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PAKISTAN METEOROLOGICAL SERVICE

GEOPHYSICAL INSTITUTE

QUETTA.

Pakistan Meteorological Service

Director,
Meteorological Service

Deputy Director,
Geophysical Institute

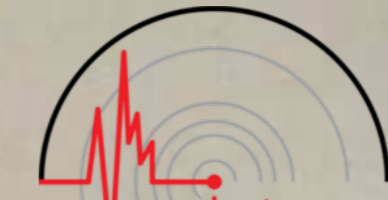
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Particulars of Stations and Instruments

(a) Stations

| Station | Symbol | Latitude | Longitude | Height (a.s.l.) | Ground |
|------------|--------|-----------|-----------|-----------------|----------------------|
| Quetta | Qt | 30° 11' N | 66° 57' E | 1721 meters | Cretaceous Limestone |
| Lahore | Lh | 31° 33' N | 74° 20' E | 210 " | Alluvium |
| Karachi | Kr | 24° 50' N | 67° 02' E | 30 " | Alluvium |
| Chittagong | Ch | 22° 21' N | 91° 49' E | 35 " | Alluvium |
| Warsak | Wr | 34° 09' N | 71° 25' E | 343 " | River Terrace |

(b) Instruments

| Instruments | Components | Period Seismo. & Galvo. | Damping | Max. Magnification |
|---------------------------------|------------|----------------------------|----------|-----------------------|
| Quetta (Central Station) | | | | |
| Sprengnether | Z | 1.9 sec. | Critical | 5,500 |
| " | N | 1.95 " | " | 4,500 |
| " | E | 1.95 " | " | 5,800 |
| " | N | 15.8 " | " | 15,000 |
| " | E | 19.5 " | " | 16,000 |

(Contd.)

| Instruments | Components | Period Seismo. & Galvo. | Damping | Max. Magnification |
|--|------------|----------------------------------|----------|-----------------------|
| Willmore | Z, N, & E | Seismo = 1 sec. Galvo = 1/4 " | — | — |
| Sprengnether Pen recorder | E | | 1.0 " | — |
| Lahore | | | | |
| Sprengnether | Z | 1.8 " | Critical | 4,900 |
| " | N | 1.7 " | " | 4,200 |
| " | E | 1.6 " | " | 4,100 |
| Karachi | | | | |
| Sprengnether | Z | 1.8 sec | Critical | 5,890 |
| " | N | 1.6 " | " | 4,700 |
| " | E | 1.4 " | " | 4,700 |
| Chittagong | | | | |
| Sprengnether | Z | 1.7 " | Critical | 5,200 |
| " | N | 1.8 " | " | 5,700 |
| " | E | 1.5 " | " | 3,600 |
| " | N | 7.0 " | " | 6,600 |
| Willmore | Z | Seismo = 1 sec Galvo = 1/4 " | — | — |
| Warsak | | | | |
| Sprengnether | N | 2.0 sec. | Critical | 4,000 |
| Willmore (with Sprengnether galvo. & recorder) | Z | 1.0 " | — | — |

* indicates long period seismographs, Sprengnether or Milne-Shaw.

c=compression, d=dilatation, X = unidentified phase.

Mu=Actual ground motion of the indicated phase in microns.

Sec=Period of the indicated phase in seconds.

(Pas), (Berk), (Up), (Ki), (Pal), stand for seismological observatories Pasadena (U.S.A.), Berkly (U. S. A.), Uppsala (Sweden), Kiruna (Sweden) & Palisade (U. S. A.) respectively.

All times are in Greenwich Mean Time.

| Date | Station | Phase | h m s | Date | Station | Phase | h m s |
|------|---------|---------------------|------------|------|---------|----------------------------|------------|
| 1 | Qt | ePKPZ | 02 32 00 | 1 | Qt | ePKPZ | 20 58 12 |
| | | ePPZ | 35 05 | | Wr | ePKP ₂ Z | 24 |
| | Wr | iPKPZ | 32 06 | | Lh | ePKP ₂ Z | 27 |
| | Lh | ePKP ₂ Z | 17 | | USCGS H | 20 38 31.1 | |
| | | USCGS H | 02 12 37.2 | | 38.0 S | 74.0 W | |
| | | 15.7 S | 74.4 W | | | Off coast of central Chile | |
| | | Southern Peru | | | | depth about 25 km | |
| | | depth about 62 km | | 1 | Lh | ePZ | 22 11 21 |
| 1 | Ch | ePZ | 04 58 05 | | Wr | ePZ | 41 |
| | | ePPZ | 57 | | Qt | ePZ | 12 42 |
| | | eSZNE | 05 03 02 | 1 | Ch | ePZ | 23 53 55 |
| | | eScSN | 08 37 | | | epPZN | 54 15 |
| | Lh | ePZ | 00 09 | | | ePPZ | 57 18 |
| | | eSN | 06 32 | | | eSKSE | 00 04 20 |
| | Wr | ePZ | 00 27 | | | eSE | 30 |
| | | eSN | 07 06 | | | eScSNE | 34 |
| | Qt | ePZ | 01 00 | | | esSE | 05 09 |
| | | eSNEN* | 08 07 | | Lh | e(PKP)Z | 23 59 24 |
| | | eScSN* | 10 38 | | Qt | ePKPZ | 48 |
| | | e(SS)N* | 11 32 | | | USCGS H | 23 41 14.5 |
| | Kr | ePZ | 01 07 | | | 14.0 S | 172.5 E |
| | | USCGS H | 04 51 57.2 | | | Samoa Islands | |
| | | 25.7 N | 124.8 E | | | depth about 73 km | |
| | | Ryukyu Islands | | | | Mag 6 (Pas) | |
| | | depth about 52 km | | 2 | Ch | ePZ | 02 27 06 |
| 1 | Ch | ePZ | 18 44 25 | | Qt | ePZ | 32 |
| | Lh | ePZ | 57 | | | USCGS H | 02 15 05.9 |
| | Wr | ePZ | 45 02 | | | 51.7 N | 173.5 W |
| | Qt | ePZ | 38 | | | Andreasof Islands | |
| | | USCGS H | 18 35 12.9 | | | depth about 25 km | |
| | | 43.0 N | 146.2 E | 2 | Wr | ePZ | 04 27 51 |
| | | Near east coast of | | | Qt | ePZ | 28 06 |
| | | Hokkaido, Japan | | | | USCGS H | 04 18 09 |
| | | depth about 48 km | | | | 0.8 N | 123.9 E |

| Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s |
|------|---------|-----------------------------|----|----|------------|------|---------|-------------------|----|-------|------|
| | | Celebes | | | | | | depth about 25 km | | | |
| | | depth about 194 km | | | | 3 | Wr | ePZ | 05 | 03 | 49 |
| 2 | Ch | ePZ | 13 | 10 | 17 | | Qt | ePZ | | 04 | 04 |
| | | epPZE | | | 31 | | | USCGS H | 04 | 53 | 54.7 |
| | | ePPZN | | | 11 43 | | | 0.1 S | | 122.0 | E |
| | | ePcPZN | | | 12 25 | | | Celebes | | | |
| | | isNE | | | 16 02 | | | depth about 25 km | | | |
| | | ePcSZE | | | 14 | 3 | Wr | ePZ | 06 | 19 | 36 |
| | | esSNE | | | 32 | | | eSN | | 21 | 13 |
| | | e!ScSZNE | | | 20 24 | | Qt | ePZ | | 20 | 32 |
| | Lh | ePZ | | | 12 33 | | | eSNE | | 22 | 57 |
| | | e(S)N | | | 20 01 | | | H | 06 | 17 | 29 |
| | Wr | ePZ | | | 12 55 | | | Western Tibet | | | |
| | | eSN | | | 20 53 | 3 | Ch | ePZ | 10 | 08 | 58 |
| | Kr | ePZ | | | 13 07 ± | | | eSNE | | 15 | 04 |
| | Qt | ePZ | | | 15 | | Lh | ePZ | | 11 | 16 |
| | | epPZ | | | 23 | | Wr | ePZ | | | 36 |
| | | eSNEN* | | | 21 29 | | Qt | ePZ | | | 51 |
| | | esSN* | | | 46 | | | USCGS H | 10 | 01 | 17.4 |
| | | eLN* | | | 28.6 | | | 0.1 N | | 126.5 | E |
| | | USCGS H | 13 | 02 | 59 | | | Molucca Passage | | | |
| | | 5.4 N | | | 126.5 E | | | depth about 25 km | | | |
| | | Off south coast of Mindanao | | | | 3 | Ch | ePZ | 12 | 21 | 56 o |
| | | Philippine Islands | | | | | | i!XZN | | 22 | 13 |
| | | depth about 30 km | | | | | | epPZ | | | 20 |
| 3 | Ch | ePZN | 00 | 56 | 45 | | | ePPZNE | | 23 | 23 |
| | | eSNE | | | 58 31 | | | ePPPZNE | | | 56 |
| | Wr | ePZ | | | 59 54 ± | | | ePcPZ | | 24 | 17 |
| | Qt | ePZ | | | 01 00 28 ± | | | eSZE | | 27 | 38 |
| | | H | 00 | 54 | 25 | | | ePcSZN | | 28 | 01 |
| | | 28.3 N | | | 100.9 E | | | isSE | | | 20 |
| | | Sikang Province, China | | | | | | eSSE | | 30 | 11 |
| | | USCGS H | 00 | 54 | 20.9 | | | e!ScSZNE | | 32 | 06 |
| | | 28.2 N | | | 100.8 E | | | Lh | | 24 | 14 |
| | | Sikang Province, China | | | | | Wr | ePZ | | | 36 |



| Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s | |
|------|---------|-----------------------------|----|----|---------|------|---------|-----------------------------|-----|-------|------|----|
| | | eSN | | | 32 26 | | | U. S. S. R. | | | | |
| | Kr | ePZ | | | 24 50 | | | depth about 15 km | | | | |
| | | ePPZ | | | 27 03 | 4 | Ch | ePZ | 12 | 56 | 46 | |
| | Qt | ePZ | | | 24 55 | | Wr | ePZ | | 58 | 53 | |
| | | epPZ | | | 25 22 | | Qt | ePZ | | 59 | 24 | |
| | | ePPZ | | | 27 04 | | | USCGS H | 12 | 49 | 55.6 | |
| | | eSNEN* | | | 32 02 | | | 27.1 N | | 129.5 | E | |
| | | ePSN* | | | 32 | | | Ryukyu Islands | | | | |
| | | esSN* | | | 46 | | | depth about 25 km | | | | |
| | | eLN* | | | 40.3 | 4 | Ch | ePZ | 14 | 21 | 08 | |
| | | USCGS H | 12 | 14 | 52.1 | | Wr | ePZ | | 23 | 56 | |
| | | 7.4 N | | | 126.5 E | | Qt | ePZ | | 24 | 10 | |
| | | Near east coast of Mindanao | | | | | | USCGS H | 14 | 14 | 16.4 | |
| | | Philippine Islands | | | | | | 0.9 S | | 121.4 | E | |
| | | depth about 90 km | | | | | | Celebes | | | | |
| 4 | Ch | ePZ | 01 | 35 | 55 ± | | | depth about 168 km | | | | |
| | | e(S)ZNE | | | 36 48 | | | | | | | |
| | Wr | ePZ | | | 38 27 | 4 | Qt | ePKPZ | 16 | 40 | 13 | |
| | Qt | ePZ | | | 39 08 | | Wr | ePKP ₂ Z | | | 25 | |
| | | H | 01 | 34 | 45 | | Lh | ePKP ₂ Z | | | 30 | |
| | | Eastern Nepal | | | | | | USCGS H | 16 | 20 | 53.5 | |
| 4 | Ch | ePZ | 08 | 33 | 08 | | | 36.3 S | | 72.9 | W | |
| | | ePPZN | | | 34 50 | | | Off coast of central Chile | | | | |
| | Lh | ePZ | | | 35 30 | | | depth about 60 km | | | | |
| | Wr | ePZ | | | 53 | | | | | | | |
| | Qt | ePZ | | | 36 06 | 5 | Qt | ePZ | 01 | 07 | 45 | |
| | | USCGS H | 08 | 26 | 14.4 | | Wr | ePZ | | | 57 | |
| | | 1.4 S | | | 120.2 E | | Lh | ePZ | | 08 | 00 | |
| | | Celabes | | | | | 5 | Lh | ePZ | 03 | 50 | 44 |
| | | depth about 144 km | | | | | Wr | ePZ | | 51 | 12 | |
| 4 | Qt | ePZ | 11 | 51 | 53 | | Qt | ePZ | | | 14 | |
| | | USCGS H | 11 | 40 | 24.5 | | | USCGS H | 03 | 42 | 33.3 | |
| | | 67.6 N | | | 171.4 W | | | 4.0 S | | 103.3 | E | |
| | | Near northeast coast of | | | | | | Near south coast of Sumatra | | | | |
| | | Chukotsky Peninsula | | | | | | depth about 78 km | | | | |

| Date | Station | Phase | h m s | Date | Station | Phase | h m s |
|------|---------|---------|----------|------|---------|------------------------|------------|
| 5 | Lh | ePZ | 16 54 32 | | | USCGS H | 15 32 33.0 |
| | Wr | ePZ | 53 | | | 12.5 N 143.9 E | |
| | Qt | ePZ | 55 19 | | | Mariana Islands | |
| | | | | | | depth about 33 km | |
| | | | | 7 | Qt | ePZ | 02 17 51 |
| | | | | | | USCGS H | 02 07 11.8 |
| | | | | | | 62.2 N 26.6 W | |
| | | | | | | Southwest of Iceland | |
| | | | | | | depth about 43 km | |
| 5 | Qt | ePZ | 21 09 39 | 7 | Wr | ePZ | 08 18 30 |
| | | eSnE | 10 02 | | | eSN | 19 53 |
| | | e(Sg)NE | 16 | | Qt | ePZ | 43 |
| | Wr | ePnZ | 09 42 | | | eSNE | 22 05 |
| | | e(Sg)N | 10 45 | | | USCGS H | 08 16 37.7 |
| | Lh | ePnZ | 09 56 | | | 40.2 N 77.2 E | |
| | | eSnN | 10 49 | | | Kirghiz S. S. R. | |
| | | | | | | depth about 25 km | |
| | | | | 7 | Ch | iPZ | 11 09 00 |
| | | | | | | iXZNE | 07 |
| | | | | | | iPcPZ | 10 08 |
| | | | | | | ipPZ | 57 |
| | | | | | | iPPZ | 11 08 |
| | | | | | | isPZN | 12 12 |
| | | | | | | ePcSZ | 55 |
| | | | | | | iSNE | 15 20 |
| | | | | | | esSZNE | 18 55 |
| | | | | | | Mu Sec | |
| | | | | | | PZ 2.4 1.0 | |
| | | | | | | $\Delta = 50^\circ .0$ | |
| | | | | | Lh | ePZ | 10 37 |
| | | | | | | eSE | 18 22 |
| | | | | | Wr | iPZ | 10 50 d |
| | | | | | | iSN | 18 47 |
| 6 | Qt | ePZ | 15 44 03 | | Qt | ePZ | 11 16 d |

| Date | Station | Phase | h m s | Date | Station | Phase | h m s |
|------|---------|------------------------|------------|------|---------|------------------------|------------|
| | | iXZ | 13 23 | | | Mariana Islands | |
| | | epPZ | 32 | | | depth about 41 km | |
| | | ePPZ | 14 11 | 7 | Ch | ePZ | 15 26 00 |
| | | iSZNEN* | 19 38 | | | epPZ | 15 |
| | | iIXN* | 57 | | | ePPZ | 28 09 |
| | | esSN* | 23 36 | | Lh | ePZ | 26 24 |
| | | iSSN* | 24 26 | | Wr | ePZ | 27 |
| | | | | | Qt | ePZ | 27 02 |
| | | Mu Sec | | | | USCGS H | 15 15 53.1 |
| | | PZ 1.6 0.9 | | | | 51.5 N 160.6 E | |
| | | PN 0.7 0.8 | | | | Off southeast coast of | |
| | | PE 1.2 1.0 | | | | Kamchatka | |
| | | $\Delta = 71^\circ .0$ | | | | depth about 20 km | |
| | Kr | iPZ | 11 22 d | | | USCGS H | 17 34 25.6 |
| | | eSE | 19 49 | | | 2.1 S 133.9 E | |
| | | eXE | 20 19 | | | New Guinea | |
| | | Mu Sec | | | | depth about 89 km | |
| | | PZ 1.8 0.8 | | | | USCGS H | 17 34 25.6 |
| | | $\Delta = 72^\circ .0$ | | | | 2.1 S 133.9 E | |
| | | USCGS H | 11 01 00.4 | | | New Guinea | |
| | | 19.3 N 145.3 E | | | | depth about 89 km | |
| | | Mariana Islands | | | | USCGS H | 17 34 25.6 |
| | | depth about 680 km | | | | 2.1 S 133.9 E | |
| | | Mag 7 (Pas), 6 (Berk), | | | | New Guinea | |
| | | 6.5 (Qt, Kr, Ch) | | | | depth about 89 km | |
| 7 | Qt | ePZ | 13 38 05 | 7 | Wr | iPZ | 19 20 38 d |
| | | eXZ | 39 04 | | | iSN | 21 07 |
| | Kr | ePZ | 02 | | Lh | ePZ | 19 ± |
| | Wr | ePZ | 04 | | | eSE | 22 17 |
| | Lh | ePZ | 32 | | Qt | ePZ | 21 45 |
| 7 | Qt | ePZ | 12 11 32 | | | eSNE | 23 01 |
| | | | | | | H | 19 20 07 |
| 7 | Lh | ePZ | 14 09 24 | | | 36.0 N 71.0 E | |
| | Wr | ePZ | 29 | | | Hindukush | |
| | Qt | ePZ | 10 02 | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km | |
| | | | | | | USCGS H | 19 20 01.1 |
| | | | | | | 36.4 N 71.6 E | |
| | | | | | | Hindukush | |
| | | | | | | depth about 100 km</ | |

| Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s |
|------|-------------------------------|---------|-------|----|----------|------|---------|-------|---|---|---|------|---------|-------|---|---|---|
| | Wr | ePZ | | | 24 | | | | | | | | | | | | |
| | USCGS H | | 21 | 08 | 03.4 | | | | | | | | | | | | |
| | 27.1 N | 57.1 E | | | | | | | | | | | | | | | |
| | Iran | | | | | | | | | | | | | | | | |
| | depth about 25 km | | | | | | | | | | | | | | | | |
| 8 | Qt | ePZ | 02 | 04 | 37 | | | | | | | | | | | | |
| | USCGS H | | 01 | 54 | 40.5 | | | | | | | | | | | | |
| | 22.3 S | 39.1 E | | | | | | | | | | | | | | | |
| | Mozambique Channel | | | | | | | | | | | | | | | | |
| | depth about 25 km | | | | | | | | | | | | | | | | |
| 8 | Lh | ePZ | 08 | 21 | 57 | | | | | | | | | | | | |
| | Wr | ePZ | | | 22 08 | | | | | | | | | | | | |
| | Qt | ePZ | | | 37 | | | | | | | | | | | | |
| | USCGS H | | 08 | 11 | 12.9 | | | | | | | | | | | | |
| | 17.9 N | 146.5 E | | | | | | | | | | | | | | | |
| | Mariana Islands | | | | | | | | | | | | | | | | |
| | depth about 131 km | | | | | | | | | | | | | | | | |
| 8 | Ch | ePZ | 10 | 56 | 29 | | | | | | | | | | | | |
| | | eSE | | | 11 04 05 | | | | | | | | | | | | |
| | Lh | ePZ | | | 10 57 15 | | | | | | | | | | | | |
| | Wr | ePZ | | | 16 | | | | | | | | | | | | |
| | Qt | ePZ | | | 52 | | | | | | | | | | | | |
| | USCGS H | | 10 | 47 | 03.9 | | | | | | | | | | | | |
| | 46.0 N | 152.7 E | | | | | | | | | | | | | | | |
| | Kurile Islands | | | | | | | | | | | | | | | | |
| | depth about 48 km | | | | | | | | | | | | | | | | |
| 8 | Wr | ePZ | 21 | 02 | 46 | | | | | | | | | | | | |
| | Qt | ePZ | | | 03 03 | | | | | | | | | | | | |
| | | epPZ | | | 13 | | | | | | | | | | | | |
| | USCGS H | | 20 | 52 | 38.1 | | | | | | | | | | | | |
| | 1.2 N | 126.1 E | | | | | | | | | | | | | | | |
| | Molucca Passage | | | | | | | | | | | | | | | | |
| | depth about 43 km | | | | | | | | | | | | | | | | |
| 8 | Qt | ePKPZ | 21 | 08 | 27 | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | USCGS H | | 20 | 48 | 38.1 | | | | | | | | | | | | |
| | 44.9 S | 79.4 W | | | | | | | | | | | | | | | |
| | Off coast of southern Chile | | | | | | | | | | | | | | | | |
| | depth about 25 km | | | | | | | | | | | | | | | | |
| | 8 | Qt | ePZ | 21 | 47 25 | | | | | | | | | | | | |
| | | eSN* | | | 54 42 | | | | | | | | | | | | |
| | Wr | ePZ | | | 48 04 | | | | | | | | | | | | |
| | Lh | ePZ | | | 09 | | | | | | | | | | | | |
| | USCGS H | | 21 | 38 | 35.4 | | | | | | | | | | | | |
| | Republic of the Congo | | | | | | | | | | | | | | | | |
| | depth about 25 km | | | | | | | | | | | | | | | | |
| | 9 | Qt | ePKPZ | 07 | 15 12 | | | | | | | | | | | | |
| | USCGS H | | 06 | 57 | 08.7 | | | | | | | | | | | | |
| | 18.4 S | 178.7 W | | | | | | | | | | | | | | | |
| | Fiji Islands | | | | | | | | | | | | | | | | |
| | depth about 472 km | | | | | | | | | | | | | | | | |
| | 9 | Qt | ePZ | 07 | 54 05 | | | | | | | | | | | | |
| | 9 | Lh | ePZ | 22 | 19 29 | | | | | | | | | | | | |
| | Wr | ePZ | | | 44 | | | | | | | | | | | | |
| | | eSN | | | 29 51 | | | | | | | | | | | | |
| | Qt | ePZ | | | 20 00 | | | | | | | | | | | | |
| | | eSN* | | | 30 26 | | | | | | | | | | | | |
| | USCGS H | | 22 | 07 | 35.6 | | | | | | | | | | | | |
| | 5.8 S | 146.4 E | | | | | | | | | | | | | | | |
| | Near coast of New Guinea | | | | | | | | | | | | | | | | |
| | depth about 76 km | | | | | | | | | | | | | | | | |
| | 9 | Qt | ePZ | 22 | 46 21 | | | | | | | | | | | | |
| | 10 | Wr | ePZ | 01 | 08 12 | | | | | | | | | | | | |
| | Qt | ePZ | | | 24 | | | | | | | | | | | | |
| | USCGS H | | 00 | 57 | 22.3 | | | | | | | | | | | | |
| | 6.5 S | 129.4 E | | | | | | | | | | | | | | | |
| | Banda Sea | | | | | | | | | | | | | | | | |
| | depth about 202 km | | | | | | | | | | | | | | | | |
| | 10 | Ch | ePZ | 03 | 05 45 | | | | | | | | | | | | |
| | | ePPZ | | | 59 | | | | | | | | | | | | |
| | | eSZE | | | 09 10 | | | | | | | | | | | | |
| | Wr | ePZ | | | 08 41 | | | | | | | | | | | | |
| | Qt | ePZ | | | 41 | | | | | | | | | | | | |
| | | ePPZ | | | 09 02 | | | | | | | | | | | | |
| | USCGS H | | 03 | 01 | 17.5 | | | | | | | | | | | | |
| | 3.8 N | 97.7 E | | | | | | | | | | | | | | | |
| | Sumatra | | | | | | | | | | | | | | | | |
| | depth about 25 km | | | | | | | | | | | | | | | | |
| | 10 | Ch | ePZ | 08 | 50 10 | | | | | | | | | | | | |
| | | eXZ | | | 14 | | | | | | | | | | | | |
| | Wr | ePZ | | | 52 11 | | | | | | | | | | | | |
| | Qt | ePZ | | | 42 | | | | | | | | | | | | |
| | | eXZ | | | 48 | | | | | | | | | | | | |
| | USCGS H | | 08 | 44 | 00.1 | | | | | | | | | | | | |
| | 23.2 N | 120.6 E | | | | | | | | | | | | | | | |
| | Formosa | | | | | | | | | | | | | | | | |
| | depth about 31 km | | | | | | | | | | | | | | | | |
| | 10 | Qt | ePgZ | 18 | 56 43.5 | | | | | | | | | | | | |
| | | eSgNEN* | | | 55 | | | | | | | | | | | | |
| | 11 | Ch | ePZ | 07 | 31 31 | | | | | | | | | | | | |
| | USCGS H | | 07 | 18 | 56.7 | | | | | | | | | | | | |
| | 13.9 S | 172.1 E | | | | | | | | | | | | | | | |
| | New Hebrides Islands | | | | | | | | | | | | | | | | |
| | depth about 133 km | | | | | | | | | | | | | | | | |
| | 11 | Ch | ePZ | 15 | 34 47 | | | | | | | | | | | | |
| | | ePcPZ | | | 35 09 | | | | | | | | | | | | |
| | | epPZ | | | 30 | | | | | | | | | | | | |
| | | ePPZ | | | 37 30 | | | | | | | | | | | | |
| | | eSNE | | | 43 48 | | | | | | | | | | | | |
| | | eScSNE | | | 44 16 | | | | | | | | | | | | |
| | | esSN | | | 55 | | | | | | | | | | | | |
| | Wr | ePZ | | | 35 01 | | | | | | | | | | | | |
| | Lh | ePZ | | | | | | | | | | | | | | | |
| | Qt | ePZ | | | | | | | | | | | | | | | |
| | | eSN* | | | | | | | | | | | | | | | |
| | | eScSNE | | | | | | | | | | | | | | | |
| | | esSN* | | | | | | | | | | | | | | | |
| | USCGS H | | 15 | 23 | 40.7 | | | | | | | | | | | | |
| | 52.3 N | 178.0 E | | | | | | | | | | | | | | | |
| | Rat Islands, Aleutian Islands | | | | | | | | | | | | | | | | |
| | depth about 135 km | | | | | | | | | | | | | | | | |
| | 11 | Ch | eSNE | 16 | 31 1 | | | | | | | | | | | | |

| Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s |
|------|---------|---|----|----|------|------|---------|---|----|----|----|
| 20 | Ch | USCGS H 18 52 55.8 22.8 N 143.2 E Mariana Islands region depth about 98 km | 23 | 13 | 03 | 20 | Ch | USCGS H 22 57 51.2 5.9 S 113.0 E Java Sea depth about 631 km Mag 5.8 (Qt) | 23 | 17 | 16 |
| | | ePZNE | | | | 21 | Ch | ePZ | | | |
| | | ePPPZ | | | | 21 | Qt | ePZ | | | |
| | | eSNE | | | | 22 | Ch | ePZ | | | |
| | | eSSN | | | | | | epPZ | | | |
| | Lh | ePZ | | | | | | eSZN | | | |
| | | eSN | | | | | | i!SNE | | | |
| | Wr | ePZ | | | | | | i!ScSNE | | | |
| | | eSN | | | | | Lh | ePZ | | | |
| | Qt | ePZ | | | | | | epPZ | | | |
| | | eSNN* | | | | | | eSN | | | |
| | | USCGS H 23 10 38.1 32.0 N 94.6 E Tibet depth about 25 km | | | | | Kr | ePZ | | | |
| | | | | | | | Wr | ePZ | | | |
| | | | | | | | Qt | ePZ | | | |
| 21 | Ch | iPZNE | 23 | 03 | 59 d | 22 | Kr | ePZ | 00 | 30 | 07 |
| | | e!pPZN | | | | | Wr | ePZ | | | |
| | | ePcPZ | | | | | Qt | ePZ | | | |
| | | esPZ | | | | | | ePZ | | | |
| | | iSZNE | | | | | | ePZ | | | |
| | | i!ScSE | | | | | | ePZ | | | |
| | Lh | ePZ | | | | | | ePZ | | | |
| | | eSNE | | | | | | ePZ | | | |
| | Kr | ePZ | | | | | | ePZ | | | |
| | Wr | ePN | | | | | | ePZ | | | |
| | | eSN | | | | | | ePZ | | | |
| | Qt | e!PZ | | | | | | ePZ | | | |
| | | eXZ | | | | | | ePZ | | | |
| | | e!SNEN* | | | | | | ePZ | | | |
| | | esSN* | | | | | | ePZ | | | |
| | | Mu Sec | | | | | | ePZ | | | |
| | | PZ 1.2 1.7 | | | | | | ePZ | | | |
| | | $\Delta = 56^\circ .7$ | | | | | | iSZ | | | |

| Date | Station | Phase | h | m | s | Date | Station | Phase | h | m | s |
|------|---------|--|----|----|----|------|---------|--|----|----|----------|
| | | Qt | | | | 22 | Qt | ePZ | 17 | 31 | 58 |
| | | eSNE | | | | 22 | Wr | ePZ | 17 | 57 | 38 |
| | | H 10 33 12 | | | | | Qt | ePZ | | | 55 |
| | | Hindukush region | | | | | | USCGS H 17 46 09.0 2.0 S 139.4 E Near north coast of New Guinea depth about 32 km | | | |
| 22 | Qt | ePKPZ | 12 | 26 | 38 | 22 | Wr | ePZ | 19 | 58 | 47 |
| | Wr | ePKPZ | | | 51 | | Qt | ePZ | | | 59 04 |
| | | USCGS H 12 01 05.5 32.2 S 66.9 W San Luis province, Argentina depth about 249 km | | | | | | USCGS H 19 47 20.4 2.1 S 139.0 E Near north coast of New Guinea depth about 57 km | | | |
| 22 | Ch | iPNE | 15 | 22 | 44 | 23 | Qt | ePKPZ | 05 | 54 | 19 |
| | | ePcPE | | | | | Wr | ePKPZ | | | 24 |
| | | ePPN | | | | | | USCGS H 05 34 40.5 38.0 S 72.8 W Near coast of southern Chile depth about 67 km | | | |
| | | eSNE | | | | | | | | | |
| | | esSN | | | | | | | | | |
| | | e!XNE | | | | | | | | | |
| | | eScSN | | | | | | | | | |
| | Lh | ePZ | | | | | | | | | |
| | Wr | iPZ | | | | | | | | | |
| | | eSZ | | | | | | | | | |
| | Kr | ePZ | | | | 23 | Ch | ePZN | 06 | 13 | 54 |
| | | eSE | | | | | | e(S)ZE | | | 15 20 |
| | | e!PZ | | | | | Wr | ePZ | | | 16 53 |
| | | epPZ | | | | | Qt | ePZ | | | 17 26 |
| | | eSNE | | | | | | ePZ | | | 06 38 45 |
| | | USCGS H 15 13 03.9 3.2 S 142.3 E Near north coast of New Guinea depth about 25 km Mag 5.3 (Berk) | | | | | | ePZ | | | 39 47 |
| | | ePZ | | | | | | ePZ | | | 00 31 23 |
| | | ePZ | | | | | | ePZ | | | 55 |
| | | ePZ | | | | | | ePZ | | | 13 09 27 |
| | | ePZ | | | | | | epPE | | | 55 |
| 22 | Wr | ePZ | 16 | 27 | 55 | | | ePPN | | | 11 43 |
| | Qt | ePZ | | | | | | eSZNE | | | 17 30 |
| | | USCGS H 16 16 26.4 2.1 S 139.3 E Near north coast of New Guinea depth about 44 km | | | | | | esSN | | | 18 17 |
| | | ePZ | | | | | | eScSE | | | 51 |
| | | ePZ | | | | | | ePKPPKPZ | | | 39 02 |

| Date | Station | Phase | h m s | Date | Station | Phase | h m s |
|------|---------|-----------------------------|------------|------|---------|---------------------------------------|------------|
| | | eSN | 54 14 | 28 | Wr | ePZ | 13 29 48 |
| | Qt | ePZ | 53 41 d | | Lh | ePZ | 30 02 |
| | | eSPZNE | 54 13 | | Qt | ePZ | 53 |
| | | iSZNE | 55 02 | | Ch | ePZ | 31 40 |
| | Kr | ePZ | 54 51 | | | epPZ | 49 |
| | Ch | ePZE | 56 51 | | | esSN | 36 10 |
| | | eIsPZNE | 57 27 | | H | 13 26 14 | |
| | | eSZN | 01 00 49 | | | 45 $\frac{3}{4}$ N 83 $\frac{1}{2}$ E | |
| | | H | 00 51 56 | | | Kazakh, S. S. R. | |
| | | 36.5 N 71.1 E | | | | USCGS H 13 26 19.5 | |
| | | Hindukush | | | | 45.7 N 83.1 E | |
| | | depth about 100 km | | | | Kazakh, S. S. R. | |
| | | USCGS H 00 51 54.7 | | | | depth about 25 km | |
| | | 36.6 N 71.6 E | | 28 | Qt | ePKPZ | 14 31 42 |
| | | Hindukush | | | | USCGS H 14 12 45.8 | |
| | | depth about 108 km | | | | 32.7 S 178.0 W | |
| 28 | Ch | iPZNE | 04 10 02 c | | | Kermadec Islands | |
| | | ipPZ | 24 | | | depth about 104 km | |
| | | esPZ | 35 | 29 | Qt | ePZ | 02 03 05 ± |
| | | ePPZ | 44 | | | USCGS H 01 52 25.4 | |
| | | eSNE | 14 08 | | | 51.8 N 157.2 E | |
| | | i(s)NE | 41 | | | Near south coast of Kamchatka | |
| | | eIsSNE | 21 30 | | | depth about 155 km | |
| | | Mu | Sec | 29 | Ch | ePZ | 20 16 50 |
| | | PZ 1.1 | 1.6 | | | ePPZNE | 18 19 |
| | | $\Delta=21^{\circ}.1$ | | | | eSNE | 23 05 |
| | Lh | ePZ | 12 28 | | | esSNE | 20 |
| | Wr | ePZ | 58 | | Lh | ePZ | 19 03 |
| | Qt | ePZ | 58 | | Wr | iPZ | 27 |
| | | ePPN* | 14 50 | | | eSZ | 27 57 |
| | | eSN* | 19 11 | | Kr | ePZ | 19 32 |
| | | USCGS H 04 05 25 | | | Qt | ePZ | 43 |
| | | 1.4 N 97.5 E | | | | eSE | 28 27 |
| | | Near south coast of Sumatra | | | | USCGS H 20 09 01.9 | |
| | | depth about 74 km | | | | 0.5 S 127.4 E | |



| Date | Station | Phase | h m s | Date | Station | Phase | h m s |
|------|---------|--------------------|----------|------|---------|---------------------------|----------|
| | | Halmahera region | | | | Philippine Islands region | |
| | | depth about 25 km | | | | depth about 156 km | |
| 29 | Ch | ePZ | 21 20 55 | 31 | Qt | ePZ | 16 47 09 |
| | | epPZ | 21 13 | 31 | Qt | ePZ | 21 51 12 |
| | Wr | ePZ | 23 31 | 31 | Qt | ePZ | 23 40 39 |
| | Qt | ePZ | 24 01 | | | USCGS H 23 36 44.3 | |
| | | USCGS H 21 15 16.0 | | | | 34.0 N 48.0 E | |
| | | 20.7 N 120.6 E | | | | Western Iran | |
| | | North of Luzon | | | | depth about 25 km | |
| | | Philippine Islands | | | | | |
| | | depth about 94 km | | | | | |
| 30 | Lh | ePZ | 00 16 24 | | | | |
| | Wr | ePZ | 41 | | | | |
| | Qt | ePZ | 17 06 | | | | |
| | | USCGS H 00 05 56.1 | | | | | |
| | | 12.9 N 143.0 E | | | | | |
| | | Mariana Islands | | | | | |
| | | depth about 134 km | | | | | |
| 30 | Wr | iPZ | 10 02 07 | | | | |
| | | iSZ | 39 | | | | |
| | Lh | ePZ | 49 ± | | | | |
| | | eSZNE | 03 51 | | | | |
| | Qt | ePZ | 05 | | | | |
| | | eSZE | 04 22 | | | | |
| | | H 10 01 24 | | | | | |
| | | 36.0 N 71.0 E | | | | | |
| | | Hindukush | | | | | |
| | | depth about 200 km | | | | | |
| 30 | Qt | ePZ | 14 14 41 | | | | |
| | Kr | ePZ | 46 | | | | |
| | Wr | ePZ | 15 51 | | | | |
| 31 | Qt | ePZ | 07 54 11 | | | | |
| | | USCGS H 07 44 36.0 | | | | | |
| | | 9.8 N 121.6 E | | | | | |
| | | Negros Islands | | | | | |

| Date | Phase | h m s | Date | Phase | h m s |
|------|--------|------------|------|-------|----------|
| 22 | e(P)Z | 15 53 19 | | eSNE | 39 |
| 22 | e(P)Z | 16 12 04 | 28 | eXZ | 08 27 06 |
| 22 | ePZ | 19 16 06 ± | 29 | ePZ | 00 54 55 |
| | e(S)Z | 17 19 | 29 | e(P)Z | 05 13 45 |
| 22 | ePgZ | 22 16 40 | 29 | ePZ | 11 46 12 |
| | eSgZNE | 50 | | eSZ | 31 |
| 23 | eXZ | 03 21 42 | 29 | ePZ | 12 08 46 |
| 23 | ePZ | 04 07 35 | | e(S)E | 09 50 |
| 23 | ePgZ | 07 26 30 | 29 | ePgZ | 17 07 03 |
| | eSgZ | 31 | | eSgE | 15 |
| 23 | ePZ | 09 25 34 | 30 | ePZ | 14 05 34 |
| | e(S)N | 26 07 | 30 | ePgZ | 18 18 05 |
| 23 | ePZ | 20 46 15 | | eSgZ | 07 |
| | eSE | 49 | 30 | ePZ | 18 51 33 |
| 23 | ePZ | 23 28 44 | | eSE | 52 |
| | e(S)E | 29 04 | 31 | ePgZ | 15 23 59 |
| 24 | ePgE | 00 44 30 | | eSgZ | 24 05 |
| | eSgE | 42 | 31 | ePgE | 20 38 52 |
| 24 | ePZ | 13 30 14 | | eSgE | 56 |
| 24 | ePE | 15 05 11 ± | 31 | ePE | 21 55 36 |
| | eSE | 40 | | eSE | 57 08 |
| 25 | ePZ | 02 08 31 ± | 31 | eXE | 22 50.0 |
| 25 | ePgZE | 02 37 55 | | | |
| | e(Sg)E | 59 | | | |
| 26 | ePZ | 09 30 32 | | | |
| | eSNE | 51 | | | |
| 27 | ePgZ | 02 08 22 | | | |
| | eSgE | 34 | | | |
| 27 | ePZ | 20 39 20 | | | |
| | eSZ | 45 | | | |
| 28 | ePZ | 00 34 31 | | | |
| 28 | ePE | 04 58 08 ± | | | |
| | eSE | 59 31 | | | |
| 28 | eXZ | 05 28 31 | | | |
| 28 | ePZ | 07 39 20 | | | |



| Date | Phase | h m s | Date | Phase | h m s |
|------|-------|------------|------|-------|------------|
| 5 | ePZ | 01 58 43 | 13 | ePZ | 14 33 14 |
| 5 | ePZ | 15 09 19 | | iSZ | 45 |
| 6 | ePZ | 21 21 21 | 13 | ePZ | 15 04 40 |
| | eSZ | 47 | | iSZ | 05 21 |
| 7 | ePZ | 12 03 19 | 13 | ePZ | 16 20 54 c |
| | iSZ | 47 | | iSZ | 21 13 |
| 8 | ePZ | 01 43 40 | 13 | ePZ | 20 13 56 |
| | eSZ | 46 13 | 13 | ePZ | 21 54 48 |
| 8 | ePZ | 04 07 44 | 14 | ePZ | 04 58 25 |
| 9 | ePZ | 01 04 28 | | eSZ | 59 11 |
| 9 | ePZ | 14 24 41 | 14 | ePZ | 14 49 50 |
| 10 | ePZ | 12 39 11 | | eSZ | 50 30 |
| 10 | ePZ | 13 43 40 | 15 | iPgZ | 16 17 16 |
| 10 | ePZ | 18 42 51 | | iSgZ | 23 |
| | eSN | 43 52 | 15 | iPZ | 21 22 12 d |
| 11 | ePZ | 03 36 44 | 15 | ePZ | 22 29 31 |
| 11 | ePZ | 10 03 17 | 16 | ePZ | 09 34 12 |
| | iSZ | 46 | 17 | ePZ | 01 34 37 |
| 12 | iPZ | 00 18 35 | | eSZ | 59 |
| | iSZ | 19 04 | 17 | ePZ | 11 28 29 |
| 12 | ePZ | 01 55 07 | 17 | ePZ | 15 04 54 |
| | eSZ | 58 | | iSZ | 05 18 |
| 12 | ePZ | 06 04 58 | 17 | ePZ | 21 36 54 |
| | iSZ | 05 32 | 18 | ePZ | 00 09 06 |
| 12 | ePZ | 14 01 44 | 18 | ePZ | 01 26 45 |
| 12 | ePZ | 15 12 26 | | eSZ | 59 |
| 12 | ePZ | 19 19 16 | 18 | ePZ | 03 58 36 |
| 12 | ePZ | 21 40 31 | 18 | ePZ | 11 36 49 |
| | eSZ | 58 | | eSZ | 37 19 |
| 13 | ePZ | 08 57 14 | 19 | ePZ | 07 53 34 |
| | iSZ | 13 | | eSZ | 54 33 |
| 13 | iPZ | 09 39 37 d | 20 | ePZ | 08 11 13 |
| | iSZ | 40 04 | 20 | ePZ | 11 19 19 |
| 13 | ePZ | 09 46 42 | 20 | iPZ | 15 51 06 d |
| | iSZ | 47 11 | | iSZ | 41 |

| Date | Phase | h m s | Date | Phase | h m s |
|------|-------|------------|------|----------------|------------|
| 21 | ePZ | 08 02 24 | 29 | iPZ | 09 43 17 |
| 21 | ePZ | 09 31 07 | | eSZ | 45 |
| | iSZ | 43 | 29 | iPZ | 13 47 26 d |
| 21 | iPZ | 17 00 31 | | iSZ | 54 |
| | iSZ | 01 03 | 30 | ePZ | 07 21 53 |
| 21 | ePZ | 19 14 50 | | iSZ | 22 26 |
| 22 | ePN | 00 53 21 | | | |
| 22 | iPZ | 07 26 46 d | | Lahore | |
| 22 | iPZ | 08 58 02 | 2 | eXZ | 19 51 40 |
| | iSZ | 31 | 3 | ePZ | 06 19 39 |
| 22 | ePZ | 15 53 02 | 4 | ePZ | 01 01 19 |
| 22 | ePZ | 16 12 01 | 4 | ePZ | 14 07 35 |
| 22 | iPZ | 19 15 10 c | | eSN | 55 |
| | iSZ | 43 | 5 | eXZ | 01 46 37 |
| 22 | iPZ | 19 18 19 d | 5 | e(P)Z | 15 08 58 |
| 23 | ePZ | 04 08 08 | 7 | ePZ | 08 21 09 |
| 23 | ePZ | 04 31 44 | 9 | ePZ | 01 01 55 |
| 24 | iPZ | 21 56 20 | 9 | ePZ | 20 59 30 |
| 25 | ePZ | 08 50 22 | 10 | ePZ | 13 43 53 |
| 25 | ePZ | 10 21 10 | 10 | ePgZ | 18 58 16 |
| 25 | ePZ | 14 15 53 | 12 | ePZ | 00 19 41 |
| | eSZ | 16 14 | 13 | eXZ | 09 40 25 |
| 26 | ePZ | 10 32 07 | 13 | ePZ | 20 12 26 |
| 26 | ePZ | 15 32 52 | 15 | ePZ | 16 18 21 |
| 26 | ePZ | 22 46 13 | 15 | ePZ | 21 21 45 |
| | iSZ | 44 | 17 | ePZ | 18 09 06 |
| 27 | ePgZ | 00 06 12 | 17 | ePZ | 19 04 37 |
| | iSgZ | 16 | 17 | ePZ | 21 36 13 |
| 27 | ePZ | 19 31 52 | 19 | ePZ | 21 05 59 |
| | eSZ | 32 22 | | | |
| 28 | ePZ | 04 57 05 | | Karachi | |
| | iSZ | 36 | 9 | eXZ | 11 05 00 |
| 28 | ePZ | 05 28 53 | | eSE | 06 07 |
| 28 | ePZ | 10 08 32 | 10 | eXE | 17 57 49 |
| | eSZ | 09 07 | | eSE | 58 19 |
| 29 | ePZ | 04 31 33 | 11 | eXE | 20 08 47 |

| Date | Phase | h m s | Date | Phase | h m s |
|------|--------|------------|------|-------------------|-------|
| 12 | eXZ | 10 01 05 | | | |
| 17 | eXZ | 21 05 56 | | | |
| 18 | eXZ | 15 38 14 ± | | | |
| 20 | ePZ | 11 04 11 | | | |
| 22 | ePZ | 16 28 04 | | | |
| | | | | Chittagong | |
| 6 | PZ | 23 13 00 | | | |
| | iSZNE | 14 | | | |
| 10 | iXZNE | 00 27 56 | | | |
| 11 | eXE | 13 20 47 | | | |
| 11 | eXE | 18 57 32 | | | |
| 12 | ePN | 02 02 57 | | | |
| | eSNE | 04 18 | | | |
| 14 | eXNE | 19 09 54 | | | |
| 16 | eXN | 09 33 17 | | | |
| 16 | ePNE | 12 18 49 | | | |
| | iSNE | 19 03 | | | |
| 16 | eXE | 19 54 18 | | | |
| | eSN | 20 04 40 | | | |
| 21 | eXNE | 20 02 06 | | | |
| 22 | e(P)Z | 01 07 22 | | | |
| 23 | ePZ | 04 31 35 | | | |
| 23 | eXZ | 22 17.0 | | | |
| 24 | eXNE | 00 29 50 | | | |
| | e(S)NE | 31 20 | | | |
| 24 | ePNE | 20 18 55 | | | |
| | eSNE | 19 24 | | | |
| 26 | ePgZN | 01 16 25 | | | |
| | eSgNE | 27 | | | |
| 29 | eXZ | 03 03.2 | | | |