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COAST & GEODETIC SURVEY

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November, 1963

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U. S. DEPARTMENT OF COMMERCE

John T. Connor, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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March 4, 2011

The instrumental results of the following stations are tabulated in this report.

Albuquerque, New Mexico (ALQ) WWNSS
**Balboa Heights, C. Z. (BHP) WWNSS
The Panama Canal Co.
*Boulder City, Nev. (BCN)
Bureau of Reclamation
*Bozeman, Mont. (BOZ) WWNSS
*Bozeman, Mont. (BZM)
Montana State College
*Butte, Mont. (BUT)
Montana School of Mines
*Chicago, Ill. (CHK)
University of Chicago and
U. S. Weather Bureau
College, Alaska (COL)
*Columbia, S. C. (CSC)
University of South Carolina
*Eureka, Nev. (EUR)
Eureka Corporation Limited
*Flaming Gorge, Utah (FGU)
Bureau of Reclamation
*Glen Canyon, Ariz. (GCA)
Bureau of Reclamation
Guam, M. I. (GUA) WWNSS
Honolulu, Hawaii (HON)
*Hungry Horse, Mont. (HHM)
Bureau of Reclamation
Kipapa, Hawaii (KIP) WWNSS
**Philadelphia, Pa. (PHI)
The Franklin Institute
**Rapid City, S. D. (RCD) WWNSS
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJP)
Sitka, Alaska (SIT)
Tucson, Ariz. (TUC) WWNSS
Ukiah, Calif. (UKI)
International Latitude Observatory
Washington, D. C. (WAS)

*Indicates a station maintained by a local institution in cooperation with the Coast and Geodetic Survey.
**Indicates a station operating on an independent basis.
Other stations are observatories of the Coast and Geodetic Survey.
WWNSS indicates the observatories are part of the World-Wide Network of Standard Seismographs.

All seismogram interpretations are made or revised at Washington except those for Balboa Heights. Beginning January 1, 1959, the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States. The horizontal instruments will continue in operation and the seismograms for the local and regional earthquakes will be scaled and the data published.

Mag. (CGS) is m_b of Gutenberg and Richter computed from the P phase only. The magnitude quoted is an average value determined from data forwarded by cooperating Standard stations and other observatories. Mag. (PAS), (PAL), (BRK) are as reported by the respective stations.

All coordinates of epicenters, origin times and focal depths have been calculated with the use of an electronic computer. The epicenters quoted in this bulletin are those previously reported on the Preliminary Determination of Epicenter cards with some refinement and minor additions.

All seismograms are on file in the Coast and Geodetic Survey. Requests for information on seismogram copies of the World-Wide Network observatories should be addressed to:

U. S. Department of Commerce
Coast and Geodetic Survey
Seismology Division
Washington Science Center
Rockville, Maryland 20852

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
1	01 34 12*	62.9 N.	3.3 E.	Near coast of Norway. h about 33 km. Mag. 4.5 (CGS).
1	02 26 01.2	5.5 N.	82.6 W.	South of Panama. h about 35 km. Mag. 4.6 (CGS).
1	02 51 35.1	45.2 N.	152.2 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
1	03 52 25.9	51.7 N.	159.8 E.	Near east coast of Kamchatka. h about 33 km. Mag. 4.4 (CGS).
1	04 29 43*	29.5 S.	64.2 W.	Santiago del Estero Province, Argentina. h about 33 km. Mag. 4.0 (CGS).
1	07 02 41.7	14.6 N.	53.6 E.	Gulf of Aden. h about 33 km. Mag. 5.1 (CGS).
1	09 28 22.0	22.8 S.	176.0 W.	Tonga Islands. h about 33 km. Mag. 4.5 (CGS).
1	10 49 45*	22.4 S.	65.7 W.	Jujuy Province, Argentina. h about 137 km. Mag. 3.8 (CGS).
1	11 34 55.9	13.6 N.	90.1 W.	Off coast of El Salvador. h about 128 km. Mag. 4.4 (CGS).
1	20 59 28.1	22.5 S.	176.8 W.	Tonga Islands. h about 71 km. Mag. 5.4 (CGS).
1	22 41 23.8	44.9 N.	148.9 E.	Kurile Islands. h about 60 km. Mag. 5.5 (CGS).
2	00 44 34*	34.3 S.	71.1 W.	Southern Chile. Felt at Santiago. h about 89 km. Mag. 3.8 (CGS).
2	01 41 58.5	6.2 S.	154.4 E.	Solomon Islands. h about 63 km. Mag. 5.9 (CGS).
2	08 47 43*	32.4 N.	113.7 W.	Sonora, Mexico. h about 14 km. Mag. 4.7 (CGS).
2	09 17 18.2	44.6 N.	151.2 E.	Kurile Islands. h about 50 km. Mag. 4.6 (CGS).
2	10 13 02.3	51.5 N.	179.9 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 4.1 (CGS).
2	12 45 16.1	35.1 N.	5.1 W.	Northern Morocco. h about 33 km. Mag. 4.1 (CGS).
2	16 07 13.1	12.5 S.	74.7 W.	Southern Peru. h about 105 km. Mag. 4.3 (CGS).
2	17 53 27.2	44.0 N.	150.5 E.	Kurile Islands. h about 50 km. Mag. 5.0 (CGS).
2	18 58 11.9	33.1 N.	115.4 W.	Imperial County, California. h about 16 km. Mag. 4.3 (CGS).
2	19 51 58.6	43.3 N.	29.5 W.	North Atlantic Ocean. h about 33 km. Mag. 4.2 (CGS).
2	20 12 27*	5.3 S.	133.9 E.	Tanimbar Islands region. h about 38 km. Mag. 4.9 (CGS).
2	20 40 32*	22.2 S.	175.6 W.	Tonga Islands region. h about 33 km. Mag. 4.4 (CGS).
2	21 35 29.8	24.3 S.	68.1 W.	Chile-Argentina border. h about 106 km. Mag. 4.8 (CGS).
2	22 21 20.7	1.9 S.	138.9 E.	Near north coast of western New Guinea. h about 33 km. Mag. 5.2 (CGS).
3	01 15 24.9	45.2 N.	151.4 E.	Kurile Islands. h about 45 km. Mag. 4.2 (CGS).
3	01 37 04.0	45.4 N.	151.0 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
3	02 14 24*	23.9 N.	122.6 E.	Off east coast of Taiwan. h about 33 km. Mag. 4.6 (CGS).
3	03 10 12.7	3.5 S.	77.8 W.	Peru-Ecuador border. Felt at Guayaquil and Quito. h about 33 km. Mag. 6¾ (PAS), 6-6¼ (BRK), 6 (PAL), 6.0 (CGS).
3	04 24 48*	4.3 S.	78.3 W.	Peru-Ecuador border. h about 146 km. Mag. 4.2 (CGS).
3	04 37 25.2	49.5 N.	155.6 E.	Southern Kamchatka. h about 50 km. Mag. 4.9 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
3	07 38 10.7	15.6 S.	73.3 W.	Southern Peru. h about 112 km. Mag. 4.8 (CGS).
3	12 00 41*	43.4 S.	145.8 E.	Tasmania region. Felt at Hobart. h about 33 km.
3	12 02 28*	3.7 S.	78.3 W.	Near coast of Ecuador. h about 33 km. Mag. 4.5 (CGS).
3	14 31 57.2	14.0 S.	165.9 E.	New Hebrides Islands. h about 50 km. Mag. 4.9 (CGS).
3	14 35 59.4	39.2 N.	21.1 E.	Near west coast of Greece. Felt in Aetolie, Neochori, Preveza and Evrytanie. h about 29 km. Mag. 4.3 (CGS).
3	15 59 04.6	38.4 N.	20.5 E.	Ionian Sea. h about 33 km. Mag. 4.1 (CGS).
3	17 10 11*	16.9 N.	61.6 W.	Leeward Islands. h about 34 km. Mag. 4.1 (CGS).
3	18 26 02.0	43.1 N.	111.3 W.	Southeastern Idaho. h about 33 km. Mag. 4.2 (CGS).
3	19 22 53.6	45.3 N.	150.1 E.	Kurile Islands. h about 45 km. Mag. 4.7 (CGS).
3	22 54 36.6	44.3 N.	149.2 E.	Kurile Islands. h about 45 km. Mag. 4.3 (CGS).
4	00 52 53.0	45.2 N.	150.0 E.	Kurile Islands. h about 66 km. Mag. 4.2 (CGS).
4	01 03 13*	2.3 N.	79.7 W.	Off west coast of Colombia. h about 62 km. Mag. 4.1 (CGS).
4	01 14 33*	15.1 S.	167.3 E.	New Hebrides Islands. Widely felt. h about 154 km. Mag. 6¾-7 (PAS).
4	01 17 08.9	6.8 S.	129.6 E.	Banda Sea. Slight damage at Darwin; felt in Western Australia, Northern Territory, South Australia, and Papua. h about 80 km.
4	02 14 04.2	6.9 S.	129.5 E.	Banda Sea. h about 76 km. Mag. 5.3 (CGS).
4	02 36 41.1	7.0 S.	129.5 E.	Banda Sea. h about 129 km. Mag. 5.5 (CGS).
4	03 29 30.5	15.0 S.	75.8 W.	Near coast of southern Peru. h about 52 km. Mag. 4.0 (CGS).
4	03 43 15.9	6.9 S.	129.8 E.	Banda Sea. h about 100 km. Mag. 5.1 (CGS).
4	05 00 29.1	7.0 S.	129.5 E.	Banda Sea. h about 115 km.
4	05 22 59.0	6.8 S.	129.8 E.	Banda Sea. h about 80 km. Mag. 5.4 (CGS).
4	06 09 19.8	44.5 N.	150.6 E.	Kurile Islands. h about 40 km. Mag. 4.2 (CGS).
4	08 06 15.1	44.0 N.	149.9 E.	Kurile Islands. h about 33 km. Mag. 4.2 (CGS).
4	08 35 51.5	44.8 N.	149.3 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
4	15 13 35.1	7.0 S.	129.4 E.	Banda Sea. h about 132 km. Mag. 5.0 (CGS).
4	15 45 46.8	44.5 N.	11.0 E.	Emilia Romagna, Italy. Felt at Reggio Emilia. h about 16 km. Mag. 4.1 (CGS).
4	18 22 43*	23.5 S.	176.1 W.	Tonga Islands. h about 33 km. Mag. 4.6 (CGS).
4	19 52 04.0	6.9 S.	129.5 E.	Banda Sea. h about 104 km.
4	21 12 11.5	36.3 N.	71.3 E.	Hindu Kush. h about 148 km. Mag. 4.7 (CGS).
4	22 17 07.5	6.8 S.	129.8 E.	Banda Sea. h about 122 km. Mag. 5.4 (CGS).
4	22 25 03*	0.9 S.	139.7 E.	Near north coast of western New Guinea. h about 33 km.
5	02 56 51*	55.5 N.	157.9 E.	Kamchatka. h about 33 km. Mag. 4.2 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
5	03 44 40*	43.1 N.	111.2 W.	Southeastern Idaho. h about 33 km. Mag. 3.9 (CGS).
5	05 16 31.2	7.3 S.	129.2 E.	Banda Sea. h about 141 km. Mag. 5.1 (CGS).
5	06 06 19*	6.9 S.	129.4 E.	Banda Sea. h about 94 km. Mag. 4.7 (CGS).
5	08 18 04*	24.8 S.	179.7 E.	Fiji Islands. h about 606 km. Mag. 4.4 (CGS).
5	08 43 25.2	43.8 N.	150.3 E.	Kurile Islands. h about 45 km. Mag. 4.2 (CGS).
5	08 43 33.8	7.2 S.	129.0 E.	Banda Sea. h about 112 km. Mag. 4.9 (CGS).
5	09 18 42.6	43.5 N.	150.9 E.	Kurile Islands. h about 40 km. Mag. 4.6 (CGS).
5	09 33 36*	27.6 S.	176.2 W.	Kermadec Islands region. h about 92 km. Mag. 4.5 (CGS).
5	16 02 05.4	26.1 S.	178.9 E.	Fiji Islands region. h about 56 km. Mag. 4.6 (CGS).
5	20 59 26.3	44.6 N.	148.8 E.	Kurile Islands. h about 33 km. Mag. 4.1 (CGS).
5	21 46 23.6	47.4 N.	147.1 E.	Kurile Islands. h about 45 km. Mag. 4.4 (CGS).
5	22 45 03*	27.8 N.	92.4 W.	Gulf of Mexico. h about 33 km. Mag. 4.8 (CGS).
5	23 10 54.0	55.5 S.	28.4 W.	Sandwich Islands region. h about 33 km.
5	23 52 56.3	1.7 N.	126.4 E.	Molucca Passage. h about 28 km. Mag. 5.8 (CGS).
6	01 01 07.0	12.8 S.	73.9 W.	Southern Peru. h about 86 km. Mag. 4.4 (CGS).
6	01 19 37.4	7.8 S.	129.8 E.	Banda Sea. h about 158 km. Mag. 4.9 (CGS).
6	01 28 46.6	4.2 S.	77.7 W.	Northern Peru. h about 170 km. Mag. 4.1 (CGS).
6	02 13 16.8	2.6 S.	138.4 E.	Western New Guinea. h about 33 km. Mag. 5.7 (CGS).
6	02 55 54.0	2.5 S.	138.6 E.	Western New Guinea. h about 32 km. Mag. 4.8 (CGS).
6	03 00 12.2	2.2 S.	138.7 E.	Western New Guinea. h about 43 km. Mag. 5.1 (CGS).
6	04 06 45.4	2.4 S.	138.6 E.	Western New Guinea. h about 22 km. Mag. 5.3 (CGS).
6	04 35 09.3	2.5 S.	138.4 E.	Western New Guinea. h about 33 km.
6	06 28 55.3	30.8 S.	179.9 E.	Kermadec Islands region. h about 411 km. Mag. 4.7 (CGS).
6	07 35 25.6	2.5 S.	138.6 E.	Western New Guinea. h about 38 km. Mag. 5.5 (CGS).
6	09 01 12.0	7.1 S.	129.2 E.	Banda Sea. h about 90 km. Mag. 5.5 (CGS).
6	09 24 49.2	46.3 N.	154.8 E.	Near west coast of Kamchatka. h about 33 km. Mag. 5.4 (CGS).
6	10 53 00.1	3.0 S.	138.7 E.	Western New Guinea. h about 16 km. Mag. 5.8 (CGS).
6	11 33 08*	2.8 S.	139.1 E.	Western New Guinea. h about 95 km. Mag. 5.2 (CGS).
6	17 07 22*	9.8 S.	113.6 E.	Near south coast of Java. h about 230 km.
6	18 33 25.9	16.7 S.	69.7 W.	Peru-Bolivia border. h about 174 km. Mag. 4.7 (CGS).
6	21 08 35*	38.7 N.	22.8 E.	Greece. Felt on Zante and in Elide. h about 100 km. Mag. 4.0 (CGS).
6	21 49 58*	12.2 N.	88.0 W.	Off coast of El Salvador. h about 37 km. Mag. 4.1 (CGS).
6	23 55 10.1	7.0 S.	129.7 E.	Banda Sea. h about 229 km. Mag. 5.3 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
7	00 46 53.1	42.7 N.	149.3 E.	Kurile Islands. h about 30 km. Mag. 4.1 (CGS).
7	02 42 57.8	2.5 S.	138.7 E.	Western New Guinea. h about 69 km. Mag. 4.9 (CGS).
7	03 24 59.3	44.8 N.	150.1 E.	Kurile Islands. h about 40 km. Mag. 4.0 (CGS).
7	06 12 22.8	36.5 N.	141.7 E.	Off east coast of Honshu, Japan. h about 49 km. Mag. 3.4 (CGS).
7	09 03 53.4	44.2 N.	149.7 E.	Kurile Islands. h about 45 km. Mag. 4.0 (CGS).
7	09 22 53.3	44.2 N.	151.1 E.	Kurile Islands. h about 50 km. Mag. 4.4 (CGS).
7	12 55 25.6	14.1 N.	146.2 E.	Mariana Islands region. h about 48 km. Mag. 5.0 (CGS).
7	15 12 34.5	45.5 N.	150.0 E.	Kurile Islands. h about 40 km. Mag. 4.1 (CGS).
7	15 53 41.9	24.2 S.	176.4 W.	Tonga Islands region. h about 33 km. Mag. 5.1 (CGS).
7	16 26 37.8	11.3 S.	166.1 E.	Santa Cruz Islands. h about 89 km. Mag. 4.9 (CGS).
7	16 45 59.8	50.2 S.	114.9 W.	South Pacific Ocean. h about 33 km. Mag. 4.7 (CGS).
7	17 34 58.0	24.4 S.	176.0 W.	Tonga Islands region. h about 33 km. Mag. 4.5 (CGS).
7	18 55 48*	36.0 N.	25.4 E.	North of Crete. Felt on Paros. h about 33 km. Mag. 4.0 (CGS).
7	20 15 22.5	29.4 S.	178.1 W.	Kermadec Islands. h about 110 km. Mag. 3.8 (CGS).
7	20 37 53.6	44.9 N.	151.9 E.	Kurile Islands. h about 29 km. Mag. 4.5 (CGS).
8	02 56 40.0	27.3 S.	70.1 W.	Central Chile. h about 40 km. Mag. 4.6 (CGS).
8	04 24 14.4	23.0 S.	170.9 E.	New Hebrides Islands region. h about 35 km. Mag. 4.8 (CGS).
8	05 05 03.0	21.5 S.	179.7 W.	Fiji Islands. h about 659 km. Mag. 4.6 (CGS).
8	08 08 09.2	45.0 N.	150.9 E.	Kurile Islands. h about 40 km. Mag. 4.8 (CGS).
8	09 59 24.3	16.5 S.	28.5 E.	Northern Rhodesia. h about 33 km. Mag. 5.5 (CGS).
8	11 06 01.2	26.7 N.	110.4 W.	Gulf of California. h about 33 km. Mag. 4.4 (CGS).
8	11 22 28.5	44.0 N.	150.4 E.	Kurile Islands. h about 40 km. Mag. 4.3 (CGS).
8	14 35 26*	44.4 N.	149.4 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
8	16 13 36.2	2.7 N.	128.4 E.	Molucca Passage. h about 216 km. Mag. 5.7 (CGS).
8	19 22 54.7	3.7 S.	78.2 W.	Ecuador. h about 33 km. Mag. 4.5 (CGS).
9	01 13 13.1	11.9 S.	166.6 E.	Santa Cruz Islands. h about 112 km. Mag. 4.3 (CGS).
9	02 46 44.5	56.8 N.	34.6 W.	South of Iceland. h about 33 km. Mag. 4.8 (CGS).
9	05 37 15.1	5.6 S.	105.5 E.	Sumatra. h about 33 km. Mag. 4.8 (CGS).
9	08 35 25.3	45.6 N.	150.0 E.	Kurile Islands. h about 45 km. Mag. 4.2 (CGS).
9	08 51 18.6	45.3 N.	150.8 E.	Kurile Islands. h about 33 km. Mag. 5.2 (CGS).
9	11 13 30.6	45.6 N.	150.9 E.	Kurile Islands. h about 40 km. Mag. 4.4 (CGS).
9	12 54 30.3	0.1 S.	25.1 W.	Atlantic Ocean. h about 33 km. Mag. 5.2 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
9	18 50 42*	7.1 S.	129.4 E.	Banda Sea. h about 80 km. Mag. 5.2 (CGS).
9	20 21 32.4	11.2 S.	165.6 E.	Santa Cruz Islands. h about 47 km. Mag. 4.8 (CGS).
9	21 15 30.4	9.0 S.	71.5 W.	Western Brazil. h about 600 km. Mag. 6¾-7 (PAS), 6¾-7 (BRK), 5.9 (CGS).
9	23 14 12.6	8.5 S.	72.1 W.	Western Brazil. h about 563 km. Mag. 4.4 (CGS).
10	00 30 31.2	2.0 S.	139.1 E.	Western New Guinea. h about 129 km. Mag. 4.8 (CGS).
10	01 00 38.8	9.2 S.	71.5 W.	Western Brazil. Mag. 6½-6¾ (PAS), 6½ (BRK), 5.6 (CGS).
10	01 36 41.3	9.4 S.	71.3 W.	Western Brazil. h about 600 km. Mag. 4.1 (CGS).
10	04 31 50.5	6.9 S.	129.3 E.	Banda Sea. h about 181 km. Mag. 4.4 (CGS).
10	04 58 52.7	26.5 N.	93.2 E.	Northeastern India. h about 66 km.
10	07 18 07.6	12.9 N.	88.5 W.	Off coast of El Salvador. h about 45 km. Mag. 4.2 (CGS).
10	08 50 06.1	44.5 N.	149.4 E.	Kurile Islands. h about 45 km. Mag. 4.9 (CGS).
10	11 18 32*	36.5 N.	25.9 E.	Aegean Islands region. h about 34 km. Mag. 4.5 (CGS).
10	14 44 32*	45.1 N.	151.9 E.	Kurile Islands. h about 40 km. Mag. 4.2 (CGS).
10	15 58 35*	47.4 N.	147.4 E.	Kurile Islands. h about 40 km. Mag. 4.2 (CGS).
10	17 17 42.7	44.4 N.	149.0 E.	Kurile Islands. h about 40 km. Mag. 5.5 (CGS).
10	18 08 44*	44.0 N.	147.3 E.	Kurile Islands. h about 45 km. Mag. 4.4 (CGS).
10	18 37 18*	37.3 N.	20.9 E.	Ionian Sea. Felt on Chephalonia and Zante and in Elide and Akarnanie. h about 33 km. Mag. 4.5 (CGS).
10	19 20 38.8	26.2 S.	178.3 E.	South of Fiji Islands. h about 607 km. Mag. 4.3 (CGS).
11	00 10 25.6	43.8 N.	149.5 E.	Kurile Islands. h about 55 km. Mag. 4.7 (CGS).
11	00 15 04.8	7.0 S.	129.5 E.	Banda Sea. h about 132 km. Mag. 5.6 (CGS).
11	00 37 10.5	44.3 N.	149.2 E.	Kurile Islands. h about 45 km. Mag. 4.4 (CGS).
11	05 06 03.2	44.3 N.	149.2 E.	Kurile Islands. h about 40 km. Mag. 4.5 (CGS).
11	05 45 50*	43.9 N.	128.8 W.	Off coast of Oregon. h about 33 km. Mag. 4.1 (CGS).
11	07 32 43*	56.0 S.	126.4 W.	South Pacific Ocean. h about 33 km. Mag. 4.6 (CGS).
11	09 49 43.3	44.6 N.	148.9 E.	Kurile Islands. h about 55 km. Mag. 4.7 (CGS).
11	11 29 06.4	16.9 S.	174.4 W.	Tonga Islands. h about 185 km. Mag. 5.2 (CGS).
11	14 43 16.2	32.0 S.	71.0 W.	Central Chile. h about 21 km. Mag. 4.2 (CGS).
11	16 21 14*	32.8 S.	95.5 W.	Easter Island region. h about 33 km. Mag. 4.2 (CGS).
11	19 54 09.4	9.1 S.	71.4 W.	Western Brazil. h about 585 km. Mag. 4.9 (CGS).
11	20 18 39.7	4.0 N.	82.6 W.	Off west coast of Colombia. h about 33 km. Mag. 4.8 (CGS).
12	00 31 47*	44.0 N.	149.2 E.	Kurile Islands. h about 33 km. Mag. 4.4 (CGS).
12	01 17 10*	14.6 S.	173.3 W.	Samoa Islands. h about 33 km. Mag. 4.2 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
12	04 57 12.1	44.8 N.	110.6 W.	Yellowstone National Park, Wyoming. h about 33 km.
12	06 07 53*	27.9 S.	176.2 W.	Kermadec Islands region. h about 33 km. Mag. 4.7 (CGS).
12	07 06 31.2	35.5 N.	29.7 E.	Near southwest coast of Turkey. h about 69 km. Mag. 5.0 (CGS).
12	07 56 53.6	44.2 N.	149.0 E.	Kurile Islands. h about 45 km. Mag. 4.9 (CGS).
12	08 33 15.9	44.2 N.	149.2 E.	Kurile Islands. h about 50 km. Mag. 4.8 (CGS).
12	12 26 45.1	15.8 S.	72.4 W.	Southern Peru. Felt at Arequipa. h about 33 km. Mag. 4.0 (CGS).
12	12 44 02.4	22.6 S.	175.5 W.	Tonga Islands. h about 33 km. Mag. 4.5 (CGS).
12	12 50 17*	51.5 N.	179.9 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 4.3 (CGS).
12	13 00 00.7	44.2 N.	149.4 E.	Kurile Islands. h about 50 km. Mag. 4.9 (CGS).
12	14 26 18*	33.1 S.	68.6 W.	Mendoza Province, Argentina. h about 19 km. Mag. 4.3 (CGS).
12	15 28 43.9	31.7 N.	78.5 E.	Northern India. h about 33 km. Mag. 4.6 (CGS).
12	17 41 52.6	30.4 S.	177.8 W.	Kermadec Islands. h about 60 km. Mag. 4.4 (CGS).
12	20 54 03.5	7.1 S.	129.5 E.	Banda Sea. h about 131 km.
12	21 48 43*	27.7 S.	176.3 W.	Kermadec Islands. h about 33 km. Mag. 4.8 (CGS).
13	01 15 38.5	44.5 N.	149.2 E.	Kurile Islands. h about 50 km. Mag. 4.1 (CGS).
13	01 34 46*	34.6 N.	137.1 E.	Near south-coast of Honshu, Japan. h about 105 km. Mag. 4.2 (CGS).
13	04 17 59.9	8.9 S.	71.5 W.	Western Brazil. h about 545 km. Mag. 3.6 (CGS).
13	05 01 41.8	34.4 N.	138.3 E.	Near south coast of Honshu, Japan. h about 80 km. Mag. 4.4 (CGS).
13	05 16 17*	7.8 N.	125.9 E.	Mindanao, Philippine Islands. h about 33 km. Mag. 5.6 (CGS).
13	06 17 33.3	38.3 N.	112.7 W.	Southwestern Utah. h about 33 km. Mag. 3.8 (CGS).
13	07 32 42.0	44.2 N.	149.6 E.	Kurile Islands. h about 40 km. Mag. 4.2 (CGS).
13	08 38 58*	4.9 S.	132.3 E.	Banda Sea. h about 33 km.
13	09 01 41*	9.0 N.	73.3 W.	Colombia. h about 328 km. Mag. 4.0 (CGS).
13	11 18 28.6	23.8 S.	179.9 W.	Fiji Islands region. h about 520 km. Mag. 4.9 (CGS).
13	12 34 52*	51.9 N.	177.6 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 3.9 (CGS).
13	13 09 00.7	44.9 N.	148.8 E.	Kurile Islands. h about 40 km. Mag. 4.7 (CGS).
13	15 46 49*	22.8 S.	175.3 W.	Tonga Islands. h about 33 km. Mag. 4.2 (CGS).
13	15 50 48*	44.3 N.	148.2 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
13	16 06 35.7	22.8 S.	175.3 W.	Tonga Islands. h about 33 km. Mag. 4.4 (CGS).
13	16 25 17*	45.5 N.	150.0 E.	Kurile Islands. h about 50 km. Mag. 4.4 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
13	17 18 50.1	22.9 S.	175.3 W.	Tonga Islands. h about 33 km. Mag. 5.1 (CGS).
13	18 04 10.5	22.9 S.	175.5 W.	Tonga Islands. h about 33 km. Mag. 4.5 (CGS).
13	20 03 06.6	25.3 N.	109.3 W.	Gulf of California. h about 14 km. Mag. 4.6 (CGS).
14	00 20 03.0	30.1 S.	177.4 W.	Kermadec Islands. h about 42 km. Mag. 4.7 (CGS).
14	03 58 48.9	22.6 N.	142.9 E.	Mariana Islands region. h about 177 km. Mag. 4.9 (CGS).
14	04 35 48.5	17.5 S.	167.7 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km. Mag. 4.8 (CGS).
14	05 06 07.5	45.7 N.	151.2 E.	Kurile Islands. h about 15 km. Mag. 4.6 (CGS).
14	09 05 47.8	15.1 N.	93.9 W.	Off coast of Chiapas, Mexico. h about 33 km. Mag. 4.9 (CGS).
14	10 17 27*	30.5 N.	138.8 E.	South of Honshu, Japan. h about 439 km. Mag. 3.9 (CGS).
14	13 37 02*	52.3 N.	179.8 W.	Andreanof Islands, Aleutian Islands. h about 100 km. Mag 4.4 (CGS).
14	14 01 18.4	17.4 S.	167.6 E.	New Hebrides Islands. h about 33 km. Mag. 4.5 (CGS).
14	14 05 35.6	17.5 S.	167.7 E.	New Hebrides Islands. h about 33 km. Mag. 4.6 (CGS).
14	16 00 00.121			37°02'22"N., 116°01'06"W. Nevada Test Site. ANCHOVY. Shot elevation 958.9 meters (AEC).
14	17 59 04.9	15.0 N.	94.2 W.	Off coast of Chiapas, Mexico. h about 33 km. Mag. 4.2 (CGS).
14	20 11 03.7	19.0 S.	168.8 E.	New Hebrides Islands. h about 33 km. Mag. 4.6 (CGS).
14	21 27 25.6	45.4 N.	151.4 E.	Kurile Islands. h about 50 km. Mag. 4.4 (CGS).
14	23 37 49.5	17.4 S.	167.8 E.	New Hebrides Islands. h about 33 km. Mag. 4.5 (CGS).
15	00 18 52.4	4.7 S.	76.8 W.	Northern Peru. h about 152 km. Mag. 4.3 (CGS).
15	00 44 38.5	44.4 N.	149.1 E.	Kurile Islands. h about 45 km. Mag. 4.7 (CGS).
15	01 11 57.2	3.3 S.	129.1 E.	Ceram. h about 54 km.
15	05 15 46.6	46.1 N.	14.6 E.	Yugoslavia. Felt. h about 35 km. Mag. 3.8 (CGS).
15	06 34 07*	45.6 N.	153.2 E.	Kurile Islands region. h about 33 km. Mag. 4.1 (CGS).
15	08 21 23*	44.4 N.	149.2 E.	Kurile Islands. h about 55 km. Mag. 4.3 (CGS).
15	15 00 00.153			37°07'56"N., 116°02'49"W. Nevada Test Site. MUSTANG. Shot elevation 1116.1 meters (AEC).
15	15 17 07.7	52.9 N.	164.3 W.	Unimak Island, Aleutian Islands. h about 33 km. Mag. 4.6 (CGS).
15	18 16 45*	20.1 N.	70.0 W.	Near north coast of Dominican Republic. h about 50 km. Mag. 3.7 (CGS).
15	21 06 34.0	44.3 N.	149.0 E.	Kurile Islands. h about 50 km. Mag. 6 (BRK), 6¼-6½ (PAL), 6.0 (CGS).
16	01 17 05.6	44.7 N.	149.0 E.	Kurile Islands. h about 33 km. Mag. 4.4 (CGS).
16	01 59 33*	44.2 N.	149.2 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
16	02 30 07.0	44.3 N.	149.0 E.	Kurile Islands. h about 50 km. Mag. 5.0 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
16	06 24 29.6	17.4 S.	167.7 E.	New Hebrides Islands. h about 27 km.
16	06 40 37*	7.0 S.	129.4 E.	Banda Sea. h about 125 km. Mag. 4.7 (CGS).
16	06 46 15.7	41.3 S.	87.5 W.	Off coast of Chile. h about 11 km. Mag. 5.3 (CGS).
16	11 07 53.7	26.7 N.	97.2 E.	Northern Burma. h about 33 km. Mag. 5.1 (CGS).
16	11 39 37.8	28.1 N.	95.1 E.	Assam, India. h about 37 km. Mag. 4.7 (CGS).
16	11 58 41.5	38.1 N.	117.0 W.	Central Nevada. h about 15 km. Mag. 4.0 (CGS).
16	12 24 41*	38.3 N.	117.1 W.	Central Nevada. h about 15 km.
16	12 56 36*	38.2 N.	117.1 W.	Central Nevada. h about 15 km.
16	14 23 43.2	38.1 N.	117.0 W.	Central Nevada. h about 15 km. Mag. 3.7 (CGS).
16	16 48 10.2	38.0 N.	117.1 W.	Central Nevada. h about 15 km. Mag. 4.0 (CGS).
16	17 40 03*	38.1 N.	117.1 W.	Central Nevada. h about 15 km.
16	18 06 55.0	2.2 S.	80.0 W.	Ecuador. Felt at Guayaquil. h about 59 km. Mag. 4.6 (CGS).
16	19 17 56*	38.0 N.	117.1 W.	Central Nevada. h about 15 km.
16	22 43 26.4	22.3 S.	175.0 W.	Tonga Islands. h about 33 km. Mag. 6 (PAS), 5¼-5½ (BRK), 5.6 (CGS).
16	22 51 25.8	38.0 N.	117.0 W.	Central Nevada. h about 15 km. Mag. 4.1 (CGS).
16	23 39 58.3	22.1 S.	175.3 W.	Tonga Islands. h about 33 km. Mag. 5.3 (CGS).
17	00 48 02.6	7.6 N.	37.4 W.	North Atlantic Ocean. h about 33 km. Mag. 6¼-6½ (PAS), 5½-5¾ (BRK), 6-6¼ (PAL), 5.9 (CGS).
17	00 48 57*	22.2 S.	175.0 W.	Tonga Islands. h about 33 km. Mag. 5.3 (CGS).
17	01 13 36.0	21.8 S.	175.0 W.	Tonga Islands. h about 33 km. Mag. 5.0 (CGS).
17	02 32 49*	38.0 N.	117.1 W.	Central Nevada. h about 15 km.
17	07 50 34.4	6.3 N.	126.2 E.	Mindanao, Philippine Islands. h about 33 km. Mag. 5.6 (CGS).
17	10 27 18*	20.9 S.	174.8 W.	Tonga Islands. h about 33 km. Mag. 4.2 (CGS).
17	13 13 49.3	17.4 S.	178.5 W.	Fiji Islands region. h about 509 km. Mag. 4.7 (CGS).
17	17 40 59.1	44.9 N.	149.5 E.	Kurile Islands. h about 50 km. Mag. 4.3 (CGS).
17	20 03 33.2	7.1 S.	129.6 E.	Banda Sea. h about 137 km. Mag. 4.1 (CGS).
17	22 51 14*	45.2 N.	150.1 E.	Kurile Islands. h about 20 km. Mag. 4.1 (CGS).
18	00 15 34*	44.1 N.	151.1 E.	Kurile Islands. h about 40 km. Mag. 4.3 (CGS).
18	01 01 52.9	3.6 S.	143.4 E.	Near coast of North-East New Guinea. h about 33 km. Mag. 5.2 (CGS).
18	01 42 55.9	29.3 N.	57.0 E.	Southern Iran. h about 33 km. Mag. 5.0 (CGS).
18	01 45 27.6	47.2 N.	148.5 E.	Sea of Okhotsk. h about 319 km. Mag. 4.7 (CGS).
18	05 16 42*	8.4 S.	113.5 E.	South of Java. h about 104 km.
18	06 04 12.7	22.4 S.	170.5 E.	Loyalty Islands. h about 33 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
18	07 17 50.4	16.5 S.	74.5 W.	Near coast of southern Peru. h about 54 km. Mag. 4.3 (CGS).
18	07 38 05*	43.9 N.	150.8 E.	Kurile Islands. h about 33 km. Mag. 4.2 (CGS).
18	09 31 35.3	36.2 N.	120.4 W.	Fresno County, California. Felt at Five Points and Walti Ranch. h about 14 km. Mag. 4.6 (CGS).
18	13 13 42.8	35.5 S.	179.9 W.	Kermadec Islands region. h about 50 km.
18	13 51 35.8	15.9 S.	173.3 W.	Tonga Islands. h about 33 km. Mag. 5.1 (CGS).
18	14 38 28.9	29.9 N.	113.6 W.	Gulf of California. h about 14 km. Mag. 6½ (PAS), 6½-6¾ (PAL), 5.7 (CGS).
18	16 02 19.9	29.7 N.	113.8 W.	Gulf of California. h about 14 km. Mag. 4.7 (CGS).
18	19 07 47.7	29.1 N.	114.1 W.	Baja California. h about 14 km. Mag. 4.6 (CGS).
18	19 33 35.9	30.0 N.	113.7 W.	Gulf of California. h about 14 km. Mag. 4.4 (CGS).
18	21 11 10.2	13.4 S.	166.6 E.	Santa Cruz Islands. h about 51 km. Mag. 4.7 (CGS).
18	22 01 10*	31.9 N.	113.3 W.	Sonora, Mexico. h about 14 km. Mag. 4.9 (CGS).
19	01 11 43.2	31.0 N.	113.7 W.	Gulf of California. h about 14 km. Mag. 4.9 (CGS).
19	02 01 16*	44.1 N.	150.2 E.	Kurile Islands. h about 50 km. Mag. 4.5 (CGS).
19	04 37 56.8	39.7 N.	129.5 E.	Off east coast of Korea. h about 537 km. Mag. 4.4 (CGS).
19	08 06 33*	59.7 N.	140.8 W.	Yakutat Bay, Alaska. h about 33 km. Mag. 4.2 (CGS).
19	08 23 11.6	30.9 N.	113.8 W.	Gulf of California. h about 14 km. Mag. 5¼ (PAS), 5.0 (CGS).
19	10 45 49.1	22.5 S.	171.3 E.	Loyalty Islands region. h about 36 km. Mag. 5.0 (CGS).
19	10 51 13.8	30.5 N.	114.1 W.	Gulf of California. h about 14 km. Mag. 4.3 (CGS).
19	11 00 54.3	44.4 N.	149.2 E.	Kurile Islands. h about 33 km. Mag. 5.8 (CGS).
19	12 25 39.5	30.2 S.	60.8 E.	Indian Ocean. h about 33 km. Mag. 5.7 (CGS).
19	14 25 27*	44.4 N.	149.1 E.	Kurile Islands. h about 33 km. Mag. 4.4 (CGS).
19	17 38 39.7	53.1 N.	159.6 E.	Off east coast of Kamchatka. h about 40 km. Mag. 4.9 (CGS).
19	18 17 02.2	5.0 S.	102.2 E.	Off south coast of Sumatra. h about 37 km. Mag. 5.4 (CGS).
19	22 36 58*	18.6 S.	72.2 W.	Off coast of southern Peru. h about 33 km. Mag. 4.4 (CGS).
20	01 13 49*	53.4 N.	130.6 W.	Queen Charlotte Islands region. h about 39 km. Mag. 4.0 (CGS).
20	04 07 22.6	5.5 S.	148.2 E.	New Britain. h about 201 km. Mag. 5.2 (CGS).
20	08 54 25*	17.5 S.	172.8 W.	Tonga Islands. h about 33 km. Mag. 3.9 (CGS).
20	11 59 58.5	22.2 S.	175.2 W.	Tonga Islands. h about 33 km. Mag. 5.6 (CGS).
20	16 57 13.5	31.5 N.	131.6 E.	Kyushu, Japan. h about 33 km. Mag. 4.5 (CGS).
20	18 49 20.8	6.4 N.	126.2 E.	Mindanao, Philippine Islands. h about 33 km. Mag. 5.4 (CGS).
20	19 48 43*	48.0 N.	154.8 E.	Kurile Islands. h about 33 km. Mag. 4.6 (CGS).
20	22 33 30.3	44.1 N.	149.1 E.	Kurile Islands. h about 45 km. Mag. 4.6 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
21	05 54 54.9	17.9 S.	178.6 W.	Fiji Islands. h about 595 km. Mag. 4.3 (CGS).
21	06 36 24.2	8.9 S.	117.8 E.	Sumbawa. h about 33 km.
21	09 08 03*	18.0 S.	178.4 W.	Fiji Islands. h about 568 km. Mag. 3.9 (CGS).
21	09 53 38.9	41.2 N.	141.1 E.	Near north coast of Honshu, Japan. h about 57 km. Mag. 4.2 (CGS).
21	13 06 41.6	44.9 N.	151.9 E.	Kurile Islands. h about 40 km. Mag. 4.4 (CGS).
21	14 22 56.1	47.6 N.	153.3 E.	Kurile Islands. h about 60 km. Mag. 4.2 (CGS).
21	16 22 42.4	13.0 N.	144.9 E.	Mariana Islands. h about 33 km. Mag. 4.9 (CGS).
21	18 42 44.8	13.8 S.	14.5 W.	Ascension Islands region. h about 33 km. Mag. 5.1 (CGS).
21	19 30 28*	8.7 S.	119.2 E.	Flores Sea. h about 157 km.
21	19 58 23.8	44.2 N.	149.6 E.	Kurile Islands. h about 40 km. Mag. 4.6 (CGS).
21	20 23 11.8	11.1 S.	166.3 E.	Santa Cruz Islands. h about 149 km. Mag. 4.7 (CGS).
21	21 01 35.3	50.3 N.	156.4 E.	Southern Kamchatka. h about 80 km. Mag. 5.3 (CGS).
22	00 18 35.9	5.9 S.	107.9 E.	Near north coast of Java. h about 323 km. Mag. 5.1 (CGS).
22	03 24 36.3	6.1 S.	154.3 E.	Solomon Islands. h about 78 km. Mag. 4.7 (CGS).
22	11 14 03.0	18.5 N.	100.3 W.	Guerrero, Mexico. h about 120 km. Mag. 4.9 (CGS).
22	12 40 10.0	18.8 S.	69.6 W.	Chile-Bolivia border. h about 120 km. Mag. 4.6 (CGS).
22	14 45 51.7	44.4 N.	149.0 E.	Kurile Islands. h about 33 km. Mag. 5.6 (CGS).
22	15 22 10.9	44.5 N.	149.2 E.	Kurile Islands. h about 40 km. Mag. 4.5 (CGS).
22	16 15 54.0	10.4 N.	94.0 E.	Andaman Islands region. h about 33 km. Mag. 5.7 (CGS).
22	17 03 38.9	17.9 S.	172.8 W.	Tonga Islands region. h about 33 km. Mag. 5.2 (CGS).
22	17 30 00.149			37°07'10"N., 116°02'43"W. Nevada Test Site. GREYS. Shot elevation 970.2 meters (AEC).
22	18 57 02.5	21.0 S.	67.9 W.	Western Bolivia. h about 87 km. Mag. 4.8 (CGS).
22	20 10 40*	63.4 N.	150.0 W.	Central Alaska. h about 156 km. Mag. 4.1 (CGS).
22	20 26 00.2	37.3 N.	30.1 E.	Southwestern Turkey. Slight damage at Burdur and Teffenni. h about 28 km. Mag. 4.4 (CGS).
22	21 41 31*	37.5 N.	30.0 E.	Southwestern Turkey. h about 20 km. Mag. 5.1 (CGS).
23	01 49 21.8	44.3 N.	148.9 E.	Kurile Islands. h about 45 km. Mag. 4.4 (CGS).
23	04 58 52.0	15.0 S.	167.3 E.	New Hebrides Islands. h about 116 km. Mag. 4.3 (CGS).
23	07 50 46.3	30.1 N.	114.0 W.	Gulf of California. h about 14 km. Mag. 6 (PAS), 6 (BRK), 5.1 (CGS).
23	08 17 16.6	30.0 N.	113.9 W.	Gulf of California. h about 14 km. Mag. 4.6 (CGS).
23	08 32 31*	29.9 N.	114.0 W.	Gulf of California. h about 14 km. Mag. 5.3 (CGS).
23	08 47 17.4	29.7 N.	114.3 W.	Baja California. h about 14 km. Mag. 4.7 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
23	10 20 10.2	30.0 N.	113.9 W.	Gulf of California. h about 14 km. Mag. 4.1 (CGS).
23	10 53 18.4	30.4 N.	113.5 W.	Gulf of California. h about 14 km. Mag. 4.3 (CGS).
23	18 08 15.8	16.7 S.	70.6 W.	Southern Peru. h about 123 km. Mag. 3.9 (CGS).
23	19 00 35.6	45.1 N.	151.5 E.	Kurile Islands. h about 45 km. Mag. 4.6 (CGS).
23	19 30 19.4	20.2 S.	178.1 W.	Fiji Islands. h about 515 km. Mag. 4.7 (CGS).
23	22 33 56.3	79.9 N.	0.9 E.	Svalbard region. h about 33 km. Mag. 4.3 (CGS).
23	23 13 28.6	52.3 N.	173.4 W.	Andreanof Island, Aleutian Islands. h about 45 km. Mag. 4.5 (CGS).
24	01 41 41.2	17.1 S.	173.2 W.	Tonga Islands region. h about 33 km. Mag. 4.1 (CGS).
24	03 58 33*	2.9 S.	128.8 E.	Ceram Sea. h about 42 km. Mag. 5.5 (CGS).
24	05 08 42.8	22.1 S.	175.6 W.	Tonga Islands. h about 33 km. Mag. 5.1 (CGS).
24	05 13 23.5	21.9 S.	175.8 W.	Tonga Islands. h about 33 km. Mag. 5.0 (CGS).
24	05 20 44.9	21.7 S.	175.1 W.	Tonga Islands. h about 34 km. Mag. 4.6 (CGS).
24	06 16 09.2	21.9 S.	176.8 W.	Fiji Islands. h about 33 km. Mag. 4.5 (CGS).
24	11 05 56.8	28.2 N.	140.1 E.	South of Honshu, Japan. h about 260 km. Mag. 5.2 (CGS).
24	11 53 56*	48.1 N.	148.0 E.	Kurile Islands. h about 40 km. Mag. 4.4 (CGS).
24	15 31 29.4	6.1 S.	147.6 E.	Near coast of North-East New Guinea. Felt at Lae. h about 75 km. Mag. 4.6 (CGS).
24	16 49 31.3	11.4 N.	73.8 W.	Northern Colombia. h about 111 km. Mag. 4.1 (CGS).
24	17 48 47.0	61.8 N.	149.5 W.	Central Alaska. h about 36 km. Mag. 4.3 (CGS).
24	17 56 02.2	44.3 N.	149.3 E.	Kurile Islands. h about 50 km. Mag. 4.6 (CGS).
24	18 09 08.7	46.4 N.	150.0 E.	Kurile Islands. h about 40 km. Mag. 4.9 (CGS).
24	19 23 13.8	45.6 N.	151.6 E.	Kurile Islands. h about 33 km. Mag. 4.2 (CGS).
24	22 58 16.8	56.1 S.	27.5 W.	Sandwich Islands. h about 33 km. Mag. 5.6 (CGS).
25	00 51 02.1	16.3 S.	174.6 W.	Fiji Islands region. h about 196 km. Mag. 4.4 (CGS).
25	03 49 13.3	44.8 N.	149.4 E.	Kurile Islands. h about 40 km. Mag. 4.3 (CGS).
25	06 43 23.5	45.4 N.	151.4 E.	Kurile Islands. h about 50 km. Mag. 4.8 (CGS).
25	06 50 08.8	6.9 N.	73.3 W.	Colombia. h about 167 km. Mag. 4.2 (CGS).
25	08 54 06.1	45.0 N.	149.2 E.	Kurile Islands. h about 33 km. Mag. 4.6 (CGS).
25	10 02 23.8	44.3 N.	149.5 E.	Kurile Islands. h about 55 km. Mag. 4.9 (CGS).
25	10 11 04.8	44.1 N.	149.9 E.	Kurile Islands. h about 45 km. Mag. 4.8 (CGS).
25	11 30 33.0	45.4 N.	151.7 E.	Kurile Islands. h about 50 km. Mag. 4.5 (CGS).
25	16 46 36.2	22.6 N.	121.3 E.	Near east coast of Taiwan. h about 33 km. Mag. 4.7 (CGS).
25	17 53 36.8	6.8 N.	73.0 W.	Colombia. h about 160 km. Mag. 4.0 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
26	02 58 34.7	26.9 S.	176.5 W.	Kermadec Islands region. h about 46 km. Mag. 4.2 (CGS).
26	06 52 08.2	6.8 S.	129.6 E.	Banda Sea. h about 111 km. Mag. 5.1 (CGS).
26	08 47 17.0	7.1 S.	129.2 E.	Banda Sea. h about 117 km. Mag. 4.7 (CGS).
26	09 09 03*	16.7 S.	67.2 W.	Bolivia. h about 276 km. Mag. 4.0 (CGS).
26	16 19 48.8	34.9 N.	27.4 E.	Crete region. h about 33 km. Mag. 4.5 (CGS).
26	18 00 33*	32.5 S.	71.2 W.	Southern Chile. h about 140 km. Mag. 4.2 (CGS).
26	20 01 08.1	9.5 S.	155.5 E.	Solomon Islands region. h about 33 km. Mag. 4.6 (CGS).
26	22 50 08.9	16.6 S.	175.2 E.	Fiji Islands region. h about 33 km. Mag. 5.3 (CGS).
27	02 19 41.9	16.6 S.	72.1 W.	Southern Peru. Felt at Arequipa. h about 79 km. Mag. 4.9 (CGS).
27	07 41 01.3	23.3 S.	65.8 W.	Jujuy Province, Argentina. h about 164 km. Mag. 4.5 (CGS).
27	07 55 17*	42.0 N.	76.5 E.	Kazakh S.S.R. h about 33 km.
27	09 21 58.1	46.6 N.	152.6 E.	Kurile Islands region. h about 45 km. Mag. 4.4 (CGS).
27	09 40 41*	7.2 N.	73.3 W.	Colombia. h about 114 km. Mag. 4.0 (CGS).
27	13 13 11*	7.5 S.	127.7 E.	Banda Sea. h about 33 km. Mag. 4.4 (CGS).
27	13 58 58.4	3.1 N.	126.6 E.	Molucca Passage. h about 33 km. Mag. 4.8 (CGS).
27	20 18 01*	45.8 N.	151.8 E.	Kurile Islands. h about 40 km. Mag. 4.4 (CGS).
27	21 10 39.9	30.8 N.	79.1 E.	Northern India. h about 33 km. Mag. 5.1 (CGS).
28	02 44 36.3	19.1 N.	69.4 W.	Near north coast of Dominican Republic. h about 48 km. Mag. 4.3 (CGS).
28	03 14 02.4	44.3 N.	114.8 W.	Central Idaho. h about 33 km. Mag. 3.5 (CGS).
28	03 19 00*	19.1 N.	69.5 W.	Dominican Republic. h about 33 km. Mag. 4.1 (CGS).
28	05 11 48*	44.9 N.	148.9 E.	Kurile Islands. h about 45 km. Mag. 4.4 (CGS).
28	08 28 19.8	12.0 S.	167.5 E.	Santa Cruz Islands. h about 259 km. Mag. 4.6 (CGS).
28	08 41 31*	10.9 N.	41.4 W.	North Atlantic Ocean. h about 33 km. Mag. 4.7 (CGS).
28	11 16 21.0	8.3 N.	124.5 E.	Near west coast of Mindanao, Philippine Islands. h about 57 km. Mag. 5.8 (CGS).
28	13 05 22.9	45.3 N.	150.0 E.	Kurile Islands. h about 33 km. Mag. 4.3 (CGS).
28	15 07 50.8	12.1 S.	166.1 E.	Santa Cruz Islands. h about 33 km. Mag. 4.5 (CGS).
28	15 13 11.0	52.2 N.	174.2 E.	Near Islands, Aleutian Islands. h about 33 km. Mag. 5.4 (CGS).
28	18 14 17*	27.4 S.	179.1 E.	Kermadec Islands. h about 593 km. Mag. 4.0 (CGS).
28	19 26 25.5	12.2 S.	165.9 E.	Santa Cruz Islands. h about 25 km. Mag. 4.1 (CGS).
28	19 57 56.7	7.1 S.	129.4 E.	Banda Sea. h about 113 km. Mag. 4.6 (CGS).
28	23 18 19.8	43.6 N.	150.6 E.	Kurile Islands. h about 33 km. Mag. 4.4 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
November	h m s	°	°	
29	01 58 45*	15.1 S.	73.7 W.	Southern Peru. h about 124 km. Mag. 4.7 (CGS).
29	03 56 20.1	44.7 N.	147.0 E.	Kurile Islands. h about 133 km. Mag. 4.1 (CGS).
29	08 48 56.7	39.1 N.	118.2 W.	Western Nevada. h about 33 km. Mag. 3.7 (CGS).
29	10 21 53.0	12.2 S.	166.0 E.	Santa Cruz Islands. h about 54 km. Mag. 4.3 (CGS).
29	14 09 11.4	44.6 N.	149.8 E.	Kurile Islands. h about 50 km. Mag. 4.6 (CGS).
29	14 49 26.6	23.7 N.	143.2 E.	Bonin Islands region. h about 33 km. Mag. 5.2 (CGS).
29	15 14 39*	42.5 N.	13.3 E.	Italy. Felt Aquila. h about 33 km. Mag. 4.2 (CGS).
29	18 33 23.0	5.3 S.	151.6 E.	New Britain. Felt at Palmalmal and Rabaul. h about 58 km. Mag. 5.0 (CGS).
29	18 55 23.6	17.3 S.	178.4 W.	Fiji Islands. h about 528 km. Mag. 4.4 (CGS).
29	19 46 17.1	44.1 N.	149.5 E.	Kurile Islands. h about 50 km. Mag. 4.5 (CGS).
29	20 49 36.1	36.8 N.	121.6 W.	Monterey County, California. Felt at Hollister. h about 5 km.
29	22 21 49*	49.0 N.	148.3 E.	Kurile Islands. h about 33 km. Mag. 4.1 (CGS).
29	23 58 55.7	17.9 S.	178.8 W.	Fiji Islands. h about 608 km. Mag. 4.4 (CGS).
30	09 47 59.0	1.6 N.	128.4 E.	Halmahera region. h about 61 km. Mag. 5.5 (CGS).
30	11 29 46.4	51.9 N.	174.2 E.	Near Islands, Aleutian Islands. h about 33 km. Mag. 4.2 (CGS).
30	18 24 29*	45.2 N.	150.4 E.	Kurile Islands. h about 50 km. Mag. 4.3 (CGS).
30	20 44 27.4	46.1 N.	150.9 E.	Kurile Islands. h about 33 km. Mag. 4.5 (CGS).
30	21 40 20.3	6.6 N.	94.2 E.	Nicobar Islands. h about 33 km. Mag. 5.3 (CGS).

Date and Station	Phase (GCT)
	h m s
NOV 01	
COL EP	00 01 36.0
NOV 01	
EUR EP	00 04 53.8
ALQ EP	00 05 47.0
NOV 01	
BOZ EP	00 14 32.0
ES	14 51.0
NOV 01	
BCN E(P)	00 27 42.5
E	28 00.2
EL	28 50.5
NOV 01	
KIP IP	01 12 39.7
NOV 01	
COL IP	01 21 24.2
NOV 01	
H-02 26 01.2	
5.5N 082.6W	
h ABOUT 035KM	
BHP IP	02 27 10.0
SJP EP	02 30 38.2
ALQ EP	02 33 07.0
TUC E(P)	02 33 14.0
FGU IP	02 33 57.2
EUR EP	02 34 18.0
E	34 28.5
BOZ IP	02 34 32.5
NOV 01	
H-02 51 35.1	
45.2N 152.2E	
h ABOUT 033KM	
COL IP	02 58 50.8
EUR EP	03 02 11.2
NOV 01	
GUA IP	03 22 33.2
IS	22 45.4
NOV 01	
H-03 52 25.9	
51.7N 159.8E	
h ABOUT 033KM	
COL EP	03 58 28.0
EUR EP	04 02 11.0
EsP	02 22.0
ALQ EP	04 03 06.0
TUC E(P)	04 03 14.0
NOV 01	
TUC E(P)	04 21 00.0

Date and Station	Phase (GCT)
	h m s
NOV 01	
H-04 29 43.0	
29.5S 064.2W	
h ABOUT 033KM	
EUR E(P)	04 42 10.0
E	42 20.0
NOV 01	
TUC E(P)	04 57 44.0
NOV 01	
COL IP	05 07 35.3
NOV 01	
H-07 02 41.7	
14.6N 053.6E	
h ABOUT 033KM	
EUR EP'	07 21 41.5
E	21 55.0
NOV 01	
TUC E(P)	07 32 55.0
NOV 01	
COL EP	07 44 09.0
NOV 01	
TUC E(P)	08 29 06.0
NOV 01	
ALQ IP	10 16 22.0
EUR E(P)	10 17 05.5
NOV 01	
EUR E(P)	10 42 42.0
E	42 49.5
EL	43 55.5
NOV 01	
TUC E(P)	11 07 33.0
NOV 01	
EUR E(P)	11 22 52.0
E	23 52.8
NOV 01	
H-11 34 55.9	
13.6N 090.1W	
h ABOUT 128KM	
ALQ EP	11 40 18.0
E	43 48.0
TUC E(P)	11 40 22.0
FGU EP	11 41 12.8
EUR EP	11 41 32.8
E	41 54.8
E	42 10.0
COL EP	11 45 17.0
IPCP	45 53.9
NOV 01	
BUT EP	11 51 40.8
NOV 01	
EUR EP	14 07 32.0
EL	08 38.0

Date and Station	Phase (GCT)
	h m s
NOV 01	
GUA E(P)	14 33 05.0
NOV 01	
EUR EP	14 33 45.0
NOV 01	
EUR EP	14 46 13.6
NOV 01	
EUR EP	15 30 44.5
EL	31 25.7
NOV 01	
ALQ EP	17 20 26.2
ES	20 55.7
NOV 01	
BUT E(P)	17 50 26.0
NOV 01	
BOZ IP	17 52 53.0
BUT IP	17 53 02.8
IS	53 20.8
NOV 01	
EUR EP	18 34 28.5
E	34 40.0
NOV 01	
COL EP	19 58 49.0
NOV 01	
GUA IP	20 06 19.0
NOV 01	
GUA EP	20 08 23.4
NOV 01	
EUR IP	20 12 38.5
IS	12 54.0
NOV 01	
COL EP	20 32 51.0
NOV 01	
EUR EP	20 38 36.0
IL	39 10.5
NOV 01	
EUR E(P)	20 58 38.5
IL	59 11.5
NOV 01	
H-20 59 28.1	
22.5S 176.8W	
h ABOUT 071KM	
KIP IP	21 07 57.8
GUA IP	21 08 32.2
UKI EP	21 11 29.5
BCN EP	21 11 45.7
EsP	12 22.7
TUC IP	21 11 49.9
IsP	12 25.5
EUR IP D	21 11 51.7
IsP	12 28.8

Date and Station	Phase (GCT)
	h m s
GCA IP	21 11 58.9
ALQ IP	21 12 11.3
IsP	12 47.5
FGU IP	21 12 15.6
BUT EP	21 12 17.8
COL IP	21 12 19.5
BOZ IP	21 12 20.5
HHM IP	21 12 20.8
COL EP	21 15 58.0
NOV 01	
GCA E(P)	21 25 42.7
NOV 01	
BCN IP	21 31 21.1
I(S)	31 28.6
EUR E(P)	21 32 04.5
IL	33 01.5
NOV 01	
FGU EP	21 46 46.1
IS	47 07.4
NOV 01	
FGU IP	22 05 44.9
IS	06 03.8
NOV 01	
ALQ IP	22 16 45.7
IS	17 18.4
GCA E(P)	22 16 48.3
ES	17 23.3
NOV 01	
EUR IP D	22 28 47.5
NOV 01	
H-22 41 23.8	
44.9N 148.9E	
h ABOUT 060KM	
COL IP	22 48 49.1
HHM IP	22 51 40.8
I	52 20.9
UKI EP	22 51 44.5
BUT EP	22 51 55.8
BOZ IP	22 52 00.0
EUR IP C	22 52 10.4
FGU IP	22 52 28.1
BCN IP C	22 52 29.1
GCA IP	22 52 36.3
TUC EP	22 52 57.3
NOV 01	
HHM EP	23 29 30.0

Date and Station	Phase (GCT)
	h m s
NOV 01	
BCN E(P)	23 38 18.9
E(S)	38 45.0
EUR EP	23 38 57.3
IL	40 18.8
NOV 01	
BCN E(P)	23 50 05.6
EL	55 56.0
NOV 02	
FGU IP	00 19 05.2
NOV 02	
COL EP	00 32 10.0
NOV 02	
EUR EP	01 14 53.5
NOV 02	
H-01 41 58.5	
6.2S 154.4E	
h ABOUT 063KM	
EUR EP	01 55 09.6
EpP	55 31.8
NOV 02	
EUR E(P)	02 07 26.6
E	07 40.0
NOV 02	
BOZ EP	02 14 02.0
IS	14 34.0
NOV 02	
GUA E(P)	03 06 53.5
NOV 02	
EUR EP	04 32 34.3
NOV 02	
BHP IP	05 04 04.0
IS	04 34.0
NOV 02	
BOZ EP	05 55 51.0
ES	56 19.0
NOV 02	
EUR EP	06 08 41.0
ES	09 06.3
NOV 02	
COL IP	07 20 21.0
NOV 02	
BHP IP	08 15 37.5
IS	15 47.5
NOV 02	
COL EP	08 28 36.0
NOV 02	
COL IP	08 42 13.8
NOV 02	
H-08 47 43.4	
32.4N 113.7W	
h ABOUT 014KM	
TUC E(P)	08 48 16.0

Date and Station	Phase (GCT)
	h m s
BCN IP C	08 48 39.9
IL	49 33.5
I	49 56.0
GCA IP	08 48 59.7
I	49 06.2
I	49 21.7
ALQ EP	08 49 19.3
E	49 56.0
EUR EP	08 49 30.2
SLC EP	08 49 51.7
FGU E(P)	08 50 00.0
NOV 02	
TUC EP	08 59 07.0
NOV 02	
TUC E(P)	09 01 49.0
BCN E(P)	09 02 20.0
EL	03 37.0
EUR E(P)	09 03 05.5
NOV 02	
H-09 17 18.2	
44.6N 151.2E	
h ABOUT 050KM	
COL IP	09 24 38.3
EUR E(P)	09 27 58.0
EpP	28 12.2
ALQ EP	09 28 51.3
NOV 02	
COL IP	09 53 13.1
EUR EP	09 57 33.3
E	57 45.8
NOV 02	
FGU EP	10 09 42.4
IS	10 17.4
NOV 02	
GUA IP	10 19 22.3
NOV 02	
H-10 13 02.3	
51.5N 179.9W	
h ABOUT 033KM	
COL EP	10 17 48.0
EUR EP	10 21 15.5
I	21 19.2
E	22 15.0
NOV 02	
GUA E(P)	10 38 36.0
E	39 10.5
NOV 02	
TUC E(P)	10 53 22.0
NOV 02	
TUC E(P)	11 42 07.0

Date and Station	Phase (GCT)
	h m s
NOV 02	
EUR EP	12 10 41.0
E	11 00.5
NOV 02	
TUC EP	12 12 35.0
BCN EP	12 13 07.9
I(S)	13 49.4
EL	14 20.4
GCA EP	12 13 24.9
ALQ E(P)	12 13 46.3
EUR E(P)	12 13 50.0
ILG	16 16.5
NOV 02	
H-12 45 16.1	
35.1N 005.1W	
h ABOUT 033KM	
EUR E(P)	12 57 43.2
NOV 02	
COL EP	13 59 48.0
NOV 02	
EUR EP	15 09 28.5
NOV 02	
H-16 07 13.1	
12.5S 074.7W	
h ABOUT 105KM	
ALQ EP	16 16 43.5
EUR E(P)	16 17 41.0
EPCP	18 14.0
NOV 02	
COL IP	16 46 01.6
EUR EP	16 51 42.4
E	52 05.7
NOV 02	
EUR E(P)	17 50 07.0
NOV 02	
H-17 53 27.2	
44.0N 150.5E	
h ABOUT 050KM	
COL IP	18 00 53.3
HHM EP	18 03 43.9
EPCP	04 20.9
EUR IP D	18 04 12.2
EPCP	04 36.5
BCN EP	18 04 29.8
EpP	04 43.8
GCA EP	18 04 37.7
ALQ IP	18 05 05.3
NOV 02	
H-18 58 11.9	
33.1N 115.4W	
h ABOUT 016KM	

Date and Station	Phase (GCT)
	h m s
BCN EP	18 58 57.8
I	59 03.8
E(S)	59 27.8
TUC EP	18 59 13.0
GCA EP	18 59 27.1
EUR E(P)	18 59 49.2
IL	19 01 36.0
ALQ E(P)	19 00 17.2
I	00 41.0
NOV 02	
BCN E(P)	19 05 30.8
I	05 36.5
EL	06 15.0
EUR E(P)	19 06 40.0
NOV 02	
TUC E(P)	19 36 43.0
BCN E(P)	19 38 59.2
E	39 06.2
E	39 12.0
NOV 02	
H-19 51 58.6	
43.3N 029.5W	
h ABOUT 033KM	
EUR E(P)	20 02 20.0
E	02 27.5
NOV 02	
EUR E(P)	20 07 19.5
E	07 28.6
IL	08 31.0
NOV 02	
H-20 40 32.4	
22.2S 175.6W	
h ABOUT 033KM	
EUR E(P)	20 52 58.5
COL IP	20 53 28.9
ALQ IPKKP	21 11 27.4
NOV 02	
BOZ IP	20 57 05.0
IL	57 35.0
NOV 02	
COL EP	21 00 36.0
NOV 02	
GUA IP	21 20 31.6
IS	20 51.1
NOV 02	
H-21 35 29.8	
24.3S 068.1W	
h ABOUT 106KM	
ALQ IP	21 46 27.4
IPCP	46 57.2
GCA EP	21 46 53.0
BCN EP	21 46 58.7

Date and Station	Phase	(GCT) h m s
FGU	IP	21 47 04.4
EUR	IP D	21 47 16.5
	I	47 25.0
	E	48 19.0
HHM	IP	21 47 44.9
NOV 02		
H-22 21 20.7		
1.9S 138.9E		
h ABOUT 033KM		
COL	EP	22 33 57.0
NOV 02		
EUR	EP	22 29 51.8
	ES	30 08.8
NOV 02		
COL	IP	23 09 05.9
NOV 02		
SLC	EP	23 11 13.0
	IL	11 44.0
FGU	IP	23 11 45.9
EUR	E(P)	23 11 57.5
	IL	12 45.5
NOV 02		
COL	EP	23 13 12.0
NOV 02		
EUR	E(P)	23 34 15.0
NOV 02		
SLC	EP	23 41 43.2
	IL	42 22.5
FGU	EP	23 42 14.9
EUR	EP	23 42 28.0
	IL	43 09.5
GCA	EP	23 42 36.2
NOV 02		
EUR	EP	23 59 34.0
NOV 03		
H-01 15 24.9		
45.2N 151.4E		
h ABOUT 045KM		
COL	IP	01 22 41.9
HHM	E▸P	01 25 47.1
BOZ	EP	01 25 53.5
EUR	EP	01 26 02.6
	E▸P	26 15.5
NOV 03		
H-01 37 04.0		
45.4N 151.0E		
h ABOUT 033KM		
COL	IP	01 44 22.0
BOZ	EP	01 47 34.0
EUR	EP	01 47 44.5
	E▸P	47 54.0
NOV 03		
EUR	EP	01 58 44.5
NOV 03		
H-02 14 24.1		
23.9N 122.6E		
h ABOUT 033KM		
COL	E(P)	02 25 11.0
HHM	EP	02 27 31.1
EUR	E(P)	02 27 52.8
NOV 03		
H-03 10 12.7		
03.5S 077.8W		
h ABOUT 033KM		
BHP	IP	03 13 12.0
	IS	15 36.0
SJP	EP	03 15 30.0
	ES	19 48.0
CSC	IP	03 17 25.0
	IS	23 13.0
WAS	IP	03 18 04.5
TUC	EP	03 18 45.8
	IS	25 42.5
GCA	IP	03 19 16.0
BCN	EP D	03 19 24.0
	EPP	21 18.4
	E	22 06.5
	EP'P'	50 09.7
RCD	E(P)	03 19 25.0
	E(S)	26 56.0
FGU	IP	03 19 26.7
SLC	IP	03 19 35.7
EUR	IP C	03 19 45.3
	I	22 12.0
	ES	27 26.0
	I	27 49.0
	EP'P'	49 38.5
BOZ	IP	03 19 59.0
	IS	27 52.0
UKI	EP	03 20 18.0
HHM	EP	03 20 21.1
	ES	28 37.1
	P'P'	49 37.1
SIT	EP	03 22 02.6
KIP	IP	03 22 34.6
	I	33 02.0
HON	EP	03 22 35.0
	I	33 02.0
COL	IP	03 22 44.3
	ES	33 14.0
GUA	EP'	03 29 32.0
NOV 03		
EUR	EP	03 57 03.8
NOV 03		
H-04 24 48.4		
04.3S 078.3W		
h ABOUT 146KM		
ALQ	EP	04 33 08.2
	I	34 12.5
EUR	EP	04 34 12.0
	E	35 17.0
BOZ	IP	04 34 26.5
NOV 03		
H-04 37 25.2		
49.5N 155.6E		
h ABOUT 050KM		
COL	IP	04 43 57.5
BOZ	IP	04 47 20.0
EUR	EP	04 47 32.5
	E▸P	47 47.0
ALQ	EP	04 48 28.1
KIP	ET	05 34 48.0
NOV 03		
COL	EP	06 05 10.0
NOV 03		
COL	IP	06 15 49.5
NOV 03		
BOZ	EP	06 15 53.1
	ES	16 25.0
NOV 03		
EUR	E(P)	07 01 40.7
	EL	02 09.0
NOV 03		
EUR	E(P)	07 06 43.4
NOV 03		
H-07 38 10.7		
15.6S 073.3W		
h ABOUT 112KM		
CSC	EP	07 46 54.0
ALQ	IP	07 48 02.2
	I▸P	48 28.2
TUC	E(P)	07 48 05.0
	E▸P	48 30.0
GCA	E(P)	07 48 31.6
	E▸P	48 57.6
BCN	EP	07 48 38.4
	E▸P	49 04.4
FGU	IP	07 48 44.0
	I▸P	49 08.7
RCD	EP	07 48 44.0
	E	49 12.0
EUR	EP	07 48 58.5
	I▸P	49 23.9
BOZ	IP	07 49 12.1
	I▸P	49 38.0
HHM	EP	07 49 31.3
COL	EP	07 51 32.0
NOV 03		
EUR	EP	08 38 36.0
	E	38 49.0
NOV 03		
COL	EP	08 56 31.0
NOV 03		
FGU	EP	09 15 59.8
	IS	16 34.3
EUR	E(P)	09 16 34.0
	EL	17 50.5
NOV 03		
EUR	EP	09 48 41.8
COL	IP	09 49 02.7
NOV 03		
BOZ	E(P)	10 16 00.0
NOV 03		
BOZ	IP	10 23 03.0
	I(S)	23 14.0
NOV 03		
COL	EP	10 52 38.0
NOV 03		
COL	EP	11 06 48.0
NOV 03		
COL	EP	11 16 43.0
NOV 03		
COL	EP	11 32 01.0
NOV 03		
H-12 02 28.3		
03.7S 078.3W		
h ABOUT 033KM		
ALQ	EP	12 10 56.3
EUR	EP	12 11 59.5
	E	12 16.5
	I	13 01.0
	E	13 07.4
BOZ	IP	12 12 14.8
	I	12 19.8
COL	EP	12 15 05.0
NOV 03		
BOZ	EP	12 09 34.0
	ES	10 06.0

Date and Station	Phase (GCT)
	h m s
FGU EP	12 09 40.3
IS	10 14.8
EUR E(P)	12 10 19.7
NOV 03	
TUC E(P)	12 16 42.0
NOV 03	
HHM EP	12 48 45.3
NOV 03	
FGU E(P)	13 37 50.8
ES	38 25.8
NOV 03	
FUR E(P)	14 17 18.0
COL EP	14 20 21.0
NOV 03	
H-14 31 57.2	
14.0S 165.9E	
h ABOUT 050KM	
COL IP	14 44 32.9
BCN EP	14 44 52.0
EUR IP C	14 44 52.7
NOV 03	
H-14 35 59.4	
39.2N 021.1E	
h ABOUT 029KM	
COL EP	14 47 44.2
NOV 03	
COL IP	15 01 52.0
EUR EP	15 02 11.5
NOV 03	
EUR IP	15 49 05.7
IS	49 29.4
NOV 03	
BOZ E(P)	16 07 16.0
NOV 03	
H-17 10 10.7	
16.9N 061.6W	
h ABOUT 034KM	
SJP IP	17 11 19.0
IS	11 52.0
COL EP	17 21 40.0
NOV 03	
ALQ EP	17 42 24.9
E	43 05.8
COL EP	17 42 38.5
NOV 03	
BOZ EP	18 14 53.0
NOV 03	
H-18 26 02.0	
43.1N 111.3W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
SLC EP	18 26 39.0
E(S)	27 12.5
BOZ IP	18 26 40.8
IS	27 12.0
FGU EP	18 26 42.6
I	26 45.9
BZM EP	18 26 42.7
BUT EP	18 26 50.3
IL	27 30.0
HHM EP	18 27 22.1
RCD E(P)	18 27 37.0
NOV 03	
EUR IP	18 27 08.0
ES	27 54.5
IL	28 37.0
NOV 03	
H-19 22 53.6	
45.3N 150.1E	
h ABOUT 045KM	
COL EP	19 30 14.1
HHM EP	19 33 07.3
BOZ IP	19 33 26.5
BCN EP	19 33 51.1
E	34 07.7
NOV 03	
COL EP	22 09 51.0
EUR E(P)	22 13 03.7
NOV 03	
EUR IP D	22 19 43.0
IS	19 56.7
NOV 03	
H-22 54 36.6	
44.3N 149.2E	
h ABOUT 045KM	
COL EP	23 02 07.0
BOZ EpP	23 05 06.0
EUR EP	23 05 24.5
EpP	05 36.0
E	05 42.5
NOV 03	
SJP IP	23 15 30.0
ES	15 48.0
NOV 03	
GCA EP	23 58 20.2
NOV 04	
COL EP	00 16 11.0
NOV 04	
H-00 52 53.0	
45.2N 150.0E	
h ABOUT 066KM	

Date and Station	Phase (GCT)
	h m s
COL IP	01 00 12.0
EUR EP	01 03 34.0
NOV 04	
H-01 03 13.3	
02.3N 079.7W	
h ABOUT 062KM	
SJP EP	01 07 53.5
ALQ EP	01 10 52.8
EUR E(P)	01 12 03.5
NOV 04	
H-01 14 32.8	
15.1S 167.3E	
h ABOUT 154KM	
GUA E(P)	01 21 21.2
KIP EP	01 23 12.0
HON EP	01 23 12.0
UKI E(P)	01 26 40.0
COL IP	01 27 00.5
BCN IP C	01 27 13.6
EpP	27 44.2
I	27 53.9
EUR IP C	01 27 14.4
E	27 55.4
EPP	30 46.5
TUC IP C	01 27 23.0
EpP	27 53.0
GCA EP	01 27 26.2
EpP	27 58.7
E	28 05.9
EPP	31 05.7
SLC EP	01 27 29.9
HHM EP	01 27 32.6
FGU IP	01 27 37.9
BUT E(P)	01 27 40.0
ALQ EP	01 27 41.3
SJP EP'	01 33 23.5
NOV 04	
H-01 17 08.9	
06.8S 129.6E	
h ABOUT 080KM	
GUA IP	01 22 31.0
ES	26 50.0
KIP IP	01 28 52.0
HON EP	01 28 54.0
IS	38 34.0
COL EP	01 30 13.0
ISKS	40 34.0

Date and Station	Phase (GCT)
	h m s
SIT EP	01 30 39.7
IS	41 56.0
IpS	42 16.0
UKI E(P)	01 31 29.0
EPP	35 53.0
ESKS	42 00.0
ESSS	55 04.0
EL	02 02 00.0
EUR EP	01 31 51.0
EP'	35 40.0
IpP'	36 03.0
EPP	36 49.5
E	37 43.5
ESKS	42 15.0
I(S)	45 54.0
HHM EP	01 31 53.1
E	32 35.1
EP'	35 39.1
BUT E	01 31 54.0
E	37 05.0
E	42 17.0
E(SP)	45 57.0
BCN IP	01 31 55.3
E	32 42.8
EP'	35 45.1
E(SP)	46 01.9
TUC EP	01 32 12.0
EP'	35 50.0
GCA EP	01 32 13.2
E	33 01.2
IP'	35 51.0
ALQ E(P)	01 32 30.0
EP'	35 58.0
SLC IP'	01 35 45.9
WAS IP'	01 36 20.0
CSC EP'	01 36 26.0
I	36 34.0
BHP IP'	01 36 30.0
I	41 36.0
SJP EP'	01 37 01.0
E	48 16.0
E	52 38.0
EL	02 24 36.0
EL	40 20.0
NOV 04	
GUA E(P)	01 29 28.2
E(S)	33 18.0
NOV 04	
TUC EP	02 10 17.9
NOV 04	
GUA EP	02 15 38.0
E	15 59.5
NOV 04	
H-02 14 04.2	
06.9S 129.5E	
h ABOUT 076KM	

Date and Station	Phase	(GCT) h m s
COL	EP	02 27 10.0
	EPP	30 50.0
BCN	E>P	02 29 20.0
EUR	EP'	02 32 36.5
NOV 04		
H-02 36 41.1		
7.0S 129.5E		
h ABOUT 129KM		
EUR	EP'	02 55 07.3
NOV 04		
COL	EP	03 03 23.0
NOV 04		
H-03 29 30.5		
15.0S 075.8W		
h ABOUT 052KM		
TUC	EP	03 39 18.9
EUR	EP	03 40 14.3
	IPCP	40 44.3
COL	EP	03 42 52.0
NOV 04		
H-03 43 15.9		
6.9S 129.8E		
h ABOUT 100KM		
GUA	EP	03 48 34.3
COL	EP	03 56 17.0
EUR	EP'	04 01 44.5
	E	02 28.5
	ESKP	05 07.0
NOV 04		
EUR	E(P)	04 48 35.7
NOV 04		
H-05 22 59.0		
6.8S 129.8E		
h ABOUT 080KM		
EUR	EP'	05 41 29.5
	ESKP	44 53.8
ALQ	EP'	05 41 45.7
NOV 04		
H-06 09 19.8		
44.5N 150.6E		
h ABOUT 040KM		
COL	IP	06 16 44.1
EUR	EP	06 20 03.5
	E>P	20 15.5
BCN	E>P	06 20 39.6
ALQ	E>P	06 21 08.0
NOV 04		
FGU	EP	06 42 38.4
	IS	43 08.9
NOV 04		
EUR	E(P)	07 20 04.5
NOV 04		
HON	IP	07 24 04.8
	ES	24 33.0
KIP	IP	07 24 05.0
	IS	24 36.0
NOV 04		
BUT	E(P)	08 03 38.0
	ES	04 12.0
BOZ	EP	08 03 40.5
HHM	E(P)	08 04 05.1
	EL	05 05.1
EUR	EP	08 04 15.5
	EL	05 27.6
NOV 04		
H-08 06 15.1		
44.0N 149.9E		
h ABOUT 033KM		
COL	E	08 13 43.0
BOZ	EP	08 16 55.0
EUR	EP	08 17 05.0
	E>P	17 15.0
NOV 04		
H-08 35 51.5		
44.8N 149.3E		
h ABOUT 033KM		
COL	IP	08 43 18.8
EUR	EP	08 46 40.0
NOV 04		
EUR	EP	09 01 53.0
NOV 04		
COL	IP	09 06 57.0
NOV 04		
BUT	EP	09 34 56.0
NOV 04		
COL	EP	10 00 42.0
NOV 04		
EUR	EP	10 21 24.0
NOV 04		
SJP	IP	10 33 24.0
NOV 04		
EUR	EP	11 28 24.4
NOV 04		
BUT	EP	11 36 12.0
NOV 04		
COL	EP	12 14 54.0
NOV 04		
COL	EP	12 47 54.6
NOV 04		
COL	EP	13 20 54.0
EUR	EP	13 24 26.1
NOV 04		
COL	EP	14 38 36.0
EUR	E(P)	14 42 10.0
	E	42 12.0
NOV 04		
COL	EP	14 59 19.0
NOV 04		
COL	EP	16 07 10.0
NOV 04		
EUR	EP	16 31 11.5
NOV 04		
COL	IP	16 49 16.1
NOV 04		
H-18 22 43.2		
23.5S 176.1W		
h ABOUT 033KM		
EUR	EP	18 35 11.7
NOV 04		
GUA	E(P)	18 23 51.0
NOV 04		
ALQ	EP	18 52 11.8
NOV 04		
TUC	EP	19 14 47.0
EUR	EP	19 14 47.4
NOV 04		
H-19 52 04.0		
06.9S 129.5E		
h ABOUT 104KM		
EUR	EP'	20 10 32.5
ALQ	EP'	20 10 48.4
NOV 04		
GUA	IP	20 18 56.8
NOV 04		
H-21 12 11.5		
36.3N 071.3E		
h ABOUT 148KM		
COL	IP	21 23 34.9
NOV 04		
FGU	EP	21 16 49.6
	IS	17 09.1
NOV 04		
EUR	EP	21 43 59.5
COL	IP	21 45 37.0
NOV 04		
EUR	EP	22 13 04.5
NOV 04		
GUA	E(P)	22 25 46.6
	E	26 10.0
NOV 04		
H-22 17 07.5		
06.8S 129.8E		
h ABOUT 122KM		
GUA	EP	22 22 23.3
	E	22 58.5
COL	IP	22 30 08.0
	IPP	33 53.0
EUR	EP'	22 35 23.0
	E	35 33.5
ALQ	EP'	22 35 50.0
	ESKP	39 13.7
NOV 04		
H-22 25 02.8		
00.9S 139.7E		
h ABOUT 033KM		
EUR	E(P)	22 38 55.0
NOV 04		
COL	IP	22 27 01.0
NOV 04		
EUR	EP'	22 44 04.0
	E	44 10.5
NOV 04		
ALQ	IP	22 53 02.8
NOV 04		
TUC	EP	23 00 16.0
NOV 04		
COL	IP	23 41 20.0
EUR	EP	23 44 38.6
	E	44 54.0
NOV 05		
COL	EP	00 23 42.0
NOV 05		
SLC	EP	01 48 10.6
NOV 05		
GUA	IP	02 06 58.5
NOV 05		
SIT	EP	02 32 28.5
	EL	32 55.5
NOV 05		
COL	EP	02 36 11.0
NOV 05		
BOZ	EP	02 48 18.0
	ES	48 46.0
HHM	E(P)	02 48 36.2
EUR	EP	02 48 49.1
	EL	50 01.5

Date and Station	Phase (GCT)
	h m s
NOV 05	
H-02 56 50.6	
55.5N 157.9E	
h ABOUT 033KM	
COL EP	03 02 36.0
EUR E(P)	03 06 26.5
IpP	06 33.5
I	06 40.0
NOV 05	
EUR E(P)	03 03 41.5
NOV 05	
BOZ IP	03 39 20.5
IL	39 52.0
FGU EP	03 39 27.8
IS	40 03.1
BUT E(P)	03 39 31.0
ES	40 08.0
EUR E(P)	03 40 03.0
EL	41 16.0
NOV 05	
H-03 44 39.7	
43.1N 111.2W	
h ABOUT 033KM	
BOZ IP	03 45 19.0
IS	45 56.0
BZM EP	03 45 20.5
SLC E(P)	03 45 22.6
BUT EP	03 45 27.0
EL	46 07.1
FGU I(P)	03 45 26.8
IL	46 00.8
EUR E(P)	03 45 54.0
EL	47 15.5
HHM E(P)	03 46 03.4
NOV 05	
GUA EP	04 01 55.0
NOV 05	
TUC EP	04 44 40.0
NOV 05	
H-05 16 31.2	
7.3S 129.2E	
h ABOUT 141KM	
EUR EP'	05 34 54.5
ALQ IP'	05 35 10.8
NOV 05	
H-06 06 19.3	
6.9S 129.4E	
h ABOUT 094KM	
EUR EP'	06 24 49.0
FGU EP'	06 24 57.3
E	25 25.0

Date and Station	Phase (GCT)
	h m s
NOV 05	
EUR E(P)	06 21 55.2
COL EP	06 22 51.0
NOV 05	
EUR EP	06 26 12.5
NOV 05	
BCN E(P)	06 41 08.5
NOV 05	
COL EP	06 59 09.0
NOV 05	
TUC EP	07 38 45.0
NOV 05	
COL IP	08 14 40.0
NOV 05	
H-08 18 04.0	
24.8S 179.7E	
h ABOUT 606KM	
TUC EP	08 29 49.0
EUR EP	08 29 50.0
NOV 05	
ALQ E(P)	08 24 57.0
NOV 05	
H-08 43 25.2	
43.8N 150.3E	
h ABOUT 045KM	
COL EP	08 50 54.0
EUR EP	08 54 12.0
EpP	54 25.0
NOV 05	
H-08 43 33.8	
7.2S 129.0E	
h ABOUT 112KM	
EUR EP'	09 02 01.0
ALQ EP'	09 02 17.4
NOV 05	
COL IP	09 08 41.4
EUR E(P)	09 12 46.0
E	12 53.5
NOV 05	
H-09 18 42.6	
43.5N 150.9E	
h ABOUT 040KM	
BOZ IP	09 29 20.[illegible]
EUR EP	09 29 29.0
EpP	29 40.0
NOV 05	
TUC EP	09 21 38.0
NOV 05	
BCN EP	09 27 47.4
E	28 23.4

Date and Station	Phase (GCT)
	h m s
NOV 05	
H-09 33 36.1	
27.6S 176.2W	
h ABOUT 092KM	
TUC EP	09 46 09.0
I	46 19.0
EUR EP	09 46 13.5
E	46 24.0
ALQ E(P)	09 46 26.8
NOV 05	
COL EP	10 20 08.0
NOV 05	
COL IP	12 23 28.9
NOV 05	
COL EP	13 31 37.0
EUR E(P)	13 31 59.0
E	32 19.0
NOV 05	
BOZ EP	13 39 53.0
E	40 25.0
EUR E(P)	13 40 22.6
EL	41 32.8
NOV 05	
COL IP	13 40 33.4
NOV 05	
EUR EP	13 43 53.0
NOV 05	
EUR E(P)	14 13 26.7
NOV 05	
BOZ EP	14 27 34.0
ES	28 07.0
FGU IP	14 27 39.0
IS	28 13.9
NOV 05	
H-16 02 05.4	
26.1S 178.9E	
h ABOUT 056KM	
EUR E(P)	16 14 49.4
TUC EP	16 14 53.5
ALQ EP	16 15 14.2
NOV 05	
TUC EP	17 48 57.0
NOV 05	
ALQ EP	18 05 12.7
E	05 52.5
GCA E(P)	18 05 35.2
E(S)	06 27.6
NOV 05	
COL IP	18 30 47.6
NOV 05	
COL EP	18 40 02.0

Date and Station	Phase (GCT)
	h m s
NOV 05	
ALQ EP	18 43 44.2
NOV 05	
EUR IP C	19 08 28.0
I	09 37.0
NOV 05	
GUA E(P)	20 16 59.1
NOV 05	
H-20 59 26.3	
44.6N 148.8E	
h ABOUT 033KM	
COL IP	21 06 59.0
EUR E(P)	21 10 14.8
E	10 24.0
NOV 05	
H-21 46 23.6	
47.4N 147.1E	
h ABOUT 045KM	
COL IP	21 53 38.7
EUR E(P)	21 56 55.5
E	57 08.0
NOV 05	
EUR IP	22 21 39.2
NOV 05	
ALQ E(P)	22 26 38.5
NOV	
H-22 45 03.4	
27.8N 0	
h ABOUT 033KM	
ALQ E(P)	22 48 28.1
EL	51 50.8
NOV 05	
H-23 10 54.0	
55.5S 028.4W	
h ABOUT 033KM	
COL IP'	23 30 38.8
NOV 05	
H-23 52 56.3	
01.7N 126.4E	
h ABOUT 028KM	
GUA IP	23 57 46.0
E	58 29.0
COL IP	24 05 40.0
ALQ EP'	24 11 44.8
NOV 06	
SJP EP	00 08 50.8
NOV 06	
EUR I(P)	00 09 10.5
NOV 06	
COL IP	00 11 47.0

Date and Station	Phase	Phase (GCT) h m s
NOV 06		
H-01 01 07.0		
12.8S 073.9W		
h ABOUT 086KM		
BOZ	EP	01 11 54.8
NOV 06		
GUA	IP	01 02 46.0
	I	02 58.0
NOV 06		
H-01 28 46.6		
4.2S 077.7W		
h ABOUT 170KM		
ALQ	EP	01 37 06.1
BOZ	EP	01 38 24.0
NOV 06		
COL	IP	01 50 11.0
NOV 06		
H-02 13 16.8		
2.6S 138.4E		
h ABOUT 033KM		
GUA	IP	02 17 17.0
	I	17 28.0
	I	18 20.0
	E	21 26.0
KIP	EP	02 24 08.0
	E	33 02.0
	ESS	37 16.0
	EL	40 22.0
	EL	42 14.0
HON	EP	02 24 08.0
	I	33 02.0
	I	33 42.0
	I	34 38.0
	ESS	37 16.0
	EL	40 22.0
	EL	41 38.0
COL	EP	02 25 50.0
SIT	E(P)	02 26 22.5
EUR	EP	02 27 16.5
	EP'	30 54.5
	EPP	31 30.6
	EPKKP	43 18.0
HHM	E(P)	02 27 18.4
	E	30 45.4
BOZ	E(P)	02 27 27.0
	EP'	02 31 37.0
BCN	EP'	02 31 42.0
ALQ	EP'	02 31 45.2
	EPP	32 37.8
	EPKKP	42 55.2
TUC	EP'	02 31 48.0
CSC	EP'	02 32 34.0
	ISKP	35 59.0
BHP	EP'	02 32 42.0
SJP	EP'	02 33 05.0
	E	34 41.0
NOV 06		
H-02 55 54.0		
02.5S 138.6E		
h ABOUT 032KM		
GUA	EP	02 59 54.0
COL	IP	03 08 29.1
SJP	EP'	03 15 45.5
NOV 06		
H-03 00 12.2		
02.2S 138.7E		
h ABOUT 043KM		
GUA	IP	03 04 06.0
	I	04 16.3
	EL	08 14.0
COL	IP	03 12 45.0
EUR	E(P)	03 14 15.0
	EP'	17 55.0
	EPP	18 26.0
SJP	EP'	03 20 01.2
NOV 06		
BOZ	EP	03 35 34.0
NOV 06		
H-04 06 45.4		
02.4S 138.6E		
h ABOUT 022KM		
GUA	E(P)	04 10 47.0
COL	EP	04 19 21.0
EUR	E(P)	04 20 51.0
NOV 06		
EUR	EP	04 32 51.8
	IL	33 22.5
NOV 06		
H-04 35 09.3		
02.5S 138.4E		
h ABOUT 033KM		
GUA	EP	04 39 08.2
	I	39 18.9
COL	EP	04 47 45.0
SJP	EP'	04 55 00.0
NOV 06		
COL	EP	04 54 10.0
SJP	EP'	05 01 26.5
NOV 06		
H-06 28 55.3		
30.8S 179.9E		
h ABOUT 411KM		
GUA	IP	06 37 50.0
TUC	EP	06 41 15.0
EUR	EP	06 41 19.5
COL	EP	06 41 48.0
NOV 06		
RCD	IP	06 35 41.2
	E	09 35 48.5
NOV 06		
GCA	IP	07 03 24.8
NOV 06		
EUR	IP	07 19 45.4
	IS	20 11.5
NOV 06		
H-07 35 25.6		
02.5S 138.6E		
h ABOUT 038KM		
GUA	E(P)	07 39 32.5
COL	IP	07 47 59.0
SJP	EP'	07 55 15.5
NOV 06		
COL	EP	08 12 39.0
NOV 06		
COL	EP	08 18 05.0
NOV 06		
H-09 01 12.0		
07.1S 129.2E		
h ABOUT 090KM		
GUA	E(P)	09 06 38.5
COL	EP	09 14 18.0
TUC	EP'	09 19 53.0
ALQ	IP'	09 19 58.7
NOV 06		
H-09 24 49.2		
46.3N 154.8E		
h ABOUT 033KM		
COL	IP	09 31 45.3
HHM	IP	09 34 41.4
BUT	E(P)	09 34 52.1
BOZ	IP	09 35 02.0
EUR	IP D	09 35 11.8
BCN	IP D	09 35 30.5
GCA	IP	09 35 37.9
RCD	EP	09 35 41.2
	I	36 56.6
TUC	EP	09 36 01.0
ALQ	IP	09 36 06.8
NOV 06		
EUR	IP	11 18 06.0
	IS	18 30.0
NOV 06		
H-11 33 08.0		
02.8S		
h ABOUT 095KM		
GUA	E(P)	11 37 04.9
COL	EP	11 45 34.0
NOV 06		
COL	IP	11 33 08.2
NOV 06		
BUT	EP	11 36 12.1
BOZ	EP	11 36 15.0
	ES	36 45.0
EUR	E(P)	11 36 45.5
	EL	38 01.0
NOV 06		
ALQ	IP	14 10 45.5
NOV 06		
COL	EP	14 57 12.0
NOV 06		
BOZ	EP	15 41 11.0
NOV 06		
GUA	IP	15 45 22.7
	E	45 46.5
NOV 06		
ALQ	EP	15 52 58.0
	IL	53 38.0
NOV 06		
ALQ	IP	16 24 07.3
NOV 0		
EUR	EP	16 48 40.0
NOV 06		
GUA	EP	17 00 58.5
	E	01 13.5
NOV 06		
H-17 07 22.1		
09.8S 113.6E		
h ABOUT 230KM		
GUA	IP	17 14 26.3
NOV 06		
COL	EP	17 28 02.0
NOV 06		
H-18 33 25.9		
16.7S 069.7W		
h ABOUT 174KM		
SJP	I(P)	18 40 00.3
ALQ	EP	18 43 30.3
TUC	IP	18 43 33.8
BCN	EP	18 44 06.4
FGU	IP	18 44 09.8

Date and Station	Phase (GCT)
	h m s
EUR EP	18 44 25.6
E	44 44.0
BOZ IP	18 44 36.0
HHM IP	18 44 54.4
NOV 06	
COL EP	18 36 43.0
EUR EP	18 37 05.0
NOV 06	
COL EP	18 52 18.0
NOV 06	
GCA EP	19 06 21.7
I	06 28.2
NOV 06	
ALQ E(P)	20 06 57.3
EL	07 32.3
NOV 06	
COL EP	20 23 35.0
NOV 06	
H-21 49 57.7	
12.2N 088.0W	
h ABOUT 037KM	
ALQ EP	21 55 50.3
FGU IP	21 56 42.3
EUR E(P)	21 57 06.5
BOZ IP	21 57 21.0
NOV 06	
TUC IP	21 51 16.1
I	51 39.0
NOV 06	
FGU EP	22 13 51.8
ES	14 11.6
NOV 06	
EUR IP D	22 18 28.4
IS	18 37.0
NOV 06	
EUR IP	22 24 24.4
IS	24 33.5
NOV 06	
FGU IP	23 46 24.2
EUR EP	23 46 36.0
EL	47 17.5
ALQ E(P)	23 47 57.6
NOV 06	
H-23 55 10.1	
7.0S 129.7E	
h ABOUT 229KM	
EUR EP'	24 13 25.2
NOV 06	
COL EP	23 59 45.0

Date and Station	Phase (GCT)
	h m s
NOV 07	
GUA IP	00 28 07.6
ES	28 26.2
NOV 07	
H-00 46 53.1	
42.7N 149.3E	
h ABOUT 030KM	
COL IP	00 54 36.2
EUR E(P)	00 57 46.5
I	58 04.4
NOV 07	
EUR E(P)	00 57 28.2
NOV 07	
HHM E(P)	02 23 08.0
E(S)	24 08.6
NOV 07	
H-02 42 57.8	
02.5S 138.7E	
h ABOUT 069KM	
COL EP	02 55 27.0
SJP EP'	03 02 44.0
NOV 07	
H-03 24 59.3	
44.8N 150.1E	
h ABOUT 040KM	
COL IP	03 32 21.6
EUR EP	03 35 43.0
E	35 51.0
E	04 02.0
NOV 07	
GUA IP	04 57 49.0
IS	58 01.9
COL EP	05 05 03.0
NOV 07	
EUR E(P)	05 24 17.0
NOV 07	
COL IP	05 58 28.5
NOV 07	
H-06 12 22.8	
36.5N 141.7E	
h ABOUT 049KM	
COL EP	06 21 10.0
EUR EP	06 24 07.3
E	24 16.6
NOV 07	
EUR IP	07 34 52.5
ES	35 09.3
NOV 07	
EUR IP	07 35 45.3
ES	36 02.3
NOV 07	
BCN E(P)	08 15 48.6
EL	16 32.6

Date and Station	Phase (GCT)
	h m s
NOV 07	
GUA E(P)	08 35 02.0
NOV 07	
H-09 03 53.4	
44.2N 149.7E	
h ABOUT 045KM	
COL EP	09 11 22.0
EUR EP	09 14 41.5
EpP	14 53.5
NOV 07	
BOZ IP	09 14 02.1
I(S)	14 16.0
BUT E(P)	09 14 17.0
I(S)	14 35.0
FGU EP	09 14 43.3
HHM E(P)	09 14 49.0
EUR E(P)	09 15 25.7
E	15 36.0
NOV 07	
BOZ EP	09 17 50.0
NOV 07	
H-09 22 53.3	
44.2N 151.1E	
h ABOUT 050KM	
COL IP	09 30 15.1
HHM IP	09 33 07.2
I	33 48.7
BOZ IP	09 33 26.0
IpP	33 39.0
EUR IP D	09 33 35.5
EpP	33 49.4
E	33 58.9
BCN EP	09 33 53.4
EpP	34 07.0
RCD E(P)	09 34 03.5
ALQ EP	09 34 29.0
NOV 07	
EUR EP	10 11 32.0
E	11 44.7
NOV 07	
EUR EP	10 23 48.5
NOV 07	
NOV 07	
COL EP	11 46 25.0
NOV 07	
EUR EP	12 35 52.0
NOV 07	
H-12 55 25.6	
14.1N 146.2E	
h ABOUT 048KM	

Date and Station	Phase (GCT)
	h m s
GUA IP	12 55 49.9
E	56 30.0
+	
E	59 53.5
COL EP	13 06 15.0
HHM IP	13 08 02.7
I	09 43.7
EUR EP	13 08 09.0
BUT EP	13 08 10.6
BOZ EP	13 08 12.0
I	10 30.4
HON ES	13 12 20.0
EL	19 04.0
NOV 07	
BCN E(P)	13 06 43.9
EL	08 17.4
NOV 07	
EUR IP C	13 10 17.0
RCD E(P)	13 10 34.2
GCA EP	13 10 39.8
ALQ EP	13 11 03.7
NOV 07	
H-15 12 34.5	
45.5N 150.0E	
h ABOUT 040KM	
COL IP	15 19 53.8
BOZ EP	15 23 07.0
E	23 21.0
EUR E(P)	15 23 18.0
NOV 07	
H-15 53 41.9	
24.2S 176.4W	
h ABOUT 033KM	
BCN EP	16 06 09.1
E	06 22.5
EUR EP	16 06 15.5
ALQ EP	16 06 34.3
COL IP	16 06 44.7
NOV 07	
EUR E(P)	16 14 29.3
E	14 39.5
NOV 07	
H-16 26 37.8	
11.3S 166.1E	
h ABOUT 089KM	
COL IP	16 38 54.1
EUR EP	16 39 21.5
E	39 33.4

Date and Station	Phase	Phase (GCT) h m s
	BOZ	EP 16 39 41.2
NOV 07		
	UKI	IP 16 40 25.0
		I 40 40.0
		EL 40 53.0
	EUR	EP 16 41 35.0
		E(S) 42 42.0
NOV 07		
H-16 45 59.8		
50.2S 114.9W		
h ABOUT 033KM		
	EUR	EP 16 58 50.5
NOV 07		
H-17 34 58.0		
24.4S 176.0W		
h ABOUT 033KM		
	EUR	EP 17 47 30.0
	GCA	E(P) 17 47 38.1
	BOZ	EP 17 47 58.5
NOV 07		
	ALQ	EP 17 58 32.5
NOV 07		
H-18 55 48.1		
36.0N 025.4E		
h ABOUT 033KM		
	HHM	IP 19 08 38.4
		I 09 43.3
NOV 07		
	BOZ	IP 19 21 19.0
	HHM	E(P) 19 21 51.0
NOV 07		
H-20 15 22.5		
29.4S 178.1W		
h ABOUT 110KM		
	EUR	EP 20 28 09.0
		E▸P 28 38.0
NOV 07		
H-20 37 53.6		
44.9N 151.9E		
h ABOUT 029KM		
	COL	IP 20 45 10.5
	HHM	E(P) 20 48 00.0
	BOZ	EP 20 48 22.0
	EUR	EP 20 48 32.2
		E 48 46.0
	BCN	E 20 49 11.8
NOV 07		
	FGU	EP 21 17 25.2
NOV 07		
	FGU	IP 21 50 25.5
		ES 50 48.3
NOV 07		
	ALQ	EP 21 57 26.7
		E 57 59.5
	GCA	E(P) 21 57 30.4
NOV 07		
	COL	EP 22 10 26.0
NOV 07		
	FGU	IP 22 14 48.5
		IS 15 08.3
NOV 07		
	EUR	IP 22 23 42.5
NOV 07		
	FGU	E(P) 22 52 59.0
		E(S) 53 33.9
NOV 07		
	TUC	IP 22 59 06.0
		IL 59 24.0
NOV 07		
	COL	IP 23 06 40.1
NOV 07		
	BCN	EP 23 09 40.4
NOV 07		
	FGU	EP 23 12 59.4
	EUR	E(P) 23 13 12.2
		EL 13 51.8
NOV 07		
	HHM	E(P) 23 26 34.0
NOV 08		
	GUA	E(P) 00 26 30.6
NOV 08		
	GUA	E(P) 00 29 04.6
NOV 08		
	EUR	IP 00 46 31.5
		IS 46 55.4
NOV 08		
	EUR	EP 01 33 26.0
NOV 08		
	FGU	IP 01 40 10.0
NOV 08		
	FGU	IP 01 49 14.0
NOV 08		
	EUR	EP 01 52 53.5
NOV 08		
	ALQ	EP 02 07 54.5
NOV 08		
	GUA	IP 02 42 52.0
NOV 08		
H-02 56 40.0		
27.3S 070.1W		
h ABOUT 040KM		
	FGU	IP 03 08 32.0
	EUR	EP 03 08 42.5
		E▸P 08 53.0
NOV 08		
	EUR	E(P) 03 07 38.8
		E 07 50.0
NOV 08		
H-04 24 14.4		
23.0S 170.9E		
h ABOUT 035KM		
	EUR	E(P) 04 37 24.0
	COL	EP 04 37 25.0
NOV 08		
	GUA	E(P) 04 38 40.5
NOV 08		
H-05 05 03.0		
21.5S 179.7W		
h ABOUT 659KM		
	GUA	IP 05 12 56.7
	BCN	EP 05 16 26.0
	EUR	EP 05 16 32.0
	TUC	IP 05 16 32.2
	ALQ	EP 05 16 52.0
	FGU	IP 05 16 56.0
NOV 08		
	COL	EP 05 10 52.0
NOV 08		
	TUC	EP 06 01 12.0
	EUR	EP 06 01 16.4
NOV 08		
	EUR	EP 06 16 25.4
		E 16 37.3
NOV 08		
	GUA	E(P) 06 38 27.0
NOV 08		
	ALQ	IP 07 19 43.2
NOV 08		
	EUR	EP 07 44 55.0
		IS 45 19.0
NOV 08		
H-08 08 09.2		
45.0N 150.9E		
h ABOUT 040KM		
	COL	IP 08 15 28.1
	EUR	EP 08 18 50.0
		E▸P 19 02.5
	BCN	E(P) 08 19 08.8
		E 19 18.8
NOV 08		
	GUA	IP 08 49 26.7
		ES 49 40.0
NOV 08		
	GUA	E(P) 08 59 58.5
NOV 08		
H-09 59 24.3		
16.5S 028.5E		
h ABOUT 033KM		
	TUC	EP' 10 18 43.0
	EUR	EP' 10 18 49.4
NOV 08		
	ALQ	EP 10 08 12.5
		E 10 52.0
NOV 08		
	GUA	E(P) 10 12 03.0
		I 13 06.0
NOV 08		
	COL	EP 10 23 41.0
NOV 08		
	GUA	IP 10 53 35.0
		ES 53 44.0
NOV 08		
H-11 06 01.2		
26.7N 110.4W		
h ABOUT 033KM		
	TUC	EP 11 07 25.0
		EL 09 03.0
	BCN	E(P) 11 08 24.5
		EL 11 54.0
NOV 08		
	EUR	EP 11 08 20.5
NOV 08		
H-11 22 28.5		
44.0N 150.4E		
h ABOUT 040KM		
	COL	EP 11 29 56.0
	EUR	EP 11 33 14.5
		E 33 29.0
NOV 08		
	FGU	E(P) 11 59 02.8
		ES 59 19.8
NOV 08		
	UKI	IP 11 59 45.5
NOV 08		
	GUA	E(P) 12 12 25.5
NOV 08		
	GUA	IP 14 11 12.0
		ES 11 20.0
NOV 08		
	GUA	E(P) 14 26 47.8
NOV 08		
H-14 35 25.7		
44.4N 149.4E		
h ABOUT 033KM		
	COL	EP 14 42 54.0

Date and Station	Phase (GCT)
	h m s
NOV 08	
TUC EP	14 51 15.0
NOV 08	
BUT E(P)	15 48 16.0
NOV 08	
COL E(P)	15 48 16.0
NOV 08	
COL EP	16 09 06.0
NOV 08	
H-16 13 36.2	
2.7N 128.4E	
h ABOUT 216KM	
GUA IP	16 17 49.2
COL EP	16 25 48.0
SJP IP'	16 33 30.2
NOV 08	
BCN E(P)	16 26 13.8
EL	26 58.0
NOV 08	
BCN E(P)	16 50 18.3
EL	51 20.0
NOV 08	
HHM E(P)	18 48 06.0
NOV 08	
HHM E(P)	19 29 45.0
NOV 08	
BUT E(P)	21 09 14.0
NOV 08	
FGU IP	21 27 52.4
IS	28 24.1
NOV 08	
GCA E(P)	21 42 40.7
NOV 08	
BOZ EP	21 47 45.5
ES	48 18.0
NOV 08	
BCN EP	21 54 30.5
EL	55 03.0
NOV 08	
GUA IP	23 23 49.2
NOV 08	
BCN EP	23 30 20.2
I	30 24.2
I(S)	30 51.2
GCA EP	23 31 10.1
NOV 08	
FGU IP	23 37 41.5
NOV 08	
BCN E(P)	23 57 45.5
E	57 50.5
NOV 09	
BUT IP	00 04 08.8

Date and Station	Phase (GCT)
	h m s
BOZ EP	00 04 22.0
ES	04 53.0
NOV 09	
BUT EP	01 09 14.8
E(S)	10 09.0
NOV 09	
H-01 13 13.1	
11.9S 166.6E	
h ABOUT 112KM	
COL EP	01 25 30.0
NOV 09	
FGU EP	01 19 12.1
NOV 09	
COL IP	01 30 03.0
NOV 09	
COL IP	01 38 08.1
HHM E(P)	01 38 47.0
EUR EP	01 39 47.2
NOV 09	
FGU IP	02 35 30.1
NOV 09	
COL EP	02 43 18.0
NOV 09	
H-02 46 44.5	
56.8N 034.6W	
h ABOUT 033KM	
SJP EP	02 54 56.4
E	55 47.3
HHM IP	02 55 08.3
E	56 42.6
BOZ IP	02 55 12.2
BUT EP	02 55 15.8
COL IP	02 55 25.2
GCA EP	02 56 01.4
EUR EP	02 56 04.9
BCN EP	02 56 19.1
E	56 50.7
NOV 09	
COL EP	04 34 56.0
NOV 09	
H-05 37 15.1	
5.6S 105.5E	
h ABOUT 033KM	
BOZ EP'	05 56 23.0
NOV 09	
GUA IP	05 56 24.0
IS	56 35.0
NOV 09	
BCN EP	06 47 35.0

Date and Station	Phase (GCT)
	h m s
NOV 09	
EUR EP	06 59 38.9
E	59 52.4
E	07 00 14.9
NOV 09	
GUA E(P)	07 05 29.0
NOV 09	
GUA E(P)	08 22 23.4
NOV 09	
H-08 35 25.3	
45.6N 150.0E	
h ABOUT 045KM	
COL IP	08 42 45.3
BOZ EP	08 45 58.0
EUR EP	08 46 07.2
EpP	46 22.0
NOV 09	
H-08 51 18.6	
45.3N 150.8E	
h ABOUT 033KM	
COL IP	08 58 38.0
HHM IP	09 01 30.7
BOZ IP	09 01 50.5
EUR IP C	09 02 00.2
E	02 14.4
BCN EP	09 02 19.5
GCA EP	09 02 26.7
RCD EP	09 02 26.7
NOV 09	
FGU EP	09 42 17.7
NOV 09	
H-11 13 30.6	
45.6N 150.9E	
h ABOUT 040KM	
COL EP	11 20 47.0
EUR EP	11 24 08.5
EpP	24 21.5
BCN EP	11 24 28.0
NOV 09	
H-12 54 30.3	
00.1S 025.1W	
h ABOUT 033KM	
GCA EP	13 07 15.9
EUR E(P)	13 07 32.2
NOV 09	
FGU EP	13 47 08.8
NOV 09	
TUC E(P)	18 01 24.0

Date and Station	Phase (GCT)
	h m s
NOV 09	
HHM EP	18 57 12.4
EUR EP	18 57 40.0
E	57 57.0
NOV 09	
HHM E(P)	19 19 37.0
ES	20 10.0
NOV 09	
EUR E(P)	20 06 07.3
EL	07 03.3
NOV 09	
H-20 21 32.4	
11.2S 165.6E	
h ABOUT 047KM	
COL IP	20 33 55.9
NOV 09	
H-21 15 30.4	
09.0S 071.5W	
h ABOUT 600KM	
BHP IP	21 19 23.0
IsP	21 49.0
SJP IP	21 20 32.2
IsP	23 10.0
IS	24 30.0
I	30 25.0
CSC IP	21 22 44.7
ESCP	27 12.4
WAS IP	21 23 17.0
IPCP	24 31.0
ES	29 27.0
TUC E(P)	21 24 11.0
ES	31 11.0
EP'P'	53 53.0
E	56 24.0
GCA IP	21 24 37.8
RCD IP	21 24 44.2
I	24 50.0
I	31 22.0
BCN IP D	21 24 46.0
IpP	26 53.5
IS	32 27.5
EP'P'	53 03.5
IP'P'	53 34.3
E	55 58.5
P'P'P'	22 12 47.0
E	14 49.0
EUR IP D	21 25 04.7
IS	33 07.2
I	34 47.2
BUT IP	21 25 19.8
IS	33 32.8
HHM IP C	21 25 34.4
IpP	27 37.4
IS	33 50.4
ISS	38 30.4
E	52 56.4
P'P'P'	22 13 02.4

Date and Station	Phase	Phase (GCT) h m s
UKI	EP D	21 25 34.4
	E▸P	27 41.4
	ES	33 56.0
	I	34 55.5
	EP'P'	53 42.0
	E	53 52.6
SIT	EP	21 27 00.0
	I▸P	29 13.8
	EPP	30 22.6
	ESKS	36 28.0
	ESP	37 43.5
	EsS	40 14.0
	ESS	42 12.0
	EPKKP	45 14.3
HON	EP	21 27 29.0
	E▸P	29 38.0
	EsPP	34 08.0
	ISKS	37 10.0
	ES	37 38.0
	ESP	38 50.0
	ESS	42 28.0
KIP	IP	21 27 29.8
	E	36 18.0
	ISKS	37 08.0
	ESP	38 42.0
COL	IP	21 27 38.5
	ISKS	37 23.0
GUA	EP'	21 33 59.3
	E	34 05.5
NOV 09		
SJP	EP	21 52 48.0
	E	53 48.0
NOV 09		
HHM	EP	22 26 15.5
EUR	EP	22 26 36.6
COL	IP	22 28 42.3
NOV 09		
EUR	EP	22 44 00.0
	I	44 06.5
NOV 09		
TUC	IP	22 51 05.8
NOV 09		
H-23 14 12.6		
8.5S 072.1W		
h ABOUT 563KM		
SJP	E(P)	23 19 13.5
TUC	IP	23 22 52.5
	I	23 42.0
BCN	EP	23 23 26.0
	E	25 06.5
EUR	EP	23 23 45.1
	E	25 43.6
HHM	IP	23 24 15.3
COL	IP	23 26 18.5

Date and Station	Phase	Phase (GCT) h m s
NOV 09		
SJP	E(P)	23 23 16.0
NOV 10		
TUC	E(P)	00 05 17.0
NOV 10		
H-01 00 38.8		
09.2S 071.5W		
h ABOUT 600KM		
BHP	IP	01 04 32.0
	IS	07 41.0
SJP	IP D	01 05 41.3
	IsP	08 25.0
	IS	09 44.0
	ISCP	11 27.0
	E	15 23.5
CSC	IP	01 07 53.6
	ESCP	12 13.0
	ES	13 35.3
WAS	EP	01 08 23.0
	ESCP	12 28.0
	E	14 08.0
TUC	IP	01 09 21.5
	ES	16 18.0
	EP'P'	39 03.0
GCA	IP	01 09 47.1
	E	38 46.1
RCD	IP	01 09 53.5
	IS	17 24.2
BCN	IP D	01 09 55.4
	I▸P	11 49.9
	IS	17 29.5
	EP'P'	38 39.5
EUR	IP D	01 10 13.9
	I▸P	12 10.4
	ISCP	13 49.4
	IS	18 02.0
	E	38 02.0
	IP'P'	39 02.5
	E	41 13.0
BOZ	IP	01 10 24.9
	E▸P	12 23.3
	EPP	12 59.2
	ES	18 23.2
BUT	IP	01 10 28.7
	▸P	12 23.8
	IS	18 32.8
	P'P'	38 50.0
UKI	EP D	01 10 43.0
	E▸P	12 42.0
	E(S)	19 06.0
HHM	IP C	01 10 43.5
	I	11 34.5
	I▸P	12 42.5
	I	13 12.5
	IS	18 59.0
	IP'P'	38 45.5
	P'P'	39 06.5

Date and Station	Phase	Phase (GCT) h m s
SIT	EP	01 12 09.3
	E▸P	14 13.8
	ESKS	21 36.0
HON	IP	01 12 40.0
	I	22 42.0
	E	23 54.0
KIP	EP	01 12 40.7
COL	IP	01 12 47.8
	ESKS	22 26.0
GUA	IP'	01 19 08.0
	I	21 53.0
NOV 10		
H-01 36 41.3		
09.4S 071.3W		
h ABOUT 600KM		
TUC	EP	01 45 26.1
	E	46 33.0
EUR	EP	01 46 19.0
HHM	IP	01 46 48.0
NOV 10		
EUR	IP	01 47 06.5
NOV 10		
EUR	EP	02 29 08.4
NOV 10		
TUC	E(P)	03 00 19.7
NOV 10		
TUC	E(P)	03 38 03.0
NOV 10		
GUA	IP	03 53 10.0
	ES	53 24.0
NOV 10		
H-04 58 52.7		
26.5N 093.2E		
h ABOUT 066KM		
COL	EP	05 10 43.0
NOV 10		
TUC	EP	05 17 54.8
	EL	19 30.0
NOV 10		
FGU	EP	06 52 37.2
NOV 10		
FGU	EP	08 05 37.4
	ES	06 08.4
NOV 10		
GUA	EP	08 10 05.0
NOV 10		
FGU	EP	08 38 56.7
	ES	39 26.9
EUR	E(P)	08 39 11.6
	EL	39 57.0

Date and Station	Phase	Phase (GCT) h m s
NOV 10		
H-08 50 06.1		
44.5N 149.4E		
h ABOUT 045KM		
COL	IP	08 57 34.0
HHM	EP	09 00 25.0
	I	00 34.5
BOZ	IP	09 00 44.5
	I▸P	00 56.6
EUR	IP C	09 00 53.7
	I▸P	01 06.5
BCN	EP	09 01 11.8
	E▸P	01 24.8
FGU	E(P)	09 01 11.9
GCA	E(P)	09 01 19.6
RCD	IP	09 01 20.0
	E▸P	01 31.4
TUC	IP	09 01 41.5
	I▸P	01 53.0
NOV 10		
GUA	EP	10 45 00.0
NOV 10		
H-11 18 32.5		
36.5N 025.9E		
h ABOUT 034KM		
RCD	E(P)	11 31 18.0
HHM	IP	11 31 20.6
EUR	E(P)	11 31 59.3
NOV 10		
GUA	E(P)	13 23 19.5
NOV 10		
HHM	EP	13 31 20.0
NOV 10		
H-14 44 32.0		
45.1N 151.9E		
h ABOUT 040KM		
COL	EP	14 51 51.0
BOZ	IP	14 55 01.0
EUR	EP	14 55 09.3
	EsP	55 27.3
NOV 10		
BOZ	IP	15 51 43.0
FGU	EP	15 51 48.2
	IS	52 16.5
EUR	E(P)	15 52 27.6
	EL	53 40.0
NOV 10		
H-15 58 35.5		
47.4N 147.4E		
h ABOUT 040KM		

Date and Station	Phase (GCT)
	h m s
COL IP	16 05 50.0
NOV 10	
H-17 17 42.7	
44.4N 149.0E	
h ABOUT 040KM	
COL IP	17 25 11.0
SIT EP	17 26 15.0
KIP EP	17 26 31.0
ES	33 35.0
ESCS	36 14.0
ESS	37 16.0
EL	40 00.0
HHM EP	17 28 02.7
I	28 05.8
ES	36 22.7
UKI E(P)	17 28 08.0
BUT EP	17 28 16.5
I	28 20.0
ESP	37 05.0
BOZ IP	17 28 22.6
E	28 25.7
ESP	37 10.0
EUR EP	17 28 31.4
EPP	30 59.2
EPPP	32 28.2
FGU EP	17 28 50.0
I	28 53.5
GCA EP	17 28 57.6
I	29 00.9
RCD EP	17 28 57.6
I	29 00.1
ESP	38 15.0
TUC EP	17 29 19.0
WAS E	17 30 30.8
CSC EP	17 30 39.0
ESKS	41 05.0
HON ES	17 33 36.0
ESCS	36 15.0
E	37 34.0
EL	40 06.0
NOV 10	
H-18 08 43.7	
44.0N 147.3E	
h ABOUT 045KM	
COL IP	18 16 21.5
HHM EP	18 19 11.7
BOZ EP	18 19 32.0
EUR IP D	18 19 40.5
I▸P	19 54.5
TUC EP	18 20 28.2
E▸P	20 42.0

Date and Station	Phase (GCT)
	h m s
NOV 10	
H-18 37 18.3	
37.3N 020.9E	
h ABOUT 033KM	
RCD E(P)	18 49 52.0
HHM EP	18 49 53.2
I	49 56.2
BUT EP	18 50 03.0
NOV 10	
H-19 20 38.8	
26.2S 178.3E	
h ABOUT 607KM	
EUR EP	19 32 34.1
NOV 10	
COL E	19 32 04.0
EUR EP	19 34 37.8
E	34 51.8
NOV 10	
FGU EP	19 59 13.5
NOV 10	
FGU E(P)	20 03 47.0
NOV 10	
EUR EP	20 30 06.6
NOV 10	
TUC E(P)	21 06 10.0
NOV 10	
TUC EP	22 57 10.5
NOV 10	
COL EP	23 47 52.0
NOV 11	
H-00 10 25.6	
43.8N 149.5E	
h ABOUT 055KM	
COL IP	00 17 56.2
HHM EP	00 20 45.9
BOZ EP	00 21 05.8
EUR EP	00 21 14.7
BCN EP	00 21 32.9
E▸P	21 47.4
RCD EP	00 21 40.8
TUC EP	00 22 02.0
E▸P	22 15.0
NOV 11	
H-00 15 04.8	
7.0S 129.5E	
h ABOUT 132KM	
COL EP	00 28 05.0
EUR EP'	00 33 30.5

Date and Station	Phase (GCT)
	h m s
NOV 11	
GUA E(P)	00 30 31.0
NOV 11	
H-00 37 10.5	
44.3N 149.2E	
h ABOUT 045KM	
COL EP	00 44 41.0
EUR EP	00 47 59.4
E▸P	48 12.2
NOV 11	
EUR E(P)	00 44 15.0
NOV 11	
COL EP	01 10 26.0
EUR EP	01 13 45.0
I	13 59.0
NOV 11	
FGU EP	01 27 55.5
ES	28 28.0
NOV 11	
FGU EP'	02 24 39.0
EUR EP'	02 24 42.8
NOV 11	
COL EP	04 20 28.0
EUR E(P)	04 23 56.4
E	24 03.4
NOV 11	
TUC E(P)	04 39 09.0
NOV 11	
FGU EP'	04 44 06.0
EUR EP'	04 44 10.1
BCN EP'	04 44 27.2
NOV 11	
H-05 06 03.2	
44.3N 149.2E	
h ABOUT 040KM	
COL IP	05 13 34.2
HHM EP	05 16 24.4
EUR EP	05 16 52.9
E▸P	17 04.9
BCN EP	05 17 11.7
E▸P	17 23.9
RCD E(P)	05 17 19.0
TUC EP	05 17 41.0
E▸P	17 53.0
NOV 11	
H-07 32 43.2	
56.0S 126.4W	
h ABOUT 033KM	
TUC E(P)	07 45 28.0

Date and Station	Phase (GCT)
	h m s
NOV 11	
H-09 49 43.3	
44.6N 148.9E	
h ABOUT 055KM	
COL EP	09 57 11.0
HHM EP	10 00 02.9
BOZ IP	10 00 22.6
E▸P	00 37.6
EUR IP C	10 00 31.0
I▸P	00 45.5
FGU EP	10 00 49.3
BCN EP	10 00 49.5
E▸P	01 03.7
GCA E(P)	10 00 57.3
RCD IP	10 00 58.8
I▸P	01 12.7
TUC EP	10 01 18.8
E▸P	01 32.8
NOV 11	
EUR E(P)	10 29 03.3
NOV 11	
H-11 29 06.4	
16.9S 174.4W	
h ABOUT 185KM	
KIP IP	11 36 36.7
GUA IP	11 37 48.3
I	37 55.5
UKI IP	11 40 21.7
BCN EP	11 40 41.5
E▸P	41 28.0
TUC IP	11 40 47.0
I▸P	41 30.0
EUR IP C	11 40 47.5
E	41 42.5
GCA IP	11 40 57.3
FGU IP	11 41 13.8
BUT IP	11 41 16.0
▸P	42 00.2
COL IP	11 41 17.1
HHM EP	11 41 17.9
EPP	44 33.9
BOZ IP	11 41 18.9
E	42 07.0
RCD E(P)	11 41 41.8
NOV 11	
GUA E(P)	11 33 40.1
NOV 11	
EUR EP C	13 50 15.2

Date and Station	Phase	(GCT) h m s
NOV 11		
EUR	E(P)	14 39 08.0
NOV 11		
H-14 43 16.2		
32.0S 071.0W		
h ABOUT 021KM		
EUR	E(P)	14 55 34.5
	E	55 39.5
NOV 11		
TUC	E(P)	14 45 21.0
NOV 11		
EUR	IP	14 50 16.0
NOV 11		
SIT	E(P)	16 21 03.8
NOV 11		
H-16 21 14.4		
32.8S 095.5W		
h ABOUT 033KM		
EUR	E(P)	16 32 47.5
NOV 11		
COL	EP	16 30 21.0
NOV 11		
COL	EP	16 44 00.0
NOV 11		
COL	EP	18 30 10.0
NOV 11		
GUA	E(P)	18 50 43.2
NOV 11		
H-19 54 09.4		
9.1S 071.4W		
h ABOUT 585KM		
CSC	EP	20 01 25.3
TUC	IP	20 02 53.5
	IPCP	03 44.0
	EpP	04 46.0
GCA	IP	20 03 18.9
RCD	IP	20 03 25.5
FGU	IP	20 03 28.0
EUR	IP D	20 03 46.5
BOZ	IP	20 03 57.3
	EpP	05 54.2
HHM	IP	20 04 15.0
COL	IP	20 06 19.6
	EpP	08 29.0
NOV 11		
H-20 18 39.7		
4.0N 082.6W		
h ABOUT 033KM		
BHP	IP	20 20 05.0
	IS	21 09.0
SJP	IP C	20 23 29.0
	E	24 00.5
TUC	EP	20 26 00.0
GCA	EP	20 26 33.9
BCN	EP	20 26 43.2
FGU	IP	20 26 46.5
RCD	IP	20 26 47.5
EUR	EP	20 27 05.6
HHM	EP	20 27 45.0
COL	EP	20 30 27.0
NOV 11		
COL	EP	21 14 50.0
NOV 11		
GUA	E(P)	21 15 11.2
NOV 11		
COL	EP	21 48 32.0
NOV 11		
GUA	E(P)	21 58 17.1
NOV 11		
COL	EP	22 11 12.0
NOV 11		
COL	EP	22 11 52.0
NOV 11		
COL	EP	22 39 28.0
NOV 11		
TUC	EP	22 55 31.0
NOV 11		
BOZ	EP	23 13 39.8
	I	13 50.6
NOV 11		
SLC	EP	23 42 35.8
	IL	43 00.3
FGU	IP	23 43 10.5
EUR	EP	23 43 22.8
	EL	44 11.0
NOV 11		
BCN	IP	23 57 44.4
EUR	E(P)	23 58 43.9
	EL	59 35.0
NOV 12		
H-00 31 46.6		
44.0N 149.2E		
h ABOUT 033KM		
COL	IP	00 39 19.7
EUR	EP	00 42 37.9
TUC	EP	00 43 25.5
	E	43 40.0
NOV 12		
COL	EP	01 00 02.0
EUR	EP	01 03 17.5
	EpP	03 29.5
NOV 12		
H-01 17 10.4		
14.6S 173.3W		
h ABOUT 033KM		
COL	EP	01 29 26.0
NOV 12		
COL	EP	02 44 35.0
NOV 12		
COL	EP	02 57 25.0
NOV 12		
H-04 57 12.1		
44.8N 110.6W		
h ABOUT 033KM		
BZM	EP	04 57 29.0
	E(S)	57 53.5
BUT	EP	04 57 42.1
	I	57 45.1
	IL	58 11.1
FGU	FP	04 58 10.5
HHM	EP	04 58 14.0
	EL	59 24.0
SLC	E(P)	04 58 25.4
EUR	E(P)	04 58 54.2
NOV 12		
H-06 07 53.3		
27.9S 176.2W		
h ABOUT 033KM		
TUC	E(P)	06 20 33.0
EUR	EP	06 20 36.7
NOV 12		
EUR	EP	06 44 49.5
	EL	45 18.5
NOV 12		
H-07 06 31.2		
35.5N 029.7E		
h ABOUT 069KM		
COL	IP	07 18 34.1
HHM	EP	07 19 26.5
	EpP	19 44.0
RCD	E(P)	07 19 26.5
EUR	EP	07 20 06.2
NOV 12		
EUR	EP	07 50 50.4
BCN	EP	07 50 55.3
NOV 12		
H-07 56 53.6		
44.2N 149.0E		
h ABOUT 045KM		
COL	IP	08 04 24.5
HHM	EP	08 07 15.0
	EpP	07 29.0
EUR	EP	08 07 43.7
	EpP	07 56.7
	EPCP	08 11.2
	pPCP	08 24.7
BCN	EP	08 08 02.2
	EpP	08 15.3
FGU	EP	08 08 02.5
GCA	E(P)	08 08 10.2
RCD	E(pP)	08 08 24.6
TUC	EP	08 08 31.1
	IpP	08 44.8
NOV 12		
H-08 33 15.9		
44.2N 149.2E		
h ABOUT 050KM		
COL	IP	08 40 45.8
HHM	EP	08 43 37.0
	EpP	43 50.0
EUR	IP C	08 44 05.4
	IpP	44 18.9
	EPCP	44 36.4
	pPCP	44 49.4
FGU	EP	08 44 23.5
BCN	EP	08 44 24.3
	IpP	44 38.0
RCD	EP	08 44 31.6
NOV 12		
TUC	EP	11 22 50.6
EUR	E(P)	11 22 50.6
NOV 12		
COL	IP	11 28 06.8
NOV 12		
HHM	E(P)	11 31 41.0
NOV 12		
COL	IP	12 21 57.4
NOV 12		
H-12 44 02.4		
22.6S 175.5W		
h ABOUT 033KM		
TUC	EP	12 56 24.0
EUR	EP	12 56 27.0
COL	EP	12 57 00.0

Date and Station	Phase (GCT)
	h m s
NOV 12	
H-12 50 16.9	
51.5N 179.9W	
h ABOUT 033KM	
COL IP	12 55 02.4
EUR IP C	12 58 31.5
NOV 12	
H-13 00 00.7	
44.2N 149.4E	
h ABOUT 050KM	
COL IP	13 07 30.3
HHM E(P)	13 10 20.9
EpP	09 38.0
EUR IP D	13 10 49.6
I	10 55.6
SLC EP	13 10 58.4
BCN EP	13 11 07.3
EsP	11 20.0
FGU EP	13 11 07.5
GCA EP	13 11 15.6
RCD EP	13 11 16.4
TUC IP	13 11 37.1
NOV 12	
COL EP	13 01 46.0
NOV 12	
EUR IP	13 26 34.8
IS	26 58.5
NOV 12	
GCA E(P)	14 40 40.6
NOV 12	
H-15 28 43.9	
31.7N 078.5E	
h ABOUT 033KM	
COL EP	15 40 36.0
NOV 12	
EUR EP	16 45 40.3
NOV 12	
H-17 41 52.6	
30.4S 177.8W	
h ABOUT 060KM	
EUR E(P)	17 54 49.0
NOV 12	
COL EP	17 49 52.0
NOV 12	
GCA IP	18 17 58.4
NOV 12	
COL EP	18 30 13.0
NOV 12	
COL EP	18 33 27.0

Date and Station	Phase (GCT)
	h m s
NOV 12	
COL EP	18 42 03.0
NOV 12	
SLC EP	18 56 42.4
NOV 12	
TUC EP	19 39 13.0
EUR EP	19 40 28.5
COL EP	19 44 43.0
NOV 12	
EUR E(P)	20 54 03.4
NOV 12	
COL EP	21 28 52.0
NOV 12	
H-21 48 43.1	
27.7S 176.3W	
h ABOUT 033KM	
TUC EP	22 01 23.0
EUR E(P)	22 01 28.0
NOV 12	
FGU IP	21 56 45.5
IS	57 18.5
NOV 12	
TUC EP	22 55 39.0
NOV 12	
FGU EP	23 04 53.1
IS	05 21.8
NOV 12	
FGU EP	23 09 32.6
EUR E(P)	23 09 53.8
EL	09 34.5
NOV 12	
BUT EP	23 47 20.5
I(S)	47 47.5
HHM E(P)	23 47 49.0
EL	48 48.0
EUR E(P)	23 47 55.0
IL	49 00.8
NOV 13	
FGU IP	00 33 45.4
IS	34 09.1
NOV 13	
FGU E(P)	00 37 18.6
E(S)	37 40.6
NOV 13	
H-01 15 38.5	
44.5N 149.2E	
h ABOUT 050KM	
COL IP	01 23 07.5
EUR EP	01 26 26.6
EpP	26 40.5

Date and Station	Phase (GCT)
	h m s
NOV 13	
H-01 34 46.1	
34.6N 137.1E	
h ABOUT 105KM	
HHM EP	01 46 22.9
EUR EP	01 46 45.5
E	46 57.5
FGU E(P)	01 47 03.1
NOV 13	
COL EP	01 53 55.0
NOV 13	
EUR IP	02 28 00.6
IL	28 27.0
NOV 13	
TUC EP	02 38 24.1
BCN E(P)	02 39 07.7
EL	41 30.0
GCA E(P)	02 40 40.1
EUR E(P)	02 40 54.5
FL	43 23.0
NOV 13	
EUR E(P)	02 44 47.0
EL	47 20.5
NOV 13	
TUC E(P)	03 55 20.0
NOV 13	
H-05 01 41.8	
34.4N 138.3E	
h ABOUT 080KM	
COL IP	05 10 50.0
HHM EP	05 13 19.0
BOZ EP	05 13 36.2
EUR EP	05 13 41.6
E	13 53.5
E	13 59.5
FGU EP	05 13 58.4
NOV 13	
H-05 16 16.6	
07.8N 125.9E	
h ABOUT 033KM	
COL EP	05 28 31.0
NOV 13	
COL EP	05 41 23.0
NOV 13	
H-06 17 33.3	
38.3N 112.7W	
h ABOUT 033KM	
GCA IP	06 17 57.9
EUR IP	06 18 17.2
I(S)	18 51.0
IL	19 01.5

Date and Station	Phase (GCT)
	h m s
BCN IP D	06 18 17.5
I	18 22.6
EL	18 58.0
FGU EP	06 18 30.1
I	18 33.3
IL	19 20.7
TUC E(P)	06 19 13.0
NOV 13	
COL I(P)	06 24 05.3
NOV 13	
COL EP	07 16 32.0
NOV 13	
H-07 32 42.0	
44.2N 149.6E	
h ABOUT 040KM	
EUR EP	07 43 31.0
EpP	43 43.5
TUC E(P)	07 44 15.0
NOV 13	
BOZ EP	07 58 22.2
NOV 13	
H-08 38 57.8	
04.9S 132.3E	
h ABOUT 033KM	
EUR EP'	08 57 48.2
NOV 13	
H-09 01 41.2	
09.0N 073.3W	
h ABOUT 328KM	
SJP EP	09 04 20.3
FGU EP	09 09 29.2
BCN E(P)	09 09 38.3
EUR EP	09 09 55.2
E	10 50.5
COL EP	09 12 50.0
NOV 13	
SJP EP	09 06 32.7
NOV 13	
SJP EP	09 25 45.4
EL	26 04.0
NOV 13	
COL EP	09 42 18.0
NOV 13	
EUR E(P)	10 01 42.5
NOV 13	
COL EP	10 35 04.0
NOV 13	
H-11 18 28.6	
23.8S 179.9W	
h ABOUT 520KM	

Date and Station	Phase	(GCT) h m s
BCN	EP	11 30 12.7
	E▸P	32 02.6
	EPP	33 38.0
TUC	IP	11 30 17.5
	I▸P	32 11.0
EUR	IP C	11 30 18.0
	E▸P	32 15.0
	EPP	33 46.5
GCA	EP	11 30 26.2
SLC	EP	11 30 34.3
COL	EP	11 30 40.0
	E▸P	32 36.0
FGU	IP	11 30 41.2
BOZ	EP	11 30 46.5
	E▸P	32 41.6
HHM	EPKKP	11 47 55.0
NOV 13		
COL	EP	11 40 50.0
NOV 13		
COL	EP	12 32 15.0
NOV 13		
H-12 34 51.6		
51.9N 177.6W		
h ABOUT 033KM		
COL	IP	12 39 25.0
NOV 13		
H-13 09 00.7		
44.9N 148.8E		
h ABOUT 040KM		
COL	IP	13 16 28.5
HHM	EP	13 19 20.8
BOZ	EP	13 19 40.9
	E	20 02.2
EUR	IP C	13 19 50.0
BCN	IP	13 20 08.4
TUC	EP	13 20 38.0
NOV 13		
COL	IP	13 15 19.0
NOV 13		
BCN	E(P)	13 35 44.8
COL	EP	13 36 10.0
NOV 13		
EUR	EP	13 53 04.0
NOV 13		
COL	IP	14 05 27.8
NOV 13		
BCN	IP	15 13 52.2
	EL	15 24.0
GCA	E(P)	15 14 19.8
EUR	E(P)	15 15 08.5
	EL	17 23.0
NOV 13		
TUC	EP	15 28 32.0
	I	28 43.0
NOV 13		
H-15 46 49.0		
22.8S 175.3W		
h ABOUT 033KM		
EUR	E(P)	15 59 14.0
NOV 13		
H-15 50 47.7		
44.3N 148.2E		
h ABOUT 033KM		
COL	IP	15 58 22.6
EUR	EP	16 01 42.8
NOV 13		
H-16 06 35.7		
22.8S 175.3W		
h ABOUT 033KM		
EUR	EP	16 19 00.0
	E	19 14.0
COL	IP	16 19 33.1
NOV 13		
H-16 25 17.0		
45.5N 150.0E		
h ABOUT 050KM		
COL	IP	16 32 36.1
BOZ	EP	16 35 50.2
EUR	EP	16 35 58.0
	E▸P	36 13.0
NOV 13		
H-17 18 50.1		
22.9S 175.3W		
h ABOUT 033KM		
BCN	EP	17 31 09.8
	E▸P	31 21.8
EUR	IP C	17 31 15.0
	I▸P	31 27.0
FGU	EP	17 31 39.7
HHM	EP	17 31 45.2
BOZ	IP	17 31 46.4
	E▸P	31 58.8
COL	IP	17 31 48.1
NOV 13		
H-18 04 10.5		
22.9S 175.5W		
h ABOUT 033KM		
EUR	EP	18 16 36.6
	E	16 49.6
NOV 13		
EUR	EP	18 17 07.0
NOV 13		
EUR	EP	18 49 49.4
NOV 13		
COL	EP	19 39 57.0
NOV 13		
COL	IP	19 53 44.7
NOV 13		
H-20 03 06.6		
25.3N 109.3W		
h ABOUT 014KM		
TUC	IP	20 04 37.1
	E(S)	06 32.0
BCN	EP	20 05 55.1
	IL	09 40.7
EUR	EP	20 06 43.9
	EL	11 24.0
SLC	E(P)	20 06 48.5
FGU	EP	20 06 48.7
BOZ	EP	20 07 45.5
	E	07 57.0
HHM	EP	20 08 14.1
COL	IP	20 11 37.0
NOV 13		
COL	IP	20 17 36.8
NOV 13		
BOZ	EP	20 20 46.3
EUR	EP	20 20 54.0
NOV 13		
COL	EP	20 59 52.0
NOV 13		
EUR	EP	21 20 46.1
	EL	21 38.1
NOV 13		
COL	EP	21 22 22.0
NOV 13		
FGU	E(P)	21 34 30.7
	ES	34 58.4
NOV 13		
COL	IP	22 04 02.3
NOV 13		
SLC	EP	22 40 43.5
EUR	EP	22 41 37.3
	EL	42 12.0
NOV 13		
TUC	IP	22 54 42.2
NOV 13		
SLC	EP	23 06 09.0
	IL	06 36.7
FGU	IP	23 06 41.5
EUR	EP	23 06 56.0
	EL	07 41.5
NOV 13		
BCN	IP	23 09 40.6
	ES	09 52.6
NOV 13		
COL	EP	23 13 19.0
BOZ	E(P)	23 16 31.2
EUR	E(P)	23 16 57.8
NOV 14		
H-00 20 03.0		
30.1S 177.4W		
h ABOUT 042KM		
TUC	EP	00 32 48.9
BCN	E(P)	00 32 51.6
EUR	EP	00 32 57.7
	E	33 11.2
NOV 14		
EUR	I(P)	01 15 21.2
NOV 14		
BCN	IP	01 25 07.8
	IS	25 19.7
GCA	E(P)	01 25 38.8
	E(S)	26 12.8
EUR	EP	01 26 01.2
	EL	26 52.2
NOV 14		
COL	IP	01 45 18.8
NOV 14		
EUR	EP	02 58 16.6
	E	58 31.6
NOV 14		
H-03 58 48.9		
22.6N 142.9E		
h ABOUT 177KM		
GUA	IP	04 00 58.9
	I	01 15.5
	E	01 28.0
COL	EP	04 08 45.0
HHM	EP	04 10 50.0
	I▸P	11 27.5
	I	11 42.0
EUR	EP	04 11 00.6
	E▸P	11 38.6
BOZ	IP	04 11 04.4
	E	11 47.0
BUT	I(P)	04 11 05.2
	I	11 31.0
BCN	EP	04 11 14.3
	E▸P	11 50.4

Date and Station	Phase (GCT)
	h m s
FGU IP	04 11 20.5
GCA EP	04 11 23.0
TUC EP	04 11 30.6
IpP	14 12 09.0
NOV 14	
H-04 35 48.5	
17.5S 167.7E	
h ABOUT 033KM	
HON E(P)	04 44 56.0
ES	52 14.0
E	56 28.0
EL	59 06.0
COL EP	04 48 39.0
BCN EP	04 48 48.9
E	49 29.4
EUR EP	04 48 50.7
EPP	52 31.5
TUC EP	04 48 51.5
E	49 23.0
KIP ES	04 52 13.0
E	56 29.0
EL	59 25.0
NOV 14	
EUR E(P)	04 40 14.0
NOV 14	
NOV 14	
H-05 06 07.5	
45.7N 151.2E	
h ABOUT 015KM	
COL EP	05 13 26.0
BOZ IP	05 16 40.7
E	17 02.5
EUR IP D	05 16 48.6
IpP	16 54.5
I	17 01.8
BCN EP	05 17 07.4
NOV 14	
COL IP	05 26 07.3
NOV 14	
SJP EP	05 59 48.0
NOV 14	
COL IP	06 01 59.6
NOV 14	
TUC E(P)	06 14 22.0
GCA E(P)	06 15 00.9
BCN EP	06 15 01.4
EL	16 04.4
NOV 14	
COL EP	06 27 51.0

Date and Station	Phase (GCT)
	h m s
NOV 14	
COL IP	07 48 57.9
NOV 14	
GUA IP	09 00 39.8
E	00 58.5
NOV 14	
H-09 05 47.8	
15.1N 093.9W	
h ABOUT 033KM	
TUC E(P)	09 10 45.0
GCA E(P)	09 11 28.2
BCN EP	09 11 38.0
FGU IP	09 11 47.8
EUR EP	09 12 05.5
BOZ EP	09 12 32.2
E	14 00.5
BUT EP	09 12 36.0
HHM EP	09 12 57.0
COL IP	09 16 02.5
NOV 14	
GCA E(P)	09 47 57.7
ES	48 15.7
EUR EP	09 48 21.6
EL	49 01.6
NOV 14	
H-10 17 27.5	
30.5N 138.8E	
h ABOUT 439KM	
COL EP	10 26 24.0
EUR EP	10 29 00.9
NOV 14	
COL EP	12 40 43.0
NOV 14	
GUA E(P)	12 42 31.0
NOV 14	
H-13 37 02.1	
52.3N 179.8W	
h ABOUT 100KM	
COL EP	13 41 38.0
EUR IP C	13 45 07.8
E	45 31.6
NOV 14	
H-14 01 18.4	
17.4S 167.6E	
h ABOUT 033KM	
COL EP	14 14 08.0
EUR EP	14 14 21.1

Date and Station	Phase (GCT)
	h m s
NOV 14	
H-14 05 35.6	
17.5S 167.7E	
h ABOUT 033KM	
COL EP	14 18 26.0
BCN EP	14 18 35.5
EUR EP	14 18 37.3
HON E	14 22 12.0
EL	28 54.0
NOV 14	
TUC EP	14 57 32.9
NOV 14	
H-16 00 00.1	
37.0N 116.0W	
h ABOUT 000KM	
BCN IP C	16 00 26.8
EUR IP C	16 00 41.8
GCA EP	16 00 57.5
I	01 00.5
SLC E(P)	16 01 15.4
E	01 38.4
IL	02 56.4
FGU EP	16 01 40.8
I	01 42.6
BOZ E(P)	16 02 17.2
E	04 03.6
COL EP	16 06 44.0
NOV 14	
BCN IP D	16 10 49.2
EUR IP C	16 11 04.0
IL	11 46.0
GCA EP	16 11 21.0
I	11 28.5
SLC E(P)	16 11 46.9
I	13 17.4
FGU E(P)	16 12 02.8
NOV 14	
FGU E(P)	17 16 42.3
IS	17 13.8
NOV 14	
H-17 59 04.9	
15.0N 094.2W	
h ABOUT 033KM	
BCN EP	18 04 54.7
FGU IP	18 05 05.3
EUR I(P)	18 05 23.0
COL EP	18 09 19.0
NOV 14	
COL EP	18 29 44.0

Date and Station	Phase (GCT)
	h m s
NOV 14	
COL EP	18 36 03.0
NOV 14	
COL EP	18 40 41.0
NOV 14	
EUR IP	19 28 34.9
I	28 54.5
NOV 14	
GCA E(P)	19 31 55.6
ES	32 28.6
NOV 14	
H-21 27 25.6	
45.4N 151.4E	
h ABOUT 050KM	
COL EP	21 34 39.0
EUR EP	21 38 01.2
E	38 07.0
NOV 14	
FGU IP	22 13 54.1
IS	14 12.4
NOV 14	
SLC EP	22 15 33.8
IL	16 00.5
NOV 14	
EUR IP D	22 20 02.4
IS	20 19.0
NOV 14	
GCA E(P)	22 32 15.7
ES	32 50.3
NOV 14	
FGU EP	22 43 43.4
ES	44 13.4
NOV 14	
FGU IP	23 37 17.4
EUR EP	23 37 32.0
EL	38 09.5
NOV 14	
H-23 37 49.5	
17.4S 167.8E	
h ABOUT 033KM	
COL EP	23 50 41.0
EUR E(P)	23 50 58.5
E	51 06.0
NOV 14	
EUR EP	23 51 23.5
NOV 15	
EUR E(P)	00 11 36.4
NOV 15	
H-00 18 52.4	
04.7S 076.8W	
h ABOUT 152KM	
FGU IP	00 28 05.4
EUR EP	00 28 23.4

Date and Station	Phase	(GCT) h m s
NOV 15		
FGU	EP	00 26 10.9
	ES	26 41.2
NOV 15		
H-00 44 38.5		
44.4N 149.1E		
h ABOUT 045KM		
COL	IP	00 52 08.5
BOZ	IP	00 55 20.4
	I▸P	55 33.6
EUR	EP	00 55 28.0
	E▸P	55 41.0
BCN	EP	00 55 46.4
	E▸P	55 58.9
NOV 15		
FGU	E(P)	01 02 42.4
	ES	03 13.4
NOV 15		
FGU	E(P)	01 06 02.9
	ES	06 38.9
NOV 15		
FGU	EP	01 09 58.4
	ES	10 29.4
EUR	E(P)	01 10 17.5
	IL	10 58.5
NOV 15		
SLC	IP	02 33 59.3
	IS	34 11.8
FGU	IP	02 34 32.6
	IS	35 01.5
EUR	EP	02 34 49.5
	IL	35 36.0
NOV 15		
COL	IP	04 59 21.6
EUR	I(P)	05 04 42.0
NOV 15		
COL	EP	06 05 10.0
NOV 15		
H-06 34 07.4		
45.6N 153.2E		
h ABOUT 033KM		
COL	EP	06 41 15.0
EUR	E▸P	06 44 51.1
NOV 15		
FGU	EP	06 41 56.4
	IS	42 30.4
NOV 15		
BHP	EP	06 55 16.0
NOV 15		
EUR	EP	07 24 16.5

Date and Station	Phase	(GCT) h m s
NOV 15		
H-08 21 22.9		
44.4N 149.2E		
h ABOUT 055KM		
COL	IP	08 28 51.0
BCN	EP	08 32 28.9
NOV 15		
BOZ	IP	09 29 41.4
NOV 15		
EUR	EP	Q9 32 10.0
NOV 15		
COL	EP	13 45 48.0
NOV 15		
FGU	IP	14 00 43.3
NOV 15		
H-15 00 00.2		
37.1N 116.0W		
h ABOUT 000KM		
BCN	IP D	15 00 28.6
	I	00 51.1
	IL	01 03.1
EUR	IP C	15 00 40.6
GCA	EP	15 00 59.5
	I	01 07.0
NOV 15		
BCN	I(P)	15 09 08.9
EUR	E(P)	15 09 14.0
	IL	09 53.5
NOV 15		
H-15 17 07.7		
52.9N 164.3W		
h ABOUT 033KM		
COL	EP	15 20 34.0
BOZ	EP	15 23 56.3
	E	24 55.2
EUR	EP	15 24 03.0
	E	24 05.5
	E	24 13.0
NOV 15		
EUR	E(P)	16 15 54.0
	E	15 08.0
NOV 15		
EUR	E(P)	16 28 53.5
NOV 15		
H-18 16 45.0		
20.1N 070.0W		
h ABOUT 050KM		
SJP	I(P)	18 17 46.0
	I	17 56.0
	I	18 09.0
EUR	E	18 24 23.0

Date and Station	Phase	(GCT) h m s
NOV 15		
KIP	EP	19 02 11.0
	ES	02 45.0
HON	EP	19 02 12.0
	ES	02 45.0
NOV 15		
GUA	EP	21 00 00.0
	ES	00 18.0
NOV 15		
H-21 06 34.0		
44.3N 149.0E		
h ABOUT 050KM		
COL	IP	21 14 03.6
	I(S)	20 06.0
SIT	EP	21 15 04.0
	E▸P	15 16.5
KIP	IP	21 15 19.0
	E(S)	22 29.0
HON	EP	21 15 19.0
	EPP	17 18.0
	I(S)	22 25.0
	E(SS)	26 05.0
	EL	26 50.0
HHM	EP	21 16 53.9
	I▸P	17 07.4
	E	45 01.4
UKI	EP	21 16 56.0
	I▸P	17 08.5
BUT	EP	21 17 08.8
BOZ	EP	21 17 15.2
	EPP	19 38.0
	E(S)	26 03.0
	EL	33 20.0
EUR	IP D	21 17 23.0
	I▸P	17 37.0
	IPP	19 49.3
	ES	26 04.5
	P'P'	45 33.8
SLC	IP	21 17 28.3
BCN	IP D	21 17 41.1
	I▸P	17 55.1
	E	20 34.2
	P'P'	45 58.7
FGU	IP	21 17 41.8
GCA	IP	21 17 49.4
RCD	IP	21 17 49.5
	E(S)	27 11.2
WAS	EP	21 19 18.5
CSC	EP	21 19 28.5
	ESKS	29 58.0
SJP	EP'	21 24 45.5
	EPP	25 29.2
BHP	EPP	21 25 47.0

Date and Station	Phase	(GCT) h m s
NOV 15		
COL	IP	21 43 19.9
EUR	E(P)	21 46 39.5
	E	46 52.0
NOV 15		
COL	EP	23 19 14.6
NOV 15		
FGU	EP	23 19 59.0
	ES	20 29.5
NOV 15		
COL	EP	23 58 37.0
NOV 16		
COL	IP	01 01 03.1
EUR	E(P)	01 04 22.0
	E	04 35.5
NOV 16		
H-01 17 05.6		
44.7N 149.0E		
h ABOUT 033KM		
EUR	EP	01 27 55.8
NOV 16		
H-01 59 33.4		
44.2N 149.2E		
h ABOUT 033KM		
COL	IP	02 07 05.3
FUR	EP	02 10 24.6
NOV 16		
COL	IP	02 08 17.0
	E	08 28.0
EUR	EP	02 11 35.6
	I	11 48.5
NOV 16		
H-02 30 07.0		
44.3N 149.0E		
h ABOUT 050KM		
COL	IP	02 37 37.5
HHM	IP	02 40 28.6
	I▸P	40 41.8
BUT	EP	02 40 40.9
	I	41 53.9
BOZ	EP	02 40 48.2
	E▸P	41 00.4
EUR	IP C	02 40 57.5
	I▸P	41 10.4
SLC	EP	02 41 07.5
FGU	EP	02 41 15.5
BCN	EP	02 41 15.7
	I▸P	41 29.6
	I	41 44.1
GCA	EP	02 41 23.3

Date and Station	Phase (GCT)
	h m s
RCD EP	02 41 23.4
IpP	41 36.9
CSC EpP	02 43 15.7
KIP ES	02 46 00.0
EL	50 22.0
E	52 55.0
HON ES	02 46 00.0
EL	50 25.0
E	52 26.0
NOV 16	
COL IP	04 28 16.0
NOV 16	
COL EP	04 50 10.0
EUR EP	04 53 30.5
E	53 44.0
NOV 16	
GUA E(P)	05 55 04.2
NOV 16	
EUR EP	06 17 06.5
NOV 16	
EUR EP	06 24 23.0
E	24 37.0
NOV 16	
H-06 46 15.7	
41.3S 087.5W	
h ABOUT 011KM	
SJP EP	06 56 39.5
I	56 48.4
CSC EP	06 57 58.5
BCN EP	06 58 32.5
GCA I(P)	06 58 33.7
SLC EP	06 58 47.3
FGU IP	06 58 49.5
I	58 58.0
EUR IP D	06 58 51.2
I	58 58.8
RCD IP	06 59 00.8
I	59 09.0
BOZ EP	06 59 14.5
BUT EP	06 59 17.8
HHM EP	06 59 29.5
NOV 16	
H-11 07 53.7	
26.7N 097.2E	
h ABOUT 033KM	
COL EP	11 19 37.0
NOV 16	
H-11 39 37.8	
28.1N 095.1E	
h ABOUT 037KM	

Date and Station	Phase (GCT)
	h m s
COL IP	11 51 19.0
NOV 16	
H-11 58 41.5	
38.1N 117.0W	
h ABOUT 015KM	
EUR IP	11 59 11.2
IS	59 34.0
BCN EP	11 59 26.4
ES	59 56.4
NOV 16	
EUR IP	12 04 02.9
IS	04 25.0
NOV 16	
COL EP	12 06 05.0
NOV 16	
EUR EP	12 21 48.3
IS	22 10.3
NOV 16	
H-12 24 41.1	
38.3N 117.1W	
h ABOUT 015KM	
EUR EP	12 25 09.5
IS	25 31.6
BCN E(P)	12 25 29.0
NOV 16	
EUR IP	12 49 59.4
IS	50 22.0
NOV 16	
H-12 56 36.4	
38.2N 117.1W	
h ABOUT 015KM	
EUR EP	12 57 05.0
IS	57 27.5
BCN E(P)	12 57 23.0
NOV 16	
COL IP	13 30 04.4
NOV 16	
COL EP	13 38 51.0
NOV 16	
H-14 23 43.2	
38.1N 117.0W	
h ABOUT 015KM	
EUR IP	14 24 13.0
IS	24 35.5
BCN EP	14 24 28.6
ES	24 58.3
NOV 16	
GUA EP	15 44 48.0
COL IP	15 47 36.2
NOV 16	
H-16 48 10.2	
38.0N 117.1W	
h ABOUT 015KM	

Date and Station	Phase (GCT)
	h m s
EUR IP	16 48 40.5
IS	49 02.2
BCN EP	16 48 54.7
IS	49 25.2
NOV 16	
BCN EP	17 05 26.4
ES	05 39.4
NOV 16	
COL IP	17 29 15.4
NOV 16	
H-17 40 02.7	
38.1N 117.1W	
h ABOUT 015KM	
EUR EP	17 40 33.0
IS	40 55.0
BCN EP	17 40 47.6
ES	41 18.6
NOV 16	
H-18 06 55.0	
02.2S 080.0W	
h ABOUT 059KM	
SJP IP	18 12 11.5
FGU EP	18 15 50.5
EUR IP D	18 16 08.5
EpP	16 23.5
NOV 16	
COL EP	18 19 38.0
NOV 16	
COL EP	18 50 34.0
NOV 16	
H-19 17 55.7	
38.0N 117.1W	
h ABOUT 015KM	
EUR IP	19 18 26.0
IS	18 48.5
BCN EP	19 18 39.9
ES	19 09.9
NOV 16	
COL EP	19 31 47.3
NOV 16	
EUR EP	19 37 34.4
ES	37 56.4
NOV 16	
GUA EP	19 45 10.0
ES	45 21.8
NOV 16	
EUR IP	20 12 38.4
IS	13 00.5
NOV 16	
TUC IP	21 58 45.8
ES	59 03.0

Date and Station	Phase (GCT)
	h m s
NOV 16	
BOZ EP	22 40 53.8
E	
NOV 16	
H-22 4	
22C30	
h A+	
KI-	
ES	58 45.0
ESS	23 01 54.0
+O-	
ESS	23 01 55.0
EL	04 06.0
GUA IP	22 52 42.0
I	52 55.0
BCN EP	22 55 41.4
TUC EP	22 55 45.0
EUR EP	22 55 47.8
GCA IP	22 55 57.5
SLC IP	22 56 04.8
FGU IP	22 56 12.7
HHM EP	22 56 20.0
COL EP	22 56 20.9
RCD E(P)	22 56 36.0
NOV 16	
H-22	
38.0N 117.0W	
h ABOUT 015KM	
EUR IP D	22 51 55.9
IS	51 17.4
BCN IP	22 52 10.4
IS	52 41.0
NOV 16	
H-23 39 58.3	
22.1S 175.3W	
h ABOUT 033KM	
BCN EP	23 52 13.3
E	52 28.7
TUC EP	23 52 18.0
EUR EP	23 52 20.6
SLC EP	23 52 38.3
FGU IP	23 52 45.4
COL IP	23 52 53.0
NOV 16	
GCA IP	23 50 30.2
EUR EP	23 50 37.8

Date and Station	Phase (GCT)
	h m s
NOV 16	
UKI EP	23 55 27.0
E	56 07.5
NOV 17	
H-00 48 02.6	
7.6N 037.4W	
h ABOUT 033KM	
SJP IP	00 54 09.0
IS	59 08.0
BHP IP	00 55 51.0
IS	01 02 06.0
WAS EP	00 56 37.0
CSC EP	00 56 40.9
ESP	01 03 46.4
RCD EP	00 58 59.0
IS	01 07 54.5
FGU IP	00 59 23.7
TUC EP	00 59 26.4
SLC EP	00 59 33.4
GCA IP	00 59 33.6
BOZ EP	00 59 36.8
E	59 50.0
BUT EP	00 59 39.0
HHM EP	00 59 45.8
BCN IP C	00 59 46.8
EUR EP	00 59 51.5
I	01 00 10.5
I	00 56.3
ES	00 59 28.8
UKI EP	01 00 25.5
E	00 38.0
I	01 30.0
COL IP	01 01 08.5
NOV 17	
COL EP	00 57 41.0
NOV 17	
COL EP	00 59 04.0
NOV 17	
H-01 13 36.0	
21.8S 175.0W	
h ABOUT 033KM	
TUC EP	01 25 52.0
EUR EP	01 25 55.3
GCA IP	01 26 04.1
FGU IP	01 26 20.4
COL IP	01 26 27.3

Date and Station	Phase (GCT)
	h m s
KIP E	01 17 24.0
E	18 33.0
E	23 56.0
EL	35 05.0
HON E	01 17 24.0
E	18 33.0
E	23 45.0
NOV 17	
H-02 32 49.0	
38.0N 117.1W	
h ABOUT 015KM	
EUR IP	02 33 19.3
IS	33 41.8
BCN E(P)	02 33 33.2
ES	34 03.7
NOV 17	
GUA E(P)	02 34 00.0
NOV 17	
EUR E(P)	02 37 27.3
NOV 17	
SJP IP	04 16 43.0
EL	17 06.0
NOV 17	
SJP IP	04 53 42.5
EL	54 16.0
NOV 17	
COL EP	05 56 48.0
NOV 17	
GUA E(P)	06 26 46.1
EUR EP	06 37 01.2
NOV 17	
GUA E(P)	06 56 06.8
E	56 20.0
NOV 17	
SJP IP	07 32 25.5
EL	32 49.0
NOV 17	
H-07 50 34.4	
06.3N 126.2E	
h ABOUT 033KM	
COL EP	08 02 55.0
NOV 17	
COL IP	08 12 09.1
EUR IP	08 12 37.1
I	12 43.1
NOV 17	
EUR I(P)	08 13 15.5
NOV 17	
COL EP	08 17 38.0
NOV 17	
COL EP	08 26 56.0
NOV 17	
COL EP	09 47 59.0

Date and Station	Phase (GCT)
	h m s
NOV 17	
EUR E(P)	10 39 50.5
NOV 17	
EUR EP	10 46 01.8
NOV 17	
FGU EP'	11 12 52.5
EUR EP'	11 12 56.0
NOV 17	
GCA EP	11 31 20.7
IS	31 25.7
NOV 17	
COL EP	11 46 47.0
NOV 17	
FGU IP	11 49 02.9
IS	49 36.7
NOV 17	
COL EP	12 07 50.0
NOV 17	
GUA IP	12 20 12.0
ES	20 22.0
NOV 17	
TUC EP	12 21 51.5
E	22 35.0
EUR EP	12 22 39.0
E	22 50.0
NOV 17	
COL IP	12 45 24.8
NOV 17	
H-13 13 49.3	
17.4S 178.5W	
h ABOUT 509KM	
BCN EP	13 25 08.3
EUR IP D	13 25 13.2
E	26 48.0
TUC IP	13 25 15.2
EPP	27 09.0
FGU IP	13 25 38.7
E	27 36.7
NOV 17	
COL IP	13 17 22.1
I	25 31.0
NOV 17	
COL IP	13 27 29.8
NOV 17	
COL EP	13 46 19.0
NOV 17	
COL EP	13 46 38.0
NOV 17	
COL IP	14 20 11.2
NOV 17	
TUC IP	16 32 14.2
ES	32 34.6

Date and Station	Phase (GCT)
	h m s
NOV 17	
EUR IP	16 47 01.6
I	47 20.2
NOV 17	
COL EP	17 01 20.0
EUR EP	17 04 27.5
NOV 17	
H-17 40 59.1	
44.9N 149.5E	
h ABOUT 050KM	
COL IP	17 48 24.9
EUR EP	17 51 44.0
EPP	51 57.9
NOV 17	
GUA EP	18 40 09.0
E	41 03.5
NOV 17	
EUR EP	20 19 50.0
NOV 17	
BHP IP	20 29 56.0
IS	30 03.5
NOV 17	
FGU E(P)	20 35 49.5
ES	36 40.0
NOV 17	
COL EP	21 19 42.0
NOV 17	
COL EP	21 30 08.0
NOV 17	
COL IP	21 36 30.4
NOV 17	
H-22 51 13.6	
45.2N 150.1E	
h ABOUT 020KM	
EUR EP	23 01 59.7
E	01 08.5
NOV 17	
COL EP	22 52 05.0
NOV 18	
H-00 15 34.1	
44.1N 151.1E	
h ABOUT 040KM	
EUR EP	00 26 17.4
EPP	26 30.0
NOV 18	
H-01 01 52.9	
03.6S 143.4E	
h ABOUT 033KM	
COL EP	01 14 21.6
NOV 18	
H-01 45 27.6	
47.2N 148.5E	
h ABOUT 319KM	

Date and Station	Phase (GCT)
	h m s
COL IP	01 52 14.6
HHM EP	01 55 08.8
BOZ IP	01 55 29.1
EUR IP	01 55 40.2
IPCP	56 09.5
EPP	56 50.2
FGU IP	01 55 57.0
BCN EP	01 55 58.8
EPCP	56 21.8
GCA EP	01 56 06.1
TUC IP	01 56 28.0
NOV 18	
COL EP	02 03 00.0
NOV 18	
GUA IP	04 14 49.0
NOV 18	
EUR EP	04 54 26.0
NOV 18	
COL EP	05 11 05.0
NOV 18	
H-05 16 42.5	
8.4S 113.5E	
h ABOUT 104KM	
EUR EP*	05 35 37.0
NOV 18	
H-06 04 12.7	
22.4S 170.5E	
h ABOUT 033KM	
COL EP	06 17 21.0
NOV 18	
EUR E(P)	07 29 14.5
NOV 18	
H-07 38 04.6	
43.9N 150.8E	
h ABOUT 033KM	
COL EP	07 45 33.0
EUR EP	07 48 50.4
NOV 18	
TUC E(P)	08 08 42.0
NOV 18	
H-09 31 35.3	
36.2N 120.4W	
h ABOUT 014KM	
BCN E(P)	09 32 45.9
E	32 57.7
EUR EP	09 32 50.0
IL	34 01.0
NOV 18	
EUR E	09 51 05.5

Date and Station	Phase (GCT)
	h m s
NOV 18	
EUR EP	10 56 00.8
EL	57 10.0
NOV 18	
GUA EP	12 13 28.5
COL IP	12 23 16.4
NOV 18	
HHM EP	13 36 28.6
EUR E(P)	13 37 05.0
FGU IP	13 37 08.3
NOV 18	
FGU EP	13 41 17.8
I	41 20.3
NOV 18	
H-13 51 35.8	
15.9S 173.3W	
h ABOUT 033KM	
BCN EP	14 03 20.6
TUC EP	14 03 25.2
EUR EP	14 03 26.8
GCA EP	14 03 37.1
FGU IP	14 03 54.3
BOZ EP	14 03 58.7
HHM E(P)	14 04 08.7
NOV 18	
H-14 38 28.9	
29.9N 113.6W	
h ABOUT 014KM	
TUC IP C	14 39 22.5
BCN IP D	14 40 00.6
GCA EP	14 40 17.8
I	40 19.8
EUR EP D	14 40 51.5
IL	44 01.5
SLC IP	14 41 13.2
UKI EP	14 41 26.6
EL	44 02.0
EL	44 36.0
BOZ EP	14 42 16.8
E	45 33.0
EL	46 36.0
BUT EP	14 42 19.1
E	42 24.1
I	45 42.1
HHM EP	14 42 45.9
I	42 51.7
I	46 25.7
CSC EP	14 44 19.6
ES	49 04.5

Date and Station	Phase (GCT)
	h m s
SIT E(P)	14 44 53.0
ESP	50 10.0
EL	52 24.0
WAS EP	14 44 53.0
PHI EP	14 45 07.5
IS	50 28.5
BHP IP	14 45 45.0
I	52 48.0
KIP EP	14 46 09.0
E(SP)	52 23.0
HON EP	14 46 09.0
EPPP	48 17.0
IS	52 16.0
EL	55 26.0
COL EP	14 46 12.0
ESP	52 36.0
SJP EP	14 46 40.5
E	48 23.0
NOV 18	
H-16 02 19.9	
29.7N 113.8W	
h ABOUT 014KM	
BCN IP C	16 03 55.0
GCA E(P)	16 04 11.5
E	04 14.5
EUR EP	16 04 45.8
EL	07 52.0
SLC IP	16 05 06.7
FGU EP	16 05 12.3
BUT E(P)	16 06 08.0
BOZ EP	16 06 09.6
HHM E(P)	16 06 39.0
COL EP	16 10 06.0
NOV 18	
EUR E(P)	16 14 38.7
NOV 18	
COL EP	16 26 01.0
NOV 18	
EUR E(P)	17 09 10.8
NOV 18	
COL EP	17 32 08.0
EUR EP	17 35 35.0
NOV 18	
HHM EP	19 05 08.7
NOV 18	
H-19 07 47.7	
29.1N 114.1W	
h ABOUT 014KM	
BCN IP C	19 09 30.8

Date and Station	Phase (GCT)
	h m s
EUR EP	19 10 21.0
EL	13 30.0
HHM EP	19 12 14.6
NOV 18	
BCN I(P)	19 15 51.4
EUR E(P)	19 16 34.0
EL	19 34.0
NOV 18	
BCN EP	19 20 08.4
ES	20 21.4
NOV 18	
EUR E(P)	19 22 03.0
NOV 18	
BCN I(P)	19 23 45.3
EUR E(P)	19 24 43.0
NOV 18	
H-19 33 35.9	
30.0N 113.7W	
h ABOUT 014KM	
BCN IP	19 35 03.7
I	35 10.1
GCA EP	19 35 23.2
EUR EP	19 35 55.0
EL	38 37.2
FGU E(P)	19 36 24.8
NOV 18	
EUR E(P)	19 52 59.6
COL IP	19 58 46.6
NOV 18	
EUR EP	19 58 21.0
NOV 18	
EUR EP	20 37 56.5
EL	39 22.4
NOV 18	
BCN E(P)	20 48 31.1
I	48 52.3
GCA E(P)	20 48 41.9
EUR E(P)	20 49 15.6
EL	51 53.8
NOV 18	
H-21 11 10.2	
13.4S 166.6E	
h ABOUT 051KM	
COL EP	21 23 41.0
EUR EP	21 24 03.5
E	24 17.9
NOV 18	
GCA EP	21 35 01.2

Date and Station	Phase	Phase (GCT) h m s
NOV 18		
SLC	EP	21 58 29.3
	ES	58 53.7
NOV 18		
H-22 01 10.4		
31.9N 113.3W		
h ABOUT 014KM		
BCN IP D		22 02 15.3
GCA	EP	22 02 30.4
EUR	IP	22 03 06.4
	IL	05 03.4
SLC E(P)		22 03 30.2
FGU	EP	22 03 35.9
BOZ	EP	22 04 33.8
BUT E(P)		22 04 34.0
HHM E(P)		22 05 03.0
NOV 18		
SLC E(P)		22 26 43.7
FGU	IP	22 27 04.2
	IS	27 33.7
GCA	EP	22 27 09.4
EUR E(P)		22 27 15.0
	IL	28 02.0
NOV 18		
COL	EP	22 28 52.0
NOV 18		
SLC	EP	23 05 56.7
	EL	06 19.5
FGU	IP	23 06 26.7
NOV 18		
BCN E(P)		23 06 04.2
GCA E(P)		23 06 54.3
	E	08 37.3
NOV 18		
BCN E(P)		23 27 17.1
	EL	28 02.0
EUR E(P)		23 27 57.0
NOV 18		
COL	EP	23 39 56.0
NOV 18		
GUA E(P)		23 59 51.5
NOV 19		
H-01 11 43.2		
31.0N 113.7W		
h ABOUT 014KM		
BCN IP C		01 12 59.7
GCA	EP	01 13 18.7
EUR	EP	01 13 50.8
	IL	16 11.3
SLC E(P)		01 14 13.7
BOZ E(P)		01 15 18.5
	EL	19 20.0
BUT E(P)		01 15 20.1
HHM	EP	01 15 48.0
COL	EP	01 19 19.0
NOV 19		
H-02 01 15.5		
44.1N 150.2E		
h ABOUT 050KM		
COL	EP	02 08 43.0
HHM	EP	02 11 31.0
EUR	EP	02 12 01.0
	I▸P	12 14.0
NOV 19		
BCN E(P)		02 20 39.1
NOV 19		
EUR E(P)		03 34 39.5
	EL	35 45.6
NOV 19		
GUA	EP	03 47 54.1
NOV 19		
BCN E(P)		04 07 20.5
EUR E(P)		04 08 20.9
	EL	10 54.0
NOV 19		
H-04 37 56.8		
39.7N 129.5E		
h ABOUT 537KM		
COL	EP	04 46 15.0
EUR IP C		04 49 17.4
FGU	IP	04 49 29.6
BCN IP D		04 49 33.1
NOV 19		
COL	EP	04 49 36.0
NOV 19		
COL	EP	06 48 21.0
NOV 19		
H-08 06 33.1		
59.7N 140.8W		
h ABOUT 033KM		
COL	EP	08 08 04.0
EUR E(P)		08 11 53.3
NOV 19		
H-08 23 11.6		
30.9N 113.8W		
h ABOUT 014KM		
BCN IP		08 24 29.0
	EL	26 39.0
GCA	EP	08 24 47.2
EUR IP C		08 25 20.0
	IL	27 38.0
SLC	EP	08 25 42.7
	EL	27 48.7
	E	28 38.0
FGU	IP	08 25 47.1
BUT E(P)		08 26 46.0
BOZ E(P)		08 26 48.3
	EL	30 56.0
RCD E(P)		08 26 59.0
	IL	31 29.5
HHM	EP	08 27 17.5
WAS E(P)		08 29 35.0
	EL	39 43.0
COL	EP	08 30 48.0
CSC	E	08 36 20.0
	EL	38 07.8
PHI	EL	08 40 26.4
NOV 19		
H-10 45 49.1		
22.5S 171.3E		
h ABOUT 036KM		
COL	EP	10 58 55.0
EUR	EP	10 58 55.3
NOV 19		
H-10 51 13.8		
30.5N 114.1W		
h ABOUT 014KM		
BCN IP C		10 52 36.8
GCA	EP	10 52 55.4
EUR	EP	10 53 28.0
	EL	56 09.0
FGU E(P)		10 53 57.9
NOV 19		
H-11 00 54.3		
44.4N 149.2E		
h ABOUT 033KM		
COL	IP	11 08 25.4
KIP	EP	11 09 39.0
HHM	IP	11 11 16.4
BUT	IP	11 11 30.2
BOZ	IP	11 11 35.8
	E	11 50.0
EUR IP D		11 11 44.5
	I	11 50.7
SLC	IP	11 11 55.2
FGU	IP	11 12 02.1
BCN IP D		11 12 03.3
GCA	IP	11 12 10.7
RCD	IP	11 12 11.7
CSC	EP	11 13 49.7
NOV 19		
BCN IP C		12 06 35.6
GCA E(P)		12 06 54.8
EUR E(P)		12 07 26.1
	EL	10 22.2
NOV 19		
FGU	EP	12 43 08.5
	IS	43 34.0
NOV 19		
H-14 25 26.7		
44.4N 149.1E		
h ABOUT 033KM		
COL	EP	14 32 58.0
EUR	EP	14 36 17.2
NOV 19		
H-17 38 39.7		
53.1N 159.6E		
h ABOUT 040KM		
COL	IP	17 44 34.4
HHM	EP	17 47 44.3
BOZ	EP	17 48 07.7
	E▸P	48 19.2
	EPCP	49 09.5
EUR	IP	17 48 21.2
	E▸P	48 33.0
FGU E(P)		17 48 39.5
BCN	EP	17 48 43.0
	I▸P	48 54.5
	EPCP	49 29.6
	E▸PCP	49 42.6
RCD	IP	17 48 46.3
	I▸P	48 58.8
NOV 19		
COL	EP	17 49 21.0
NOV 19		
H-18 17 02.2		
05.0S 102.2E		
h ABOUT 037KM		
COL	EPP	18 35 14.0
HHM	EP'	18 36 04.2

Date and Station	Phase (GCT)
	h m s
EUR EP'	18 36 15.5
WAS EP'	18 36 25.5
FGU ESKP	18 39 47.5
NOV 19	
COL EP	18 33 04.0
NOV 19	
COL IP	19 14 00.0
NOV 19	
COL EP	19 50 27.0
NOV 19	
BCN I(P)	20 04 50.7
GCA EP	20 05 08.8
EUR I(P)	20 05 46.0
EL	08 26.0
FGU E(P)	20 06 10.0
NOV 19	
COL EP	20 19 39.0
NOV 19	
FGU EP	20 34 46.0
IS	35 06.5
NOV 19	
GUA EP	21 22 04.8
COL EP	21 31 12.0
NOV 19	
SLC E(P)	22 00 33.2
NOV 19	
COL EP	22 05 08.0
NOV 19	
H-22 36 58.0	
18.6S 072.2W	
h ABOUT 033KM	
FGU E(P)	22 48 00.2
NOV 19	
SLC IP	23 40 09.2
IS	40 35.7
FGU IP	23 40 41.3
EUR IP	23 40 58.8
IL	41 45.3
NOV 19	
COL EP	23 56 14.0
NOV 20	
H-01 13 49.3	
53.4N 130.6W	
h ABOUT 039KM	
HHM E(P)	01 16 39.0
COL EP	01 17 13.0
EUR E(P)	01 17 43.5
FGU E(P)	01 18 10.0

Date and Station	Phase (GCT)
	h m s
NOV 20	
COL EP	01 21 15.0
NOV 20	
BHP IP	01 39 13.0
NOV 20	
COL EP	03 38 21.0
NOV 20	
H-04 07 22.6	
5.5S 148.2E	
h ABOUT 201KM	
COL IP	04 19 31.6
EUR EP	04 20 37.5
E▸P	21 29.5
BCN EP	04 20 43.1
SJP EP'	04 26 32.0
E	27 37.5
NOV 20	
COL EP	05 11 46.0
NOV 20	
EUR I(P)	05 28 47.9
IL	29 32.5
NOV 20	
COL EP	06 43 48.0
NOV 20	
BCN E(P)	07 38 33.2
GCA E(P)	07 38 58.8
NOV 20	
COL EP	08 37 31.0
NOV 20	
H-08 54 24.7	
17.5S 172.8W	
h ABOUT 033KM	
EUR E(P)	09 06 21.2
COL EP	09 06 54.8
NOV 20	
COL EP	09 15 54.0
NOV 20	
COL EP	10 00 11.0
NOV 20	
COL EP	10 18 13.0
NOV 20	
COL EP	10 51 36.0
NOV 20	
COL EP	11 31 13.0
NOV 20	
H-11 59 58.5	
22.2S 175.2W	
h ABOUT 033KM	
BCN EP	12 12 14.5
EUR EP	12 12 20.5

Date and Station	Phase (GCT)
	h m s
SLC E(P)	12 12 35.8
E	12 38.8
FGU EP	12 12 45.0
I	12 46.3
BUT EP	12 12 50.1
HHM EP	12 12 52.0
E	13 32.0
RCD EP	12 13 13.2
NOV 20	
COL IP	12 04 36.9
NOV 20	
COL EP	12 07 40.0
I	07 54.0
NOV 20	
COL EP	12 49 17.0
NOV 20	
COL EP	14 49 39.0
NOV 20	
COL EP	15 29 41.0
NOV 20	
H-16 57 13.5	
31.5N 131.6E	
h ABOUT 033KM	
COL EP	17 07 06.0
EUR EP	17 09 51.2
NOV 20	
GUA EP	17 15 22.6
NOV 20	
GUA IP	18 57 20.2
IS	57 30.1
NOV 20	
SLC EP	19 09 55.8
IL	10 22.6
FGU IP	19 10 27.8
EUR E(P)	19 10 46.0
EL	10 28.3
NOV 20	
GUA IP	19 45 12.7
ES	45 21.0
NOV 20	
H-19 48 42.9	
48.0N 154.8E	
h ABOUT 033KM	
COL EP	19 55 29.0
EUR IP	19 58 59.2
NOV 20	
COL EP	20 55 16.0
EUR EP	20 58 41.7
NOV 20	
COL EP	21 56 29.0

Date and Station	Phase (GCT)
	h m s
NOV 20	
SLC EP	22 02 18.9
EL	02 43.4
NOV 20	
UKI EP	22 33 16.5
EL	33 36.3
EUR E(P)	22 34 16.2
EL	35 34.0
NOV 20	
H-22 33 30.3	
44.1N 149.1E	
h ABOUT 045KM	
COL IP	22 41 02.6
HHM IP	22 43 51.7
EUR IP D	22 44 21.0
I▸P	44 33.8
BCN EP	22 44 39.7
NOV 20	
GCA IP	23 01 26.9
NOV 20	
COL IP	23 19 38.8
NOV 21	
BCN EP	01 14 00.9
I	14 10.9
EUR EP	01 14 20.3
IL	15 35.3
NOV 21	
EUR E(P)	02 05 37.5
EL	06 39.0
NOV 21	
FGU EP	02 15 06.0
NOV 21	
GUA EP	02 31 56.0
EUR EP	02 44 14.0
NOV 21	
GUA E(P)	02 47 08.0
NOV 21	
BOZ IP	03 11 38.4
EL	11 49.3
BUT IP	03 11 52.0
IS	12 10.1
HHM E(P)	03 12 24.0
NOV 21	
GUA IP	04 03 03.9
ES	03 08.0
NOV 21	
COL IP	05 24 59.0
NOV 21	
UKI IP	05 37 17.0
IS	37 31.0

Date and Station	Phase (GCT)
	h m s
NOV 21	
EUR EP	05 46 24.2
NOV 21	
H-05 54 54.9	
17.9S 178.6W	
h ABOUT 595KM	
EUR EP	06 06 13.4
NOV 21	
H-09 08 03.0	
18.0S 178.4W	
h ABOUT 568KM	
EUR EP	09 19 23.6
NOV 21	
H-09 53 38.9	
41.2N 141.1E	
h ABOUT 057KM	
EUR EP	10 05 07.5
NOV 21	
EUR E(P)	10 20 53.0
NOV 21	
COL EP	10 31 09.0
NOV 21	
CSC IP	11 24 08.4
NOV 21	
BOZ EP	11 25 25.2
ES	25 57.1
FGU IP	11 25 29.3
IS	26 04.3
NOV 21	
COL EP	12 18 43.0
NOV 21	
COL EP	12 27 08.0
NOV 21	
EUR E(P)	12 45 43.0
EL	46 41.5
NOV 21	
H-13 06 41.6	
44.9N 151.9E	
h ABOUT 040KM	
COL EP	13 13 57.0
BOZ EP	13 17 10.6
EUR E(P)	13 17 19.5
E	17 33.0
NOV 21	
BOZ EP	13 52 08.9
EL	52 44.0
EUR EP	13 52 42.1
E	53 54.0
NOV 21	
H-14 22 56.1	
47.6N 153.3E	
h ABOUT 060KM	

Date and Station	Phase (GCT)
	h m s
COL EP	14 29 48.0
EUR EP	14 33 16.8
I▸P	33 32.9
NOV 21	
BOZ IP	15 14 27.5
HHM E(P)	15 15 06.0
EL	16 15.0
NOV 21	
H-16 22 42.4	
13.0N 144.9E	
h ABOUT 033KM	
GUA IP	16 22 54.2
HHM EP	16 35 28.3
EUR I(P)	16 35 34.5
BOZ EP	16 35 40.0
NOV 21	
GUA IP	17 23 32.0
NOV 21	
COL EP	17 56 14.0
NOV 21	
COL EP	18 12 06.0
NOV 21	
EUR IP	19 14 11.0
IL	14 37.0
NOV 21	
H-19 58 23.8	
44.2N 149.6E	
h ABOUT 040KM	
COL EP	20 05 54.0
BOZ EP	20 09 04.1
EUR EP	20 09 13.0
E▸P	09 25.5
NOV 21	
H-20 23 11.8	
11.1S 166.3E	
h ABOUT 149KM	
COL IP	20 35 21.5
EUR EP	20 35 46.0
NOV 21	
HHM E(P)	20 29 18.0
BOZ EP	20 29 25.5
EUR E(P)	20 29 58.5
EL	31 05.0
NOV 21	
GUA E(P)	20 54 22.0
E	54 29.2
NOV 21	
H-21 01 35.3	
50.3N 156.4E	
h ABOUT 080KM	

Date and Station	Phase (GCT)
	h m s
COL IP	21 07 54.9
HHM EP	21 10 58.4
I▸P	11 14.9
BOZ IP	21 11 21.3
EUR IP	21 11 33.5
I▸P	11 49.5
SLC IP	21 11 42.5
FGU IP	21 11 51.0
BCN IP D	21 11 53.7
I▸P	12 08.2
RCD IP	21 11 59.5
I▸P	12 16.1
GCA E(P)	21 12 00.9
NOV 21	
COL EP	22 09 59.0
NOV 21	
FGU IP	22 12 38.8
IS	12 57.5
NOV 21	
COL IP	22 17 35.2
NOV 21	
FGU IP	22 27 56.5
E(S)	28 02.5
NOV 12	
COL EP	22 28 07.0
NOV 21	
EUR IP	22 37 52.0
IS	38 02.2
NOV 21	
FGU EP	22 59 47.5
IS	23 00 10.0
NOV 21	
GUA IP	23 50 05.5
ES	50 18.2
NOV 22	
GUA EP	00 02 38.5
NOV 22	
H-00 18 35.9	
05.9S 107.9E	
h ABOUT 323KM	
HHM EP'	00 37 00.0
EUR EP'	00 37 07.5
ESKP	39 57.0
BCN EP'	00 37 12.7
ISKP	40 05.3
FGU ISKP	00 40 08.8
GCA ESKP	00 40 11.8

Date and Station	Phase (GCT)
	h m s
NOV 22	
H-03 24 36.3	
06.1S 154.3E	
h ABOUT 078KM	
COL EP	03 36 51.0
EUR EP	03 37 48.0
NOV 22	
GUA EP	04 38 52.5
NOV 22	
GUA E(P)	05 15 58.2
NOV 22	
EUR EP	06 26 09.0
E	26 20.0
NOV 22	
COL EP	08 06 04.0
NOV 22	
EUR EP	08 46 53.9
E▸P	47 05.4
NOV 22	
EUR E(P)	08 58 56.0
NOV 22	
H-11 14 03.0	
18.5N 100.3W	
h ABOUT 120KM	
TUC EP	11 17 49.0
E	21 07.0
GCA IP	11 18 39.0
BCN EP	11 18 45.9
I	19 05.4
EL	25 09.4
FGU IP	11 19 05.9
SLC IP	11 19 12.1
EUR IP D	11 19 17.0
E▸P	19 35.5
I	19 53.5
EL	26 54.5
RCD EP	11 19 25.2
E	24 04.4
BOZ EP	11 19 51.0
E▸S	25 14.0
EL	29 14.0
BUT EP	11 19 56.0
HHM EP	11 20 18.0
COL EP	11 23 29.0
EPCP	24 25.0
NOV 22	
EUR EP	11 42 16.2
NOV 22	
H-12 40 10.0	
18.8S 069.6W	
h ABOUT 120KM	

Date and Station	Phase (GCT)
	h m s
EUR EP	12 51 26.0
E	51 42.5
E	51 44.2
HHM EP	12 51 56.1
NOV 22	
UKI EP	13 23 57.6
IS	24 03.6
NOV 22	
UKI IP	13 25 44.2
IS	25 50.2
EUR E(P)	13 26 36.0
EL	12 28 13.5
NOV 22	
GUA EP	14 35 48.0
NOV 22	
H-14 45 51.7	
44.4N 149.0E	
h ABOUT 033KM	
COL IP	14 53 23.1
KIP EP	14 54 38.0
E	15 01 54.0
E	06 05.0
EL	08 50.0
HHM EP	14 56 13.7
PP	56 26.7
BUT EP	14 56 27.9
E	56 47.0
BOZ IP	14 56 33.6
E	15 01 56.0
EL	12 50.0
EUR IP C	14 56 42.0
IPP	56 56.8
IPP	59 13.0
SLC IP	14 56 53.4
FGU IP	14 57 00.2
IPP	57 14.9
I	57 41.7
BCN IP	14 57 00.3
IPP	57 14.8
GCA EP	14 57 08.3
IPP	57 22.8
RCD EP	14 57 08.7
IPP	57 22.8
HON E	15 01 54.0
EL	08 18.0
NOV 22	
SJP IP	15 14 22.0
NOV 22	
H-15 22 10.9	
44.5N 149.2E	
h ABOUT 040KM	
COL EP	15 29 40.0

Date and Station	Phase (GCT)
	h m s
HHM EP	15 32 33.7
E	32 44.7
RCD EPP	15 33 40.0
EUR P	15 33 59.1
IPP	33 12.5
NOV 22	
H-16 15 54.0	
10.4N 094.0E	
h ABOUT 033KM	
EUR EP'	16 34 52.5
NOV 22	
UKI EP	16 56 21.3
E	56 34.3
NOV 22	
H-17 03 38.9	
17.9S 172.8W	
h ABOUT 033KM	
EUR EP	17 15 35.1
GCA EP	17 15 45.4
SLC E(P)	17 15 54.7
BUT EP	17 16 01.9
E	17 16.9
FGU IP	17 16 03.4
HHM EP	17 16 06.7
BOZ IP	17 16 09.1
E	16 19.7
COL IP	17 16 11.2
NOV 22	
EUR E(P)	17 12 31.0
NOV 22	
H-17 30 00.2	
37.1N 116.0W	
h ABOUT 000KM	
BCN IP C	17 30 27.8
EUR IP C	17 30 40.8
GCA EP	17 30 58.0
I	31 04.9
SLC EP	17 31 18.1
I	31 35.1
IL	32 49.1
UKI EP	17 31 30.8
EL	33 42.0
TUC EP	17 31 37.8
IL	34 09.0
FGU IP	17 31 40.4
I	31 48.4
I	31 59.4
IL	33 12.2
ALQ EP	17 32 00.0
I	32 29.0

Date and Station	Phase (GCT)
	h m s
BUT EP	17 32 21.9
EL	34 53.9
HHM E(P)	17 32 44.0
EL	36 06.5
NOV 22	
SJP IP	17 33 54.3
NOV 22	
BCN IP	18 22 04.8
EUR IP	18 22 34.0
I	22 43.0
IL	23 10.0
NOV 22	
H-18 57 02.5	
21.0S 067.9W	
h ABOUT 087KM	
GCA I(P)	19 08 12.9
BCN EP	19 08 18.1
FGU IP	19 08 22.9
EUR IP D	19 08 37.0
HHM IP	19 09 06.4
E	10 40.4
NOV 22	
SLC EP	19 16 25.1
EL	16 45.6
EUR EP	19 17 17.0
NOV 22	
EUR EP	19 27 12.6
NOV 22	
FGU EP	19 48 06.4
NOV 22	
H-20 10 40.1	
63.4N 150.0W	
h ABOUT 156KM	
COL IP	20 11 13.3
HHM EP	20 15 48.3
EUR E(P)	20 16 47.0
NOV 22	
H-20 26 00.2	
37.3N 030.1E	
h ABOUT 028KM	
COL EP	20 37 58.0
NOV 22	
EUR IP	21 00 51.0
NOV 22	
BCN E(P)	21 01 14.6
NOV 22	
FGU EP	21 10 52.4
IS	11 21.4

Date and Station	Phase (GCT)
	h m s
NOV 22	
H-21 41 30.8	
37.5N 030.0E	
h ABOUT 020KM	
COL IP	21 53 29.7
NOV 22	
SLC EP	21 59 09.2
NOV 22	
HHM EP	22 44 11.2
NOV 22	
COL EP	23 14 12.0
EUR EP	23 17 31.0
E	17 45.0
NOV 22	
FGU IP	23 39 37.9
NOV 22	
SLC EP	23 40 54.0
IL	41 19.2
FGU EP	23 41 25.9
EUR EP	23 41 43.1
EL	42 28.6
NOV 23	
GUA E(P)	00 01 04.0
NOV 23	
EUR EP	00 06 29.0
EL	07 42.0
NOV 23	
GUA IP	01 17 14.0
NOV 23	
H-01 49 21.8	
44.3N 148.9E	
h ABOUT 045KM	
COL EP	01 56 53.0
EUR IP	02 00 12.5
E	00 19.5
I	00 25.5
NOV 23	
EUR E(P)	02 46 13.5
NOV 23	
EUR EP	02 53 55.5
NOV 23	
EUR E(P)	03 47 06.5
E	47 24.0
NOV 23	
FGU EP	04 27 20.5
IS	27 54.5
NOV 23	
H-04 58 52.0	
15.0S 167.3E	
h ABOUT 116KM	
EUR EP	05 11 39.5
EPP	12 07.0

Date and Station	Phase (GCT)
	h m s
NOV 23	
COL EP	05 19 06.0
NOV 23	
GUA EP	06 08 35.0
I	08 39.5
NOV 23	
H-07 50 46.3	
30.1N 114.0W	
h ABOUT 014KM	
BCN IP C	07 52 15.8
GCA IP	07 52 35.0
ALQ EP	07 52 43.0
EUR IP	07 53 06.8
IL	55 17.0
SLC EP	07 53 27.2
FGU IP	07 53 35.3
UKI E(P)	07 53 45.0
EL	56 23.0
BOZ I(P)	07 54 32.6
BUT E(P)	07 54 34.0
RCD E(P)	07 54 41.5
I	54 50.1
E	57 53.2
HHM EP	07 55 02.0
IS	58 18.0
KIP EP	07 58 23.0
E(S)	08 04 45.0
EL	07 28.0
COL EP	07 58 26.0
HON EP	07 58 28.0
E(S)	08 04 45.0
EL	07 32.0
BHP ES	08 04 04.0
NOV 23	
H-08 17 16.6	
30.0N 113.9W	
h ABOUT 014KM	
BCN EP	08 18 46.5
GCA EP	08 19 05.1
EUR EP	08 19 37.0
I	22 34.0
FGU E(P)	08 20 07.5
BUT E(P)	08 21 00.0
E	21 07.0
HHM EP	08 21 34.5
NOV 23	
GUA IP	08 20 35.4

Date and Station	Phase (GCT)
	h m s
NOV 23	
H-08 32 30.9	
29.9N 114.0W	
h ABOUT 014KM	
TUC E(P)	08 33 23.0
BCN EP D	08 34 02.5
GCA IP	08 34 20.4
EUR IP	08 34 53.0
SLC IP	08 35 13.2
UKI E(P)	08 35 37.0
EL	38 07.0
BOZ EP	08 36 18.7
E	39 38.0
EL	40 48.0
BUT EP	08 36 22.7
RCD EP	08 36 29.4
HHM EP	08 36 49.5
COL EP	08 40 14.0
NOV 23	
TUC EP	08 40 17.2
NOV 23	
H-08 47 17.4	
29.7N 114.3W	
h ABOUT 014KM	
TUC E(P)	08 48 26.0
BCN EP	08 48 51.1
GCA IP	08 49 11.4
ALQ I(P)	08 49 29.5
EUR IP C	08 49 39.2
NOV 23	
TUC E(P)	09 55 03.0
EUR E(P)	09 56 35.5
NOV 23	
H-10 20 10.2	
30.0N 113.9W	
h ABOUT 014KM	
TUC E(P)	10 21 06.0
E	21 14.0
BCN EP	10 21 39.5
EUR E(P)	10 22 29.5
NOV 23	
TUC EP	10 31 19.0
NOV 23	
H-10 53 18.4	
30.4N 113.5W	
h ABOUT 014KM	

Date and Station	Phase (GCT)
	h m s
TUC EP	10 54 07.0
BCN EP	10 54 43.5
GCA E(P)	10 55 01.6
EUR EP	10 55 36.1
EL	58 46.0
NOV 23	
FGU EP	11 02 11.5
ES	02 26.0
NOV 23	
TUC EP	11 25 08.0
NOV 23	
EUR EP	11 36 31.9
NOV 23	
COL EP	11 55 24.0
NOV 23	
TUC EP	16 01 21.0
NOV 23	
COL IP	17 50 14.5
IS	50 18.0
NOV 23	
COL EP	18 43 10.0
NOV 23	
H-19 00 35.6	
45.1N 151.5E	
h ABOUT 045KM	
COL IP	19 07 51.0
EUR EP	19 11 13.5
I▸P	11 26.5
BCN EP	19 11 33.3
E▸P	11 44.8
NOV 23	
HHM EP	19 09 38.0
NOV 23	
H-19 30 19.4	
20.2S 178.1W	
h ABOUT 515KM	
BCN IP D	19 41 45.3
EUR IP D	19 41 51.2
GCA IP	19 41 59.9
COL IP	19 42 12.7
BUT EP	19 42 18.0
HHM EP	19 42 18.9
BOZ EP	19 42 21.0
NOV 23	
TUC EP	21 00 36.0
BCN EP	21 01 13.5
EL	03 29.0

Date and Station	Phase (GCT)
	h m s
NOV 23	
GCA IP	21 37 01.9
NOV 23	
EUR IP	22 26 16.0
IL	26 58.0
NOV 23	
H-22 33 56.3	
79.9N 000.9E	
h ABOUT 033KM	
COL EP	22 40 43.0
NOV 23	
EUR EP	22 42 48.5
NOV 23	
FGU EP	23 08 41.8
ES	09 18.3
NOV 23	
H-23 13 28.6	
52.3N 173.4W	
h ABOUT 045KM	
COL EP	23 17 39.0
EUR EP	23 21 10.4
I	21 17.9
I	21 23.1
EPCP	23 08.0
NOV 23	
BCN EP	23 45 39.2
ES	46 07.0
NOV 23	
EUR EP	23 53 51.6
NOV 24	
BHP IP	00 22 13.0
NOV 24	
FGU IP	00 29 49.6
IS	30 24.3
NOV 24	
GUA EP	00 57 42.9
ES	57 58.3
NOV 24	
H-01 41 41.2	
17.1S 173.2W	
h ABOUT 033KM	
COL EP	01 54 11.0
NOV 24	
EUR EP	02 05 48.7
NOV 24	
EUR E(P)	02 06 51.2
E	07 06.4
NOV 24	
EUR EP	02 21 49.8
NOV 24	
COL EP	02 40 59.0
NOV 24	
EUR EP	02 44 24.0
E▸P	44 38.8

Date and Station	Phase (GCT)
	h m s
NOV 24	
FGU EP	03 16 08.7
ES	16 44.2
NOV 24	
TUC IP	03 44 12.0
IS	45 03.0
BCN E(P)	03 44 57.6
GCA E(P)	03 45 27.7
EUR EP	03 45 34.0
EL	48 14.0
NOV 24	
FGU EP	03 53 56.2
ES	54 25.2
NOV 24	
FGU EP	03 55 03.8
ES	55 32.5
NOV 24	
H-05 08 42.8	
22.1S 175.6W	
h ABOUT 033KM	
BCN EP	05 20 59.1
EUR EP	05 21 05.8
GCA EP	05 21 14.0
FGU EP	05 21 30.6
COL IP	05 21 37.9
NOV 24	
H-05 13 23.5	
21.9S 175.8W	
h ABOUT 033KM	
BCN EP	05 25 39.5
EUR EP	05 25 46.6
GCA EP	05 25 54.3
FGU EP	05 26 11.1
COL IP	05 26 17.0
NOV 24	
H-05 20 44.9	
21.7S 175.1W	
h ABOUT 034KM	
EUR EP	05 33 04.5
GCA EP	05 33 12.2
COL EP	05 33 36.0
NOV 24	
H-06 16 09.2	
21.9S 176.8W	
h ABOUT 033KM	
EUR EP	06 28 35.9
NOV 24	
EUR IP	07 46 57.3
IS	47 11.8

Date and Station	Phase (GCT)
	h m s
NOV 24	
GUA EP	09 22 53.7
NOV 24	
H-11 05 56.8	
28.2N 140.1E	
h ABOUT 260KM	
GUA E(P)	11 09 23.0
COL IP	11 15 18.2
HHM EP	11 17 34.9
E	18 30.9
BUT IP	11 17 44.9
EpP	18 48.9
EUR IP D	11 17 51.7
IpP	18 54.3
SLC IP	11 18 01.8
BCN IP D	11 18 04.4
EpP	19 07.9
FGU IP	11 18 08.9
GCA EP	11 18 12.4
RCD EP	11 18 19.2
NOV 24	
FGU E(P)	11 11 38.9
ES	12 12.2
NOV 24	
H-11 53 56.0	
48.1N 148.0E	
h ABOUT 040KM	
COL EP	12 01 04.0
NOV 24	
EUR E(P)	12 04 21.2
E	04 36.4
NOV 24	
COL EP	12 24 40.0
NOV 24	
H-15 31 29.4	
6.1S 147.6E	
h ABOUT 075KM	
EUR E(P)	15 45 06.8
NOV 24	
COL IP	16 46 06.9
NOV 24	
H-16 49 31.3	
11.4N 073.8W	
h ABOUT 111KM	
BHP I(P)	16 50 56.0
EUR E(P)	16 57 51.0
NOV 24	
COL EP	17 46 17.0

Date and Station	Phase (GCT)
	h m s
NOV 24	
H-17 48 47.0	
61.8N 149.5W	
h ABOUT 036KM	
COL IP	17 49 36.2
HHM EP	17 54 00.7
EUR IP	17 54 56.5
IpP	54 59.3
EPCP	57 51.9
pPCP	57 54.9
NOV 24	
H-17 56 02.2	
44.3N 149.3E	
h ABOUT 050KM	
COL IP	18 03 30.9
HHM E(P)	18 06 22.0
EUR EP	18 06 50.5
IpP	07 03.2
BCN EP	18 07 09.0
EpP	07 22.5
NOV 24	
H-18 09 08.7	
46.4N 150.0E	
h ABOUT 040KM	
COL IP	18 16 21.0
HHM EP	18 19 18.8
EUR IP	18 19 48.5
IpP	19 58.9
FGU EP	18 20 06.7
BCN EP	18 20 06.8
EpP	20 17.9
RCD E(P)	18 20 15.0
NOV 24	
COL EP	18 53 42.0
NOV 24	
H-19 23 13.8	
45.6N 151.6E	
h ABOUT 033KM	
COL EP	19 30 27.0
EUR E(P)	19 33 49.7
EpP	34 02.1
BCN EpP	19 34 21.7
NOV 24	
BCN EP	19 37 20.7
GCA E(P)	19 37 38.5
EUR EP	19 38 11.0
E	38 21.0
NOV 24	
TUC EP	19 38 49.0

Date and Station	Phase (GCT)
	h m s
NOV 24	
EUR EP	20 45 27.0
IL	45 52.5
NOV 24	
BCN EP	21 41 57.4
EL	42 28.0
EUR EP	21 42 06.5
IL	42 32.0
GCA IP	21 42 43.5
NOV 24	
COL EP	21 45 23.0
NOV 24	
H-22 58 16.8	
56.1S 027.5W	
h ABOUT 033KM	
COL EP'	23 18 02.0
NOV 25	
COL EP	00 03 01.0
NOV 25	
H-00 51 02.1	
16.3S 174.6W	
h ABOUT 196KM	
BCN EP	01 02 35.1
EUR EP	01 02 41.0
EpP	03 31.5
FGU EP	01 03 08.1
COL IP	01 03 08.9
I	04 02.1
NOV 25	
COL EP	01 26 10.0
EUR EP	01 31 37.0
NOV 25	
COL P	01 47 59.0
NOV 25	
COL EP	02 28 20.0
NOV 25	
COL EP	02 47 32.0
NOV 25	
BCN EP	03 00 09.1
E	00 20.0
NOV 25	
COL EP	03 09 19.0
NOV 25	
H-03 49 13.3	
44.8N 149.4E	
h ABOUT 040KM	
EUR E(P)	03 59 57.5
E	04 00 20.5
NOV 25	
COL IP	04 29 13.1

Date and Station	Phase	(GCT)
		h m s
NOV 25		
BOZ	EP	04 38 44.5
EUR	E(P)	04 40 18.5
NOV 25		
EUR	E(P)	05 12 34.0
NOV 25		
COL	IP	05 54 46.4
NOV 25		
COL	EP	06 24 15.0
NOV 25		
H-06 43 23.5		
45.4N 151.4E		
h ABOUT 050KM		
COL	IP	06 50 37.7
BOZ	EP	06 53 52.2
	E	54 22.4
EUR	EP	06 54 00.4
	EPP	54 13.0
RCD	E(P)	06 54 26.0
NOV 25		
H-06 50 08.8		
6.9N 073.3W		
h ABOUT 167KM		
BHP	IP	06 51 43.0
	IS	52 55.0
RCD	EP	06 58 14.3
FGU	EP	06 58 25.3
EUR	EP	06 58 51.9
NOV 25		
BHP	IP	07 55 10.0
NOV 25		
EUR	EP	08 17 02.0
NOV 25		
H-08 54 06.1		
45.0N 149.2E		
h ABOUT 033KM		
COL	EP	09 01 33.0
EUR	E(P)	09 04 52.0
	E	05 05.9
NOV 25		
H-10 02 23.8		
44.3N 149.5E		
h ABOUT 055KM		
HHM	EP	10 12 42.4
BOZ	EP	10 13 02.0
	I	13 19.4
EUR	EP	10 13 10.6
	E	13 26.6
RCD	EP	10 13 37.5

Date and Station	Phase	(GCT)
		h m s
NOV 25		
H-10 11 04.8		
44.1N 149.9E		
h ABOUT 045KM		
HHM	EP	10 21 25.9
BOZ	EP	10 21 45.4
	E(S)	30 42.0
EUR	EP	10 21 53.2
	EPP	22 05.5
RCD	E(P)	10 22 20.7
NOV 25		
EUR	E(P)	11 14 18.0
	E	14 35.0
NOV 25		
H-11 30 33.0		
45.4N 151.7E		
h ABOUT 050KM		
COL	IP	11 37 46.0
BOZ	EP	11 41 01.0
EUR	EP	11 41 09.2
	EPP	41 21.5
NOV 25		
FGU	IP	11 55 30.1
GCA	IP	11 55 41.0
EUR	E(P)	11 55 58.0
	EL	56 47.0
NOV 25		
COL	IP	12 52 17.9
NOV 25		
GCA	EP	12 54 05.5
	EL	55 07.5
NOV 25		
COL	EP	13 03 15.0
NOV 25		
GUA	IP	13 21 50.6
	I	22 17.0
EUR	EP	13 34 02.8
NOV 25		
FGU	EP	14 11 06.2
	IS	11 19.2
NOV 25		
GUA	IP	14 20 52.0
	ES	21 08.0
NOV 25		
EUR	IP	14 20 08.5
NOV 25		
COL	EP	14 29 29.0
NOV 25		
SLC	E(P)	15 28 49.6
	IS	29 16.8

Date and Station	Phase	(GCT)
		h m s
NOV 25		
COL	IP	16 31 07.4
NOV 25		
H-16 46 36.2		
22.6N 121.3E		
h ABOUT 033KM		
COL	EP	16 57 46.0
NOV 25		
COL	IP	18 30 31.2
EUR	EP	18 33 00.0
NOV 25		
EUR	E(P)	19 13 04.0
NOV 25		
COL	EP	20 26 57.0
NOV 25		
GUA	EP	20 53 30.5
NOV 25		
SLC	EP	22 05 00.3
	EL	05 28.0
FGU	EP	22 05 33.0
EUR	EP	22 05 45.5
NOV 25		
EUR	IP	22 23 21.5
	I(S)	23 33.0
NOV 25		
GCA	EP	22 53 31.3
	ES	53 42.3
NOV 26		
FGU	EP	00 25 59.9
NOV 26		
GUA	E(P)	01 29 37.0
NOV 26		
H-02 58 34.7		
26.9S 176.5W		
h ABOUT 046KM		
EUR	E(P)	03 11 15.5
	E	11 31.4
NOV 26		
COL	EP	03 06 46.0
NOV 26		
TUC	EP	04 03 23.0
NOV 26		
EUR	EP	04 17 44.2
	IL	18 31.4
NOV 26		
COL	EP	04 35 45.0
NOV 26		
H-06 52 08.2		
06.8S 129.6E		
h ABOUT 111KM		
COL	IP	07 05 09.2

Date and Station	Phase	(GCT)
		h m s
EUR	EP'	07 10 22.5
	E	10 35.5
	ISKP	14 58.5
	IPKKP	21 22.2
	I	21 29.0
FGU	EP'	07 10 44.2
RCD	EP'	07 10 51.2
NOV 26		
COL	IP	07 38 34.0
EUR	EP	07 41 58.0
	EPP	42 13.0
NOV 26		
H-08 47 17.0		
07.1S 129.2E		
h ABOUT 117KM		
EUR	EP'	09 05 43.7
NOV 26		
H-09 09 03.3		
16.7S 067.2W		
h ABOUT 276KM		
EUR	EP	09 19 59.2
NOV 26		
COL	EP	10 27 19.0
NOV 26		
COL	EP	11 47 31.0
NOV 26		
GUA	IP	12 32 31.4
	ES	32 42.7
NOV 26		
COL	EP	13 01 26.0
NOV 26		
EUR	EP	13 30 01.5
NOV 26		
EUR	E(P)	13 35 09.2
	IL	35 43.0
NOV 26		
COL	EP	15 14 04.0
EUR	EP	15 17 40.5
	E	17 50.0
NOV 26		
SLC	EP	17 17 55.1
	ES	18 13.5
NOV 26		
H-18 00 32.9		
32.5S 071.2W		
h ABOUT 140KM		
EUR	EP	18 12 44.0
NOV 26		
SLC	EP	19 37 14.3
	ES	37 31.3

Date and Station	Phase (GCT)
	h m s
NOV 26	
H-20 01 08.1	
9.5S 155.5E	
h ABOUT 033KM	
COL IP	20 13 40.7
EUR EP	20 14 30.8
EpP	14 36.2
EsP	14 40.3
NOV 26	
FGU EP	20 59 09.4
NOV 26	
EUR I(P)	21 05 27.7
NOV 26	
UKI EP	22 14 37.3
ES	15 08.2
EUR EP	22 15 14.1
I	15 19.0
NOV 26	
GCA EP	22 43 13.3
NOV 26	
H-22 50 08.9	
16.6S 175.2E	
h ABOUT 033KM	
BCN EP	23 02 40.3
EUR EP	23 02 43.5
COL IP	23 02 45.0
GCA E(P)	23 02 54.8
SLC E(P)	23 03 00.3
FGU IP	23 03 07.8
HON IS	23 05 24.0
E	09 07.0
EL	10 12.0
KIP ES	23 05 28.0
E	09 21.0
EL	10 14.0
NOV 26	
EUR E(P)	22 59 46.7
NOV 27	
GUA IP	00 06 23.6
NOV 27	
H-02 19 41.9	
16.6S 072.1W	
h ABOUT 079KM	
SJP EP	02 26 29.8
GCA E(P)	02 30 16.7
BCN EP	02 30 24.4
E	30 38.0
RCD IP	02 30 28.8
FGU EP	02 30 29.1

Date and Station	Phase (GCT)
	h m s
EUR EP	02 30 43.0
I	31 05.8
E	31 20.0
COL IP	02 33 14.0
NOV 27	
EUR E(P)	02 26 19.0
EL	26 25.0
NOV 27	
COL IP	03 09 08.0
EUR EP	03 09 55.5
E	10 03.0
NOV 27	
EUR E(P)	03 43 28.9
NOV 27	
EUR EP	05 14 49.2
EpP	14 55.5
NOV 27	
COL EP	05 21 23.0
EUR EP	05 24 20.3
NOV 27	
GUA E(P)	05 52 53.2
NOV 27	
COL IP	06 09 16.9
NOV 27	
COL EP	06 28 17.0
EUR E(P)	06 31 56.8
I	31 01.7
E	31 09.5
NOV 27	
GUA IP	07 13 29.8
IS	13 43.0
NOV 27	
COL EP	07 33 28.0
NOV 27	
H-07 41 01.3	
23.3S 065.8W	
h ABOUT 164KM	
EUR EP	07 52 44.0
NOV 27	
BCN EP	07 50 26.5
NOV 27	
H-09 21 58.1	
46.6N 152.6E	
h ABOUT 045KM	
COL IP	09 29 01.1
EUR EP	09 32 27.0
IpP	32 36.9
IsP	32 41.0
NOV 27	
H-09 40 40.9	
07.2N 073.3W	
h ABOUT 114KM	

Date and Station	Phase (GCT)
	h m s
EUR EP	09 49 24.8
NOV 27	
GUA IP	10 44 47.0
NOV 27	
GUA EP	11 04 37.8
NOV 27	
EUR EP	11 33 34.0
EL	34 38.0
NOV 27	
COL EP	11 51 03.0
NOV 27	
EUR EP	13 37 29.8
NOV 27	
H-13 58 58.4	
03.1N 126.6E	
h ABOUT 033KM	
COL EP	14 1' 34.0
EUR EP	14 13 40.9
EP	17 28.5
EPKKP	28 36.8
NOV 27	
BOZ EP	14 57 00.7
EL	57 35.0
EUR EP	14 57 32.9
EL	58 40.0
NOV 27	
BCN IP	15 41 53.3
NOV 27	
COL IP	19 03 53.0
NOV 27	
COL IP	20 03 25.4
NOV 27	
H-20 18 01.0	
45.8N 151.8E	
h ABOUT 040KM	
COL IP	20 25 10.7
EUR E(P)	20 28 35.5
EpP	28 47.5
NOV 27	
H-21 10 39.9	
30.8N 079.1E	
h ABOUT 033KM	
COL I(P)	21 22 30.1
NOV 27	
BOZ EP	21 18 53.2
EL	19 32.0
EUR E(P)	21 19 26.0
EL	20 37.0
NOV 27	
SLC EP	21 41 18.0
EL	41 42.5

Date and Station	Phase (GCT)
	h m s
FGU IP	21 41 49.3
IL	42 25.8
EUR E(P)	21 42 04.0
EL	42 49.0
NOV 27	
COL IP	22 29 01.2
NOV 27	
SLC EP	22 36 46.8
NOV 27	
FGU EP	22 39 20.8
NOV 27	
EUR EP	23 31 58.2
NOV 28	
GUA IP	00 54 04.8
NOV 28	
H-02 44 36.3	
19.1N 069.4W	
h ABOUT 048KM	
SJP EP	02 45 25.6
ES	46 09.0
BOZ EP	02 52 39.4
NOV 28	
SJP EP	02 54 49.5
ES	55 35.0
NOV 28	
H-03 14 02.4	
44.3N 114.8W	
h ABOUT 033KM	
BUT EP	03 14 40.4
E	15 11.4
BOZ EP	03 14 46.7
ES	15 15.7
EL	15 21.2
HHM E(P)	03 15 03.0
EUR EP	03 15 16.8
EL	16 28.5
NOV 28	
H-03 18 59.7	
19.1N 069.5W	
h ABOUT 033KM	
SJP EP	03 19 49.8
ES	20 33.0
NOV 28	
EUR E(P)	03 27 30.0
NOV 28	
SJP EP	04 04 09.0
ES	04 52.5
NOV 28	
COL EP	04 55 56.0
NOV 28	
H-05 11 48.0	
44.9N 148.9E	
h ABOUT 045KM	

Date and Station	Phase (GCT)
	h m s
COL IP	05 19 13.7
EUR EP	05 22 34.3
NOV 28	
FGU E(P)	05 15 02.6
NOV 28	
SIT EP	06 49 58.4
ES	50 24.0
NOV 28	
SJP EP	07 14 09.5
ES	14 52.5
NOV 28	
COL EP	07 53 33.0
NOV 28	
COL EP	07 53 47.0
NOV 28	
H-08 28 19.8	
12.0S 167.5E	
h ABOUT 259KM	
COL IP	08 40 19.2
EUR E(P)	08 40 40.8
NOV 28	
H-08 41 31.2	
10.9N 041.4W	
h ABOUT 033KM	
RCD E(P)	08 51 54.2
E	52 04.0
E	53 54.3
BOZ EP	08 52 33.4
E	52 42.2
BCN EP	08 52 45.0
E	52 55.5
EUR EP	08 52 50.5
E	53 00.0
COL IP	08 54 14.0
NOV 28	
RCD E(P)	09 33 17.8
NOV 28	
HHM EP	11 15 22.9
EL	16 12.9
BOZ EP	11 15 47.2
EL	17 14.5
EUR E(P)	11 16 27.5
NOV 28	
EUR EP	11 48 04.5
NOV 28	
H-13 05 22.9	
45.3N 150.0E	
h ABOUT 033KM	
COL IP	13 12 44.8
BOZ IP	13 15 58.4

Date and Station	Phase (GCT)
	h m s
EUR EP	13 16 07.8
NOV 28	
COL EP	13 15 21.0
NOV 28	
GUA IP	13 56 08.9
IS	56 20.5
NOV 28	
H-15 07 50.8	
12.1S 166.1E	
h ABOUT 033KM	
EUR E(P)	15 20 42.5
NOV 28	
H-15 13 11.0	
52.2N 174.2E	
h ABOUT 033KM	
COL IP	15 18 14.4
KIP IP	15 20 26.0
HHM EP	15 21 20.0
I	21 28.5
BUT EP	15 21 35.5
BOZ IP	15 21 43.0
EUR IP C	15 21 53.5
E	22 01.3
I	23 30.0
FGU EP	15 22 14.8
RCD IP	15 22 27.7
NOV 28	
COL EP	15 15 58.0
NOV 28	
EUR E(P)	16 21 10.5
E(L)	22 40.0
NOV 28	
SJP EP	16 26 20.0
NOV 28	
EUR E(P)	16 41 38.0
NOV 28	
COL EP	16 53 35.0
NOV 28	
COL IP	17 20 56.8
NOV 28	
EUR IP	17 38 46.4
NOV 28	
COL EP	17 41 26.0
NOV 28	
COL EP	17 55 15.0
NOV 28	
H-18 14 16.9	
27.4S 179.1E	
h ABOUT 593KM	
EUR EP	18 26 15.0

Date and Station	Phase (GCT)
	h m s
NOV 28	
COL EP	18 14 31.0
NOV 28	
BUT EP	18 56 56.5
ES	57 22.5
BOZ E(P)	18 57 03.0
EL	57 40.0
EUR E(P)	18 57 35.0
EL	58 42.5
NOV 28	
COL IP	19 04 09.9
NOV 28	
H-19 26 25.5	
12.2S 165.9E	
h ABOUT 025KM	
EUR E(P)	19 39 15.5
NOV 28	
EUR E(P)	19 41 58.0
E	42 14.0
NOV 28	
COL EP	20 14 42.0
EUR EP	20 15 06.5
NOV 28	
EUR EP	20 51 41.5
IL	52 21.5
NOV 28	
EUR E(P)	21 03 38.5
E	03 54.5
NOV 28	
EUR EP	23 00 44.2
NOV 28	
H-23 18 19.8	
43.6N 150.6E	
h ABOUT 033KM	
COL EP	23 25 50.0
EUR EP	23 29 07.5
EpP	29 17.7
NOV 28	
BCN EP	23 41 53.4
EL	42 21.9
NOV 28	
COL IP	23 53 30.0
NOV 29	
FGU EP	01 09 12.9
NOV 29	
EUR EP	01 37 30.9
EL	38 38.4
NOV 29	
H-01 58 45.1	
15.1S 073.7W	
h ABOUT 124KM	
EUR EP	02 09 28.4
IpP	09 54.3

Date and Station	Phase (GCT)
	h m s
NOV 29	
COL EP	03 04 03.0
NOV 29	
EUR EP	03 17 00.0
NOV 29	
H-03 56 20.1	
44.7N 147.0E	
h ABOUT 133KM	
COL IP	04 03 45.8
EUR EP	04 07 06.2
IpP	07 40.2
NOV 29	
FGU EP	04 59 45.9
IS	05 00 17.7
NOV 29	
BOZ EP	05 32 34.2
EL	33 06.1
FGU EP	05 32 37.8
IL	33 12.6
NOV 29	
COL EP	05 34 52.0
NOV 29	
COL IP	06 30 10.1
NOV 29	
FGU EP	08 03 03.6
NOV 29	
BOZ EP	08 29 00.2
ES	29 12.0
NOV 29	
COL EP	08 35 33.0
NOV 29	
H-08 48 56.7	
39.1N 118.2W	
h ABOUT 033KM	
EUR IP C	08 49 24.8
IS	49 49.4
BCN E(P)	08 50 11.2
EL	50 53.7
NOV 29	
BUT EP	08 59 09.3
I	59 14.4
IS	59 33.4
HHM E(P)	08 59 47.0
EUR EP	09 00 40.7
EL	02 11.7
NOV 29	
BOZ IP	09 07 03.5
IS	07 15.7
NOV 29	
EUR IP	09 10 40.4
IS	11 05.1

Date and Station	Phase (GCT)
	h m s
NOV 29	
EUR E(P)	09 26 22.5
EL	27 05.5
NOV 29	
COL EP	09 40 19.0
NOV 29	
H-10 21 53.0	
12.2S 166.0E	
h ABOUT 054KM	
COL EP	10 34 19.0
EUR E(P)	10 34 45.0
NOV 29	
EUR EP	11 22 14.5
NOV 29	
GUA IP	11 36 12.0
EUR E(P)	11 48 53.2
NOV 29	
GUA IP	11 36 12.5
NOV 29	
GUA EP	11 46 46.0
NOV 29	
EUR E(P)	11 54 31.5
NOV 29	
EUR E(P)	14 02 22.9
NOV 29	
H-14 09 11.4	
44.6N 149.8E	
h ABOUT 050KM	
COL EP	14 16 37.0
BOZ EP	14 19 48.5
EUR E(P)	14 19 56.8
I	20 22.0
NOV 29	
EUR EP	14 37 15.5
NOV 29	
H-14 49 26.6	
23.7N 143.2E	
h ABOUT 033KM	
GUA E(P)	14 51 55.0
KIP EP	14 58 48.0
COL EP	14 59 28.0
HHM EP	15 01 38.3
BUT IP	15 01 48.2
I	01 58.7
EUR EP	15 01 50.0
I	02 29.0
BCN EP	15 02 02.5
FGU EP	15 02 08.6

Date and Station	Phase (GCT)
	h m s
NOV 29	
COL EP	14 58 23.0
NOV 29	
SLC EP	15 45 10.8
EL	45 39.8
EUR E(P)	15 46 01.0
EL	46 38.0
NOV 29	
COL EP	15 51 50.0
NOV 29	
COL EP	16 26 20.0
EUR EP	16 27 26.4
EL	27 53.0
NOV 29	
COL EP	17 39 54.0
NOV 29	
COL EP	18 07 27.0
NOV 29	
H-18 33 23.0	
05.3S 151.6E	
h ABOUT 058KM	
GUA E(P)	18 37 54.0
COL EP	18 45 41.0
EUR EP	18 46 42.5
E	46 53.7
NOV 29	
H-18 55 23.6	
17.3S 178.4W	
h ABOUT 528KM	
BCN EP	19 06 40.7
EUR EP	19 06 45.2
GCA EP	19 06 55.7
COL IP	19 07 03.3
NOV 29	
FGU IP	19 00 05.0
IS	00 23.0
NOV 29	
COL EP	19 09 03.0
NOV 29	
SLC EP	19 13 49.9
EL	14 11.4
EUR E(P)	19 14 32.7
EL	15 18.5
NOV 29	
EUR E(P)	19 29 38.0
NOV 29	
COL EP	19 42 37.0
NOV 29	
H-19 46 17.1	
44.1N 149.5E	
h ABOUT 050KM	

Date and Station	Phase (GCT)
	h m s
COL EP	19 53 47.0
BOZ EP	19 56 57.3
EUR EP	19 57 06.3
E▸P	57 23.0
EsP	57 30.8
NOV 29	
COL EP	19 59 46.0
NOV 29	
COL EP	20 43 55.0
NOV 29	
H-20 49 36.1	
36.8N 121.6W	
h ABOUT 005KM	
UKI E(P)	20 50 35.0
ES	51 11.4
EUR EP	20 50 58.6
I	51 13.0
EL	52 20.5
BCN E(P)	20 51 15.2
EL	52 43.2
NOV 29	
COL EP	21 37 26.0
EUR E(P)	21 41 46.0
NOV 29	
COL EP	21 52 30.0
NOV 29	
EUR IP	22 04 31.4
IS	04 54.0
NOV 29	
H-22 21 49.0	
49.0N 148.3E	
h ABOUT 033KM	
COL EP	22 28 51.0
EUR E(P)	22 32 17.4
E▸P	32 25.5
NOV 29	
BOZ IP	22 27 44.4
IL	27 51.7
BUT EP	22 27 54.0
HHM E(P)	22 28 27.0
EUR E(P)	22 29 21.0
NOV 29	
FGU E(P)	23 01 17.2
IS	01 40.9
NOV 29	
EUR EP	23 10 16.5
EL	10 56.0
NOV 29	
BOZ EP	23 24 44.3
E(S)	25 11.3
EL	25 18.4

Date and Station	Phase (GCT)
	h m s
EUR EP	23 25 15.2
EL	26 27.5
NOV 29	
H-23 58 55.7	
17.9S 178.8W	
h ABOUT 608KM	
EUR EP	24 10 13.3
NOV 30	
EUR EP	00 24 01.4
NOV 30	
COL EP	00 50 29.0
NOV 30	
COL EP	01 42 10.0
EUR E(P)	01 45 35.0
(▸P)	45 47.0
E(sP)	45 54.0
NOV 30	
COL IP	02 00 12.2
NOV 30	
COL EP	02 07 18.0
NOV 30	
HON EP	04 03 47.0
E(S)	04 24.0
KIP IP	04 03 47.9
E(S)	04 28.0
NOV 30	
COL EP	04 17 55.0
NOV 30	
COL IP	06 41 11.0
NOV 30	
COL IP	06 57 10.0
NOV 30	
COL IP	08 15 47.3
NOV 30	
GUA IP	08 17 10.0
NOV 30	
H-09 47 59.0	
01.6N 128.4E	
h ABOUT 061KM	
GUA EP	09 52 32.5
KIP IP	09 59 33.2
HON IP	09 59 35.0
EPS	10 09 38.0
EL	21 53.0
COL EP	10 00 32.0
EUR E(P)	10 02 25.5
E▸P	02 44.0
EP'	06 24.0
E▸P'	06 44.5
EPP	07 01.0
PKKP	17 57.5

Date and Station	Phase (GCT)
	h m s
NOV 30	
H-11 29 46.4	
51.9N 174.2E	
h ABOUT 033KM	
COL IP	11 34 52.8
EUR EP	11 38 28.0
E	38 44.0
NOV 30	
COL EP	11 31 36.0
NOV 30	
EUR E(P)	11 56 31.0
EL	57 36.0
NOV 30	
COL EP	12 09 57.0
EUR E(P)	12 13 18.0
NOV 30	
COL EP	12 34 04.0
NOV 30	
COL EP	12 40 19.0
NOV 30	
COL EP	12 55 19.0
NOV 30	
FGU EP	12 55 57.7
IS	56 29.5
NOV 30	
COL EP	13 55 06.0
EUR E(P)	13 58 23.8
E	58 33.0
NOV 30	
EUR EP	14 05 09.0
NOV 30	
EUR E(P)	14 56 59.0
NOV 30	
COL EP	15 24 20.0
NOV 30	
COL EP	15 28 42.0
NOV 30	
COL IP	15 37 12.3
NOV 30	
EUR EP	15 51 43.2
NOV 30	
EUR EP	16 38 14.0
EL	42 00.5
NOV 30	
H-18 24 28.7	
45.2N 150.4E	
h ABOUT 050KM	
COL EP	18 31 51.0
EUR EP	18 35 08.8
E	35 21.0

Date and Station	Phase (GCT)
	h m s
NOV 30	
COL EP	18 35 47.0
NOV 30	
COL EP	18 41 03.0
NOV 30	
COL EP	19 25 39.0
NOV 30	
H-20 44 27.4	
46.1N 150.9E	
h ABOUT 033KM	
COL IP	20 51 40.3
EUR EP	20 55 05.2
EPCP	55 41.0
NOV 30	
H-21 40 20.3	
6.6N 094.2E	
h ABOUT 033KM	
EUR EP'	21 59 22.8
E	59 34.0
EPP	22 01 19.5
ESKP	02 46.0
E	02 55.0
NOV 30	
EUR EP	22 57 04.0
IS	57 54.5
IL	58 19.5
NOV 30	
EUR E(P)	23 13 50.0
EL	14 46.0

Date and Station	Phase (GCT)
	h m s

Date and Station	Phase (GCT)
	h m s

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