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SEISMOLOGICAL BULLETIN

COAST & GEODETIC SURVEY

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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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1963

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)
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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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
August	h m s	°	°	
1	04 01 05*	40.0 N.	115.6 W.	Eastern Nevada. h about 33 km. Mag. 3.8 (CGS).
1	04 05 04.3	14.1 N.	92.3 W.	Guatemala. h about 33 km. Mag. 4.0 (CGS).
1	04 39 02.7	7.0 S.	146.1 E.	Eastern New Guinea. h about 174 km. Mag. 4.7 (CGS).
1	05 00 17*	39.3 N.	109.1 W.	Utah-Colorado border. h about 33 km. Mag. 3.7 (CGS).
1	05 22 15*	21.8 N.	108.1 W.	Off west coast of Mexico. h about 33 km. Mag. 3.7 (CGS).
1	10 45 02.7	55.3 N.	161.8 E.	Near east coast of Kamchatka. h about 50 km. Mag. 5.0 (CGS).
1	14 46 39.8	58.3 N.	151.9 W.	Kodiak Island region. h about 40 km. Mag. 4.8 (CGS).
1	15 20 55.9	29.8 S.	177.2 W.	Kermadec Islands. h about 59 km. Mag. 4.8 (CGS).
1	18 22 53.2	42.3 N.	142.2 E.	Hokkaido, Japan. h about 26 km. Mag. 4.3 (CGS).
1	18 30 26.3	15.0 S.	71.8 W.	Southern Peru. h about 100 km. Mag. 4.1 (CGS).
1	19 59 03*	44.3 N.	85.8 E.	Sinkiang Province, China. h about 33 km. Mag. 4.5 (CGS).
1	20 53 58.3	17.6 S.	178.9 W.	Fiji Islands. h about 526 km. Mag. 3.8 (CGS).
1	21 43 08.6	52.1 N.	173.2 E.	Near Islands, Aleutian Islands. h about 90 km. Mag. 4.4 (CGS).
2	05 44 36*	31.4 N.	131.6 E.	Kyushu, Japan. h about 22 km. Mag. 4.3 (CGS).
2	09 07 18.0	56.2 N.	34.1 W.	North Atlantic Ocean. h about 41 km. Mag. 4.6 (CGS).
2	09 13 46.8	56.3 N.	34.5 W.	North Atlantic Ocean. h about 33 km. Mag. 4.2 (CGS).
2	09 45 42.0	43.4 N.	114.5 W.	Idaho. Felt: Fairfield. h about 33 km.
2	10 20 38*	26.8 N.	141.3 E.	Mariana Islands region. h about 109 km. Mag. 4.3 (CGS).
2	10 49 16.1	34.7 N.	8.9 W.	Off coast of Morocco. Felt Casablanca and Mohammedia. h about 33 km. Mag. 4.1 (CGS).
2	12 49 35*	57.5 N.	38.5 W.	North Atlantic Ocean. h about 33 km. Mag. 4.2 (CGS).
2	14 28 35.7	11.8 N.	89.5 W.	Off coast of El Salvador. h about 33 km. Mag. 3.9 (CGS).
2	19 26 26.0	6.0 N.	125.1 E.	Mindanoa, Philippine Islands. h about 118 km. Mag. 5.0 (CGS).
2	22 17 25.6	40.5 N.	125.1 W.	Off coast of northern California. h about 33 km. Mag. 3¾-4 (BRK), 5.1 (CGS).
3	00 37 50.3	37.0 N.	88.8 W.	Illinois-Kentucky border. Felt: Southern Illinois and northern Kentucky. h about 18 km. Mag. 3.6 (CGS).
3	01 09 56*	8.8 S.	108.3 W.	Southwest of Galapagos Islands. h about 33 km. Mag. 4.4 (CGS).
3	01 23 17*	44.9 N.	115.4 W.	Central Idaho. h about 33 km. Mag. 4.0 (CGS).
3	03 48 06.4	7.6 S.	156.8 E.	Solomon Islands. h about 402 km. Mag. 5.1 (CGS).
3	06 28 02.5	6.7 S.	147.5 E.	Near east coast of New Guinea. h about 83 km.
3	10 21 36.6	7.7 N.	35.8 W.	Mid-Atlantic Ocean. h about 33 km. Mag. 6.9 (PAS), 6¾-7 (BRK), 6.1 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
3	10 34 16*	7.8 N.	35.9 W.	Mid-Atlantic Ocean. h about 33 km. Mag. 4.9 (CGS).
3	16 29 35.8	52.0 N.	174.3 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 4.4 (CGS).
3	20 07 19.9	1.4 N.	28.2 W.	Mid-Atlantic Ocean. h about 33 km. Mag. 4.4 (CGS).
3	20 26 04.1	30.7 S.	178.3 W.	Kermadec Islands. h about 37 km. Mag. 5.2 (CGS).
4	02 13 50.6	42.6 S.	83.4 W.	Off coast of southern Chile. h about 33 km. Mag. 4.7 (CGS).
4	05 40 08.2	46.4 N.	153.4 E.	Kurile Islands. h about 33 km. Mag. 3.9 (CGS).
4	07 08 47.1	9.4 S.	114.2 E.	South of Java. h about 117 km. Mag. 5.5 (CGS).
4	09 13 17.8	22.6 S.	173.4 E.	Loyalty Islands region. h about 72 km. Mag. 4.9 (CGS).
4	09 54 12.0	7.7 S.	129.5 E.	Tanimbar Islands region. h about 195 km. Mag. 4.9 (CGS).
4	11 43 20.3	35.7 N.	140.1 E.	Honshu, Japan. h about 68 km. Mag. 4.7 (CGS).
4	12 07 24.4	4.1 S.	80.9 W.	Near north coast of Peru. h about 34 km. Mag. 4.7 (CGS).
4	13 00 44.7	12.6 N.	143.8 E.	Mariana Islands. h about 61 km. Mag. 4.6 (CGS).
4	13 25 52*	22.8 S.	112.6 W.	Easter Island region. h about 33 km. Mag. 4.3 (CGS).
4	15 19 50*	26.6 S.	176.8 W.	Kermadec Islands region. h about 33 km. Mag. 4.3 (CGS).
4	21 40 52.4	5.2 S.	145.9 E.	Near north coast of eastern New Guinea. h about 59 km. Mag. 4.9 (CGS).
4	23 54 14.0	17.5 S.	179.1 W.	Fiji Islands region. h about 515 km. Mag. 5.2 (CGS).
5	02 48 42*	17.2 N.	99.8 W.	Near coast of Guerrero Mexico. h about 33 km. Mag. 4.3 (CGS).
5	07 41 37.9	27.2 S.	178.0 W.	Kermadec Islands region. h about 33 km. Mag. 4.2 (CGS).
5	08 46 59.7	9.9 S.	79.0 W.	Near coast of Peru. h about 31 km. Mag. 4.8 (CGS).
5	15 39 07.0	60.7 S.	154.3 E.	Macquarie Island region. h about 33 km. Mag. 5.2 (CGS).
5	20 05 06*	37.0 N.	95.8 E.	Tsinghai Province, China. h about 33 km. Mag. 4.6 (CGS).
6	01 34 22.2	11.3 S.	167.1 E.	Santa Cruz Islands region. h about 33 km.
6	05 20 32*	45.1 N.	111.4 W.	Southwestern Montana. h about 33 km. Mag. 3.7 (CGS).
6	09 28 30.0	38.1 S.	72.3 W.	Central Chile. Felt. h about 96 km. Mag. 4.8 (CGS).
6	13 36 35.6	57.0 N.	33.6 W.	North Atlantic Ocean. h about 33 km. Mag. 4¾-5 (BRK), 5.1 (CGS).
6	20 40 10.2	53.9 N.	160.7 E.	Near east coast of Kamchatka. h about 140 km. Mag. 4.1 (CGS).
6	23 38 46*	33.7 N.	116.7 W.	Riverside County, California. h about 14 km. Mag. 5.0 (CGS).
7	04 26 23.4	21.8 S.	173.5 E.	Loyalty Islands region. h about 106 km. Mag. 4.5 (CGS).
7	04 33 42.7	54.0 N.	142.1 E.	Sakhalin Island, U. S. S. R. h about 33 km. Mag. 5.1 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
7	07 17 25.8	7.5 N.	37.2 W.	Atlantic Ocean. h about 33 km. Mag. 4.6 (CGS).
7	09 35 38.2	14.6 N.	91.3 W.	Guatemala. h about 245 km. Mag. 3.9 (CGS).
7	11 15 07.6	20.0 S.	178.3 W.	Fiji Islands. h about 600 km. Mag. 4.5 (CGS).
7	11 16 48.6	20.1 S.	178.4 W.	Fiji Islands. h about 600 km. Mag. 4.3 (CGS).
7	13 10 42*	53.3 N.	164.1 E.	Off east coast of Kamchakta. h about 33 km. Mag. 4.3 (CGS).
7	13 56 50*	18.2 S.	177.9 W.	Fiji Islands region. h about 508 km. Mag. 3.9 (CGS).
7	15 38 58.7	21.2 S.	177.8 W.	Fiji Islands. h about 352 km. Mag. 4.4 (CGS).
7	17 13 18.4	56.1 S.	27.0 W.	Sandwich Islands. h about 33 km. Mag. 5.4 (CGS).
7	18 36 46.6	13.6 N.	90.9 W.	Near south coast of Guatemala. h about 67 km. Mag. 4.7 (CGS).
8	02 14 54.4	54.2 N.	168.1 E.	Fox Islands, Aleutian Islands. h about 33 km. Mag. 4¾-5 (BRK), 5.5 (CGS).
8	03 09 52*	29.8 N.	138.8 E.	South of Honshu, Japan. h about 458 km. Mag. 3.8 (CGS).
8	09 54 37.4	44.9 N.	111.1 W.	Southwestern Montana. Felt. h about 33 km.
8	10 58 23.1	35.9 S.	103.6 W.	Easter Island region. h about 33 km. Mag. 4.7 (CGS).
8	11 16 11.2	5.8 S.	151.0 E.	New Britain. Felt: Palmalmal, Pomio. h about 48 km. Mag. 5 (BRK), 5.6 (CGS).
8	11 41 30.5	27.3 N.	129.2 E.	Ryukyu Islands. h about 92 km. Mag. 4.4 (CGS).
8	13 53 42.2	18.3 N.	145.3 E.	Mariana Islands region. h about 423 km. Mag. 4.9 (CGS).
8	19 11 11*	32.2 N.	140.9 E.	South of Honshu, Japan. h about 77 km. Mag. 4.0 (CGS).
8	23 53 21.0	44.9 N.	111.0 W.	Yellowstone National Park, Wyoming. h about 33 km. Mag. 4.0 (CGS).
9	01 17 37.8	14.2 N.	92.3 W.	Guatemala. h about 33 km. Mag. 4.1 (CGS).
9	06 05 32.2	44.5 N.	11.9 E.	Northeastern Italy. Slights damage. h about 33 km. Mag. 4.9 (CGS).
9	08 42 21.1	50.6 N.	157.2 E.	Southern Kamchatka. h about 33 km. Mag. 4.6 (CGS).
9	10 10 18.2	21.6 S.	171.1 E.	Loyalty Islands region. h about 153 km. Mag. 5.4 (CGS).
9	12 20 02*	51.6 N.	178.8 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 4.5 (CGS).
9	14 13 59*	1.2 N.	125.6 E.	Molucca Passage. h about 33 km.
9	14 36 45.9	15.3 S.	175.7 W.	Fiji Islands region. h about 33 km. Mag. 5¾-6 (BRK), 5.5 (CGS).
9	15 12 57.0	3.0 S.	152.3 E.	New Ireland. h about 143 km. Mag. 4.9 (CGS).
9	16 40 15.9	15.5 S.	167.7 E.	New Hebrides Islands. h about 127 km. Mag. 4.1 (CGS).
9	20 29 58*	36.9 S.	71.5 W.	Central Chile. h about 186 km. Mag. 4.3 (CGS).
10	02 36 40*	15.6 S.	175.0 W.	Tonga Islands region. h about 33 km. Mag. 4.2 (CGS).
10	03 34 44*	27.3 S.	176.6 W.	Kermadec Islands region. h about 140 km. Mag. 4.3 (CGS).
10	04 27 33.5	28.1 N.	53.3 E.	Southern Iran. h about 46 km. Mag. 4.8 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
10	13 17 47.1	24.7 N.	142.7 E.	Volcano Islands region. h about 33 km. Mag. 5.0 (CGS).
10	16 05 59.7	15.0 S.	179.0 W.	Fiji Islands region. h about 389 km. Mag. 4.5 (CGS).
10	17 51 40*	3.2 S.	141.9 E.	Near north coast of New Guinea. h about 88 km.
10	18 07 26.2	54.4 S.	132.8 W.	South Pacific Ocean. h about 33 km. Mag. 4.7 (CGS).
10	18 37 45.3	8.8 N.	82.9 W.	Panama Costa Rica border. h about 33 km. Mag. 4.3 (CGS).
10	21 03 39*	49.6 N.	179.2 E.	Rat Islands, Aleutian Islands. h about 33 km. Mag. 4.3 (CGS).
11	01 34 22.2	60.5 S.	154.9 E.	Balleny Islands region. h about 33 km. Mag. 5.4 (CGS).
11	05 24 00.6	17.4 S.	179.0 W.	Fiji Islands. h about 509 km. Mag. 4.1 (CGS).
11	06 30 36.5	1.0 S.	78.9 W.	Ecuador. h about 33 km. Mag. 4.0 (CGS).
11	07 37 20.4	38.8 N.	140.9 E.	Near east coast of northern Honshu, Japan. h about 45 km. Mag. 5.0 (CGS).
11	08 43 48*	37.1 N.	55.2 E.	Northern Iran. h about 33 km. Mag. 4.4 (CGS).
11	10 03 05.1	38.1 S.	73.1 W.	Near coast of southern Chile. h about 60 km. Mag. 5.0 (CGS).
11	13 11 51*	4.7 S.	145.4 E.	Near east coast of New Guinea. Felt: Madang. h about 86 km. Mag. 5.5 (CGS).
11	14 34 58*	53.0 N.	172.5 E.	Near Islands, Aleutian Islands. h about 33 km. Mag. 4.1 (CGS).
11	19 40 52.2	36.2 N.	71.2 E.	Hindu Kush. h about 148 km.
11	21 14 34*	7.7 S.	108.8 E.	Near south coast of Java. h about 169 km.
12	01 05 34.1	32.5 S.	71.1 W.	Near coast of central Chile. h about 92 km. Mag. 4.7 (CGS).
12	03 01 38*	38.1 N.	88.7 E.	Sinkiang Province, China. h about 33 km.
12	07 19 54.9	27.7 N.	53.2 E.	Near southwest coast of Iran. h about 33 km. Mag. 5.0 (CGS).
12	08 58 03.3	11.6 S.	166.3 E.	Santa Cruz Islands. h about 53 km. Mag. 4.2 (CGS).
12	10 10 08.0	5.7 S.	131.1 E.	Banda Sea. h about 92 km. Mag. 5.2 (CGS).
12	13 06 46*	2.1 N.	90.4 W.	Galapagos Islands. h about 33 km. Mag. 4.6 (CGS).
12	13 12 08*	2.1 N.	90.5 W.	Galapagos Islands region. h about 33 km. Mag. 4.6 (CGS).
12	17 19 00.5	9.8 N.	84.2 W.	Costa Rica. Felt: San Jose. h about 114 km. Mag. 4.2 (CGS).
12	17 42 46.0	5.9 S.	146.5 E.	Near east coast of New Guinea. h about 100 km. Mag. 4.4 (CGS).
12	18 29 38.8	25.3 N.	62.7 E.	Near coast of West Pakistan. h about 33 km. Mag. 5.2 (CGS).
12	20 59 08.0	21.9 S.	175.7 W.	Tonga Islands. h about 33 km. Mag. 4.6 (CGS).
12	21 14 00*	56.0 S.	27.7 W.	Sandwich Islands region. h about 33 km.
12	23 45 00.129			37°02'30" N, 116°00'56"W. Nevada Test Site. PEKAN. Shot elevation 919.8864 meters (AEC).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
13	02 58 34*	12.9 N.	120.7 E.	Near coast of Mindoro, Philippine Islands. h about 33 km. Mag. 4.9 (CGS).
13	03 26 45.4	55.0 N.	156.4 W.	Kodiak Island region. h about 33 km. Mag. 5.0 (CGS).
13	04 53 58.8	7.2 S.	124.5 E.	Banda Sea. h about 542 km. Mag. 5.3 (CGS).
13	06 04 44*	15.9 N.	95.3 W.	Off coast of Oaxaca, Mexico. h about 33 km. Mag. 3.8 (CGS).
13	06 29 19.1	20.6 S.	178.5 W.	Fiji Islands. h about 562 km. Mag. 4.6 (CGS).
13	06 52 06.1	19.1 S.	173.9 W.	Tonga Islands. h about 28 km. Mag. 4.7 (CGS).
13	07 03 49.6	36.6 N.	70.9 E.	Hindu Kush. h about 244 km. Mag. 4.7 (CGS).
13	12 39 55*	3.1 S.	80.4 W.	Near coast of Ecuador. h about 66 km. Mag. 4.3 (CGS).
13	13 28 02.2	76.2 N.	6.4 E.	Svalbard region. h about 33 km. Mag. 4.7 (CGS).
13	21 52 37.4	19.3 S.	173.7 W.	Tonga Islands. h about 33 km. Mag. 5.1 (CGS).
13	23 00 24.8	27.2 N.	140.1 E.	Bonin Islands region. h about 448 km. Mag. 4.8 (CGS).
13	23 23 06*	17.9 S.	178.7 W.	Fiji Islands. h about 598 km. Mag. 4.1 (CGS).
14	00 15 07*	16.7 S.	28.7 E.	Northern Rhodesia. h about 33 km.
14	02 46 44.1	21.4 S.	175.2W.	Fiji Islands region. h about 33 km. Mag. 4.7 (CGS).
14	03 32 33.5	4.9 S.	152.3 E.	New Britain. Felt: Pomio. h about 62 km. Mag. 5.8 (CGS).
14	08 27 14.9	9.3 S.	158.3 E.	Solomon Islands. h about 33 km. Mag. 4.7 (CGS).
14	09 03 46*	18.4 N.	104.6 W.	Near coast of Jalisco, Mexico. h about 33 km. Mag. 4.2 (CGS).
14	12 30 06.0	41.5 N.	112.1 W.	Northern Utah. Felt: Cache Valley. h about 33 km. Mag. 3.7 (CGS).
14	13 46 02*	83.6 N.	4.6 W.	Svalbard region. h about 33 km. Mag. 4.6 (CGS).
14	14 32 36.7	22.3 S.	68.7 W.	Northern Chile. h about 120 km. Mag. 5.1 (CGS).
14	16 18 18.0	24.1 N.	122.4 E.	Off coast of Formosa. h about 28 km. Mag. 5.3 (CGS).
14	18 43 55.5	3.4 S.	135.4 E.	West New Guinea. h about 33 km.
14	20 43 12*	22.5 S.	175.5 W.	Tonga Islands. h about 33 km. Mag. 4.4 (CGS).
14	21 20 42*	40.6 N.	143.6 E.	Off east coast of northern Honshu, Japan. h about 33 km. Mag. 4.1 (CGS).
14	21 48 28*	17.5 S.	178.3 W.	Fiji Islands region. h about 487 km. Mag. 3.6 (CGS).
15	00 47 05*	2.8 N.	76.1 W.	Southern Colombia. h about 33 km. Mag. 4.3 (CGS).
15	01 33 02.1	18.1 S.	172.6 W.	Tonga Islands region. h about 33 km. Mag. 4.2 (CGS).
15	02 17 17*	27.9 N.	139.6 E.	Bonin Islands. h about 476 km. Mag. 4.7 (CGS).
15	06 11 34.6	37.9 N.	141.6 E.	Near east coast of Honshu, Japan. Felt. h about 59 km. Mag. 6½ (PAS), 6-6¼ (BRK), 5.7 (CGS).
15	08 42 16*	51.5 N.	177.8 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 4.2 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
15	09 59 25.0	21.6 S.	174.7 W.	Tonga Islands. h about 33 km. Mag. 4.2 (CGS).
15	10 18 30.1	15.8 S.	175.3 W.	Tonga Islands Region. h about 287 km. Mag. 4.2 (CGS).
15	13 00 00.153			37°09'15" N., 116°04'36" W. Nevada Test Site. SATSOP. Shot elevation 1104.2904 meters (AEC).
15	14 36 01.2	10.0 S.	78.6 W.	Near coast of central Peru. h about 80 km. Mag. 4.4 (CGS).
15	14 57 51*	20.0 S.	178.9 W.	Fiji Islands. h about 298 km. Mag. 4.2 (CGS).
15	17 25 05.9	13.8 S.	69.3 W.	Peru-Bolivia border. h about 543 km. Mag. 7¾ (PAS), 7.9 (BRK), 6.0 (CGS).
15	19 14 27.4	40.2 S.	71.8 W.	Near coast of southern Chile. h about 58 km. Mag. 4.1 (CGS).
15	21 02 33.8	36.1 N.	121.1 W.	Monterey County, California. h about 33 km. Mag. 4.0 (CGS).
15	21 21 33.1	35.9 N.	121.1 W.	Monterey County, California. Felt. h about 33 km. Mag. 4.0 (CGS).
15	22 29 47.1	21.0 S.	179.2 W.	Fiji Islands. h about 597 km. Mag. 4.9 (CGS).
15	23 57 02.8	69.8 N.	8.9 E.	Arctic Ocean region. h about 33 km.
16	02 38 10.9	3.1 S.	129.3 E.	Ceram Sea. h about 94 km. Mag. 4.6 (CGS).
16	03 00 24.3	6.3 S.	129.0 E.	Banda Sea. h about 263 km. Mag. 4.5 (CGS).
16	03 21 08.5	39.7 N.	111.9 W.	Central Utah. Felt: Nephi. h about 33 km. Mag. 3.4 (CGS).
16	07 01 03.7	41.5 N.	112.2 W.	Northern Utah. h about 33 km. Mag. 3.6 (CGS).
16	07 05 26*	48.8 N.	155.0 E.	Hokkaido, Japan. h about 33 km. Mag. 4.5 (CGS).
16	17 27 36*	15.1 S.	172.8 W.	Tonga Islands region. h about 33 km. Mag. 4.5 (CGS).
16	20 49 52.1	2.1 N.	126.1 E.	Molucca Passage. h about 36 km. Mag. 4.5 (CGS).
16	22 28 45*	43.9 N.	142.1 E.	Hokkaido, Japan. h about 81 km. Mag. 4.5 (CGS).
16	23 06 25*	12.8 S.	14.5 W.	South Atlantic Ocean. h about 33 km. Mag. 5.1 (CGS).
16	23 19 31.1	48.9 S.	122.8 E.	South of Australia. h about 33 km.
17	05 09 11*	41.4 N.	112.2 W.	Northern Utah. h about 33 km. Mag. 3.5 (CGS).
17	05 33 40.1	20.0 S.	174.0 W.	Tonga Islands. h about 33 km. Mag. 4.6 (CGS).
17	06 17 36.4	52.4 N.	168.7 W.	Fox Islands, Aleutian Islands. h about 33 km. Mag. 4.3 (CGS).
17	09 35 25*	34.2 S.	179.9 W.	Kermadec Islands region. h about 368 km. Mag. 4.3 (CGS).
17	10 23 15*	40.4 N.	110.6 W.	Eastern Utah. h about 33 km. Mag. 3.5 (CGS).
17	11 12 41.2	30.6 N.	130.9 E.	Ryukyu Islands region. Felt: Kagoshima. h about 33 km. Mag. 6¼ (PAS), 6 (BRK), 5.6 (CGS).
17	11 33 28*	63.4 S.	169.5 E.	Balleny Islands region. h about 33 km.
17	11 34 23.4	17.7 N.	94.3 W.	Veracruz, Mexico. h about 163 km. Mag. 4.9 (CGS).
17	20 56 42*	20.3 S.	67.4 W.	Southern Bolivia. h about 33 km. Mag. 4.6 (CGS).
17	21 58 54.4	36.7 N.	59.7 E.	Northern Iran. h about 33 km. Mag. 4.8 (CGS).
17	22 15 22*	32.1 N.	40.9 W.	North Atlantic Ocean. h about 33 km. Mag. 4.8 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
18	07 09 51.6	35.9 N.	139.2 E.	Central Honshu, Japan. Felt. h about 153 km. Mag. 4.8 (CGS).
18	10 18 10.0	7.5 N.	74.1 W.	Columbia. h about 33 km. Mag. 3.8 (CGS).
18	15 58 14*	19.5 N.	45.4 W.	North Atlantic Ocean. h about 33 km. Mag. 4.2 (CGS).
18	18 43 16.1	50.3 N.	176.9 W.	Andreanof Islands, Aleutian Islands. h about 33 km. Mag. 5 (BRK), 5.5 (CGS).
18	19 52 40.6	18.0 S.	178.3 W.	Fiji Islands. h about 544 km. Mag. 4.3 (CGS).
18	20 18 29.9	22.5 S.	175.2 W.	Tonga Islands. h about 33 km. Mag. 4.7 (CGS).
18	20 27 41.9	32.1 S.	178.1 W.	Kermadec Islands region. h about 33 km. Mag. 5.0 (CGS).
18	23 07 54*	14.2 S.	71.9 W.	Southern Peru. h about 31 km. Mag. 4.6 (CGS).
19	01 34 38*	9.0 S.	111.0 W.	About 2,000 km. southwest of Galapagos Islands. h about 33 km. Mag. 4.1 (CGS).
19	04 24 00.4	32.0 S.	177.9 W.	Kermadec Islands region. h about 33 km. Mag. 4.8 (CGS).
19	05 53 45.1	17.6 S.	168.0 E.	New Hebrides Islands. Felt: Port Vila. h about 33 km.
19	06 24 23.9	41.0 N.	143.5 E.	Off east coast of northern Honshu, Japan. h about 25 km. Mag. 4.3 (CGS).
19	07 29 40.5	45.6 S.	95.7 E.	Indian Ocean. h about 33 km.
19	09 39 00*	40.9 N.	126.0 W.	Off coast of northern California. h about 33 km. Mag. 4.1 (CGS).
19	09 51 25.2	59.8 S.	25.9 W.	Sandwich Islands region. h about 33 km.
19	11 49 26*	45.7 S.	95.9 E.	Indian Ocean. h about 33 km.
19	14 58 59.5	41.5 N.	141.8 E.	Off east coast of Honshu, Japan. h about 117 km. Mag. 4.0 (CGS).
19	16 54 01.3	17.0 S.	168.8 E.	New Hebrides Islands. h about 231 km. Mag. 3.8 (CGS).
19	19 09 48.2	6.1 S.	130.7 E.	Banda Sea. h about 33 km. Mag. 4.3 (CGS).
20	00 27 40*	21.9 S.	175.8 W.	Tonga Islands. h about 33 km. Mag. 4.2 (CGS).
20	04 57 16*	18.8 S.	174.2 W.	Tonga Islands. h about 25 km. Mag. 3.9 (CGS).
20	06 39 57*	5.5 S.	145.8 E.	Near coast of northeast New Guinea. h about 90 km.
20	06 53 28.1	6.9 S.	103.0 E.	Off coast of Sumatra. h about 61 km.
20	09 20 26.7	27.8 S.	176.5 W.	Kermadec Islands. h about 37 km.
20	09 25 38.9	16.0 N.	92.4 W.	Chiapas, Mexico. h about 193 km. Mag. 4.2 (CGS).
20	12 59 28.6	37.1 N.	139.3 E.	Central Honshu, Japan. h about 53 km. Mag. 4.1 (CGS).
20	13 19 50.3	4.1 N.	76.5 W.	Colombia. h about 59 km. Mag. 4.5 (CGS).
20	15 48 12.2	41.2 N.	142.7 E.	Off east coast of Honshu, Japan. h about 50 km. Mag. 4.5 (CGS).
20	19 43 56.6	30.2 S.	177.8 W.	Kermadec Islands. h about 43 km. Mag. 4.2 (CGS).
20	20 14 31*	0.0	80.9 W.	Off coast of Ecuador. h about 64 km. Mag. 4.2 (CGS).
21	02 41 32.6	5.5 S.	147.7 E.	New Britain region. h about 164 km. Mag. 4.4 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
21	03 39 22.6	14.3 N.	72.5 W.	Caribbean Sea. Felt: Caracas, Venezuela. h about 33 km. Mag. 5.4 (CGS).
21	05 06 44.5	6.7 N.	72.8 W.	Colombia. h about 182 km. Mag. 3.8 (CGS).
21	10 17 01*	8.3 S.	108.8 E.	Near south coast of Java. h about 225 km.
21	17 33 46*	20.2 N.	108.6 W.	Revilla Gigedo Islands region. h about 33 km. Mag. 4.3 (CGS).
21	18 02 44.4	49.0 N.	158.2 E.	Kurile Islands region. h about 33 km. Mag. 4.9 (CGS).
21	18 20 52.8	51.8 N.	176.5 W.	Andreanof Islands, Aleutian Islands. h about 17 km. Mag. 4.2 (CGS).
21	22 59 24*	21.3 S.	176.0 W.	Tonga Islands. h about 140 km. Mag. 4.0 (CGS).
22	03 58 43.2	63.2 N.	148.5 W.	Central Alaska. h about 101 km. Mag. 4.6 (CGS).
22	04 33 54.2	34.1 N.	116.2 W.	San Bernardino County, California. h about 14 km. Mag. 4.4 (CGS).
22	05 01 38.3	1.2 S.	128.5 E.	Halmahera region. h about 33 km. Mag. 3.7 (CGS).
22	09 27 09.3	42.0 N.	126.2 W.	Off coast of Oregon. h about 33 km. Mag. 5.6 (CGS).
22	12 13 11.3	33.7 N.	118.0 W.	Orange County, California. Felt: Orange and Los Angles Counties. h about 14 km. Mag. 4.3 (CGS).
22	14 39 28*	1.9 S.	133.9 E.	West New Guinea. h about 33 km. Mag. 4.3 (CGS).
22	15 53 56*	14.5 S.	71.8 W.	Southern Peru. h about 284 km. Mag. 3.5 (CGS).
22	17 05 27.5	7.2 S.	120.4 E.	Flores Sea. h about 398 km.
22	18 18 49*	3.8 S.	104.2 W.	About 1,500 km. west of Galapagos Islands. h about 33 km. Mag. 4.3 (CGS).
22	19 52 25.0	9.4 S.	158.0 E.	Solomon Islands. Felt. h about 33 km. Mag. 6¾-7 (PAS), 6-6¼ (BRK), 6.1 (CGS).
22	21 24 48*	45.0 S.	75.1 W.	Near coast of southern Chile. h about 33 km. Mag. 4.5 (CGS).
22	23 20 21.1	4.3 N.	76.4 W.	Colombia. h about 100 km. Mag. 4.9 (CGS).
23	03 45 17.6	44.7 N.	146.1 E.	Kurile Islands. h about 135 km. Mag. 4.5 (CGS).
23	13 09 25.3	52.4 N.	159.6 E.	Off east coast of Kamchatka. h about 33 km. Mag. 4.5 (CGS).
23	13 20 00.148			37°07'30" N., 116°02'07" W. Nevada Test Site. KOHOCTON. Shot elevation 1029.3096 Meters (AEC).
23	13 35 57*	17.3 S.	67.8 W.	Peru-Bolivia border. h about 33 km. Mag. 4.5 (CGS).
23	15 24 06*	4.9 N.	128.1 E.	Talaud Island region. h about 268 km.
23	16 42 34.2	52.5 N.	159.5 E.	Near east coast of Kamchatka. h about 67 km. Mag. 4.1 (CGS).
23	21 28 12*	4.4 S.	134.9 E.	West New Guinea. h about 95 km. Mag. 5.2 (CGS).
23	23 22 10.1	28.6 N.	142.5 E.	Bonin Islands. h about 45 km. Mag. 4.6 (CGS).
24	01 41 40.5	22.4 S.	68.5 W.	Northern Chile. h about 66 km. Mag. 4.7 (CGS).
24	02 11 58*	54.3 S.	5.2 E.	Bouvet Island region. h about 28 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
24	03 01 30*	55.9 N.	162.1 E.	Near east coast of Kamchatka. h about 110 km. Mag. 4.2 (CGS)
24	03 15 47*	40.7 N.	112.2 W.	Chemical explosion in northern Utah. h about 0 km. Mag. 3.5 (CGS).
24	03 18 09.5	30.7 S.	178.2 W.	Kermadec Islands. h about 42 km. Mag. 4.6 (CGS).
24	10 10 15*	19.3 N.	108.8 W.	Off coast of Jalisco, Mexico. h about 33 km. Mag. 4.0 (CGS).
24	10 49 08.4	36.0 N.	117.6 W.	Inyo County, California. h about 20 km. Mag. 3.7 (CGS).
24	10 58 28.2	51.0 N.	179.4 E.	Rat Islands, Aleutian Islands. h about 33 km. Mag. 4.0 (CGS).
24	12 50 13.0	37.3 S.	178.2 W.	Off east coast of North Island, New Zealand. h about 36 km.
24	13 28 20*	34.1 N.	116.2 W.	San Bernardino County, California. h about 14 km.
24	20 47 35.0	31.2 N.	116.5 W.	Near west coast of Baja California. h about 14 km. Mag. 4.5 (CGS).
24	21 41 57.8	45.0 N.	151.7 E.	Kurile Islands region. h about 33 km. Mag. 4.1 (CGS).
25	02 20 12.7	48.7 N.	148.8 E.	Sea of Okhotsk. h about 134 km. Mag. 4.7 (CGS).
25	05 21 19.4	45.2 N.	151.3 E.	Kurile Islands region. h about 33 km. Mag. 4.6 (CGS).
25	06 11 43.3	38.9 N.	38.4 E.	Central Turkey. h about 33 km. Mag. 4.8 (CGS).
25	12 18 12.5	17.5 S.	178.8 W.	Fiji Islands region. h about 565 km. Mag. 6½ (PAS), 6-6¼ (BRK), 6.1 (CGS).
25	13 26 01.4	17.9 S.	178.8 W.	Fiji Islands region. h about 610 km. Mag. 3.6 (CGS).
25	13 34 46.0	17.4 S.	178.7 W.	Fiji Islands region. h about 540 km. Mag. 3.6 (CGS).
25	17 53 04.1	15.6 S.	173.1 W.	Tonga Islands. h about 33 km. Mag. 4.2 (CGS).
25	18 44 15.5	52.5 N.	172.5 W.	Andreanof Islands, Aleutian Islands. h about 80 km. Mag. 4.5 (CGS).
26	01 30 08.7	14.4 N.	91.3 W.	Near coast of Guatemala. h about 33 km. Mag. 3.8 (CGS).
26	02 28 12.8	26.3 S.	178.8 E.	Fiji Islands region. h about 546 km. Mag. 4.4 (CGS).
26	02 59 46.9	19.3 S.	175.4 W.	Tonga Islands. h about 83 km. Mag. 4.5 (CGS).
26	04 49 43.8	17.7 S.	178.8 W.	Fiji Islands. h about 575 km. Mag. 4.6 (CGS).
26	05 42 40.3	6.8 S.	105.6 E.	Java. h about 33 km. Mag. 5.1 (CGS).
26	08 45 32.4	51.6 N.	157.0 E.	Near east coast of Kamchatka. h about 105 km. Mag. 4.7 (CGS).
26	12 19 27.6	22.7 S.	171.7 E.	Loyalty Islands region. h about 43 km. Mag. 4.5 (CGS).
26	12 45 30.8	32.7 N.	137.7 E.	South of Honshu, Japan. h about 349 km. Mag. 4.2 (CGS).
26	18 49 19*	19.8 N.	155.6 W.	Hawaii. Felt. h about 5 km. Mag. 4.4 (CGS).
26	23 32 38.3	7.7 S.	127.3 E.	Banda Sea. h about 151 km. Mag. 4.4 (CGS).
27	01 20 56*	31.7 N.	116.2 W.	Baja California. Felt. h about 14 km. Mag. 4.4 (CGS).
27	02 29 51.4	17.5 N.	92.6 W.	Chiapas, Mexico. h about 180 km. Mag. 3.6 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
27	03 15 36*	72.9 N.	4.3 E.	Arctic Ocean. h about 33 km. Mag. 4.7 (CGS).
27	03 23 32.6	45.9 S.	75.3 W.	Near coast of southern Chile. h about 33 km. Mag. 5.3 (CGS).
27	03 32 56.5	11.2 S.	165.7 E.	Santa Cruz Islands. h about 33 km. Mag. 4.2 (CGS).
27	05 51 37.4	44.1 N.	129.5 W.	Off coast of Oregon. h about 33 km. Mag. 4.2 (CGS).
27	07 06 57.4	5.5 S.	149.3 E.	New Britain region. h about 162 km. Mag. 4.2 (CGS).
27	12 56 55.2	17.7 S.	70.1 W.	Southern Peru. h about 188 km. Mag. 4.2 (CGS).
27	18 08 12.7	10.0 S.	161.3 E.	Solomon Islands. h about 92 km. Mag. 4.5 (CGS).
27	20 40 37.0	18.3 N.	146.4 E.	Mariana Islands. h about 78 km. Mag. 4.1 (CGS).
27	22 02 55.9	40.2 N.	145.2 E.	Off east coast of northern Honshu, Japan. h about 55 km. Mag. 4.8 (CGS).
27	23 40 42.9	16.1 N.	96.9 W.	Oaxaca, Mexico. h about 38 km. Mag. 4.3 (CGS).
28	00 13 12*	40.7 N.	112.0 W.	Chemical explosion in northern Utah. h about 0 km.
28	02 40 21*	16.3 N.	96.9 W.	Oaxaca, Mexico. h about 33 km. Mag. 3.9 (CGS).
28	05 55 51*	12.6 N.	87.2 W.	Nicaragua. h about 115 km. Mag. 4.2 (CGS).
28	12 48 22.1	61.9 S.	164.5 E.	Balleny Islands region. h about 33 km.
28	15 51 06.3	28.3 N.	141.0 E.	Bonin Islands region. h about 96 km. Mag. 5.1 (CGS).
28	16 57 46.2	39.1 S.	91.8 W.	West of Chile. h about 33 km. Mag. 4.7 (CGS).
29	01 22 06.4	2.0 N.	123.4 E.	Northern Celebes. h about 43 km.
29	04 00 18.1	6.7 N.	72.9 W.	Colombia. h about 170 km. Mag. 3.9 (CGS).
29	06 08 48*	21.9 N.	145.5 E.	Mariana Islands. h about 130 km. Mag. 4.6 (CGS).
29	08 53 48.4	39.6 N.	74.2 E.	Sinkiang Province, China. h about 31 km. Mag. 6¼-6½ (BRK), 5.5 (CGS).
29	15 30 31.4	7.1 S.	81.6 W.	Off coast of Peru. h about 23 km. Mag. 6½ (PAS), 7 (BRK), 6.1 (CGS).
29	20 57 31.5	15.5 S.	172.9 W.	Tonga Islands region. h about 33 km. Mag. 4.9 (CGS).
30	00 16 36.3	8.7 S.	108.6 E.	Off south coast of Java. h about 33 km. Mag. 5.1 (CGS).
30	00 43 19.0	23.3 S.	66.3 W.	Jujuy Province, Argentina. h about 239 km. Mag. 4.6 (CGS).
30	04 46 25.0	44.8 N.	80.1 E.	China-Kazakh S.S.R. border. h about 33 km. Mag. 4.9 (CGS).
30	07 16 04.0	71.6 N.	4.7 W.	Jan Mayen Island region. h about 33 km. Mag. 4.2 (CGS).
30	13 51 51.6	23.4 S.	175.4 W.	Tonga Islands. h about 33 km. Mag. 4.9 (CGS).
31	10 30 30.1	15.9 S.	74.4 W.	Southern Peru. h about 53 km. Mag. 4.1 (CGS).
31	12 47 11*	28.2 N.	129.3 E.	Ryukyu Islands. h about 33 km. Mag. 4.6 (CGS).
31	13 08 46.3	11.9 N.	87.0 W.	Off west coast of Nicaragua. h about 48 km. Mag. 4.9 (CGS).
31	16 29 52*	47.5 N.	143.6 E.	Sakhalin region. h about 70 km. Mag. 4.7 (CGS).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
August	h m s	°	°	
31	16 31 12.6	36.6 N.	121.8 W.	Monterey County, California. Felt: Montery and San Bernardino Counties. h about 14 km. Mag. 4-4½ (BRK), 4.7 (CGS).
31	16 53 44.7	2.0 N.	127.5 E.	Halmahera region. h about 70 km.
31	21 26 09.3	21.5 S.	179.2 W.	Fiji Islands. h about 543 km. Mag. 4.8 (CGS).

Date and Station	Phase	Phase (GCT) h m s
AUG 01		
EUR	IP	00 41 17.1
FGU	E(P)	00 42 34.1
AUG 01		
GCA	EP	00 42 26.4
	I	43 33.9
AUG 01		
TUC	E(P)	03 54 25.5
AUG 01		
H-04 01 04.6		
40.0N 115.6W		
h ABOUT 033KM		
EUR	IP	04 01 16.0
SLC	E(P)	04 01 54.2
	I	01 57.2
	E(S)	02 39.2
FGU	E(P)	04 02 18.4
	E	02 29.9
	ES	03 38.2
TUC	E(P)	04 03 11.0
AUG 01		
GCA	E(P)	04 02 33.6
AUG 01		
ALQ	EP	04 03 57.2
AUG 01		
ALQ	EP	04 03 57.5
AUG 01		
H-04 05 04.3		
14.1N 092.3W		
h ABOUT 033KM		
ALQ	E(P)	04 10 22.9
TUC	E(P)	04 10 23.3
FGU	E(P)	04 11 19.0
AUG 01		
FGU	EP	04 31 45.0
	IS	32 16.0
AUG 01		
H-04 39 02.7		
7.0S 146.1E		
h ABOUT 174KM		
COL	IP	04 51 27.0
AUG 01		
H-05 00 17.3		
39.3N 109.1W		
h ABOUT 033KM		
FGU	IP	05 00 44.8
	IS	01 06.7
GCA	IP	05 01 03.1
	IS	01 41.1
EUR	EP	05 01 37.3
AUG 01		
ALQ	EP	05 01 59.4
TUC	E(P)	05 02 27.5
AUG 01		
H-05 22 15.3		
21.8N 108.1W		
h ABOUT 033KM		
TUC	EP	05 24 50.2
EUR	EP	05 26 35.6
AUG 01		
FGU	EP	07 14 59.2
	E(S)	15 24.4
AUG 01		
ALQ	EP	09 37 48.0
AUG 01		
H-10 45 02.7		
55.3N 161.8E		
h ABOUT 050KM		
COL	IP	10 50 33.7
HHM	E(P)	10 53 49.0
BOZ	E(P)	10 54 14.0
EUR	IP	10 54 28.3
	IpP	54 39.0
FGU	EP	10 54 42.3
TUC	IP	10 55 24.0
ALQ	IP	10 55 26.5
HON	E(S)	10 59 53.0
	EL	11 03 38.0
AUG 01		
EUR	EP	12 31 33.8
COL	IP	12 31 53.8
GUA	IP	12 32 15.2
AUG 01		
BHP	IP	12 44 18.0
	IS	45 46.0
COL	E(P)	12 50 27.0
AUG 01		
EUR	EP	12 54 11.7
	I	54 24.0
TUC	IP	12 54 12.3
ALQ	EP	12 54 33.0
AUG 01		
COL	EP	13 16 33.0
AUG 01		
ALQ	EP	13 34 49.0
FGU	E(P)	13 35 38.2
AUG 01		
KIP	ET	13 41 02.0
AUG 01		
COL	EP	14 34 48.0
AUG 01		
H-14 46 39.8		
58.3N 151.9W		
h ABOUT 040KM		
COL	EP	14 48 20.3
	E(S)	49 32.0
	E(L)	50 24.0
EUR	IP	14 52 44.4
FGU	I(P)	14 53 02.9
TUC	IP	14 53 55.0
AUG 01		
EUR	EP	14 55 46.9
AUG 01		
TUC	E(P)	14 58 38.3
EUR	EP	14 58 42.4
	E(S)	59 49.9
AUG 01		
H-15 20 55.9		
29.8S 177.2W		
h ABOUT 059KM		
TUC	EP	15 33 41.0
EUR	EP	15 33 47.9
ALQ	IP	15 34 03.0
COL	EP	15 34 23.0
HON	E(S)	15 40 22.0
	EL	44 47.0
AUG 01		
BHP	EP	17 00 33.0
	ES	02 18.0
COL	IP	17 10 02.0
AUG 01		
TUC	IP	17 09 43.0
EUR	EP	17 09 43.5
AUG 01		
COL	EP	17 34 15.0
EUR	EP	17 34 15.1
AUG 01		
H-18 22 53.2		
42.3N 142.2E		
h ABOUT 026KM		
COL	EP	18 31 03.9
EUR	EP	18 34 18.3
AUG 01		
H-18 30 26.3		
15.0S 071.8W		
h ABOUT 100KM		
EUR	EP	18 41 16.9
	EpP	41 41.2
AUG 01		
ALQ	IP	18 59 53.5
AUG 01		
H-19 59 02.6		
44.3N 085.8E		
h ABOUT 033KM		
COL	EP	20 09 29.0
	E	10 07.0
EUR	EP	20 12 20.3
AUG 01		
BHP	IP	20 04 59.0
	IS	05 33.0
TUC	IP	20 10 39.2
ALQ	EP	20 11 10.0
AUG 01		
H-20 53 58.3		
17.6S 178.9W		
h ABOUT 526KM		
EUR	E(P)	21 05 21.6
AUG 01		
FGU	EP	21 23 02.1
	ES	23 30.1
AUG 01		
ALQ	EP	21 36 52.0
AUG 01		
H-21 43 08.6		
52.1N 173.2E		
h ABOUT 090KM		
COL	IP	21 48 12.5
TUC	E(P)	21 52 45.8
EUR	IP	21 51 48.4
	I	51 52.4
AUG 01		
ALQ	EP	22 48 29.9
AUG 01		
TUC	EP	22 52 12.5
AUG 02		
EUR	E(P)	00 39 57.7
	E(S)	40 49.2
AUG 02		
CSC	EP	00 40 48.0
	IS	41 24.0
AUG 02		
ALQ	IP	01 05 21.8

Date and Station	Phase (GCT)
	h m s
AUG 02	
FGU EP	01 07 15.9
ES	07 41.5
AUG 02	
ALQ E(P)	01 14 17.5
AUG 02	
ALQ EP	01 27 10.5
AUG 02	
EUR EP	03 43 00.5
AUG 02	
BUT EP	04 02 22.1
E	03 50.1
AUG 02	
COL EP	04 14 02.0
AUG 02	
H-05 44 36.5	
31.4N 131.6E	
h ABOUT 022KM	
EUR EP	05 57 14.2
AUG 02	
TUC E(P)	06 13 29.0
AUG 02	
ALQ E(P)	06 28 49.1
AUG 02	
H-09 07 18.0	
56.2N 034.1W	
h ABOUT 041KM	
HHM E(P)	09 15 39.0
COL EP	09 16 04.0
FGU I(P)	09 16 06.5
ALQ EP	09 16 22.7
EUR EP	09 16 41.1
TUC EP	09 16 58.5
AUG 02	
H-09 13 46.8	
56.3N 034.5W	
h ABOUT 033KM	
FGU E(P)	09 22 30.3
COL EP	09 22 32.0
ALQ EP	09 22 55.0
EUR EP	09 23 11.1
TUC E(P)	09 23 26.5
AUG 02	
TUC E(P)	09 28 49.0
AUG 02	
H-09 45 42.0	
43.4N 114.5W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
EUR IP	09 46 44.5
I(S)	47 39.0
FGU E(P)	09 47 02.3
E	47 10.1
E(S)	48 13.8
HHM E(P)	09 47 14.0
I	48 20.0
AUG 02	
FGU EP	10 19 03.0
E	19 24.2
AUG 02	
H-10 20 39.7	
26.8N 141.3E	
h ABOUT 109KM	
COL EP	10 30 23.0
EUR IP	10 32 51.6
FGU E(P)	10 33 03.5
ALQ EP	10 33 35.2
AUG 02	
FGU E(P)	10 47 13.2
E(S)	47 36.2
AUG 02	
H-12 49 35.4	
57.5N 038.5W	
h ABOUT 033KM	
COL EP	12 58 02.0
EUR E(P)	12 58 39.9
AUG 02	
COL IP	12 51 42.0
AUG 02	
H-14 28 35.7	
11.8N 089.5W	
h ABOUT 033KM	
EUR EP	14 35 37.4
AUG 02	
BHP IP	16 21 52.0
IS	22 35.0
AUG 02	
H-19 26 26.0	
6.0N 125.1E	
h ABOUT 118KM	
EUR EP'	19 44 35.1
E	45 10.6
AUG 02	
HHM EP	20 08 26.9
IS	08 47.9
AUG 02	
BHP IP	20 40 44.0
IS	41 23.0
AUG 02	
FGU IP	21 18 26.5
IS	18 53.7

Date and Station	Phase (GCT)
	h m s
AUG 02	
HHM E(P)	21 50 38.9
ES	51 14.9
AUG 02	
TUC EP	21 57 00.6
AUG 02	
H-22 17 25.6	
40.5N 125.1W	
h ABOUT 033KM	
UKI EP	22 17 55.7
ES	18 15.7
HHM EP	22 20 05.7
FGU EP	22 20 14.9
AUG 02	
TUC EP	22 53 29.2
AUG 02	
GCA EP	23 07 16.8
AUG 02	
FGU IP	23 12 38.9
IS	13 11.4
AUG 02	
SLC EP	23 17 47.2
IS	18 15.6
AUG 02	
SLC IP	23 42 11.1
IS	42 36.6
FGU IP	23 42 41.9
I(S)	43 04.4
I	46 37.2
EUR E(P)	23 42 54.7
E(S)	43 36.2
AUG 03	
GCA IP	00 24 50.5
AUG 03	
CSC EP	00 40 48.0
I	41 24.0
ALQ E(P)	00 41 26.0
EUR EP	00 42 40.5
AUG 03	
H-01 09 56.1	
08.8S 108.3W	
h ABOUT 033KM	
FGU E(P)	01 18 38.6
EUR EP	01 18 41.8
COL E(P)	01 22 03.0
AUG 03	
H-01 23 16.7	
44.9N 115.4W	
h ABOUT 033KM	
BUT EP	01 23 52.4
IS	24 22.4

Date and Station	Phase (GCT)
	h m s
HHM EP	01 24 10.9
IS	24 50.9
IL	25 15.0
EUR I(P)	01 24 38.3
I(S)	25 36.3
FGU E(P)	01 24 45.3
E	26 07.3
AUG 03	
EUR E(P)	01 24 18.8
AUG 03	
H-03 48 06.4	
07.6S 156.8E	
h ABOUT 402KM	
COL IP	03 59 47.4
IpP	04 01 18.0
SIT EP	03 59 58.0
EpP	04 01 32.5
EUR IP	04 00 35.5
EPKKP	16 58.3
BCN EP	04 00 38.5
EpP	02 09.5
HHM EP	04 00 44.9
IpP	02 21.9
FGU IP	04 00 58.9
IpP	02 35.2
AUG 03	
H-06 28 02.5	
06.7S. 147.5E	
h ABOUT 083KM	
COL E(P)	06 40 37.0
AUG 03	
BHP IP	06 43 29.0
IS	44 09.0
AUG 03	
H-10 21 36.6	
07.7N 035.8W	
h ABOUT 033KM	
SJP IP	10 27 56.0
BHP IP	10 29 36.0
IS	36 07.0
PHI IP	10 30 13.5
IPP	32 15.0
IS	37 10.5
WAS IP	10 30 15.0
IS	37 27.0
IL	41 39.0
CSC EP D	10 30 23.2
ES	37 32.0
EL	42 06.0
ALQ IP	10 32 45.1
FGU IP	10 33 02.5
TUC IP	10 33 06.0

Date and Station	Phase	Phase (GCT) h m s
TUC	P	10 33 08.0
GCA	IP	10 33 12.0
BOZ	EP	10 33 12.1
	ES	42 21.0
SLC	IP	10 33 13.7
	IS	42 49.2
BUT	IP	10 33 18.4
	IS	42 58.1
HHM	IP	10 33 24.4
	ES	43 07.9
BCN	IP	10 33 27.2
	EPP	36 20.9
	P'P'	11 00 48.4
	EP'P'P	20 35.4
EUR	IP	10 33 31.8
	EP'P'	11 00 50.8
	EP'P'P'	20 30.8
UKI	EP	10 34 03.2
SIT	EP	10 34 30.0
	ESKS	45 00.2
	ES	45 20.0
COL	IP	10 34 43.4
	EPP	38 25.0
	ESKS	45 16.0
HON	EPP	10 41 25.0
	ESKS	47 17.0
	ESKKS	48 32.0
	IPS	51 04.0
	IPPS	52 22.0
	ESS	57 32.0
	ESSS	11 01 30.0
	EL	09 12.0
	E	58 04.0
KIP	EPP	10 41 26.0
	ISKS	47 16.0
	ESKKS	48 13.0
	IPS	51 08.0
	IPPS	52 22.0
	ESS	57 34.0
	ESSS	11 01 30.0
	EL	10 08 50.0
AUG 03		
BHP	IP	10 22 29.0
	IS	23 13.0
AUG 03		
H-10 34 25.7		
7.8N 035.9W		
h ABOUT 033KM		
ALQ	IP	10 45 35.2
TUC	IP	10 45 55.1
BCN	EP	10 46 17.2
EUR	E(P)	10 46 20.8
AUG 03		
HHM	EP	12 51 32.9
AUG 03		
ALQ	EP	13 06 44.0
AUG 03		
CSC	E(P)	14 42 29.0
AUG 03		
BCN	EP	15 16 26.7
	ES	16 53.7
TUC	E(P)	15 17 03.0
	E	17 19.7
AUG 03		
BCN	EP	15 21 39.2
	EL	22 07.7
AUG 03		
BCN	EP	15 37 30.2
	EL	37 58.2
AUG 03		
H-16 29 35.8		
52.0N 174.3W		
h ABOUT 033KM		
COL	EP	16 33 56.0
SIT	EP	16 34 42.3
	E	34 55.0
HHM	EP	16 36 50.9
BOZ	E(P)	16 37 10.0
FGU	E(P)	16 37 46.4
BCN	E(P)	16 37 54.2
ALQ	E(P)	16 38 29.2
CSC	E(P)	16 40 21.0
AUG 03		
HHM	E(P)	18 04 07.0
	ES	04 43.9
AUG 03		
ALQ	E(P)	19 19 29.5
AUG 03		
BHP	IP	19 45 19.0
	IS	46 02.0
AUG 03		
H-20 07 19.9		
01.4N 028.2W		
h ABOUT 033KM		
HHM	E(P)	20 19 58.0
EUR	E(P)	20 20 11.5
AUG 03		
H-20 26 04.1		
30.7S 178.3W		
h ABOUT 037KM		
KIP	IP	20 35 36.9
	E(S)	43 20.0
	EL	51 13.0
TUC	IP	20 38 58.0
	EPKKP	56 34.0
BCN	IP	20 38 58.4
EUR	IP	20 39 04.0
	EPKKP	56 27.0
GCA	EP	20 39 10.1
ALQ	IP	20 39 19.0
FGU	E(P)	20 39 26.2
COL	EP	20 39 37.2
HON	E(S)	20 43 20.0
	EL	51 11.0
AUG 03		
HHM	EP	20 56 12.9
AUG 03		
BHP	IP	23 13 46.0
	IS	14 21.0
BCN	IP	23 14 39.1
	IS	14 51.1
AUG 03		
SLC	IP	23 32 53.6
	IS	33 15.0
FGU	IP	23 33 24.3
AUG 04		
H-02 13 50.6		
42.6S 083.4W		
h ABOUT 033KM		
TUC	IP	02 25 51.0
ALQ	IP	02 25 53.9
BCN	EP	02 26 17.5
FGU	E(P)	02 26 31.5
EUR	EP	02 26 34.0
AUG 04		
H-05 40 08.2		
46.4N 153.4E		
h ABOUT 033KM		
COL	EP	05 47 05.5
	IPP	48 15.0
AUG 04		
TUC	E(P)	07 00 45.0
	E	00 49.6
ALQ	EP	07 00 48.0
EUR	EP	07 01 32.6
AUG 04		
H-07 08 47.1		
09.4S 114.2E		
h ABOUT 117KM		
COL	EP	07 22 27.0
	E	23 35.0
HHM	EP'	07 27 35.9
BUT	EP'	07 27 39.6
	IPP'	27 58.6
EUR	EP'	07 27 39.9
BOZ	EP'	07 27 40.0
BCN	EP'	07 27 42.9
	IPP'	28 05.1
TUC	EP'	07 27 43.0
	ISKP	31 12.2
ALQ	EP'	07 27 57.5
	IPP'	28 19.0
	ISKP	31 20.9
CSC	EP'	07 28 28.0
AUG 04		
FGU	EP	07 27 18.9
AUG 04		
GCA	EP	07 31 04.3
AUG 04		
H-09 13 17.8		
22.6S 173.4E		
h ABOUT 072KM		
BCN	EP	09 26 09.7
EUR	EP	09 26 12.3
TUC	EP	09 26 14.5
COL	EP	09 26 19.0
GCA	EP	09 26 22.9
ALQ	EP	09 26 34.0
AUG 04		
COL	EP	11 14 39.0
AUG 04		
BOZ	E(P)	11 37 41.0
	E(S)	38 06.0
BUT	EP	11 37 57.7
	I	38 03.7
	ES	38 22.7
FGU	EP	11 38 49.2
AUG 04		
HHM	EP	11 38 50.9
	ES	39 40.9
EUR	EP	11 39 36.6
AUG 04		
H-11 43 20.3		
35.7N 140.1E		
h ABOUT 068KM		
HHM	EP	11 54 46.9
BUT	EP	11 54 59.7
EUR	EP	11 55 10.1
FGU	E(P)	11 55 22.2
	I	55 27.2

Date and Station	Phase (GCT)
	h m s
BCN EP	11 55 26.3
TUC EP	11 55 49.6
ALQ IP	11 55 56.0
AUG 04	
H-12 07 24.4	
4.1S 080.9W	
h ABOUT 034KM	
BHP IP	12 10 31.0
SJP IP	12 13 02.0
CSC EP	12 14 40.0
ALQ IP	12 15 44.9
TUC IP	12 15 45.4
I▸P	15 55.5
GCA EP	12 16 17.9
BCN EP	12 16 26.2
E▸P	16 35.2
FGU I(P)	12 16 31.2
SLC E(P)	12 16 38.2
EUR EP	12 16 48.1
BOZ EP	12 17 05.0
COL EP	12 19 52.0
AUG 04	
H-13 00 44.7	
12.6N 143.8E	
h ABOUT 061KM	
GUA IP	13 01 10.0
COL IP	13 11 47.8
I▸P	12 05.0
HHM EP	13 13 33.8
EUR EP	13 13 39.2
BCN EP	13 13 48.7
AUG 04	
CSC EP	13 13 18.0
AUG 04	
H-13 25 52.3	
22.8S 112.6W	
h ABOUT 033KM	
ALQ EP	13 35 43.0
BCN EP	13 35 51.2
EUR EP	13 36 14.7
AUG 04	
BOZ E(P)	14 30 00.0
BUT EP	14 30 11.7
ES	31 28.7

Date and Station	Phase (GCT)
	h m s
AUG 04	
BHP IP	15 16 27.0
IS	17 08.0
AUG 04	
H-15 19 50.5	
26.6S 176.8W	
h ABOUT 033KM	
TUC IP	15 32 29.4
AUG 04	
BHP IP	18 09 54.0
IS	10 28.0
AUG 04	
ALQ IP	21 31 30.0
AUG 04	
H-21 40 52.4	
05.2S 145.9E	
h ABOUT 059KM	
COL IP	21 53 21.7
AUG 04	
COL IP	21 41 50.4
E	44 04.0
I	44 47.0
AUG 04	
COL EP	21 44 47.0
EUR EP	21 48 20.4
AUG 04	
TUC E(P)	22 02 00.0
AUG 04	
SLC E(P)	22 34 17.2
AUG 04	
SLC EP	22 39 52.8
ES	40 20.7
AUG 04	
BOZ EP	23 30 36.0
AUG 04	
H-23 54 14.0	
17.5S 179.1W	
h ABOUT 515KM	
HON EP	24 01 36.0
E&PP	05 54.0
IS	07 30.0
E&S	10 18.0
E	15 12.0
KIP IP	24 01 36.0
BCN EP	24 05 36.5
E▸P	07 30.9
EPP	08 46.4
EP'P'	32 20.8
EUR EP	24 05 39.4
I▸P	07 33.8
I(sP)	08 29.0
EPP	08 53.5
ES	15 12.2
E	32 04.0

Date and Station	Phase (GCT)
	h m s
TUC IP	24 05 41.9
I▸P	07 37.0
COL IP	24 05 56.9
I▸P	07 54.0
ES	15 43.0
ALQ EP	24 06 03.0
I▸P	07 58.1
FGU I(P)	24 06 05.3
E▸P	08 01.8
BUT IP	24 06 05.9
E(▸P)	08 08.0
HHM IP	24 06 06.8
EP'P'	32 40.5
AUG 05	
HHM EP	00 23 53.8
AUG 05	
H-02 48 41.5	
17.2N 099.8W	
h ABOUT 033KM	
ALQ IP	02 52 59.9
I	53 15.9
BCN EP	02 53 46.3
FGU EP	02 54 06.2
EUR EP	02 54 16.9
COL EP	02 58 28.7
AUG 05	
COL EP	03 45 44.2
AUG 05	
SJP IP	04 22 46.5
FGU EP	04 29 34.1
AUG 05	
BOZ E(P)	04 47 41.0
AUG 05	
BOZ EP	05 20 44.0
ES	20 55.0
BUT EP	05 20 52.9
IS	21 09.9
FGU E(P)	05 21 37.5
E	22 41.5
AUG 05	
COL EP	06 48 18.5
AUG 05	
H-07 41 37.9	
27.2S 178.0W	
h ABOUT 033KM	
EUR EP	07 54 23.0
E	54 50.3
ALQ EP	07 54 42.8
COL E(P)	07 55 58.6

Date and Station	Phase (GCT)
	h m s
AUG 05	
BCN EP	07 54 47.1
AUG 05	
H-08 46 59.7	
09.9S 079.0W	
h ABOUT 031KM	
SJP IP	08 53 15.0
IPP	54 12.0
CSC E(P)	08 55 14.0
ALQ IP	08 56 06.8
E▸P	56 18.1
TUC EP	08 56 07.5
BCN E(P)	08 56 45.1
E	56 54.1
FGU IP	08 56 50.9
EUR IP	08 57 05.9
I▸P	57 18.4
BUT EP	08 57 25.8
HHM E(P)	08 57 56.1
IPCP	58 18.2
COL EP	08 59 57.3
I▸P	09 00 09.0
AUG 05	
ALQ EP	08 55 19.6
BCN E(P)	08 55 48.8
FGU E(P)	08 55 58.2
I	56 50.9
I	57 03.4
EUR EP	08 56 11.8
AUG 05	
COL IP	09 24 09.3
AUG 05	
FGU I(P)	09 36 01.2
AUG 05	
FGU E(P)	10 33 41.3
ES	34 12.3
AUG 05	
FGU I(P)	13 40 26.2
AUG 05	
FGU IP	13 44 12.2
ES	44 37.5
AUG 05	
H-15 39 07.0	
60.7S 154.3E	
h ABOUT 033KM	
EUR EP'	15 58 12.0
HHM EP'	15 58 18.2
COL EP'	15 58 18.4

Date and Station	Phase	(GCT) h m s
HON	ES	16 02 48.0
	E	03 12.0
	EPPS	04 18.0
	ESS	08 27.0
	EL	15 51.0
KIP	ES	16 02 50.0
	E	03 12.0
	EPPS	04 21.0
	ESS	08 40.0
	EL	15 54.0
AUG 05		
EUR	EP	18 56 31.2
AUG 05		
H-20 05 06.3		
37.0N 095.8E		
h ABOUT 033KM		
COL	EP	20 15 56.4
HHM	IP	20 18 08.7
AUG 05		
EUR	EP	21 33 27.8
	IS	33 50.8
AUG 05		
SLC	E(P)	23 10 41.5
	E	11 09.5
	I	12 32.0
	I	12 50.0
AUG 06		
BHP	IP	03 13 26.0
	IS	14 07.0
AUG 06		
HHM	E(P)	04 48 30.2
AUG 06		
H-05 20 32.0		
45.1N 111.4W		
h ABOUT 033KM		
HHM	E(P)	05 21 29.2
	I	21 38.7
	ES	22 27.2
FGU	EP	05 21 36.8
	E(S)	22 40.1
EUR	E(P)	05 22 11.0
	EL	23 45.0
AUG 06		
COL	EP	05 28 51.2
	I	29 50.0
AUG 06		
COL	EP	05 32 10.8
	I	33 10.0
AUG 06		
COL	EP	05 45 38.0
	I	45 37.0
AUG 06		
COL	EP	07 02 48.9
AUG 06		
COL	EP	07 03 23.8
	I	04 23.0

Date and Station	Phase	(GCT) h m s
AUG 06		
COL	EP	07 31 38.1
	I	32 37.0
AUG 06		
H-09 28 30.0		
38.1S 072.3W		
h ABOUT 096KM		
TUC	EP	09 40 23.0
ALQ	IP	09 40 26.2
	IPCP	40 33.0
	IPP	40 40.9
	E	40 51.8
BCN	EP	09 40 49.7
FGU	I(P)	09 41 00.2
EUR	IP	09 41 06.3
AUG 06		
TUC	IP	11 46 06.0
AUG 06		
COL	EP	11 54 04.0
	I	55 04.0
AUG 06		
COL	EP	13 21 29.8
	I	22 29.0
AUG 06		
H-13 36 35.6		
57.0N 033.6W		
h ABOUT 033KM		
WAS	EP	13 43 12.0
	EL	56 09.0
CSC	E(P)	13 44 03.0
HHM	EP	13 45 02.7
BOZ	EP	13 45 07.0
COL	EP	13 45 17.3
	I	45 31.0
FGU	I(P)	13 45 25.4
SLC	EP	13 45 35.1
ALQ	IP	13 45 47.0
	EPP	47 41.0
EUR	EP	13 45 59.4
BCN	EP	13 46 14.0
TUC	EP	13 46 18.0
HON	E(S)	14 01 20.0
	E	10 10.0
	EL	18 18.0
KIP	E(S)	14 01 36.0
	EL	18 37.0
AUG 06		
FGU	IP	13 49 11.4
	ES	49 34.9

Date and Station	Phase	(GCT) h m s
AUG 06		
BHP	IP	15 04 21.0
	IS	05 02.0
AUG 06		
COL	EP	16 45 01.0
	E	45 58.0
EUR	E(P)	16 46 51.7
	E	47 06.2
	E(S)	48 04.7
AUG 06		
EUR	E(P)	18 37 47.4
	E	38 06.9
AUG 06		
EUR	EP	19 01 47.4
COL	IP	19 02 40.6
AUG 06		
EUR	EP	19 02 21.1
AUG 06		
EUR	EP	19 49 45.5
	E(L)	50 34.5
AUG 06		
FGU	EP	20 19 38.6
	ES	19 57.4
AUG 06		
H-20 40 10.2		
53.9N 160.7E		
h ABOUT 140KM		
COL	E(P)	20 45 59.7
EUR	EP	20 49 34.6
AUG 06		
TUC	IP	22 39 13.5
AUG 06		
ALQ	EP	22 57 46.9
AUG 06		
TUC	IP	22 59 04.6
AUG 06		
SLC	E(P)	23 07 06.4
	E(S)	07 31.2
AUG 06		
H-23 38 46.3		
33.7N 116.7W		
h ABOUT 14KM		
TUC	E(P)	23 40 04.0
	ES	41 03.0
TUC	EP	23 40 04.5
	ES	41 04.0
GCA	EP	23 40 07.8
EUR	IP	23 40 13.8
	I(S)	41 13.3
AUG 06		
BHP	IP	23 42 47.0
	IS	43 22.0

Date and Station	Phase	(GCT) h m s
AUG 07		
EUR	IP	03 03 12.7
	IS	03 36.7
AUG 07		
H-04 26 23.4		
21.8S 173.5E		
h ABOUT 106KM		
EUR	EP	04 39 12.0
COL	EP	04 39 18.0
GCA	EP	04 39 22.2
ALQ	EP	04 39 34.0
AUG 07		
H-04 33 42.7		
54.0N 142.1E		
h ABOUT 033KM		
COL	EP	04 40 35.6
KIP	E(P)	04 42 40.0
	E(S)	49 34.0
HON	E(P)	04 42 45.0
	E	46 16.0
	E(S)	49 34.0
HHM	EP	04 43 27.0
EUR	IP	04 44 23.6
FGU	I(P)	04 44 36.9
TUC	IP'	04 45 14.0
ALQ	IP'	04 45 14.0
AUG 07		
ALQ	IP	05 55 15.0
EUR	E(P)	05 56 01.5
AUG 07		
H-07 17 25.8		
07.5N 037.2W		
h ABOUT 033KM		
ALQ	E(P)	07 27 31.2
	E	28 26.7
FGU	E(P)	07 28 42.3
HHM	EP	07 29 08.0
EUR	EP	07 29 14.7
	E(PP)	32 09.1
TUC	E(P)	07 29 49.0
AUG 07		
EUR	EP	07 27 16.4
AUG 07		
TUC	E(P)	09 00 05.5
AUG 07		
H-09 35 38.2		
14.6N 091.3W		
h ABOUT 245KM		

Date and Station	Phase (GCT)
	h m s
ALQ E(P)	09 40 34.0
E	41 12.2
EUR EP	09 41 51.7
AUG 07	
TUC E	09 45 19.2
AUG 07	
H-11 15 07.6	
20.0S 178.3W	
h ABOUT 600KM	
EUR IP	11 26 31.8
EpP	28 36.3
E(PP)	29 56.5
TUC IP	11 26 32.9
I	28 14.8
COL IP	11 26 53.0
IpP	29 02.0
ALQ IP	11 26 53.9
E	28 34.5
AUG 07	
H-11 16 48.6	
20.1S 178.4W	
h ABOUT 600KM	
EUR E(P)	11 27 14.2
EUR EP	11 28 14.0
COL IP	11 28 34.5
IpP	30 43.0
AUG 07	
BOZ E(P)	12 54 50.0
AUG 07	
H-13 10 41.6	
53.3N 164.1E	
h ABOUT 033KM	
COL EP	13 16 18.0
EUR EP	13 20 05.7
AUG 07	
COL IP	13 51 12.8
AUG 07	
EUR EP	14 07 05.3
AUG 07	
EUR EP	14 17 17.8
AUG 07	
H-15 38 58.7	
21.2S 177.8W	
h ABOUT 352KM	
EUR EP	15 50 49.6
AUG 07	
CSC EP	16 58 12.0
AUG 07	
H-17 13 18.4	
56.1S 027.0W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
EUR EP'	17 32 10.0
COL IP'	17 33 04.3
AUG 07	
FGU IP	17 38 42.1
IS	38 59.9
AUG 07	
TUC E(P)	18 04 23.0
AUG 07	
TUC EP	18 13 02.0
AUG 07	
TUC EP	18 20 55.5
ALQ EP	18 21 59.0
BCN E(P)	18 22 11.5
EL	23 27.0
EUR E(P)	18 22 26.7
AUG 07	
FGU IP	18 34 57.0
IS	35 27.2
AUG 07	
H-18 36 46.6	
13.6N 090.9W	
h ABOUT 067KM	
CSC EP	18 41 40.0
ALQ IP	18 42 11.8
I	42 21.0
IPP	45 43.0
TUC IP	18 42 16.9
GCA EP	18 42 51.4
BCN EP	18 43 02.3
EPCP	45 58.0
FGU IP	18 43 07.9
WAS E(P)	18 43 12.0
E(S)	47 38.0
EL	54 06.0
SLC EP	18 43 16.1
EUR IP	18 43 27.5
EPCP	46 03.5
BOZ EP	18 43 46.0
HHM EP	18 44 13.0
EPCP	46 20.0
COL IP	18 47 15.0
I	47 25.0
I	47 49.0
AUG 07	
ALQ IP	20 48 39.3
EUR E(P)	20 49 34.1
AUG 07	
BHP IP	21 43 06.0
IS	43 43.0

Date and Station	Phase (GCT)
	h m s
AUG 07	
EUR EP	22 57 26.5
AUG 07	
SLC E(P)	23 05 19.9
E(S)	05 36.9
AUG 07	
SLC E(P)	23 11 57.4
E	12 58.9
E(S)	13 27.4
AUG 07	
FGU EP	23 42 11.5
I	42 13.2
ES	42 38.4
SLC IP	23 42 16.9
IS	42 34.9
EUR EP	23 43 00.5
I(S)	43 42.2
AUG 08	
BOZ EP	02 03 46.9
AUG 08	
H-02 14 54.4	
54.2N 168.1E	
h ABOUT 033KM	
COL EP	02 20 08.0
IS	24 24.0
KIP IP	02 22 41.3
IpP	22 51.0
HON EP	02 22 42.0
ES	29 00.0
HHM IP	02 23 21.8
ES	30 08.0
BUT E(P)	02 23 27.1
EUR IP	02 23 58.4
EPCS	29 06.2
ES	31 36.7
EP'P'	54 26.4
SLC IP	02 24 09.3
FGU I(P)	02 24 17.4
BCN IP	02 24 21.6
EPP	26 28.6
E	28 20.6
GCA IP	02 24 29.5
TUC IP	02 24 56.0
ALQ IP	02 25 00.0
WAS EP	02 26 16.5
CSC EP	02 26 29.0
ES	35 58.0
SJP IP	02 28 12.0
AUG 08	
ALQ EP	02 54 31.0

Date and Station	Phase (GCT)
	h m s
TUC EP	02 54 33.7
AUG 08	
H-03 09 51.7	
29.8N 138.8E	
h ABOUT 458KM	
COL EP	03 18 49.0
EUR EP	03 21 24.7
AUG 08	
HHM EP	06 08 58.1
AUG 08	
EUR EP	06 21 33.5
AUG 08	
EUR EP	06 34 42.1
HHM EP	06 34 43.1
AUG 08	
FGU EP	07 17 16.0
AUG 08	
COL EP	07 45 33.0
E	45 43.0
AUG 08	
ALQ EP	08 37 36.8
AUG 08	
H-09 54 37.4	
44.9N 111.1W	
h ABOUT 033KM	
BOZ EP	09 54 53.0
ES	55 05.0
BUT EP	09 55 01.9
HHM E(P)	09 55 38.2
I	55 47.5
ES	56 39.2
FGU E(P)	09 55 40.1
E	55 49.9
EUR E(P)	09 56 21.7
E(L)	57 52.0
AUG 08	
H-10 58 23.1	
35.9S 103.6W	
h ABOUT 033KM	
TUC IP	11 09 21.0
ALQ EP	11 09 36.0
EPCP	09 57.1
BCN EP	11 09 47.0
EPCP	10 08.0
GCA EP	11 09 51.6
EUR EP	11 10 07.6
HHM EP	11 10 57.7

Date and Station	Phase	Phase (GCT) h m s
AUG 08		
H-11 16 11.2		
5.8S 151.0E		
h ABOUT 048KM		
GUA	EP	11 20 41.0
	S	24 30.0
KIP	IP	11 25 53.0
	ES	33 46.0
	EL	39 49.0
HON	EP	11 25 53.0
	E	30 56.0
	ES	33 46.0
	EL	40 02.0
COL	EP	11 28 32.5
EUR	IP	11 29 35.1
	EPP	33 32.4
	EPKKP	46 25.4
HHM	E(P)	11 29 35.2
BCN	EP	11 29 40.0
	EPP	33 32.3
TUC	EP	11 29 53.1
FGU	EP	11 29 57.8
ALQ	EP	11 30 04.5
	EPP	34 24.0
AUG 08		
H-11 41 30.5		
27.3N 129.2E		
h ABOUT 092KM		
COL	EP	11 51 47.0
HHM	EP	11 54 02.2
EUR	EP	11 54 21.8
	EpP	54 41.8
AUG 08		
EUR	EP	12 25 07.5
AUG 08		
H-13 53 42.2		
18.3N 145.3E		
h ABOUT 423KM		
GUA	IP	13 55 03.5
	ES	56 07.0
COL	IP	14 03 31.1
HHM	IP	14 05 25.2
	E(pP)	06 43.2
EUR	EP	14 05 33.3
BCN	IP	14 05 43.9
	EpP	07 26.7
FGU	IP	14 05 53.0
GCA	EP	14 05 53.8
TUC	IP	14 06 04.0
	EpP	07 44.0
ALQ	IP	14 06 14.0
AUG 08		
HHM	EP	14 39 34.2
AUG 08		
TUC	EP	18 06 59.6
AUG 08		
H-19 11 11.2		
32.2N 140.9E		
h ABOUT 077KM		
EUR	EP	19 23 10.2
AUG 08		
TUC	EP	19 38 32.5
EUR	EP	19 38 32.7
AUG 08		
FGU	EP	22 07 05.0
	ES	07 23.5
AUG 08		
TUC	IP	22 52 59.0
AUG 08		
BCN	EP	22 59 43.2
	ES	23 00 10.7
AUG 08		
FGU	IP	23 06 41.9
	IS	07 04.2
AUG 08		
SLC	E(P)	23 11 06.9
	E	12 51.0
	I	13 08.2
AUG 08		
BHP	IP	23 43 03.5
	IS	43 45.0
AUG 08		
H-23 53 21.0		
44.9N 111.0W		
h ABOUT 033KM		
BOZ	IP	23 53 35.0
	IS	53 46.0
BUT	IP	23 53 51.2
	IS	54 07.2
SLC	E(P)	23 54 12.9
	E	54 25.9
	E	55 30.4
HHM	EP	23 54 21.2
	I	54 31.2
	IL	55 27.0
FGU	IP	23 54 24.9
	IS	55 19.9
EUR	EP	23 54 57.5
	E(S)	56 11.0
AUG 09		
ALQ	E(P)	01 00 04.0
EUR	E(P)	01 01 01.0
AUG 09		
H-01 17 37.8		
14.2N 092.3W		
h ABOUT 033KM		
ALQ	EP	01 22 54.4
TUC	EP	01 22 57.9
BCN	EP	01 23 43.8
FGU	I(P)	01 23 50.9
EUR	EP	01 24 09.8
COL	EP	01 28 02.5
AUG 09		
EUR	EP	01 53 01.5
AUG 09		
BCN	IP	02 01 12.4
	IS	01 27.4
GCA	E(P)	02 01 45.3
	E(S)	02 21.5
EUR	EP	02 02 07.1
	E(S)	03 01.0
AUG 09		
ALQ	E(P)	02 23 08.8
	E	25 18.0
AUG 09		
EUR	IP	02 34 02.9
	EL	35 45.5
AUG 09		
FGU	EP	04 14 56.8
	ES	15 21.7
AUG 09		
H-06 05 32.2		
44.5N 011.9E		
h ABOUT 033KM		
CSC	E(P)	06 16 34.0
COL	EP	06 16 40.0
HHM	EP	06 17 18.3
	I	17 25.3
FGU	I(P)	06 17 39.7
ALQ	IP	06 17 57.0
EUR	EP	06 18 01.5
GCA	EP	06 18 02.5
BCN	E(P)	06 18 15.1
TUC	EP	06 18 17.5
AUG 09		
EUR	E(P)	07 35 52.3
TUC	EP	07 35 52.5
AUG 09		
H-08 42 21.1		
50.6N 157.2E		
h ABOUT 033KM		
COL	IP	08 48 40.5
EUR	IP	08 52 19.9
BCN	EP	08 52 41.0
AUG 09		
TUC	E(P)	08 46 05.0
EUR	E(P)	08 48 00.4
	E	51 28.4
AUG 09		
ALQ	E(P)	08 47 16.4
	E	53 16.0
AUG 09		
FGU	E(P)	08 51 54.7
AUG 09		
H-10 10 18.2		
21.6S 171.1E		
h ABOUT 153KM		
COL	EP	10 23 11.5
	EpP	23 54.0
AUG 09		
EUR	EP	10 23 51.0
AUG 09		
COL	IP	10 58 16.8
AUG 09		
SJP	IP	11 23 10.0
	E(S)	24 13.0
AUG 09		
H-12 20 02.2		
51.6N 178.8W		
h ABOUT 033KM		
COL	EP	12 24 42.5
	I	24 45.0
HHM	EP	12 27 40.3
EUR	IP	12 28 11.8
FGU	EP	12 28 35.6
BCN	EP	12 28 38.3
TUC	EP	12 29 10.5
ALQ	EP	12 29 17.1
AUG 09		
H-14 36 45.9		
15.3S 175.7W		
h ABOUT 033KM		
HON	EP	14 44 22.0
	EPP	46 02.0
	IS	50 36.0
	EL	52 55.0
UKI	EP	14 48 15.3

Date and Station	Phase (GCT)
	h m s
BCN EP	14 48 37.7
EUR EP	14 48 42.1
E(PPP)	54 47.1
E	56 13.6
ES	58 41.6
TUC IP	14 48 43.6
GCA IP	14 48 53.0
SLC EP	14 49 00.7
COL IP	14 49 06.5
EPP	52 18.0
ES	59 26.0
FGU I(P)	14 49 10.5
HHM EP	14 49 12.3
BOZ IP	14 49 16.2
AUG 09	
HHM EP	14 39 30.3
AUG 09	
COL E(P)	15 09 34.0
I	09 44.0
AUG 09	
H-15 12 57.0	
3.0S 152.3E	
h ABOUT 143KM	
COL I(P)	15 24 44.5
EUR E(P)	15 25 50.6
AUG 09	
SLC IP	15 29 28.2
IS	29 50.3
FGU IP	15 30 00.9
IS	30 21.5
EUR EP	15 30 12.1
ES	30 52.6
AUG 09	
TUC IP	17 05 26.2
ALQ EP	17 05 52.0
AUG 09	
HHM E(P)	18 18 33.3
AUG 09	
EUR EP	19 08 34.3
AUG 09	
FGU EP	19 18 28.8
IS	18 49.3
AUG 09	
H-20 29 58.2	
36.9S 071.5W	
h ABOUT 186KM	
ALQ E(P)	20 41 41.0
EUR EP	20 42 20.0

Date and Station	Phase (GCT)
	h m s
AUG 09	
TUC EP	21 53 10.0
EUR EP	21 53 13.8
AUG 09	
TUC EP	21 58 30.0
AUG 09	
FGU EP	22 37 58.2
ES	38 14.0
AUG 09	
TUC EP	22 56 29.0
AUG 09	
ALQ E(P)	23 00 22.0
AUG 09	
TUC E(P)	23 36 36.8
EUR EP	23 37 33.9
AUG 10	
EUR EP	00 09 16.4
AUG 10	
H-02 36 39.8	
15.6S 175.0W	
h ABOUT 033KM	
EUR E(P)	02 48 35.5
TUC EP	02 48 37.8
COL IP	02 49 00.0
AUG 10	
H-03 34 44.5	
27.3S 176.6W	
h ABOUT 140KM	
TUC IP	03 47 13.0
IPP	47 42.0
EUR EP	03 47 15.6
EPP	47 45.1
ALQ EP	03 47 33.0
COL EP	03 47 46.5
AUG 10	
H-04 27 33.5	
28.1N 053.3E	
h ABOUT 046KM	
COL IP	04 40 10.0
I	40 21.0
EUR EP	04 46 25.0
AUG 10	
SJP EP	04 29 58.1
AUG 10	
ALQ E(P)	07 22 52.0
AUG 10	
EUR EP	08 30 34.2
FGU EP	08 30 46.3
ALQ EP	08 31 04.0

Date and Station	Phase (GCT)
	h m s
AUG 10	
BOZ E(P)	11 44 48.1
AUG 10	
H-13 17 47.1	
24.7N 142.7E	
h ABOUT 033KM	
COL EP	13 27 46.1
HHM EP	13 29 56.5
EUR IP	13 30 10.0
E	30 30.0
SLC EP	13 30 21.2
BCN EP	13 30 22.5
FGU I(P)	13 30 28.9
TUC IP	13 30 44.0
ALQ IP	13 30 52.8
AUG 10	
TUC E(P)	14 43 27.9
AUG 10	
TUC E(P)	15 15 07.0
AUG 10	
H-16 05 59.7	
15.0S 179.0W	
h ABOUT 389KM	
BCN EP	16 17 24.3
EUR EP	16 17 28.0
TUC IP	16 17 31.0
GCA EP	16 17 39.0
COL IP	16 17 43.0
AUG 10	
BCN EP	16 29 39.8
EL	30 15.8
EUR EP	16 29 40.8
ES	30 17.5
CSC E(P)	16 29 46.0
AUG 10	
H-17 51 39.6	
03.2S 141.9E	
h ABOUT 088KM	
COL E(P)	18 04 00.0
E	04 25.0
AUG 10	
H-18 07 26.2	
54.4S 132.8W	
h ABOUT 033KM	
TUC EP	18 20 14.2
BCN EP	18 20 30.8
ALQ EP	18 20 31.0

Date and Station	Phase (GCT)
	h m s
EUR E(P)	18 20 45.5
AUG 10	
EUR EP	18 19 36.1
AUG 10	
H-18 37 45.3	
8.8N 082.9W	
h ABOUT 033KM	
BHP IP	18 38 34.0
IS	39 28.0
SJP EP	18 42 08.7
CSC E(P)	18 43 13.0
ALQ E(P)	18 44 27.5
TUC IP	18 44 36.4
EUR E(P)	18 45 38.7
HHM EP	18 46 17.5
COL EP	18 49 04.0
AUG 10	
BHP IP	19 20 20.0
H-06 24 23.9	
41.0N 143.5E	
IS	21 03.5
AUG 10	
EUR EP	19 46 54.2
AUG 10	
EUR EP	20 15 27.7
AUG 10	
ALQ EP	20 37 58.8
AUG 10	
BOZ EP	20 53 39.5
ES	53 49.5
BUT IP	20 53 48.1
IS	54 05.1
HHM E(P)	20 54 26.6
E	54 33.6
ES	55 22.6
FGU EP	20 54 38.1
E	55 33.3
EUR EP	20 55 15.2
AUG 10	
H-21 03 39.2	
49.6N 179.2E	
h ABOUT 033KM	
COL IP	21 08 44.3
EUR EP	21 12 01.2
TUC IP	21 13 01.2
ALQ E(P)	21 13 04.1
AUG 10	
GCA E(P)	21 21 16.1
ES	21 46.6

Date and Station	Phase	Phase (GCT) h m s
AUG 10		
HHM	E(P)	22 13 22.6
	ES	14 01.6
AUG 10		
SLC	E(P)	23 10 26.0
AUG 10		
SLC	E(P)	23 13 36.0
	E	13 45.0
	ES	14 10.5
AUG 10		
GCA	E(P)	23 17 26.0
	E	17 28.2
	I	17 32.2
AUG 10		
HHM	EP	23 44 03.8
	ES	44 27.1
AUG 11		
H-01 34 22.2		
60.5S 154.9E		
h ABOUT 033KM		
HON	E(S)	01 58 24.0
	E	59 38.0
	EL	02 15 24.0
KIP	E(S)	01 58 25.0
	EL	02 15 34.0
AUG 11		
ALQ	EP	03 15 10.0
AUG 11		
H-05 24 00.6		
17.4S 179.0W		
h ABOUT 509KM		
EUR	EP	05 35 25.6
TUC	IP	05 35 28.8
COL	IP	05 35 43.6
ALQ	IP	05 35 50.3
AUG 11		
BCN	E(P)	05 42 32.7
	EL	43 09.8
AUG 11		
COL	IP	06 38 14.0
AUG 11		
H-06 30 36.5		
1.0S 078.9W		
h ABOUT 033KM		
ALQ	EP	06 38 45.0
EUR	E(P)	06 39 44.1
AUG 11		
EUR	EP	06 41 23.3
AUG 11		
BOZ	E(P)	07 24 35.0
BUT	EP	07 24 50.7
EUR	EP	07 25 26.2

Date and Station	Phase	Phase (GCT) h m s
AUG 11		
HHM	IP	07 25 36.4
AUG 11		
H-07 37 20.4		
38.8N 140.9E		
h ABOUT 045KM		
COL	IP	07 45 54.8
HHM	IP	07 48 33.9
BOZ	EP	07 48 55.0
EUR	IP	07 48 59.6
FGU	EP	07 49 16.6
BCN	EP	07 49 17.0
TUC	IP	07 49 41.0
ALQ	IP	07 49 47.3
	E	50 13.5
AUG 11		
H-08 43 47.7		
37.1N 055.2E		
h ABOUT 033KM		
COL	EP	08 55 37.0
AUG 11		
H-10 03 05.1		
38.1S 073.1W		
h ABOUT 060KM		
TUC	IP	10 15 00.8
	EPCP	15 07.3
ALQ	IP	10 15 04.5
	IPCP	15 11.5
GCA	EP	10 15 26.0
BCN	EP	10 15 27.9
FGU	E(P)	10 15 38.5
EUR	IP	10 15 44.1
HHM	EP	10 16 15.6
COL	IP	10 17 09.4
AUG 11		
HHM	EP	10 18 18.4
	E	18 45.6
AUG 11		
BOZ	EP	11 19 37.0
	E	19 47.0
BUT	EP	11 19 46.2
	IS	20 03.2
HHM	E(P)	11 20 21.6
	E	20 32.6
	ES	21 19.6
FGU	E(P)	11 20 38.2
EUR	E(P)	11 21 08.3

Date and Station	Phase	Phase (GCT) h m s
AUG 11		
ALQ	E(P)	11 31 36.3
AUG 11		
H-13 11 50.7		
04.7S 145.4E		
h ABOUT 086KM		
COL	EP	13 24 15.0
AUG 11		
H-14 34 58.3		
53.0N 172.5E		
h ABOUT 033KM		
COL	IP	14 40 03.3
EUR	EP	14 43 46.3
ALQ	EP	14 44 49.5
AUG 11		
BUT	EP	14 49 11.3
AUG 11		
GCA	IP	18 48 40.1
	IS	48 47.9
AUG 11		
GCA	IP	18 52 18.2
	IS	52 47.9
AUG 11		
H-19 40 52.2		
36.2N 071.2E		
h ABOUT 148KM		
ALQ	EP'	20 00 21.1
AUG 12		
EUR	EP	00 02 05.5
AUG 12		
EUR	EP	00 04 33.0
AUG 12		
EUR	EP	00 05 23.0
GCA	EP	00 05 46.1
SLC	E(P)	00 06 10.9
TUC	E(P)	00 06 39.1
FGU	E(P)	00 06 39.1
AUG 12		
BCN	EP	00 20 07.4
AUG 12		
ALQ	E(P)	03 51 04.0
AUG 12		
H-10 10 08.0		
05.7S 131.1E		
h ABOUT 092KM		
ALQ	EP'	10 28 50.0
TUC	E(P')	11 28 37.8
ALQ	EP	11 29 23.0

Date and Station	Phase	Phase (GCT) h m s
AUG 12		
ALQ	EP	12 02 23.0
AUG 12		
BOZ	EP	13 12 04.0
AUG 12		
H-13 06 46.1		
02.1N 090.4W		
h ABOUT 033KM		
TUC	IP	13 13 42.0
	ES	19 04.8
ALQ	IP	13 13 45.2
BCN	EP	13 14 25.5
GCA	EP	13 14 18.8
FGU	I(P)	13 14 38.9
HHM	E(P)	13 15 38.7
AUG 12		
H-13 12 08.4		
02.1N 090.5W		
h ABOUT 033KM		
ALQ	EP	13 19 07.8
BCN	EP	13 19 47.9
FGU	I(P)	13 20 01.6
AUG 12		
GUA	IP	14 20 12.8
	ES	20 23.9
AUG 12		
FGU	E(P)	14 49 28.3
	E(S)	49 47.3
AUG 12		
GCA	IP	16 24 14.7
AUG 12		
BUT	EP	16 34 31.9
	I	34 36.9
	IS	35 06.9
HHM	EP	16 34 51.7
	E	35 00.7
	ES	35 28.7
BOZ	EP	16 34 52.3
	E	35 29.5
FGU	E(P)	16 35 07.3
	E	35 22.0
EUR	EP	16 35 21.1
	E(S)	05 36 09.6
AUG 12		
TUC	E(P)	16 42 00.0
BCN	E(P)	16 42 13.5
	EL	43 08.5
AUG 12		
H-17 19 00.5		
09.8N 084.2W		
h ABOUT 114KM		

Date and Station	Phase (GCT)
	h m s
ALQ EP	17 25 25.0
AUG 12	
GCA EP	17 58 16.4
AUG 12	
GCA EP	18 04 03.4
AUG 12	
HHM EP	18 12 14.7
AUG 12	
GCA IP	18 37 40.9
AUG 12	
H-18 29 38.8	
25.3N 062.7E	
h ABOUT 033KM	
EUR EP'	18 48 28.2
EPP	49 08.7
TUC IP	18 48 42.9
AUG 12	
EUR EP	19 00 43.4
AUG 12	
EUR EP	19 12 18.2
AUG 12	
FGU IP	20 47 19.5
IS	47 36.8
AUG 12	
GCA IP	21 47 30.4
AUG 12	
FGU EP	22 12 22.1
ES	12 59.9
AUG 12	
GCA IP	22 48 51.8
AUG 12	
H-23 45 03.6	
37.0N 116.1W	
h ABOUT 033KM	
BCN IP	23 45 27.2
EUR IP	23 45 41.4
GCA EP	23 45 58.1
I	46 04.0
SLC E(P)	23 46 16.9
E	46 20.1
I	46 45.4
TUC IP	23 46 36.3
FGU IP	23 46 40.6
ALQ EP	23 46 59.0
I	47 28.1
HHM E(P)	23 48 10.0
AUG 13	
BCN EP	00 20 07.4
AUG 13	
GUA E(P)	00 28 24.9

Date and Station	Phase (GCT)
	h m s
AUG 13	
GUA E(P)	00 33 32.4
E	34 08.2
AUG 13	
GCA IP	01 07 21.9
IS	07 40.3
EUR EP	01 07 58.0
ES	08 26.0
AUG 13	
EUR EP	02 09 43.0
IS	10 10.5
AUG 13	
H-03 26 45.4	
55.0N 156.4W	
h ABOUT 033KM	
COL EP	03 29 18.0
E(L)	32 20.0
HHM IP	03 32 24.4
BUT E(P)	03 32 42.0
EUR IP	03 33 01.2
IPCP	35 55.6
FGU I(P)	03 33 26.0
BCN EP	03 33 29.7
EPCP	36 04.7
GCA EP	03 33 38.2
TUC IP	03 34 11.0
IPCP	36 19.0
ALQ EP	03 34 15.0
IPCP	36 21.0
I▸PCP	36 32.5
CSC EP	03 36 12.0
AUG 13	
ALQ E(P)	03 41 16.0
AUG 13	
TUC EP	03 58 15.0
AUG 13	
CSC EP	04 25 34.0
AUG 13	
H-04 53 58.8	
07.2S 124.5E	
h ABOUT 542KM	
COL EP	05 06 24.0
EUR IP'	05 11 44.5
EPP	13 03.2
E▸P'	13 55.5
BCN EP'	05 11 49.7
FGU IP'	05 11 52.9
TUC IP'	05 11 56.0
ALQ IP'	05 12 02.0
EPP	14 00.0

Date and Station	Phase (GCT)
	h m s
CSC EP'	05 12 35.0
AUG 13	
TUC EP	06 09 32.6
AUG 13	
H-06 29 19.1	
20.6S 178.5W	
h ABOUT 562KM	
GUA IP	06 37 18.9
BCN EP	06 40 45.1
EUR IP	06 40 49.2
E▸P	42 56.7
TUC EP	06 40 49.5
COL IP	06 41 11.0
I	41 29.0
E▸P	43 19.0
FGU EP	06 41 12.0
HHM EP	06 41 12.7
AUG 13	
H-06 52 06.1	
19.1S 173.9W	
h ABOUT 028KM	
GUA EP	07 01 16.2
TUC EP	07 04 11.0
BCN E(P)	07 04 12.5
EUR EP	07 04 13.3
GCA E(P)	07 04 23.1
ALQ EP	07 04 35.0
COL IP	07 04 46.0
AUG 13	
H-07 03 49.6	
36.6N 070.9E	
h ABOUT 244KM	
COL IP	07 15 02.5
I▸P	16 01.0
AUG 13	
EUR IP	08 49 22.2
IS	49 45.2
AUG 13	
EUR EP	09 35 40.8
AUG 13	
GUA E(P)	12 26 26.4
AUG 13	
H-12 39 55.3	
03.1S 080.4W	
h ABOUT 066KM	
ALQ IP	12 48 07.3
E▸P	48 17.4
TUC EP	12 48 09.6

Date and Station	Phase (GCT)
	h m s
FGU EP	12 48 54.6
EUR EP	12 49 11.9
I▸P	49 23.0
HHM EP	12 49 50.8
COL E(P)	12 52 14.0
AUG 13	
H-13 28 02.2	
76.2N 006.4E	
h ABOUT 033KM	
COL IP	13 35 19.6
FGU I(P)	13 37 42.1
EUR EP	13 38 01.0
I	38 49.4
ALQ IP	13 38 18.4
BCN EP	13 38 23.2
EPCP	39 03.7
TUC EP	13 38 19.0
AUG 13	
HHM EP	15 06 45.3
E	06 54.8
EUR EP	15 08 43.1
AUG 13	
HHM EP	15 32 28.8
AUG 13	
HHM E(P)	17 14 04.0
EUR EP	17 14 55.2
AUG 13	
ALQ IP	19 36 49.9
AUG 13	
GCA IP	20 56 54.3
AUG 13	
EUR EP	21 05 18.3
AUG 13	
BCN IP	21 10 21.8
IS	10 45.8
AUG 13	
GCA IP	21 25 08.4
IS	25 23.7
EUR EP	21 25 41.9
FGU IP	21 26 15.8
AUG 13	
ALQ E(P)	21 26 25.0
AUG 13	
H-21 52 37.4	
19.3S 173.7W	
h ABOUT 033KM	
KIP E(P)	22 00 45.0

Date and Station	Phase	Phase (GCT) h m s
HON	E(P)	22 00 46.0
	ES	07 08.0
BCN	EP	22 04 37.3
TUC	IP	22 04 41.0
EUR	EP	22 04 42.4
SLC	E(P)	22 05 01.7
ALQ	IP	22 05 05.0
	I	05 09.5
	I	05 21.9
FGU	I(P)	22 05 09.8
COL	IP	22 05 17.5
	ES	15 52.0
AUG 13		
H-23 00 24.8		
27.2N 140.1E		
h ABOUT 448KM		
COL	IP	23 09 35.0
BUT	IP	23 11 58.0
	EpP	13 40.0
EUR	IP	23 12 03.7
	EpP	13 44.2
SLC	E(P)	23 12 12.8
BCN	EP	23 12 16.7
FGU	I(P)	23 12 21.1
TUC	IP	23 12 38.0
ALQ	EP	23 12 45.8
	EpP	14 31.6
AUG 13		
SLC	EP	23 04 04.7
	E(S)	04 28.4
FGU	EP	23 04 33.8
GCA	EP	23 04 52.1
AUG 13		
BHP	IP	23 23 59.0
	IS	24 42.0
AUG 13		
EUR	EP	23 34 23.8
ALQ	EP	23 34 46.1
COL	EP	23 37 45.0
AUG 13		
EUR	EP	23 38 28.7
AUG 13		
SLC	E(P)	23 42 20.3
	E	42 28.3
	IS	42 56.8
FGU	IP	23 43 01.5

Date and Station	Phase	Phase (GCT) h m s
AUG 14		
H-00 15 07.1		
16.7S 028.7E		
h ABOUT 033KM		
EUR	EP'	00 34 33.5
AUG 14		
COL	EP	01 07 42.0
AUG 14		
BOZ	EP	01 34 05.0
	ES	34 17.0
HHM	E(P)	01 34 58.8
	E(S)	35 48.8
AUG 14		
ALQ	E(P)	02 38 53.0
AUG 14		
BOZ	EP	02 42 21.0
BUT	EP	02 42 29.5
	IS	42 47.0
AUG 14		
HHM	EP	02 43 16.8
	ES	44 04.8
AUG 14		
H-02 46 44.1		
21.4S 175.2W		
h ABOUT 033KM		
BCN	EP	02 58 56.6
TUC	EP	02 59 00.0
EUR	EP	02 59 02.1
GCA	EP	02 59 11.0
ALQ	EP	02 59 22.1
FGU	EP	02 59 27.8
COL	EP	02 59 35.0
AUG 14		
H-03 32 33.5		
4.9S 152.3E		
h ABOUT 062KM		
GUA	IP	03 37 02.1
COL	IP	03 44 47.9
EUR	IP	03 45 48.8
	EPP	49 13.2
HHM	EP	03 45 52.0
BCN	EP	03 45 54.1
	E	46 28.1
TUC	EP	03 46 08.9
AUG 14		
TUC	EP	04 46 39.0
EUR	EP	04 48 28.9
GUA	E(P)	04 57 33.1

Date and Station	Phase	Phase (GCT) h m s
AUG 14		
SJP	EP	05 38 48.7
AUG 14		
FGU	EP	05 51 18.9
	ES	51 25.4
AUG 14		
HHM	E(P)	08 07 31.0
AUG 14		
H-08 27 14.9		
09.3S 158.3E		
h ABOUT 033KM		
COL	IP	08 39 43.4
EUR	EP	08 40 26.4
AUG 14		
H-09 03 45.5		
18.4N 104.6W		
h ABOUT 033KM		
TUC	EP	09 07 16.1
ALQ	EP	09 07 39.8
GCA	E(P)	09 08 11.7
BCN	EP	09 08 18.8
FGU	EP	09 08 49.0
EUR	EP	09 08 52.4
AUG 14		
FGU	IP	09 15 00.1
	IS	15 28.8
AUG 14		
FGU	IP	12 03 48.5
	E(S)	04 07.5
AUG 14		
H-12 30 06.0		
41.5N 112.1W		
h ABOUT 033KM		
SLC	IP	12 30 19.4
	I	30 31.4
	E(S)	31 31.0
FGU	IP	12 30 39.7
	IS	31 08.0
EUR	IP	12 31 00.1
	IS	31 40.1
GCA	E(P)	12 31 14.6
	E	31 22.5
	E(S)	31 31.1
BUT	E(P)	12 31 19.1
	ES	32 13.0
ALQ	E(P)	12 32 33.0
AUG 14		
H-14 32 36.7		
22.3S 068.7W		
h ABOUT 120KM		
SJP	IP	14 40 02.3

Date and Station	Phase	Phase (GCT) h m s
ALQ	IP	14 43 21.0
	IpP	43 48.0
	IsP	44 03.0
GCA	IP	14 43 47.5
FGU	I(P)	14 43 59.4
	IpP	44 26.8
EUR	IP	14 44 11.7
TUC	I(P)	14 44 22.7
	EpP	44 47.5
	IPCP	45 04.0
BOZ	EP	14 44 23.2
	EpP	44 54.5
BUT	IP	14 44 28.1
	IpP	44 57.1
HHM	EP	14 44 40.8
	IpP	45 10.8
COL	EP	14 46 33.4
AUG 14		
SJP	IP	14 40 31.0
AUG 14		
KIP	IP	15 25 42.6
	IS	25 46.0
HON	IP	15 25 43.3
	IS	25 47.0
AUG 14		
GCA	EP	16 13 28.0
AUG 14		
H-16 18 18.0		
24.1N 122.4E		
h ABOUT 028KM		
COL	E(P)	16 29 19.0
HHM	EP	16 31 26.8
AUG 14		
FGU	IP	16 26 31.7
	IS	27 00.4
GCA	EP	17 09 39.9
AUG 14		
H-18 43 55.5		
03.4S 135.4E		
h ABOUT 033KM		
GUA	E(P)	18 48 21.5
HON	EP	18 55 04.0
KIP	IP	18 55 05.0
	I	55 24.0
COL	IP	18 56 41.3
EUR	EP	18 58 09.5
	EP'	19 02 20.0
	IPKKP	13 40.5
	E	16 31.5
TUC	IP'	19 02 30.1

Date and Station	Phase (GCT)
	h m s
ALQ IP'	19 02 36.0
EPKKP	13 11.0
BHP IP'	19 03 30.0
AUG 14	
GCA EP	19 13 14.4
AUG 14	
FGU EP	19 35 22.8
IS	35 50.3
AUG 14	
GCA E(P)	20 22 33.9
AUG 14	
H-20 43 11.6	
22.5S 175.5W	
h ABOUT 033KM	
EUR EP	20 55 37.1
ALQ E(P)	20 55 51.0
COL EP	20 56 08.0
AUG 14	
H-21 20 42.0	
40.6N 143.6E	
h ABOUT 033KM	
COL IP	21 28 57.3
AUG 14	
FGU E(P)	22 00 48.7
ES	01 20.2
AUG 14	
GCA EP	22 02 20.3
AUG 14	
GUA E(P)	23 03 07.0
AUG 14	
FGU EP	23 05 08.1
IS	05 28.4
SLC EP	23 07 50.7
FGU IP	23 11 32.7
IS	11 53.6
HHM IP	23 11 47.8
E	13 16.8
AUG 14	
SLC EP	23 38 03.8
IS	38 29.4
FGU IP	23 38 35.6
EUR EP	23 38 52.3
EL	39 37.2
AUG 14	
GCA EP	23 59 54.3
EUR IP	24 00 05.7
AUG 15	
EUR EP	00 08 48.2
EL	09 37.7

Date and Station	Phase (GCT)
	h m s
AUG 15	
H-00 47 05.0	
2.8N 076.1W	
h ABOUT 033KM	
ALQ IP	00 5[illegible] 01.0
TUC IP	00 55 10.5
FGU I(P)	00 55 46.1
EUR EP	00 56 08.8
AUG 15	
GCA EP	01 08 22.1
ES	08 40.8
AUG 15	
H-01 33 02.1	
18.1S 172.6W	
h ABOUT 033KM	
COL E(P)	01 45 45.0
AUG 15	
H-02 17 16.9	
27.9N 139.6E	
h ABOUT 476KM	
COL EP	02 26 23.0
SIT EP	02 27 08.0
HHM IP	02 28 36.3
I▸P	30 21.8
BUT I(P)	02 28 51.2
E▸P	30 37.0
BOZ EP	02 28 51.8
EUR IP	02 28 52.6
E▸P	30 37.6
BCN EP	02 29 07.0
E▸P	30 49.0
FGU IP	02 29 10.0
I▸P	30 56.4
ALQ IP	02 29 36.8
E▸P	31 28.0
EPKKP	46 56.0
AUG 15	
TUC IP	02 44 28.2
AUG 15	
TUC IP	04 00 39.0
ALQ IP	04 00 56.5
GCA EP	04 01 26.7
E(S)	02 21.2
AUG 15	
EUR E(P)	04 02 46.9
E	04 30.0
AUG 15	
PHI E(P)	05 35 28.6
AUG 15	
COL EP	06 07 46.0

Date and Station	Phase (GCT)
	h m s
AUG 15	
H-06 11 34.6	
37.9N 141.6E	
h ABOUT 059KM	
GUA E(P)	06 16 55.9
E(S)	21 28.9
COL IP	06 20 11.5
E	26 56.0
E(S)	27 09.0
KIP EP	06 20 55.0
I	21 05.0
IS	28 26.0
HON IP	06 20 55.0
EPP	22 16.0
IS	28 26.0
E	29 36.0
ESCS	30 42.0
EL	33 40.0
SIT IP	06 21 07.0
HHM IP	06 22 47.8
I	23 01.8
BUT IP	06 23 00.2
I▸P	23 08.2
IS	32 25.3
EUR EP	06 23 11.0
EPP	26 00.5
ES	32 20.0
ESP	32 48.5
EP'P'P'	10 20.0
SLC IP	06 23 22.0
E	24 35.0
FGU I(P)	06 23 29.4
BCN IP	06 23 30.1
GCA IP	06 23 35.7
TUC IP	06 23 55.0
I▸P	24 05.2
ALQ IP	06 23 59.9
AUG 15	
COL EP	08 12 37.0
AUG 15	
H-08 42 16.9	
51.5N 177.8W	
h ABOUT 033KM	
COL IP	08 46 54.0
EUR EP	08 50 20.3
AUG 15	
ALQ E(P)	09 21 17.1
AUG 15	
H-10 18 30.1	
15.8S 175.3W	
h ABOUT 287KM	
EUR EP	10 29 57.8

Date and Station	Phase (GCT)
	h m s
ALQ IP	10 30 22.2
COL IP	10 30 24.8
E▸P	31 35.0
AUG 15	
GUA E(P)	11 08 40.2
AUG 15	
SJP EP	11 12 10.5
AUG 15	
TUC EP	11 36 55.0
AUG 15	
GCA IP	11 53 40.1
IS	54 03.4
EUR EP	11 53 53.4
IS	54 19.4
BCN EP	11 53 57.8
ES	54 28.3
AUG 15	
ALQ E(P)	11 55 03.2
AUG 15	
EUR EP	12 40 42.5
AUG 15	
H-13 00 00.3	
37.1N 116.1W	
h ABOUT 000KM	
BCN IP	13 00 29.6
EUR IP	13 00 39.6
GCA IP	13 00 59.0
I	01 09.0
I(L)	01 51.0
SLC E(P)	13 01 19.0
I	01 39.1
I(L)	03 01.5
TUC EP	13 01 38.0
FGU IP	13 01 40.2
ALQ E(P)	13 02 02.0
BOZ E(P)	13 02 28.0
HHM E(P)	13 02 50.0
E	06 05.0
COL EP	13 06 43.5
AUG 15	
SIT EP	13 44 24.0
ES	44 50.0
COL EP	13 46 21.0
AUG 15	
H-14 36 01.2	
10.0S 078.6W	
h ABOUT 080KM	
ALQ IP	14 45 04.8
TUC E(P)	14 45 06.0

Date and Station	Phase	(GCT)
		h m s
EUR	IP	14 46 04.1
COL	EP	14 48 55.1
	IPP	49 13.0
AUG 15		
H-14 57 51.1		
20.0S 178.9W		
h ABOUT 298KM		
TUC	IP	15 09 45.0
EUR	EP	15 09 49.1
ALQ	IP	15 10 06.8
	I	10 21.0
COL	EP	15 10 11.0
AUG 15		
H-17 25 05.9		
13.8S 069.3W		
h ABOUT 543KM		
BHP	IP	17 29 47.0
	IS	34 00.0
SJP	IP	17 30 48.5
	ISP	34 10.0
	IS	35 22.0
CSC	EP	17 32 59.9
	IS	35 20.0
WAS	IP	17 33 32.5
PHI	IP	17 33 41.6
	I	33 56.0
	IS	38 51.5
	EL	40 11.0
ALQ	IP	17 34 20.6
TUC	IP	17 34 25.6
GCA	IP	17 34 50.7
FGU	IP	17 34 58.5
BCN	EP	17 34 58.6
	IPP	37 11.1
	S	43 14.4
	IP'P'	18 03 46.9
	ISKPP'	06 00.6
	P'P'P'	22 34.1
	E	25 25.1
SLC	IP	17 35 07.5
	IPP	37 02.5
	IS	43 32.0
EUR	IP	17 35 16.1
	EP'P	18 22 27.4
	E	25 22.3
	E	43 42.9
BOZ	IP	17 35 27.2
	IPCP	35 40.5
	ES	43 54.5
BUT	IP	17 35 31.8
	IPCP	35 47.3
	IS	36 05.3
UKI	EP	17 35 41.8
	IPCP	35 55.6
	IPP	37 49.6
	ES	44 39.1
	EP'P'	18 03 24.6
	ESKKP'	05 41.6
HHM	IP	17 35 43.4
	IS	44 40.8
SIT	IP	17 37 04.0
	ESKPP'	18 05 14.0
	P'P'P'	23 10.0
HON	EP	17 37 27.0
	I	39 44.0
	IS	47 12.0
	ISSP	53 04.0
	ISS	54 45.0
	ISSS	58 00.0
	I	18 01 34.0
	ISKPP'	05 04.0
COL	IP	17 37 41.6
	I	38 00.0
	EPP	41 36.0
	ISKS	47 40.0
	IS	48 20.0
GUA	EP'	17 43 45.4
	E	53 27.8
	ESPP	59 44.5
	E	18 01 06.8
	E	10 55.1
AUG 15		
FGU	IP	18 25 19.9
	IS	25 42.6
AUG 15		
COL	E(P)	18 53 19.0
EUR	EP	18 54 08.9
AUG 15		
SIT	EP	19 07 57.5
AUG 15		
TUC	IP	19 29 51.6
ALQ	E(P)	19 30 23.0
AUG 15		
EUR	EP	21 03 54.5
BCN	E(P)	21 04 06.8
CSC	E(P)	21 05 57.0
AUG 15		
EUR	IP	21 22 55.1
BCN	E(P)	21 23 07.8
AUG 15		
CSC	E(P)	21 49 57.0
TUC	IP	21 55 10.6
AUG 15		
H-22 29 47.1		
21.0S 179.2W		
h ABOUT 597KM		
BCN	EP	22 41 13.3
EUR	EP	22 41 17.3
TUC	IP	22 41 18.3
GCA	IP	22 41 26.4
ALQ	EP	22 41 38.0
COL	EP	22 41 38.0
FGU	IP	22 41 41.4
AUG 15		
ALQ	IP	22 58 44.0
AUG 15		
GCA	IP	23 04 59.4
	I	05 05.9
	IS	05 23.9
AUG 15		
SLC	E(P)	23 06 59.6
AUG 15		
SLC	E(P)	23 25 19.6
	E	26 47.6
AUG 15		
SLC	EP	23 40 31.6
	ES	40 53.6
FGU	IP	23 41 03.5
AUG 15		
H-23 57 02.8		
69.8N 008.9E		
h ABOUT 033KM		
COL	EP	24 05 10.7
FGU	I(P)	24 07 13.4
EUR	EP	24 07 34.0
ALQ	IP	24 07 45.8
TUC	IP	24 08 10.0
AUG 16		
H-03 00 24.3		
06.3S 129.0E		
h ABOUT 263KM		
COL	E(P)	03 13 02.0
AUG 16		
ALQ	E(P)	03 19 49.2
AUG 16		
H-03 21 08.5		
39.7N 111.9W		
h ABOUT 033KM		
SLC	IP	03 21 27.8
	ES	21 47.3
FGU	I(P)	03 21 37.4
	IS	22 07.8
GCA	IP	03 21 50.8
	IS	22 16.3
	IL	22 26.8
EUR	EP	03 21 56.0
	IS	22 33.6
BCN	E(P)	03 22 25.5
ALQ	IP	03 22 41.0
AUG 16		
TUC	E(P)	03 23 16.3
AUG 16		
FGU	IP	05 15 16.6
	E	15 33.3
AUG 16		
TUC	EP	05 53 21.0
AUG 16		
H-07 01 03.7		
41.5N 112.2W		
h ABOUT 033KM		
SLC	EP	07 01 16.9
FGU	IP	07 01 37.2
	IS	02 03.4
EUR	IP	07 01 57.7
	I(S)	02 40.7
AUG 16		
BCN	I(P)	07 01 24.2
AUG 16		
H-07 05 26.1		
48.8N 155.0E		
h ABOUT 033KM		
COL	IP	07 12 06.8
ALQ	IP	07 16 35.0
AUG 16		
TUC	EP	07 57 36.0
AUG 16		
EUR	EP	08 13 50.9
	EL	14 13.9
AUG 16		
COL	IP	12 15 12.0
AUG 16		
COL	IP	12 52 39.0
AUG 16		
GUA	E(P)	14 35 19.6
AUG 16		
EUR	E(P)	15 03 16.5
AUG 16		
EUR	EP	15 09 45.2
	I	10 32.7
AUG 16		
EUR	IP	15 13 22.7
	IS	13 45.7
AUG 16		
H-17 27 36.3		
15.1S 172.8W		
h ABOUT 033KM		

Date and Station	Phase (GCT)
	h m s
ALQ EP	17 39 45.0
COL IP	17 39 54.5
AUG 16	
FGU IP	19 26 53.9
IS	27 29.2
AUG 16	
H-20 49 52.1	
2.1N 126.1E	
h ABOUT 036KM	
COL EP	21 02 33.0
AUG 16	
FGU EP	21 10 53.8
ES	11 23.0
AUG 16	
FGU EP	21 20 12.6
ES	20 36.8
AUG 16	
H-22 28 45.0	
43.9N 142.1E	
h ABOUT 081KM	
EUR EP	22 39 56.7
AUG 16	
GCA EP	22 33 15.0
ES	33 38.5
AUG 16	
H-23 06 24.6	
12.8S 014.5W	
h ABOUT 033KM	
ALQ E(P)	23 20 04.0
AUG 16	
H-23 19 31.1	
48.9S 122.8E	
h ABOUT 033KM	
EUR EP'	23 38 49.1
ALQ EP'	23 38 50.0
TUC EP'	23 38 51.6
BCN EP'	23 38 53.8
AUG 16	
TUC EP	23 28 52.0
EUR E(P)	23 30 15.0
E	30 29.5
AUG 16	
BCN EP	23 43 55.0
AUG 16	
SLC EP	23 50 05.7
IS	50 31.2
FGU IP	23 50 37.6
EUR EP	23 50 54.3
EL	51 37.3

Date and Station	Phase (GCT)
	h m s
AUG 16	
SLC E(P)	23 56 26.7
IS	56 57.2
AUG 16	
FGU EP	23 57 03.4
E(S)	57 33.3
AUG 17	
HON E	00 05 50.0
EL	11 22.0
AUG 17	
H-05 09 11.1	
41.4N 112.2W	
h ABOUT 033KM	
SLC EP	05 09 23.5
FGU IP	05 09 44.3
IS	10 15.6
EUR IP	05 10 04.5
I(S)	10 37.0
AUG 17	
ALQ E(P)	05 11 39.0
AUG 17	
ALQ EP	05 16 11.5
AUG 17	
H-05 33 40.1	
20.0S 174.0W	
h ABOUT 033KM	
TUC EP	05 45 48.0
EUR EP	05 45 49.3
COL EP	05 46 23.0
AUG 17	
FGU IP	06 04 23.5
IS	04 52.5
AUG 17	
COL EP	06 16 51.5
AUG 17	
H-06 17 36.4	
52.4N 168.7W	
h ABOUT 033KM	
COL EP	06 21 24.5
EUR EP	06 24 54.0
AUG 17	
CSC E(P)	09 38 45.0
AUG 17	
TUC EP	09 47 57.9
EUR EP	09 48 03.5
AUG 17	
SLC E(P)	10 22 41.2
ES	23 22.7
AUG 17	
H-10 23 14.7	
40.4N 110.6W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
SLC E(P)	10 23 22.7
ES	23 32.8
FGU IP	10 23 32.9
I	25 13.4
GCA EP	10 24 08.6
E(S)	24 50.5
EUR EP	10 24 18.7
ES	25 03.7
ALQ E(P)	10 25 09.0
AUG 17	
H-11 12 41.2	
30.6N 130.9E	
h ABOUT 033KM	
GUA IP	11 17 25.3
IS	21 22.8
COL IP	11 22 39.0
EPP	24 57.0
E(PPP)	26 29.0
ES	30 46.0
EL	39 40.0
HON IP	11 23 11.0
IS	31 36.0
KIP IP	11 23 11.2
IS	31 33.0
SIT IP	11 23 32.0
IS	32 26.0
BUT EP	11 25 13.1
BOZ EP	11 25 18.0
EUR IP	11 25 23.7
EPP	28 54.8
ES	36 14.7
P'P'	51 16.8
SLC I(P)	11 25 31.7
FGU I(P)	11 25 37.9
BCN EP	11 25 38.3
GCA EP	11 25 44.0
TUC IP	11 25 59.5
ALQ IP	11 26 05.0
AUG 17	
H-11 34 23.4	
17.7N 094.3W	
h ABOUT 163KM	
ALQ IP	11 38 49.9
TUC IP	11 38 54.2
GCA IP	11 39 31.0
BCN EP	11 39 42.3
FGU I(P)	11 39 48.9
EUR IP	11 40 08.5

Date and Station	Phase (GCT)
	h m s
BOZ EP	11 40 30.0
COL IP	11 44 06.7
IPP	44 53.2
KIP IP	11 44 13.3
HON EP	11 44 14.0
AUG 17	
EUR IP	12 31 07.1
IS	31 31.1
AUG 17	
COL EP	12 36 44.0
AUG 17	
EUR EP	12 40 10.4
AUG 17	
EUR EP	12 52 17.3
E	53 03.8
AUG 17	
WAS E(P)	13 40 12.0
E	48 54.0
AUG 17	
GUA EP	17 26 23.5
AUG 17	
ALQ IP	19 32 27.4
AUG 17	
SJP IP	21 04 01.5
ALQ EP	21 07 29.0
BCN EP	21 08 04.1
EUR EP	21 08 21.3
AUG 17	
H-21 58 54.4	
36.7N 059.7E	
h ABOUT 033KM	
COL EP	22 10 42.0
AUG 17	
H-22 15 22.2	
32.1N 040.9W	
h ABOUT 033KM	
ALQ IP	22 24 44.5
I	24 51.8
EUR EP	22 25 25.6
BCN EP	22 25 30.2
COL EP	22 26 21.0
AUG 17	
SLC E(P)	23 06 16.6
AUG 17	
SLC E(P)	23 09 51.6
AUG 17	
ALQ E(P)	23 14 55.0
AUG 17	
EUR EP	23 48 16.5

Date and Station	Phase	(GCT)
		h m s
AUG 18		
SLC	EP	01 15 07.1
	IS	15 29.1
AUG 18		
FGU	IP	01 17 28.3
	IS	17 54.3
GCA	IP	01 17 46.8
ALQ	E(P)	01 18 11.7
AUG 18		
COL	IP	03 01 34.4
AUG 18		
H-07 09 51.6		
35.9N 139.2E		
h ABOUT 153KM		
COL	IP	07 18 40.2
EUR	IP	07 21 34.2
	EpP	22 05.1
FGU	I(P)	07 21 51.3
TUC	EP	07 22 14.6
	EpP	22 49.6
ALQ	EP	07 22 20.0
	EpP	22 55.0
AUG 18		
COL	EP	09 48 58.0
AUG 18		
COL	EP	11 05 44.0
AUG 18		
ALQ	E(P)	11 23 44.3
AUG 18		
FGU	IP	11 26 14.9
	IS	26 43.4
EUR	EP	11 26 34.2
	E(S)	27 31.2
BCN	E(P)	11 27 37.8
AUG 18		
BUT	EP	14 54 23.2
	ES	54 45.2
AUG 18		
H-15 58 14.3		
19.5N 045.4W		
h ABOUT 033KM		
EUR	EP	16 08 43.5
COL	EP	16 10 09.0
AUG 18		
BUT	EP	16 51 05.2
AUG 18		
H-18 43 16.1		
50.3N 176.9W		
h ABOUT 033KM		
COL	EP	18 47 56.3
	ES	51 46.0

Date and Station	Phase	(GCT)
		h m s
SIT	EP	18 48 41.5
	ES	53 14.0
HON	EP	18 50 08.0
	IS	55 06.0
	IL	57 45.0
UKI	EP	18 50 42.0
EUR	IP	18 51 18.2
	IPCP	53 02.7
	E	56 40.7
	ES	57 51.7
SLC	IP	18 51 31.9
BCN	IP	18 51 40.8
	IPCP	53 15.8
FGU	IP	18 51 42.7
	E	52 07.1
GCA	IP	18 51 51.0
TUC	IP	18 52 17.4
ALQ	IP	18 52 25.0
	IPCP	53 36.1
	I	53 47.0
	I	54 01.9
CSC	EP	18 54 13.0
SJP	IP	18 56 07.0
AUG 18		
EUR	EP	19 29 31.2
AUG 18		
H-19 52 40.6		
18.0S 178.3W		
h ABOUT 544KM		
EUR	EP	20 04 02.9
TUC	IP	20 04 05.1
COL	EP	20 04 21.0
	EpP	06 17.0
ALQ	EP	20 04 25.0
AUG 18		
WAS	EP	19 54 04.0
AUG 18		
H-20 18 29.9		
22.5S 175.2W		
h ABOUT 033KM		
BCN	EP	20 30 47.2
TUC	EP	20 30 50.0
EUR	EP	20 30 53.3
GCA	EP	20 31 02.5
ALQ	IP	20 31 13.1
COL	IP	20 31 26.7

Date and Station	Phase	(GCT)
		h m s
AUG 18		
H-20 27 41.9		
32.1S 178.1W		
h ABOUT 033KM		
TUC	IP	20 40 39.5
	I	40 45.2
BCN	EP	20 40 39.7
EUR	IP	20 40 46.3
GCA	EP	20 40 53.5
ALQ	EP	20 41 00.5
COL	EP	20 41 22.0
KIP	ES	20 45 23.0
	EL	52 06.0
HON	IS	20 45 25.0
	EL	51 52.0
AUG 18		
TUC	E(P)	20 51 22.0
EUR	EP	20 51 34.8
AUG 18		
EUR	EP	22 11 03.4
AUG 18		
FGU	IP	22 24 05.5
AUG 18		
COL	IP	22 32 04.6
AUG 18		
SLC	EP	22 44 17.0
AUG 18		
H-23 07 54.2		
14.2S 071.9W		
h ABOUT 031KM		
ALQ	IP	23 17 52.9
EUR	EP	23 18 49.0
	E	19 12.0
AUG 18		
SLC	EP	23 44 27.4
	ES	44 49.0
FGU	IP	23 45 00.0
EUR	EP	23 45 14.2
AUG 18		
ALQ	E(P)	23 46 33.1
AUG 19		
ALQ	E(P)	00 09 04.5
	ES	09 39.5
TUC	EP	00 09 13.0
AUG 19		
ALQ	EP	00 09 04.8
	ES	09 34.9
	IL	09 41.2

Date and Station	Phase	(GCT)
		h m s
AUG 19		
FGU	IP	01 15 37.9
EUR	EP	01 15 51.4
	IL	16 40.6
AUG 19		
H-01 34 38.4		
09.0S 111.0W		
h ABOUT 033KM		
EUR	EP	01 43 21.2
AUG 19		
ALQ	IP	01 41 03.9
AUG 19		
GUA	IP	03 36 03.5
	IS	36 17.0
AUG 19		
H-04 24 00.4		
32.0S 177.9W		
h ABOUT 033KM		
BCN	EP	04 36 56.3
TUC	IP	04 36 59.2
EUR	IP	04 37 04.7
GCA	EP	04 37 11.7
ALQ	EP	04 37 19.0
COL	EP	04 37 43.2
HON	ES	04 41 38.0
	EL	47 48.0
KIP	ES	04 41 40.0
	EL	48 06.0
AUG 19		
H-06 24 23.9		
41.0N 143.5E		
h ABOUT 025 KM		
COL	EP	06 32 38.3
EUR	EP	06 35 48.5
AUG 19		
EUR	EP	06 45 59.5
AUG 19		
GUA	IP	07 14 46.8
	ES	15 08.0
AUG 19		
H-07 29 40.5		
45.6S 095.7E		
h ABOUT 033KM		
COL	EP'	07 49 07.0
TUC	EP'	07 49 33.0
EUR	EP'	07 49 34.6
	EP'	49 59.6
AUG 19		
H-09 38 59.9		
40.9N 126.0W		
h ABOUT 033KM		

Date and Station	Phase (GCT)
	h m s
UKI E(P)	09 39 43.0
EUR EP	09 40 51.7
EUR EP	09 40 51.9
ALQ E(P)	09 42 52.0
AUG 19	
H-09 51 25.2	
59.8S 025.9W	
h ABOUT 033KM	
COL IP'	10 11 16.1
EP'	11 28.0
E	13 27.0
AUG 19	
H-11 49 26.4	
45.7S 095.9E	
h ABOUT 033KM	
TUC EP'	12 09 19.5
EUR EP'	12 09 22.9
E	09 44.9
ALQ EP'	12 10 02.5
COL EP'	12 10 21.0
AUG 19	
BHP IP	12 26 53.0
IS	27 27.0
AUG 19	
FGU EP	14 39 31.6
IS	39 54.6
AUG 19	
H-14 58 59.5	
41.5N 141.8E	
h ABOUT 117KM	
COL EP	15 07 05.9
EUR EP	15 10 38.0
BCN EP	15 10 55.7
AUG 19	
EUR EP	15 57 35.6
AUG 19	
SIT IP	18 48 43.0
IS	53 14.0
AUG 19	
COL EP	22 36 40.0
E	37 21.0
AUG 19	
FGU EP	22 59 20.2
IS	59 43.2
AUG 19	
SLC EP	23 12 01.5
AUG 20	
H-00 27 40.4	
21.9S 175.8W	
h ABOUT 033KM	
EUR E(P)	00 40 15.9
ALQ EP	00 40 24.0
COL EP	00 40 36.0
AUG 20	
EUR IP	04 39 26.7
IS	39 51.7
AUG 20	
COL EP	05 09 55.0
AUG 20	
H-06 39 56.7	
05.5S 145.8E	
h ABOUT 090KM	
COL E(P)	06 52 22.0
AUG 20	
H-06 53 28.1	
06.9S 103.0E	
h ABOUT 061KM	
EUR EP'	07 12 40.6
EPP	14 56.6
AUG 20	
EUR EP	07 36 30.7
AUG 20	
EUR EP	08 28 37.2
BHP IP	08 31 57.0
AUG 20	
H-09 25 38.9	
16.0N 092.4W	
h ABOUT 193KM	
ALQ IP	09 30 26.0
I▸P	31 00.0
TUC IP	09 30 30.5
BCN EP	09 31 15.5
E▸P	31 51.5
FGU EP	09 31 22.6
EUR EP	09 31 43.4
E	32 17.7
AUG 20	
EUR EP	12 43 49.3
AUG 20	
H-12 59 28.6	
37.1N 139.3E	
h ABOUT 053KM	
EUR EP	13 11 18.9
AUG 20	
H-13 19 50.3	
4.1N 076.5W	
h ABOUT 059KM	
BHP IP	13 21 14.0
IS	22 19.0
ALQ IP	13 27 33.6
TUC IP	13 27 43.9
FGU I(P)	13 28 18.8
EUR EP	13 28 42.5
EPCP	30 01.0
AUG 20	
GCA IP	14 12 05.0
AUG 20	
TUC EP	14 22 20.0
AUG 20	
H-15 48 12.2	
41.2N 142.7E	
h ABOUT 050KM	
HHM EP	15 59 08.0
EUR IP	15 59 36.0
I	59 48.5
FGU EP	15 59 52.7
BCN EP	15 59 54.6
I	16 00 05.8
TUC EP	16 00 20.0
I▸P	00 35.0
ALQ IP	16 00 25.0
KIP ES	16 04 58.0
EL	12 16.0
HON ES	16 05 03.0
EL	12 08.0
AUG 20	
GUA IP	18 54 21.9
AUG 20	
H-19 43 56.6	
30.2S 177.8W	
h ABOUT 043KM	
TUC EP	19 56 48.9
E▸P	57 04.0
EUR EP	19 56 53.8
AUG 20	
ALQ IP	20 22 21.2
AUG 20	
FGU IP	20 43 22.0
IS	43 40.3
AUG 20	
KIP ET	22 07 05.0
AUG 20	
HON ET	22 07 20.0
AUG 20	
KIP ET	22 16 29.0
HON ET	22 16 37.0
AUG 20	
BCN EP	22 46 43.9
E(S)	47 12.4
AUG 20	
EUR EP	22 47 56.4
AUG 20	
SLC E(P)	23 07 21.3
AUG 20	
SLC EP	23 11 40.3
E	12 07.3
AUG 20	
COL EP	23 41 19.0
SLC EP	23 42 44.1
ES	43 08.5
EUR E(P)	23 43 31.0
EUR E(P)	23 44 18.5
AUG 21	
BHP IP	02 11 29.0
IS	12 13.0
AUG 21	
H-02 41 32.6	
05.5S 147.7E	
h ABOUT 164KM	
COL EP	02 53 45.0
AUG 21	
H-03 39 22.6	
14.3N 072.5W	
h ABOUT 033KM	
SJP I(P)	03 41 05.5
BHP IP	03 41 25.0
IS	42 54.0
CSC IP C	03 44 04.0
WAS EP	03 44 46.0
ALQ IP	03 46 30.0
TUC IP	03 46 50.0
FGU IP	03 47 08.7
GCA I(P)	03 47 14.2
SLC IP	03 47 23.0
BCN IP	03 47 27.0
I▸P	47 39.2
EUR IP	03 47 42.2
I▸P	47 53.5
IPP	49 19.3
BUT IP	03 47 44.8
IS	48 35.8
HHM EP	03 47 59.0
COL IP	03 50 36.5
I▸P	50 50.0
AUG 21	
H-05 06 44.5	
06.7N 072.8W	
h ABOUT 182KM	
EUR EP	05 15 27.4

Date and Station	Phase	Phase (GCT) h m s
AUG 21		
SJP	IP	05 54 16.5
AUG 21		
BCN	EP	06 48 13.8
	EL	48 45.1
AUG 21		
GUA	E(P)	07 55 43.5
AUG 21		
EUR	EP	08 16 06.1
AUG 21		
FGU	EP	08 23 08.0
AUG 21		
COL	IP	08 42 14.9
EUR	EP	08 46 43.5
	E	48 13.7
AUG 21		
H-10 17 00.9		
8.3S 108.8E		
h ABOUT 225KM		
EUR	EP	10 35 48.8
AUG 21		
EUR	E(P)	14 03 50.5
	E	04 24.0
COL	IP	14 03 54.5
AUG 21		
H-17 33 45.8		
20.2N 108.6W		
h ABOUT 033KM		
TUC	EP	17 36 38.2
ALQ	EP	17 37 12.3
BCN	EP	17 37 37.9
GCA	E(P)	17 37 45.0
EUR	EP	17 38 19.2
FGU	EP	17 38 25.7
AUG 21		
H-18 02 44.4		
49.0N 158.2E		
h ABOUT 033KM		
COL	IP	18 09 11.9
	I	09 23.0
HHM	E(P)	18 12 09.0
EUR	IP	18 12 44.7
BCN	EP	18 13 03.3
TUC	EP	18 13 36.3
ALQ	IP	18 13 41.0
AUG 21		
H-18 20 52.8		
51.8N 176.5W		
h ABOUT 017KM		
COL	EP	18 25 23.0
HI	E(P)	18 28 13.0
EUR	EP	18 28 51.7
AUG 21		
FGU	EP	19 02 42.3
	ES	03 09.6
AUG 21		
EUR	EP	19 16 25.2
AUG 21		
EUR	EP	19 57 12.3
AUG 21		
EUR	E(P)	20 03 19.2
	E(L)	04 17.4
AUG 21		
EUR	EP	21 57 59.4
AUG 21		
SJP	IP	22 07 18.0
	ES	07 40.0
AUG 21		
EUR	IP	22/18 57.8
	I(S)	19 06.8
AUG 21		
SJP	EP	22 40 15.0
	ES	41 10.0
AUG 21		
H-22 59 24.2		
21.3S 176.0W		
h ABOUT 140KM		
EUR	E(P)	23 11 32.5
COL	IP	23 12 00.0
AUG 21		
EUR	EP	23 26 56.5
	EL	28 06.8
AUG 21		
EUR	EP	23 38 33.3
AUG 22		
EUR	EP	00 14 59.2
	IL	15 38.9
AUG 22		
FGU	IP	03 19 58.8
	IS	20 28.3
EUR	EP	03 20 21.4
AUG 22		
COL	IP	03 58 12.1
	IS	58 32.0
AUG 22		
H-03 58 43.2		
63.2N 148.5W		
h ABOUT 101KM		
COL	IP	03 59 12.3
HHM	IP	04 03 50.0
BUT	IP	04 04 12.8
EUR	EP	04 04 49.8
	I▸P	05 19.3
BCN	EP	04 05 20.6
	E▸P	05 49.1
ALQ	IP	04 05 55.3
	I▸P	06 25.3
TUC	IP	04 06 01.0
AUG 22		
EUR	E(P)	04 11 22.9
AUG 22		
FGU	EP	04 31 01.0
	ES	31 25.0
AUG 22		
H-04 33 54.2		
34.1N 116.2W		
h ABOUT 014KM		
BCN	IP	04 34 31.6
	IS	35 03.6
EUR	IP	04 35 17.4
ALQ	E(P)	04 36 05.3
AUG 22		
TUC	IP	04 35 07.4
AUG 22		
TUC	E(P)	04 46 10.5
AUG 22		
BCN	E(P)	04 49 59.1
	ES	50 31.1
GCA	IP	04 50 08.2
	IS	36 21.5
AUG 22		
EUR	EP	04 51 00.8
	EL	52 10.4
AUG 22		
H-05 01 38.3		
01.2S 128.5E		
h ABOUT 033KM		
COL	EP	05 14 29.0
AUG 22		
BCN	IP	05 33 23.6
	IS	33 50.1
AUG 22		
EUR	EP	05 34 22.5
	E	35 29.5
AUG 22		
COL	E(P)	05 41 25.0
EUR	EP	05 44 25.3
AUG 22		
TUC	E(P)	06 30 49.0
AUG 22		
FGU	IP	07 20 25.7
	IS	20 54.7
AUG 22		
HHM	EP	09 26 41.0
	ES	31 37.0
AUG 22		
H-09 27 09.3		
42.0N 126.2W		
h ABOUT 033KM		
UKI	EP	09 28 04.9
	ES	28 46.9
EUR	EP	09 29 08.2
BUT	IP	09 29 41.3
	E(L)	31 44.8
SLC	IP	09 29 45.8
BCN	E(P)	09 29 48.4
GCA	IP	09 30 08.6
FGU	I(P)	09 30 08.8
TUC	IP	09 30 51.1
ALQ	IP	09 31 08.0
COL	EP	09 32 41.5
	E	36 10.0
CSC	EP	09 34 09.0
WAS	EP	09 34 20.0
	E	43 10.0
AUG 22		
COL	EP	10 14 21.0
AUG 22		
ALQ	IP	10 24 37.0
EUR	EP	10 25 26.8
AUG 22		
GUA	E(P)	11 35 56.1
EUR	E(P)	11 47 50.9
AUG 22		
EUR	EP	12 07 49.9
GCA	IP	12 07 59.1
COL	IP	12 08 07.0
AUG 22		
H-12 13 11.3		
33.7N 118.3		
h ABOUT 014KM		
BCN	I(P)	12 14 06.4
	IS	14 45.9
EUR	IP	12 14 42.8
GCA	EP	12 14 51.9
TUC	E(P)	12 15 08.0

Date and Station	Phase (GCT)
	h m s
AUG 22	
EUR EP	12 35 33.0
AUG 22	
CSC E(P)	13 49 33.0
AUG 22	
H-14 39 27.5	
1.9S 133.9E	
h ABOUT 033KM	
COL E(P)	14 51 10.4
AUG 22	
GUA IP	15 33 42.9
AUG 22	
CSC E(P)	16 03 32.0
AUG 22	
H-17 05 27.5	
7.2S 120.4E	
h ABOUT 398KM	
EUR E(P)	17 19 58.7
EP'	23 38.7
ALQ EP'	17 23 55.0
AUG 22	
H-18 04 00.0	
4.0S 103.8W	
h ABOUT 033KM	
ALQ IP	18 11 24.8
BCN E(P)	18 11 43.5
GCA E(P)	18 11 46.2
EUR EP	18 12 13.2
IPP	13 55.7
HHM EP	18 13 14.0
COL IP	18 15 44.4
AUG 22	
H-18 18 49.3	
3.8S 104.2W	
h ABOUT 033KM	
TUC E(P)	18 25 50.0
ALQ EP	18 26 11.0
BCN E(P)	18 26 40.0
EUR EP	18 27 00.5
EPP	28 41.0
HHM EP	18 28 02.5
COL IP	18 30 32.0
KIP ES	18 22 10.0
EL	30 38.0
AUG 22	
HHM E(P)	18 25 24.0
E(S)	25 56.0
FGU IP	18 49 00.9
ES	49 33.9

Date and Station	Phase (GCT)
	h m s
AUG 22	
GCA E(P)	19 29 23.6
E	29 27.1
E	29 31.6
EUR EP	19 29 48.8
ES	30 40.6
AUG 22	
H-19 52 25.0	
9.4S 158.0E	
h ABOUT 033KM	
GUA IP	19 57 59.0
ES	20 03 19.0
HON EP	20 01 37.0
E(PCP)	02 26.0
EPPP	05 01.0
IS	09 06.0
E	10 04.0
E	10 40.0
ESS	12 58.0
EL	14 52.0
KIP IP	20 01 39.0
COL IP	20 04 52.9
E	06 40.0
EPP	08 15.0
ES	15 04.0
UKI EP	20 05 11.7
EUR IP	20 05 38.1
EPP	09 15.3
E(S)	16 33.8
BCN EP	20 05 39.4
EPP	09 19.4
HHM EP	20 05 48.0
SLC EP	20 05 49.1
GCA E(P)	20 05 51.5
TUC IP	20 05 52.1
IPP	09 40.0
BUT EP	20 05 52.3
ALQ IP	20 06 10.0
IPP	10 11.0
WAS EP'	20 11 19.5
E	23 49.5
SJP EP'	20 11 43.0
E	14 20.0
AUG 22	
BHP EP	20 12 45.0
AUG 22	
EUR EP	20 34 50.9
AUG 22	
EUR EP	21 06 08.9
AUG 22	
EUR E(P)	21 16 20.9

Date and Station	Phase (GCT)
	h m s
AUG 22	
H-21 24 47.7	
45.0S 075.1W	
h ABOUT 033KM	
ALQ I(P)	21 37 19.1
AUG 22	
TUC EP	21 55 59.2
AUG 22	
GUA E(P)	22 30 00.4
AUG 22	
EUR EP	22 49 09.5
AUG 22	
ALQ E(P)	22 55 41.0
AUG 22	
FGU EP	23 02 32.7
ES	02 56.4
AUG 22	
SLC EP	23 11 08.6
AUG 22	
H-23 20 21.1	
04.3N 076.4W	
h ABOUT 100KM	
BHP IP	23 21 41.0
IS	22 45.0
SJP EP	23 24 14.0
I	24 15.6
ALQ IP	23 27 59.3
TUC IP	23 28 09.8
GCA EP	23 28 36.7
FGU IP	23 28 45.1
EUR IP	23 29 09.2
EPP	29 32.1
IPCP	30 27.5
COL IP	23 32 11.0
AUG 22	
HHM IP	23 27 54.3
IS	28 25.0
GUA E(P)	23 30 03.9
AUG 22	
FGU IP	23 40 15.5
IS	41 33.9
AUG 22	
SLC EP	23 45 30.4
FGU IP	23 46 03.2
ES	46 33.7
AUG 23	
CSC E(P)	00 48 34.0
AUG 23	
GUA EP	01 47 00.0

Date and Station	Phase (GCT)
	h m s
AUG 23	
H-03 45 17.6	
44.7N 146.1E	
h ABOUT 135KM	
COL IP	03 52 47.3
EPP	53 18.0
EUR IP	03 56 07.0
EPP	56 41.8
AUG 23	
EUR EP	03 53 39.3
AUG 23	
FGU IP	04 05 01.3
AUG 23	
EUR EP	04 27 05.9
AUG 23	
EUR EP	04 42 13.6
AUG 23	
FGU EP	05 50 32.5
ES	50 51.8
AUG 23	
EUR EP	07 56 43.6
AUG 23	
H-13 09 25.3	
52.4N 159.6E	
h ABOUT 033KM	
COL EP	13 15 25.0
ES	20 12.0
HHM E(P)	13 18 37.0
EUR EP	13 19 11.6
SLC EP	13 19 22.1
BCN E(P)	13 19 24.3
FGU E(P)	13 19 31.1
TUC E(P)	13 20 06.0
ALQ EP	13 20 07.6
KIP E(S)	13 24 22.0
EL	30 04.0
ET	14 05 54.0
HON E(S)	13 24 24.0
EL	30 02.0
AUG 23	
BCN I(P)	13 20 28.6
IS	20 51.1
AUG 23	
H-13 19 58.2	
37.0N 116.3W	
h ABOUT 000KM	
EUR IP	13 20 42.0
GCA EP	13 20 57.7
I	21 05.2
EL	21 47.2

Date and Station	Phase	(GCT)
		h m s
SLC	IP	13 21 39.1
	E	21 54.6
ALQ	E(P)	13 22 25.0
	I	22 31.2
	I	24 13.1
AUG 23		
H-13 35 57.2		
17.3S 067.8W		
h ABOUT 033KM		
EUR	E(P)	13 47 25.7
AUG 23		
H-15 24 06.0		
4.9N 128.1E		
h ABOUT 268KM		
GUA	E(P)	15 28 07.2
COL	IP	15 36 05.7
	I	36 24.0
	EpP	37 08.0
AUG 23		
FGU	EP	15 46 32.6
	IS	46 57.0
AUG 23		
H-16 42 34.2		
52.5N 159.5E		
h ABOUT 067KM		
COL	EP	16 48 31.0
EUR	EP	16 52 15.9
AUG 23		
GCA	IP	16 46 51.4
	E(S)	47 26.4
AUG 23		
COL	IP	17 07 28.7
AUG 23		
EUR	EP	18 18 57.8
AUG 23		
EUR	IP	18 31 11.8
	E	31 31.3
AUG 23		
FGU	I(P)	20 05 59.8
AUG 23		
TUC	E(P)	21 09 43.5
AUG 23		
COL	EP	22 41 34.0
AUG 23		
TUC	E(P)	22 49 09.6
AUG 23		
FGU	EP	22 52 05.5
	ES	52 23.8
GCA	EP	22 52 27.7
	I	52 30.5
	ES	52 49.2
TUC	IP	22 52 30.0

Date and Station	Phase	(GCT)
		h m s
AUG 23		
FGU	IP	23 14 56.2
	ES	15 25.0
AUG 23		
H-23 22 10.1		
28.6N 142.5E		
h ABOUT 045KM		
EUR	EP	23 34 22.0
	E	34 58.0
AUG 24		
TUC	E(P)	00 10 33.0
AUG 24		
H-01 41 40.5		
22.4S 068.5W		
h ABOUT 066KM		
ALQ	IP	01 52 31.5
	EpP	52 52.9
	EPCP	52 57.8
TUC	IP	01 52 33.5
FGU	IP	01 53 09.6
EUR	IP	01 53 23.3
	EpP	53 45.8
HHM	EP	01 53 52.1
GUA	EP'	02 01 17.0
	I	01 41.4
AUG 24		
H-02 11 58.3		
54.3S 005.2E		
h ABOUT 028KM		
ALQ	EP'	02 31 04.0
TUC	EP'	02 31 07.8
HHM	EP'	02 31 22.0
COL	EP'	02 32 47.0
AUG 24		
EUR	E(P)	02 46 25.3
AUG 24		
COL	EP	03 00 52.0
AUG 24		
H-03 01 30.4		
55.9N 162.1E		
h ABOUT 110KM		
COL	EP	03 06 51.0
EUR	EP	03 10 47.7
	IpP	11 13.2
AUG 24		
H-03 15 46.8		
40.7N 112.1W		
h ABOUT 000KM		
SLC	EP	03 15 53.0
	IL	16 15.0
FGU	IP	03 16 23.6

Date and Station	Phase	(GCT)
		h m s
EUR	E(P)	03 16 38.2
	I	16 43.7
	IL	17 27.7
AUG 24		
H-03 18 09.5		
30.7S 178.2W		
h ABOUT 042KM		
GUA	EP	03 27 47.8
	E	28 18.4
TUC	EP	03 31 04.0
EUR	EP	03 31 09.7
COL	EP	03 31 41.0
AUG 24		
COL	EP	06 00 03.0
AUG 24		
BUT	EP	06 32 37.3
	I	33 03.3
AUG 24		
TUC	EP	09 54 33.0
AUG 24		
H-10 10 15.1		
19.3N 108.8W		
h ABOUT 033KM		
TUC	IP	10 13 20.6
ALQ	E(P)	10 14 00.0
BCN	EP	10 14 18.2
GCA	E(P)	10 14 23.4
EUR	EP	10 14 58.5
AUG 24		
TUC	E(P)	10 42 29.0
AUG 24		
H-10 49 08.4		
36.0N 117.6W		
h ABOUT 020KM		
BCN	EP	10 49 45.7
	IS	50 16.6
EUR	EP	10 50 04.7
GCA	IP	10 50 27.2
	I	50 36.7
	E(S)	51 40.7
TUC	EP	10 50 46.7
	ES	52 05.0
ALQ	EP	10 51 26.8
AUG 24		
UKI	EP	10 51 54.5
ALQ	IP	10 53 59.0
AUG 24		
H-10 58 28.2		
51.0N 179.6W		
h ABOUT 033KM		

Date and Station	Phase	(GCT)
		h m s
COL	IP	11 03 19.8
EUR	EP	11 06 47.7
AUG 24		
GUA	E(P)	11 10 21.4
	E	10 35.4
AUG 24		
EUR	EP	11 32 57.6
AUG 24		
TUC	EP	12 05 56.6
AUG 24		
FGU	IP	12 22 43.1
	E	23 11.9
AUG 24		
H-13 28 19.6		
34.1N 116.2W		
h ABOUT 014KM		
BCN	EP	13 28 56.3
	I(S)	29 27.3
TUC	E(P)	13 29 39.5
EUR	E(P)	13 29 42.5
	IL	31 10.3
AUG 24		
BHP	IP	14 48 19.0
	IS	49 06.0
AUG 24		
ALQ	IP	15 51 47.8
AUG 24		
UKI	E(P)	18 49 07.7
AUG 24		
SJP	IP	19 56 56.0
BCN	EP	19 58 17.1
	ES	58 47.6
EUR	E(P)	19 58 37.8
	I(S)	59 14.0
EUR	EP	19 58 41.0
	I(S)	59 14.0
TUC	E(P)	20 00 31.8
AUG 24		
H-20 47 35.0		
31.2N 116.5W		
h ABOUT 014KM		
BCN	IP	20 48 50.8
	ES	49 44.9
TUC	E(P)	20 48 51.1
GCA	EP	20 49 20.5
EUR	IP	20 49 37.5
	IL	51 41.7
ALQ	EP	20 49 50.0

Date and Station	Phase (GCT)
	h m s
AUG 24	
H-21 41 57.8	
45.0N 151.7E	
h ABOUT 033KM	
COL EP	21 49 14.0
EUR EP	21 52 37.1
AUG 24	
TUC EP	22 52 00.0
AUG 24	
FGU EP	23 05 42.2
E(S)	06 11.6
AUG 24	
GUA IP	23 14 09.4
IS	14 22.7
AUG 24	
SLC EP	23 44 01.2
ES	44 27.2
AUG 25	
TUC IP	00 52 23.0
AUG 25	
SJP EP	02 13 42.0
E	13 51.0
EL	14 57.5
AUG 25	
H-02 20 12.7	
48.7N 148.8E	
h ABOUT 134KM	
COL IP	02 27 02.8
HHM EP	02 30 04.1
BUT EP	02 30 19.5
EUR IP	02 30 38.2
FGU EP	02 30 55.0
BCN EP	02 30 58.6
GCA E(P)	02 31 05.4
TUC EP	02 31 28.3
ALQ IP	02 31 31.3
E	32 21.2
AUG 25	
EUR EP	02 41 04.0
AUG 25	
SJP IP	02 54 48.0
ES	55 09.0
AUG 25	
BUT EP	05 01 30.4
AUG 25	
H-05 21 19.4	
45.2N 151.3E	
h ABOUT 033KM	
COL IP	05 28 36.2
HHM EP	05 31 30.2
EUR EP	05 31 58.7

Date and Station	Phase (GCT)
	h m s
ALQ E(P)	05 32 50.0
AUG 25	
BUT EP	05 50 18.4
ES	50 45.4
AUG 25	
SJP IP	05 53 11.5
ES	53 24.0
AUG 25	
H-06 11 43.3	
38.9N 038.4E	
h ABOUT 033KM	
COL EP	06 23 30.2
HHM EP	06 24 40.2
BUT EP	06 24 48.5
BOZ EP	06 24 49.0
EUR IP	06 25 21.8
AUG 25	
EUR E(P)	06 28 40.6
AUG 25	
BCN E(P)	06 29 48.5
EUR E(P)	06 29 56.6
AUG 25	
EUR EP	07 15 46.1
AUG 25	
SIT EP	10 33 55.5
ES	34 13.0
AUG 25	
COL EP	11 10 08.0
AUG 25	
EUR EP	11 23 41.2
AUG 25	
BUT EP	12 07 25.4
IS	07 48.4
AUG 25	
H-12 18 12.5	
17.5S 178.8W	
h ABOUT 565KM	
HON IP	12 25 29.2
IPCP	27 08.0
IsP	28 16.0
ESCP	30 04.0
IS	31 20.0
IsS	34 29.0
ISS	35 11.0
EL	37 20.0
I	38 33.0
KIP IP	12 25 30.0
ES	31 23.0
GUA IP	12 25 58.0
EPCP	27 41.4
ISCP	30 18.4
ES	32 10.4
E	34 52.9

Date and Station	Phase (GCT)
	h m s
UKI IP	12 29 08.0
I▸P	31 07.6
ES	38 11.0
E	38 38.0
IP'P'	56 23.0
ESKPP'	58 44.0
FGU IP	12 29 28.1
BCN IP	12 29 28.7
I▸P	31 30.9
ES	38 47.6
EsS	42 20.6
EPKKP	48 00.1
P'P'	55 00.0
E	55 14.5
ESKKP'	58 47.6
EUR IP	12 29 32.6
I▸P	31 34.7
IS	39 01.2
EsS	42 51.9
PKKP	47 56.4
EP'P'	55 52.7
ESKPP'	58 06.7
TUC IP	12 29 34.8
I▸P	31 36.1
ISKS	39 04.0
IS	39 49.0
IPKKP	48 02.1
IP'P'	56 06.0
ESKPP'	58 20.8
SIT IP	12 29 39.0
I	31 43.0
SLC IP	12 29 49.4
I▸P	31 52.7
EPP	33 15.9
ISKS	39 25.4
IP'P'	56 04.2
ISKPP'	58 29.4
COL IP C	12 29 50.1
I▸P	31 56.0
ISKS	39 20.0
ES	39 24.0
E(SP)	41 16.0
IsS	43 16.0
EPKKP	47 48.0
EP'P'	55 51.0
P'P'P'	13 17 33.0
GCA I(P)	12 29 52.6
I	31 46.1
ALQ IP	12 29 55.1
BUT IP	12 29 58.4
I▸P	32 02.4
EsP	32 59.4
IS	39 33.4
EP'P'	55 50.4
HHM IP	12 29 59.2
I▸P	32 04.1
sP	32 59.2
IS	39 33.2
E(SP)	43 35.2
EPKKP	47 48.2
EP'P'	55 50.9

Date and Station	Phase (GCT)
	h m s
BOZ IP	12 30 01.0
I▸P	32 06.0
I	32 08.0
IS	38 29.0
EP'P'	13 55 45.0
CSC E(P)	12 33 30.0
I	35 52.0
I	41 10.0
SJP EP'	12 35 52.0
EPP	37 08.0
E	38 37.0
ESKS	41 53.0
E	43 06.0
EPKKP	46 25.0
E	50 02.0
WAS IP'	12 36 18.0
I	39 14.0
I	40 10.0
AUG 25	
GCA E(P)	12 23 54.1
E(S)	24 01.6
AUG 25	
HHM E(P)	13 08 02.2
E(S)	09 04.2
AUG 25	
EUR IP	13 23 19.7
IL	24 38.7
AUG 25	
H-13 26 01.4	
17.9S 178.8W	
h ABOUT 610KM	
COL EP	13 37 37.0
E▸P	39 54.0
AUG 25	
H-13 34 46.0	
17.4S 178.7W	
h ABOUT 540KM	
EUR EP	13 46 07.7
COL EP	13 46 24.0
E▸P	48 30.0
AUG 25	
TUC IP	16 27 22.5
ALQ EP	16 27 45.8
GCA E(P)	16 28 17.5
E(S)	29 11.5
BCN EP	16 28 38.4
AUG 25	
H-17 53 04.1	
15.6S 173.1W	
h ABOUT 033KM	
ALQ EP	18 05 16.1
COL IP	18 05 25.3
E▸P	05 35.0
AUG 25	
GUA E(P)	18 02 23.5

Date and Station	Phase (GCT)
	h m s
AUG 25	
GUA EP	18 07 49.9
AUG 25	
H-18 44 15.5	
52.5N 172.5W	
h ABOUT 080KM	
EUR EP	18 51 47.2
BCN EP	18 52 12.2
ALQ EP	18 52 55.5
EpP	53 14.6
ES	54 19.5
AUG 25	
SJP EP	21 10 13.9
AUG 25	
TUC IP	21 58 55.1
ALQ EP	21 59 43.6
AUG 25	
GUA EP	22 41 51.5
ES	42 21.7
AUG 25	
GUA E(P)	22 49 45.2
AUG 26	
H-01 30 08.7	
14.4N 091.3W	
h ABOUT 033KM	
EUR EP	01 36 44.3
AUG 26	
COL EP	01 41 08.0
AUG 26	
TUC EP	02 23 16.1
ALQ EP	02 23 42.2
EUR EP	02 24 06.3
AUG 26	
H-02 28 12.8	
26.3S 178.8E	
h ABOUT 546KM	
TUC E(P)	02 40 10.5
EUR EP	02 40 11.7
AUG 26	
EUR IP	02 48 37.9
IS	49 01.3
AUG 26	
ALQ EP	02 59 32.1
AUG 26	
H-02 59 46.9	
19.3S 175.4W	
h ABOUT 083KM	
EUR E(P)	03 11 51.9
ALQ IP	03 12 13.2
EpP	12 50.2

Date and Station	Phase (GCT)
	h m s
COL IP	03 12 21.6
EpP	12 57.0
AUG 26	
SJP IP	04 38 47.0
EUR EP	04 46 23.9
AUG 26	
H-04 49 43.8	
17.7S 178.8W	
h ABOUT 575KM	
BCN EP	05 01 00.1
EpP	03 03.1
EUR EP	05 01 03.8
EpP	03 08.3
TUC IP	05 01 06.0
GCA IP	05 01 14.6
COL IP	05 01 22.0
E	01 40.0
EpP	03 25.0
FGU EP	05 01 29.7
AUG 26	
COL IP	05 42 16.0
AUG 26	
H-05 42 40.3	
06.8S 105.6E	
h ABOUT 033KM	
EUR EP'	06 01 49.9
ISKP	05 15.0
AUG 26	
EUR EP	05 50 56.9
IL	52 05.0
AUG 26	
GUA IP	08 21 06.2
AUG 26	
KIP IP	08 42 04.5
IS	42 20.0
HON IP	08 42 04.8
IS	42 20.0
AUG 26	
H-08 45 32.4	
51.6N 157.0E	
h ABOUT 105KM	
COL IP	08 51 39.5
EPP	52 42.0
EUR IP	08 55 21.5
IpP	55 47.9
IsP	56 02.2
TUC IP	08 56 14.2
ALQ IP	08 56 18.0
AUG 26	
H-12 19 27.6	
22.7S 171.7E	
h ABOUT 043KM	

Date and Station	Phase (GCT)
	h m s
EUR EP	12 32 31.7
E	32 50.7
COL EP	12 32 33.6
AUG 26	
GUA IP	12 25 58.9
AUG 26	
H-12 45 30.8	
32.7N 137.7E	
h ABOUT 349KM	
COL EP	12 54 22.3
EPCP	55 23.0
EUR EP	12 57 08.2
EpP	58 39.5
AUG 26	
GCA EP	15 27 48.0
AUG 26	
TUC IP	17 08 36.0
AUG 26	
SJP IP	18 20 57.5
AUG 26	
H-18 49 18.6	
19.8N 155.6W	
h ABOUT 005KM	
HON IP	18 50 03.2
IS	50 38.0
KIP IP	18 50 04.4
IS	50 39.0
EUR EP	18 56 50.1
TUC EP	18 57 13.0
GCA E(P)	18 57 13.9
HHM E(P)	18 57 27.6
ALQ E(P)	18 57 38.0
I	57 45.0
COL EP	18 57 41.0
AUG 26	
EUR EP	18 59 00.6
AUG 26	
HHM EP	22 26 30.6
ES	27 12.6
AUG 26	
TUC IP	22 52 41.8
AUG 26	
TUC E(P)	22 57 16.5
AUG 26	
GUA E(P)	23 14 44.1
AUG 26	
H-23 32 38.3	
07.7S 127.3E	
h ABOUT 151KM	
ALQ IP'	23 51 19.8

Date and Station	Phase (GCT)
	h m s
AUG 26	
EUR IP	23 50 03.3
SLC EP	23 50 38.5
IS	51 05.3
AUG 27	
SJP EP	00 43 22.5
AUG 27	
TUC E(P)	01 14 08.5
AUG 27	
H-01 20 55.8	
31.7N 116.2W	
h ABOUT 014KM	
TUC EP	01 22 06.0
GCA IP	01 22 34.1
EUR IP	01 22 52.2
ALQ E(P)	01 23 07.6
AUG 27	
COL EP	02 16 53.0
AUG 27	
H-02 29 51.4	
17.5N 092.6W	
h ABOUT 180KM	
TUC E(P)	02 34 30.3
AUG 27	
H-03 23 32.6	
45.9S 075.3W	
h ABOUT 033KM	
BHP EP	03 33 05.0
EUR E(P)	03 35 42.3
TUC EP	03 36 02.0
ALQ EP	03 36 06.0
GCA E(P)	03 36 23.7
COL EP'	03 42 27.0
AUG 27	
H-03 32 56.5	
11.2S 165.7E	
h ABOUT 033KM	
EUR E(P)	03 44 45.3
COL IP	03 45 21.9
I	45 35.0
E(PP)	48 20.0
HON EPP	03 51 14.0
E	56 00.0
KIP E	03 56 02.0
E	04 05 42.0
EL	10 03.0
AUG 27	
FGU EP	04 14 53.9

Date and Station	Phase (GCT)
	h m s
AUG 27	
H-05 51 37.4	
44.1N 129.5W	
h ABOUT 033KM	
UKI EP	05 53 19.0
HHM E(P)	05 54 15.0
BCN EP	05 54 56.7
GCA E(P)	05 55 11.2
TUC EP	05 55 52.6
ALQ EP	05 56 08.3
COL EP	05 56 43.0
KIP ET	06 32 10.0
AUG 27	
TUC E(P)	05 51 40.0
AUG 27	
TUC E(P)	06 07 03.2
AUG 27	
EUR EP	06 44 58.3
AUG 27	
COL IP	06 55 07.1
I	55 17.0
EUR IP	06 55 59.5
I	56. 09.5
EUR IP	06 56 09.5
I	56 19.5
SJP EP	07 01 50.0
EL	02 35.0
AUG 27	
EUR EP	07 01 53.9
E	02 12.9
COL IP	07 03 22.6
E	03 45.0
AUG 27	
EUR EP	07 02 59.4
AUG 27	
H-07 06 57.4	
5.5S 149.3E	
h ABOUT 162KM	
COL EP	07 19 09.9
AUG 27	
TUC EP	07 59 09.0
EUR E(P)	08 00 58.0
EL	04 27.9
AUG 27	
ALQ EP	08 00 23.0
AUG 27	
GCA E(P)	08 02 22.0
BCN E(P)	08 02 36.2

Date and Station	Phase (GCT)
	h m s
AUG 27	
FGU E(P)	08 05 01.2
AUG 27	
FGU EP	09 13 59.2
AUG 27	
BUT EP	10 02 25.4
I	02 49.4
AUG 27	
BHP IP	11 44 25.0
IS	44 37.0
AUG 27	
EUR EP	12 35 31.4
AUG 27	
H-12 56 55.2	
17.7S 070.1W	
h ABOUT 188KM	
EUR EP	13 07 56.0
AUG 27	
GCA IP	14 06 20.7
IS	06 24.0
AUG 27	
COL EP	15 16 09.9
AUG 27	
COL IP	16 32 59.2
E	34 24.0
AUG 27	
EUR E(P)	17 28 53.6
E	29 26.6
AUG 27	
GUA E(P)	17 41 55.0
EUR E(P)	17 50 51.4
AUG 27	
H-18 08 12.7	
10.0S 161.3E	
h ABOUT 092KM	
COL IP	18 20 31.5
EUR EP	18 21 07.6
E(PCP)	21 43.0
AUG 27	
KIP IP	18 50 04.4
IS	50 39.0
AUG 27	
GUA EP	20 41 50.5
E	42 48.0
EUR EP	20 52 58.2
AUG 27	
GCA EP	21 10 49.1
AUG 27	
FGU EP	21 12 09.0
AUG 27	
H-22 02 55.9	
40.2N 145.2E	
ABOUT 055KM	

Date and Station	Phase (GCT)
	h m s
COL EP	22 11 05.7
I▸P	11 27.0
EUR EP	22 14 12.7
BCN EP	22 14 50.1
ALQ IP	22 15 03.6
I▸P	15 15.2
AUG 27	
TUC IP	22 28 15.1
AUG 27	
GCA IP	22 31 46.3
AUG 27	
SLC EP	23 07 45.7
ES	08 14.5
AUG 27	
FGU IP	23 11 57.1
IS	12 29.1
AUG 27	
FGU EP	23 14 22.8
AUG 27	
H-23 40 42.9	
16.1N 096.9W	
h ABOUT 038KM	
TUC IP	23 45 20.7
ALQ IP	23 45 22.1
GCA EP	23 46 01.6
FGU EP	23 46 24.5
EUR EP	23 46 38.6
EPP	47 25.8
E	48 10.3
COL IP	23 50 42.6
AUG 28	
H-00 13 12.1	
40.7N 112.0W	
h ABOUT 000KM	
SLC E(P)	00 13 15.7
IL	
FGU IP	00 13 48.3
EUR E(P)	00 14 03.9
IL	14 49.2
AUG 28	
EUR EP	00 37 22.4
E	37 36.6
AUG 28	
EUR EP	01 07 26.4
E	07 53.9
E	08 21.4
AUG 28	
ALQ E(P)	01 19 33.0
AUG 28	
TUC E(P)	01 26 52.5

Date and Station	Phase (GCT)
	h m s
AUG 28	
FGU IP	01 31 47.8
AUG 28	
H-02 40 21.3	
16.3N 096.9W	
h ABOUT 033KM	
TUC EP	02 44 57.1
EUR EP	02 46 15.1
COL E(P)	02 50 30.0
AUG 28	
EUR EP	03 55 11.3
AUG 28	
EUR E(P)	03 58 33.6
AUG 28	
COL IP	05 45 36.2
I	45 46.0
AUG 28	
BUT E(P)	05 54 24.0
AUG 28	
H-05 55 51.3	
12.6N 087.2W	
h ABOUT 115KM	
FGU IP	06 02 28.6
EUR E(P)	06 02 52.2
AUG 28	
EUR E(P)	07 35 10.5
AUG 28	
COL EP	07 53 55.3
EUR EP	07 56 05.7
TUC E(P)	07 56 45.6
AUG 28	
FGU EP	08 02 46.1
E(S)	03 12.8
AUG 28	
TUC E(P)	09 11 10.0
AUG 28	
SJP IP	10 00 19.8
EL	01 07.0
TUC EP	10 07 18.5
AUG 28	
EUR EP	12 04 36.1
AUG 28	
TUC E(P)	12 38 42.0
AUG 28	
H-12 48 22.1	
61.9S 164.5E	
h ABOUT 033KM	
EUR EP'	13 07 31.7

Date and Station	Phase	(GCT) h m s
KIP	ES	13 13 26.0
	E	25 19.0
	EL	29 06.0
HON	ES	13 13 26.0
	E	25 02.0
	EL	29 06.0
AUG 28		
FGU	EP	13 09 02.5
	ES	09 32.8
AUG 28		
GCA	IP	14 05 24.5
	IS	05 27.7
AUG 28		
HHM	E(P)	15 25 21.0
AUG 28		
UKI	EP	15 31 37.0
	E	32 15.0
AUG 28		
H-15 51 06.3		
28.3N 141.0E		
h ABOUT 096KM		
COL	IP	16 00 42.2
HHM	EP	16 02 59.8
EUR	IP	16 03 15.8
	IPP	03 37.1
FGU	IP	16 03 34.2
GCA	IP	16 03 37.5
TUC	IP	16 03 52.0
ALQ	IP	16 03 59.5
AUG 28		
KIP	EP	15 52 51.0
	ES	53 26.0
AUG 28		
GCA	EP	16 06 31.0
AUG 28		
COL	EP	16 23 33.0
EUR	E(P)	16 28 46.1
	IL	29 42.5
AUG 28		
H-16 57 46.2		
39.1S 091.8W		
h ABOUT 033KM		
BHP	E(P)	17 06 19.0
ALQ	EP	17 09 24.0
EUR	EP	17 10 01.6
BUT	E(P)	17 10 28.0
AUG 28		
BHP	E(P)	17 20 37.0

Date and Station	Phase	(GCT) h m s
AUG 28		
SJP	IP	17 42 03.5
	I	43 04.0
AUG 28		
HHM	E(P)	18 15 56.0
	ES	16 33.0
AUG 28		
GUA	IP	18 47 59.1
	E	49 03.0
COL	EP	18 58 21.0
AUG 28		
GUA	IP	18 48 00.0
AUG 28		
HHM	EP	21 01 16.4
	ES	01 48.9
BOZ	EP	21 01 35.0
	E(S)	01 43.0
AUG 28		
ALQ	EP	22 45 52.0
EUR	E(P)	22 47 09.9
AUG 28		
HHM	EP	23 06 27.1
	ES	06 46.0
AUG 28		
SLC	E(P)	23 10 38.7
AUG 28		
SLC	E(P)	23 12 09.5
AUG 28		
SLC	E(P)	23 12 09.7
AUG 28		
BCN	EP	23 46 30.7
AUG 28		
SLC	EP	23 53 41.9
	IS	54 20.7
EUR	E(P)	23 54 29.9
AUG 28		
SLC	IP	23 53 43.7
	IS	54 21.6
FGU	IP	23 54 15.8
AUG 29		
H-01 22 06.4		
02.0N 123.4E		
h ABOUT 043KM		
EUR	EP'	01 40 39.5
ALQ	IP'	01 40 56.9
	E	57 16.0
AUG 29		
EUR	E(P)	01 51 40.2
AUG 29		
FGU	EP	02 42 28.4
	ES	42 57.0

Date and Station	Phase	(GCT) h m s
AUG 29		
BHP	IP	02 50 24.0
	IS	50 58.0
AUG 29		
TUC	E(P)	03 45 36.2
EUR	E(P)	03 45 45.5
AUG 29		
EUR	E(P)	03 52 56.8
AUG 29		
EUR	EP	04 46 43.2
AUG 29		
HHM	EP	05 20 48.0
AUG 29		
H-06 08 48.0		
21.9N 145.5E		
h ABOUT 130KM		
COL	EP	06 18 46.3
EUR	IP	06 20 58.6
	EPP	21 35.7
BCN	EP	06 21 10.0
FGU	IP	06 21 18.3
ALQ	IP	06 21 41.0
AUG 29		
SJP	EP	07 25 33.0
	EL	26 13.5
AUG 29		
FGU	IP	08 21 21.5
AUG 29		
H-08 53 48.4		
39.6N 074.2E		
h ABOUT 031KM		
GUA	EP	09 04 39.5
COL	IP	09 05 02.2
	I	05 26.0
	EPP	07 40.0
	ES	14 18.0
	ESS	18 46.0
	EL	22 20.0
	EP'P'	32 41.0
SIT	EP	09 05 59.0
	ES	16 09.0
HHM	IP	09 06 55.6
	E(S)	17 28.0
BUT	IP	09 07 07.0
	ES	16 37.0
BOZ	IP	09 07 09.0
FGU	EP	09 07 31.9
SLC	E(P)	09 07 32.3

Date and Station	Phase	(GCT) h m s
EUR	EP	09 07 35.7
	EPP	10 50.9
	EPPP	13 46.4
	EPS	20 42.9
	EPKKP	23 48.9
	EP'P'	32 05.4
HON	EP	09 07 43.0
	EPP	11 57.0
	ESKS	18 19.0
	EPS	20 58.0
	EPPS	22 02.0
	ESS	26 44.0
	EL	38 10.0
GCA	E(P)	09 07 49.5
BCN	E(P)	09 07 56.8
	EPP	12 00.8
	E	12 16.3
ALQ	E(P)	09 07 58.5
TUC	EP'	09 08 11.0
BHP	IP'	09 12 48.0
KIP	ESKS	09 18 27.0
	EPPS	22 02.0
	ESS	26 37.0
	EL	36 32.0
AUG 29		
TUC	IP	09 23 26.5
AUG 29		
TUC	E(P)	10 48 07.8
AUG 29		
BOZ	EP	11 11 00.0
BUT	EP	11 11 03.0
	ES	11 15.0
HHM	EP	11 11 38.5
	ES	12 15.0
AUG 29		
HHM	EP	12 52 05.0
	ES	52 54.0
BUT	EP	12 52 05.0
	E	52 51.0
EUR	EP	12 52 34.6
	ES	53 36.6
COL	EP	12 54 13.2
AUG 29		
GCA	IP	14 00 03.0
AUG 29		
KIP	IP	14 00 26.7
AUG 29		
H-15 30 31.4		
07.1S 081.6W		
h ABOUT 023KM		
BHP	IP	15 34 19.0
	IS	37 29.0

Date and Station	Phase (GCT)
	h m s
SJP IP	15 36 37.0
IS	41 32.0
CSC IP	15 38 14.0
IPP	39 55.0
IS	44 19.0
PHI EP	15 39 04.6
ES	45 58.6
ALQ IP	15 39 09.1
TUC IP	15 39 11.3
CHK EP	15 39 17.7
IS	46 25.3
GCA IP	15 39 43.9
BCN EP	15 39 51.2
EPP	41 55.1
EP'P'	16 09 58.4
FGU IP	15 39 57.5
SLC IP	15 40 05.7
SLC IP	15 40 05.8
EUR EP	15 40 12.7
EP'P'	16 10 10.7
BOZ IP	15 40 31.2
E(PCP)	41 48.0
ES	48 40.0
BUT IP	15 40 37.0
ES	48 47.0
UKI EP	15 40 40.0
EP'P'	10 13.0
HHM EP	15 40 53.0
IS	49 20.0
SIT IP	15 42 28.0
IS	52 24.0
KIP IP	15 42 43.4
IS	52 53.0
HON IP	15 42 43.9
IS	52 52.0
COL IP	15 43 14.1
EPP	46 34.0
IS	53 13.0
EP'P'	16 09 17.0
GUA IP'	15 49 49.4
AUG 29	
TUC EP	16 10 15.8
AUG 29	
EUR EP	16 17 28.4
AUG 29	
GUA IP	16 40 05.0
ES	41 11.2
AUG 29	
EUR EP	17 45 11.7

Date and Station	Phase (GCT)
	h m s
AUG 29	
FGU IP	18 24 57.4
ES	25 16.9
AUG 29	
ALQ E(P)	19 04 42.1
AUG 29	
EUR EP	19 35 02.4
AUG 29	
H-20 57 31.5	
15.5S 172.9W	
h ABOUT 033KM	
HON EP	21 05 02.0
EPCP	07 06.0
IS	11 08.0
E	11 38.0
EL	13 32.0
KIP IP	21 05 02.5
IS	11 08.0
BCN I(P)	21 09 04.1
E	09 11.1
TUC EP	21 09 18.5
EUR EP	21 09 19.7
GCA EP	21 09 29.5
SLC E(P)	21 09 37.3
ALQ EP	21 09 42.0
FGU EP	21 09 47.8
HHM EP	21 09 50.6
COL IP	21 09 51.7
I	10 07.0
AUG 29	
GCA EP	20 59 52.0
AUG 29	
EUR E(P)	21 18 32.9
AUG 29	
TUC IP	22 01 35.0
IS	01 54.9
AUG 29	
TUC IP	22 20 11.9
AUG 29	
COL IP	22 48 52.3
AUG 29	
FGU EP	23 02 25.5
E(S)	02 49.7
AUG 29	
FGU IP	23 15 01.4
ES	15 30.2
AUG 29	
SLC EP	23 35 19.7
IS	35 45.9
FGU IP	23 35 52.2
E(S)	36 22.7

Date and Station	Phase (GCT)
	h m s
AUG 29	
EUR EP	23 37 04.0
IL	37 54.2
AUG 30	
H-00 16 36.3	
8.7S 108.6E	
h ABOUT 033KM	
HHM EP'	00 35 37.8
EUR EP'	00 35 45.0
EPP	37 44.0
TUC EP'	00 35 46.6
ALQ EP'	00 35 56.8
AUG 30	
H-00 43 19.0	
23.3S 066.3W	
h ABOUT 239KM	
TUC IP	00 54 05.1
BCN EP	00 54 34.6
FGU EP	00 54 39.2
EUR EP	00 54 51.8
HHM E(P)	00 55 19.0
AUG 30	
COL E(P)	00 53 43.0
AUG 30	
TUC E(P)	02 21 03.0
AUG 30	
COL EP	02 58 02.0
EUR IP	03 01 24.0
I	01 33.6
TUC EP	03 02 25.1
AUG 30	
TUC EP	03 15 48.8
EUR EP	03 16 32.7
AUG 30	
COL EP	04 32 09.0
AUG 30	
H-04 46 25.0	
44.8N 080.1E	
h ABOUT 033KM	
COL IP	04 56 58.9
EUR EP	04 59 45.3
AUG 30	
COL EP	05 02 34.0
AUG 30	
EUR EP	05 55 30.4
AUG 30	
EUR EP	06 23 14.9
IL	23 46.6

Date and Station	Phase (GCT)
	h m s
AUG 30	
TUC E(P)	08 59 03.0
AUG 30	
COL EP	10 39 49.0
E	41 39.0
AUG 30	
BCN EP	11 21 40.3
EL	22 22.8
AUG 30	
EUR EP	11 46 25.1
AUG 30	
H-13 51 51.6	
23.4S 175.4W	
h ABOUT 033KM	
KIP IP	14 00 27.0
BCN EP	14 04 13.2
TUC EP	14 04 15.0
EUR EP	14 04 18.9
GCA EP	14 04 27.0
ALQ IP	14 04 38.9
COL IP	14 04 51.5
AUG 30	
GCA IP	14 08 51.0
AUG 30	
TUC E(P)	14 38 56.0
AUG 30	
ALQ E(P)	17 20 56.0
AUG 30	
TUC EP	18 23 15.5
AUG 30	
BCN EP	20 06 29.3
EL	06 59.2
AUG 30	
TUC EP	20 09 21.8
AUG 30	
GCA EP	20 29 46.5
AUG 30	
EUR IP	22 21 52.1
HHM EP	22 24 00.0
ES	24 29.0
AUG 30	
COL IP	22 28 38.8
E	29 28.0
EUR EP	22 32 05.2
AUG 30	
GCA E(P)	22 45 42.0
IS	45 49.0
AUG 30	
TUC EP	22 55 30.8

Date and Station	Phase	Phase (GCT) h m s
EUR	E(P)	22 55 54.9
	IL	56 49.4
AUG 30		
FGU	IP	22 59 55.4
	ES	23 00 22.7
AUG 30		
TUC	IP	23 11 07.3
AUG 31		
GCA	EP	00 24 44.9
AUG 31		
GCA	IP	00 29 12.5
	IS	29 29.0
AUG 31		
ALQ	EP	03 52 49.0
AUG 31		
GCA	EP	05 17 35.7
AUG 31		
TUC	E(P)	05 50 16.0
AUG 31		
TUC	EP	08 28 41.7
AUG 31		
COL	EP	08 45 53.6
AUG 31		
H-10 30 30.1		
15.9S 074.4W		
h ABOUT 053KM		
EUR	E(P)	10 41 30.9
AUG 31		
BHP	IP	11 03 42.0
	IS	04 25.0
AUG 31		
UKI	IP	11 18 38.7
AUG 31		
TUC	EP	12 01 35.3
	I	01 39.2
AUG 31		
H-12 47 11.4		
28.2N 129.3E		
h ABOUT 033KM		
COL	IP	12 57 28.5
HHM	EP	12 59 45.5
EUR	EP	13 00 06.2
AUG 31		
H-13 08 46.3		
11.9N 087.0W		
h ABOUT 048KM		
BHP	IP	13 10 41.0
CSC	E(P)	13 13 54.0
ALQ	IP	13 14 43.2
TUC	EP	13 14 52.0
	I	14 58.0
	E	15 06.0
GCA	IP	13 15 23.8
BCN	EP	13 15 35.4
FGU	IP	13 15 36.4
HHM	EP	13 16 40.5
COL	EP	13 19 34.2
	IPP	19 49.0
AUG 31		
COL	EP	13 28 24.5
HHM	EP	13 31 40.5
AUG 31		
COL	IP	13 29 22.2
	E	29 43.0
AUG 31		
EUR	EP	15 15 59.0
AUG 31		
H-16 31 12.6		
36.6N 121.8W		
h ABOUT 014KM		
EUR	IP	16 32 38.0
	I(S)	33 30.5
BCN	EP	16 32 57.2
ALQ	E(P)	16 34 22.0
COL	IP	16 37 18.5
AUG 31		
UKI	EP	16 31 59.0
	ES	32 46.5
BCN	E(P)	16 32 42.2
AUG 31		
HHM	IP	16 40 14.5
	I	40 54.5
EUR	IP	16 40 47.8
	E	41 06.3
	I	41 15.8
BCN	EP	16 41 07.9
AUG 31		
ALQ	EP	17 35 32.0
AUG 31		
HHM	E(P)	18 39 06.5
	ES	39 41.5
AUG 31		
COL	EP	20 16 44.0
AUG 31		
HHM	E(P)	21 21 42.0
	ES	22 22.6
AUG 31		
H-21 26 09.3		
21.5S 179.2W		
h ABOUT 543KM		
BCN	EP	21 37 44.3
TUC	EP	21 37 46.0
EUR	EP	21 37 46.9
ALQ	IP	21 38 07.1
COL	IP	21 38 07.8
FGU	I(P)	21 38 10.9