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COAST & GEODETIC SURVEY

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SEISMOLOGICAL BULLETIN

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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)
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)
*Thule, Greenland (THU)
U. S. Army Ionosphere Station
Tucson, Ariz. (TUC) WWNSS
Ukiah, Calif. (UKI)
International Latitude Observatory
Washington, D. C. (WAS)

Tucson, Ariz. Telemeter was discontinued after February 25, 1963.

*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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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.

All magnitude determinations are by Pasadena, unless otherwise stated.

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, Remarks and Focal Depth
March	h m s	°	°	
1	00 25 56.0	34.9 N.	119.0 W.	Kern County, California. Slight damage at Taft. Felt over an area of 8,000 square miles. h about 16 km. Mag. 5.0.
1	03 20 02.3	35.8 N.	59.9 E.	Iran. h about 33 km.
1	04 02 53.4	16.8 N.	93.7 W.	Chiapas, Mexico. Felt at Tacotalpa, Tabasco. h about 117 km.
1	04 35 01*	4.7 S.	139.3 E.	West New Guinea. h about 33 km.
1	04 39 34.1	18.2 S.	177.9 W.	Fiji Islands region. h about 567 km.
1	09 30 44*	36.1 N.	23.6 E.	Southern Greece. h about 136 km.
1	10 45 55.5	41.1 N.	143.0 E.	Hokkaido, Japan. Felt. h about 43 km.
1	11 55 23.2	41.8 N.	81.3 E.	Southern Sinkiang Province, China. h about 50 km.
1	14 32 25*	42.6 N.	141.1 E.	Hokkaido, Japan. Felt. h about 65 km.
1	19 14 11.1	1.0 N.	29.7 W.	Central Mid-Atlantic Ridge. h about 33 km. Mag. 4¾ (PAL).
1	23 03 28*	22.8 N.	144.2 E.	Volcano Islands region. h about 50 km.
2	00 20 31.6	5.0 S.	144.2 E.	Near north coast of New Guinea. h about 55 km.
2	01 34 40.7	6.6 S.	131.3 E.	Tanimbar Islands region. h about 33 km.
2	02 45 37.1	23.8 N.	92.2 E.	India-East Pakistan border region. h about 36 km.
2	05 39 07*	1.8 S.	143.6 E.	Near north coast of West New Guinea. h about 129 km.
2	08 44 52*	15.9 S.	173.1 W.	Tonga Islands. h about 25 km.
2	09 25 58.2	46.4 N.	153.1 E.	Kurile Islands. h about 48 km.
2	11 12 03.4	46.3 N.	153.1 E.	Kurile Islands. h about 40 km.
2	15 42 48*	10.5 N.	62.5 W.	Near coast of Venezuela. h about 35 km.
2	16 04 44*	47.6 N.	152.0 E.	Kurile Islands. h about 42 km.
2	16 06 56.0	10.0 N.	125.9 E.	Mindanao, Philippine Islands. h about 83 km.
2	17 27 39.5	10.0 N.	126.1 E.	Mindanao, Philippine Islands. h about 79 km.
2	19 41 55.1	6.8 N.	73.0 W.	Northern Colombia. h about 165 km.
2	21 50 41*	7.6 S.	128.2 E.	Banda Sea. h about 112 km.
2	22 09 19*	15.1 N.	93.8 W.	Near coast of Chiapas, Mexico. h about 33 km.
2	22 16 35.2	17.1 S.	174.9 W.	Tonga Islands. h about 239 km.
3	01 48 10.8	36.6 N.	71.4 E.	Afghanistan-U.S.S.R. border region. h about 229 km.
3	02 08 16.2	20.6 S.	69.4 W.	Northern Chile. h about 124 km.
3	09 39 51*	54.3 N.	165.0 W.	Unimak Island region. h about 55 km.
3	17 04 58.9	36.7 N.	71.4 E.	Afghanistan-U.S.S.R. border region. h about 101 km.
3	17 30 11.4	36.7 N.	90.0 W.	Slight damage southeast Missouri. Felt in Missouri, Illinois, Arkansas, Kentucky, Tennessee, Indiana, Kansas, Oklahoma. h about 33 km. Mag. 4½ (PAL).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
3	18 36 20.4	1.2 N.	67.1 E.	Carlsberg Ridge. h about 33 km.
3	22 59 44.7	30.6 N.	136.9 E.	Southeast of Shikoku, Japan. h about 490 km.
4	05 08 30*	16.1 S.	178.4 E.	Fiji Islands. h about 33 km.
4	07 41 50.6	83.0 N.	06.4 W.	North of Svalbard. h about 33 km. Mag. 5¼ (PAL)
4	12 37 33*	47.7 N.	152.4 E.	Kurile Islands. h about 33 km.
4	12 50 16*	46.3 N.	153.0 E.	Kurile Islands. h about 33 km.
4	13 38 42.5	24.5 N.	121.8 E.	Taiwan. Damage. h about 33 km.
4	15 10 13.1	34.9 N.	25.2 E.	Crete. h about 7 km.
4	15 43 02.2	4.5 S.	81.6 W.	Near coast of northern Peru. h about 23 km.
4	15 51 32.9	1.2 N.	121.6 E.	Northern Celebes. h about 133 km.
4	18 31 51.0	15.8 S.	75.3 W.	Near coast of Peru. h about 40 km.
4	19 04 00.4	19.3 S.	169.8 E.	New Hebrides Islands. Felt at Tanna. h about 33 km.
4	20 10 42*	34.7 N.	119.3 W.	Southern California. h about 33 km.
5	01 30 38.7	42.6 N.	111.3 W.	Eastern Idaho. Felt at Fish Haven. h about 33 km.
5	01 58 33.1	34.9 N.	05.5 W.	Morocco. Felt at Quezzane and Meknes. h about 47 km.
5	02 35 08*	29.2 N.	81.2 E.	Nepal. h about 33 km.
5	02 48 49.7	12.6 N.	90.9 W.	Off coast of Central America. h about 98 km.
5	04 54 50*	11.0 N.	140.8 E.	West Caroline Islands. h about 33 km.
5	07 05 00.4	4.5 S.	81.5 W.	Near coast of northern Peru. h about 22 km.
5	07 53 38.2	36.0 N.	26.2 E.	Dodecanese Islands. h about 73 km.
5	09 12 16.6	17.7 S.	178.5 W.	Fiji Islands region. h about 511 km.
5	13 07 55.0	27.1 N.	140.1 E.	Bonin Islands region. h about 480 km.
5	19 05 39.1	6.4 S.	149.0 E.	New Britain region. h about 54 km.
5	19 32 34*	45.0 N.	143.6 E.	Hokkaido, Japan. Felt. h about 33 km.
5	21 14 20.9	33.6 N.	104.5 E.	Kansu Province, China. h about 57 km.
5	23 27 40.4	6.3 S.	149.1 E.	New Britain region. h about 21 km.
6	04 37 40.3	28.6 N.	132.3 E.	East of Ryukyu Islands. h about 29 km.
6	06 55 44.9	53.9 N.	161.0 E.	Near east coast of Kamchatka. h about 41 km.
6	08 35 04.6	33.7 N.	72.5 E.	West Pakistan. h about 49 km.
6	17 53 26*	11.4 S.	166.2 E.	Santa Cruz Islands. h about 200 km.
6	19 50 07*	9.5 S.	154.9 E.	Dentrecasteaux Islands region. h about 50 km.
6	23 22 58.7	36.5 N.	141.1 E.	Near east coast of Honshu, Japan. Felt in the Tokyo area. h about 50 km.
7	01 50 29.5	3.9 S.	131.2 E.	West New Guinea region. h about 33 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
7	03 40 45.5	15.1 S.	168.2 E.	New Hebrides Islands. h about 26 km.
7	05 22 01.3	26.8 S.	113.4 W.	Easter Island region. h about 33 km. Mag 6¾ .
7	11 41 29*	27.5 S.	113.3 W.	Easter Island region. h about 33 km.
7	12 16 26.3	44.2 S.	75.4 W.	Off coast of southern Chile. h about 33 km. Mag. 5½ (PAL).
7	13 03 01*	6.2 S.	148.8 E.	New Britain region. h about 82 km.
7	13 43 05.0	51.3 N.	178.1 E.	Rat Islands, Aleutian Islands. h about 40 km.
7	21 49 24.1	36.5 N.	71.3 E.	Afghanistan-U.S.S.R. border region. h about 102 km.
7	23 53 25.0	44.9 N.	123.5 W.	Northwestern Oregon. Slight damage at Salem. Felt from Portland to Eugene. h about 33 km.
8	00 14 15.6	76.7 N.	94.9 W.	Queen Elizabeth Islands. h about 33 km.
8	02 44 27.0	19.3 S.	169.8 E.	New Hebrides Islands. Felt at Tanna. h about 5 km.
8	03 17 50.5	14.8 S.	167.3 E.	New Hebrides Islands. h about 131 km.
8	03 24 58.5	19.3 S.	169.3 E.	New Hebrides Islands. Felt at Tanna. h about 63 km.
8	03 33 03.4	19.3 S.	169.6 E.	New Hebrides Islands. Felt at Tanna. h about 33 km.
8	09 35 48.9	44.8 N.	110.2 W.	Yellowstone National Park, Wyoming. Slight damage at Canyon. h about 33 km.
8	13 59 37.8	22.0 S.	176.3 W.	South of Fiji Islands. h about 121 km.
8	15 06 03.0	0.7 N.	29.7 W.	Central Mid-Atlantic Ridge. h about 33 km.
8	16 04 53.6	21.3 S.	170.2 E.	Loyalty Islands Region. h about 103 km.
8	22 26 26*	9.0 N.	84.1 W.	Near west coast of Costa Rica. h about 33 km.
9	02 17 35.0	21.5 N.	61.9 E.	Arabian Sea. h about 11 km.
9	02 48 29*	27.1 S.	177.1 W.	Kermadec Islands. h about 33 km.
9	04 21 28*	5.2 N.	84.8 W.	Off coast of Central America. h about 33 km.
9	05 26 52*	9.0 N.	126.3 E.	Mindanao, Philippine Islands. h about 33 km.
9	06 44 28.4	46.2 N.	141.0 E.	Sakhalin Island. h about 33 km.
9	13 06 09.7	19.1 S.	169.6 E.	New Hebrides Islands. h about 5 km.
9	16 23 43.5	3.2 S.	147.1 E.	Bismarck Sea. h about 33 km.
9	16 56 23.1	6.5 N.	123.8 E.	Mindanao, Philippine Islands. h about 136 km.
9	18 55 48.5	3.3 S.	147.1 E.	Bismarck Sea. h about 33 km.
9	19 13 52.1	19.1 S.	169.8 E.	New Hebrides Islands. h about 33 km.
9	22 43 50.9	21.5 S.	178.9 W.	Fiji Islands region. h about 534 km.
10	01 19 36.6	15.2 S.	167.4 E.	New Hebrides Islands. Felt at Santo. h about 132 km.
10	01 26 03.7	56.3 N.	153.6 W.	Kodiak Island region. h about 29 km. Mag. 5 (PAL).
10	01 26 43.4	25.7 S.	179.4 E.	South of Fiji Islands. h about 509 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
10	02 53 33.2	24.6 N.	122.1 E.	Taiwan region. Felt in northern Taiwan. h about 33 km. Mag. 5½-5¾ (PAL).
10	04 25 12*	48.6 N.	157.2 E.	Kurile Islands region. h about 37 km.
10	06 04 38.2	14.8 N.	90.1 W.	Guatemala. Felt at Ahuachapan, El Salvador and in Guatemala. h about 33 km.
10	08 25 55*	54.6 N.	159.1 E.	Near east coast of Kamchatka. h about 57 km.
10	09 39 09.4	16.0 S.	168.5 E.	New Hebrides Islands. h about 283 km.
10	10 51 46.7	30.0 S.	71.2 W.	Near coast of central Chile. Felt at La Serna. h about 60 km. Mag. 6-6¼.
10	11 26 06*	44.9 N.	110.9 W.	Yellowstone National Park. Felt at Canyon. h about 33 km.
10	11 50 26.9	39.3 N.	141.7 E.	Honshu, Japan. Felt. h about 69 km.
10	13 16 57.5	44.8 N.	110.5 W.	Yellowstone National Park, Wyoming. Felt at Canyon. h about 33 km.
10	13 51 05.4	2.4 N.	126.8 E.	Molucca Passage. h about 55 km.
11	03 27 06*	17.2 S.	178.8 W.	Fiji Islands region. h about 521 km.
11	07 27 17.1	37.9 N.	29.0 E.	Turkey. Heavy damage at Denizli. Felt at Burduc, Isparta and Izmir. h about 6 km.
11	09 02 21.5	18.7 S.	177.6 W.	Fiji Islands region. h about 422 km.
11	09 42 47.2	0.0 N.	130.3 E.	West New Guinea region. h about 8 km.
11	10 27 46.7	36.5 N.	71.1 E	Afghanistan-U.S.S.R. border region. h about 252 km.
11	11 30 15.7	5.1 N.	76.5 W.	Colombia. h about 5[illegible] km.
11	14 22 07.5	31.0 N.	138.3 E.	South of Honshu, Japan. h about 369 km.
11	15 30 26*	18.8 N.	100.9 W.	Guerrero, Mexico. h about 109 km.
11	21 06 03*	14.9 S.	165.9 E.	New Hebrides Islands. h about 184 km.
12	03 41 24.4	44.9 N.	110.7 W.	Yellowstone National Park, Wyoming. Felt at Canyon. h about 21 km.
12	08 05 52.6	53.9 N.	160.5 E.	Near east coast of Kamchatka. h about 65 km.
12	12 38 47.4	39.2 N.	40.3 E.	Turkey. h about 16 km.
12	13 21 39*	15.9 S.	172.7 W.	Samoa Islands region. h about 33 km.
12	15 18 00*	72.0 N.	0.9 W.	Jan Mayen Island region. h about 33 km.
12	16 04 33*	80.1 N.	0.2 W.	North of Svalbard. h about 7 km.
12	20 15 00.8	16.3 S.	167.6 E.	New Hebrides Islands. Felt at Lamap and Santo. h about 41 km.
12	20 40 13.0	7.2 S.	156.0 E.	Solomon Islands. h about 99 km.
12	23 47 18.2	39.6 N.	110.5 W.	Rockburst. Damage at Geneva Coal Mine, Utah. 39°28'N., 110°21'W. (USGS). h about 0 km.
13	03 48 00*	10.5 S.	161.3 E.	Solomon Islands. h about 106 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
13	10 39 20.1	19.5 N.	69.5 W.	Dominican Republic region. h about 49 km.
13	10 54 25.7	33.8 N.	141.2 E.	Off east coast of Honshu, Japan. h about 98 km.
13	17 27 19.8	36.4 N.	70.4 E.	Hindu Kush region. h about 155 km.
14	01 57 26.8	25.7 S.	137.5 E.	Northern Territory, Australia. h about 10 km.
14	08 00 15.4	18.9 N.	120.2 E.	Luzon, Philippine Islands. h about 53 km.
14	18 13 28*	53.1 N.	163.2 W.	Unimak Island region. h about 33 km.
14	18 30 41.2	46.4 N.	153.7 E.	Kurile Islands. h about 41 km.
14	23 15 22*	5.8 S.	144.8 E.	New Guinea. h about 33 km.
15	00 03 50.5	4.8 S.	129.4 E.	Banda Sea. h about 181 km.
15	00 15 53*	8.3 N.	126.7 E.	Mindanao, Philippine Islands. h about 44 km.
15	03 35 01*	25.1 S.	179.4 E.	South of Fiji Islands. h about 616 km.
15	04 03 08*	25.1 S.	179.5 E.	South of Fiji Islands. h about 612 km.
15	05 46 32.4	21.8 N.	45.4 W.	North Atlantic Ridge. h about 26 km.
15	10 54 02.3	17.4 N.	120.1 E.	Luzon, Philippine Islands. h about 68 km.
15	18 50 34*	42.2 N.	142.3 E.	Hokkaido, Japan region. Felt. h about 33 km.
16	03 35 21.5	26.0 N.	92.8 E.	Eastern India. h about 39 km.
16	08 44 51.1	46.6 N.	154.8 E.	Kurile Islands region. Felt on northern Hokkaido. h about 46 km. Mag. 7.
16	13 18 19*	20.6 S.	174.4 W.	Tonga Islands. h about 33 km.
16	19 16 42*	36.5 N.	70.9 E.	Hindu Kush region. h about 160 km.
16	21 40 08.4	20.9 S.	174.4 W.	Tonga Islands. h about 33 km.
16	22 28 53.6	39.0 N.	71.8 E.	Afghanistan-U.S.S.R. border region. h about 39 km.
17	03 06 09*	24.5 N.	121.6 E.	Taiwan. Felt. h about 33 km.
17	04 26 35*	27.9 S.	65.4 W.	Tucuman Province, Argentina. h about 118 km.
17	06 18 47.1	6.8 N.	82.3 W.	South of Panama. h about 30 km.
17	08 42 12.6	46.1 N.	154.9 E.	Kurile Islands region. h about 33 km.
17	10 32 20*	37.4 S.	78.2 E.	Indian Ocean. h about 33 km.
17	11 11 33*	38.9 N.	112.0 W.	Utah. h about 33 km.
17	13 08 56*	46.8 N.	155.0 E.	Kurile Islands region. h about 50 km.
17	14 17 20.9	39.4 N.	20.9 E.	Greece-Albania border region. h about 33 km.
17	19 38 49*	65.7 N.	166.6 W.	Alaska. h about 33 km.
17	22 10 35.4	44.8 N.	110.1 W.	Yellowstone National Park, Wyoming. h about 20 km.
18	00 45 09*	38.2 N.	72.9 E.	Tadzhik S.S.R. h about 111 km.
18	04 00 39.4	27.1 S.	176.3 W.	Kermadec Islands. h about 20 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
18	04 25 41*	33.2 S.	179.0 E.	Kermadec Islands region. h about 33 km.
18	07 29 21*	20.1 S.	178.0 W.	Fiji Islands region. h about 506 km.
18	09 47 58*	30.6 N.	42.1 W.	North Atlantic Ridge. h about 33 km.
18	10 01 59.4	24.1 N.	05.1 E.	Southern Algeria. h about 0 km.
18	11 39 36*	7.6 S.	120.2 E.	Flores Sea. h about 22 km.
18	13 16 14.8	17.7 S.	178.6 W.	Fiji Islands region. h about 557 km.
19	04 52 33*	79.0 N.	01.6 E.	Greenland Sea. h about 10 km.
19	05 11 08.5	18.8 N.	145.3 E.	Mariana Islands. h about 226 km.
19	05 46 45.7	22.7 S.	170.7 E.	Loyalty Islands region. h about 33 km.
19	13 13 20.1	22.6 S.	170.8 E.	Loyalty Islands region. h about 33 km.
19	14 13 18*	27.2 N.	115.2 W.	Off west coast of Baja California. h about 33 km.
19	14 42 01.4	22.6 S.	170.9 E.	Loyalty Islands region. h about 33 km.
19	17 19 22.6	7.8 S.	106.9 E.	Java. h about 81 km.
19	18 11 33*	2.1 S.	127.3 E.	Banda Sea. h about 33 km.
19	19 08 08*	8.3 N.	126.6 E.	Mindanao, Philippine Islands. h about 106 km.
19	23 56 11*	5.4 S.	152.1 E.	New Britain region. h about 65 km.
20	04 43 14.0	20.0 S.	179.0 W.	Fiji Islands region. h about 690 km.
20	04 45 48.7	20.0 S.	179.1 W.	Fiji Islands region. h about 690 km.
20	07 04 21.0	46.4 N.	154.6 E.	Kurile Islands region. h about 33 km.
20	10 44 41*	15.8 S.	171.5 W.	Samoa Islands region. h about 33 km.
20	11 38 31.3	44.8 N.	110.7 W.	Yellowstone National Park, Wyoming. h about 33 km.
20	12 32 24.5	44.7 N.	110.6 W.	Yellowstone National Park, Wyoming. h about 33 km.
20	14 38 57*	6.7 S.	129.9 E.	Banda Sea. h about 222 km.
20	14 41 47.4	11.6 N.	92.8 E.	Andaman Islands region. h about 33 km.
20	16 38 54.3	2.4 S.	138.4 E.	West New Guinea. h about 29 km.
20	21 33 45*	3.3 S.	130.9 E.	Ceram. h about 5 km.
21	01 12 53.1	19.5 S.	175.7 W.	Tonga Islands. h about 121 km.
21	03 00 24.2	44.8 N.	110.6 W.	Yellowstone National Park, Wyoming. h about 33 km.
21	04 00 09.6	36.4 N.	141.1 E.	Near east coast of Honshu, Japan. Felt at Tokyo and on Kanto Plains. h about 38 km.
21	04 33 53.0	5.5 S.	152.2 E.	New Britain region. h about 46 km.
21	16 09 47*	45.0 N.	110.3 W.	Montana. h about 33 km.
21	17 53 19*	46.8 N.	155.0 E.	Kurile Islands region. h about 51 km.
21	18 19 20*	50.8 N.	129.2 W.	Vancouver Island region. h about 6 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
21	23 35 54.7	47.0 N.	155.7 E.	Kurile Islands region. h about 60 km.
22	01 44 26.3	19.3 N.	66.9 W.	Puerto Rico region. h about 51 km.
22	02 38 50.1	36.7 N.	139.5 E.	Honshu, Japan. Felt at Tokyo. h about 83 km.
22	03 57 23.4	45.6 N.	148.7 E.	Kurile Islands. h about 125 km.
22	04 34 42.9	4[illegible].8 N.	110.5 W.	Yellowstone National Park, Wyoming. Felt at Mammoth and West Yellowstone. h about 34 km.
22	05 58 53*	44.9 N.	109.9 W.	Yellowstone National Park, Wyoming. h about 33 km.
22	11 56 45.0	15.3 S.	168.2 E.	New Hebrides Islands. Felt at Santo. h about 33 km.
22	21 18 19.3	23.3 S.	66.9 W.	Jujuy Province, Argentina. h about 217 km.
22	22 28 44.4	34.7 N.	33.1 E.	Cyprus. Felt at Limassol. h about 33 km.
22	23 35 24.8	34.9 N.	33.4 E.	Cyprus. Felt at Limassol. h about 33 km.
22	23 36 19*	52.7 S.	137.4 E.	1,500 km. southwest of Tasmania. h about 33 km.
23	01 10 44.4	25.5 S.	179.3 E.	South of Fiji Islands. h about 540 km.
23	05 48 35*	42.3 N.	84.3 E.	Sinkiang Province, China. h about 33 km.
23	07 57 35.4	10.5 S.	71.0 W.	Peru-Brazil border region. h about 600 km.
23	08 51 44.0	4.8 S.	145.7 E.	Near north coast of New Guinea. h about 50 km.
23	12 09 06*	41.5 N.	75.1 E.	Kirgiz S.S.R. h about 62 km.
23	12 21 39.0	44.7 N.	110.6 W.	Yellowstone National Park, Wyoming. h about 33 km.
23	14 28 56.5	6.5 S.	147.9 E.	East New Guinea region. h about 62 km.
23	21 11 25*	9.8 S.	114.0 E.	South of Bali Island. h about 99 km.
23	21 23 00*	2.4 S.	133.6 E.	West New Guinea region. h about 140 km.
24	01 36 23*	5.8 S.	151.0 E.	New Britain region. h about 46 km.
24	02 07 09.4	9.7 S.	120.5 E.	Sumba Islands region. h about 12 km. Mag. 6¼.
24	02 24 49.2	51.6 N.	173.3 W.	Andreanof Islands, Aleutian Islands. h about 55 km.
24	08 19 24.6	22.6 S.	170.8 E.	Loyalty Islands region. h about 33 km.
24	09 09 51*	59.4 N.	148.1 W.	Kenai Peninsula, Alaska. h about 33 km.
24	09 31 46.2	3.2 S.	147.0 E.	Bismarck Sea. h about 10 km.
24	09 43 21.2	9.0 N.	125.7 E.	Mindanao, Philippine Islands. h about 68 km.
24	10 58 55.3	36.5 N.	70.7 E.	Hindu Kush. h about 213 km.
24	12 04 15*	44.8 N.	141.3 E.	Hokkaido, Japan region. h about 234 km.
24	12 44 00.5	34.3 N.	47.8 E.	Western Iran. Twenty injured and minor damage in Kangavar area. h about 10 km. Mag. 5⅛-5¾ (PAL).
24	18 20 53*	14.9 S.	176.0 W.	Fiji Islands region. h about 320 km.
24	20 20 30*	15.2 S.	173.4 W.	Tonga Islands. h about 35 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
24	20 31 09*	17.7 N.	99.5 W.	Guerrero, Mexico. h about 117 km.
24	21 35 23.2	51.8 N.	178.1 W.	Andreanof Islands, Aleutian Islands. Felt at Adak. h about 47 km. Mag. 6.
25	02 39 45*	52.1 N.	171.3 W.	Fox Islands, Aleutian Islands. h about 25 km.
25	03 55 18*	17.8 N.	121.4 E.	Luzon, Philippine Islands. h about 31 km.
25	08 08 53.0	14.6 N.	120.5 E.	Luzon, Philippine Islands. Felt at Manila. h about 75 km.
25	09 28 43.0	36.0 N.	114.8 W.	Southern Nevada. Minor damage in the Boulder City area. Felt in Nevada, Arizona, Utah and California. h about 19 km. Mag. 4.9.
25	12 52 59.3	9.8 S.	120.4 E.	Sumba Island region. h about 36 km.
25	17 43 50.5	44.9 N.	110.6 W.	Yellowstone National Park, Wyoming. h about 33 km.
25	20 17 04*	56.3 S.	149.9 E.	Macquarie Islands region. h about 39 km.
25	22 46 16.7	0.8 N.	96.6 E.	Off west coast of northern Sumatra. h about 37 km.
26	04 29 43.7	36.0 N.	114.7 W.	Southern Nevada-Arizona border region. h about 6 km.
26	08 23 54*	15.2 S.	173.1 W.	Tonga Islands. h about 56 km.
26	08 50 44.2	4.3 S.	152.8 E.	New Britain region. h about 107 km.
26	09 48 20.3	29.7 S.	177.9 W.	Kermadec Islands region. Felt on Raoul Island. h about 48 km. Mag. 6¾-7.
26	11 46 01.6	30.0 S.	177.3 W.	Kermadec Islands region. h about 38 km.
26	12 51 40*	29.9 S.	177.6 W.	Kermadec Islands region. h about 60 km.
26	13 25 01.2	29.9 S.	178.0 W.	Kermadec Islands region. h about 40 km. Mag. 7¼.
26	14 34 16.5	18.0 S.	168.0 E.	New Hebrides Islands. Felt at Port Vila. h about 32 km.
26	18 23 08*	51.4 N.	178.7 E.	Rat Islands, Aleutian Islands. h about 42 km.
26	19 47 48.1	44.3 N.	147.3 E.	Kurile Islands. h about 131 km.
26	21 34 38.5	35.9 N.	135.7 E.	Southern Honshu, Japan. One injured and minor damage in central Honshu. h about 16 km. Mag. 6½.
26	22 36 47.8	34.0 N.	139.7 E.	South of Honshu, Japan. Felt at Tokyo. h about 100 km.
26	23 52 05*	7.0 S.	129.0 E.	Banda Sea. h about 237 km.
27	02 32 01.4	6.7 N.	73.0 W.	Northern Colombia. h about 169 km.
27	03 38 06.0	21.1 S.	67.5 W.	Chile-Bolivia border region. h about 234 km.
27	03 39 02.3	37.3 N.	71.9 E.	Afghanistan-U.S.S.R. border region. h about 148 km.
27	05 12 07*	44.5 N.	145.6 E.	Kurile Islands. h about 33 km.
27	06 49 23*	35.6 N.	135.8 E.	Southern Honshu, Japan. Felt. h about 33 km.
27	07 22 09.4	44.3 N.	110.7 W.	Yellowstone National Park, Wyoming. h about 33 km.
27	09 11 44*	51.2 N.	129.8 W.	Queen Charlotte Island region. h about 33 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March 27	h m s 12 31 51.9	° 6.8 N.	° 73.0 W.	Northern Colombia. h about 176 km.
27	12 52 17*	50.5 N.	177.9 E.	Rat Islands, Aleutian Islands. h about 33 km.
27	13 15 35.1	5.8 N.	73.1 W.	Northern Colombia. h about 165 km.
27	15 15 46*	44.9 N.	110.9 W.	Yellowstone National Park, Wyomong. h about 33 km.
27	21 18 59*	51.3 N.	179.3 W.	Andreanof Islands, Aleutian Island. h about 33 km.
28	00 15 51.4	66.1 N.	20.1 W.	Iceland region. Several injured and slight damage in northern Iceland. h about 33 km. Mag. 7-7½.
28	00 26 27.0	66.3 N.	20.2 W.	Iceland region. h about 33 km.
28	00 27 09.3	66.6 N.	19.2 W.	Iceland region. h about 33 km.
28	00 59 38.6	66.3 N.	19.6 W.	Iceland region. h about 33 km.
28	01 28 38*	66.3 N.	20.1 W.	Iceland region. h about 33 km.
28	01 31 16*	16.0 S.	131.9 E.	Northern Territory, Australia. h about 33 km.
28	02 04 17*	51.3 N.	157.1 E.	Near east coast of Kamchatka. h about 62 km.
28	03 55 03.0	40.2 N.	77.7 E.	Kirgiz-Sinkiang border region. h about 44 km.
28	06 27 06*	42.5 S.	83.0 W.	West Chile Rise. h about 33 km.
28	09 47 14.3	49.1 N.	155.0 E.	Kurile Islands. h about 78 km.
28	11 12 30.0	30.2 S.	177.9 W.	Kermadec Islands region. h about 31 km.
28	15 12 05.3	10.2 N.	126.0 E.	Philippine Islands region. h about 87 km.
28	16 18 38.9	20.4 S.	178.4 W.	Fiji Islands region. h about 566 km.
28	17 12 24.4	30.9 N.	70.0 E.	West Pakistan. h about 33 km.
28	21 51 38*	40.6 N.	78.5 E.	Southern Sinkiang Province, China. h about 27 km.
28	23 29 15.1	29.6 S.	177.7 W.	Kermadec Islands region. h about 62 km.
29	00 23 31*	55.3 N.	166.0 E.	Komandorsky Islands region. h about 33 km.
29	01 40 15*	29.3 S.	177.0 W.	Kermadec Islands region. h about 57 km.
29	03 09 11*	40.4 N.	26.6 E.	Northwestern Turkey. Felt at Cannakale. h about 33 km.
29	05 12 29.5	14.6 N.	92.3 W.	Near coast of Chiapas, Mexico. h about 38 km.
29	06 05 20.0	10.3 S.	160.7 E.	Solomon Islands. h about 33 km.
29	06 32 23*	35.3 N.	140.4 E.	Near east coast of Honshu, Japan. Felt at Tokyo. h about 33 km.
29	07 47 52.0	12.3 N.	90.4 W.	Off coast of Central America. h about 97 km.
29	09 00 06.9	31.8 N.	129.1 E.	Kyushu, Japan. Felt. h about 125 km.
29	13 46 15*	52.6 N.	168.6 W.	Fox Islands, Aleutian Islands. h about 33 km.
29	15 49 00.120			37°02'30" N., 116°00'06" W. Nevada Test Site. GERBIL. Shot elevation = 940.9 meters (AEC).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
29	20 04 51.6	36.5 N.	70.4 E.	Hindu Kush. h about 204 km.
29	21 16 43.7	30.2 S.	177.7 W.	Kermadec Islands region. h about 60 km.
29	21 51 56.9	35.0 N.	27.1 E.	Dodecanese Islands. h about 44 km.
29	23 30 42.0	17.7 S.	167.8 E.	New Hebrides Islands. Felt at Port Vila. h about 36 km.
30	00 34 36.2	51.0 N.	129.8 W.	Vancouver Island region. h about 19 km.
30	01 53 28.5	19.1 S.	169.0 E.	New Hebrides Islands. Felt at Port Vila, Tanna, and Anatom. h about 156 km. Mag. 5½-5¾ (PAL).
30	06 55 00*	51.8 N.	170.5 W.	Fox Islands, Aleutian Islands. h about 33 km.
30	09 23 13.9	1.5 S.	77.7 W.	Ecuador. h about 154 km.
30	11 37 28*	30.1 S.	176.9 W.	Kermadec Islands region. h about 33 km.
30	16 11 46*	6.3 S.	80.6 W.	Near coast of northern Peru. h about 21 km.
30	16 51 59.1	44.1 N.	148.0 E.	Kurile Islands. h about 61 km. Mag. 5¼-5½ (PAL).
30	17 25 01*	34.9 N.	26.4 E.	Crete. h about 33 km.
30	17 30 04*	38.6 N.	75.8 E.	Sinkiang Province, China. h about 33 km.
30	21 13 52.2	8.9 S.	109.5 W.	Northern Easter Island Cordillera. h about 33 km.
31	02 09 14.2	17.9 N.	61.6 W.	Leeward Islands. h about 28 km.
31	02 27 06.5	37.0 N.	57.9 E.	Iran. Four killed, two injured and extensive property damage at Hendojan. h about 33 km.
31	04 45 59.7	6.6 S.	81.2 W.	Near coast of northern Peru. h about 31 km. Mag. 5 (PAL).
31	05 30 49.8	29.9 S.	177.9 W.	Kermadec Islands region. h about 55 km. Mag. 6¼-6½.
31	05 51 00.5	10.8 S.	78.5 W.	Near coast of Peru. h about 32 km.
31	07 07 35.7	6.1 S.	149.1 E.	New Britain region. Felt at Popondetta, Walindi, and Kandrian. h about 55 km. Mag. 6¼.
31	08 12 38.3	29.8 S.	176.9 W.	Kermadec Islands. h about 43 km.
31	09 07 16.5	30.2 S.	177.8 W.	Kermadec Islands region. h about 20 km.
31	12 26 06.7	35.0 N.	132.2 E.	Southern Honshu, Japan. h about 33 km.
31	13 06 54.9	53.5 N.	35.3 W.	North Atlantic Ocean. h about 33 km.
31	13 44 29.1	53.5 N.	35.4 W.	North Atlantic Ocean. h about 33 km.
31	14 58 03.9	35.2 N.	09.2 W.	West of Gibraltar. h about 45 km.
31	15 02 27*	35.0 N.	132.9 E.	Southern Honshu, Japan. Felt. h about 60 km.
31	15 33 25*	53.1 N.	167.2 W.	Fox Islands, Aleutian Islands. h about 33 km.
31	16 40 50.5	21.5 S.	66.8 W.	Southern Bolivia. h about 234 km.
31	17 28 52.1	0.7 N.	96.6 E.	Off west coast of northern Sumatra. h about 33 km.
31	19 22 51.5	30.1 S.	178.2 W.	Kermadec Islands region. h about 39 km. Mag. 6¼-6½.

Date and Station	Phase (GCT)
	h m s
MAR 01	
H-00 25 56.0	
34.9N 119.0W	
h ABOUT 016KM	
BCN EP	00 26 52.8
E	27 05.7
E	27 45.5
EUR IP	00 27 16.9
I	27 47.8
I	28 43.1
L	29 03.2
UKI EP	00 27 21.2
TUC E(P)	00 27 43.0
I	28 13.2
IL	29 29.0
SLC E(P)	00 28 05.6
E	28 32.6
E	29 43.1
FGU I(P)	00 28 27.4
EL	31 07.4
BUT EP	00 28 56.0
IL	33 20.0
BOZ E(P)	00 29 03.5
HHM EP	00 29 18.1
EL	33 23.2
COL EP	00 32 49.0
MAR 01	
FGU IP	01 39 54.9
MAR 01	
BCN EP	02 02 10.3
ES	02 32.5
EUR IP	02 02 19.8
MAR 1	
H-03 20 02.3	
35.8N 059.9E	
h ABOUT 033KM	
COL IP	03 31 56.4
MAR 1	
H-04 02 53.4	
16.8N 093.7W	
h ABOUT 117KM	
TUC IP	04 07 39.8
I	08 05.0
FGU EP	04 08 33.1
E	09 05.1
EUR EP	04 08 51.3
COL IP	04 12 48.2
MAR 1	
H-04 35 01.0	
4.7S 139.3E	
h ABOUT 033KM	
COL EP	04 47 44.2

Date and Station	Phase (GCT)
	h m s
MAR 1	
H-04 39 34.1	
18.2S 177.9W	
h ABOUT 567KM	
EUR IP	04 50 53.1
MAR 01	
COL IP	05 34 07.0
MAR 01	
BCN IP	06 23 01.0
E(S)	23 19.0
EUR IP	06 23 10.1
MAR 01	
EUR EP	08 13 40.3
MAR 1	
H-09 30 44.2	
36.1N 023.6E	
h ABOUT 136KM	
COL E(P)	09 42 35.0
MAR 1	
H-10 45 55.5	
41.1N 143.0E	
h ABOUT 043KM	
COL IP	10 54 08.8
HHM EP	10 56 52.1
BOZ EP	10 57 16.0
BUT E(P)	10 57 18.0
EUR IP	10 57 18.6
BCN EP	10 57 37.0
E	57 45.4
RCD E(P)	10 57 42.5
TUC E(P)	10 58 04.0
I	58 12.5
HON E(S)	11 02 55.0
EL	10 05.0
MAR 1	
H-11 55 23.2	
41.8N 081.3E	
h ABOUT 050KM	
COL IP	12 06 12.2
MAR 01	
COL EP	12 25 31.0
MAR 01	
COL IP	12 40 45.0
MAR 01	
COL EP	13 59 49.1
EUR IP	14 03 37.8
I	03 53.9
MAR 01	
FGU EP	14 17 11.0
EL	18 00.0

Date and Station	Phase (GCT)
	h m s
MAR 1	
H-14 32 24.8	
42.6N 141.1E	
h ABOUT 065KM	
COL IP	14 40 32.0
MAR 01	
TUC E(P)	15 02 12.1
I	02 38.8
MAR 1	
H-19 14 11.1	
1.0N 029.7W	
h ABOUT 033KM	
TUC E(P)	19 26 31.0
HHM EP	19 26 48.1
BCN IP	19 26 51.0
EUR EP	19 26 55.3
MAR 01	
COL E(P)	19 27 05.0
MAR 01	
ALQ E(P)	20 29 39.0
MAR 01	
ALQ EP	21 09 32.0
MAR 1	
H-23 03 27.9	
22.8N 144.2E	
h ABOUT 050KM	
COL E(P)	23 13 34.0
EUR IP	23 15 50.0
E▸P	16 03.0
MAR 2	
H-00 20 31.6	
5.0S 144.2E	
h ABOUT 055KM	
COL IP	00 33 02.7
MAR 02	
GCA IP	00 49 57.8
IS	50 20.0
MAR 2	
H-01 34 40.7	
06.6S 131.3E	
h ABOUT 033KM	
COL EP	01 47 51.0
MAR 02	
TUC EP	02 02 16.3
ES	02 52.0
MAR 2	
H-02 45 37.1	
23.8N 092.2E	
h ABOUT 036KM	
COL EP	02 57 46.0

Date and Station	Phase (GCT)
	h m s
MAR 02	
H-05 39 07.4	
01.8S 143.6E	
h ABOUT 129KM	
COL IP	05 51 22.2
I	51 49.0
MAR 2	
H-08 44 51.6	
15.9S 173.1W	
h ABOUT 025KM	
COL IP	08 57 15.0
I	57 22.0
MAR 2	
H-09 25 58.2	
46.4N 153.1E	
h ABOUT 048KM	
COL IP	09 33 00.8
I▸P	33 15.0
HHM EP	09 35 54.4
BOZ E(P)	09 36 09.0
EUR EP	09 36 24.7
SLC EP	09 36 36.0
RCD EP	09 36 51.2
FGU IP	09 36 43.7
TUC EP	09 37 15.0
E	37 47.9
ALQ EP	09 37 19.0
HON ES	09 41 24.0
EL	47 06.0
MAR 02	
COL E(P)	10 59 44.0
MAR 2	
H-11 12 03.4	
46.3N 153.1E	
h ABOUT 040KM	
COL IP	11 19 07.2
EUR EP	11 22 31.4
I▸P	22 43.6
ALQ E(P)	11 23 21.0
ES	24 10.0
MAR 02	
COL EP	13 35 43.0
E	39 28.0
MAR 2	
H-15 42 48.3	
10.5N 062.5W	
h ABOUT 035KM	
COL EP	15 54 47.0

Date and Station	Phase	Phase (GCT) h m s
MAR 2		
H-16 04 44.3		
47.6N 152.0E		
h ABOUT 042KM		
COL	IP	16 11 42.3
	E	12 10.0
	E	12 26.0
EUR	EP	16 15 11.9
	E	15 46.1
MAR 2		
H-16 06 56.0		
10.0N 125.9E		
h ABOUT 083KM		
COL	EP	16 18 53.0
MAR 02		
BUT	E(P)	16 31 14.4
	E	33 55.4
HHM	E(P)	16 31 45.0
	E(S)	32 17.0
EUR	IP	16 32 03.1
	E	32 19.9
MAR 02		
HHM	IP	16 45 15.3
	IS	45 19.3
MAR 2		
H-17 27 39.5		
10.0N 126.1E		
h ABOUT 079KM		
COL	EP	17 39 38.0
MAR 2		
H-19 41 55.1		
6.8N 073.0W		
h ABOUT 165KM		
SJP	E(P)	19 44 58.7
TUC	IP	19 49 42.3
EUR	IP	19 50 38.2
	E	51 23.4
COL	EP	19 53 33.6
	E▸P	54 14.0
	E	58 27.0
MAR 02		
ALQ	E(P)	20 26 16.0
MAR 02		
ALQ	E(P)	21 28 47.0
	EL	29 39.0
MAR 2		
H-22 09 18.6		
15.1N 093.8W		
h ABOUT 033KM		
ALQ	EP	22 14 20.0
TUC	EP	22 14 22.9
COL	EP	22 19 33.6
	E	19 44.0
MAR 2		
H-22 16 35.2		
17.1S 174.9W		
h ABOUT 239KM		
BCN	I(P)	22 27 07.0
	E	27 16.8
EUR	IP	22 28 12.6
TUC	IP	22 28 12.9
ALQ	IP	22 28 36.0
COL	EP	22 28 41.3
	E▸P	29 40.0
HHM	EP	22 28 43.0
MAR 02		
FGU	IP	23 16 57.6
	ES	16 32.6
MAR 03		
EUR	EP	01 10 58.9
MAR 3		
H-01 48 10.8		
36.6N 071.4E		
h ABOUT 229KM		
COL	IP	01 59 24.3
	E▸P	02 00 18.0
MAR 3		
H-02 08 16.2		
20.6S 069.4W		
h ABOUT 124KM		
ALQ	EP	02 18 49.0
	E▸P	19 16.0
TUC	IP	02 18 51.2
FGU	IP	02 19 28.1
EUR	EP	02 19 41.4
	E▸P	20 08.9
BUT	E(P)	02 19 54.9
MAR 03		
HHM	E(P)	02 19 02.0
	E(S)	20 11.0
MAR 3		
H-09 39 51.2		
54.3N 165.0W		
h ABOUT 055KM		
COL	EP	09 43 03.6
EUR	EP	09 46 48.0
	E▸P	47 04.6
MAR 3		
H-17 04 58.9		
36.7N 071.4E		
h ABOUT 101KM		
COL	EP	17 16 30.0
	E	16 46.0
MAR 03		
H-17 30 11.4		
36.7N 090.0W		
h ABOUT 033KM		
CSC	EP	17 32 08.0
	I	33 28.0
	IL	34 12.0
RCD	E(P)	17 33 05.2
ALQ	E(P)	17 33 12.5
	I	35 27.0
FGU	IP	17 33 50.2
	I	37 49.7
SLC	EP	17 34 13.6
	E	38 01.0
TUC	IP	17 34 16.4
BOZ	E(P)	17 34 21.0
	E	38 01.0
BUT	EP I	17 34 35.9
	E	38 13.3
	E	38 30.5
	I	39 21.0
BCN	EP	17 34 46.6
	EL	40 39.8
EUR	IP	17 34 53.6
	EL	40 59.6
HHM	EP	17 34 55.2
	ES	38 33.2
	IL	41 05.2
COL	IP	17 38 17.2
MAR 03		
FGU	IP	20 22 18.9
	IS	22 47.5
MAR 3		
H-22 59 44.7		
30.6N 136.9E		
h ABOUT 490KM		
COL	IP	23 08 39.3
HHM	IP	23 10 56.7
BUT	IP	23 11 10.0
	E▸P	12 55.0
	E▸P	13 48.0
BOZ	EP	23 11 15.0
EUR	IP C	23 11 18.2
MAR 03		
SJP	EP	23 28 09.7
	I(S)	29 14.0
HHM	EP	23 35 07.6
COL	E(P)	23 37 43.0
MAR 04		
EUR	IP	04 27 42.9
	IL	28 08.4
MAR 4		
H-05 08 30.2		
16.1S 178.4E		
h ABOUT 033KM		
EUR	EP	05 20 50.7
	E	21 17.7
TUC	IP	05 20 54.8
COL	IP	05 21 00.6
BUT	EP	05 21 16.4
BOZ	E(P)	05 21 21.0
MAR 04		
HHM	EP	06 08 49.6
	ES	09 09.1
MAR 4		
H-07 41 50.6		
83.0N 006.4W		
h ABOUT 033KM		
COL	IP	07 48 05.0
BUT	EP	07 50 16.4
	E	50 57.1
	EL	08 05 48.3
BOZ	EP	07 50 17.0
RCD	EP	07 50 23.2
EUR	IP	07 51 09.0
	E	53 14.3
	E	54 32.1
CSC	EP	07 51 20.0
BCN	EP	07 51 30.1
ALQ	EP	07 51 34.0
TUC	IP	07 51 55.1
HON	ES	08 03 59.0
	EL	17 14.0
KIP	ES	08 04 00.0
	EL	17 28.0
MAR 4		
H-12 37 33.0		
47.7N 152.4E		
h ABOUT 033KM		
COL	IP	12 44 30.2
EUR	I(P)	12 47 59.3
	E	48 32.7
MAR 4		
H-12 50 16.0		
46.3N 153.0E		
h ABOUT 033KM		
COL	IP	12 57 20.0
EUR	EP	13 00 44.7
	E	00 55.0

Date and Station	Phase (GCT)
	h m s
MAR 4	
H-13 38 42.5	
24.5N 121.8E	
h ABOUT 033KM	
GUA EP	13 43 56.0
COL EP	13 49 40.0
HHM EP	13 51 50.1
BUT EP	13 52 00.5
E	53 08.7
BOZ EP	13 52 05.0
FUR FP	13 52 12.4
EPP	56 20.9
HON ES	13 59 42.0
E	14 00 34.0
E	07 54.0
EL	11 54.0
KIP ES	13 59 43.0
E	14 07 28.0
EL	11 48.0
MAR 04	
TUC E(P)	14 11 21.0
MAR 04	
ALQ E(P)	14 57 08.0
MAR 4	
H-15 10 13.1	
34.9N 025.2E	
h ABOUT 007KM	
COL IP	15 22 26.0
HHM FP	15 23 13.1
BOZ EP	15 23 20.5
MAR 4	
H-15 43 02.2	
4.5S 081.6W	
h ABOUT 023KM	
SJP EP	15 48 49.0
ES	53 27.0
I	53 48.0
CSC IP	15 50 23.0
I	51 54.0
BCN EP	15 52 04.6
I	52 36.1
FGU IP	15 52 11.5
RCD EP	15 52 13.2
SLC EP	15 52 18.9
EUR IP	15 52 27.8
EPP	54 33.1
EP'P'	16 22 35.0
BOZ EP	15 52 44.0

Date and Station	Phase (GCT)
	h m s
BUT EP	15 52 50.4
I	53 24.5
ES	16 00 45.8
UKI EP	15 52 53.0
HHM EP	15 53 07.1
HON EP	15 55 08.0
KIP EP	15 55 08.0
HON E(P)	15 55 08.0
ES	16 05 31.0
E	16 15.0
EL	18 54.0
KIP EP	15 55 08.0
ES	16 05 34.0
EL	19 34.0
COL IP	15 55 32.6
MAR 04	
EUR EP	16 17 03.6
MAR 04	
TUC EP	17 17 08.1
MAR 04	
FGU IP	17 50 52.5
MAR 4	
H-18 31 51.0	
15.8S 075.3W	
h ABOUT 040KM	
ALQ EP	18 41 46.0
PP	41 57.0
TUC IP	18 41 48.0
FGU EP	18 42 28.0
RCD E(P)	18 42 28.0
EUR IP	18 42 42.6
COL E(P)	18 45 19.5
MAR 4	
H-19 04 00.4	
19.3S 169.8E	
h ABOUT 033KM	
COL IP	19 16 56.5
I	17 12.0
HON E(S)	19 20 25.0
EL	27 40.0
MAR 4	
H-20 10 41.6	
34.7N 119.3W	
h ABOUT 033KM	
BCN EP	20 11 40.5
I	11 50.2
EL	12 33.5
EUR EP	20 12 01.6
IL	13 25.2

Date and Station	Phase (GCT)
	h m s
TUC E(P)	20 12 31.0
EL	14 28.5
COL EP	20 15 57.5
MAR 04	
TUC IP	21 07 09.3
MAR 04	
FGU IP	22 35 00.0
IS	35 21.0
MAR 04	
GUA IP	22 56 49.0
MAR 5	
H-01 30 38.7	
42.6N 111.3W	
h ABOUT 033KM	
SLC EP	01 31 09.9
ES	31 35.4
FGU IP	01 31 14.5
IS	31 43.0
BOZ EP	01 31 26.5
BUT E(P)	01 31 34.2
EL	32 21.7
EUR EP	01 31 48.2
IL	33 06.7
MAR 05	
H-02 35 07.8	
29.2N 081.2E	
h ABOUT 033KM	
COL EP	02 47 09.0
MAR 5	
H-02 48 49.7	
12.6N 090.9W	
h ABOUT 098KM	
TUC E(P)	02 54 21.9
EUR EP	02 55 33.5
E	55 36.7
COL EP	02 59 21.0
MAR 5	
H-04 54 49.5	
11.0N 140.8E	
h ABOUT 033KM	
GUA EP	04 56 01.0
COL EP	05 06 12.0
MAR 05	
FGU EP	05 32 58.5
MAR 5	
H-07 05 00.4	
04.5S 081.5W	
h ABOUT 022KM	
BHP P	07 08 14.0
S	10 50.0

Date and Station	Phase (GCT)
	h m s
SJP E(P)	07 10 51.0
ES	15 28.0
I	17 15 48.0
CSC EP	07 12 22.0
E	13 55.0
TUC IP	07 13 24.3
I	15 00.0
ALQ IP	07 13 24.8
BCN EP	07 14 03.2
FGU IP	07 14 10.4
RCD EP	07 14 11.6
SLC EP	07 14 17.1
EPCP	15 07.5
EUR IP	07 14 26.1
EPP	16 26.0
BOZ EP	07 14 43.0
E	14 54.0
BUT IP	07 14 49.3
E	14 59.2
EPCP	15 34.9
EPP	16 53.0
UKI EP	07 14 52.3
HHM EP	07 15 06.2
E	17 15 16.1
EPCP	15 51.1
HON EP	07 17 06.0
KIP IP	07 17 06.1
HON EP	07 17 07.0
EL	41 58.0
COL IP	07 17 30.4
IPP	20 47.0
MAR 5	
H-07 53 38.2	
36.0N 026.2E	
h ABOUT 073KM	
COL EP	08 05 39.0
MAR 5	
H-09 12 16.6	
17.7S 178.5W	
h ABOUT 511KM	
EUR IP	09 23 41.2
TUC IP	09 23 42.6
COL IP	09 23 59.0
E	25 02.0
HHM EP	09 24 07.6
MAR 05	
COL IP	09 44 50.3
IS	45 21.0

Date and Station	Phase	Phase (GCT) h m s
MAR 5		
H-13 07 55.0		
27.1N 140.1E		
h ABOUT 480KM		
COL	EP	13 17 04.0
	E	18 42.0
EUR	EP	13 19 31.8
	E	19 49.4
MAR 05		
SIT	IP	15 46 02.0
	ES	46 08.2
MAR 05		
EUR	IP	16 24 13.0
MAR 05		
COL	EP	16 44 23.0
MAR 05		
BCN	EP	18 15 41.9
MAR 5		
H-19 05 39.1		
6.4S 149.0E		
h ABOUT 054KM		
COL	IP	19 18 07.0
MAR 5		
H-19 32 34.0		
45.0N 143.6E		
h ABOUT 033KM		
COL	EP	19 40 20.0
EUR	IP	19 43 43.3
	E	43 46.3
MAR 05		
EUR	E(P)	20 11 09.1
MAR 5		
H-21 14 20.9		
33.6N 104.5E		
h ABOUT 057KM		
COL	EP	21 25 10.0
MAR 05		
EUR	EP	21 20 27.0
MAR 05		
HHM	E(P)	21 34 20.2
	ES	35 04.2
MAR 05		
EUR	EP	21 50 19.0
MAR 05		
HHM	E(P)	22 34 41.2
	ES	35 12.2
MAR 5		
H-23 27 40.4		
6.3S 149.1E		
h ABOUT 021KM		
COL	EP	23 40 14.0
MAR 06		
HHM	IP	01 18 26.1
	IS	18 42.2
BUT	IP	01 18 31.1
	I	18 34.1
	ES	18 53.3
BOZ	E(P)	01 18 37.0
	E(S)	19 06.0
MAR 6		
H-04 37 40.3		
28.6N 132.3E		
h ABOUT 029KM		
COL	IP	04 47 47.0
HHM	EP	04 50 05.2
EUR	EP	04 50 26.7
	E	50 52.3
FGU	IP	04 50 41.3
MAR 6		
H-06 55 44.9		
53.9N 161.0E		
h ABOUT 041KM		
COL	EP	07 01 28.0
EUR	IP	07 05 19.5
	I	06 18.7
RCD	EP	07 05 42.7
MAR 6		
H-08 35 04.6		
33.7N 072.5E		
h ABOUT 049KM		
COL	EP	08 46 52.0
MAR 06		
TUC	E(P)	15 36 47.3
EUR	E(P)	15 38 10.0
	EL	40 36.5
MAR 06		
HHM	E(P)	15 45 09.2
MAR 06		
ALQ	EP	15 50 24.0
	ES	50 49.0
MAR 06		
COL	IP	16 24 36.7
MAR 6		
H-17 53 26.1		
11.4S 166.2E		
h ABOUT 200KM		
COL	IP	18 05 33.3
	E	05 45.0
	E▸P	06 23.0
EUR	IP	18 05 55.2
MAR 06		
ALQ	IP	17 53 29.0
MAR 6		
H-19 50 07.2		
09.5S 154.9E		
h ABOUT 050KM		
COL	EP	20 02 39.5
	E▸P	02 54.0
EUR	E(P)	20 03 29.9
	E▸P	03 41.1
MAR 06		
HHM	E(P)	22 40 22.1
	ES	40 53.1
MAR 6		
H-23 22 58.7		
36.5N 141.1E		
h ABOUT 050KM		
COL	EP	23 31 47.9
MAR 07		
BOZ	EP	01 47 04.0
MAR 7		
H-01 50 29.5		
03.9S 131.2E		
h ABOUT 033KM		
COL	E(P)	02 03 25.0
MAR 7		
H-03 40 45.5		
15.1S 168.2E		
h ABOUT 026KM		
COL	IP	03 53 25.4
EUR	EP	03 53 41.3
MAR 07		
COL	EP	04 51 34.7
	E	56 31.7
MAR 07		
COL	EP	05 21 25.0
EUR	EP	05 24 51.5
MAR 7		
H-05 22 01.3		
26.8S 113.4W		
h ABOUT 033KM		
BHP	P	05 30 42.0
	S	37 31.0
TUC	IP	05 31 58.5
	ES	40 05.3
ALQ	EP	05 32 18.8
BCN	EP	05 32 25.0
KIP	EP	05 32 38.0
	ES	41 16.0
HON	EP	05 32 39.0
	ES	09 41 16.0
SJP	I(P)	05 32 40.0
	ES	41 14.0
EUR	IP C	05 32 47.2
	P'P'	06 00 55.0
UKI	EP	05 32 51.0
SLC	EP	05 32 53.1
CSC	EP	05 32 59.0
	E(S)	42 00.0
BOZ	EP	05 33 25.0
	E(S)	43 00.0
BUT	EP	05 33 27.4
	E	35 32.3
	EPP	36 09.9
	E	43 05.0
HHM	EP	05 33 40.6
	E	43 19.1
COL	E(P)	05 35 21.5
	I	35 24.0
MAR 07		
EUR	EP	07 58 09.9
MAR 07		
ALQ	EP	11 37 50.0
MAR 7		
H-11 41 28.7		
27.5S 113.3W		
h ABOUT 033KM		
TUC	IP	11 51 31.0
BCN	EP	11 51 56.4
EUR	E(P)	11 52 16.5
	I	52 19.5
RCD	EP	11 52 50.7
BOZ	EP	11 52 57.0
BUT	EP	11 52 58.3
COL	EP	11 54 52.0
	E	55 05.0
MAR 7		
H-12 16 26.3		
44.2S 075.4W		
h ABOUT 033KM		
BHP	P	12 25 42.0
SJP	EP	12 26 49.3
CSC	EP	12 28 25.0
TUC	EP	12 28 47.8
	I	28 50.9
BCN	EP	12 29 12.3
	E▸P	29 22.6
FGU	EP	12 29 26.0

Date and Station	Phase (GCT)
	h m s
EUR IP D	12 29 28.5
IpP	29 40.0
EPP	33 05.0
PKKP	46 55.5
EpPKKP	46 04.5
EP'P'	55 01.0
SLC EP	12 29 29.4
RCD E(P)	12 29 30.2
BOZ EP	12 29 49.0
BUT EP	12 29 49.8
HHM EP	12 29 59.1
EPKKP	46 44.1
HON EP	12 30 11.0
ES	40 51.0
COL EP'	12 35 16.6
I	35 20.0
KIP ES	12 40 55.0
ESPP	43 18.0
E	48 49.0
EL	58 24.0
E	13 02 45.0
MAR 7	
H-13 03 00.5	
6.2S 148.8E	
h ABOUT 082KM	
COL IP	13 15 26.5
IpP	15 49.0
MAR 7	
H-13 43 05.0	
51.3N 178.1E	
h ABOUT 040KM	
COL EP	13 47 59.5
I	48 12.0
I	48 35.0
KIP IP	13 49 56.9
UKI EP	13 50 55.6
E	51 11.6
BUT EP	13 51 20.3
BOZ EP	13 51 24.5
EUR IP D	13 51 28.9
IpP	51 42.6
E(SCP)	56 54.0
SLC EP	13 51 42.0
BCN EP	13 51 51.3
RCD EP	13 52 04.2
TUC IP	13 52 27.2
SJP I(P)	13 56 07.0
MAR 07	
COL EP	13 55 31.0
E	59 14.0

Date and Station	Phase (GCT)
	h m s
MAR 07	
HHM IP	14 05 58.7
MAR 07	
COL E(P)	17 18 21.0
MAR 07	
EUR EP C	17 19 18.0
I	19 22.2
IL	19 59.2
UKI EP	17 20 15.0
MAR 07	
ALQ IP	18 18 05.8
IS	18 08.0
MAR 07	
COL EP	18 40 56.0
MAR 07	
TUC IP	19 14 41.3
MAR 07	
HHM EP	20 08 35.0
MAR 07	
HHM E(P)	20 22 50.0
MAR 07	
EUR EP	21 06 26.0
IL	06 50.5
MAR 7	
H-21 49 24.1	
36.5N 071.3E	
h ABOUT 102KM	
COL IP	22 00 56.0
MAR 07	
EUR IP	22 18 18.2
MAR 07	
EUR IP	22 22 59.9
MAR 07	
H-23 53 25.0	
44.9N 123.5W	
h ABOUT 033KM	
HHM IP	23 55 13.8
EL	57 06.0
BUT IP	23 55 19.5
I	56 46.0
EL	57 20.0
EUR IP C	23 55 20.8
EL	57 42.5
BOZ E(P)	23 55 34.0
EL	58 10.0
SLC EP	23 55 44.0
BCN EP	23 56 05.4
RCD E(P)	23 56 50.0
TUC EP	23 57 09.4
ALQ EP	23 57 13.8

Date and Station	Phase (GCT)
	h m s
COL EP	23 58 38.5
MAR 8	
H-00 14 15.6	
76.7N 094.9W	
h ABOUT 033KM	
COL IP	00 18 48.8
I	18 53.0
HHM E(P)	00 20 11.0
IL	29 18.0
BOZ E(P)	00 20 40.0
EUR EP	00 21 36.5
EL	34 11.0
MAR 08	
BCN IP	02 07 30.8
MAR 08	
GUA IP	02 20 25.0
MAR 8	
H-02 44 27.0	
19.3S 169.8E	
h ABOUT 005KM	
COL IP	02 57 26.9
EUR IP D	02 57 33.0
EPP	03 01 01.7
HON ES	03 01 00.0
EL	08 03.0
KIP ES	03 01 04.0
EL	08 03.0
MAR 8	
H-03 17 50.5	
14.8S 167.3E	
h ABOUT 131KM	
COL EP	03 30 18.0
MAR 8	
H-03 24 58.5	
19.3S 169.3E	
h ABOUT 063KM	
COL IP	03 37 48.9
ALQ E(P)	03 38 19.0
MAR 08	
H-03 33 03.4	
19.3S 169.6E	
h ABOUT 033KM	
COL EP	03 46 02.0
EUR EP	03 46 03.2
EPP	49 39.0
HON ES	03 41 23.0
EL	48 26.0
KIP ES	03 41 27.0
EL	48 29.0
MAR 08	
COL EP	03 44 10.0

Date and Station	Phase (GCT)
	h m s
MAR 08	
BOZ EP	03 44 18.2
EL	44 35.0
BUT IP	03 44 34.0
IS	45 57.5
HHM EP	03 45 06.5
I	45 20.0
EL	46 13.0
EUR EP	03 45 40.5
E	45 55.7
MAR 08	
BOZ EP	03 47 53.0
BUT IP	03 48 09.5
IS	48 34.5
MAR 08	
EUR EP	04 02 55.0
MAR 08	
BOZ EP	04 33 27.5
BUT IP	04 33 41.0
IS	34 06.5
MAR 08	
EUR EP	06 23 52.7
EL	25 02.0
MAR 8	
H-08 35 48.9	
44.8N 110.2W	
h ABOUT 033KM	
BOZ EP	08 36 05.5
ES	36 24.6
BUT IP	08 36 22.1
IS	36 47.4
SLC EP	08 36 51.2
I	37 00.8
ES	37 35.6
HHM EP	08 36 55.0
I	37 07.5
IL	38 02.0
RCD E(P)	08 37 02.0
EUR EP	08 37 28.6
EL	39 22.0
COL EP	08 41 49.0
MAR 08	
BUT EP	09 28 38.4
MAR 08	
BUT EP	09 28 50.4
E(S)	29 17.6
HHM E(P)	09 29 22.0
E	32 49.0
MAR 08	
BOZ E(P)	09 31 49.0
BUT EP	09 32 06.1
ES	32 30.1

Date and Station	Phase	Phase (GCT) h m s
MAR 8		
H-13 59 37.8		
22.0S 176.3W		
h ABOUT 121KM		
EUR	EP	14 11 52.7
	E	12 18.7
COL	IP	14 12 20.4
MAR 08		
BOZ	E(P)	14 04 07.0
BUT	EP	14 04 24.4
	ES	04 48.4
HHM	E(P)	14 05 09.0
MAR 08		
EUR	E(P)	14 31 05.0
	EL	32 45.0
MAR 8		
H-15 06 03.0		
.7N 029.7W		
h ABOUT 033KM		
SJP	EP	15 13 34.0
ALQ	EP	15 18 05.0
FGU	IP	15 18 21.3
SLC	EP	15 18 30.6
BOZ	EP	15 18 33.6
BUT	EP	15 18 35.3
HHM	EP	15 18 40.0
BCN	EP	15 18 41.4
EUR	IP D	15 18 46.0
	I	18 49.9
COL	E(P)	15 20 00.0
MAR 8		
H-16 04 53.6		
21.3S 170.2E		
h ABOUT 103KM		
COL	EP	16 17 50.0
EUR	EP	16 17 52.5
	E	18 19.5
MAR 08		
COL	EP	16 12 25.0
MAR 08		
ALQ	EP	16 17 43.6
	ES	18 23.0
MAR 08		
BOZ	EP	17 47 42.0
	ES	48 12.0
MAR 08		
EUR	EP	18 39 18.8
MAR 08		
HHM	E(P)	19 13 48.0
MAR 08		
ALQ	IP	20 33 19.8
	IS	33 22.0
MAR 08		
COL	IP	22 03 42.8
MAR 08		
H-22 26 26.1		
9.0N 084.1W		
h ABOUT 033KM		
BHP	P	22 27 33.0
	EL	28 38.0
SJP	E(P)	22 31 11.1
TUC	EP	22 33 09.8
	I	33 21.5
EUR	E(P)	22 34 24.2
	E	35 09.7
HHM	E(P)	22 35 03.0
	E	36 39.0
COL	EP	22 37 42.0
	E	37 59.0
MAR 08		
BHP	P	23 09 14.0
MAR 09		
COL	EP	01 40 20.9
MAR 09		
EUR	E(P)	01 43 51.0
	EL	02 44 47.5
MAR 9		
H-02 17 35.0		
21.5N 061.9E		
h ABOUT 011KM		
COL	EP	02 30 40.0
EUR	EP'	02 36 27.0
	PP	37 46.5
	PKKP	46 40.2
TUC	IP'	02 36 40.0
MAR 09		
EUR	EP	02 47 22.5
	EL	47 59.2
MAR 9		
H-02 48 28.5		
27.1S 177.1W		
h ABOUT 033KM		
EUR	EP	03 01 13.0
	E	01 35.3
	EPKKP	19 57.1
MAR 09		
COL	IP	03 22 27.3
MAR 09		
EUR	E(P)	03 59 49.2
MAR 9		
H-04 21 27.8		
05.2N 084.8W		
h ABOUT 033KM		
ALQ	EP	04 28 26.0
EUR	EP	04 29 35.0
COL	EP	04 33 04.0
MAR 9		
H-05 26 52.4		
09.0N 126.3E		
h ABOUT 033KM		
COL	IP	05 39 01.1
MAR 9		
H-06 44 28.4		
46.2N 141.0E		
h ABOUT 033KM		
COL	IP	06 52 15.5
	I	52 26.0
HHM	EP	06 55 09.0
EUR	EP	06 55 41.0
	E	55 54.5
	E	55 59.7
TUC	EP	06 56 28.0
MAR 09		
COL	IP	07 08 47.9
EUR	IP D	07 12 14.2
MAR 09		
EUR	EP	07 51 50.0
MAR 09		
BUT	EP	07 53 50.9
	E(S)	54 17.4
HHM	EP	07 54 34.0
	ES	55 24.0
MAR 09		
BUT	EP	07 54 40.0
	E(S)	55 04.1
MAR 09		
EUR	EP	11 37 54.0
	IpP	38 03.5
MAR 09		
FGU	EP	16 00 28.8
	I	00 31.2
	EL	00 58.5
MAR 9		
H-16 23 43.5		
3.2S 147.1E		
h ABOUT 033KM		
COL	IP	16 36 04.8
EUR	E(P)	16 37 24.2
	E	37 30.9
MAR 09		
FGU	IP	16 24 48.0
	IS	25 46.5
MAR 09		
EUR	E(P)	16 28 56.5
MAR 09		
BOZ	EP	16 41 57.0
	ES	42 09.0
BUT	EP	16 42 10.0
	ES	42 34.7
HHM	EP	16 42 46.0
	I	42 55.0
	EL	43 44.0
EUR	E(P)	16 43 35.5
MAR 9		
H-16 56 23.1		
6.5N 123.8E		
h ABOUT 136KM		
COL	E(P)	17 08 39.0
MAR 09		
ALQ	EP	17 32 51.0
	ES	33 20.0
MAR 09		
FGU	EP	17 40 40.9
	ES	41 00.0
MAR 9		
H-18 55 48.5		
03.3S 147.1E		
h ABOUT 033KM		
COL	EP	19 08 10.0
EUR	E(P)	19 09 38.0
MAR 9		
H-19 13 52.1		
19.1S 169.8E		
h ABOUT 033KM		
COL	EP	19 26 50.0
MAR 09		
HHM	E(P)	21 29 21.0
COL	E(P)	21 31 14.0
MAR 9		
H-22 43 50.9		
21.5S 178.9W		
h ABOUT 534KM		
TUC	IP	22 55 29.0
EUR	EP	23 55 29.2
	EpP	57 27.0
	E	57 34.6
GCA	IP	22 55 39.5
	I	57 45.5
ALQ	EP	22 55 49.0
	E	57 52.0

Date and Station	Phase (GCT)
	h m s
COL IP	22 55 50.5
E▸P	57 49.0
I	57 58.0
MAR 10	
HHM EP	00 09 21.8
MAR 10	
BUT EP	00 43 48.6
ES	44 01.6
HHM EP	00 44 29.0
MAR 10	
H-01 19 36.6	
15.2S 167.4E	
h ABOUT 132KM	
EUR I(P)	01 32 25.5
I▸P	32 55.5
IPKKP	49 56.5
TUC EP	01 32 29.0
E▸P	33 03.2
GCA E(P)	01 32 33.3
MAR 10	
H-01 26 03.7	
56.3N 153.6W	
h ABOUT 029KM	
COL IP	01 28 14.4
SIT EP	01 28 26.1
ES	30 12.9
HHM IP	01 31 28.0
IPCP	35 01.0
BUT EP	01 31 49.1
BOZ EP	01 31 58.0
EUR IP C	01 32 11.4
E▸P	32 21.2
IPCP	35 12.7
I▸PCP	35 21.6
ISCP	38 44.0
E▸SCP	38 52.5
BCN EP	01 32 39.7
SLC E(P)	01 32 22.7
IPCP	35 16.4
E▸SCP	38 55.6
GCA I▸P	01 32 59.0
IPCP	35 25.2
ISCP	38 52.5
KIP IP	01 33 06.4
ET	02 09 06.0
HON EP	01 33 08.0
EL	42 09.0
ET	02 09 21.0
CSC EP	01 35 19.0
TUC IPCP	01 35 35.9
SJP IP	01 37 33.8

Date and Station	Phase (GCT)
	h m s
MAR 10	
H-01 26 43.4	
25.7S 179.4E	
h ABOUT 509KM	
ALQ EP	01 39 02.0
I	39 24.0
COL IP	01 39 06.0
MAR 10	
EUR EP	01 58 03.5
E	58 08.2
MAR 10	
EUR IP	02 04 09.2
MAR 10	
ALQ EP	02 14 17.0
MAR 10	
COL EP	02 48 50.0
EUR EP	02 52 13.2
MAR 10	
H-02 53 33.2	
24.6N 122.1E	
h ABOUT 033KM	
GUA EP	02 58 47.0
E	03 03 51.0
COL EP	03 04 30.0
HHM EP	03 06 39.5
BUT EP	03 06 49.6
E	07 19.9
EUR IP	03 07 01.5
EPP	10 50.7
EPKKP	24 15.5
MAR 10	
HHM EP	03 40 26.0
ES	41 25.0
MAR 10	
H-04 25 11.8	
48.6N 157.2E	
h ABOUT 037KM	
COL EP	04 31 45.0
EUR IP	04 35 16.0
I▸P	35 27.0
MAR 10	
BOZ EP	04 58 43.4
ES	58 57.0
BUT EP	04 58 56.6
ES	59 23.0
HHM EP	04 59 34.0
I	59 43.0
E(S)	05 00 21.0
EUR EP	05 00 05.0
MAR 10	
H-06 04 38.2	
14.8N 090.1W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
FGU EP	06 10 56.5
EUR E(P)	06 11 19.5
COL EP	06 15 04.0
MAR 10	
BUT EP	06 07 40.6
ES	08 08.0
HHM E(P)	06 08 02.0
EUR E(P)	06 08 48.6
MAR 10	
ALQ EP	06 22 09.0
EUR EP	06 23 03.2
MAR 10	
H-08 25 55.3	
54.6N 159.1E	
h ABOUT 057KM	
COL EP	08 31 41.0
EUR IP	08 35 33.0
(▸P)	35 55.0
ALQ EP	08 36 30.0
MAR 10	
BCN EP	09 32 43.4
E	32 47.9
ES	33 17.9
EUR EP	09 33 24.0
ES	34 20.0
EL	34 49.0
MAR 10	
H-09 39 09.4	
16.0S 168.5E	
h ABOUT 283KM	
KIP I(P)	09 47 34.0
COL IP	09 51 23.0
EUR IP	09 51 36.5
E▸P	52 46.5
TUC IP	09 51 43.2
MAR 10	
HHM IP	10 43 15.5
MAR 10	
BOZ EP	10 46 17.0
ES	46 31.0
BUT EP	10 46 30.1
ES	46 56.1
MAR 10	
H-10 51 46.7	
30.0S 071.2W	
h ABOUT 060KM	
SJP IP	11 00 21.0
IPP	02 18.0
TUC IP	11 03 08.0

Date and Station	Phase (GCT)
	h m s
ALQ IP	11 03 10.0
▸P	03 27.0
GCA IP	11 03 33.7
E	04 38.5
BCN EP	11 03 37.4
FGU IP	11 03 45.5
E	04 02.5
RCD EP	11 03 47.7
SLC EP	11 03 50.6
E▸P	04 07.1
EUR IP D	11 03 55.6
I▸P	04 11.5
E	09 07.0
EPKKP	22 38.0
E▸PKKP	22 53.0
BOZ EP	11 04 10.0
E▸P	04 27.0
BUT EP	11 04 14.7
E▸P	04 30.0
E	04 57.0
ES	14 35.0
HHM EP	11 04 26.0
▸P	04 42.0
COL EP	11 06 17.0
EPP	10 37.0
HON E	11 18 10.0
E	23 25.0
EL	36 25.0
MAR 10	
BUT EP	10 54 00.0
ES	54 25.0
MAR 10	
H-11 26 06.4	
44.9N 110.9W	
h ABOUT 033KM	
BOZ E(P)	11 26 19.4
ES	26 32.0
BUT EP	11 26 32.4
EL	26 59.0
FGU E(P)	11 26 58.5
FGU IP	11 27 09.3
HHM EP	11 27 10.0
EL	28 07.0
EUR E(P)	11 27 46.4
MAR 10	
BOZ EP	11 29 00.0
ES	29 14.4
BUT EP	11 29 13.8
ES	29 39.5
FGU IP	11 29 54.6
EUR EP	11 30 25.5

Date and Station	Phase (GCT)
	h m s
MAR 10	
EUR EP	11 42 32.8
ALQ E(P)	11 44 27.0
MAR 10	
H-11 50 26.9	
39.3N 141.7E	
h ABOUT 069KM	
COL IP	11 58 53.2
KIP I(P)	11 59 46.0
HHM IP	12 01 33.0
EUR IP C	12 01 59.0
pP	02 09.0
sP	02 13.4
BCN EP	12 02 15.6
E	02 30.9
RCD EP	12 02 21.3
TUC IP	12 02 41.6
ALQ EP	12 02 46.0
MAR 10	
EUR EP	12 56 14.0
MAR 10	
BUT EP	13 09 54.5
ES	10 17.0
MAR 10	
H-13 16 57.5	
44.8N 110.5W	
h ABOUT 033KM	
BOZ E(P)	13 17 14.0
ES	17 25.0
BUT EP	13 17 29.7
ES	17 55.0
FGU EP	13 17 56.6
HHM EP	13 18 03.0
I	18 14.0
EL	19 12.0
EUR EP	13 18 37.0
EL	20 25.0
MAR 10	
BUT EP	13 20 06.5
ES	20 30.0
MAR 10	
BUT EP	13 24 42.0
ES	25 06.0
MAR 10	
HHM IP	13 50 44.0
IS	50 47.0
MAR 10	
H-13 51 05.4	
2.4N 126.8E	
h ABOUT 055KM	
COL EP	14 03 43.0

Date and Station	Phase (GCT)
	h m s
EUR EP	14 05 50.0
EP'	09 34.0
PKKP	20 40.5
MAR 10	
EUR EP	19 12 54.9
EL	13 44.0
MAR 10	
TUC EP	19 41 47.9
ALQ EP	19 42 19.2
E	42 54.0
MAR 10	
BUT EP	22 09 37.4
ES	09 57.0
MAR 10	
TUC EP	22 40 21.5
MAR 10	
EUR EP	23 06 21.5
MAR 11	
COL EP	00 42 30.0
MAR 11	
H-07 27 17.1	
37.9N 029.0E	
h ABOUT 006KM	
COL IP	07 39 15.2
CSC EP	07 39 48.0
RCD EP	07 40 08.0
HHM EP	07 40 09.5
BUT EP	07 40 16.6
E	41 09.0
FGU IP	07 40 32.2
SLC EP	07 40 36.5
ALQ EP	07 40 50.0
EUR EP	07 40 50.4
EPP	44 52.5
EPKKP	57 37.0
TUC IP	07 41 09.3
MAR 11	
BUT EP	08 52 50.2
ES	53 17.0
MAR 11	
H-09 02 21.5	
18.7S 177.6W	
h ABOUT 422KM	
EUR IP	09 13 55.8
E▸P	15 31.0
TUC IP	09 13 57.0
E▸P	15 31.9
GCA IP	09 14 05.5
COL IP	09 14 17.0
I▸P	15 54.0

Date and Station	Phase (GCT)
	h m s
ALQ EP	09 14 18.2
E▸P	15 55.0
FGU EP	09 14 21.2
MAR 11	
BUT EP	09 02 37.1
ES	03 03.3
MAR 11	
H-10 27 46.7	
36.5N 071.1E	
h ABOUT 252KM	
COL IP	10 38 58.0
I	39 58.0
I	40 23.0
MAR 11	
BUT EP	10 28 06.2
ES	28 30.1
MAR 11	
EUR EP	10 55 57.6
MAR 11	
BUT EP	11 03 11.6
ES	03 36.0
MAR 11	
H-11 30 15.7	
5.1N 076.5W	
h ABOUT 088KM	
BHP IP	11 31 29.0
IS	32 26.0
SJP IP	11 34 05.6
ALQ IP	11 37 50.0
TUC IP	11 38 01.0
EUR EP	11 38 59.1
MAR 11	
BUT EP	11 33 53.1
ES	34 18.0
MAR 11	
H-14 22 07.5	
31.0N 138.3E	
h ABOUT 389KM	
COL IP	14 31 05.0
EUR EP	14 33 45.4
MAR 11	
H-15 30 25.5	
18.8N 100.9W	
h ABOUT 109KM	
TUC EP	15 34 06.0
I	34 10.1
ALQ IP	15 34 18.0
BCN EP	15 35 03.6
EUR IP	15 35 36.0
HHM E(P)	15 36 37.5

Date and Station	Phase (GCT)
	h m s
COL IP	15 39 50.0
IPCP	40 50.0
MAR 11	
BUT EP	16 26 24.0
ES	26 48.0
HHM E(P)	16 27 08.5
MAR 11	
BUT EP	16 38 12.5
ES	38 38.5
MAR 11	
EUR EP	19 08 17.8
MAR 11	
BOZ EP	19 58 46.5
E(S)	59 00.0
BUT EP	19 59 00.0
ES	59 22.0
HHM E(P)	19 59 45.4
MAR 11	
COL EP	20 45 49.0
MAR 11	
H-21 06 02.5	
14.9S 165.9E	
h ABOUT 184KM	
COL IP	21 18 25.1
E	19 14.0
EUR IP	21 18 45.0
E	18 53.5
MAR 11	
COL EP	23 50 49.0
EUR EP	23 54 34.5
MAR 12	
H-03 41 24.4	
44.9N 110.7W	
h ABOUT 021KM	
BOZ IP	03 41 41.0
IS	41 56.4
BUT EP	03 41 54.7
ES	42 18.5
FGU E(P)	03 42 24.4
HHM EP	03 42 28.6
EUR E(P)	03 43 04.5
RCD E(P)	03 43 05.4
MAR 12	
KIP IP	03 45 51.0
IS	46 09.0
MAR 12	
BUT EP	04 06 10.6
ES	06 34.7

Date and Station	Phase (GCT)
	h m s
MAR 12	
BOZ EP	04 16 38.4
ES	16 53.5
BUT EP	04 16 52.2
ES	17 17.2
HHM E(P)	04 17 25.0
MAR 12	
BUT EP	04 32 58.2
ES	33 22.7
HHM E(P)	04 33 42.3
MAR 12	
COL EP	05 10 10.0
MAR 12	
H-08 05 52.6	
53.9N 160.5E	
h ABOUT 065KM	
COL EP	08 11 35.6
E	11 46.0
THU E(P)	08 14 01.1
EUR IP C	08 15 25.6
EPCP	16 23.7
RCD EP	08 15 49.4
TUC EP	08 16 21.8
ALQ IP	08 16 24.0
MAR 12	
EUR EP	09 20 41.6
EL	21 35.6
MAR 12	
BOZ EP	09 23 52.2
ES	24 06.0
BUT EP	09 24 07.3
ES	24 32.9
MAR 12	
BOZ EP	11 43 47.5
ES	44 03.0
BUT EP	11 44 01.5
ES	44 26.3
EUR E(P)	11 45 26.0
MAR 12	
HHM E(P)	11 57 02.3
ES	59 37.3
MAR 12	
H-12 38 47.4	
39.2N 040.3E	
h ABOUT 016KM	
COL EP	12 50 34.0
MAR 12	
H-13 21 39.2	
15.9S 172.7W	
h ABOUT 033KM	
EUR EP	13 33 27.7

Date and Station	Phase (GCT)
	h m s
COL IP	13 34 01.0
I	34 21.0
MAR 12	
EUR E(P)	14 12 59.4
MAR 12	
THU EP	15 00 22.1
MAR 12	
H-15 17 59.5	
72.0N 000.9W	
h ABOUT 033KM	
COL EP	15 25 49.0
EUR E(P)	15 28 05.0
MAR 12	
BUT EP	15 19 19.1
ES	19 44.0
MAR 12	
COL EP	15 23 34.0
MAR 12	
BOZ E(P)	15 20 52.0
ES	21 07.0
BUT EP	15 21 06.8
ES	21 30.9
MAR 12	
H-16 04 32.9	
80.1N 000.2W	
h ABOUT 007KM	
COL E(P)	16 11 29.0
MAR 12	
COL EP	17 02 39.2
E	02 51.0
MAR 12	
BCN EP	19 18 37.3
EL	18 56.0
MAR 12	
H-20 15 00.8	
16.3S 167.6E	
h ABOUT 041KM	
COL EP	20 27 45.0
EUR E(P)	20 28 02.0
MAR 12	
BOZ EP	20 25 10.3
BUT EP	20 25 24.9
ES	25 50.1
HHM EP	20 25 45.3
E	26 09.3
EL	26 41.3
FGU IP	20 26 03.1
IL	26 52.6
RCD E(P)	20 26 31.5
E	26 44.6
E(S)	27 44.0

Date and Station	Phase (GCT)
	h m s
EUR E(P)	20 26 35.0
EL	28 22.5
MAR 12	
H-20 40 13.0	
07.2S 156.0E	
h ABOUT 099KM	
COL EP	20 52 26.0
EUR EP	20 53 18.6
EPP	53 34.5
MAR 12	
BOZ E(P)	21 31 57.0
BUT EP	21 32 09.3
ES	32 33.1
HHM E(P)	21 32 42.2
EUR E(P)	21 33 29.5
MAR 12	
HHM EP	22 18 49.2
ES	19 28.2
MAR 12	
H-23 47 18.2	
39.6N 110.5W	
h ABOUT 000KM	
FGU I(P)	23 47 54.0
GCA IP	23 48 06.3
IS	48 41.5
EUR E(P)	23 48 29.0
ALQ E(P)	23 48 35.0
E	50 10.0
MAR 13	
BUT EP	02 47 54.1
ES	48 19.1
MAR 13	
H-03 48 00.1	
10.5S 161.3E	
h ABOUT 106KM	
COL E(P)	04 00 20.0
E	00 37.4
EUR EP	04 00 54.5
I	01 14.5
MAR 13	
BUT EP	05 53 28.2
ES	53 52.7
HHM E(P)	05 54 06.2
ES	55 03.2
MAR 13	
COL IP	05 59 43.4
I	59 54.0
MAR 13	
EUR EP	07 44 00.0

Date and Station	Phase (GCT)
	h m s
MAR 13	
H-10 39 20.1	
19.5N 069.5W	
h ABOUT 049KM	
SJP IP	10 40 11.6
IS	40 49.0
ALQ EP	10 46 20.0
TUC EP	10 46 45.0
EUR EP	10 47 30.2
HHM EP	10 47 39.2
COL EPP	10 50 27.0
MAR 13	
H-10 54 25.7	
33.8N 141.2E	
h ABOUT 098KM	
COL EP	11 03 27.0
BUT E(P)	11 06 01.1
EUR EP	11 06 11.8
MAR 13	
COL EP	11 43 06.0
MAR 13	
ALQ E(P)	11 59 21.0
EUR EP	11 59 58.6
MAR 13	
H-17 27 19.8	
36.4N 070.4E	
h ABOUT 155KM	
COL EP	17 38 44.0
E	39 31.0
MAR 13	
BCN EP	19 13 18.9
ES	13 25.8
EUR E(P)	19 14 09.0
EL	15 00.0
MAR 13	
EUR E(P)	19 18 12.7
EL	19 00.0
HHM E(P)	19 19 37.2
MAR 13	
BOZ IP	21 00 35.0
I(S)	00 38.0
BUT EP	21 00 48.2
ES	01 03.7
HHM EP	21 01 28.2
E	02 09.2
MAR 13	
ALQ EP	21 05 25.8
IS	05 41.9
MAR 13	
HHM EP	21 31 50.2

Date and Station	Phase	(GCT) h m s
MAR 13		
TUC	IP	21 55 14.5
MAR 13		
TUC	EP	22 32 48.9
MAR 14		
COL	IP	00 33 07.0
	ES	33 32.0
MAR 14		
BUT	EP	01 15 58.2
EUR	E(P)	01 15 59.0
HHM	EP	01 16 03.2
MAR 14		
EUR	EP	01 20 55.7
MAR 14		
COL	EP	05 35 39.7
EUR	EP	05 39 06.0
	E	39 10.5
MAR 14		
H-08 00 15.4		
18.9N 120.2E		
h ABOUT 053KM		
COL	IP	08 11 45.3
	I	12 00.0
HHM	IP	08 13 45.4
EUR	EP	08 14 05.9
	I▸P	14 16.9
	EP'	17 57.5
	E	18 40.5
	EPKKP	30 32.9
TUC	EP'	08 18 43.2
ALQ	EP'	08 18 44.8
HON	E	08 22 06.0
	EL	32 34.0
MAR 14		
COL	EP	08 40 38.0
	E	41 16.0
MAR 14		
EUR	E(P)	12 25 00.0
	E(S)	25 57.5
	IL	26 15.4
MAR 14		
EUR	E(P)	17 43 40.5
	EL	45 56.0
MAR 14		
EUR	E(P)	17 50 34.5
	EL	51 42.0
MAR 14		
EUR	E(P)	17 59 05.5
	EL	18 00 55.5
MAR 14		
H-18 13 27.8		
53.1N 163.2W		
h ABOUT 033KM		
COL	EP	18 16 47.0
HHM	IP	18 19 44.1
EUR	IP D	18 20 17.0
	EPCP	22 47.0
MAR 14		
TUC	I(P)	18 21 22.1
MAR 14		
H-18 30 41.2		
46.4N 153.7E		
h ABOUT 041KM		
COL	IP	18 37 42.0
	I▸P	37 54.0
HHM	EP	18 40 38.0
EUR	IP D	18 41 07.7
	E▸P	41 19.0
ALQ	EP	18 42 00.8
TUC	E▸P	18 42 09.0
MAR 14		
COL	EP	20 08 33.0
MAR 14		
ALQ	EP	20 15 23.8
	ES	16 03.8
MAR 14		
BOZ	EP	20 25 34.0
	ES	25 47.5
BUT	EP	20 25 50.7
	ES	26 14.2
MAR 14		
EUR	EP	21 04 40.4
ALQ	IP	21 04 41.0
MAR 14		
ALQ	IP	21 29 46.1
	IS	29 48.8
MAR 14		
EUR	IP	22 24 52.9
MAR 14		
EUR	IP	22 36 10.8
MAR 14		
TUC	IP	22 46 05.9
MAR 14		
FGU	IP	22 50 43.3
MAR 14		
FGU	IP	22 53 31.2
MAR 14		
H-23 15 22.1		
05.8S 144.8E		
h ABOUT 033KM		
COL	EP	23 28 02.0
MAR 15		
H-00 03 50.5		
04.8S 129.4E		
h ABOUT 181KM		
COL	IP	00 16 34.0
	E▸P	17 17.0
EUR	EP	00 18 16.0
	IP'	22 06.0
	EPP	22 49.5
TUC	IP'	00 22 16.9
ALQ	IP'	00 22 21.7
	IPP	23 49.0
SJP	IP'	00 24 08.3
MAR 15		
H-00 15 52.7		
08.3N 126.7E		
h ABOUT 044KM		
GUA	E(P)	00 20 15.0
	ES	24 13.0
HON	I(P)	00 27 39.0
COL	IP	00 28 03.0
HHM	E(P)	00 29 47.0
BUT	E(P)	00 30 01.7
EUR	E(P)	00 30 02.5
	EP'	34 08.2
	EPP	34 20.3
	EPKKP	45 39.7
	I▸PKKP	45 56.8
TUC	EP'	00 34 27.0
	E	34 40.9
	EPKKP	45 17.3
ALQ	EP'	00 34 30.8
	E	45 09.8
BHP	EP'	00 35 37.0
SJP	EP'	00 35 37.0
	I	35 42.0
MAR 15		
BUT	IP	01 31 55.2
	IS	32 19.8
MAR 15		
H-03 35 01.3		
25.1S 179.4E		
h ABOUT 616KM		
TUC	IP	03 46 47.1
MAR 15		
EUR	IP D	03 44 51.2
	IS	45 17.5
MAR 15		
GCA	E(P)	03 46 06.2
	ES	47 17.0
MAR 15		
H-04 03 08.3		
25.1S 179.5E		
h ABOUT 612KM		
TUC	IP	04 14 54.9
EUR	EP	04 14 55.8
MAR 15		
COL	EP	04 27 09.0
MAR 15		
COL	E(P)	05 25 35.0
EUR	EP	05 29 01.5
	E	29 17.0
MAR 15		
H-05 46 32.4		
21.8N 045.4W		
h ABOUT 026KM		
SJP	EP	05 51 03.4
RCD	EP	05 55 43.5
ALQ	EP	05 56 00.8
FGU	IP	05 56 16.5
BOZ	EP	05 56 25.0
SLC	EP	05 56 27.9
TUC	IP	05 56 29.0
BUT	EP	05 56 32.2
HHM	EP	05 56 38.0
EUR	IP D	05 56 51.9
COL	EP	05 58 15.0
MAR 15		
EUR	IP	10 19 35.7
	E	19 41.7
MAR 15		
H-10 54 02.3		
17.4N 120.1E		
h ABOUT 068KM		
COL	E(P)	11 05 46.0
EUR	EP'	11 13 17.0
MAR 15		
FGU	IP	17 00 38.8
	IS	01 28.8
RCD	EP	17 00 54.0
MAR 15		
EUR	EP	21 56 33.8
	EL	57 11.3
MAR 15		
HHM	E(P)	22 20 16.0
	ES	20 56.0
MAR 15		
HHM	EP	23 06 42.8

Date and Station	Phase (GCT)
	h m s
MAR 16	
COL EP	01 45 48.0
MAR 16	
COL E(P)	02 10 04.0
EUR EP	02 13 30.0
E	13 34.0
MAR 16	
HHM E(P)	03 03 06.0
ES	03 53.0
MAR 16	
H-03 35 21.5	
26.0N 092.8E	
h ABOUT 039KM	
COL EP	03 47 18.0
IPP	47 29.0
MAR 16	
HHM EP	03 46 45.0
ES	47 34.0
MAR 16	
EUR E(P)	04 09 18.2
MAR 16	
HHM EP	04 33 08.0
ES	33 42.0
MAR 16	
COL EP	05 14 01.0
EUR EP	05 17 09.5
MAR 16	
ALQ E(P)	05 58 18.0
MAR 16	
ALQ E(P)	06 11 38.0
MAR 16	
TUC E(P)	06 26 31.5
ES	26 39.2
BCN EP	06 27 04.8
GCA E(P)	06 27 29.3
E	27 46.4
ES	29 12.4
ALQ E(P)	06 27 33.0
EUR EP	06 27 50.5
EL	30 03.0
MAR 16	
H-08 44 51.1	
46.6N 154.8E	
h ABOUT 046KM	
GUA EP	08 51 31.0
COL IP C	08 51 45.5
IS	57 16.0
IL	59 36.0
SIT EP	08 52 44.0
I(S)	59 12.6

Date and Station	Phase (GCT)
	h m s
KIP EP	08 53 05.0
E	55 11.0
E	59 03.0
I(S)	59 53.0
IL	09 03 36.0
ET	42 53.0
HON E(P)	08 53 14.0
I(PP)	55 06.0
E	59 06.0
I(S)	09 00 00.0
IL	04 52.0
ET	43 21.0
THU IP	08 54 13.5
HHM IP	08 54 41.0
I	55 41.0
I	57 12.0
I	59 08.0
E(S)	09 02 10.0
IP'P'	24 11.0
UKI EP	08 54 42.5
EPP	56 57.5
P'P'	09 24 40.0
BUT IP C	08 54 57.0
ES	09 03 11.0
ESS	07 32.0
IP'P'	24 18.0
IP'P'	24 31.0
BOZ EP	08 55 04.8
E(S)	09 03 30.0
P'P'	24 17.0
P'P'	24 35.0
EUR IP C	08 55 10.9
E	57 52.2
E(S)	09 03 54.0
EP'P'	24 05.0
EP'P'	24 40.0
SLC IP C	08 55 21.8
ES	09 03 59.8
ESCS	05 29.8
ESS	08 06.0
EP'P'	23 52.0
P'P'	24 32.4
P'P'	25 15.8
BCN EP	08 55 29.6
EP'P'	09 23 34.8
FGU IP	08 55 29.7
I	56 52.1
I	09 04 40.6
GCA IP	08 55 38.0
E(S)	09 04 33.0
EP'P'	24 16.0
RCD EP	08 55 38.3
P'P'	09 24 09.0
TUC IP	08 56 01.0
I	58 57.0
IP'P'	09 24 32.0
ALQ IP	08 56 04.2
I	59 02.0
E	09 06 20.0
EP'P'	09 23 57.0

Date and Station	Phase (GCT)
	h m s
CHK EP	08 56 34.0
EPPP	09 01 31.2
ES	06 16.0
ESS	11 21.2
EL	15 17.2
WAS IP	08 57 15.0
PP	09 00 19.0
ES	07 23.0
PHI EP	08 57 16.0
E	9 00 37.0
E	01 55.0
E	03 34.0
ES	07 30.0
SS	12 48.0
EL	18 06.0
C&C IP	08 57 26.0
E	09 04 50.0
IS	07 50.0
BHP P	08 59 01.0
SJP EP	08 59 01.8
EP'	09 02 40.0
IPP	03 18.0
ESKKS	10 27.0
MAR 16	
BCN EP	09 36 32.2
ES	36 38.5
EUR IP	09 37 14.0
EL	38 39.0
MAR 16	
HHM E(P)	09 42 40.0
ES	43 24.7
MAR 16	
SJP IP	10 03 12.4
IS	03 33.0
MAR 16	
TUC E(P)	11 08 25.2
E	08 57.3
MAR 16	
EUR E(P)	12 10 00.0
E	10 25.5
E	10 33.0
MAR 16	
EUR EP	12 16 46.0
EL	16 47.5
MAR 16	
EUR EP	12 21 43.0
MAR 16	
H-13 18 19.4	
20.6S 174.4W	
h ABOUT 033KM	
EUR E(P)	13 30 33.4
E	30 40.5
ALQ EP	13 30 50.0
COL EP	13 31 07.0
E	31 42.0

Date and Station	Phase (GCT)
	h m s
MAR 16	
COL EP	13 53 35.4
E	53 47.0
MAR 16	
COL EP	18 34 56.0
E	38 26.0
MAR 16	
H-21 40 08.4	
20.9S 174.4W	
h ABOUT 033KM	
TUC IP	21 52 20.9
E	52 52.9
EUR EP	21 52 23.0
ALQ EP	21 52 42.5
COL IP	21 52 56.7
I	53 19.0
E	53 55.0
MAR 16	
FGU IP	21 52 02.9
IS	52 21.1
MAR 16	
COL IP	22 43 14.6
MAR 17	
FGU IP	03 03 43.3
IS	04 14.8
MAR 17	
H-03 06 08.5	
24.5N 121.6E	
h ABOUT 033KM	
HHM EP	03 19 16.6
MAR 17	
EUR EP	04 02 39.2
MAR 17	
FGU IP	05 36 46.3
ES	37 23.3
MAR 17	
H-06 18 47.1	
06.8N 082.3W	
h ABOUT 030KM	
BHP P	06 19 41.0
S	20 24.0
SJP EP	06 23 16.3
ALQ EP	06 25 45.3
TUC IP	06 25 55.1
E	27 25.5
HHM EP	06 27 36.6
COL EP	06 30 20.0
MAR 17	
ALQ E(P)	07 33 57.0

Date and Station	Phase	(GCT) h m s
MAR 17		
H-08 42 12.6		
46.1N 154.9E		
h ABOUT 033KM		
COL	IP	08 49 11.2
	I	49 21.0
THU	EP	08 51 39.0
HHM	EP	08 52 05.5
BOZ	EP	08 52 28.5
FGU	E(P)	08 52 54.4
RCD	EP	08 53 02.4
ALQ	EP	08 53 28.0
MAR 17		
H-11 11 33.3		
38.9N 112.0W		
h ABOUT 033KM		
SLC	EP	11 12 01.6
	IS	12 21.6
FGU	IP	11 12 18.7
	IS	12 52.7
ALQ	E(P)	11 13 08.0
MAR 17		
GCA	IP	11 12 23.0
	IS	12 55.0
MAR 17		
COL	EP	13 19 45.0
MAR 17		
H-14 17 20.9		
39.4N 020.9E		
h ABOUT 033KM		
COL	IP	14 29 05.5
	E	29 26.0
	E	40 30.0
RCD	EP	14 29 44.2
HHM	EP	14 29 50.0
BUT	EP	14 29 56.9
BOZ	EP	14 29 57.5
ALQ	EP	14 30 25.0
MAR 17		
COL	EP	17 06 46.5
MAR 17		
H-19 38 49.1		
65.7N 166.6W		
h ABOUT 033KM		
COL	EP	19 40 43.0
	E	43 07.0
HHM	EP	19 45 16.4
EUR	EP	19 46 11.9

Date and Station	Phase	(GCT) h m s
MAR 17		
BUT	EP	19 41 00.7
	ES	41 24.0
MAR 17		
GUA	EP	19 54 44.0
	ES	54 59.0
EUR	IP D	20 06 58.6
MAR 17		
H-22 10 35.4		
44.8N 110.1W		
h ABOUT 020KM		
BOZ	E(P)	22 10 54.0
	ES	11 10.0
BUT	IP	22 11 08.6
	IS	11 32.9
FGU	E(P)	22 11 36.1
HHM	EP	22 11 42.3
	I	11 53.3
	EL	12 49.0
EUR	E(P)	22 12 16.8
MAR 17		
FGU	EP	22 38 01.2
	ES	38 34.4
MAR 18		
HHM	E(P)	00 42 17.3
MAR 18		
H-04 00 39.4		
27.1S 176.3W		
h ABOUT 020KM		
EUR	EP	04 13 25.0
	E	13 37.3
GCA	EP	04 13 31.3
COL	EP	04 13 58.2
MAR 18		
H-04 25 41.4		
33.2S 179.0E		
h ABOUT 033KM		
COL	E(P)	04 39 29.0
	E	39 55.0
MAR 18		
FGU	IP	06 38 25.8
	ES	38 46.3
GCA	IP	06 38 42.7
MAR 18		
H-07 29 21.3		
20.1S 178.0W		
h ABOUT 506KM		
EUR	EP	07 40 54.0
MAR 18		
H-09 47 58.3		
30.6N 042.1W		
h ABOUT 033KM		

Date and Station	Phase	(GCT) h m s
EUR	E(P)	09 58 01.1
COL	IP	09 59 02.4
MAR 18		
H-10 01 59.4		
24.1N 005.1E		
h ABOUT 000KM		
HHM	EP	10 15 00.8
FGU	IP	10 15 08.2
GCA	E(P)	10 15 26.0
EUR	EP C	10 15 32.4
	E	15 39.0
MAR 18		
HHM	E(P)	10 28 06.3
MAR 18		
EUR	EP'	11 28 28.2
MAR 18		
GCA	E(P)	12 28 55.7
MAR 18		
H-13 16 14.8		
17.7S 178.6W		
h ABOUT 557KM		
EUR	IP C	13 27 36.6
	IPCP	27 42.5
GCA	IP	13 27 46.0
COL	IP	13 27 54.4
	E	31 02.0
MAR 18		
COL	EP	14 27 02.0
HHM	E(P)	14 27 45.3
MAR 18		
EUR	EP	21 29 48.6
	E	30 00.6
MAR 18		
TUC	IP	22 52 59.8
MAR 18		
HHM	EP	22 59 25.3
MAR 18		
EUR	EP	23 48 34.2
MAR 19		
BUT	EP	00 41 35.4
	ES	41 59.9
MAR 19		
EUR	IP	03 41 10.0
	IS	41 32.3
MAR 19		
HHM	E(P)	04 14 35.2
	E(S)	15 41.0
MAR 19		
TUC	EP	04 42 38.5

Date and Station	Phase	(GCT) h m s
MAR 19		
H-04 52 32.7		
79.0N 001.6E		
h ABOUT 010KM		
EUR	EP	05 02 17.7
MAR 19		
H-05 11 08.5		
18.8N 145.3E		
h ABOUT 226KM		
GUA	EP	05 12 27.4
COL	EP	05 21 13.0
	EPCP	21 42.0
	E>P	22 06.0
EUR	IP	05 23 19.7
	E>P	24 07.2
MAR 19		
H-05 46 45.7		
22.7S 170.7E		
h ABOUT 033KM		
EUR	EP	05 59 53.2
	E	06 00 15.0
MAR 19		
THU	EP	07 13 43.5
MAR 19		
EUR	EP	09 26 38.1
MAR 19		
EUR	EP	10 24 27.8
MAR 19		
EUR	E(P)	10 56 17.0
	E	56 24.0
MAR 19		
H-13 13 20.1		
22.6S 170.8E		
h ABOUT 033KM		
COL	E(P)	13 26 30.0
MAR 19		
H-14 13 18.3		
27.2N 115.2W		
h ABOUT 033KM		
TUC	EP	14 14 53.0
ALQ	EP	14 15 52.0
EUR	EP	14 16 13.9
HHM	E(P)	14 18 03.0
MAR 19		
COL	EP	14 24 05.0
EUR	EP	14 27 29.9
MAR 19		
H-14 42 01.4		
22.6S 170.9E		
h ABOUT 033KM		
EUR	EP	14 55 08.7

Date and Station	Phase (GCT)
	h m s
COL EP	14 55 11.0
HON E	14 59 10.0
EL	15 07 06.0
MAR 19	
HHM EP	16 57 36.2
MAR 19	
H-17 19 22.6	
7.8S 106.9E	
h ABOUT 081KM	
EUR EP'	17 38 27.3
MAR 19	
COL EP	18 34 05.5
I	34 22.0
I	34 52.0
MAR 19	
BOZ IP	18 36 00.0
IS	36 03.0
BUT IP	18 36 12.7
IS	36 23.7
HHM EP	18 36 45.2
I	36 53.2
IL	37 35.2
FGU EP	18 37 27.0
E(S)	38 33.0
RCD EP	18 37 54.4
E	38 50.3
EUR E(P)	18 37 59.5
EL	39 37.1
MAR 19	
ALQ IP	19 02 38.2
MAR 19	
H-19 08 07.8	
8.3N 126.6E	
h ABOUT 106KM	
COL IP	19 20 10.7
MAR 19	
TUC EP	21 28 23.8
ALQ EP	21 28 55.0
E	29 35.0
MAR 19	
HON EP	22 16 08.0
KIP IP	22 16 09.7
MAR 19	
HHM EP	22 17 04.2
ES	17 18.2
MAR 19	
FGU IP	23 39 23.6
IS	39 37.6
MAR 19	
H-23 56 11.0	
5.4S 152.1E	
h ABOUT 065KM	

Date and Station	Phase (GCT)
	h m s
COL E(P)	00 08 30.0
MAR 20	
FGU IP	00 09 46.4
ES	10 18.1
EUR E(P)	00 09 57.0
EL	10 42.0
MAR 20	
H-04 43 14.0	
20.0S 179.0W	
h ABOUT 690KM	
HON EP	04 50 40.0
ES	56 41.0
KIP IP	04 50 40.6
ES	56 42.0
EUR IP C	04 54 33.8
E▸P	56 59.2
TUC IP	04 54 34.5
E▸P	56 57.1
SLC EP	04 54 50.2
E▸P	57 15.0
COL IP	04 54 52.4
I▸P	57 16.0
ALQ IP	04 54 55.0
E	57 17.0
FGU IP	04 54 58.2
E▸P	57 24.0
HHM EP	04 55 00.2
BUT EP	04 55 00.6
E▸P	57 23.3
SJP EP'	05 00 44.0
MAR 20	
H-04 45 48.7	
20.0S 179.1W	
h ABOUT 690KM	
HON IP	04 53 15.4
ES	59 16.0
KIP IP	04 53 15.7
EUR IP	04 57 08.2
E	59 24.5
TUC IP	04 57 09.1
E▸P	59 32.3
GCA IP	04 57 18.0
SLC EP	04 57 25.9
E▸P	59 48.6
COL IP	04 57 28.8
E	59 50.0
BUT EP	04 57 34.6
E▸P	59 58.6
SJP IP'	05 03 18.3

Date and Station	Phase (GCT)
	h m s
MAR 20	
BUT EP	04 50 13.0
I(S)	50 44.4
MAR 20	
HHM E(P)	05 12 25.0
MAR 20	
BOZ EP	06 03 05.5
ES	03 21.0
BUT EP	06 03 20.8
ES	03 44.8
MAR 20	
H-07 04 21.0	
46.4N 154.6E	
h ABOUT 033KM	
COL IP	07 11 18.6
HHM EP	07 14 14.1
BUT EP	07 14 29.1
BOZ EP	07 14 37.0
EUR EP	07 14 43.0
BCN IP	07 15 03.0
FGU IP	07 15 03.3
RCD EP	07 15 11.0
ALQ IP	07 15 39.0
MAR 20	
COL E(P)	09 10 14.0
MAR 20	
H-10 44 41.0	
15.8S 171.5W	
h ABOUT 033KM	
EUR E(P)	10 56 23.7
ALQ E(P)	10 56 53.5
COL IP	10 57 02.7
MAR 20	
BOZ EP	11 37 42.0
E(S)	38 03.0
BUT IP	11 37 58.7
IS	38 23.3
HHM EP	11 38 21.1
I	38 42.1
I	39 44.1
SLC E(P)	11 38 29.6
E	38 39.8
FGU EP	11 38 30.3
I	38 40.8
I	39 29.5
RCD E(P)	11 38 51.4
EUR E(P)	11 39 07.0
IL	40 32.0

Date and Station	Phase (GCT)
	h m s
MAR 20	
H-11 38 31.3	
44.8N 110.7W	
h ABOUT 033KM	
BOZ IP	11 38 47.8
IS	39 01.0
BUT IP	11 39 01.5
IS	39 27.2
FGU I(P)	11 39 29.5
HHM EP	11 39 35.1
IL	40 43.1
RCD EP	11 39 53.0
EUR EP	11 40 11.2
GCA E(P)	11 40 21.5
ALQ E(P)	11 40 58.0
TUC E(P)	11 41 22.5
E	45 13.0
COL EP	11 44 28.0
MAR 20	
BCN EP	11 45 46.9
MAR 20	
BOZ EP	11 46 01.4
ES	46 20.0
BUT EP	11 46 17.0
ES	46 41.7
FGU E(P)	11 46 44.2
HHM EP	11 47 00.1
ES	47 59.1
EUR EP	11 47 24.5
EL	49 16.0
MAR 20	
COL EP	11 47 37.3
MAR 20	
BOZ EP	11 47 58.0
ES	48 15.5
BUT EP	11 48 12.3
ES	48 36.0
FGU IP	11 48 39.8
EL	49 33.5
HHM E(P)	11 48 46.0
ES	49 52.0
MAR 20	
H-12 32 24.5	
44.7N 110.6W	
h ABOUT 033KM	
BOZ EP	12 32 41.6
IS	32 59.0
BUT IP	12 32 56.8
IS	33 20.0

Date and Station	Phase	(GCT) h m s
FGU	IP	12 33 24.8
	I	33 33.0
	IL	34 26.0
SLC	EP	12 33 25.8
	E	33 32.1
	E(S)	34 10.6
HHM	EP	12 33 30.1
	I	33 41.1
	IL	34 41.1
RCD	EP	12 33 44.7
	E	33 50.5
EUR	EP	12 34 01.5
	EL	35 55.0
	E	36 02.4
MAR 20		
GUA	EP	13 19 24.0
MAR 20		
SIT	IP	14 40 02.9
	IS	40 06.3
MAR 20		
H-14 41 47.4		
11.6N 092.8E		
h ABOUT 033KM		
COL	EP	14 54 50.7
EUR	EP'	15 00 42.5
	E	00 58.2
ALQ	E	15 01 57.8
	I	04 16.0
MAR 20		
H-16 38 54.3		
2.4S 138.4E		
h ABOUT 029KM		
GUA	EP	16 42 57.0
KIP	IP	16 49 43.6
HON	EP	16 49 46.0
	E	58 44.0
COL	IP	16 51 29.7
EUR	IP	16 52 55.8
	EPP	57 15.2
SJP	EP'	16 58 40.5
MAR 20		
HHM	E(P)	19 13 11.0
	E(S)	13 47.0
MAR 20		
HHM	E(P)	19 56 25.0
	ES	57 14.0
MAR 20		
TUC	IP	22 50 57.1
MAR 20		
BCN	E(P)	23 16 12.5
	E	16 38.0
	EL	17 33.5
GCA	E(P)	23 16 53.0
	I	18 41.2
EUR	IP	23 17 12.6
	EL	19 21.6
ALQ	E(P)	23 17 20.0
MAR 21		
TUC	EP	00 01 24.5
EUR	IP	00 01 24.9
MAR 21		
H-01 12 53.1		
19.5S 175.7W		
h ABOUT 121KM		
TUC	IP	01 24 55.9
EUR	EP	01 24 56.4
COL	IP	01 25 23.7
MAR 21		
H-03 00 24.2		
44.8N 110.6W		
h ABOUT 033KM		
BOZ	EP	03 00 41.2
	ES	00 52.5
BUT	EP	03 00 55.0
	ES	01 19.8
FGU	EP	03 01 24.6
HHM	EP	03 01 28.0
EUR	EP	03 02 02.1
	E	02 32.0
MAR 21		
H-04 00 09.6		
36.4N 141.1E		
h ABOUT 038KM		
COL	IP	04 09 00.7
THU	E(P)	04 10 49.5
HHM	EP	04 11 33.5
BUT	IP	04 11 47.3
	E	12 15.7
EUR	IP C	04 11 59.0
	I	12 06.0
	I	12 12.9
SLC	EP	04 12 08.4
BCN	EP	04 12 13.4
	E	12 21.4
	E	12 25.8
RCD	EP	04 12 21.8
	E	12 35.6
TUC	IP	04 12 38.9
ALQ	IP	04 12 45.0
	I	12 57.0
MAR 21		
HHM	P	04 01 03.0
MAR 21		
H-04 33 53.0		
05.5S 152.2E		
h ABOUT 046KM		
COL	EP	04 46 11.0
EUR	EP	04 47 12.9
	E	47 23.6
SJP	EP'	04 53 35.2
MAR 21		
BUT	EP	08 10 17.0
	ES	10 42.3
MAR 21		
COL	IP	09 23 48.6
	IS	24 08.0
EUR	EP	09 29 56.0
MAR 21		
ALQ	EP	16 01 53.0
MAR 21		
H-16 09 47.0		
45.0N 110.3W		
h ABOUT 033KM		
BOZ	EP	16 10 02.7
	E(S)	10 18.0
BUT	EP	16 10 16.8
	ES	10 41.9
FGU	EP	16 10 49.8
HHM	E(P)	16 10 50.0
	I	11 03.0
	EL	11 57.0
EUR	E(P)	16 11 29.8
	E	11 47.6
MAR 21		
H-17 53 19.2		
46.8N 155.0E		
h ABOUT 051KM		
COL	EP	18 00 11.0
	E	00 31.0
EUR	EP	18 03 36.8
MAR 21		
H-18 19 19.9		
50.8N 129.2W		
h ABOUT 006KM		
HHM	E(P)	18 21 42.0
	EL	24 02.0
BUT	EP	18 22 12.4
	EL	25 54.0
BOZ	E(P)	18 22 31.0
EUR	EP	18 22 50.3
	I	22 56.5
COL	EP	18 23 22.0
RCD	EP	18 23 44.5
TUC	EP	18 24 24.6
ALQ	EP	18 24 25.0
MAR 21		
UKI	IP	18 55 21.2
	IS	55 22.8
MAR 21		
TUC	IP	19 45 14.8
MAR 21		
ALQ	EP	20 17 49.5
MAR 21		
GCA	IP	21 42 29.5
	IS	43 05.5
EUR	EP	21 42 58.7
	EL	43 57.4
ALQ	E(P)	21 43 17.0
	E(S)	44 30.0
MAR 21		
BCN	EP	22 18 35.8
	ES	18 52.1
MAR 21		
TUC	IP	22 48 37.0
MAR 21		
TUC	IP	22 57 29.5
MAR 21		
GCA	IP	23 01 21.5
	ES	01 55.5
ALQ	E(P)	23 01 50.0
MAR 21		
ALQ	EP	23 16 08.0
MAR 21		
H-23 35 54.7		
47.0N 155.7E		
h ABOUT 060KM		
COL	IP	23 42 41.4
	I	43 14.4
EUR	IP D	23 46 08.0
	E	46 33.4
MAR 22		
ALQ	EP	00 05 33.0
MAR 22		
ALQ	EP	01 13 23.0
MAR 22		
H-01 44 26.3		
19.3N 066.9W		
h ABOUT 051KM		
SJP	IP	01 44 47.1
ALQ	EP	01 51 44.0
COL	EP	01 55 28.0

Date and Station	Phase (GCT)
	h m s
MAR 22	
COL EP	02 07 52.0
EUR E(P)	02 11 16.5
MAR 22	
H-02 38 50.1	
36.7N 139.5E	
h ABOUT 083KM	
COL EP	02 47 39.0
EUR IP C	02 50 37.0
E	50 52.5
MAR 22	
H-03 57 23.4	
45.6N 148.7E	
h ABOUT 125KM	
COL IP	04 04 39.5
I*P	05 09.0
ESCP	10 24.0
HHM IP	04 07 31.9
EUR IP C	04 08 01.9
*P	08 31.0
TUC IP	04 08 49.5
ALQ IP	04 08 54.0
MAR 22	
H-04 34 42.9	
44.8N 110.5W	
h ABOUT 034KM	
BOZ IP	04 35 00.6
EL	35 16.0
BUT IP	04 35 15.3
IS	35 38.0
FGU IP	04 35 42.6
EL	36 57.6
SLC EP	04 35 46.3
I	36 00.1
ES	36 31.4
HHM EP	04 35 48.0
I	36 01.0
IL	36 57.0
FUR EP	04 36 21.5
EL	38 08.0
GCA E(P)	04 36 42.7
I	37 13.0
E	37 51.5
BCN EP	04 36 59.0
EL	39 53.0
ALQ E(P)	04 37 18.5
TUC E(P)	04 37 49.0
EL	41 15.2
COL EP	04 40 43.0

Date and Station	Phase (GCT)
	h m s
MAR 22	
BOZ EP	04 41 11.4
ES	41 24.0
BUT IP	04 41 25.0
IS	41 50.4
SLC E(P)	04 41 57.1
E	42 03.0
EUR E(P)	04 41 59.0
MAR 22	
H-05 58 52.8	
44.9N 109.9W	
h ABOUT 033KM	
BOZ EP	05 59 11.8
ES	59 26.4
BUT IP	05 59 27.7
IS	59 52.0
FGU E(P)	05 59 51.6
HHM EP	06 00 00.0
I	00 12.0
EL	01 07.0
SLC E(P)	06 00 01.5
EUR E(P)	06 00 34.9
MAR 22	
EUR EP	06 10 54.6
MAR 22	
BUT IP	07 09 37.3
IS	10 01.0
HHM I(P)	07 10 18.9
MAR 22	
ALQ EP	09 11 04.0
MAR 22	
TUC EP	10 37 11.0
BCN EP	10 37 17.0
E	37 36.4
EL	38 33.4
EUR E(P)	10 38 04.6
EL	38 17.7
MAR 22	
H-11 56 45.0	
15.3S 168.2E	
h ABOUT 033KM	
EUR EP	12 09 39.9
MAR 22	
COL EP	12 03 25.0
EUR E(P)	12 08 31.7
MAR 22	
TUC E(P)	12 43 26.0
EUR E(P)	12 43 56.5
E	44 06.0

Date and Station	Phase (GCT)
	h m s
MAR 22	
BUT EP	13 32 03.4
ES	32 28.3
HHM E(P)	13 32 43.9
MAR 22	
BHP IP	15 12 14.0
IS	12 38.0
MAR 22	
HHM E(P)	19 33 34.9
MAR 22	
BOZ EP	19 39 00.4
ES	39 17.5
BUT EP	19 39 16.0
ES	39 41.3
HHM E(P)	19 40 00.9
MAR 22	
BOZ EP	20 38 32.5
ES	38 47.5
BUT EP	20 38 48.0
ES	39 11.7
HHM E(P)	20 39 17.8
ES	40 09.8
MAR 22	
HON IP	21 00 20.1
IS	00 50.0
MAR 22	
TUC IP	21 07 52.1
ALQ EP	21 08 24.0
MAR 22	
H-21 18 19.3	
23.3S 066.9W	
h ABOUT 217KM	
COL IP'	21 36 33.0
I	36 44.0
MAR 22	
COL IP	21 31 52.4
MAR 22	
H-23 35 24.8	
34.9N 033.4E	
h ABOUT 033KM	
COL EP	23 47 36.0
MAR 23	
H-01 10 44.4	
25.5S 179.3E	
h ABOUT 540KM	
COL E(P)	01 22 55.0
MAR 23	
TUC IP	01 37 38.2
MAR 23	
HHM E(P)	01 41 13.8
ES	42 06.8

Date and Station	Phase (GCT)
	h m s
MAR 23	
ALQ EP	03 36 50.1
MAR 23	
BOZ EP	03 38 05.0
ES	38 20.5
BUT IP	03 38 20.9
IS	38 46.0
FGU E(P)	03 38 47.8
HHM EP	03 38 53.8
ES	40 02.8
MAR 23	
H-05 48 34.5	
42.3N 084.3E	
h ABOUT 033KM	
COL EP	05 59 17.0
MAR 23	
HHM EP	06 35 41.8
MAR 23	
HHM E(P)	06 46 34.8
MAR 23	
BOZ EP	07 04 54.0
ES	05 11.5
BUT EP	07 05 09.0
ES	05 33.0
HHM E(P)	07 05 40.8
EL	06 46.8
MAR 23	
BOZ EP	08 30 45.5
ES	31 00.5
BUT EP	08 31 00.0
ES	31 25.0
HHM E(P)	08 31 35.8
I	31 45.8
EL	32 42.8
MAR 23	
H-08 51 44.0	
4.8S 145.7E	
h ABOUT 050KM	
COL IP	09 04 12.6
MAR 23	
BOZ EP	12 08 47.3
ES	08 59.0
BUT EP	12 08 59.4
ES	09 21.2
HHM E(P)	12 09 33.7
EL	10 36.7
MAR 23	
H-12 09 06.1	
41.5N 075.1E	
h ABOUT 062KM	
COL EP	12 20 06.0

Date and Station	Phase	Phase (GCT) h m s
MAR 23		
H-12 21 39.0		
44.7N 110.6W		
h ABOUT 033KM		
BOZ	IP	12 21 55.2
	IS	22 13.0
BUT	IP	12 22 09.2
	IS	22 33.7
FGU	IP	12 22 38.3
	EL	23 04.6
HHM	EP	12 22 39.7
	I	22 54.7
	IL	23 51.7
RCD	E(P)	12 23 05.0
MAR 23		
TUC	EP	14 48 33.1
COL	EP	14 49 03.7
MAR 23		
TUC	EP	15 02 02.0
MAR 23		
GCA	IP	17 33 09.4
	IS	33 44.5
EUR	EP	17 33 42.5
	EL	34 30.0
MAR 23		
HHM	E(P)	19 27 38.7
	ES	28 17.7
MAR 23		
BUT	EP	19 51 06.2
	ES	51 32.7
MAR 23		
BOZ	EP	19 55 20.0
	ES	55 37.0
BUT	EP	19 55 36.9
	ES	56 01.8
HHM	E(P)	19 56 09.6
MAR 23		
BOZ	EP	19 58 16.0
	ES	58 30.5
BUT	EP	19 58 29.2
	ES	58 55.2
MAR 23		
H-21 11 24.8		
9.8S 114.0E		
h ABOUT 099KM		
EUR	EP'	21 30 36.3
MAR 23		
FGU	IP	21 26 27.6
	IS	26 42.7
MAR 23		
FGU	IP	21 48 07.6
	ES	48 36.6
EUR	EP	21 48 20.0
	EL	49 10.0
MAR 23		
TUC	IP	22 49 33.1
MAR 23		
TUC	EP	22 54 18.0
MAR 23		
BHP	P	23 03 18.0
	S	04 03.0
MAR 23		
EUR	E(P)	23 54 09.0
MAR 24		
H-01 36 23.2		
05.8S 151.0E		
h ABOUT 046KM		
COL	EP	01 48 46.0
EUR	EP	01 49 48.8
MAR 24		
HHM	IP	01 54 56.6
	IS	55 16.6
MAR 24		
H-02 07 09.4		
9.7S 120.5E		
h ABOUT 012KM		
GUA	EP	02 13 50.0
	E	15 11.0
HON	IP	02 19 53.9
	ES	30 18.0
KIP	IP	02 19 54.5
	E	20 14.0
	ES	30 20.0
	ESS	36 06.0
	EL	42 35.0
COL	EP	02 20 53.2
	EPKKP	37 19.0
	E	37 43.0
EUR	E(P)	02 22 56.0
	EP'	26 07.0
	EPP	27 38.5
	ESKP	29 13.5
	IPKKP	36 07.0
	ESPP	36 07.0
BUT	EP'	02 25 49.7
	EP'	26 06.3
	E	26 16.6
	EPP	27 40.5
HHM	EP'	02 26 03.6
	PP	12 27 21.6
ALQ	EP'	02 26 10.0
BCN	EP'	02 26 11.0
	I	26 20.9
SLC	EP'	02 26 12.0
	E	26 45.0
GCA	IP'	02 26 15.0
	I	33 01.5
FGU	IP'	02 26 15.3
	I	26 48.3
	I	32 53.3
TUC	EP'	02 26 18.3
	E	32 49.0
	E	35 05.0
RCD	EP'	02 26 20.4
CSC	IP'	02 26 57.0
	E	30 30.0
BHP	EP'	02 27 12.0
SJP	EP'	02 27 19.8
	EPP	32 27.0
MAR 24		
H-02 24 49.2		
51.6N 173.3W		
h ABOUT 055KM		
COL	IP	02 29 05.0
HHM	EP	02 31 58.1
	E	36 13.6
BUT	EP	02 32 15.6
	E	33 39.3
	E	36 06.5
EUR	IP D	02 32 28.0
	IPP	32 41.5
SLC	EP	02 32 41.8
BCN	EP	02 32 51.8
TUC	EP	02 33 29.2
	E	38 44.0
MAR 24		
SJP	EP	02 34 49.0
	IS	35 16.0
MAR 24		
COL	EP	02 41 36.0
MAR 24		
H-08 19 24.6		
22.6S 170.8E		
h ABOUT 033KM		
EUR	E(P)	08 32 32.4
	E	32 36.0
MAR 24		
H-09 09 51.2		
59.4N 148.1W		
h ABOUT 033KM		
COL	IP	09 11 12.2
	I	12 18.0
MAR 24		
H-09 31 46.2		
03.2S 147.0E		
h ABOUT 010KM		
COL	EP	09 44 11.0
TUC	E(P)	09 44 45.0
EUR	E(P)	09 45 34.5
	E	45 41.5
MAR 24		
H-09 43 21.2		
09.0N 125.7E		
h ABOUT 068KM		
GUA	EP	09 47 43.0
KIP	IP	09 54 54.5
HON	EP	09 54 55.0
COL	IP	09 55 27.6
THU	EP	09 56 30.5
HHM	EP	09 57 13.5
	EPP	10 01 20.5
EUR	IP	09 57 27.0
	I	10 00 36.5
	EPKKP	13 20.0
ALQ	EP'	10 01 54.0
SJP	EP'	10 03 08.3
MAR 24		
H-10 58 55.3		
36.5N 070.7E		
h ABOUT 213KM		
COL	EP	11 10 12.0
	EPP	11 03.0
MAR 24		
COL	EP	11 23 03.2
MAR 24		
H-12 04 14.9		
44.8N 141.3E		
h ABOUT 234KM		
COL	IP	12 11 49.7
	EPP	12 39.0
EUR	EP	12 15 10.3
MAR 24		
TUC	E(P)	12 26 15.9
MAR 24		
H-12 44 00.5		
34.3N 047.8E		
h ABOUT 010KM		
THU	EP	12 54 25.5
COL	EP	12 56 12.2
	I	56 15.0
	I	56 25.0
	EPKKP	13 14 53.0
HHM	EP	12 57 29.5
RCD	E(P)	12 57 36.7

Date and Station	Phase (GCT)
	h m s
EUR EP	12 58 11.0
EP'	13 01 15.0
EPP	02 33.9
EPKKP	13 50.7
ALQ EP'	13 01 31.0
TUC EPKKP	13 13 46.0
MAR 24	
EUR EP	12 44 53.0
MAR 24	
GUA EP	15 25 10.0
ES	25 22.0
MAR 24	
COL EP	17 20 34.0
MAR 24	
TUC IP	17 29 22.0
ALQ EP	17 29 53.0
MAR 24	
BCN EP	17 32 11.3
E	32 34.8
E	32 46.8
EUR E(P)	17 32 57.5
EL	34 04.5
MAR 24	
H-18 20 53.2	
14.9S 176.0W	
h ABOUT 320KM	
FUR E(P)	18 31 57.7
COL IP	18 32 39.7
MAR 24	
EUR EP	18 23 51.7
MAR 24	
COL IP	19 19 29.4
EUR IP	19 23 05.1
MAR 24	
H-20 20 29.5	
15.2S 173.4W	
h ABOUT 035KM	
TUC EP	20 32 17.0
COL EP	20 32 48.0
MAR 24	
H-20 31 09.2	
17.7N 099.5W	
h ABOUT 117KM	
FUR EP	20 36 33.5
MAR 24	
TUC IP	20 55 24.2
ALQ IP	20 55 56.0
GCA EP	20 56 16.8
FS	57 12.8

Date and Station	Phase (GCT)
	h m s
MAR 24	
H-21 35 23.2	
51.8N 178.1W	
h ABOUT 047KM	
COL IP	21 39 58.0
ES	43 40.0
IPCP	44 08.0
ISCP	47 39.0
ESCS	51 19.0
I	52 05.0
KIP IP	21 42 04.7
ES	47 35.0
EL	50 57.0
ET	22 17 19.0
HON EP	21 42 05.0
ES	47 33.0
EL	51 02.0
ET	22 17 31.0
UKI EP	21 42 53.2
E▸P	43 06.0
HHM IP	21 42 56.3
PCP	45 00.4
SCP	48 42.4
ES	49 08.3
SCS	53 07.4
BUT IP	21 43 13.0
IPCP	45 07.3
▸PCP	45 20.2
ESCP	48 54.4
IS	49 17.0
ESCS	53 11.4
BOZ IP	21 43 22.6
E▸P	43 34.5
EUR IP C	21 43 27.8
I▸P	43 40.4
ESCP	48 57.8
ES	49 55.0
THU IP	21 43 33.0
SLC IP	21 43 41.0
I▸P	44 02.7
EPCP	45 10.0
E▸PCP	45 31.5
ES	50 22.0
BCN IP	21 43 50.6
I▸P	44 04.3
IPCP	45 20.4
ESCP	49 13.8
FGU IP	21 43 52.1
I	44 35.1
ISCS	53 40.1
GCA IS	21 44 00.3
I	45 04.8
RCD IP	21 44 04.4
TUC IP	21 44 27.3
I▸P	44 39.3
IPCP	45 40.5
ES	51 46.8

Date and Station	Phase (GCT)
	h m s
ALQ IP	21 44 34.5
I▸P	44 47.0
CSC IP	21 46 20.0
SJP IP	21 48 13.9
I▸P	48 27.0
MAR 24	
EUR EP	22 12 29.0
COL EP	22 14 06.0
MAR 24	
EUR E(P)	22 14 37.5
MAR 24	
EUR EP	22 45 34.0
MAR 25	
COL EP	01 39 54.0
I	40 17.0
MAR 25	
H-02 39 44.5	
52.1N 171.3W	
h ABOUT 025KM	
COL EP	02 43 50.0
EUR EP	02 47 16.0
E▸P	47 22.6
TUC EP	02 48 19.1
MAR 25	
H-03 55 18.1	
17.8N 121.4E	
h ABOUT 031KM	
COL IP	04 06 53.5
MAR 25	
EUR EP	05 39 23.2
MAR 25	
EUR EP	05 59 00.8
TUC IP	05 59 03.4
COL IP	05 59 20.0
ALQ EP	05 59 26.0
MAR 25	
H-08 08 53.0	
14.6N 120.5E	
h ABOUT 075KM	
COL IP	08 20 42.4
MAR 25	
HON IP	08 32 30.3
IS	32 59.0
KIP IP	08 32 31.4
IS	33 01.0
EUR EP	08 39 21.0
MAR 25	
EUR EP	08 42 18.0

Date and Station	Phase (GCT)
	h m s
MAR 25	
H-09 28 43.0	
36.0N 114.8W	
h ABOUT 019KM	
BCN IP	09 28 45.0
GCA IP	09 29 28.3
I	31 37.4
EUR IP D	09 29 38.7
IS	30 12.7
EL	30 28.7
TUC IP	09 29 57.0
ES	30 50.0
SLC EP	09 30 04.2
I	30 26.7
EL	31 32.0
FGU IP	09 30 21.3
I	30 44.8
IL	32 07.3
ALQ EP	09 30 25.0
I	30 41.0
BUT EP	09 31 13.0
IL	34 08.0
BOZ EP	09 31 13.0
EL	34 05.0
RCD E(P)	09 31 33.5
HHM EP	09 31 42.6
EL	35 09.4
UKI E(P)	09 31 58.0
EL	32 34.0
COL IP	09 35 36.4
CSC EL	09 43 13.0
WAS EL	09 44 16.2
I	46 56.2
MAR 25	
BCN IP	10 09 34.4
GCA EP	10 10 21.1
EL	10 55.1
EUR E(P)	10 10 29.0
EL	11 24.0
MAR 25	
BCN IP	10 25 15.0
GCA IP	10 26 01.7
IL	26 39.2
EUR E(P)	10 26 09.7
EL	27 03.6
MAR 25	
BCN IP	10 54 48.2
GCA EP	10 55 21.4
ES	55 53.6

Date and Station	Phase	Phase (GCT) h m s
EUR	E(P)	10 55 32.5
	EL	56 28.0
MAR 25		
H-12 52 59.3		
9.8S 120.4E		
h ABOUT 036KM		
EUR	EP'	13 11 53.7
	E	12 00.0
MAR 25		
EUR	EP	13 10 23.5
MAR 25		
ALQ	EP	13 15 32.0
MAR 25		
BCN	IP	13 34 16.5
GCA	EP	13 35 03.1
	EL	35 38.9
EUR	E(P)	13 35 10.0
	EL	36 07.0
MAR 25		
BCN	IP	15 49 44.0
EUR	E(P)	15 50 38.0
	EL	51 34.0
MAR 25		
KIP	IP	17 19 01.0
	IS	19 21.0
HON	IP	17 19 01.2
	IS	19 20.0
MAR 25		
H-17 43 50.5		
44.9N 110.6W		
h ABOUT 033KM		
BOZ	EP	17 44 05.5
	EL	44 20.4
BUT	IP	17 44 22.0
	IS	44 45.0
HHM	EP	17 44 54.2
SLC	E(P)	17 44 59.7
EUR	EP	17 45 28.7
MAR 25		
BOZ	EP	18 24 13.6
	E(L)	24 28.0
BUT	EP	18 24 29.2
	ES	24 54.6
HHM	E(P)	18 25 03.4
	I	25 15.4
	EL	26 02.4
MAR 25		
BCN	IP	19 36 30.2
MAR 25		
COL	EP	19 52 18.0
EUR	IP	19 56 11.5
	I	56 17.5
	I	56 24.3
	E	57 26.5
MAR 25		
H-20 17 03.8		
56.3S 149.9E		
h ABOUT 039KM		
KIP	E(P)	20 30 08.0
	EL	59 07.0
EUR	EP'	20 35 56.7
TUC	EP'	20 36 02.0
COL	EP'	20 36 15.0
WAS	EP'	20 36 27.8
HON	E	20 42 09.0
	EL	58 58.0
MAR 25		
GCA	IP	20 52 34.2
	ES	21 53 16.4
EUR	E(P)	20 52 36.3
	EL	53 36.0
MAR 25		
EUR	EP	21 03 50.1
MAR 25		
EUR	EP	21 04 08.4
MAR 25		
ALQ	EP	21 11 14.9
	ES	11 41.0
GCA	EP	21 11 20.7
	ES	11 54.2
MAR 25		
BCN	IP	21 11 47.1
EUR	E(P)	21 12 41.3
	EL	13 35.0
MAR 25		
TUC	IP	21 21 23.0
MAR 25		
TUC	IP	21 21 56.0
MAR 25		
BOZ	EP	21 46 43.0
MAR 25		
BOZ	EP	21 51 16.2
	E(S)	51 27.0
EUR	EP	21 51 45.2
	E	52 46.1
	IL	53 04.5
MAR 25		
BCN	IP	21 51 47.9
GCA	E(P)	21 52 18.7
	EL	53 32.7
MAR 25		
BOZ	E(P)	21 51 51.5
	E(S)	52 01.5
BUT	E(P)	21 52 07.7
HHM	E(P)	21 52 10.0
	EL	56 15.4
MAR 25		
ALQ	E(P)	21 55 03.0
TUC	EP	21 56 05.8
MAR 25		
TUC	IP	21 56 48.2
	ES	57 05.2
MAR 25		
H-22 46 14.7		
0.7N 096.8E		
h ABOUT 036KM		
HHM	IP'	23 05 13.4
	I	05 23.4
BUT	EP'	23 05 17.3
	EPP	07 10.4
BOZ	EP'	23 05 21.0
	EPP	07 21.0
EUR	IP'	23 05 25.5
	I	05 36.5
	IPP	07 41.0
	ISKP	08 45.5
	ESKKP	18 18.0
WAS	EP'	23 05 25.6
ALQ	EP'	23 05 31.0
	I	05 42.0
BCN	EP'	23 05 31.6
	EPP	07 56.0
TUC	IP'	23 05 41.0
CSC	IP'	23 05 52.0
SJP	EP'	23 06 16.0
MAR 26		
H-04 29 43.7		
36.0N 114.7W		
h ABOUT 006KM		
BCN	I(P)	04 29 47.0
GCA	IP	04 30 34.0
	IS	31 07.3
EUR	EP	04 30 41.5
	EL	31 36.0
TUC	E(P)	04 31 00.0
ALQ	E(P)	04 31 45.0
MAR 26		
EUR	IP C	04 54 00.0
	IS	54 21.6
MAR 26		
EUR	IP D	05 17 57.0
	IS	18 18.7
MAR 26		
EUR	IP	07 11 57.0
	IS	12 19.2
MAR 26		
EUR	IP D	07 58 16.4
	IS	58 38.2
BCN	EP	07 59 07.9
	EL	08 00 06.7
MAR 26		
H-08 23 54.2		
15.2S 173.1W		
h ABOUT 056KM		
TUC	EP	08 35 38.6
ALQ	EP	08 36 03.0
COL	IP	08 36 09.0
MAR 26		
H-08 50 44.2		
04.3S 152.8E		
h ABOUT 107KM		
COL	IP	09 02 49.9
EUR	EP	09 03 51.4
MAR 26		
H-09 48 20.3		
29.7S 177.9W		
h ABOUT 048KM		
HON	IP	09 57 42.4
	IS	10 05 22.0
KIP	IP	09 57 43.6
	IS	10 05 22.0
GUA	EP	09 57 57.0
	ES	10 06 03.0
UKI	EP	10 00 53.7
BCN	IP	10 01 08.4
	I	04 56.1
	PKKP	18 58.8
	E	20 04.3
	EP'P'	27 07.9
TUC	IP	10 01 10.2
	EPP	04 37.0
	EPKKP	18 54.0
	EP'P'	26 56.0
EUR	IP C	10 01 14.6
	I	01 23.6
	PKKP	18 19.7
	IP'P'	27 06.2
GCA	IP	10 01 21.2
	EPKKP	18 49.7
	EP'P'	26 57.7

Date and Station	Phase (GCT)
	h m s
SLC EP	10 01 29.4
E	05 36.5
F	12 16.5
EPKKP	18 42.5
EP'P'	26 58.0
ALQ IP	10 01 30.0
I	01 43.0
I	01 50.0
P'P'	26 45.0
HHM E(P)	10 01 36.3
E	04 47.3
E	10 10.3
P'P'	26 37.3
I	33 29.3
SIT E(P)	10 01 39.5
E	02 02.0
EPP	05 24.0
F	05 48.0
ESKS	12 10.4
ES	12 47.6
ESS	19 02.0
BUT EP	10 01 41.5
IPP	05 47.3
E	06 23.0
E	08 18.0
E	12 23.0
PKKP	10 19 07.9
P'P'	26 48.9
BOZ EP	10 01 44.0
EPP	05 54.5
E	06 22.0
E	12 28.0
EPKKP	19 07.0
ESS	19 36.0
ESSS	23 32.0
EP'P'	26 48.0
COL EP	10 01 46.6
I	02 03.0
I	02 20.0
F	12 14.0
EP'P'	27 16.0
RCD EP	10 02 02.1
RHP P	10 02 10.0
WAS E(P)	10 03 26.5
EP'	06 54.5
EPP	08 06.5
SJP EP'	10 07 08.4
IPKKP	17 30.0
THU EP'	10 07 12.0
CHK EPP	10 07 22.0
ESKS	13 09.0
ESP	16 45.0
FSS	22 36.0
MAR 26	
RCN IP	10 10 26.6
MAR 26	
BCN IP	10 13 24.6

Date and Station	Phase (GCT)
	h m s
MAR 26	
EUR IP	11 40 08.0
IS	40 29.5
MAR 26	
H-11 46 01.6	
30.0S 177.3W	
h ABOUT 038KM	
BCN EP	11 58 49.7
TUC IP	11 58 51.9
EpP	59 05.2
EUR IP	11 58 57.0
EpP	59 10.5
ALQ EP	11 59 12.0
COL EP	11 59 29.0
MAR 26	
H-12 51 39.7	
29.9S 177.6W	
h ABOUT 060KM	
BCN EP	13 04 26.3
TUC IP	13 04 28.5
IpP	04 45.8
EUR EP	13 04 33.0
IpP	04 46.0
ALQ EP	13 04 48.0
COL EP	13 05 06.0
MAR 26	
H-13 25 01.2	
29.9S 178.0W	
h ABOUT 040KM	
HON EP	13 34 27.0
IS	42 06.0
KIP IP	13 34 27.7
IS	42 09.0
GUA EP	13 34 39.0
E	38 13.0
UKI EP	13 37 38.7
E	38 53.7
BCN EP	13 37 50.7
EPP	41 24.5
PKKP	55 32.2
EP'P'	14 03 41.0
TUC IP	13 37 52.0
E	49 52.0
EPKKP	55 34.1
EUR EP	13 37 56.5
IpP	38 19.4
PKKP	55 04.5
EP'P'	14 03 31.2
GCA IP	13 38 05.5
ALQ E(P)	13 38 11.0
EpP	38 32.0

Date and Station	Phase (GCT)
	h m s
SLC EP	13 38 14.5
EPP	42 09.0
PKKP	55 24.5
BUT EP	13 38 24.5
I	38 41.4
IPP	42 33.0
HHM E(P)	13 38 26.3
E	41 40.3
EPKKP	55 13.3
COL EP	13 38 27.6
I	38 38.0
RCD EP	13 38 41.3
THU EP'	13 43 55.0
MAR 26	
COL EP	13 30 10.0
I	33 49.0
MAR 26	
H-14 34 16.5	
18.0S 168.0E	
h ABOUT 032KM	
COL EP	14 47 08.1
EUR E(P)	14 47 13.2
I	47 19.7
BCN EP	14 47 17.7
TUC IP	14 47 26.0
MAR 26	
EUR EP	15 44 49.5
E	45 54.0
MAR 26	
ALQ EP	16 46 30.0
ES	47 10.0
MAR 26	
COL IP	17 06 48.6
MAR 26	
COL IP	17 45 58.0
MAR 26	
H-18 23 07.7	
51.4N 178.7E	
h ABOUT 042KM	
COL IP	18 28 00.0
I	28 11.0
EUR IP C	18 31 28.5
IpP	31 40.0
IPCP	33 04.7
TUC IP	18 32 27.6
ALQ EP	18 32 34.0
IpP	32 46.0
MAR 26	
BUT EP	18 24 29.2
ES	24 54.6
MAR 26	
COL EP	18 40 05.0

Date and Station	Phase (GCT)
	h m s
MAR 26	
TUC IP	18 48 10.0
ES	48 29.0
MAR 26	
H-19 47 48.1	
44.3N 147.3E	
h ABOUT 131KM	
COL IP	19 55 16.9
THU IP	19 57 24.0
HHM IP	19 58 06.3
EUR IP D	19 58 34.7
I	58 43.8
I	59 18.0
BCN EP	19 58 53.6
E	59 28.6
ALQ IP	19 59 27.0
MAR 26	
COL EP	21 03 10.0
E	04 48.0
EUR EP	21 08 15.4
MAR 26	
H-21 34 38.5	
35.9N 135.7E	
h ABOUT 016KM	
GUA IP	21 39 53.0
ES	44 03.0
COL IP	21 43 51.8
I	44 17.0
ES	51 20.0
HON EP	21 44 38.0
ES	52 46.0
KIP IP	21 44 39.2
ES	52 48.0
THU EP	21 45 31.5
HHM IP	21 46 24.2
ES	56 02.2
UKI EP	21 46 26.7
BUT IP	21 46 35.8
IS	56 31.0
EUR IP C	21 46 49.5
E	47 11.5
SLC EP	21 46 57.6
BCN EP	21 47 05.0
RCD IP	21 47 10.6
GCA IP	21 47 13.0
TUC IP	21 47 28.8
I	47 48.8
ALQ IP	21 47 33.9

Date and Station	Phase (GCT)
	h m s
MAR 26	
HHM IP	22 13 40.2
I	14 08.2
MAR 26	
BHP P	22 30 12.0
MAR 26	
H-22 36 47.8	
34.0N 139.7E	
h ABOUT 100KM	
COL IP	22 45 51.7
HHM IP	22 48 20.2
IPP	48 44.2
EUR IP	22 48 42.2
E	49 02.5
MAR 26	
TUC IP	22 53 08.9
MAR 26	
BUT EP	23 05 17.3
E	07 10.4
MAR 26	
BCN IP	23 07 29.5
E(L)	07 43.0
MAR 26	
ALQ EP	23 53 45.0
MAR 27	
TUC E(P)	00 39 21.2
ALQ E(P)	00 39 38.6
COL EP	00 39 44.0
MAR 27	
H-02 32 01.4	
6.7N 073.0W	
h ABOUT 169KM	
EUR EP	02 40 44.5
MAR 27	
EUR EP	03 32 43.5
MAR 27	
H-03 39 02.3	
37.3N 071.9E	
h ABOUT 148KM	
HHM E(P)	03 52 06.0
MAR 27	
EUR EP	03 40 01.1
MAR 27	
COL EP	03 47 37.0
EUR EP	03 52 00.0
E	52 22.5
MAR 27	
EUR IP	03 53 54.0
IS	54 16.0

Date and Station	Phase (GCT)
	h m s
MAR 27	
H-05 12 07.2	
44.5N 145.6E	
h ABOUT 033KM	
COL EP	05 19 50.0
MAR 27	
EUR IP	05 33 55.8
IS	34 17.0
MAR 27	
H-06 49 23.0	
35.6N 135.8E	
h ABOUT 033KM	
COL E(P)	06 58 35.0
HHM EP	07 01 07.6
EUR EP	07 01 33.2
ALQ E(P)	07 02 13.0
MAR 27	
H-07 22 09.4	
44.3N 110.7W	
h ABOUT 033KM	
BOZ EP	07 22 33.6
ES	23 02.5
BUT IP	07 22 45.7
IS	23 16.0
SLC EP	07 23 04.3
I	23 11.0
EL	23 53.0
HHM EP	07 23 19.1
I	23 31.1
IL	24 31.1
RCD EP	07 23 31.8
EUR EP	07 23 41.0
IL	24 19.0
GCA E(P)	07 23 58.8
IL	25 16.3
BCN EP	07 24 19.3
COL E(P)	07 28 12.0
MAR 27	
EUR EP	08 55 00.5
E	55 15.3
MAR 27	
H-09 11 44.3	
51.2N 129.8W	
h ABOUT 033KM	
HHM E(P)	09 14 17.0
E	17 22.1
EUR EP	09 15 18.0
I	15 23.0
COL E(P)	09 15 35.0
ALQ EP	09 16 52.0

Date and Station	Phase (GCT)
	h m s
TUC EP	09 16 52.0
MAR 27	
BUT EP	09 18 26.0
MAR 27	
COL EP	11 08 54.1
MAR 27	
ALQ EP	11 13 45.0
MAR 27	
H-12 31 51.9	
06.8N 073.0W	
h ABOUT 176KM	
SJP IP	12 34 53.7
IS	37 13.0
ALQ EP	12 39 25.2
TUC I(P)	12 39 39.7
RCD EP	12 39 55.6
BCN EP	12 40 17.2
EUR IP	12 40 34.5
HHM EP	12 40 59.5
COL EP	12 43 29.0
E	45 11.0
MAR 27	
H-12 52 17.3	
50.5N 177.9E	
h ABOUT 033KM	
COL E(P)	12 57 20.0
EUR EP	13 00 44.5
I	00 50.0
MAR 27	
H-13 15 35.1	
06.8N 073.1W	
h ABOUT 165KM	
BHP P	13 17 10.0
TUC EP	13 23 23.0
EUR EP	13 24 18.6
MAR 27	
COL E(P)	13 26 52.0
E	27 22.0
MAR 27	
H-15 15 46.3	
44.9N 110.9W	
h ABOUT 033KM	
BOZ EP	15 15 59.5
ES	16 17.0
BUT IP	15 16 15.6
IS	16 36.1
HHM E(P)	15 16 46.0
FGU EP	15 16 49.6

Date and Station	Phase (GCT)
	h m s
MAR 27	
BCN IP	17 20 21.9
MAR 27	
TUC IP	18 34 57.8
MAR 27	
EUR IP	19 16 21.3
IS	16 43.3
MAR 27	
COL IP	19 47 02.0
MAR 27	
H-21 18 59.1	
51.3N 179.3W	
h ABOUT 033KM	
COL EP	21 23 44.0
EUR EP	21 27 11.2
MAR 28	
ALQ EP	00 02 52.2
MAR 28	
H-00 15 51.4	
66.1N 020.1W	
h ABOUT 033KM	
THU I(P)	00 20 09.0
PHI EP	00 23 28.0
EPP	25 01.0
ES	29 40.0
EL	32 19.0
WAS IP	00 23 40.0
EPP	25 28.0
COL IP	00 23 56.3
CHK EP	00 24 00.2
EPP	25 42.2
ES	30 32.0
ESS	33 52.0
CSC EP	00 24 27.0
RCD EP	00 24 29.2
HHM EP	00 24 31.8
BOZ EP	00 24 42.0
BUT IP	00 24 44.7
IS	31 59.2
IL	35 29.2
FGU IP	00 25 07.3
SLC EP	00 25 17.5
ES	32 58.0
SJP EP	00 25 32.4
EUR IP	00 25 35.3
EL	45 44.0
ALQ EP	00 25 36.1
ES	33 21.0
ESS	36 52.0
GCA IP	00 25 38.0

Date and Station	Phase (GCT)
	h m s
BCN E(P)	00 25 59.5
TUC IP	00 26 04.2
IPP	28 18.5
ES	34 33.0
RHP P	00 27 00.0
HON E(P)	00 28 42.0
EPP	32 12.0
EPPP	34 13.0
IS	39 30.0
IPS	40 25.0
ESS	45 16.0
ESSS	48 40.0
EL	53 46.0
KIP EPP	00 32 12.0
ES	39 21.0
IPS	40 24.0
ESS	45 13.0
ESSS	48 57.0
EL	56 29.0
MAR 28	
THU IP	00 19 34.0
MAR 28	
H-00 26 27.0	
66.3N 020.2W	
h ABOUT 033KM	
COL IP	00 34 32.6
I	35 18.0
HHM EP	00 35 09.0
BOZ EP	00 35 18.5
TUC IP	00 36 41.9
I	36 45.0
MAR 28	
H-00 27 09.3	
66.6N 019.2W	
h ABOUT 033KM	
TUC IP	00 37 23.0
MAR 28	
H-00 59 38.6	
66.3N 019.6W	
h ABOUT 033KM	
THU EP	01 03 42.5
COL IP	01 07 45.0
HHM EP	01 08 21.2
BOZ EP	01 08 31.3
SJP E(P)	01 09 22.6
I	10 17.0
TUC IP	01 09 52.0
MAR 28	
H-01 28 37.7	
66.3N 020.1W	
h ABOUT 033KM	
TUC EP	01 38 52.8

Date and Station	Phase (GCT)
	h m s
MAR 28	
H-02 04 17.0	
51.3N 157.1E	
h ABOUT 062KM	
COL EP	02 10 30.3
ALQ EP	02 15 08.0
MAR 28	
H-03 55 03.0	
40.2N 077.7E	
h ABOUT 044KM	
COL E(P)	04 06 08.0
MAR 28	
H-06 27 06.4	
42.5S 083.0W	
h ABOUT 033KM	
ALQ EP	06 39 14.0
MAR 28	
TUC EP	07 04 48.3
MAR 28	
TUC EP	07 35 35.0
COL IP	07 36 06.0
MAR 28	
BOZ E(P)	09 37 22.5
ES	37 38.3
BUT EP	09 37 38.5
ES	38 02.3
MAR 28	
BOZ EP	09 39 00.2
ES	39 13.0
HHM EP	09 39 59.9
EL	40 57.8
FGU E(P)	09 39 42.7
IS	40 44.7
RCD E(P)	09 40 05.7
MAR 28	
BCN IP	09 40 06.6
MAR 28	
BOZ EP	09 42 01.5
ES	42 17.0
BUT EP	09 42 16.9
MAR 28	
H-09 47 14.3	
49.1N 155.0E	
h ABOUT 078KM	
COL IP	09 53 48.2
I	54 07.0
HHM EP	09 56 48.7
EUR EP	09 57 21.2
FGU E(P)	09 57 40.1
RCD EP	09 57 46.5

Date and Station	Phase (GCT)
	h m s
GCA EP	09 57 49.0
TUC IP	09 58 12.5
I	58 27.1
ALQ IP	09 58 17.1
I	58 32.0
MAR 28	
COL IP	10 40 24.0
MAR 28	
H-11 12 30.0	
30.2S 177.9W	
h ABOUT 031KM	
KIP EP	11 21 58.0
BCN EP	11 25 21.5
TUC IP	11 25 24.0
I	25 37.0
EUR IP	11 25 28.2
GCA IP	11 25 35.0
ALQ IP	11 25 43.9
MAR 28	
ALQ E(P)	11 42 50.0
MAR 28	
BOZ EP	12 15 14.5
ES	15 32.0
BUT IP	12 15 30.5
ES	15 55.3
FGU EP	12 15 57.1
EL	16 50.1
HHM EP	12 16 03.7
I	16 14.7
IL	17 12.7
RCD E(P)	12 16 25.0
MAR 28	
BOZ EP	12 18 43.5
ES	18 59.5
BUT EP	12 18 59.3
ES	19 22.8
FGU EP	12 19 25.5
EL	20 23.6
HHM E(P)	12 19 32.7
I	19 41.7
EL	20 38.7
MAR 28	
HHM E(P)	12 45 45.6
E	46 01.6
MAR 28	
H-15 12 05.3	
10.2N 126.0E	
h ABOUT 087KM	
COL IP	15 24 02.0

Date and Station	Phase (GCT)
	h m s
MAR 28	
H-16 18 38.9	
20.4S 178.4W	
h ABOUT 566KM	
EUR E(P)	16 30 08.7
E	32 46.5
COL IP	16 30 29.8
E	32 46.0
MAR 28	
TUC IP	16 40 32.0
ALQ EP	16 41 03.0
MAR 28	
COL EP	17 23 49.0
MAR 28	
TUC IP	19 09 01.9
MAR 28	
COL IP	19 13 34.0
MAR 28	
ALQ E(P)	21 23 36.0
E(S)	24 19.0
MAR 28	
BOZ I(P)	22 04 46.2
IS	04 49.0
MAR 28	
HHM E(P)	21 53 19.0
MAR 28	
BOZ E(P)	22 17 29.0
ES	17 43.0
BUT EP	22 17 44.4
ES	18 08.7
MAR 28	
TUC EP	22 36 56.0
MAR 28	
FGU IP	22 45 50.0
MAR 28	
TUC IP	22 52 29.0
MAR 28	
ALQ EP	23 13 23.0
MAR 28	
H-23 29 15.1	
29.6S 177.7W	
h ABOUT 062KM	
KIP EP	23 38 36.0
TUC IP	23 42 02.0
EUR EP	23 42 06.0
E	42 13.5
PKKP	00 00 27.0
GCA IP	23 42 14.5
ALQ EP	23 42 22.5
FGU EP	23 42 29.2

Date and Station	Phase	Phase (GCT) h m s
COL	EP	23 42 40.0
	I	42 50.0
MAR 28		
TUC	E(P)	23 59 46.0
MAR 29		
H-00 23 31.3		
55.3N 166.0E		
h ABOUT 033KM		
COL	IP	00 28 47.1
EUR	E(P)	00 32 43.0
	E	33 00.6
MAR 29		
BOZ	EP	01 04 08.3
	IS	04 11.4
BUT	EP	01 04 30.2
	ES	04 44.7
MAR 29		
H-01 40 14.9		
29.3S 177.0W		
h ABOUT 057KM		
EUR	E(P)	01 53 04.5
MAR 29		
FGU	IP	02 18 37.1
	IS	19 05.4
MAR 29		
H-03 09 11.2		
40.4N 026.6E		
h ABOUT 033KM		
COL	E(P)	03 20 56.0
HHM	E(P)	03 21 51.0
EUR	EP	03 22 28.0
MAR 29		
ALQ	EP	04 18 27.5
MAR 29		
H-05 12 29.5		
14.6N 092.3W		
h ABOUT 038KM		
ALQ	IP	05 17 43.4
EUR	EP	05 18 59.5
MAR 29		
COL	IP	05 23 45.5
MAR 29		
EUR	EP	05 54 09.5
	E	54 20.0
MAR 29		
H-06 05 20.0		
10.3S 160.7E		
h ABOUT 033KM		
COL	IP	06 17 48.3
EUR	IP D	06 18 25.5
	E	18 30.0
MAR 29		
H-06 32 23.2		
35.3N 140.4E		
h ABOUT 033KM		
EUR	IP	06 44 18.2
MAR 29		
H-07 47 52.0		
12.3N 090.4W		
h ABOUT 097KM		
ALQ	EP	07 53 25.0
BCN	EP	07 54 13.3
EUR	EP	07 54 39.8
COL	E(P)	07 58 27.0
MAR 29		
EUR	EP	12 05 30.6
	E	05 43.0
MAR 29		
COL	EP	13 29 31.0
	IS	30 16.0
MAR 29		
H-13 46 14.5		
52.6N 168.6W		
h ABOUT 033KM		
COL	IP	13 50 01.6
EUR	EP	13 53 31.0
MAR 29		
H-15 49 00.1		
37.0N 116.0W		
h ABOUT 000KM		
BCN	IP C	15 49 26.9
	IL	49 45.2
EUR	IP C	15 49 41.5
	IL	50 17.9
GCA	IP	15 49 59.0
SLC	EP	15 50 20.0
	E(L)	51 38.0
TUC	EP	15 50 37.0
	I	50 45.8
FGU	IP	15 50 43.0
ALQ	EP	15 51 00.0
BUT	I(P)	15 51 21.6
	EL	54 08.0
MAR 29		
BCN	EP	15 58 18.0
EUR	IP	15 58 33.5
	IL	59 11.0
GCA	EP	15 58 50.3
	I	58 58.0
SLC	E(P)	15 59 12.0
	E(L)	16 00 36.0
TUC	E(P)	15 59 29.0
FGU	E(P)	15 59 36.5
MAR 29		
HHM	EP	19 25 23.3
	ES	26 00.3
MAR 29		
H-20 04 51.6		
36.5N 070.4E		
h ABOUT 204KM		
COL	IP	20 16 11.0
	E▸P	17 00.0
MAR 29		
H-21 16 43.7		
30.2S 177.7W		
h ABOUT 060KM		
BCN	EP	21 29 31.0
	E▸P	29 47.5
TUC	IP	21 29 33.0
	I▸P	29 50.0
EUR	IP	21 29 37.5
	I▸P	29 55.0
ALQ	EP	21 29 52.5
COL	EP	21 30 11.0
MAR 29		
HHM	EP	23 12 01.3
	ES	12 55.3
MAR 29		
H-23 30 42.0		
17.7S 167.8E		
h ABOUT 036KM		
COL	E(P)	23 43 32.0
	E	43 49.0
MAR 30		
H-00 34 36.2		
51.0N 129.8W		
h ABOUT 19KM		
HHM	EP	00 37 09.2
	EL	40 26.7
BUT	EP	00 37 35.0
	EL	41 19.5
BOZ	E(P)	00 37 40.2
EUR	IP	00 38 09.2
FGU	IP	00 38 39.4
BCN	EP	00 38 52.4
GCA	EP	00 39 01.2
RCD	E(P)	00 39 03.5
ALQ	EP	00 39 43.3
TUC	IP	00 39 44.0
MAR 30		
BCN	E(P)	00 49 05.4
	EL	49 35.6
MAR 30		
BHP	P	00 55 24.0
	S	55 38.0
MAR 30		
COL	EP	01 07 19.0
	E	07 34.0
MAR 30		
H-01 53 28.5		
19.1S 169.0E		
h ABOUT 156KM		
GUA	EP	02 00 54.0
KIP	IP	02 02 19.6
HON	IP	02 02 19.8
COL	EP	02 06 09.0
	ES	16 47.0
BCN	EP	02 06 14.0
	E▸P	06 53.3
	EPP	09 45.5
EUR	IP C	02 06 16.2
	I▸P	06 55.5
	IPP	09 54.4
	ESKS	16 23.8
	ES	17 08.0
	PKKP	23 41.0
	P'P'	31 41.5
TUC	IP	02 06 22.0
GCA	IP	02 06 27.0
	IPP	10 11.5
SLC	EP	02 06 32.0
	EPP	10 20.0
	ESKS	16 53.0
BUT	EP	02 06 37.5
	E▸P	07 19.5
	E	09 10.2
	EPP	10 30.5
	ESKS	17 00.5
HHM	EP	02 06 37.7
	EPKKP	23 27.2
	EP'P'	31 43.2
FGU	IP	02 06 39.5
	I▸P	07 21.9
	IPP	10 33.8
	EPKKP	23 27.8
ALQ	IP	02 06 40.9
BOZ	IP	02 06 43.8
SJP	EP'	02 12 15.1
	ISKP	15 19.0
MAR 30		
BOZ	EP	02 00 48.5
	E(S)	01 00.5

Date and Station	Phase (GCT) h m s
BUT IP	02 01 04.0
ES	01 27.0
HHM FP	02 01 35.2
I	01 47.2
ES	02 29.2
MAR 30	
BUT EP	05 40 02.3
MAR 30	
BCN EP	06 18 25.9
MAR 30	
BHP P	06 20 41.0
MAR 30	
H-06 54 59.6	
51.8N 170.5W	
h ABOUT 033KM	
COL E(P)	06 59 03.0
EUR E(P)	07 02 39.0
ALQ E(P)	07 03 35.0
MAR 30	
H-09 23 13.9	
1.5S 077.7W	
h ABOUT 154KM	
ALQ IP	09 31 18.0
IPP	31 56.0
TUC IP	09 31 23.1
COL E(P)	09 35 23.0
MAR 30	
SLC EP	09 45 29.7
EUR E(P)	09 45 37.2
E	45 56.0
HHM EP	09 45 42.2
MAR 30	
BOZ E(P)	11 31 18.0
BUT EP	11 31 32.5
ES	31 57.4
MAR 30	
H-11 37 27.7	
30.1S 176.9W	
h ABOUT 033KM	
TUC EP	11 50 16.0
EUR E(P)	11 50 23.0
COL E(P)	11 51 01.0
MAR 30	
FGU EP	14 32 45.5
ES	33 25.5
MAR 30	
H-16 11 46.0	
6.3S 080.6W	
h ABOUT 021KM	
SJP IP	16 17 41.6
ALQ EP	16 20 24.9
TUC E(P)	16 20 25.0
MAR 30	
H-16 51 59.1	
44.1N 148.0E	
h ABOUT 061KM	
COL IP	16 59 33.7
KIP EP	17 00 47.0
ET	53 43.0
HHM IP	17 02 23.2
I	02 26.2
IP'P'	31 21.7
BUT IP	17 02 37.7
I	03 11.0
P'P'	31 21.7
THU I(P)	17 02 45.0
BOZ EP	17 02 45.3
EUR EP C	17 02 51.5
IPP	05 17.3
P'P'	31 11.0
SLC IP	17 03 01.5
E	03 30.2
FGU IP	17 03 09.6
RCD EP	17 03 16.2
GCA IP	17 03 16.7
TUC IP	17 03 38.9
ALQ IP	17 03 44.0
CSC IP	17 04 56.0
SJP EP'	17 11 00.0
MAR 30	
TUC IP	17 14 53.0
EUR IP	17 14 53.8
MAR 30	
H-17 30 04.3	
38.6N 075.8E	
h ABOUT 033KM	
COL EP	17 41 21.0
MAR 30	
EUR IP	20 13 42.5
MAR 30	
COL EP	20 48 57.0
MAR 30	
EUR IP	21 03 28.0
ALQ EP	21 04 29.0
MAR 30	
H-21 13 52.2	
8.9S 109.5W	
h ABOUT 033KM	
ALQ EP	21 21 56.2
EUR EP	21 22 35.0
FGU EP	21 22 42.8
COL EP	21 25 55.0
MAR 30	
HHM E(P)	21 36 42.0
MAR 30	
TUC IP	22 55 25.8
IS	55 35.0
MAR 31	
H-02 09 14.2	
17.9N 061.6W	
h ABOUT 028KM	
SJP EP	02 10 20.3
I(S)	11 11.0
TUC IP	02 17 41.5
MAR 31	
HHM E(P)	02 20 58.0
MAR 31	
H-02 27 06.5	
37.0N 057.9E	
h ABOUT 033KM	
COL EP	02 38 58.0
E	39 10.0
E	40 14.0
EUR EP'	02 44 24.0
MAR 31	
HHM E(P)	04 41 59.0
MAR 31	
SLC EP	04 43 58.4
MAR 31	
H-04 45 59.7	
06.6S 081.2W	
h ABOUT 031KM	
BHP P	04 49 40.0
SJP IP	04 51 58.8
CSC EP	04 53 35.0
E	55 30.0
WAS E(P)	04 54 14.0
E	56 10.0
ALQ I(P)	04 54 26.5
TUC IP	04 54 37.0
GCA EP	04 55 07.8
FGU IP	04 55 23.0
RCD EP	04 55 25.2
SLC EP	04 55 30.4
EUR EP	04 55 38.0
BOZ EP	04 56 00.0
BUT EP	04 56 02.7
HHM E(P)	04 56 18.0
COL EP	04 58 40.0
MAR 31	
BOZ EP	05 27 28.0
EUR E(P)	05 28 44.5
MAR 31	
H-05 30 49.8	
29.9S 177.9W	
h ABOUT 055KM	
HON EP	05 40 12.0
ES	47 54.0
EL	55 36.0
KIP IP	05 40 12.0
TUC IP	05 43 39.5
EUR IP C	05 43 43.8
PKKP	06 00 50.0
P'P'	09 26.5
GCA IP	05 43 51.4
ALQ EP	05 43 59.9
IPKKP	06 00 14.0
FGU IP	05 44 07.0
EPKKP	06 00 58.0
BUT EP	05 44 12.8
HHM E(P)	05 44 14.0
EPKKP	06 00 50.0
COL EP	05 44 17.0
EPKKP	06 00 16.0
RCD E(P)	05 44 31.7
THU EP'	05 49 42.5
MAR 31	
H-05 51 00.5	
10.8S 078.5W	
h ABOUT 032KM	
SJP E(P)	05 57 20.2
TUC IP	06 00 15.0
GCA EP	06 00 44.7
FGU IP	06 00 58.5
SLC EP	06 01 05.4
EUR IP C	06 01 13.5
BUT I(P)	06 01 35.6
HHM IP	06 01 50.1
COL IP	06 04 03.3

Date and Station	Phase	(GCT) h m s
MAR 31		
TUC	IP	06 50 17.1
	I▸P	50 27.2
ALQ	EP	06 50 31.2
	I	50 47.0
FUR	EP	06 50 47.2
	E▸P	51 00.7
COL	EP	06 56 14.0
MAR 31		
H-07 07 35.7		
6.1S 149.1E		
h ABOUT 055KM		
GUA	I(P)	07 12 11.0
	E	16 15.0
KIP	EP	07 17 31.0
COL	EP	07 20 01.5
	I	20 03.5
	I▸P	20 15.0
HHM	E(P)	07 21 04.1
FUR	IP	07 21 08.5
	I▸P	21 20.8
	E	25 28.0
	EPKKP	37 44.5
TUC	E(P)	07 21 32.0
CSC	EP'	07 26 36.0
SJP	EP'	07 27 05.4
	I	27 08.0
MAR 31		
COL	EP	07 30 55.0
ALQ	E(P)	07 36 25.0
	I	37 39.0
TUC	E(P)	07 37 26.0
MAR 31		
HHM	EP	07 45 52.1
MAR 31		
H-08 12 38.3		
29.8S 176.9W		
h ABOUT 043KM		
TUC	E(P)	08 25 26.2
FUR	EP	08 25 31.6
COL	EP	08 26 06.0
MAR 31		
H-09 07 16.5		
30.2S 177.8W		
h ABOUT 020KM		
BCN	EP	09 20 09.6
TUC	IP	09 20 12.0
	I	20 18.3
EUR	IP C	09 20 15.8
	PKKP	37 48.0
ALQ	EP	09 20 31.0
COL	IP	09 20 48.8
	I	21 01.0
MAR 31		
EUR	EP	10 18 22.5
MAR 31		
ALQ	EP	12 16 02.0
	E	20 13.0
MAR 31		
COL	EP	12 19 14.0
EUR	EP	12 19 38.5
MAR 31		
H-12 26 06.7		
35.0N 132.2E		
h ABOUT 033KM		
COL	IP	12 35 34.0
	E	35 44.0
HHM	EP	12 38 05.1
EUR	IP D	12 38 30.5
TUC	E(P)	12 39 08.7
MAR 31		
H-13 06 54.9		
53.5N 035.3W		
h ABOUT 033KM		
COL	EP	13 15 57.0
	E	20 08.0
EUR	EP	13 16 20.9
MAR 31		
ALQ	EP	13 19 21.0
EUR	EP	13 20 30.0
	E	20 50.0
MAR 31		
H-13 44 29.1		
53.5N 035.4W		
h ABOUT 033KM		
HHM	EP	13 53 01.9
COL	IP	13 53 30.4
ALQ	EP	13 53 38.0
EUR	IP	13 53 55.0
	I	54 00.4
TUC	EP	13 54 09.0
MAR 31		
H-14 58 03.9		
35.2N 009.2W		
h ABOUT 045KM		
COL	EP	15 09 45.0
EUR	E(P)	15 10 09.0
MAR 31		
H-15 02 27.4		
35.0N 132.9E		
h ABOUT 060KM		
COL	EP	15 11 51.0
HHM	EP	15 14 20.1
EUR	IP	15 14 44.9
	E▸P	15 00.7
MAR 31		
H-15 33 25.3		
53.1N 167.2W		
h ABOUT 033KM		
COL	EP	15 37 02.0
	I	37 15.0
HHM	EP	15 40 02.1
EUR	EP	15 40 35.7
TUC	EP	15 41 40.0
	E▸P	41 53.0
ALQ	EP	15 41 46.0
	E	43 24.0
MAR 31		
KIP	EP	16 14 00.0
MAR 31		
H-16 40 50.5		
21.5S 066.8W		
h ABOUT 234KM		
ALQ	IP	16 51 25.9
TUC	IP	16 51 27.0
	E	51 38.5
EUR	P	16 52 14.8
	E	52 22.0
HHM	EP	16 52 43.1
MAR 31		
COL	E(P)	16 53 57.0
MAR 31		
THU	EP	17 09 11.5
MAR 31		
EUR	E(P)	17 24 41.0
	I	25 09.8
TUC	IP	17 25 09.3
MAR 31		
H-17 28 52.1		
.7N 096.6E		
h ABOUT 033KM		
HHM	EP'	17 47 49.1
EUR	EP'	17 48 01.8
	EPP	50 17.0
FGU	IP'	17 48 04.9
TUC	EP'	17 48 07.9
ALQ	EP'	17 48 09.0
	I	48 18.0
CSC	EP'	17 48 29.0
SJP	IP'	17 49 06.4
MAR 31		
EUR	IP	17 40 09.9
MAR 31		
H-19 22 51.5		
30.1S 178.2W		
h ABOUT 039KM		
HON	EP	19 32 19.0
KIP	EP	19 32 19.0
HON	EP	19 32 19.0
	EL	47 46.0
BCN	EP	19 35 42.4
	I▸P	36 01.1
TUC	IP	19 35 44.9
	E▸P	36 02.5
EUR	IP C	19 35 49.1
	I▸P	36 06.6
	EPP	39 27.2
	EPKKP	53 20.0
	E	54 01.4
	P'P'	20 01 27.0
GCA	EP	19 35 55.6
	I▸P	36 12.3
SLC	EP	19 36 04.0
	E▸P	36 22.1
	E	36 51.0
	EPP	40 02.6
FGU	IP	19 36 11.9
	I▸P	36 28.9
	I	40 14.9
BUT	I(P)	19 36 15.8
	E▸P	36 33.3
	IPP	40 08.4
BOZ	EP	19 36 22.0
	E	36 38.0
	EPP	40 27.0
COL	IP	19 36 22.7
	I	36 27.0
	EPKKP	52 52.0
RCD	EP	19 36 37.5
MAR 31		
FGU	IP	21 31 59.3
	I	32 04.3
MAR 31		
COL	EP	21 32 10.0