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May, 1963

COAST & GEODETIC SURVEY

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U. S. DEPARTMENT OF COMMERCE

John T. Connor, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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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
*Boseman, 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)
Tucson, Ariz. (TUC) WWNSS
Ukiah, Calif. (UKI)
International Latitude Observatory
Washington, D. C. (WAS)

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

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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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

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
May	h m s	°	°	
1	01 05 12.7	52.2 N.	174.6 W.	Andreanof Islands, Aleutian Islands. h about 34 km.
1	05 09 05*	14.8 S.	167.3 E.	New Hebrides Islands. Felt at Port Vila. h about 112 km.
1	03 09 14.0	36.4 N.	71.2 E.	Afghanistan-U.S.S.R. border region. h about 222 km.
1	10 03 20.2	19.0 S.	168.9 E.	New Hebrides Islands. Felt. h about 142 km. Mag. 7.
1	16 38 52.6	14.0 N.	91.8 W.	Guatemala. h about 109 km.
1	16 45 03.9	19.0 S.	169.4 E.	New Hebrides Islands. h about 130 km.
1	19 52 14.7	38.8 N.	75.4 E.	Southern Sinkiang Province, China. h about 54 km.
2	01 09 21.7	36.7 N.	89.4 W.	New Madrid, Missouri region. h about 18 km.
2	01 58 25.5	28.5 N.	54.9 E.	Southern Iran. h about 46 km.
2	09 20 16.0	25.2 S.	179.6 W.	South of Fiji Islands. h about 599 km.
2	13 05 26.8	6.7 N.	72.8 W.	Northern Colombia. h about 178 km.
2	23 13 09.4	63.1 N.	149.9 W.	Central Alaska. h about 79 km.
3	02 14 44.4	37.7 N.	118.8 W.	Central California. h about 15 km. Mag. 4.2.
3	10 44 29.6	30.7 N.	51.8 E.	Iran. h about 35 km.
3	10 54 44.7	15.2 S.	173.2 W.	Tonga Islands. h about 47 km.
3	16 32 55.9	45.0 N.	111.2 W.	Hebgen Lake region, Montana. h about 33 km.
3	19 18 14.5	17.6 N.	91.8 W.	Mexico-Guatemala border region. h about 90 km.
4	04 41 16.0	4.2 N.	74.1 W.	Colombia. h about 35 km.
4	05 56 01.1	51.8 N.	175.4 W.	Andreanof Islands, Aleutian Islands. h about 41 km.
4	07 38 53.3	24.7 S.	66.6 W.	Salta Province, Argentina. h about 153 km.
4	12 29 33*	44.3 N.	129.7 W.	Off coast of Oregon. h about 15 km.
4	16 19 27.4	13.6 N.	90.9 W.	Near coast of Guatemala. Felt. h about 123 km.
4	16 42 02.8	55.1 N.	160.3 E.	Kamchatka. h about 53 km.
4	18 24 09.5	54.5 S.	143.9 E.	West of Macquarie Island. h about 33 km.
4	19 01 41.9	56.1 S.	27.2 W.	South Sandwich Islands region. h about 41 km.
4	21 01 36*	32.2 N.	79.7 W.	South Carolina. Felt at Charleston and Columbia. h about 15 km.
4	21 40 40.2	19.2 N.	108.7 W.	Revilla Gigedo Islands region. h about 40 km.
4	22 07 26.3	13.1 N.	60.5 W.	Windward Islands. h about 50 km.
4	22 09 12.5	32.0 N.	140.4 E.	South of Honshu, Japan. h about 113 km.
5	03 49 34*	19.8 S.	177.0 W.	West of Tonga Islands. h about 33 km.
5	11 04 14.8	32.7 N.	139.7 E.	South of Honshu, Japan. h about 135 km.
5	12 44 43.0	14.3 N.	91.9 W.	Guatemala. h about 112 km.
5	15 17 02.1	24.8 S.	69.6 W.	Northern Chile. Felt at Antofagasta. h about 53 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
5	17 11 48.8	17.6 S.	173.7 W.	Tonga Islands. h about 52 km.
6	05 09 00.1	39.6 N.	110.0 W.	Utah. h about 33 km.
6	05 53 16.6	2.4 S.	138.2 E.	West New Guinea. h about 15 km.
6	08 38 32.1	9.2 S.	112.4 E.	South of Java. h about 80 km.
6	09 15 21.7	10.0 S.	160.9 E.	Solomon Islands. Felt at Honiara. h about 53 km.
6	19 30 28.7	39.3 N.	20.4 E.	Greece-Albania border region. Felt. h about 33 km.
7	02 17 36.5	37.5 N.	84.1 E.	Southern Sinkiang Province, China. h about 40 km.
7	03 16 39.9	36.6 N.	71.0 E.	Hindu Kush region. h about 216 km.
7	04 27 25*	47.9 N.	156.1 E.	Kurile Islands region. h about 33 km.
7	05 00 50.0	18.8 N.	145.5 E.	Mariana Islands. h about 90 km.
7	05 16 17.9	64.5 N.	146.7 W.	Central Alaska. h about 8 km.
7	07 07 45.1	36.7 N.	121.9 W.	Central California. Felt in San Francisco area. h about 15 km. Mag. 4½ (BRK).
7	16 23 11.8	22.1 S.	68.7 W.	Northern Chile. h about 112 km.
7	18 00 23.4	12.1 N.	72.2 W.	Near north coast of Colombia. h about 58 km.
8	02 09 45.9	26.6 S.	179.8 E.	South of Fiji Islands. h about 33 km.
8	02 09 07.6	46.0 N.	12.1 E.	Northern Italy. Felt at Belluno and vicinity. h about 34 km.
8	04 28 21*	15.9 S.	171.9 W.	Samoa Islands region. h about 33 km.
8	08 50 56.3	54.9 N.	163.8 W.	Unimak Island region. h about 90 km.
8	10 22 09.6	36.4 N.	141.0 E.	Near east coast of Honshu, Japan. Felt at Tokyo. h about 45 km. Mag. 5¼ -6 (PAL).
8	13 56 27.4	58.8 S.	62.4 W.	Drake Passage. h about 35 km.
8	14 15 03*	21.7 N.	84.9 E.	India. h about 33 km.
8	15 23 58.9	5.3 N.	125.6 E.	Mindanao, Philippine Islands. h about 60 km.
8	19 15 39.7	17.2 S.	174.9 W.	Tonga Islands. h about 200 km.
8	19 50 06.6	3.6 S.	103.0 E.	Southern Sumatra. h about 137 km.
8	20 28 08.9	15.0 S.	172.9 W.	Samoa Islands region. h about 33 km.
8	21 26 58.4	32.4 N.	141.3 E.	South of Honshu, Japan. h about 69 km.
9	04 31 40.3	27.4 S.	179.0 W.	Kermadec Islands region. h about 360 km.
9	07 25 53.7	28.5 S.	179.0 W.	Kermadec Islands region. h about 267 km.
9	10 03 35.7	31.7 S.	71.3 W.	Near coast of central Chile. h about 84 km.
9	11 23 29.6	31.7 N.	142.3 E.	South of Honshu, Japan. h about 33 km.
9	15 03 43.8	12.4 N.	87.0 W.	Near coast of Nicaragua. Eruption of Cerro Negro Volcano. Damage at Leon. h about 50 km. Mag. 5¼-5½ (PAL).
9	15 06 24*	12.7 N.	86.6 W.	Nicaragua. h about 33 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
9	19 28 02.3	52.3 S.	27.5 E.	South of Africa. h about 33 km.
9	20 45 12.6	53.8 N.	165.5 W.	Fox Islands, Aleutian Islands. h about 27 km.
10	01 49 37.9	30.3 N.	130.9 E.	Kyushu, Japan. h about 134 km.
10	03 06 50*	51.1 N.	172.9 E.	Near Islands, Aleutian Islands. h about 33 km.
10	04 28 42.6	20.2 S.	168.1 E.	Loyalty Islands. h about 40 km.
10	10 29 12.9	21.5 S.	178.5 W.	West of Tonga Islands. h about 175 km.
10	10 57 34.7	40.9 N.	47.8 E.	Eastern Caucasus. h about 150 km.
10	11 09 43.3	8.2 S.	68.1 E.	Chagos Archipelago region. h about 33 km.
10	13 05 22.5	8.0 S.	74.4 W.	Peru-Brazil border region. h about 143 km.
10	20 38 56*	5.8 S.	108.1 W.	East-Central Pacific Ocean. h about 33 km.
10	22 22 42.7	2.1 S.	77.6 W.	Peru-Ecuador border region. Felt. h about 30 km. Mag. 6¼.
11	01 10 48*	32.8 N.	19.4 E.	Near coast of Libya. h about 33 km.
11	02 55 59.0	45.0 N.	110.4 W.	Yellowstone National Park, Wyoming. h about 33 km.
11	03 00 58.7	45.1 N.	110.8 W.	Montana. h about 15 km.
11	04 44 26.8	15.7 S.	176.7 W.	Fiji Islands region. h about 487 km.
11	07 49 47.3	17.8 S.	178.5 W.	Fiji Islands region. h about 594 km.
11	11 46 37.0	19.3 S.	169.5 E.	New Hebrides Islands. h about 271 km.
11	17 49 41.9	24.1 N.	122.3 E.	Taiwan region. Felt. h about 33 km.
11	19 44 24.2	34.8 S.	108.1 W.	Easter Island Cordillera. h about 33 km.
11	21 03 56.5	2.9 S.	79.2 W.	Near coast of Ecuador. h about 33 km.
12	01 07 37.1	41.9 N.	137.1 E.	Eastern Sea of Japan. h about 302 km.
12	02 57 15.5	36.5 N.	140.6 E.	Near east coast of Honshu, Japan. h about 33 km.
12	04 46 32*	17.3 S.	167.6 E.	New Hebrides Islands. h about 54 km.
12	09 42 57.3	57.5 S.	159.4 E.	Macquarie Island region. h about 33 km.
12	11 00 50.1	2.7 S.	77.0 W.	Peru-Ecuador border region. h about 115 km.
12	16 37 10.5	42.2 S.	72.0 W.	Near coast of southern Chile. h about 33 km.
12	19 22 30.9	3.2 S.	147.0 E.	Bismarck Sea. h about 33 km.
12	20 08 40.8	57.3 N.	154.0 W.	Kodiak Island region. h about 60 km. Mag. 6½.
12	20 37 17.8	56.1 N.	163.1 E.	Near east coast of Kamchatka. h about 69 km.
13	01 32 38.6	6.9 N.	73.3 W.	Northern Colombia. h about 145 km.
13	07 10 37.4	25.9 S.	179.8 E.	South of Fiji Islands. h about 448 km.
13	09 44 12.3	40.4 N.	142.2 E.	Near east coast of Honshu, Japan. Felt. h about 52 km.
13	12 44 01.4	14.6 N.	92.9 W.	Near coast of Chiapas, Mexico. h about 61 km. Mag. 4¾-5 (BRK), 5¼-5½ (PAL).

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
13	13 12 55.6	14.1 N.	93.1 W.	Near coast of Chiapas, Mexico. h about 33 km.
13	14 07 46.5	19.5 S.	169.2 E.	New Hebrides Islands. h about 158 km.
13	17 35 45.7	5.5 S.	154.6 E.	Solomon Islands. h about 386 km.
13	17 50 19.3	61.1 N.	151.0 W.	Southern Alaska. h about 96 km.
13	18 03 04.4	20.6 S.	70.7 W.	Near coast of northern Chile. h about 33 km.
13	22 48 07.4	6.1 S.	149.9 E.	New Britain region. h about 65 km.
14	08 05 28.9	9.8 N.	62.0 W.	Near coast of Venezuela. h about 52 km.
14	11 23 02.1	0.7 N.	80.2 W.	Near coast of Ecuador. h about 25 km.
14	13 50 42.3	57.4 N.	154.0 W.	Kodiak Island region. h about 42 km.
14	15 08 46.4	5.7 S.	127.7 E.	Banda Sea. h about 405 km.
14	17 56 14.9	30.3 S.	177.7 W.	Kermadec Islands region. h about 33 km.
14	23 14 45.8	4.1 S.	152.9 E.	New Britain region. Felt at Rabaul. h about 47 km.
15	02 17 59.3	45.1 S.	76.7 W.	Off coast of southern Chile. h about 33 km.
15	02 52 39.7	3.4 S.	146.9 E.	Bismarck Sea. h about 33 km.
15	06 35 24.8	38.5 N.	75.5 E.	Southern Sinkiang Province, China. Felt at Frunze. h about 33 km.
15	11 15 39.5	41.8 N.	20.2 E.	Albania. Felt at Debar and Skopje. h about 33 km.
15	12 08 08.7	38.0 N.	26.5 W.	Azores Islands. Felt on Sao Miguel Island. h about 33 km.
15	15 32 14.0	24.1 N.	122.8 E.	Taiwan region. h about 59 km.
16	01 14 29.8	7.1 N.	73.1 W.	Northern Colombia. h about 127 km.
16	01 28 05.7	22.4 S.	171.7 E.	Loyalty Islands region. h about 84 km.
16	09 01 12*	29.9 S.	176.1 W.	Kermadec Islands. h about 36 km.
16	15 52 15.4	0.9 S.	128.6 E.	Halmahera. h about 24 km.
16	16 17 59.9	0.9 S.	128.8 E.	Halmahera. h about 33 km.
16	19 20 09.0	18.0 S.	178.4 W.	Fiji Islands region. h about 565 km.
16	20 42 33.5	16.8 N.	99.0 W.	Near coast of Guerrero, Mexico. h about 33 km.
16	22 05 53.3	41.6 N.	142.0 E.	Hokkaido, Japan region. h about 65 km.
16	23 37 26*	43.9 N.	147.1 E.	Kurile Islands. h about 33 km.
17	04 06 39.5	45.5 N.	150.9 E.	Kurile Islands. h about 51 km.
17	06 09 20.4	15.7 N.	120.1 E.	Luzon, Philippine Islands. Felt at Manila and Dagupan. h about 99 km.
17	07 33 15.2	31.2 S.	179.7 W.	Kermadec Islands. h about 343 km.
17	10 34 54.8	32.3 N.	140.7 E.	South of Honshu, Japan. h about 115 km.
17	12 09 08.1	41.6 N.	142.0 E.	Hokkaido, Japan region. Felt on Hokkaido and Honshu. h about 72 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
17	14 11 05.7	14.1 S.	73.9 W.	Peru. h about 94 km.
17	21 31 12*	0.8 S.	128.8 E.	Halmahera. h about 231 km.
17	22 40 12.4	24.7 S.	177.3 W.	South of Fiji Islands. h about 128 km.
17	23 04 58*	13.5 N.	142.5 E.	Mariana Islands region. h about 163 km.
17	23 36 42*	63.5 N.	148.5 W.	Central Alaska. h about 33 km.
18	02 36 35.8	60.5 S.	27.3 W.	South Sandwich Islands region. h about 33 km.
18	04 04 24.9	29.7 S.	68.9 W.	San Juan Province, Argentina. h about 28 km.
18	05 33 26.7	29.7 S.	68.6 W.	San Juan Province, Argentina. h about 42 km.
18	12 20 34.4	8.2 S.	115.6 E.	Bali Islands region. Eruption of Gunung Agung Volcano. Damage at Karanggasem. h about 65 km.
18	13 03 35.8	8.3 S.	115.7 E.	Bali Island region. h about 69 km.
18	14 51 14.0	16.5 S.	173.1 W.	Tonga Islands. h about 33 km.
18	16 32 38.7	11.5 S.	162.9 E.	Solomon Islands. h about 33 km.
18	16 43 13.8	16.1 N.	119.5 E.	Luzon, Philippine Islands. h about 60 km.
18	20 58 52.5	36.1 N.	114.7 W.	California-Nevada border region. h about 5 km.
18	23 16 20.1	40.8 N.	141.9 E.	Near east coast of Honshu, Japan. h about 93 km.
18	23 47 19.6	49.6 N.	156.2 E.	Kurile Islands. h about 84 km.
18	23 58 54.9	37.6 N.	72.8 E.	Tadzhik SSR. h about 91 km.
19	01 03 06.2	46.3 S.	74.8 W.	Near coast of southern Chile. h about 48 km. Mag. 6¼.
19	04 33 36*	17.0 N.	100.0 W.	Guerrero, Mexico. h about 40 km.
19	08 10 18.5	44.4 N.	112.0 W.	Eastern Idaho. h about 15 km.
19	08 20 37*	15.5 S.	167.9 E.	New Hebrides Islands. h about 126 km.
19	09 48 26.0	4.1 S.	103.1 E.	Southern Sumatra. h about 96 km.
19	10 00 05.0	46.0 N.	14.6 E.	Yugoslavia. 3 injured at Litija. Widespread minor damage. Felt in Austria, Itlay and Yugoslavia. h about 32 km.
19	11 02 36*	1.5 N.	126.0 E.	Molucca Passage. h about 105 km.
19	19 21 16.0	2.5 N.	128.7 E.	Halmahera. h about 102 km.
19	21 35 47.0	23.8 N.	46.0 W.	North Atlantic Ridge. h about 10 km. Mag. 6½.
19	23 31 25.3	17.7 S.	69.4 W.	Peru-Bolivia border region. h about 137 km.
20	01 35 31.3	8.2 N.	83.0 W.	Panama-Costa Rica border region. h about 27 km.
20	02 39 59.0	40.3 S.	75.6 W.	Off coast of sourthern Chile. h about 33 km.
20	02 43 16.3	8.3 N.	83.0 W.	Panama-Costa Rica border region. h about 33 km.
20	03 33 32.2	23.4 S.	179.9 E.	South of Fiji Islands. h about 503 km.
20	05 14 22.5	10.4 S.	161.7 E.	Solomon Islands. h about 90 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
20	09 08 01.7	19.2 N.	121.3 E.	Philippine Islands region. h about 27 km.
20	11 38 05.3	30.7 S.	178.3 W.	Kermadec Islands region. h about 68 km. Mag. 6¾-7.
20	13 22 08.9	1.1 N.	77.6 W.	Colombia. h about 148 km.
20	13 41 11.6	1.6 N.	124.6 E.	Northern Celebes. h about 252 km.
20	13 54 06.2	24.1 N.	45.9 W.	North Atlantic Ridge. h about 33 km.
20	17 01 40.2	72.1 N.	126.6 E.	Central Siberia. h about 33 km.
20	19 16 33.0	27.0 S.	176.3 W.	Kermadec Islands. h about 59 km.
20	21 04 55.4	2.5 N.	128.8 E.	Halmahera. h about 125 km.
21	00 58 07.4	56.0 S.	123.5 W.	Easter Island Cordillera. h about 33 km.
21	09 44 40.3	18.9 N.	146.0 E.	Mariana Islands. h about 180 km.
21	10 16 21.2	20.9 S.	69.3 W.	Northern Chile. Felt at Arica. h about 108 km.
21	15 16 06.9	11.0 S.	163.1 E.	Solomon Islands. h about 69 km.
21	16 23 29.9	51.5 N.	158.8 E.	Near east coast of Kamchatka. h about 33 km.
21	17 01 52.0	36.1 N.	139.6 E.	Honshu, Japan. Felt at Tokyo. h about 96 km.
21	17 30 15.3	11.1 S.	163.3 E.	Solomon Islands. h about 33 km. Mag. 5¾-6 (PAL).
21	17 40 44.6	11.0 S.	163.2 E.	Solomon Islands. h about 69 km.
21	17 51 07.2	22.2 S.	179.4 W.	South of Fiji Islands. h about 580 km.
21	18 10 02.8	30.6 S.	177.6 W.	Kermadec Islands region. h about 33 km.
21	18 34 59.3	10.8 S.	163.2 E.	Solomon Islands. h about 60 km.
21	20 03 29.1	23.7 N.	108.6 W.	Gulf of California. h about 33 km.
21	20 21 04.7	11.0 S.	163.4 E.	Solomon Islands. h about 33 km.
22	02 27 55.7	11.2 S.	163.2 E.	Solomon Islands. h about 60 km.
22	04 24 33.5	18.1 N.	106.0 W.	Off coast of Jalisco, Mexico. h about 35 km.
22	05 42 25.2	46.0 N.	151.1 E.	Kurile Islands. h about 48 km.
22	07 52 01.3	30.3 S.	177.6 W.	Kermadec Islands. h about 168 km.
22	10 18 26.3	11.1 S.	163.5 E.	Solomon Islands. h about 33 km.
22	13 56 47.5	48.7 N.	154.6 E.	Kurile Islands. h about 54 km. Mag. 6½.
22	15 40 00.149			37°06'40"N., 116°02'21"W. Nevada Test Site. STONES. Shot elevation 498.5 meters (AEC).
22	15 42 51.5	4.3 N.	127.9 E.	Talaud Islands. h about 82 km.
22	16 25 37.2	52.0 N.	165.4 W.	Aleutian Islands region. h about 33 km.
22	16 28 48.9	54.0 N.	160.2 E.	Kamchatka. h about 33 km.
22	21 53 03.7	8.2 S.	115.7 E.	Bali Island region. h about 47 km. Mag. 5¼-5½ (PAL).
22	22 00 44.2	49.3 N.	155.4 E.	Kurile Islands. h about 33 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
22	22 41 02.9	37.1 N.	122.8 W.	Off coast of California. Felt at San Francisco. h about 15 km. Mag. 4½-5 (BRK).
23	00 51 37.6	1.7 N.	126.6 E.	Molucca Passage. h about 10 km.
23	02 27 07.2	11.1 S.	163.4 E.	Solomon Islands. h about 33 km.
23	03 15 29.2	60.1 N.	150.1 W.	Kenai Peninsula, Alaska. h about 35 km.
23	03 33 24.8	14.7 S.	176.2 W.	Fiji Islands region. h about 302 km.
23	03 35 36.6	10.9 S.	163.1 E.	Solomon Islands. h about 46 km. Mag. 5¼ (PAL).
23	03 57 43.8	1.6 S.	80.8 W.	Near coast of Ecuador. h about 90 km.
23	05 30 25.8	7.6 S.	115.7 E.	Bali Sea. h about 95 km.
23	06 36 32.9	32.9 N.	115.6 W.	Imperial County, California. Slight damage. h about 15 km. Mag. 4.4.
23	06 57 52.1	18.4 N.	145.4 E.	Mariana Islands. h about 483 km.
23	07 43 56.9	19.2 N.	64.5 W.	Virgin Islands. h about 47 km. Mag. 4½-4¾ (PAL).
23	07 47 59.9	11.1 S.	163.2 E.	Solomon Islands. h about 21 km.
23	07 54 32.8	11.3 S.	163.0 E.	Solomon Islands. h about 49 km.
23	08 41 53.6	20.8 S.	177.8 W.	Fiji Islands region. h about 467 km.
23	09 06 03.2	32.8 N.	115.6 W.	Imperial County, California. Felt. h about 15 km. Mag. 4.6.
23	10 15 08.9	36.6 N.	30.0 E.	Turkey. h about 226 km.
23	10 43 32.4	36.8 N.	140.9 E.	Near east coast of Honshu, Japan. h about 50 km.
23	11 56 45.3	44.7 S.	75.8 W.	Off coast of southern Chile. h about 33 km.
23	12 09 11.8	20.0 N.	73.5 W.	Haiti region. h about 33 km.
23	15 12 09.7	6.0 N.	126.1 E.	Mindanao, Philippine Islands. Felt Davao and Cagayan de Oro. h about 124 km.
23	15 52 59.6	32.7 N.	115.4 W.	California-Mexico border region. Minor damage at Westmoreland, Brawley and El Centro. h about 15 km. Mag. 4.8.
23	16 27 44.7	46.8 N.	152.6 E.	Kurile Islands. h about 58 km.
23	18 21 18.3	14.5 N.	105.2 W.	Off coast of Mexico. h about 33 km.
23	21 36 37.2	30.7 S.	178.0 W.	Kermadec Islands region. h about 33 km.
23	21 37 36.3	52.1 N.	178.6 W.	Andreanof Islands, Aleutian Islands. h about 60 km.
24	06 10 09.5	12.1 N.	88.5 W.	Off coast of Central America. h about 42 km.
24	07 33 05.8	58.2 N.	136.8 W.	Southeastern Alaska. h about 33 km.
24	07 33 17.7	6.7 N.	82.2 W.	South of Panama. h about 33 km.
24	20 52 28.3	22.8 S.	179.7 W.	South of Fiji Islands. h about 608 km.
24	21 00 24.1	36.5 N.	140.9 E.	Near east coast of Honshu, Japan. Felt on Honshu. h about 58 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
24	21 19 04.8	24.5 S.	179.7 E.	South of Fiji Islands. h about 649 km.
25	00 14 38.1	21.0 S.	69.1 W.	Northern Chile. h about 113 km.
25	01 35 54.1	24.6 N.	121.8 E.	Taiwan. h about 69 km.
25	01 50 58.0	23.6 S.	66.8 W.	Jujuy Province, Argentina. h about 216 km.
25	02 37 55.7	35.6 N.	139.7 E.	Near south coast of Honshu, Japan. h about 77 km.
25	04 22 46.8	54.4 N.	164.6 W.	Unimak Island region. h about 70 km.
25	07 35 03.7	51.7 N.	179.5 E.	Rat Islands, Aleutian Islands. h about 91 km.
25	07 56 58.8	24.2 S.	66.8 W.	Salta Province, Argentina. h about 185 km.
25	08 41 11.6	42.9 N.	144.4 E.	Hokkaido, Japan region. h about 88 km.
25	10 11 46.2	4.4 S.	129.0 E.	Banda Sea. h about 66 km.
25	10 44 36.7	39.8 N.	104.7 W.	Colorado. Felt in Denver area. h about 10 km.
25	14 52 27.8	13.1 N.	89.8 W.	El Salvador. h about 91 km.
25	16 08 00.6	56.7 S.	24.8 W.	South Sandwich Islands region. h about 33 km. Mag. 5½-5¾ (PAL).
25	16 45 42.9	20.7 N.	121.0 E.	Philippine Islands region. h about 12 km.
25	18 05 25.0	62.3 S.	163.8 E.	Balleny Islands region. h about 32 km.
25	19 57 18.0	31.2 N.	141.5 E.	South of Honshu, Japan. h about 37 km.
25	20 49 38.6	36.6 N.	70.9 E.	Afghanistan-U.S.S.R. border region. h about 200 km.
25	22 18 17.7	37.6 S.	179.3 E.	Off east coast of North Island, New Zealand. h about 33 km.
25	23 59 55.9	20.0 S.	173.9 W.	Tonga Islands. h about 33 km.
26	00 42 55.5	7.0 S.	155.4 E.	Solomon Islands. h about 82 km.
26	02 50 10.5	1.5 S.	127.3 E.	Halmahera. h about 33 km.
26	04 43 09.6	53.2 N.	160.1 E.	Near east coast of Kamchatka. h about 33 km.
26	04 52 24.0	51.6 N.	160.0 E.	Off east coast of Kamchatka. h about 33 km.
26	09 36 41.6	18.0 S.	178.5 W.	Fiji Islands region. h about 561 km.
26	10 57 59.8	15.6 S.	174.0 W.	Tonga Islands. h about 33 km.
26	12 43 46.0	16.9 S.	72.4 W.	Near coast of Peru. Felt at Arequipa. h about 47 km.
26	18 32 52.5	22.8 N.	144.3 E.	Volcano Islands region. h about 53 km.
26	19 13 39.6	5.5 S.	81.2 W.	Near coast of northern Peru. h about 33 km.
26	19 24 43.5	14.8 S.	34.7 E.	Nyasaland. h about 33 km.
26	21 02 19.2	48.5 N.	156.4 E.	Kurile Islands region. h about 33 km.
26	21 03 50.9	42.3 N.	48.6 E.	Caspian Sea. h about 55 km.
26	23 06 54.0	55.2 N.	160.1 E.	Kamchatka. h about 34 km. Mag. 5¼-5½ (PAL).
26	23 34 48*	7.1 S.	128.7 E.	Banda Sea. h about 290 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
27	00 30 52.2	10.5 S.	162.8 E.	Solomon Islands. h about 133 km.
27	03 58 46.6	55.2 N.	160.1 E.	Kamchatka. h about 49 km. Mag. 5¼-5½ (PAL).
27	07 02 26.7	54.3 N.	159.7 E.	Near east coast of Kamchatka. h about 33 km.
27	16 05 13.0	12.2 N.	102.2 W.	Off coast of Mexico. h about 33 km.
27	16 20 09.6	0.6 S.	130.1 E.	West New Guinea region. h about 33 km.
27	18 45 36.4	2.0 S.	138.9 E.	Near north coast of West New Guinea. h about 33 km.
27	21 53 33.0	20.8 S.	69.4 W.	Northern Chile. h about 102 km.
28	00 08 56.2	51.7 N.	177.6 E.	Rat Islands, Aleutian Islands. h about 66 km.
28	01 15 37.6	31.7 N.	142.3 E.	South of Honshu, Japan. h about 13 km.
28	01 23 10.0	26.2 N.	125.5 E.	Northeast of Taiwan. h about 33 km.
28	03 09 58.4	23.6 S.	179.2 W.	South of Fiji Islands. h about 33 km.
28	07 00 55.2	18.7 S.	177.7 W.	Fiji Islands region. h about 606 km.
28	08 22 45.0	6.9 N.	73.0 W.	Northern Colombia. h about 149 km.
28	10 32 47.3	35.4 N.	49.8 E.	Western Iran. Felt at Kazvin. h about 33 km.
28	16 29 11.9	44.3 N.	114.8 W.	Western Idaho. h about 33 km.
28	20 06 59.2	32.5 S.	70.7 W.	Chile-Argentina border region. h about 30 km.
28	21 04 15.4	47.5 N.	152.6 E.	Kurile Islands. h about 166 km.
28	21 38 46.2	12.5 N.	142.1 E.	South of Mariana Islands. h about 8 km.
28	21 58 27.1	36.0 N.	140.7 E.	Near east coast of Honshu, Japan. h about 73 km.
29	00 47 43.6	28.1 N.	52.4 E.	Southern Iran. h about 7 km.
29	01 02 05.8	18.1 S.	178.0 W.	West of Tonga Islands. h about 472 km.
29	04 50 23.4	57.7 N.	153.1 W.	Kodiak Island region. h about 85 km.
29	05 40 34.9	60.9 S.	26.5 W.	South sandwich Islands region. h about 33 km.
29	08 27 44.5	17.6 S.	178.8 W.	West of Tonga Islands. h about 516 km.
29	09 35 03.7	27.0 N.	59.4 E.	Southern Iran. h about 52 km.
29	10 59 13.8	18.1 S.	177.9 W.	Fiji Islands region. h about 600 km.
29	13 04 09.6	22.1 S.	169.6 E.	Loyalty Islands region. h about 40 km.
29	13 22 23.4	23.9 S.	179.2 W.	South of Fiji Islands. h about 60 km.
29	18 02 21.7	16.3 S.	174.3 W.	Tonga Islands. h about 64 km.
29	18 27 19.5	22.6 S.	114.4 W.	Easter Island region. h about 33 km.
29	18 30 25*	24.4 S.	114.7 W.	Easter Island region. h about 33 km.
29	22 41 36.7	13.9 N.	91.8 W.	Guatemala. h about 131 km.
30	01 56 47.1	6.6 N.	73.0 W.	Northern Colombia. h about 174 km.

Date 1963	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
May	h m s	°	°	
30	03 04 49.5	18.3 S.	178.3 W.	West of Tonga Islands. h about 450 km.
30	03 44 49.8	50.0 N.	157.4 E.	Kurile Islands region. h about 36 km.
30	05 10 05.3	41.9 N.	133.8 E.	Near east coast of eastern Russia. h about 33 km.
30	05 35 05.3	26.0 S.	178.4 E.	South of Fiji Islands. h about 597 km.
30	06 56 08.6	54.3 S.	144.1 E.	West of Macquarie Island. h about 33 km. Mag. 5¼-5½ (PAL).
30	11 33 01.1	23.9 N.	46.1 W.	North Atlantic Ridge. h about 33 km.
30	16 37 46.9	30.1 N.	111.5 W.	Northwestern Mexico. h about 33 km.
30	17 01 21.0	28.9 N.	141.7 E.	Bonin Islands region. h about 33 km.
30	17 39 42.6	52.4 N.	169.6 W.	Fox Islands, Aleutian Islands. h about 80 km.
30	18 57 52.4	59.3 S.	26.9 W.	South Sandwich Islands region. h about 33 km.
30	20 30 25.2	22.8 S.	176.0 W.	South of Fiji Islands. h about 37 km.
31	04 39 14.8	17.9 S.	68.3 W.	Bolivia. h about 57 km.
31	05 29 29.0	55.1 N.	160.2 E.	Kamchatka. h about 49 km.
31	06 03 34.2	15.2 S.	173.4 W.	Tonga Islands. h about 29 km.
31	11 09 02.7	61.5 N.	140.6 W.	Southern Yukon Territory, Canada. h about 33 km.
31	11 37 53.6	45.0 N.	111.2 W.	Hebgen Lake region. h about 15 km.
31	12 00 29*	20.3 S.	175.5 W.	Tonga Islands. h about 166 km.
31	14 08 02.8	30.7 S.	178.2 W.	Kermadec Islands region. h about 57 km.
31	17 15 16.0	28.9 N.	131.1 E.	Ryukyu Islands region. h about 30 km.
31	21 53 46.4	11.2 N.	91.2 W.	Off coast of Central America. h about 33 km.
31	23 58 52.2	15.3 S.	173.4 W.	Fiji Islands region. h about 61 km.

Date and Station	Phase (GCT)
	h m s
MAY 01	
ALQ EP	00 01 18.5
TUC EP	00 01 20.3
E	02 03.5
MAY 01	
BOZ EP	00 12 55.0
MAY 01	
ALQ EP	00 42 25.0
E	42 48.0
MAY 1	
H-01 05 12.7	
52.2N 174.6W	
h ABOUT 034KM	
COL EP	01 09 29.5
ESCP	17 21.0
E	17 45.0
EUR IP	01 13 00.0
BCN IP	01 13 24.0
FGU IP	01 13 24.6
IPCP	15 01.1
TUC IP	01 14 01.9
I	15 39.9
ALQ IP	01 14 08.0
MAY 01	
EUR EP	01 41 53.0
KIP ET	01 46 23.0
MAY 01	
ALQ E(P)	02 45 34.0
BCN EP	02 45 37.2
TUC E(P)	02 45 42.6
MAY 01	
FGU EP	06 59 05.8
ES	59 31.8
MAY 01	
COL EP	07 38 24.0
MAY 01	
FGU IP	08 42 51.8
MAY 1	
H-10 03 20.2	
19.0S 168.9E	
h ABOUT 142KM	
HON EP	10 12 13.0
I▸P	12 49.0
ES	19 22.0
KIP IP	10 12 13.2
ES	19 22.0
UKI EP	10 15 45.5
E▸P	16 21.0
E(sP)	16 39.0
SIT EP	10 16 00.1
E▸P	16 35.6

Date and Station	Phase (GCT)
	h m s
COL IP	10 16 01.0
I▸P	16 43.0
EPP	19 38.0
ESKS	26 20.0
ISP	27 48.0
BCN IP	10 16 07.7
I▸P	16 43.4
IsP	17 07.8
E	29 05.4
EPKKP	33 36.0
E	39 49.4
E(P'P')	41 48.0
E▸P'P'	42 26.3
EUR IP	10 16 09.6
I▸P	16 45.4
I	18 32.0
P'P'	41 42.5
TUC P	10 16 15.5
I▸PP	20 36.0
ESKS	26 35.5
IP'P'	41 43.0
SLC EP	10 16 24.8
E▸P	17 02.3
E(PP)	20 20.3
E▸PP	20 48.5
EPKKP	33 26.4
E	34 02.4
E	42 16.8
BUT IP	10 16 31.0
I▸P	17 08.1
E▸PP	21 00.0
E	42 17.4
FGU IP	10 16 33.2
I▸P	17 10.4
ALQ	10 16 34.5
I▸PP	21 01.0
E(SKS)	26 16.0
E	30 09.0
E(P'P')	41 30.0
BOZ EP	10 16 36.0
EPP	20 25.0
E	30 15.0
BHP IP C	10 17 50.0
CSC EP'	10 22 57.0
E	32 19.0
MAY 01	
EUR EP	12 34 37.5
MAY 01	
BHP IP	12 53 15.0
MAY 01	
COL E(P)	13 25 30.0
MAY 01	
TUC IP	16 37 43.1
ES	38 01.0
MAY 1	
H-16 38 52.6	
14.0N 091.8W	
h ABOUT 109KM	

Date and Station	Phase (GCT)
	h m s
TUC E(P)	16 44 10.0
COL EP	16 49 10.0
E	49 29.0
EPCP	49 50.0
MAY 01	
EUR IP	18 13 29.2
MAY 01	
COL IP	19 11 28.0
EUR IP	19 12 13.8
MAY 1	
H-19 52 14.7	
38.8N 075.4E	
h ABOUT 054KM	
COL EP	20 03 28.0
E	04 04.0
MAY 01	
TUC IP	20 13 19.2
ES	13 37.0
BCN EP	20 13 39.9
EL	14 39.9
GCA EP	20 13 47.4
EUR EP	20 14 10.5
MAY 01	
BHP IP	20 43 36.0
MAY 01	
FGU IP	21 22 58.8
I	24 04.9
MAY 01	
ALQ IP	21 55 33.5
MAY 01	
BOZ EP	22 02 26.0
ES	02 39.5
BUT EP	22 02 39.0
IS	02 57.5
FGU EP	22 03 17.2
MAY 01	
EUR IP	22 27 07.2
MAY 01	
BHP IP	23 50 48.0
MAY 02	
COL IP	01 15 30.0
MAY 02	
BOZ EP	01 58 48.5
ES	59 02.5
BUT EP	01 59 03.0
ES	59 30.0
MAY 02	
COL EP	02 06 23.0
MAY 02	
BOZ EP	06 17 16.0
IS	17 50.0

Date and Station	Phase (GCT)
	h m s
MAY 02	
EUR EP	06 46 17.0
MAY 02	
TUC EP	07 09 39.2
E	09 43.0
COL EP	07 13 56.0
MAY 02	
EUR IP	07 16 06.3
FGU IP	07 16 26.8
MAY 02	
TUC EP	08 19 33.1
E	19 36.2
MAY 02	
TUC E(P)	08 25 41.0
E	25 50.7
MAY 2	
H-09 20 16.0	
25.2S 179.6W	
h ABOUT 599KM	
COL EP	09 32 27.0
MAY 02	
BHP IP	09 54 55.0
MAY 02	
COL EP	11 02 04.0
MAY 02	
BHP IP	11 42 10.0
IS	42 20.0
MAY 2	
H-13 05 26.8	
06.7N 072.8W	
h ABOUT 178KM	
TUC E(P)	13 13 14.8
EUR IP	13 14 10.0
MAY 02	
EUR IP	13 30 05.0
MAY 02	
BHP IP	15 15 43.0
MAY 02	
BUT IP	16 33 22.3
IS	33 50.0
MAY 02	
EUR IP	16 40 40.9
MAY 02	
SLC EP	17 26 00.0
ALQ IP	17 27 31.5
MAY 02	
TUC IP	19 30 24.1
ES	30 42.2
ALQ IP	19 30 55.1
MAY 02	
COL IP	20 11 53.6

Date and Station	Phase	(GCT)
		h m s
MAY 02		
ALQ	IP	22 00 04.0
	IS	00 06.5
MAY 02		
TUC	IP	22 43 44.0
	ES	00 43 55.0
MAY 2		
H-23 13 09.4		
63.1N 149.9W		
h ABOUT 079KM		
COL	IP	23 13 42.7
	IS	14 04.0
EUR	IP	23 19 22.7
	I(pP)	19 48.9
	E(sP)	20 03.1
FGU	IP	23 19 34.6
TUC	E(P)	23 20 30.6
MAY 02		
SLC	IP	23 24 22.0
	IS	24 48.6
MAY 03		
EUR	IP	01 28 58.3
MAY 03		
EUR	EP	01 49 28.9
MAY 03		
EUR	IP	01 55 04.6
MAY 03		
H-02 14 44.4		
37.7N 118.8W		
h ABOUT 015KM		
EUR	EP	02 15 31.3
UKI	E(P)	02 15 47.0
BCN	E(P)	02 15 49.7
	I	15 52.3
	IIL	16 50.0
SLC	E(P)	02 16 43.4
TUC	E(P)	02 16 50.0
ALQ	E(P)	02 17 18.0
MAY 03		
FGU	E(P)	03 09 47.4
	I	11 10.4
MAY 03		
SJP	E(P)	05 03 14.0
MAY 03		
EUR	IP	06 06 10.1
	IPP	06 49.9
MAY 03		
EUR	IP	07 03 16.2
MAY 03		
EUR	EP	07 08 49.6
MAY 03		
EUR	IP	07 38 54.0
MAY 03		
EUR	EP	08 43 34.9
	I	44 18.2
BCN	E(P)	08 43 46.9
	I	42 55.8
	EL	44 41.9
MAY 3		
H-10 44 29.6		
30.7N 051.8E		
h ABOUT 035KM		
COL	EP	10 56 55.8
MAY 03		
COL	EP	10 48 21.4
BOZ	EP	10 51 44.0
EUR	IP	10 51 48.1
FGU	EP	10 52 12.2
TUC	E(P)	10 52 48.0
ALQ	E(P)	10 52 51.0
MAY 3		
H-10 54 44.7		
15.2S 173.2W		
h ABOUT 047KM		
KIP	E(P)	11 02 28.0
HON	ES	11 08 14.0
	EL	10 58.0
BCN	E(P)	11 06 21.7
	E(pP)	06 38.2
TUC	E(P)	11 06 29.3
EUR	I(P)	11 06 34.6
ALQ	EP	11 06 54.0
COL	IP	11 07 02.0
	IpP	07 13.0
BOZ	EP	11 07 06.0
EUR	IP	11 15 51.9
MAY 03		
COL	EP	11 23 18.0
MAY 03		
FGU	I(P)	12 06 58.1
MAY 03		
EUR	EP	13 23 34.2
MAY 03		
EUR	EP	13 55 24.6
MAY 03		
EUR	IP	14 00 22.6
MAY 03		
BHP	IP	15 51 04.0
	IS	51 42.0
MAY 03		
BHP	IP	16 16 35.0
	IS	18 10.0
MAY 03		
H-16 32 55.9		
45.0N 111.2W		
h ABOUT 033KM		
BUT	IP	16 33 22.3
	IL	33 50.0
SLC	EP	16 34 00.3
	E	34 05.5
	EL	34 59.0
MAY 03		
EUR	IP	17 29 51.9
BCN	E(P)	17 30 03.6
	E	30 11.1
	EL	30 53.0
MAY 03		
EUR	I(P)	17 38 15.6
MAY 03		
H-19 18 14.5		
17.6N 091.8W		
h ABOUT 090KM		
TUC	E(P)	19 23 08.0
COL	EP	19 28 14.0
MAY 03		
ALQ	E(P)	20 00 43.0
	E(S)	01 27.0
MAY 03		
FGU	EP	21 06 28.6
	IS	06 58.4
MAY 03		
TUC	E(P)	23 04 31.0
MAY 04		
BHP	IP	00 33 05.0
	I	40 30.0
	I	48 46.0
MAY 04		
BUT	I(P)	01 06 00.0
MAY 04		
BUT	EP	01 06 16.0
	IS	06 37.0
MAY 04		
COL	EP	02 02 24.0
MAY 04		
EUR	IP	03 59 25.4
MAY 4		
H-04 41 16.0		
04.2N 074.1W		
h ABOUT 035KM		
ALQ	EP	04 49 12.0
TUC	EP	04 49 25.0
EUR	EP	04 50 21.8
COL	EP	04 53 19.0
MAY 4		
H-05 56 01.1		
51.8N 175.4W		
h ABOUT 041KM		
COL	IP	06 00 24.1
	IS	04 00.0
	I(SCP)	08 19.0
KIP	IP	06 02 35.9
	ET	37 16.0
HON	EP	06 02 37.0
	EL	11 08.0
BUT	EP	06 03 38.5
	EPCP	05 40.7
BOZ	EP	06 03 48.0
EUR	IP	06 03 52.9
	I	04 22.9
	IPCP	05 46.5
	ISCP	09 30.5
FGU	IP	06 04 17.3
	ISCP	09 43.8
TUC	IP	06 04 53.2
	I	04 59.0
ALQ	EP	06 05 00.0
CSC	IP	06 06 49.0
MAY 04		
BOZ	EP	06 16 29.5
	E(S)	16 51.8
BUT	E(P)	06 16 33.0
BUT	EP	06 16 45.2
	ES	17 10.0
FGU	EP	06 17 18.5
MAY 04		
H-07 38 53.3		
24.7S 066.6W		
h ABOUT 153KM		
ALQ	EP	07 49 51.5
TUC	EP	07 49 54.0
MAY 04		
EUR	IP	10 48 45.1
MAY 04		
COL	IP	11 17 09.2
MAY 04		
EUR	IP	11 48 38.5
MAY 04		
H-12 29 33.3		
44.3N 129.7W		
h ABOUT 015KM		

Date and Station	Phase (GCT)
	h m s
EUR IP	12 32 17.7
ALQ E(P)	12 34 09.0
MAY 04	
EUR E(P)	14 19 04.2
MAY 04	
EUR I	15 25 11.5
MAY 04	
COL EP	15 39 44.0
MAY 4	
H-16 19 27.4	
13.6N 090.9W	
h ABOUT 123KM	
TUC IP	16 24 50.1
I	25 03.3
I▸P	25 09.8
IPCP	16 28 21.0
EUR IP	16 26 01.5
I	33 19.3
COL EP	16 29 49.0
I(▸P)	30 26.0
MAY 04	
TUC IP	16 31 09.3
MAY 04	
UKI EP	16 37 37.8
I	37 52.4
ES	38 00.4
EUR EP	16 38 47.0
MAY 4	
H-16 42 02.8	
55.1N 160.3E	
h ABOUT 053KM	
COL EP	16 47 41.0
EUR IP	16 51 34.8
I▸P	51 50.8
MAY 04	
BHP IP	17 46 02.0
IS	46 39.0
MAY 4	
H-19 01 41.9	
56.1S 027.2W	
h ABOUT 041KM	
COL EP'	19 21 28.0
MAY 04	
FGU I(P)	19 23 58.2
MAY 04	
H-21 01 35.9	
32.2N 079.7W	
h ABOUT 015KM	
CSC EP	21 02 11.0
EL	02 28.0
MAY 04	
TUC EP	21 04 20.1

Date and Station	Phase (GCT)
	h m s
ALQ E(P)	21 04 27.0
EUR IP	21 04 53.7
MAY 04	
BHP IP	21 18 42.0
MAY 4	
H-21 40 40.2	
19.2N 108.7W	
h ABOUT 040KM	
EUR IP	21 45 25.3
MAY 04	
BHP IP	21 49 02.0
COL EP	21 53 55.0
MAY 4	
H-22 07 26.3	
13.1N 060.5W	
h ABOUT 050KM	
SJP EP	22 09 15.5
ES	10 35.0
ALQ EP	22 15 52.8
FGU EP	22 16 28.2
MAY 4	
H-22 09 12.5	
32.0N 140.4E	
h ABOUT 113KM	
COL E(P)	22 18 23.0
EUR E(P)	22 21 00.6
MAY 04	
TUC EP	22 55 45.9
MAY 04	
FGU EP	23 39 27.0
ES	40 02.3
MAY 04	
COL IP	23 59 38.1
MAY 05	
HON EP	02 12 10.0
ES	12 44.0
KIP IP	02 12 10.9
IS	12 50.0
MAY 05	
EUR EP	05 36 09.3
MAY 05	
EUR EP	06 18 38.3
MAY 05	
ALQ E(P)	07 11 06.0
E	13 34.0
MAY 05	
EUR IP	08 07 31.7
MAY 05	
SJP EP	08 55 20.0
E	55 36.0

Date and Station	Phase (GCT)
	h m s
MAY 5	
H-11 04 14.8	
32.7N 139.7E	
h ABOUT 135KM	
COL EP	11 13 23.4
EUR IP	11 16 10.2
FGU I(P)	11 16 28.1
MAY 5	
H-12 44 43.0	
14.3N 091.9W	
h ABOUT 112KM	
ALQ EP	12 49 52.0
TUC E(P)	12 49 57.0
FGU IP	12 50 49.0
EUR IP	12 51 08.1
COL EP	12 54 59.7
EPCP	55 37.0
MAY 05	
EUR IP	13 12 45.3
MAY 05	
EUR EP	13 53 17.0
MAY 05	
EUR EP	14 35 16.3
MAY 05	
EUR IP	14 48 21.8
I	49 00.4
MAY 5	
H-15 17 02.1	
24.8S 069.6W	
h ABOUT 053KM	
SJP EP	15 24 57.0
ALQ IP	15 28 03.9
▸P	28 18.0
EP'P'	56 16.0
TUC IP	15 28 04.2
I▸P	28 18.6
EUR P	15 28 52.5
I▸P	29 08.0
BOZ EP	15 29 06.5
E▸P	29 22.0
sP	29 28.0
BUT IP	15 29 11.4
I▸P	29 26.4
IsP	29 33.2
COL EP	15 31 14.0
EP'	35 14.0
MAY 05	
FGU IP	15 23 41.1
MAY 05	
FGU EP	16 33 48.1

Date and Station	Phase (GCT)
	h m s
MAY 05	
EUR IP	16 38 41.8
MAY 05	
TUC IP	17 00 09.3
ALQ EP	17 00 41.0
MAY 5	
H-17 11 48.8	
17.6S 173.7W	
h ABOUT 052KM	
KIP E(P)	17 19 47.0
TUC EP	17 23 44.2
I▸P	23 59.0
EUR IP	17 23 46.3
ALQ EP	17 24 07.0
FGU E(P)	17 24 12.5
BUT EP	17 24 16.5
COL IP	17 24 17.5
I▸P	24 31.0
BOZ EP	17 24 20.0
MAY 05	
EUR E(P)	19 47 08.1
MAY 05	
EUR EP	20 19 56.5
MAY 06	
EUR EP	03 05 49.0
MAY 06	
BUT EP	03 12 35.0
ES	13 03.2
FGU EP	03 13 07.5
HHM E(P)	03 13 14.0
MAY 06	
BOZ EP	03 21 20.0
ES	12 36.0
MAY 06	
H-05 09 00.1	
39.6N 110.0W	
h ABOUT 033KM	
FGU EP	05 09 23.9
ES	09 49.9
SLC E(P)	05 09 29.6
GCA IP	05 09 46.2
ES	10 20.0
EUR EP	05 10 10.5
MAY 06	
FGU EP	05 52 39.5
MAY 6	
H-05 53 16.6	
02.4S 138.2E	
h ABOUT 015KM	

Date and Station	Phase	Phase (GCT) h m s
COL	EP	06 05 54.0
MAY 06		
BHP	IP	06 20 03.0
MAY 06		
EUR	IP	07 58 28.5
MAY 6		
H-08 38 32.1		
9.2S 112.4E		
h ABOUT 080KM		
COL	EP'	08 56 35.0
EUR	IP'	08 57 33.0
FGU	EP'	08 57 40.3
	ISKP	09 01 00.3
HHM	E(pP')	08 57 46.7
TUC	EP'	08 57 51.0
	ISKP	09 01 10.0
	I	01 13.9
ALQ	EP'	08 57 54.0
	ISKP	09 01 17.0
CSC	EP'	08 58 23.0
MAY 06		
EUR	EP	08 46 28.0
MAY 6		
H-09 15 21.7		
10.0S 160.9E		
h ABOUT 053KM		
COL	IP	09 27 46.0
EUR	IP	09 28 23.0
MAY 06		
SJP	EP	10 12 49.0
MAY 06		
BHP	IP	13 54 41.0
	IS	55 17.0
MAY 06		
EUR	E(P)	14 24 57.8
MAY 06		
EUR	EP	14 43 58.8
MAY 06		
HHM	E(P)	17 16 53.0
	ES	18 39.0
MAY 06		
HHM	E(P)	19 13 14.0
	ES	14 16.0
MAY 06		
SLC	EP	19 24 12.8
	F	24 16.3
	FS	24 40.3
EUR	E(P)	19 25 04.0

Date and Station	Phase	Phase (GCT) h m s
MAY 6		
H-19 30 28.7		
39.3N 020.4E		
h ABOUT 033KM		
COL	E(P)	19 42 12.0
HHM	EP	19 42 58.0
MAY 06		
FGU	E(P)	23 03 57.6
MAY 07		
ALQ	E(P)	00 45 16.0
MAY 07		
BOZ	EP	01 13 19.0
	ES	13 33.5
BUT	EP	01 13 34.9
	ES	14 02.0
HHM	E(P)	01 14 10.0
MAY 07		
FGU	E(P)	01 16 00.5
MAY 07		
BUT	EP	01 49 59.0
	ES	50 23.0
HHM	E(P)	01 50 41.0
MAY 07		
FGU	E(P)	01 52 40.0
MAY 7		
H-03 16 39.9		
36.6N 071.0E		
h ABOUT 218KM		
COL	EP	03 27 55.0
	EpP	28 48.0
MAY 07		
SJP	IP D	03 17 17.0
	E	17 54.0
MAY 7		
H-04 27 25.4		
47.9N 156.1E		
h ABOUT 033KM		
COL	EP	04 34 08.0
EUR	EP	04 37 36.8
MAY 7		
H-05 00 50.0		
18.8N 145.5E		
h ABOUT 090KM		
GUA	IP	05 02 08.0
COL	EP	05 11 09.4
HHM	EP	05 13 07.0
EUR	IP	05 13 14.8
BUT	EP	05 13 14.9
BOZ	EP	05 13 21.5

Date and Station	Phase	Phase (GCT) h m s
TUC	IP	05 13 47.0
	E(sP)	14 24.0
ALQ	IP	05 13 57.0
	E(sP)	14 30.0
MAY 07		
FGU	IP	05 04 45.7
MAY 07		
FGU	IP	05 15 33.9
MAY 7		
H-05 16 17.9		
64.5N 146.7W		
h ABOUT 008KM		
COL	IP	05 16 33.3
	IL	16 46.0
HHM	EP	05 21 33.0
EUR	IP	05 22 35.1
	IPCP	25 30.8
BCN	EP	05 23 07.5
ALQ	EP	05 23 40.3
TUC	IP	05 23 47.0
MAY 07		
FGU	IP	05 24 45.4
MAY 07		
TUC	E(P)	06 09 42.0
MAY 07		
H-07 07 45.1		
36.7N 121.9W		
h ABOUT 015KM		
UKI	EP	07 08 28.8
	E	08 41.6
	EL	09 17.0
EUR	I(P)	07 09 06.9
	I	10 32.6
TUC	E(P)	07 10 13.0
	EL	13 09.0
ALQ	E(P)	07 10 51.0
	EL	14 31.0
MAY 07		
FGU	E(P)	07 12 25.3
MAY 07		
SIT	EP	08 54 39.0
MAY 07		
BHP	IP	12 08 06.0
MAY 07		
EUR	E(P)	13 44 44.1
MAY 07		
COL	EP	14 10 11.9
MAY 7		
H-16 23 11.8		
22.1S 068.7W		
h ABOUT 112KM		

Date and Station	Phase	Phase (GCT) h m s
SJP	EP	16 30 35.4
	EpP	31 04.0
	E(sS)	37 16.0
CSC	EP	16 32 47.0
ALQ	IP	16 33 55.5
	IpP	34 23.0
TUC	EpP	16 34 22.0
	EsP	34 36.0
	IPCP	34 38.0
BCN	IP	16 34 29.5
	IpP	34 58.1
	IsP	35 10.4
FGU	IP	16 34 33.0
	EpP	35 01.8
SLC	EP	16 34 38.9
	EpP	35 08.1
	EsP	35 20.1
EUR	IP	16 34 46.9
	IPCP	34 58.3
	IpP	35 15.2
BOZ	IP	16 34 58.5
	EpP	35 27.8
	(sP)	35 40.0
BUT	IP	16 35 03.8
	IpP	35 32.3
UKI	EpP	16 35 37.3
	EsP	35 49.3
HHM	IP	16 35 16.0
	pP	35 44.0
COL	EP	16 37 08.0
	IpP	37 39.0
	EP'	41 07.0
MAY 7		
H-18 00 23.4		
12.1N 072.2W		
h ABOUT 058KM		
SJP	EP	18 02 23.5
TUC	IP	18 08 01.0
	IpP	08 16.1
EUR	IP	18 08 54.6
COL	EP	18 11 50.0
MAY 07		
BCN	E(P)	19 50 20.2
	E	50 35.5
	EL	51 28.5
MAY 07		
ALQ	E(P)	20 07 13.0
MAY 07		
FGU	EP	21 00 47.4
	ES	01 28.4
MAY 07		
HHM	E(P)	21 07 42.0
	E(S)	08 16.0

Date and Station	Phase (GCT)
	h m s
MAY 07	
ALQ EP	21 42 00.0
ES	42 36.0
MAY 07	
EUR IP	22 27 57.0
MAY 07	
HHM E(P)	22 58 32.0
E(S)	59 14.0
MAY 07	
SLC EP	23 55 26.0
ES	55 53.0
FGU EP	23 55 57.6
IS	56 30.4
EUR IP	23 56 11.0
COL E(P)	23 56 34.0
MAY 07	
ALQ EP	23 57 31.0
MAY 08	
SJP IP C	00 19 49.2
MAY 08	
ALQ EP	00 31 30.0
I	31 50.0
MAY 08	
H-02 08 45.9	
26.6S 179.8E	
h ABOUT 033KM	
TUC EP	02 21 33.9
MAY 08	
H-04 28 20.7	
15.9S 171.9W	
h ABOUT 033KM	
TUC IP	04 40 04.8
COL EP	04 40 41.8
MAY 8	
H-08 50 56.3	
54.9N 163.8W	
h ABOUT 090KM	
COL IP	08 53 55.5
ES	56 19.0
ISCP	09 02 48.0
I	03 35.0
ESCS	06 25.0
HHM IP	08 57 08.0
ES	09 02 07.9
SCP	03 33.9
UKI EP	08 57 11.0
EpP	57 32.5
BUT EP	08 57 26.0
EPP	58 40.4
ISCP	09 03 42.0
KIP IP	08 57 30.1
IPP	58 44.3
HON IP	08 57 31.4
IPP	58 45.0
BOZ IP	08 57 36.5
EPP	58 55.0
EUR IP	08 57 44.4
IpP	58 04.4
SCP	09 03 49.0
SLC EP	08 57 57.2
ESCP	09 03 55.2
FGU IP	08 58 07.9
ISCP	09 03 59.7
BCN EP	08 58 11.2
EpP	58 33.4
E(sP)	58 44.3
I(PP)	58 54.8
ISCP	09 04 01.8
E	04 45.8
TUC IP	08 58 50.9
I(pP)	59 13.0
E&P	59 30.0
SCP	09 04 20.0
ALQ P	08 58 55.0
E	09 01 12.0
SCP	04 22.1
CSC EP	09 00 47.0
SJP IP	09 02 55.0
MAY 8	
H-10 22 09.6	
36.4N 141.0E	
h ABOUT 045KM	
GUA EP	10 27 14.0
ES	31 23.0
COL IP	10 30 58.9
I	31 20.0
ES	38 06.0
HON EP	10 31 38.0
IS	39 16.0
ESS	42 58.0
EL	44 34.0
KIP E(P)	10 31 42.0
ES	39 16.0
HHM IP	10 33 33.2
BUT IP	10 33 42.0
I	34 01.0
I(S)	43 06.8
BOZ EP	10 33 53.0
EUR IP	10 33 57.2
IpP	34 12.0
E(PP)	36 56.5
ES	43 41.5
SLC EP	10 34 06.1
BCN EP	10 34 13.7
FGU I(P)	10 34 24.2
TUC IP	10 34 38.0
ALQ IP	10 34 43.9
pP	34 56.0
ES	45 04.0
CSC ESKS	10 46 28.0
PHI E(S)	10 46 48.0
MAY 08	
EUR IP	12 54 27.7
MAY 8	
H-13 56 27.4	
58.8S 062.4W	
h ABOUT 035KM	
COL EP'	14 15 39.0
MAY 8	
H-14 15 03.4	
21.7N 084.9E	
h ABOUT 033KM	
COL E(P)	14 27 37.0
MAY 08	
HHM E(P)	14 17 49.0
MAY 8	
H-15 23 58.9	
05.3N 125.6E	
h ABOUT 060KM	
KIP IP	15 35 40.5
COL IP	15 36 22.0
HHM E(P)	15 38 04.8
EPP	42 24.8
EUR IP'	15 42 15.0
TUC EPP	15 43 32.0
E	50 17.0
ALQ IP'	15 42 40.0
E(pP')	42 59.0
MAY 08	
COL EP	15 45 43.3
MAY 08	
TUC IP	17 14 56.0
MAY 08	
TUC E(P)	17 26 44.0
E	26 51.0
E	27 08.3
EUR E(P)	17 27 30.5
FGU E(P)	17 27 41.0
BOZ EP	17 28 31.0
E(S)	28 43.0
BUT EP	17 28 45.9
ES	29 13.9
HHM E(P)	17 29 13.0
MAY 08	
EUR EP	18 33 45.7
MAY 08	
EUR E(P)	19 06 48.8
MAY 8	
H-19 15 39.7	
17.2S 174.9W	
h ABOUT 200KM	
TUC EP	19 27 20.7
FGU E(P)	19 27 48.4
COL IP	19 27 50.3
I(pP)	28 48.0
MAY 08	
COL EP	20 16 11.0
MAY 08	
BOZ EP	20 23 36.0
E	23 51.0
BUT EP	20 23 51.6
ES	24 15.8
MAY 8	
H-20 28 08.9	
15.0S 172.9W	
h ABOUT 033KM	
TUC EP	20 39 55.2
COL IP	20 40 25.4
IpP	40 33.0
MAY 8	
H-21 26 58.4	
32.4N 141.3E	
h ABOUT 069KM	
COL E(P)	21 36 13.0
MAY 08	
FGU EP	21 34 12.3
MAY 08	
TUC EPN	21 54 10.3
EPG	54 21.1
ES	54 36.0
MAY 08	
ALQ IP	22 14 51.0
IS	14 53.5
MAY 08	
BUT I(P)	22 23 07.2
MAY 08	
FGU IP	23 40 31.5
MAY 09	
SJP IP D	01 48 45.5
MAY 09	
COL E(P)	02 26 31.0
MAY 09	
TUC EP	02 44 12.0
E	44 22.5
ALQ EP	02 44 16.0

Date and Station	Phase	(GCT)
		h m s
MAY 09		
EUR	EP	03 40 34.5
MAY 9		
H-04 31 40.3		
27.4S 179.0W		
h ABOUT 360KM		
TUC	IP	04 43 52.0
ALQ	EP	04 44 12.0
MAY 09		
COL	EP	04 51 42.0
MAY 09		
HHM	E(P)	05 10 01.0
	ES	11 18.0
MAY 09		
COL	E(P)	06 25 20.0
MAY 09		
H-07 25 53.7		
28.5S 179.0W		
h ABOUT 267KM		
TUC	IP	07 38 18.2
EUR	EP	07 38 22.6
MAY 9		
H-10 03 35.7		
31.7S 071.3W		
h ABOUT 084KM		
ALQ	EP	10 15 04.1
FGU	IP	10 15 40.3
MAY 9		
H-11 23 29.6		
31.7N 142.3E		
h ABOUT 033KM		
COL	EP	11 32 46.3
	I	32 58.0
BUT	EP	11 35 23.7
MAY 09		
FGU	EP	11 30 48.2
MAY 09		
FGU	EP	11 36 57.2
MAY 09		
EUR	E(P)	12 01 47.3
MAY 09		
EUR	IP	12 05 58.0
MAY 09		
UKI	EP	13 24 39.3
	I	24 49.8
	EL	25 08.3
EUR	EP	13 25 47.5
MAY 09		
FGU	EP	13 38 13.6

Date and Station	Phase	(GCT)
		h m s
MAY 09		
BOZ	EP	13 42 15.0
	IS	42 27.0
BUT	EP	13 42 29.7
	ES	42 51.4
HHM	E(P)	13 43 01.0
	ES	44 07.0
EUR	E(P)	13 43 52.5
MAY 9		
H-15 03 43.8		
12.4N 087.0W		
h ABOUT 050KM		
BHP	P	15 05 36.0
SJP	IP	15 08 25.0
	E	08 35.0
	ES	12 14.0
CSC	EP	15 08 37.0
ALQ	EP	15 09 36.5
TUC	E(P)	15 09 49.0
FGU	IP	15 10 30.7
	E	10 51.5
BCN	EP	15 10 32.5
	E	10 57.3
EUR	IP	15 10 53.9
	I	11 34.4
	EPP	12 18.7
BOZ	EP	15 11 09.0
	E	11 35.0
BUT	EP	15 11 15.2
	EPP	12 50.7
HHM	EP	15 11 34.8
	I	16 20.3
COL	EP	15 14 30.3
MAY 09		
H-15 06 24.4		
12.7N 086.6W		
h ABOUT 033KM		
SJP	EP	15 11 03.8
ALQ	IP	15 12 14.5
TUC	E(P)	15 12 30.0
FGU	IP	15 13 10.0
BCN	EP	15 13 12.4
EUR	EP	15 13 34.3
	IPP	13 47.8
BOZ	EP	15 13 51.0
	EPP	14 04.0
BUT	EP	15 13 54.5
HHM	EP	15 14 17.8

Date and Station	Phase	(GCT)
		h m s
COL	EP	15 17 13.5
MAY 09		
SJP	EP	15 13 04.5
CSC	IP	15 13 18.0
	IS	15 35.0
TUC	E(P)	15 14 31.8
BCN	IP	15 15 16.0
EUR	IP	15 15 36.2
	E	17 00.1
BUT	EP	15 15 56.5
COL	IP	15 19 13.5
MAY 09		
BCN	E(P)	16 03 47.0
	EL	04 42.0
MAY 09		
ALQ	E(P)	18 02 27.0
	E	02 45.0
	E(S)	03 13.0
MAY 09		
EUR	IP	18 20 11.5
	ES	25 42.5
HHM	E(P)	18 20 41.0
	ES	21 23.0
SLC	EP	18 20 48.8
	E	21 11.8
TUC	E(P)	18 21 07.0
UKI	E(P)	18 21 28.0
ALQ	EP	18 21 29.0
	I	22 00.0
	E	23 43.0
MAY 09		
BOZ	EP	18 39 45.0
	ES	40 01.0
BUT	IP	18 39 59.5
	IS	40 26.2
SLC	EP	18 40 33.3
	EL	41 32.2
HHM	EP	18 40 35.5
	I	40 43.7
	IS	41 38.7
EUR	E	18 41 06.5
MAY 09		
BUT	IP	18 43 02.5
	IS	43 30.8
MAY 09		
BOZ	EP	18 51 42.5
	ES	51 58.0
BUT	EP	18 51 57.3
	ES	52 25.3

Date and Station	Phase	(GCT)
		h m s
HHM	E(P)	18 52 32.0
	ES	08 53 38.0
MAY 09		
H-19 28 02.3		
52.3S 027.5E		
h ABOUT 033KM		
TUC	EP'	19 47 32.0
	E	47 46.5
BCN	IP'	19 47 38.0
	E	47 54.8
	E	48 04.6
EUR	EP'	19 47 55.7
MAY 09		
BOZ	EP	19 33 26.5
	ES	33 41.7
BUT	IP	19 33 42.8
	IS	34 10.0
HHM	E(P)	19 34 20.0
	I	34 27.0
	ES	35 23.0
MAY 09		
ALQ	E(P)	20 02 06.0
	I	02 19.0
	E(S)	02 56.0
MAY 09		
BUT	EP	20 26 50.3
	ES	27 17.8
MAY 09		
BOZ	EP	20 31 11.0
	ES	31 27.0
BUT	EP	20 31 28.2
	ES	31 54.8
MAY 9		
H-20 45 12.6		
53.8N 165.5W		
h ABOUT 027KM		
COL	E(P)	20 48 31.0
	I	50 33.0
EUR	IP	20 52 14.0
TUC	EP	20 53 18.0
	E	53 30.0
MAY 09		
EUR	IP	21 40 52.1
MAY 09		
ALQ	E(P)	21 58 30.0
MAY 09		
BCN	I(P)	22 19 44.1
	I	19 53.4
	I	20 09.6
MAY 09		
HHM	E(P)	22 23 33.0
	ES	24 08.0
EUR	IP	22 23 38.1

Date and Station	Phase (GCT)
	h m s
MAY 09	
BCN I(P)	22 33 43.6
I	34 03.6
MAY 09	
TUC E(P)	22 50 02.0
MAY 09	
ALQ E(P)	23 00 00.0
MAY 09	
BCN E(P)	23 19 57.1
E	20 15.6
MAY 09	
BCN EP	23 20 49.6
MAY 09	
EUR E(P)	23 45 44.5
MAY 10	
COL EP	00 22 29.0
MAY 10	
H-01 49 37.9	
30.3N 130.9E	
h ABOUT 134KM	
COL EP	01 59 29.0
HHM EP	02 01 47.5
EUR EP	02 02 10.4
MAY 10	
H-03 06 50.3	
51.1N 172.9E	
h ABOUT 033KM	
COL EP	03 12 09.0
I	12 25.0
EUR EP	03 15 39.8
MAY 10	
H-04 28 42.6	
20.2S 168.1E	
h ABOUT 040KM	
COL EP	04 41 43.4
I▷P	41 55.0
BCN EP	04 41 49.0
I▷P	42 00.7
EUR IP	04 41 50.0
TUC IP	04 41 55.4
I▷P	42 07.0
HHM E(P)	04 42 05.0
ALQ EP	04 42 14.8
E	42 52.0
MAY 10	
EUR EP	05 31 06.7
MAY 10	
SIT EP	07 05 45.3
ES	05 54.0
MAY 10	
ALQ E(P)	08 03 20.0

Date and Station	Phase (GCT)
	h m s
MAY 10	
ALQ E(P)	09 38 27.0
MAY 10	
H-10 29 12.9	
21.5S 178.5W	
h ABOUT 175KM	
ALQ EP	10 41 46.0
MAY 10	
EUR EP	10 42 08.8
MAY 10	
EUR IP	10 48 52.1
MAY 10	
H-11 09 43.3	
08.2S 068.1E	
h ABOUT 033KM	
EUR IP'	11 29 26.2
E	31 17.5
E	31 50.3
EPP	32 57.6
TUC EP'	11 29 37.0
BCN EP'	11 29 39.8
E	29 46.5
E	29 54.2
MAY 10	
EUR E(P)	12 08 10.5
MAY 10	
BCN IP	13 04 22.3
ES	04 54.0
MAY 10	
H-13 05 22.5	
8.0S 074.4W	
h ABOUT 143KM	
ALQ EP	13 14 22.0
I▷P	14 57.0
TUC IP	13 14 27.0
BCN EP	13 15 04.1
EUR EP	13 15 23.5
COL IP	13 18 08.5
MAY 10	
EUR I(P)	14 56 10.0
MAY 10	
EUR IP	17 56 19.3
MAY 10	
BOZ IP	19 10 04.0
IS	10 19.5
BUT EP	19 10 19.1
ES	10 44.7
HHM EP	19 10 52.5
I	11 04.5
I	11 46.5

Date and Station	Phase (GCT)
	h m s
EUR EP	19 11 32.3
E	11 42.5
I	13 17.3
MAY 10	
BOZ EP	19 32 53.0
ES	33 06.0
BUT EP	19 33 07.7
ES	33 35.2
MAY 10	
HHM EP	19 33 51.5
MAY 10	
SLC E(P)	19 46 56.8
EL	47 53.3
MAY 10	
H-20 38 56.0	
5.8S 108.1W	
h ABOUT 033KM	
EUR EP	20 47 15.0
MAY 10	
HHM E(P)	21 01 29.0
ES	02 10.0
MAY 10	
HHM EP	21 33 38.7
E	33 59.5
MAY 10	
EUR EP	21 44 10.2
MAY 10	
HHM E(P)	22 01 00.0
MAY 10	
BOZ EP	22 15 01.0
ES	15 16.0
BUT EP	22 15 17.0
ES	15 40.7
MAY 10	
H-22 22 42.7	
2.1S 077.6W	
h ABOUT 030KM	
BHP P	22 25 24.1
S	27 26.0
SJP EP	22 27 48.2
ES	32 02.0
CSC EP	22 29 44.0
ES	35 26.0
WAS I(P)	22 30 29.5
ES	36 28.0
PHI EP	22 30 36.0
ES	36 45.0
TUC IP	22 31 09.0
ES	38 07.0
BCN EP	22 31 48.3

Date and Station	Phase (GCT)
	h m s
EUR IP	22 32 09.0
IS	39 28.2
ISCS	41 43.1
ELG	51 31.4
ELR	54 57.4
BOZ EP	22 32 20.7
ES	40 07.0
BUT EP	22 32 27.7
EPCP	33 16.2
ES	40 24.7
UKI EP	22 32 41.1
HHM EP	22 32 43.5
ES	40 49.5
HON E(P)	22 35 06.0
ES	45 20.0
KIP E(P)	22 35 07.0
ES	45 24.0
COL IP	22 35 09.0
EPP	38 16.0
MAY 10	
TUC IP	22 45 37.8
MAY 10	
BCN IP	23 26 01.8
IS	26 13.7
MAY 10	
SLC EP	23 31 57.9
MAY 10	
EUR EP	23 43 39.9
MAY 10	
EUR E(P)	23 51 03.4
MAY 11	
TUC EP	02 48 23.0
MAY 11	
H-02 55 59.0	
45.0N 110.4W	
h ABOUT 033KM	
BOZ EP	02 56 13.0
ES	56 28.0
BUT EP	02 56 28.7
ES	56 53.7
HHM E(P)	02 57 04.0
I	57 15.5
E(S)	58 08.5
MAY 11	
H-03 00 58.7	
45.1N 110.8W	
h ABOUT 015KM	
BOZ IP	03 01 13.0
ES	01 25.0
BUT EP	03 01 27.3
I(S)	01 38.5

Date and Station	Phase	(GCT)
		h m s
HHM	EP	03 02 01.5
	I	02 13.5
	I	02 25.5
SLC	EP	03 02 09.3
	E(S)	03 04.3
FUR	IP	03 02 38.6
MAY 11		
BHP	IP	03 40 45.0
	IS	41 51.0
MAY 11		
H-04 44 26.8		
15.7S 176.7W		
h ABOUT 487KM		
BCN	IP	04 55 35.4
FUR	IP	04 55 39.9
TUC	IP	04 55 41.3
	IPCP	55 48.0
	EPP	57 09.5
COL	IP	04 56 02.8
	IPP	57 35.0
HHM	EP	04 56 08.4
BOZ	EP	04 56 13.4
MAY 11		
BHP	IP	06 43 32.0
	IS	44 09.0
MAY 11		
COL	EP	07 06 16.0
TUC	E(P)	07 11 11.5
MAY 11		
H-07 49 47.3		
17.8S 178.5W		
h ABOUT 594KM		
COL	EP	08 01 23.0
MAY 11		
TUC	E(P)	08 51 45.5
MAY 11		
BHP	IP	12 21 41.0
MAY 11		
EUR	EP	12 35 00.3
MAY 11		
HHM	E(P)	14 18 18.0
	ES	19 11.4
MAY 11		
BCN	IP	14 34 43.9
BHP	IP	14 38 25.0
MAY 11		
EUR	IP	16 22 34.6
MAY 11		
H-17 49 41.9		
24.1N 122.3E		
h ABOUT 033KM		

Date and Station	Phase	(GCT)
		h m s
COL	EP	18 00 42.0
	I	01 27.0
HHM	EP	18 02 50.5
	E	03 09.3
	I	03 34.3
EUR	EP	18 03 11.5
MAY 11		
TUC	E(P)	18 00 49.0
MAY 11		
SJP	IP	18 23 04.0
MAY 11		
EUR	IP	19 08 34.6
MAY 11		
H-19 44 24.2		
34.8S 108.1W		
h ABOUT 033KM		
TUC	E(P)	19 55 14.2
EUR	IP	19 56 00.1
MAY 11		
EUR	I(P)	20 33 18.5
	I	35 27.2
MAY 11		
EUR	IP	21 27 25.7
MAY 11		
EUR	IP	22 22 05.0
MAY 11		
EUR	IP	22 55 25.7
	I	56 23.6
MAY 11		
BOZ	EP	23 06 33.5
	ES	06 45.0
BUT	IP	23 06 39.9
	IS	06 56.4
HHM	EP	23 07 00.2
	I	07 15.2
	IS	08 14.2
EUR	IP	23 08 07.0
	I	08 46.2
	I	09 36.3
MAY 11		
SIT	EP	23 31 36.5
	ES	31 44.5
MAY 12		
COL	EP	00 47 22.0
BOZ	EP	00 51 21.0
	E(S)	51 37.0
BUT	EP	00 51 36.8
	ES	52 02.1
HHM	E(P)	00 52 00.0
	E	52 21.0
	E(S)	53 12.0

Date and Station	Phase	(GCT)
		h m s
MAY 12		
EUR	EP	00 58 01.0
MAY 12		
H-01 07 37.1		
41.9N 137.1E		
h ABOUT 302KM		
COL	IP	01 15 40.2
HHM	IP	01 18 20.8
EUR	IP	01 18 49.6
BCN	EP	01 19 07.5
TUC	IP	01 19 32.1
MAY 12		
H-02 57 15.5		
36.5N 140.6E		
h ABOUT 033KM		
COL	IP	03 06 07.3
EUR	IP	03 09 05.3
MAY 12		
EUR	EP	04 25 28.7
MAY 12		
EUR	IP	06 02 50.1
MAY 12		
EUR	IP	08 14 20.7
MAY 12		
BUT	EP	09 07 33.6
	ES	07 51.0
MAY 12		
EUR	IP	09 10 01.3
BCN	E(P)	09 10 49.1
	EL	12 09.4
MAY 12		
H-09 42 57.3		
57.5S 159.4E		
h ABOUT 033KM		
HON	E(S)	10 05 51.0
	EL	23 42.0
KIP	IP	09 55 37.1
TUC	EP'	10 01 25.0
	I	01 37.0
	EPKKP	12 11.0
BCN	EP'	10 01 40.3
EUR	IP'	10 01 43.0
ALQ	EP'	10 01 43.0
BUT	IP'	10 01 56.6
	I	02 23.7
	IPP	03 30.4
BOZ	EP'	10 01 57.0
	E	02 13.0
	EPP	02 31.0

Date and Station	Phase	(GCT)
		h m s
COL	EP'	10 01 57.0
	E	03 03.0
HHM	EP'	10 01 57.2
MAY 12		
MAY 12		
ALQ	E(P)	10 14 36.0
MAY 12		
H-11 00 50.1		
2.7S 077.0W		
h ABOUT 115KM		
ALQ	EP	11 09 06.0
MAY 12		
COL	E(P)	12 13 20.0
	E	15 48.0
MAY 12		
BHP	IP D	13 18 27.0
	IS	18 55.0
MAY 12		
BUT	IP	13 53 19.6
	ES	53 43.0
MAY 12		
EUR	EP	14 18 44.5
MAY 12		
ALQ	EP	15 01 08.0
MAY 12		
H-16 37 10.5		
42.2S 072.0W		
h ABOUT 033KM		
ALQ	EP	16 49 34.0
MAY 12		
EUR	EP	17 57 16.6
MAY 12		
EUR	EP	18 17 36.5
	E	18 40.3
MAY 12		
EUR	EP	18 57 42.4
MAY 12		
COL	EP	19 04 40.0
MAY 12		
H-19 22 30.9		
03.2S 147.0E		
h ABOUT 033KM		
COL	EP	19 34 52.9
MAY 12		
H-20 08 40.8		
57.3N 154.0W		
h ABOUT 060KM		
COL	I(P)	20 10 35.7
	IS	12 16.0
SIT	E(P)	20 11 00.0

Date and Station	Phase (GCT)
	h m s
HHM IP	20 14 05.1
I	16 29.1
PCP	17 23.1
EL	19 24.1
UKI EP	20 14 20.6
IPCP	17 40.6
BUT IP	20 14 24.9
IpP	14 40.6
EPCP	17 37.0
E	17 49.6
ES	18 59.5
BOZ IP	20 14 35.0
ES	19 20.0
EUR IP	20 14 49.9
EL	24 42.0
SLC EP	20 15 00.2
EpP	15 14.5
BCN IP	20 15 19.5
IpP	15 34.5
IPCP	17 58.3
I	19 56.5
ES	20 46.0
KIP IP	20 15 35.4
ES	21 18.0
EL	23 46.0
HON EP	20 15 37.0
E(PP)	17 22.0
IS	21 20.0
EL	23 58.0
TUC IP	20 16 01.0
IpP	16 16.2
IPCP	18 10.0
ALQ IP	20 16 02.0
IpP	16 19.0
IL	25 04.0
PHI EP	20 17 42.0
ES	25 03.0
WAS IP	20 17 44.0
I	36 36.0
CSC IP	20 17 54.0
ES	25 23.0
SJP IP	20 20 09.0
BHP P	20 20 10.0
MAY 12	
H-20 37 17.8	
56.1N 163.1E	
h ABOUT 069KM	
COL IP	20 42 37.3
HHM E(P)	20 45 58.0
EPCP	47 21.0
BOZ E(P)	20 46 20.0
EUR IP	20 46 34.5
SLC EP	20 46 43.0

Date and Station	Phase (GCT)
	h m s
BCN EP	20 46 58.9
TUC EP	20 47 30.5
MAY 12	
ALQ EP	21 50 08.0
MAY 12	
ALQ EP	22 16 49.0
MAY 13	
H-01 32 38.6	
06.9N 073.3W	
h ABOUT 145KM	
BHP E(P)	01 34 08.0
SJP E(P)	01 35 42.0
TUC IP	01 40 25.9
EUR IP	01 41 22.4
MAY 13	
COL IP	02 12 17.6
E	14 41.0
MAY 13	
BUT EP	04 13 02.2
MAY 13	
EUR EP	04 28 48.5
MAY 13	
BUT EP	04 45 42.7
MAY 13	
EUR IP	04 50 46.5
MAY 13	
COL EP	05 55 55.0
MAY 13	
COL EP	06 16 43.0
MAY 13	
H-07 10 37.4	
25.9S 179.8E	
h ABOUT 448KM	
TUC IP	07 22 40.3
EUR IP	07 22 42.3
MAY 13	
EUR EP	07 47 42.5
MAY 13	
ALQ EP	07 54 24.0
MAY 13	
H-09 44 12.3	
40.4N 142.2E	
h ABOUT 052KM	
COL EP	09 52 32.0
HHM EP	09 55 14.1
EpP	55 27.1
BUT EP	09 55 30.4
EpP	55 40.5
EUR EP	09 55 39.8

Date and Station	Phase (GCT)
	h m s
ALQ EP	09 56 29.0
MAY 13	
BUT EP	10 30 33.4
BHP P	10 34 08.0
MAY 13	
COL EP	12 09 07.0
MAY 13	
H-12 44 01.4	
14.6N 092.9W	
h ABOUT 061KM	
BHP IP C	12 47 21.0
CSC IP	12 48 55.0
ES	53 02.0
ALQ IP	12 49 09.2
S	53 36.0
I	59 00.0
TUC IP	12 49 12.5
HON ES	13 02 51.0
E	10 00.0
EL	12 30.0
BCN IP	12 49 59.1
I(sP)	50 28.6
E	51 58.6
EPCP	53 05.6
E	59 41.6
SLC EP	12 50 14.8
E	51 44.0
EPCP	53 10.0
EUR IP	12 50 25.0
BOZ IP	12 50 47.5
EPCP	53 21.0
BUT IP	12 50 54.3
EpP	51 06.3
EPCP	53 23.7
EL	58 05.3
HHM IP	12 51 15.1
I	51 43.1
SJP E	12 49 11.0
EPCP	52 58.0
EL	54 30.0
KIP EP	12 54 15.0
COL IP	12 54 18.0
IPCP	54 59.0
MAY 13	
TUC IP	12 56 24.3
BCN EP	12 57 09.6
SLC EP	12 57 23.1
EUR IP	12 57 34.5
MAY 13	
COL IP	13 01 29.7

Date and Station	Phase (GCT)
	h m s
MAY 13	
H-13 12 55.6	
14.1N 093.1W	
h ABOUT 033KM	
ALQ EP	13 18 09.4
TUC EP	13 18 12.5
I	18 14.0
BCN EP	13 18 59.1
EUR IP	13 19 25.2
I	19 34.7
BUT EP	13 19 55.3
HHM EP	13 20 15.1
COL IP	13 23 19.7
MAY 13	
H-14 07 46.5	
19.5S 169.2E	
h ABOUT 158KM	
UKI EP	14 20 10.6
COL IP	14 20 28.1
ES	31 10.0
BCN IP	14 20 32.1
E	20 46.5
EpP	21 10.9
EUR IP	14 20 34.7
IPP	24 12.5
TUC IP	14 20 39.6
E	20 57.6
ALQ EP	14 20 59.0
MAY 13	
BUT EP	14 28 47.7
MAY 13	
BUT EP	14 48 41.0
ES	49 08.7
MAY 13	
EUR IP	17 15 23.2
MAY 13	
H-17 35 45.7	
05.5S 154.6E	
h ABOUT 386KM	
COL EP	17 47 24.0
EpP	48 52.0
MAY 13	
H-17 50 19.3	
61.1N 151.0W	
h ABOUT 096KM	
COL IP	17 51 21.0
I	51 44.0
I	56 24.0
HHM EP	17 55 30.0
I(pP)	55 44.5
EUR EP	17 56 24.5

Date and Station	Phase (GCT)
	h m s
TUC E(P)	17 57 37.0
MAY 13	
H-18 03 04.4	
20.6S 070.7W	
h ABOUT 033KM	
ALQ E(P)	18 13 40.0
TUC E(P)	18 13 58.0
BCN E(P)	18 14 31.4
EUR IP	18 14 37.2
HHM EP	18 15 06.0
MAY 13	
COL E(P)	18 15 43.0
MAY 13	
EUR IP	18 43 41.9
MAY 13	
HHM E(P)	18 47 24.0
E(S)	48 00.0
MAY 13	
EUR IP	19 20 46.0
MAY 13	
BCN IP	19 25 12.1
MAY 13	
EUR I	19 27 01.0
MAY 13	
COL E(P)	20 28 45.0
TUC EP	20 30 49.0
MAY 13	
ALQ E(P)	22 46 06.0
ES	46 45.0
MAY 13	
H-22 48 07.4	
6.1S 149.9E	
h ABOUT 065KM	
COL EP	23 00 31.0
MAY 13	
HHM E(P)	22 52 46.0
E(S)	53 41.0
MAY 13	
EUR FP	23 59 15.5
MAY 14	
ALQ EP	00 43 55.0
IS	44 17.0
MAY 14	
BOZ EP	00 52 41.5
ES	52 53.0
BUT EP	00 52 48.6
ES	53 04.8
MAY 14	
TUC E(P)	01 05 10.5

Date and Station	Phase (GCT)
	h m s
MAY 14	
BCN EP	03 59 52.7
MAY 14	
BCN EP	04 53 05.4
MAY 14	
BCN EP	04 53 48.1
EL	54 46.0
MAY 14	
BCN EP	04 55 33.8
EL	56 47.1
EUR EP	04 56 19.2
E	58 30.0
MAY 14	
H-08 05 28.9	
9.8N 062.0W	
h ABOUT 052KM	
ALQ EP	08 14 02.0
COL EP	08 17 32.0
MAY 14	
EUR IP	10 00 13.8
I	00 21.2
MAY 14	
H-11 23 02.1	
.7N 080.2W	
h ABOUT 025KM	
SJP E(P)	11 28 01.0
ALQ EP	11 30 53.5
TUC E(P)	11 30 58.0
MAY 14	
BCN IP	13 36 46.4
I	37 02.7
EL	37 51.7
EUR IP	13 37 31.3
I	39 05.0
I	39 42.0
ALQ E(P)	13 37 45.0
MAY 14	
H-13 50 42.3	
57.4N 154.0W	
h ABOUT 042KM	
COL FP	13 52 39.7
HHM EP	13 56 07.7
EUR IP	13 56 52.4
EPCP	59 49.8
BCN EP	13 57 22.2
TUC IP	13 58 03.3
ALQ IP	13 58 04.0
PCP	14 00 14.9

Date and Station	Phase (GCT)
	h m s
MAY 14	
H-15 08 46.4	
5.7S 127.7E	
h ABOUT 405KM	
COL EP	15 21 10.0
EUR IP'	15 26 40.1
EPP	27 37.2
TUC IP'	15 26 51.2
MAY 14	
EUR IP	15 10 05.1
MAY 14	
EUR E(P)	15 20 44.4
MAY 14	
SLC E(P)	19 31 08.8
MAY 14	
BCN EP	20 20 19.8
EL	20 46.8
MAY 14	
BCN EP	21 42 57.7
MAY 14	
H-23 14 45.8	
04.1S 152.9E	
h ABOUT 047KM	
COL IP	23 26 57.0
EUR E(P)	23 27 59.0
MAY 14	
TUC E(P)	23 41 06.0
SLC IP	23 42 24.6
IS	42 50.6
MAY 15	
H-02 17 59.3	
45.1S 076.7W	
h ABOUT 033KM	
TUC E(P)	02 30 23.0
COL IP'	02 37 28.0
E	37 50.0
MAY 15	
H-02 52 39.7	
03.4S 146.9E	
h ABOUT 033KM	
HON ES	03 11 02.0
EL	19 15.0
KIP ES	03 11 02.0
EL	17 18.0
COL IP	03 05 00.0
EUR EP	03 06 15.4
HHM E(P)	03 06 18.0
SJP EP'	03 12 17.0
MAY 15	
COL IP	03 11 11.5

Date and Station	Phase (GCT)
	h m s
MAY 15	
HHM EP	03 27 38.8
I	28 15.8
MAY 15	
COL EP	06 22 26.0
EUR EP	06 26 01.0
MAY 15	
HHM E(P)	06 34 08.0
ES	35 09.0
BCN EP	06 34 56.1
F	35 46.2
MAY 15	
H-06 35 24.8	
38.5N 075.5E	
h ABOUT 033KM	
COL FP	06 46 43.0
MAY 15	
EUR EP	06 56 10.5
TUC IP	06 56 10.5
COL IP	06 56 31.5
MAY 15	
SJP E(P)	08 16 29.0
E	17 38.0
MAY 15	
EUR IP	10 40 19.0
BCN EP	10 40 21.9
MAY 15	
BCN EP	10 41 28.4
MAY 15	
H-11 15 39.5	
41.8N 020.2E	
h ABOUT 033KM	
COL IP	11 27 09.2
HHM EP	11 27 57.0
MAY 15	
UKI IP	11 46 24.6
ES	46 33.9
MAY 15	
UKI IP	11 52 40.9
IS	52 47.6
MAY 15	
H-12 08 08.7	
38.0N 026.5W	
h ABOUT 033KM	
HHM E(P)	12 18 23.0
E	18 28.0
EUR E(P)	12 18 59.0
IPCP	19 26.3
EPP	21 20.5
TUC E(P)	12 19 02.0
COL IP	12 19 05.0

Date and Station	Phase (GCT)
	h m s
MAY 15	
COL E(P)	13 42 18.0
MAY 15	
H-15 32 14.0	
24.1N 122.8E	
h ABOUT 059KM	
COL EP	15 43 10.1
HHM EP	15 45 18.7
MAY 15	
EUR IP	16 28 25.0
MAY 15	
ALQ E(P)	19 05 49.0
E	06 56.0
MAY 15	
TUC IP	19 08 48.4
BOZ EP	19 09 40.0
E	09 55.0
HHM E(P)	19 10 27.0
I	10 41.0
ES	11 38.7
MAY 15	
TUC IP	19 10 45.0
EUR E(P)	19 11 22.1
MAY 15	
ALQ EP	19 36 12.0
MAY 15	
TUC EP	19 42 55.5
EUR EP	19 44 25.5
MAY 15	
TUC E(P)	20 42 29.5
EUR IP	20 44 02.7
MAY 15	
TUC E(P)	21 15 07.5
MAY 15	
EUR E	22 19 05.6
MAY 15	
TUC EP	22 58 28.6
MAY 15	
EUR E(P)	23 11 44.5
MAY 15	
HHM EP	23 14 26.4
MAY 15	
BCN IP	23 23 47.6
MAY 15	
EUR IP	23 44 17.0
MAY 16	
TUC E(P)	00 58 03.5

Date and Station	Phase (GCT)
	h m s
MAY 16	
H-01 28 05.7	
22.4S 171.7E	
h ABOUT 084KM	
EUR IP	01 41 03.9
COL IP	01 41 05.3
TUC EP	01 41 06.0
MAY 16	
EUR EP	03 03 46.8
E	04 50.2
MAY 16	
TUC E(P)	03 13 46.0
MAY 16	
BHP EP	03 50 24.0
MAY 16	
EUR EP	04 05 41.4
MAY 16	
EUR IP	07 35 26.7
IS	35 57.0
MAY 16	
EUR EP	09 16 39.9
MAY 16	
COL EP	12 27 45.0
EUR EP	12 33 19.4
MAY 16	
BHP P	13 10 09.0
MAY 16	
BOZ EP	15 30 10.5
ES	30 25.0
BUT EP	15 30 23.8
IS	30 50.2
MAY 16	
H-15 52 15.4	
00.9S 128.6E	
h ABOUT 024KM	
COL EP	16 05 06.0
I(pP)	05 20.0
EUR EPP	16 11 10.8
MAY 16	
H-16 17 59.9	
.9S 128.8E	
h ABOUT 033KM	
COL EP	16 30 49.0
EPP	34 28.0
MAY 16	
H-19 20 09.0	
18.0S 178.4W	
h ABOUT 565KM	
EUR IP	19 31 30.3
TUC IP	19 31 32.0
COL IP	19 31 49.8

Date and Station	Phase (GCT)
	h m s
ALQ EP	19 31 52.8
MAY 16	
ALQ EP	19 54 19.0
I	54 25.2
MAY 16	
H-20 42 33.5	
16.8N 099.0W	
h ABOUT 033KM	
TUC EP	20 46 52.0
EPP	47 08.8
ALQ EP	20 46 56.0
BCN EP	20 47 44.1
EUR EP	20 48 14.3
EPCP	51 32.5
HHM E(P)	20 49 15.0
E	49 41.0
COL I(P)	20 52 39.3
I(pP)	52 47.0
MAY 16	
EUR IP	20 42 42.9
MAY 16	
TUC IP	20 47 31.9
IpP	47 41.2
BCN EP	20 48 17.6
E	48 26.1
EUR IP	20 48 44.3
I	49 05.5
BOZ EP	20 49 14.0
MAY 16	
H-22 05 53.3	
41.6N 142.0E	
h ABOUT 065KM	
COL IP	22 14 04.3
MAY 16	
EUR IP	23 32 04.5
MAY 16	
H-23 37 25.6	
43.9N 147.1E	
h ABOUT 033KM	
COL IP	23 45 06.7
I	45 34.0
MAY 17	
EUR EP	00 26 08.1
MAY 17	
HHM EP	00 33 51.1
MAY 17	
BHP EP	00 54 28.0
ES	55 05.0
MAY 17	
EUR IP	01 45 03.3

Date and Station	Phase (GCT)
	h m s
MAY 17	
EUR IP	01 54 28.3
MAY 17	
EUR IP	02 57 06.6
MAY 17	
H-04 06 39.5	
45.5N 150.9E	
h ABOUT 051KM	
COL IP	04 13 56.3
KIP E(P)	04 15 24.0
HHM IP	04 16 47.5
BUT IP	04 17 03.6
EPCP	17 39.5
I	18 08.3
BOZ EP	04 17 09.0
EPCP	17 45.0
EUR IP	04 17 18.0
I	17 40.5
SLC EP	04 17 27.9
BCN IP	04 17 37.2
I	17 42.3
RCD IP	04 17 43.3
TUC IP	04 18 05.8
ALQ IP	04 18 10.5
MAY 17	
H-06 09 20.4	
15.7N 120.1E	
h ABOUT 099KM	
COL EP	06 21 03.5
HON ES	06 31 06.0
EL	45 06.0
EUR IP	06 23 18.5
EP'	06 27 15.5
EPKKP	39 22.3
TUC I(P)	06 23 48.5
ALQ EP'	06 27 49.5
SJP IP'	06 28 50.0
MAY 17	
TUC IP	06 23 38.0
MAY 17	
HHM EP	07 03 42.4
I	03 44.4
ES	04 03.4
MAY 17	
H-07 33 15.2	
31.2S 179.7W	
h ABOUT 343KM	
KIP EP	07 42 23.0

Date and Station	Phase	(GCT)
		h m s
BCN	EP	07 45 41.1
	pP	47 04.1
	(sP)	47 37.6
TUC	IP	07 45 42.0
	IpP	01 47 04.5
EUR	IP	07 45 46.5
	IpP	47 07.5
	IsP	47 39.2
ALQ	EP	07 46 00.0
	EpP	47 24.0
MAY 17		
EUR	IP	10 28 29.5
MAY 17		
H-10 34 54.8		
32.3N 140.7E		
h ABOUT 115KM		
COL	EP	10 44 05.0
	E	44 23.0
HHM	EP	10 46 28.4
EUR	EP	10 46 50.0
BCN	EP	10 47 04.2
MAY 17		
BCN	EP	10 55 01.9
EUR	E	10 55 06.1
TUC	IP	10 55 06.5
MAY 17		
EUR	I(P)	11 43 04.0
MAY 17		
H-12 09 08.1		
41.6N 142.0E		
h ABOUT 072KM		
COL	IP	12 17 18.8
HON	ES	12 26 10.0
	EL	39 41.0
KIP	E(P)	12 19 13.0
HHM	EP	12 20 01.3
BUT	EP	12 20 19.2
	I	20 24.3
BOZ	E(P)	12 20 22.0
	EpP	20 40.0
EUR	IP	12 20 30.0
	IpP	20 47.5
	IsP	21 05.4
	I	22 45.8
SLC	EP	12 20 39.9
BCN	EP	12 20 48.3
	IpP	21 05.8
RCD	EP	12 20 52.2

Date and Station	Phase	(GCT)
		h m s
TUC	E(P)	12 21 14.0
	EpP	12 21 32.5
ALQ	EP	12 21 19.0
MAY 17		
TUC	EP	12 10 20.0
MAY 17		
BHP	IP	14 08 38.0
	IS	09 15.0
MAY 17		
H-14 11 05.7		
14.1S 073.9W		
h ABOUT 094KM		
TUC	EP	14 20 52.5
	EpP	21 18.5
EUR	IP	14 21 46.5
COL	IP	14 24 23.3
MAY 17		
BCN	IP	14 55 27.7
SLC	EP	14 56 17.1
	E	56 40.9
TUC	EP	14 56 36.0
ALQ	EP	14 56 39.0
	E	57 24.0
MAY 17		
BCN	IP	15 08 14.2
	ES	08 34.5
MAY 17		
TUC	EP	15 09 53.0
MAY 17		
ALQ	IP	16 52 56.2
	I	53 29.0
MAY 17		
BCN	EP	17 00 20.7
	EL	01 18.1
EUR	E(P)	17 00 59.5
MAY 17		
COL	EP	17 28 31.0
MAY 17		
HHM	E(P)	19 30 25.0
	ES	31 06.0
MAY 17		
EUR	E(P)	21 43 00.0
	I	44 13.9
MAY 17		
ALQ	IP	22 15 57.0
MAY 17		
BCN	IP	22 19 40.9
	ES	19 49.9
MAY 17		
BHP	IP	22 31 19.0
	IS	31 56.0

Date and Station	Phase	(GCT)
		h m s
MAY 17		
H-22 40 12.4		
24.7S 177.3W		
h ABOUT 128KM		
HON	IP	22 48 50.5
KIP	IP	22 48 51.2
BCN	EP	22 52 33.1
TUC	IP	22 52 36.0
	I	52 52.5
	IpP	53 12.2
HHM	EP	22 53 07.2
	EPP	56 46.2
COL	IP	22 53 07.2
	IpP	53 40.0
BOZ	EP	22 53 10.0
MAY 17		
BCN	E(P)	22 58 22.9
	E	58 29.9
	EL	59 03.4
MAY 17		
H-23 04 57.6		
13.5N 142.5E		
h ABOUT 163KM		
GUA	IP	23 05 37.1
	ES	06 17.0
COL	IP	23 15 51.0
MAY 17		
H-23 36 41.7		
63.5N 148.5W		
h ABOUT 033KM		
COL	EP	23 37 04.9
	IL	37 32.0
HHM	E(P)	23 41 55.0
MAY 17		
ALQ	EP	23 44 56.2
MAY 17		
EUR	I(P)	23 52 38.4
MAY 18		
BCN	IP	01 06 29.5
	IS	06 42.7
MAY 18		
BCN	EP	02 12 05.7
MAY 18		
ALQ	EP	02 20 55.0
	IS	21 10.0
MAY 18		
H-02 36 35.8		
60.5S 027.3W		
h ABOUT 033KM		
COL	EP'	02 56 31.0

Date and Station	Phase	(GCT)
		h m s
MAY 18		
H-04 04 24.9		
29.7S 068.9W		
h ABOUT 028KM		
TUC	EP	04 15 55.0
	I	15 57.0
RCD	E(P)	04 16 32.5
EUR	IP	04 16 42.3
HHM	EP	04 17 11.3
MAY 18		
COL	EP	04 30 12.0
MAY 18		
H-05 33 26.7		
29.7S 068.6W		
h ABOUT 042KM		
BHP	EP C	05 40 59.0
SJP	E(P)	05 42 07.0
TUC	EP	05 44 52.0
	IpP	45 06.0
BCN	EP	05 45 26.3
	EPCP	45 33.5
SLC	EP	05 45 37.8
EUR	IP	05 45 42.8
BOZ	EP	05 45 56.0
	E	46 05.0
BUT	EP	05 46 01.2
HHM	EP	05 46 12.1
COL	EPP	05 52 30.0
MAY 18		
ALQ	E(P)	06 39 34.0
	I	39 45.0
	I	43 11.0
MAY 18		
ALQ	EP	07 22 46.5
MAY 18		
EUR	EP	11 16 28.7
MAY 18		
HHM	EP	11 58 03.1
MAY 18		
H-12 20 34.4		
08.2S 115.6E		
h ABOUT 065KM		
KIP	E(P)	12 33 33.0
HON	ES	12 44 32.0
	E	50 19.0
	EL	13 03 20.0
COL	E(P)	12 34 15.0
	E(PP)	58 20.0
	EPKKP	12 50 37.0

Date and Station	Phase (GCT)
	h m s
HHM EP'	12 39 23.1
EUR IP'	12 39 28.6
BCN EP'	12 39 39.2
TUC EP'	12 39 41.0
ISKP	43 02.0
RCD ESKP	12 43 03.0
MAY 18	
H-13 03 35.8	
8.3S 115.7E	
h ABOUT 069KM	
COL E(P)	13 17 20.0
EPP	21 30.0
EUR EP'	13 22 29.4
BCN EP'	13 22 34.7
TUC EP'	13 22 42.0
ISKP	26 02.0
MAY 18	
BCN IP	13 44 36.0
E	44 37.7
MAY 18	
EUR EP	14 47 58.0
MAY 18	
H-14 51 14.0	
16.5S 173.1W	
h ABOUT 033KM	
TUC EP	15 03 05.5
EUR EP	15 03 06.7
COL IP	15 03 39.0
MAY 18	
H-16 32 38.7	
11.5S 162.9E	
h ABOUT 033KM	
COL EP	16 45 09.0
EUR EP	16 45 40.2
MAY 18	
EUR E(P)	16 38 33.5
MAY 18	
H-16 43 13.8	
16.1N 119.5E	
h ABOUT 060KM	
COL EP	16 55 01.0
E	55 25.0
E	55 35.0
MAY 18	
H-20 58 52.5	
36.1N 114.7W	
h ABOUT 005KM	
GCA IP	20 59 40.2
IS	21 00 17.4
EUR IP	20 59 49.0
TUC IP	21 00 08.8
ALQ EP	21 00 35.0
EL	02 26.0
MAY 18	
EUR IP	22 25 05.8
MAY 18	
EUR I	22 27 26.5
MAY 18	
H-23 16 20.1	
40.8N 141.9E	
h ABOUT 093KM	
COL IP	23 24 33.6
EUR EP	23 27 43.0
EP'P'	54 59.0
MAY 18	
H-23 47 19.6	
49.6N 156.2E	
h ABOUT 084KM	
COL EP	23 53 45.4
EUR IP	23 57 19.4
TUC EP	23 58 11.5
MAY 18	
H-23 58 54.9	
37.6N 072.8E	
h ABOUT 091KM	
COL IP	24 10 17.0
MAY 19	
H-01 03 06.2	
46.3S 074.8W	
h ABOUT 048KM	
BHP IP C	01 12 35.0
IS	20 22.0
SJP IP D	01 13 41.2
ES	22 33.0
EL	29 56.0
CSC EP	01 15 12.0
EPP	18 22.0
ES	25 22.0
TUC IP	01 15 36.0
E(P'P')	42 26.0
ALQ IP	01 15 41.2
E	18 04.4
IS	25 04.0
PHI E(P)	01 15 47.0
IS	26 39.0
BCN IP	01 16 00.2
EPP	19 36.9
PKKP	33 41.7
SLC EP	01 16 14.3
EPP	19 59.1
EUR IP	01 16 15.5
EPP	20 05.0
IPKKP	33 31.5
EP'P'	41 35.4
BOZ EP	01 16 34.0
EPP	20 33.0
BUT EP	01 16 38.8
EPP	20 37.3
ESKS	27 21.2
ESP	29 34.0
HON E(P)	01 16 58.0
ISKS	27 40.0
KIP E(P)	01 17 00.0
ISKS	27 38.0
COL IP'	01 21 58.0
E	22 40.0
MAY 19	
BCN IP	01 28 24.6
IS	28 26.2
MAY 19	
BCN IP	01 47 35.7
IS	47 37.2
MAY 19	
BCN IP	01 52 08.2
IS	52 10.2
EUR EP	01 53 01.5
MAY 19	
ALQ EP	02 23 15.0
I	24 12.5
MAY 19	
ALQ EP	03 49 53.5
TUC E(P)	03 50 02.5
MAY 19	
H-04 33 36.3	
17.0N 100.0W	
h ABOUT 040KM	
TUC EP	04 37 45.0
BCN EP	04 38 41.5
EUR IP	04 39 10.8
HHM EP	04 40 12.0
COL EP	04 43 22.0
E	43 40.0
MAY 19	
CSC EP	06 30 46.0
MAY 19	
BOZ EP	07 28 47.0
ES	29 06.0
MAY 19	
BOZ EP	08 05 48.0
ES	06 07.0
BUT EP	08 06 00.2
IS	06 31.5
MAY 19	
H-08 10 18.5	
44.4N 112.0W	
h ABOUT 015KM	
BOZ EP	08 10 43.0
ES	11 03.0
BUT E(P)	08 10 56.7
ES	11 26.7
SLC E(P)	08 11 16.4
E	11 27.4
EL	12 18.4
HHM E(P)	08 11 24.0
EL	12 41.0
MAY 19	
BOZ EP	09 19 43.0
ES	20 03.0
MAY 19	
H-09 48 26.0	
04.1S 103.1E	
h ABOUT 096KM	
ALQ EP'	10 07 38.0
ESKP	11 15.0
MAY 19	
H-10 00 05.0	
46.0N 014.6E	
h ABOUT 032KM	
COL IP	10 11 06.1
HHM EP	10 11 49.0
ALQ EP	10 12 32.1
EUR IP	10 12 35.3
MAY 19	
BOZ EP	10 01 53.0
ES	02 12.5
ALQ E(P)	10 02 06.0
MAY 19	
TUC E	11 40 09.0
MAY 19	
BOZ EP	11 44 18.0
ES	44 36.0
CSC EP	11 46 23.0
MAY 19	
KIP ET	11 55 54.0
MAY 19	
KIP ET	12 22 13.0
MAY 19	
BOZ E(P)	12 56 37.0
ES	56 57.5
MAY 19	
GCA IP	15 18 17.0
MAY 19	
BOZ EP	15 21 00.5
EL	21 19.0

Date and Station	Phase	(GCT)
		h m s
SLC	EP	15 21 44.4
	EL	22 35.9
EUR	EP	15 22 18.2
MAY 19		
EUR	E(P)	16 15 36.9
MAY 19		
HHM	E(P)	18 21 43.0
MAY 19		
ALQ	E(P)	18 35 19.0
	I	35 32.0
	ES	36 12.0
MAY 19		
H-19 21 16.0		
2.5N 128.7E		
h ABOUT 102KM		
COL	EP	19 33 42.0
	E(sP)	34 21.0
MAY 19		
BUT	EP	19 47 41.3
MAY 19		
COL	I(P)	20 27 37.0
	I(S)	27 48.0
BOZ	EP	20 32 30.0
	ES	32 48.5
BUT	EP	20 32 40.1
	IL	33 14.3
SLC	EP	20 33 09.4
	EL	34 03.4
EUR	EP	20 33 46.5
MAY 19		
HHM	E(P)	20 33 09.0
	E(S)	34 28.0
MAY 19		
COL	E(P)	20 38 52.0
MAY 19		
H-21 35 47.0		
23.8N 046.0W		
h ABOUT 010KM		
SJP	IP	21 40 17.0
	IS	44 05.0
PHI	EP	21 41 53.0
	IS	46 50.0
	E	22 13 41.0
CSC	EP	21 42 17.0
	I	42 38.0
	ES	48 05.0
BHP	P	21 42 44.0
CHK	EP	21 43 14.0
	EPP	44 36.0
	ES	49 14.0
	EL	51 44.0
ALQ	IP	21 45 08.0
	ES	52 24.0
BOZ	EP	21 45 29.0
	P'P'	22 15 37.0
SLC	EP	21 45 34.5
	E	48 12.5
BUT	EP	21 45 35.8
	ES	53 36.3
	P'P'	22 15 40.5
TUC	EP	21 45 36.0
HHM	EP	21 45 41.0
	IS	53 44.0
	P'P'	22 15 28.0
EUR	IP	21 45 57.0
	EP'P'	22 15 28.9
SIT	EP	21 47 02.7
	ES	56 23.7
COL	IP	21 47 20.6
	EPP	50 21.0
	ES	56 52.0
HON	E(P)	21 49 26.0
	EPP	53 26.0
	ESKS	22 00 33.0
	IPS	02 46.0
	ESS	08 09.0
	E	15 28.0
	EL	17 42.0
KIP	ESKS	22 00 22.0
	E	01 15.0
	IPS	02 46.0
	ESS	08 10.0
	E	15 28.0
	EL	17 40.0
MAY 19		
BCN	IP	22 36 17.7
	ES	36 30.4
MAY 19		
EUR	IP	22 55 29.5
BCN	IP	22 55 37.9
	IS	55 49.6
GCA	IP	22 56 05.0
	IS	56 42.5
TUC	E(P)	22 56 23.0
MAY 19		
BUT	EP	23 09 56.4
	IS	10 18.7
MAY 19		
H-23 31 25.3		
17.7S 069.4W		
h ABOUT 137KM		
CSC	EP	23 40 26.0
	I	41 18.0
ALQ	EP	23 41 39.0
	pP	42 12.0
TUC	IP	23 41 43.0
	I(pP)	42 11.0
BCN	EP	23 42 16.4
	E	42 31.4
	EpP	42 49.4
EUR	IP	23 42 34.0
BOZ	EP	23 42 46.0
BUT	EP	23 42 50.7
	EpP	43 25.2
HHM	EP	23 43 04.0
	IpP	43 39.0
COL	EP	23 45 00.0
MAY 19		
SLC	IP	23 54 15.3
	IS	54 41.1
MAY 19		
BUT	EP	23 57 48.4
	E	58 20.4
MAY 20		
H-01 35 31.3		
08.2N 083.0W		
h ABOUT 027KM		
BHP	IP C	01 36 24.0
SJP	IP C	01 39 58.0
	E(S)	43 37.0
CSC	EP	01 41 03.0
	ES	45 46.0
BCN	EP	01 43 07.2
BUT	EP	01 43 49.2
HHM	EP	01 44 08.0
COL	EP	01 46 54.0
	EPP	49 36.0
	E	53 41.0
MAY 20		
H-02 39 59.0		
40.3S 075.6W		
h ABOUT 033KM		
TUC	E(P)	02 52 02.0
MAY 20		
H-02 43 16.3		
8.3N 083.0W		
h ABOUT 033KM		
BHP	IP C	02 44 08.0
SJP	IP	02 47 42.0
CSC	EP	02 48 45.0
	ES	53 40.0
TUC	E(P)	02 50 08.5
EUR	EP	02 51 14.4
BUT	EP	02 51 31.7
COL	EP	02 54 37.0
MAY 20		
H-03 33 32.2		
23.4S 179.9E		
h ABOUT 503KM		
TUC	EP	03 45 22.0
EUR	IP	03 45 22.5
COL	EP	03 45 44.0
MAY 20		
H-05 14 22.5		
10.4S 161.7E		
h ABOUT 090KM		
COL	IP	05 26 41.4
	IpP	27 06.0
EUR	IP	05 27 17.0
MAY 20		
BHP	EP	05 33 46.0
BUT	EP	05 41 46.1
MAY 20		
CSC	EP	05 41 28.0
EUR	E	05 45 01.2
MAY 20		
HHM	E(P)	07 23 27.0
	ES	24 41.0
MAY 20		
BUT	EP	07 24 57.1
MAY 20		
H-09 08 01.7		
19.2N 121.3E		
h ABOUT 027KM		
COL	EP	09 19 31.0
HHM	EP	09 21 32.0
MAY 20		
BUT	EP	10 23 13.1
	E	24 17.1
MAY 20		
BUT	EP	10 53 29.5
	ES	54 00.5
RCD	E(P)	10 55 12.0
COL	EP	10 58 34.9
	E	58 42.0
MAY 20		
BUT	EP	10 55 30.0
	ES	56 04.0
MAY 20		
H-11 38 05.3		
30.7S 178.3W		
h ABOUT 068KM		
HON	IP	11 47 33.3
	IS	55 18.0
KIP	IP	11 47 33.8
	IS	55 19.0

Date and Station	Phase (GCT)
	h m s
GUA IP	11 47 42.9
BCN IP	11 50 55.8
I▸P	51 15.3
I▸P	51 25.8
EPKKP	12 08 29.8
EP'P'	16 36.8
E	17 04.3
TUC IP	11 50 57.0
EPKKP	12 08 21.0
E(P'P')	16 06.0
EUR IP	11 51 01.7
I▸P	51 22.0
IPP	54 24.8
IS	12 01 44.9
EP'P'	16 25.4
E	20 16.7
EP'P'P'	37 20.2
ALQ P	11 51 16.5
EP'P'	12 16 21.0
E	23 14.0
SLC E(P)	11 51 17.1
E▸P	51 35.1
E	51 49.6
EPKKP	12 08 17.6
SIT EP	11 51 20.2
ESKS	12 01 52.0
ES	02 36.0
HHM EP	11 51 27.0
EPP	55 28.0
EPKKP	12 08 11.0
P'P'	16 29.0
BUT IP	11 51 29.8
E▸P	51 46.0
E	51 59.8
BOZ EP	11 51 34.0
EPP	55 22.0
EPKKP	12 08 13.0
EP'P'	16 30.0
COL IP	11 51 34.6
I	52 04.0
ESKS	12 02 06.0
EPKKP	08 02.0
I	08 37.0
EP'P'	16 19.0
RCD EP	11 51 49.3
ESP	12 05 04.8
EPKKP	08 00.2
BHP P	11 51 54.0
CSC IP'	11 56 39.0
E	57 16.0
IPP	57 35.0
ESKS	12 03 12.0
EPS	06 55.0
SJP EP'	11 56 43.5
ESKS	12 03 32.0
PHI EPP	11 58 05.0

Date and Station	Phase (GCT)
	h m s
MAY 20	
COL E(P)	12 49 04.0
E	49 21.0
EUR E	12 52 43.3
MAY 20	
H-13 22 08.9	
1.1N 077.6W	
h ABOUT 148KM	
ALQ IP	13 29 56.5
I▸P	30 32.0
TUC IP	13 30 04.0
EUR EP	13 31 03.8
MAY 20	
H-13 54 06.2	
24.1N 045.9W	
h ABOUT 033KM	
ALQ EP	14 03 24.0
TUC E(P)	14 03 51.2
EUR EP	14 04 12.8
MAY 20	
COL IP	16 23 59.8
IS	24 12.0
MAY 20	
H-17 01 40.2	
72.1N 126.6E	
h ABOUT 033KM	
COL IP	17 07 44.7
HHM EP	17 10 53.0
EUR EP	17 11 50.0
I	12 11.9
ALQ EP	17 12 32.0
MAY 20	
EUR EP	17 05 42.9
MAY 20	
H-19 16 33.0	
27.0S 176.3W	
h ABOUT 059KM	
TUC E(P)	19 29 08.0
EUR EP	19 29 12.7
COL E(P)	19 29 55.0
MAY 20	
EUR E(P)	19 59 05.9
MAY 20	
EUR IP	19 59 23.8
MAY 20	
EUR E(P)	20 18 10.4
MAY 20	
EUR IP	21 01 04.9

Date and Station	Phase (GCT)
	h m s
MAY 20	
H-21 04 55.4	
02.5N 128.8E	
h ABOUT 125KM	
COL EP	21 17 19.2
E	28 40.0
MAY 21	
ALQ E(P)	00 22 07.0
ES	23 10.0
MAY 21	
H-00 58 07.4	
56.0S 123.5W	
h ABOUT 033KM	
HON E(S)	01 20 26.0
EPS	21 31.0
EL	35 28.0
KIP E(PS)	01 21 32.0
EL	35 30.0
TUC E(P)	01 10 52.0
ALQ E(P)	01 11 12.0
EUR EP	01 11 29.6
MAY 21	
SIT EP	02 33 05.0
EL	33 43.5
MAY 21	
BHP IP C	07 39 38.5
IS	39 47.0
MAY 21	
BOZ EP	07 48 10.2
ES	48 29.8
MAY 21	
EUR E(P)	08 49 33.6
MAY 21	
H-09 44 40.3	
18.9N 146.0E	
h ABOUT 180KM	
GUA EP	09 46 02.0
COL EP	09 54 48.0
EUR EP	09 56 52.9
MAY 21	
H-10 16 21.2	
20.9S 069.3W	
h ABOUT 108KM	
BCN EP	10 27 29.7
E▸P	27 57.7
EUR EP	10 27 48.0
COL EP'	10 34 15.0
MAY 21	
H-15 16 06.9	
11.0S 163.1E	
h ABOUT 069KM	

Date and Station	Phase (GCT)
	h m s
COL IP	15 28 30.7
EPP	31 56.0
EUR IP	15 29 01.7
EPP	32 43.2
MAY 21	
H-16 23 29.9	
51.5N 158.8E	
h ABOUT 033KM	
COL EP	16 29 36.0
E	29 47.0
MAY 21	
H-17 10 52.0	
36.1N 139.6E	
h ABOUT 096KM	
COL EP	17 19 43.4
MAY 21	
H-17 30 15.3	
11.1S 163.3E	
h ABOUT 033KM	
HON IP	17 39 06.0
IS	46 24.0
EL	50 22.0
KIP ES	17 46 29.0
EL	50 35.0
COL IP	17 42 42.5
EUR IP	17 43 13.4
E	46 15.2
BCN EP	17 43 14.0
TUC E(P)	17 43 24.0
HHM E(P)	17 43 28.0
BUT EP	17 43 31.3
BOZ EP	17 43 37.0
MAY 21	
H-17 40 44.6	
11.0S 163.2E	
h ABOUT 069KM	
COL EP	17 53 07.0
EUR IP	17 53 38.7
MAY 21	
H-17 51 07.2	
22.2S 179.4W	
h ABOUT 580KM	
COL EP	18 03 06.0
E(▸P)	05 16.0
MAY 21	
BHP P	18 21 34.0
COL EP	18 32 03.0

Date and Station	Phase	Phase (GCT) h m s
MAY 21		
H-18 34 59.3		
10.8S 163.2E		
h ABOUT 060KM		
COL	EP	18 47 23.0
FUR	EP	18 47 53.4
	E	48 26.4
MAY 21		
EUR	IP	18 39 04.6
MAY 21		
H-20 03 29.1		
23.7N 108.6W		
h ABOUT 033KM		
TUC	EP	20 05 34.9
EUR	IP	20 07 25.1
HHM	E(P)	20 08 50.0
MAY 21		
H-20 21 04.7		
11.0S 163.4E		
h ABOUT 033KM		
COL	EP	20 33 32.0
EUR	P	20 34 02.5
	pP	34 12.6
MAY 21		
COL	EP	21 50 52.0
MAY 21		
EUR	IP	22 27 38.8
ALQ	EP	22 28 29.0
MAY 21		
EUR	EP	23 28 22.1
	E	29 23.8
MAY 22		
BCN	IP	01 06 59.1
MAY 22		
TUC	E(P)	02 06 33.0
MAY 22		
SLC	EP	02 19 13.9
	ES	19 36.7
MAY 22		
H-02 27 55.7		
11.2S 163.2E		
h ABOUT 060KM		
HON	ES	02 44 08.0
	EL	48 32.0
COL	IP	02 40 20.2
EUR	IP	02 40 50.8
	IpP	41 08.8
	IsP	41 22.7
	EPP	44 42.4
BCN	EP	02 40 52.1
BUT	EP	02 41 09.0
MAY 22		
BOZ	EP	03 45 22.5
	E	46 33.0
	E	48 38.0
MAY 22		
EUR	I	04 09 22.0
MAY 22		
H-04 24 33.5		
18.1N 106.0W		
h ABOUT 035KM		
BCN	EP	04 29 01.8
EUR	IP	04 29 37.2
	EL	37 41.4
SLC	EP	04 29 38.7
BOZ	EP	04 30 22.0
BUT	EP	04 30 27.4
	EPP	31 13.0
HHM	E(P)	04 30 48.0
COL	IP	04 33 58.0
MAY 22		
H-05 42 25.2		
46.0N 151.1E		
h ABOUT 048KM		
COL	IP	05 49 37.0
	IpP	49 51.0
EUR	IP	05 53 00.9
BCN	EP	05 53 22.0
MAY 22		
BCN	E(P)	05 45 32.5
MAY 22		
ALQ	IP	08 07 54.0
	I	08 12.0
	I	35 54.0
MAY 22		
H-10 18 26.3		
11.1S 163.5E		
h ABOUT 033KM		
COL	IP	10 30 53.5
EUR	IP	10 31 23.6
BCN	EP	10 31 24.4
MAY 22		
H-13 56 47.5		
48.7N 154.8E		
h ABOUT 054KM		
COL	IP	14 03 27.0
	E(S)	07 52.0
GUA	IP	14 03 42.0
SIT	EP	14 04 30.8
	EpP	04 43.7
	EPP	06 10.0
	ES	10 48.0
	E	11 08.0
KIP	IP	14 05 09.2
HON	EP	14 05 10.0
	IS	11 55.0
HHM	EP	14 06 26.6
UKI	EP	14 06 31.8
	EpP	06 45.7
BUT	EP	14 06 43.7
	EpP	06 59.2
BOZ	EP	14 06 50.3
	EpP	07 05.5
EUR	IP	14 06 58.8
	I	07 05.6
	ES	15 09.4
	EP'P'	35 55.2
SLC	EP	14 07 08.8
	EpP	07 24.3
	E(sP)	07 37.8
BCN	EP	14 07 19.4
	IpP	07 34.6
	IsP	07 43.4
TUC	IP	14 07 50.0
	I	10 24.2
	EP'P'	35 47.0
WAS	IP	14 09 01.5
	EPP	12 08.5
CSC	IP	14 09 14.0
	E(S)	19 56.0
MAY 22		
COL	EP	14 28 12.0
EUR	E	14 28 43.2
MAY 22		
SLC	EP	14 41 16.8
MAY 22		
EUR	IP	15 13 23.1
MAY 22		
EUR	IP	15 24 50.9
MAY 22		
EUR	IP	15 31 10.6
MAY 22		
H-15 40 00.1		
37.1N 116.0W		
h ABOUT 000KM		
BCN	IP	15 40 28.3
EUR	IP	15 40 40.7
TUC	IP	15 41 37.9
UKI	E	15 41 49.7
	EL	43 14.7
BUT	EP	15 42 20.2
BOZ	E(P)	15 42 24.0
	EL	45 00.0
HHM	EP	15 42 47.2
	EL	45 42.5
COL	IP	15 46 43.0
	EPCP	49 21.0
MAY 22		
H-15 42 51.5		
04.3N 127.9E		
h ABOUT 082KM		
GUA	EP	15 47 11.0
KIP	EP	15 54 19.9
HON	EP	15 54 20.0
COL	IP	15 55 12.0
	IpP	55 30.0
	E(PP)	58 40.0
HHM	E(P)	15 56 51.0
TUC	EPKKP	16 12 13.7
CSC	EP'	16 02 18.0
	EPP	04 44.0
BHP	P'	16 02 34.0
MAY 22		
BCN	E(P)	16 13 56.2
	E(L)	15 10.7
MAY 22		
H-16 25 37.2		
52.0N 165.4W		
h ABOUT 033KM		
COL	E(P)	16 29 12.0
	EPCP	34 15.0
SIT	EP	16 29 46.0
HHM	EP	16 32 07.4
	IPCP	34 51.9
BUT	EP	16 32 24.0
	E	34 25.0
BOZ	EP	16 32 32.5
SLC	EP	16 32 52.3
BCN	EP	16 33 02.4
	E(pP)	33 14.2
	EPCP	35 12.2
	E	35 22.7
	ES	38 46.5
TUC	EP	16 33 40.9
	I	33 42.0
	IPCP	35 27.5
	ISCP	39 19.2

Date and Station	Phase (GCT)
	h m s
MAY 22	
BCN E(P)	16 30 40.2
MAY 22	
BCN E(P)	16 40 11.6
E(L)	41 16.2
MAY 22	
BCN EP	16 53 39.1
SLC EP	16 54 31.3
TUC E(P)	16 54 40.5
E	54 49.5
BUT EP	16 55 34.2
BOZ EP	16 55 36.0
MAY 22	
H-21 53 03.7	
8.2S 115.7E	
h ABOUT 047KM	
GUA IP	22 00 04.0
HON E(P)	22 06 08.0
E(S)	17 00.0
ESS	22 46.0
EL	35 06.0
KIP E	22 06 17.0
COL E(P)	22 06 47.0
HHM EP'	22 11 53.0
BOZ EP'	22 12 01.0
TUC EP'	22 12 10.8
EPP	14 27.0
E(SKP)	15 32.0
WAS EP'	22 12 42.5
CSC EP'	22 12 47.0
MAY 22	
H-22 00 44.2	
49.3N 155.4E	
h ABOUT 033KM	
COL IP	22 07 21.2
HHM EP	22 10 21.3
BUT EP	22 10 37.6
BOZ EP	22 10 45.0
BCN EP	22 11 14.4
TUC EP	22 11 44.0
I	11 45.0
ALQ EP	22 11 49.7
IPCP	12 18.0
IPPP	15 41.3
WAS I(P)	22 13 18.0

Date and Station	Phase (GCT)
	h m s
MAY 22	
H-22 41 02.9	
37.1N 122.8W	
h ABOUT 015KM	
UKI IP	22 41 39.3
IL	42 14.6
MAY 22	
BCN EP	22 41 47.8
E	42 50.8
I(L)	43 10.3
MAY 22	
BCN EP	23 08 54.7
EL	09 31.8
MAY 23	
SJP IP	00 11 47.5
MAY 23	
H-00 51 37.6	
01.7N 126.6E	
h ABOUT 010KM	
COL EP	01 04 21.6
ALQ EP'	01 10 29.0
MAY 23	
TUC E	01 41 58.0
E	42 03.2
MAY 23	
SLC E(P)	02 20 05.8
E(L)	24 27.8
MAY 23	
H-02 27 07.2	
11.1S 163.4E	
h ABOUT 033KM	
COL IP	02 39 35.0
MAY 23	
SLC E(P)	02 39 28.3
MAY 23	
BCN E(P)	02 42 15.7
EL	43 23.4
SLC E(P)	02 43 22.8
MAY 23	
H-03 15 29.2	
60.1N 150.1W	
h ABOUT 035KM	
COL IP	03 16 43.3
EL	17 48.0
TUC E(P)	03 22 45.0
MAY 23	
SJP IP D	03 30 28.5
MAY 23	
H-03 33 24.8	
14.7S 176.2W	
h ABOUT 302KM	
HON EP	03 40 32.0
ES	46 17.0

Date and Station	Phase (GCT)
	h m s
KIP IP	03 40 33.2
GUA EP	03 41 28.0
BCN IP	03 44 44.9
EpP	45 54.1
TUC IP	03 44 52.0
IpP	46 02.0
SLC EP	03 45 08.8
EpP	46 17.8
COL IP	03 45 13.1
IpP	46 23.0
ESKS	55 00.0
ALQ IP	03 45 15.0
IpP	46 26.0
EPKKP	04 03 37.0
HHM EP	03 45 18.5
EpP	46 29.3
MAY 23	
H-03 35 36.6	
10.9S 163.1E	
h ABOUT 046KM	
COL IP	03 48 05.0
BCN EP	03 48 33.5
SLC EP	03 48 57.0
MAY 23	
H-03 57 43.8	
01.6S 080.8W	
h ABOUT 090KM	
SJP IP C	04 02 56.5
I	03 21.0
ALQ EP	04 05 40.0
TUC E(P)	04 05 44.0
HHM E(P)	04 07 23.0
ESCP	11 43.0
COL E(P)	04 10 00.0
MAY 23	
ALQ EP	04 34 42.0
MAY 23	
H-06 36 32.9	
32.9N 115.6W	
h ABOUT 015KM	
BCN IP	06 37 24.8
I	37 29.8
EL	38 06.3
TUC EP	06 37 34.0
ALQ EP	06 38 29.1
I	38 59.5
IL	40 43.0
SLC E(P)	06 38 37.8
E	39 07.3

Date and Station	Phase (GCT)
	h m s
MAY 23	
ALQ EP	06 44 36.0
I	46 18.0
ES	46 59.0
MAY 23	
BCN IP	06 43 44.9
I	43 48.8
EL	44 21.8
MAY 23	
H-06 57 52.1	
18.4N 145.4E	
h ABOUT 483KM	
GUA IP	06 59 17.0
IS	07 00 14.0
COL IP	07 07 35.3
E	08 27.0
HHM EP	07 09 27.7
BUT EP	07 09 38.1
MAY 23	
COL EP	07 01 21.4
MAY 23	
SIT IP	07 33 25.0
IS	33 44.0
I	35 19.7
MAY 23	
H-07 43 56.9	
19.2N 064.5W	
h ABOUT 047KM	
SJP IP D	07 44 24.0
BHP IP C	07 48 02.0
CSC EP	07 48 36.0
E(S)	52 16.0
WAS E	07 49 44.4
E	52 04.0
PHI E(P)	07 49 02.0
ES	53 02.0
ALQ IP	07 51 31.1
TUC IP	07 51 57.0
SLC EP	07 52 15.3
BCN EP	07 52 26.3
E	54 30.3
BUT EP	07 52 31.1
HHM EP	07 52 42.8
COL EP	07 55 05.0
MAY 23	
H-07 47 59.9	
11.1S 163.2E	
h ABOUT 021KM	
COL EP	08 00 31.0

Date and Station	Phase	(GCT)
		h m s
MAY 23		
H-07 54 32.8		
11.3S 163.0E		
h ABOUT 049KM		
COL	EP	08 07 00.0
MAY 23		
TUC	EP	08 04 30.5
MAY 23		
BOZ	EP	08 27 42.0
SJP	IP D	08 34 46.0
MAY 23		
BUT	IP	08 29 38.0
	ES	30 01.0
HHM	E(P)	08 30 09.0
	ES	31 21.0
MAY 23		
H-08 41 53.6		
20.8S 177.8W		
h ABOUT 467KM		
TUC	IP	08 53 31.5
COL	IP	08 53 55.4
MAY 23		
SJP	IP D	08 53 40.0
MAY 23		
H-09 06 03.2		
32.8N 115.6W		
h ABOUT 015KM		
BCN	IP	09 06 53.8
TUC	EP	09 07 05.5
ALQ	EP	09 08 00.0
	I	08 32.0
SLC	E(P)	09 08 07.8
	EL	10 45.0
HHM	E(P)	09 09 43.0
MAY 23		
BUT	EP	09 13 12.5
MAY 23		
BCN	EP	09 39 27.8
	E(S)	40 08.2
MAY 23		
COL	IP	10 10 49.0
	E	11 52.0
MAY 23		
H-10 15 08.9		
36.6N 030.0E		
h ABOUT 226KM		
COL	E(P)	10 26 42.0
	IPCP	26 50.0
MAY 23		
H-10 43 31.4		
36.8N 140.9E		
h ABOUT 050KM		

Date and Station	Phase	(GCT)
		h m s
ALQ	EP	10 56 04.0
MAY 23		
H-11 56 45.3		
44.7S 075.8W		
h ABOUT 033KM		
TUC	E(P)	12 09 09.0
	EPCP	09 16.0
ALQ	IP	12 09 14.0
MAY 23		
SJP	EP	12 08 36.2
MAY 23		
H-12 09 11.8		
20.0N 073.5W		
h ABOUT 033KM		
ALQ	EP	12 15 43.1
MAY 23		
COL	EP	12 24 43.0
MAY 23		
BCN	EP	14 03 17.8
	E	03 49.8
	EL	04 01.8
TUC	EP	14 03 24.0
MAY 23		
BCN	EP	14 15 48.3
	E	15 51.3
	EL	16 59.6
TUC	EP	14 15 52.5
ALQ	E(P)	14 17 22.0
MAY 23		
SLC	EP	14 20 24.7
	EL	20 43.0
MAY 23		
WAS	E(P)	15 09 40.0
MAY 23		
H-15 12 09.7		
6.0N 126.1E		
h ABOUT 124KM		
KIP	E(P)	15 23 40.0
	E	24 03.0
COL	IP	15 24 22.5
TUC	EP'	15 30 36.0
BHP	P'	15 31 50.0
MAY 23		
H-15 52 59.6		
32.7N 115.4W		
h ABOUT 015KM		
BCN	EP	15 53 49.3
	ES	54 27.8
TUC	IP	15 54 02.0
SLC	E(P)	15 55 23.2
	EL	57 12.0

Date and Station	Phase	(GCT)
		h m s
HHM	E(P)	15 56 43.0
COL	EP	16 00 17.0
MAY 23		
BUT	E(P)	16 00 08.0
MAY 23		
TUC	E(P)	16 11 37.0
BCN	E(P)	16 12 31.8
	E(L)	13 13.8
MAY 23		
BCN	IP	16 17 53.6
	I(S)	18 26.8
	I(L)	18 36.8
TUC	E(P)	16 17 57.0
MAY 23		
H-16 27 44.7		
46.8N 152.6E		
h ABOUT 058KM		
COL	IP	16 34 45.0
HHM	EP	16 37 41.2
MAY 23		
BCN	EP	16 28 40.4
	E(S)	29 12.8
MAY 23		
BCN	E(P)	16 49 41.7
	E	49 58.0
	EL	50 18.1
MAY 23		
BCN	EP	17 05 23.5
	I	05 25.7
	IL	06 04.1
COL	IP	17 07 57.2
MAY 23		
COL	EP	17 25 00.8
BCN	E(P)	17 30 09.0
	EL	30 51.9
MAY 23		
BCN	EP	17 43 20.7
	EL	43 59.7
MAY 23		
H-18 21 18.3		
14.5N 105.2W		
h ABOUT 033KM		
TUC	EP	18 25 31.0
	I	25 32.8
BCN	EP	18 26 24.1
	E	26 42.6
	E(PP)	26 52.1
SLC	EP	18 27 00.3
BUT	EP	18 27 45.0
HHM	EP	18 28 07.2
COL	EP	18 31 09.0

Date and Station	Phase	(GCT)
		h m s
MAY 23		
BCN	EP	18 37 34.6
	EL	38 14.0
MAY 23		
BCN	IP	18 40 59.0
	EL	41 33.7
MAY 23		
BCN	EP	19 53 33.5
	EL	54 10.0
MAY 23		
H-21 37 36.3		
52.1N 178.6W		
h ABOUT 060KM		
COL	EP	21 42 09.0
TUC	IP	21 46 40.5
MAY 23		
ALQ	IP	22 09 22.0
MAY 23		
COL	IP	23 15 05.4
MAY 23		
ALQ	IP	23 47 20.0
	ES	47 50.0
MAY 24		
BCN	EP	00 18 57.3
	E(S)	19 29.8
MAY 24		
BCN	EP	00 30 00.0
	E(S)	30 36.3
MAY 24		
BCN	EP	04 25 57.5
	E(S)	26 31.5
MAY 24		
EUR	E(P)	04 27 07.9
MAY 24		
H-06 10 09.5		
12.1N 088.5W		
h ABOUT 042KM		
ALQ	EP	06 16 00.0
COL	EP	06 20 55.6
MAY 24		
EUR	IP	06 13 43.9
	E	17 16.2
MAY 24		
EUR	IP	06 42 32.9
MAY 24		
H-07 33 05.8		
58.2N 136.8W		
h ABOUT 033KM		
SIT	IP	07 33 25.0
	IS	33 44.0
COL	E(P)	07 35 09.0
EUR	EP	07 38 11.6

Date and Station	Phase (GCT)
	h m s
ALQ E(P)	07 40 17.0
MAY 24	
H-07 33 17.7	
6.7N 082.2W	
h ABOUT 033KM	
BHP IP	07 34 09.0
IS	34 50.0
SJP EP	07 37 46.0
MAY 24	
ALQ E(P)	09 13 13.0
MAY 24	
ALQ E(P)	09 49 28.0
COL EP	09 51 50.0
MAY 24	
FUR E(P)	10 45 30.2
I	45 56.9
MAY 24	
TUC EP	11 12 17.6
I	12 21.0
MAY 24	
TUC EP	11 45 35.9
I	45 40.2
MAY 24	
FUR IP	12 51 31.1
MAY 24	
EUR E	12 58 08.6
BCN EP	12 58 33.7
TUC EP	12 58 43.6
E	58 50.0
MAY 24	
TUC E(P)	14 38 31.0
I	38 36.0
MAY 24	
SJP EP	20 42 54.0
MAY 24	
H-20 52 28.3	
22.8S 179.7W	
h ABOUT 608KM	
TUC IP	21 04 05.5
MAY 24	
H-21 00 24.1	
36.5N 140.9E	
h ABOUT 058KM	
EUR EP	21 12 10.3
MAY 24	
H-21 19 04.8	
24.5S 179.7E	
h ABOUT 649KM	
TUC IP	21 30 42.0
MAY 24	
ALQ E(P)	22 30 32.0

Date and Station	Phase (GCT)
	h m s
MAY 24	
ALQ E(P)	22 44 28.0
MAY 24	
BCN IP	23 12 14.7
IS	12 26.7
MAY 24	
BCN IP	23 18 51.2
IS	19 03.2
MAY 25	
ALQ E(P)	01 12 39.0
MAY 25	
ALQ E(P)	01 18 29.0
E	18 49.0
MAY 25	
ALQ E(P)	01 25 27.0
MAY 25	
H-01 35 54.1	
24.6N 121.8E	
h ABOUT 069KM	
HHM EP	01 48 55.9
MAY 25	
ALQ E(P)	01 38 26.0
E	38 51.0
MAY 25	
H-01 50 58.0	
23.6S 066.8W	
h ABOUT 216KM	
ALQ EP	02 01 44.0
MAY 25	
H-02 37 55.7	
35.6N 139.7E	
h ABOUT 077KM	
BUT E(P)	02 49 41.8
MAY 25	
H-04 22 46.8	
54.4N 164.6W	
h ABOUT 070KM	
COL EP	04 25 55.3
MAY 25	
ALQ EP	04 32 31.2
I	32 50.1
MAY 25	
ALQ E(P)	07 31 14.0
E	31 24.0
MAY 25	
H-07 35 03.7	
51.7N 179.5E	
h ABOUT 091KM	
COL EP	07 39 45.0
EUR IP	07 43 13.6
ALQ EP	07 44 23.0
MAY 25	
ALQ EP	07 51 51.0

Date and Station	Phase (GCT)
	h m s
MAY 25	
H-07 56 58.8	
24.2S 066.8W	
h ABOUT 185KM	
ALQ IP	08 07 51.0
TUC IP	08 07 52.5
BUT I(P)	08 08 56.0
MAY 25	
H-08 41 11.6	
42.9N 144.4E	
h ABOUT 088KM	
COL IP	08 49 02.0
SIT EP	08 50 03.0
BUT EP	08 52 04.6
E	52 17.2
E>P	52 27.6
BOZ EP	08 52 10.5
EUR IP	08 52 18.6
BCN IP	08 52 37.0
I	52 42.2
(>P)	52 59.7
E(>P)	53 09.2
TUC IP	08 53 04.0
I>P	53 21.0
ALQ IP	08 53 08.5
MAY 25	
H-10 11 46.2	
04.4S 129.0E	
h ABOUT 066KM	
ALQ EP'	10 30 32.0
MAY 25	
H-10 44 36.7	
39.8N 104.7W	
h ABOUT 010KM	
ALQ EP	10 45 56.1
I	46 08.0
IL	47 15.0
SLC E(P)	10 46 04.7
E	46 14.2
EL	47 29.0
BCN EP	10 46 47.2
I	47 22.2
E(L)	49 10.2
BOZ E(P)	10 46 54.0
BUT EP	10 47 13.2
EL	48 45.4
TUC E(P)	10 47 18.0
MAY 25	
HHM EP	10 47 57.8
E(S)	50 11.9

Date and Station	Phase (GCT)
	h m s
MAY 25	
COL IP	11 02 38.9
MAY 25	
H-14 52 27.8	
13.1N 089.8W	
h ABOUT 091KM	
TUC E(P)	14 58 03.7
BCN EP	14 58 48.9
MAY 25	
EUR IP	15 19 17.7
MAY 25	
H-16 08 00.6	
56.7S 024.8W	
h ABOUT 033KM	
BHP P	16 20 05.0
SJP E(P)	16 20 17.0
E(S)	30 22.0
ALQ EP'	16 26 28.0
TUC EP'	16 26 35.0
BCN EP'	16 26 48.4
EPP	28 14.9
EUR IP'	16 26 53.2
EPKKP	36 50.7
BUT EP'	16 27 02.7
HHM EP'	16 27 03.8
HON E(PP)	16 29 27.0
ISKP	30 40.0
E	47 57.0
EL	17 09 09.0
KIP ESKP	16 30 40.0
E	48 10.0
EL	17 09 23.0
COL EP'	16 27 45.6
IP'	27 51.6
I	33 50.0
I(PP)	35 16.0
MAY 25	
WAS E(P)	16 23 14.0
MAY 25	
H-16 45 42.9	
20.7N 121.0E	
h ABOUT 012KM	
COL EP	16 57 10.6
TUC EPP	17 04 41.9
E	04 48.5
MAY 25	
SJP E(P)	18 04 30.0
MAY 25	
H-19 57 18.0	
31.2N 141.5E	
h ABOUT 037KM	

Date and Station	Phase	Phase (GCT) h m s
COL	IP	20 06 44.0
HHM	EP	20 09 03.9
BUT	EP	20 09 14.4
FUR	IP	20 09 23.4
BCN	EP	20 09 37.6
TUC	E(P)	20 10 02.0
MAY 25		
EUR	IP	22 23 41.4
MAY 25		
FUR	I	22 25 30.1
MAY 25		
BCN	E(P)	22 50 33.3
	E(L)	51 16.3
MAY 25		
BCN	EP	22 50 42.3
	EL	51 16.3
MAY 25		
ALQ	EP	22 55 18.0
	ES	55 46.0
MAY 25		
EUR	EP	23 17 13.0
ALQ	E(P)	23 17 16.0
MAY 25		
H-23 59 55.9		
20.0S 173.9W		
h ABOUT 033KM		
BCN	EP	24 11 59.2
TUC	EP	24 12 03.0
EUR	E(P)	24 12 05.4
ALQ	EP	24 12 26.0
COL	IP	24 12 39.3
MAY 26		
SJP	E(P)	00 39 15.0
MAY 26		
H-00 42 55.5		
7.0S 155.4E		
h ABOUT 082KM		
COL	IP	00 55 11.1
	E(sP)	55 45.0
EUR	IP	00 56 03.0
MAY 26		
BCN	E(P)	02 17 01.2
	E(L)	17 47.2
EUR	IP	02 17 37.1
MAY 26		
BCN	EP	02 17 10.4
	EL	17 47.2
MAY 26		
ALQ	IP	03 17 05.2
MAY 26		
COL	EP	04 17 19.0
	E▸P	17 38.0
MAY 26		
H-04 43 09.6		
53.2N 160.1E		
h ABOUT 033KM		
EUR	EP	04 52 49.8
MAY 26		
H-04 52 24.0		
51.6N 160.0E		
h ABOUT 033KM		
COL	EP	04 58 27.0
EUR	IP	05 02 08.7
BCN	E(P)	05 02 36.1
ALQ	E(P)	05 02 58.0
MAY 26		
TUC	E(P)	05 00 40.0
	I	00 46.0
	E	03 05.0
MAY 26		
ALQ	E(P)	07 42 20.0
MAY 26		
COL	EP	08 48 36.0
MAY 26		
H-10 57 59.8		
15.6S 174.0W		
h ABOUT 033KM		
TUC	EP	11 09 52.3
ALQ	EP	11 10 16.0
COL	IP	11 10 21.5
	I	10 37.2
MAY 26		
HHM	E(P)	11 23 18.0
	E	23 38.0
	ES	24 05.0
MAY 26		
HHM	EP	11 26 39.9
	I	26 54.8
	ES	27 40.8
MAY 26		
BUT	EP	11 27 50.7
	EL	28 58.0
MAY 26		
H-12 43 46.0		
16.9S 072.4W		
h ABOUT 047KM		
ALQ	IP	12 53 55.8
TUC	E(P)	12 53 56.0
	E(▸P)	54 14.0
EUR	IP	12 54 51.0
HHM	EP	12 55 23.9
COL	EP	12 57 22.5
	E	57 45.0
MAY 26		
COL	E(P)	13 05 02.0
	E	05 20.0
MAY 26		
HHM	EP	13 52 11.4
GCA	E(P)	13 53 41.7
MAY 26		
EUR	IP	14 07 19.1
MAY 26		
BHP	IP C	16 06 52.0
	IS	07 15.0
MAY 26		
EUR	EP	17 27 57.0
MAY 26		
TUC	E(P)	17 44 06.0
MAY 26		
BHP	IP	18 03 05.0
	IS	03 20.0
MAY 26		
H-18 32 52.5		
22.8N 144.3E		
h ABOUT 053KM		
COL	EP	18 42 58.0
HHM	EP	18 45 01.2
BUT	EP	18 45 11.5
	E▸P	45 26.5
EUR	IP	18 45 13.2
BCN	EP	18 45 25.7
TUC	EP	18 45 47.1
	E▸P	46 02.0
ALQ	IP	18 45 56.8
	▸P	46 12.0
MAY 26		
SJP	IP C	19 08 51.7
MAY 26		
H-19 13 39.6		
05.5S 081.2W		
h ABOUT 033KM		
SJP	E(P)	19 19 34.0
ALQ	EP	19 22 08.7
EUR	EP	19 23 10.5
MAY 26		
H-19 24 43.5		
14.8S 034.7E		
h ABOUT 033KM		
TUC	IP'	19 44 17.5
EUR	IP'	19 44 18.0
	I	45 28.4
BCN	EP'	19 44 22.1
MAY 26		
BCN	IP	19 45 55.1
	EL	46 40.5
MAY 26		
H-21 02 19.2		
48.5N 156.4E		
h ABOUT 033KM		
COL	EP	21 08 55.0
	I▸P	09 10.0
MAY 26		
SJP	EP	21 09 55.0
MAY 26		
BHP	IP D	21 21 59.0
MAY 26		
H-23 06 54.0		
55.2N 160.1E		
h ABOUT 034KM		
COL	IP	23 12 33.0
	I(PP)	13 06.0
	ES	17 04.0
	EL	18 08.0
SIT	EP	23 13 44.1
	EPP	15 10.6
	ES	19 20.6
KIP	EP	23 15 16.0
HON	EP	23 15 18.0
	IS	22 06.0
HHM	EP	23 15 48.0
	I(S)	23 15.0
	ISCS	25 17.0
BOZ	EP	23 16 14.0
	ES	23 51.0
BCN	EP	23 16 21.2
EUR	IP	23 16 28.4
TUC	IP	23 17 23.8
ALQ	IP	23 17 26.0
	IS	26 08.0
CSC	E(P)	23 18 23.0
WAS	EP	23 18 30.0
MAY 27		
H-00 30 52.2		
10.5S 162.8E		
h ABOUT 133KM		
COL	EP	00 43 07.2
EUR	I(P)	00 43 37.8

Date and Station	Phase (GCT)
	h m s
BCN EP	00 43 39.6
MAY 27	
COL EP	00 55 34.0
EUR IP	00 59 29.5
MAY 27	
SJP IP	01 38 03.0
MAY 27	
COL EP	01 53 00.0
MAY 27	
COL EP	01 59 50.0
EUR EP	02 01 42.3
I	02 20.8
MAY 27	
EUR EP	02 12 24.5
MAY 27	
BUT EP	03 24 55.2
BOZ EP	03 25 04.0
E(L)	25 35.0
MAY 27	
BUT EP	03 25 19.1
EL	25 43.6
MAY 27	
EUR EP	03 56 44.7
HHM EP	03 58 19.1
MAY 27	
H-03 58 46.6	
55.2N 160.1E	
h ABOUT 049KM	
COL IP	04 04 23.5
I	04 46.0
IPCP	07 45.0
EL	09 56.0
SIT EP	04 05 35.1
EPP	06 56.6
KIP EP	04 07 07.0
HON EP	04 07 08.0
IS	13 55.0
HHM IP	04 07 40.6
IPCP	08 59.1
BUT IP	04 07 57.6
E	08 32.5
IPCP	09 07.1
E	09 28.1
BOZ EP	04 08 05.5
EUR IP	04 08 19.2
IPCP	09 14.5
IPP	10 19.1
EP'P'	38 07.1
SLC IP	04 08 28.2

Date and Station	Phase (GCT)
	h m s
BCN IP	04 08 42.3
E	09 02.5
EPCP	09 32.5
TUC IP	04 09 15.0
EPP	11 34.5
EP'P'	38 16.0
ALQ IP	04 09 17.0
PCP	09 52.0
IS	17 59.0
WAS EP	04 10 18.0
CSC EP	04 10 34.0
SJP IP C	04 12 15.0
MAY 27	
EUR IP	05 03 09.2
MAY 27	
BUT EP	05 05 34.1
ES	06 00.6
EUR IP	05 06 10.7
MAY 27	
H-07 02 26.7	
54.3N 159.7E	
h ABOUT 033KM	
COL EP	07 08 14.0
EUR IP	07 12 05.3
E	15 03.6
MAY 27	
SJP E(P)	07 27 12.0
MAY 27	
EUR I	08 41 07.9
MAY 27	
EUR EP	09 21 41.1
MAY 27	
BCN E(P)	11 03 27.2
E(L)	04 08.6
MAY 27	
EUR IP	11 53 44.1
MAY 27	
BOZ EP	12 12 01.5
ES	12 16.0
BUT EP	12 12 15.4
ES	12 41.3
FGU E(P)	12 12 45.6
EUR EP	12 13 24.3
MAY 27	
ALQ EP	12 53 41.1
MAY 27	
EUR IP	13 45 25.5
MAY 27	
ALQ E(P)	14 00 45.0
ES	01 28.0

Date and Station	Phase (GCT)
	h m s
MAY 27	
COL IP	15 03 28.5
MAY 27	
BHP IP D	15 24 37.0
IS	24 48.0
MAY 27	
H-16 05 13.0	
12.2N 102.2W	
h ABOUT 033KM	
EUR EP	16 11 19.2
MAY 27	
H-16 20 09.6	
00.6S 130.1E	
h ABOUT 033KM	
COL EP	16 32 54.0
MAY 27	
EUR EP	16 24 49.5
MAY 27	
EUR IP	18 38 44.2
I	41 39.8
MAY 27	
H-18 45 36.4	
02.0S 138.9E	
h ABOUT 033KM	
COL E(P)	18 58 09.0
MAY 27	
EUR IP	18 52 52.5
BCN E(P)	18 53 14.0
E(L)	54 07.5
MAY 27	
EUR EP	19 13 57.1
MAY 27	
EUR EP	21 39 16.2
MAY 27	
H-21 53 33.0	
20.8S 069.4W	
h ABOUT 102KM	
ALQ EP	22 04 08.0
IPP	04 35.0
TUC EP	22 04 10.0
EPP	04 31.9
EUR EP	22 05 00.9
MAY 27	
EUR E	21 59 45.3
MAY 27	
BCN IP	22 19 54.2
MAY 27	
EUR I(P)	22 20 57.9
MAY 27	
EUR IP	22 25 16.4
MAY 27	
EUR EP	23 06 40.3

Date and Station	Phase (GCT)
	h m s
MAY 27	
BUT EP	23 16 07.1
MAY 27	
EUR I	23 17 55.2
MAY 27	
EUR I	23 21 49.3
MAY 27	
EUR EP	23 41 37.1
MAY 28	
H-00 08 56.2	
51.7N 177.6E	
h ABOUT 066KM	
COL IP	00 13 47.5
HHM E(P)	00 16 45.0
EPCP	18 38.0
EUR IP	00 17 19.1
IPCP	18 51.8
ALQ EP	00 18 24.0
IPCP	19 25.0
MAY 28	
COL EP	01 19 57.0
MAY 28	
H-01 23 10.0	
26.2N 125.5E	
h ABOUT 033KM	
COL EP	01 33 50.0
MAY 28	
H-03 09 58.4	
23.6S 179.2W	
h ABOUT 033KM	
TUC EP	03 22 35.0
I	22 37.0
MAY 28	
EUR IP	05 27 50.8
MAY 28	
H-07 00 55.2	
18.7S 177.7W	
h ABOUT 606KM	
EUR IP	07 12 12.7
TUC EP	07 12 13.9
I	12 14.9
COL IP	07 12 34.1
MAY 28	
H-08 22 45.0	
06.9N 073.0W	
h ABOUT 149KM	
BHP P	08 24 23.0
S	25 35.0
SJP E(P)	08 25 51.0
ALQ EP	08 30 20.0

Date and Station	Phase (GCT)
	h m s
TUC IP	08 30 33.9
E	30 44.0
BCN EP	08 31 12.4
EUR IP	08 31 28.8
COL EP	08 34 23.0
MAY 28	
BUT EP	08 45 52.7
EL	46 28.7
HHM E(P)	08 46 00.0
ES	46 59.0
EUR EP	08 46 31.6
I	47 47.2
BHP P	08 51 45.0
S	52 25.0
MAY 28	
BOZ EP	08 46 13.0
EL	47 53.0
MAY 28	
H-10 32 47.3	
35.4N 049.8E	
h ABOUT 033KM	
COL EP	10 44 50.0
MAY 28	
COL EP	11 00 08.0
EUR IP	11 00 38.1
BCN EP	11 01 38.9
MAY 28	
BCN EP	11 38 53.8
IL	39 49.8
EUR IP	11 39 13.9
I	39 28.6
TUC EP	11 39 44.0
ALQ E(P)	11 40 27.0
E(S)	43 15.0
MAY 28	
HHM EP	12 12 59.1
E	14 00.1
MAY 28	
EUR E	12 32 16.1
MAY 28	
BHP EP D	13 12 50.0
MAY 28	
ALQ EP	13 31 29.0
MAY 28	
H-16 29 11.9	
44.3N 114.8W	
h ABOUT 033KM	
BUT EP	16 29 51.0
ES	30 16.0

Date and Station	Phase (GCT)
	h m s
BOZ E(P)	16 29 59.0
EL	19 30 38.0
HHM E(P)	16 30 12.0
EL	31 29.5
FGU E(P)	16 30 23.5
EUR IP	16 30 26.1
IS	31 33.5
MAY 28	
EUR IP	18 15 28.2
I	16 19.7
MAY 28	
COL EP	18 37 10.0
HHM E(P)	18 38 32.0
MAY 28	
EUR EP	19 43 49.5
MAY 28	
COL EP	20 42 32.0
MAY 28	
H-21 04 15.4	
47.5N 152.6E	
h ABOUT 166KM	
COL IP	21 11 00.2
HHM E(P)	21 13 53.0
EUR IP	21 14 26.9
I	14 34.2
TUC E(P)	21 15 08.0
I	15 16.6
E*P	15 51.0
ALQ EP	21 15 21.0
MAY 28	
EUR I	21 22 19.1
MAY 28	
H-21 38 46.2	
12.5N 142.1E	
h ABOUT 008KM	
COL EP	21 50 01.0
MAY 28	
H-21 58 27.1	
36.0N 140.7E	
h ABOUT 073KM	
COL EP	22 07 18.0
HHM EP	22 09 48.6
EUR IP	22 10 13.8
MAY 28	
EUR IP	22 23 06.9
MAY 28	
HHM EP	22 56 40.6
MAY 28	
HHM IP	23 52 16.6
IS	52 43.6

Date and Station	Phase (GCT)
	h m s
MAY 28	
ALQ E(P)	23 56 15.0
MAY 29	
EUR E(P)	00 15 57.4
MAY 29	
ALQ E(P)	00 47 23.0
MAY 29	
H-00 47 43.6	
28.1N 052.4E	
h ABOUT 007KM	
COL IP	01 00 25.9
MAY 29	
H-01 02 05.8	
18.1S 178.0W	
h ABOUT 472KM	
EUR EP	01 13 33.4
TUC IP	01 13 35.3
MAY 29	
COL IP	01 15 47.5
MAY 29	
TUC EP	01 31 51.2
E	32 04.5
MAY 29	
EUR E	02 31 31.7
MAY 29	
BHP EP C	03 46 14.0
MAY 29	
BHP IP C	04 32 21.0
IS	33 00.0
MAY 29	
H-04 50 23.4	
57.7N 153.1W	
h ABOUT 085KM	
COL IP	04 52 13.5
HHM EP	04 55 41.2
EUR IP	04 56 25.6
TUC IP	04 57 36.0
ALQ IP	04 57 38.0
E(PCP)	59 48.0
MAY 29	
H-05 40 34.9	
60.9S 026.5W	
h ABOUT 033KM	
TUC EP'	05 59 13.0
ALQ EP'	05 59 13.0
EUR EP'	05 59 30.0
HHM EP'	05 59 40.2
COL EP'	06 00 20.0
I	00 43.0

Date and Station	Phase (GCT)
	h m s
MAY 29	
ALQ EP	06 43 23.0
BHP EP	06 46 28.0
MAY 29	
SIT EP	06 55 45.2
ES	56 02.0
MAY 29	
H-08 27 44.5	
17.6S 178.8W	
h ABOUT 516KM	
EUR IP	08 39 09.4
TUC IP	08 39 11.9
COL IP	08 39 27.4
ALQ EP	08 39 32.5
HHM EP	08 39 36.7
MAY 29	
H-08 35 03.7	
27.0N 059.4E	
h ABOUT 052KM	
COL EP	08 47 38.8
IPCP	47 42.0
I*P	47 58.0
EUR EP'	08 53 35.1
EPKKP	09 04 34.2
TUC EP'	08 53 52.5
E*P'	54 10.0
MAY 29	
HHM E(P)	08 52 27.0
ALQ E(P)	08 52 35.0
MAY 29	
ALQ E(P)	09 46 32.0
ES	47 17.0
MAY 29	
H-10 59 13.8	
18.1S 177.9W	
h ABOUT 600KM	
EUR IP	11 10 30.2
TUC IP	11 10 31.5
COL IP	11 10 49.8
MAY 29	
H-13 04 09.6	
22.1S 169.6E	
h ABOUT 040KM	
COL EP	13 17 17.0
MAY 29	
H-13 22 23.4	
23.9S 179.2W	
h ABOUT 060KM	
TUC IP	13 34 59.0
EUR IP	13 34 59.8

Date and Station	Phase (GCT)
	h m s
MAY 29	
COL EP'	13 39 44.0
MAY 29	
EUR IP	15 04 10.5
SLC E(P)	15 04 36.0
EL	06 17.0
FGU E(P)	15 04 49.2
TUC EP	15 05 08.0
MAY 29	
BCN EP	15 13 12.9
ES	13 35.3
EUR IP	15 13 24.9
MAY 29	
TUC E(P)	16 21 27.5
MAY 29	
EUR E(P)	17 18 34.8
MAY 29	
H-18 02 21.7	
16.3S 174.3W	
h ABOUT 064KM	
COL IP	18 14 43.0
MAY 29	
H-18 27 19.5	
22.6S 114.4W	
h ABOUT 033KM	
TUC E(P)	18 36 48.0
EUR IP	18 37 37.5
MAY 29	
H-18 30 25.5	
24.4S 114.7W	
h ABOUT 033KM	
TUC EP	18 40 06.5
EUR IP	18 40 55.5
MAY 29	
EUR IP	18 47 26.6
MAY 29	
HHM EP	19 05 43.8
EUR E(P)	19 06 08.5
MAY 29	
EUR IP	22 21 57.9
MAY 29	
EUR E	22 41 16.9
MAY 29	
H-22 41 36.7	
13.9N 091.8W	
h ABOUT 131KM	
ALQ IP	22 46 48.0
TUC E(P)	22 46 49.0
EUR IP	22 48 03.2

Date and Station	Phase (GCT)
	h m s
MAY 29	
TUC IP	22 51 14.0
MAY 29	
ALQ EP	22 59 04.0
MAY 29	
BOZ EP	23 41 49.0
MAY 30	
EUR EP	00 28 02.4
MAY 30	
BOZ EP	00 36 19.5
E	36 54.0
BUT EP	00 36 30.0
E(S)	36 47.2
EUR EP	00 38 02.3
MAY 30	
BUT E(P)	00 37 02.2
E(S)	37 20.2
HHM E(P)	00 37 38.0
MAY 30	
BUT IP	00 45 24.0
IS	45 40.7
HHM EP	00 45 59.9
I	46 09.9
IS	46 58.9
FGU E(P)	00 46 14.5
EUR EP	00 46 32.3
I	46 52.4
I	48 09.4
MAY 30	
ALQ EP	00 59 37.0
MAY 30	
ALQ EP	01 15 15.0
MAY 30	
H-01 56 47.1	
6.6N 073.0W	
h ABOUT 174KM	
TUC EP	02 04 34.2
MAY 30	
H-03 04 49.5	
18.3S 178.3W	
h ABOUT 450KM	
TUC EP	03 16 22.0
COL I(P)	03 16 41.5
E▸P	18 27.0
ALQ EP	03 16 44.0
E▸P	18 30.0
MAY 30	
H-03 44 49.8	
50.0N 157.4E	
h ABOUT 036KM	
COL IP	03 51 13.9
I▸P	51 28.0

Date and Station	Phase (GCT)
	h m s
EUR IP	03 54 49.2
I	54 57.1
I▸P	55 04.9
TUC EP	03 55 41.8
ALQ IP	03 55 46.0
I	55 54.0
MAY 30	
EUR IP	04 50 37.2
MAY 30	
ALQ E(P)	04 59 20.0
MAY 30	
H-05 10 05.3	
41.9N 133.8E	
h ABOUT 033KM	
COL IP	05 18 44.9
MAY 30	
H-05 35 05.3	
26.0S 178.4E	
h ABOUT 597KM	
TUC E(P)	05 46 59.0
EUR IP	05 47 00.7
COL EP	05 47 21.0
E▸P	49 31.0
MAY 30	
H-06 56 08.6	
54.3S 144.1E	
h ABOUT 033KM	
HON E(S)	07 20 11.0
EPS	21 20.0
E	26 26.0
EL	37 40.0
KIP E	07 22 02.0
EL	38 50.0
TUC EP'	07 15 10.0
EUR IP'	07 15 11.7
ALQ EP'	07 15 15.2
ESKP	18 40.0
COL EP'	07 15 18.0
HHM EP'	07 15 24.0
BUT EP'	07 15 26.7
ESKP	18 56.8
WAS EP'	07 16 04.0
MAY 30	
BHP IP C	10 21 56.0
IS	31 44.0
MAY 30	
H-11 33 01.1	
23.9N 046.1W	
h ABOUT 033KM	
ALQ E(P)	11 42 16.0

Date and Station	Phase (GCT)
	h m s
EUR E(P)	11 43 12.9
COL EP	11 44 31.0
MAY 30	
COL E(P)	13 24 03.0
EUR EP	13 26 58.5
ALQ E(P)	13 27 31.0
MAY 30	
EUR I	13 55 26.8
MAY 30	
TUC E(P)	15 59 50.0
EUR E	16 01 43.0
MAY 30	
ALQ E(P)	16 01 05.0
E	03 11.0
MAY 30	
H-16 37 46.9	
30.1N 111.5W	
h ABOUT 033KM	
TUC IP	16 38 22.2
ALQ EP	16 39 20.0
E	40 02.0
ES	41 40.0
EUR IP	16 40 09.8
I	43 58.2
MAY 30	
BCN EP	16 41 37.5
MAY 30	
BUT EP	16 55 21.2
ES	55 47.5
MAY 30	
H-17 01 21.0	
28.9N 141.7E	
h ABOUT 033KM	
BUT EP	17 13 26.7
MAY 30	
H-17 39 42.6	
52.4N 169.6W	
h ABOUT 080KM	
COL EP	17 43 33.7
HHM EP	17 46 26.9
EUR IP	17 47 00.3
TUC E(P)	17 48 02.5
ALQ EP	17 48 10.0
MAY 30	
H-18 57 52.4	
59.3S 026.9W	
h ABOUT 033KM	
EUR IP'	19 16 47.0
E	17 17.9

Date and Station	Phase	Phase (GCT) h m s
BOZ	EP'	19 16 50.0
	E	17 41.0
HHM	EP'	19 16 54.0
COL	IP'	19 17 43.7
MAY 30		
ALQ	EP	19 26 20.4
MAY 30		
EUR	E(P)	20 28 02.4
	I	29 18.1
MAY 30		
H-20 30 25.2		
22.8S 176.0W		
h ABOUT 037KM		
COL	IP	20 43 21.7
MAY 30		
TUC	IP	21 47 03.0
ALQ	EP	21 47 34.1
	ES	48 15.0
MAY 30		
TUC	EP	22 20 05.0
MAY 30		
ALQ	EP	22 35 36.0
MAY 30		
ALQ	E(P)	23 52 41.0
	E	53 32.0
MAY 31		
ALQ	EP	01 14 17.5
MAY 31		
SJP	E(P)	01 54 08.0
MAY 31		
BUT	EP	02 02 58.1
	ES	03 22.1
MAY 31		
BUT	EP	03 11 41.4
	ES	12 08.1
MAY 31		
BOZ	E(P)	03 15 34.0
BUT	EP	03 15 50.1
	ES	16 17.6
MAY 31		
HHM	E(P)	03 16 32.0
MAY 31		
SJP	EP	04 07 35.0
MAY 31		
H-04 39 14.8		
17.9S 068.3W		
h ABOUT 057KM		
ALQ	EP	04 49 43.0
	EPCP	50 19.0
BUT	EP	04 50 54.1
MAY 31		
BUT	EP	04 45 00.1
MAY 31		
SJP	E(P)	05 28 29.0
MAY 31		
H-05 29 29.0		
55.1N 160.2E		
h ABOUT 049KM		
COL	EP	05 35 07.8
BUT	EP	05 38 41.0
	E	39 01.0
EUR	IP	05 39 02.6
	I	39 24.3
	IPCP	40 00.0
TUC	EP	05 39 58.0
ALQ	EP	05 40 00.0
MAY 31		
H-06 03 34.2		
15.2S 173.4W		
h ABOUT 029KM		
KIP	IP	06 11 04.9
	I	11 54.7
HON	E(S)	06 17 10.0
	FL	19 46.0
TUC	EP	06 15 22.0
EUR	IP	06 15 22.4
	I	16 32.2
	I	17 12.3
	I	19 09.0
SLC	EP	06 15 41.5
ALQ	IP	06 15 47.3
BUT	EP	06 15 53.1
COL	IP	06 15 53.3
	I	17 35.0
HHM	EP	06 15 57.1
BOZ	E(P)	06 15 58.5
MAY 31		
EUR	IP	06 46 33.7
	I	47 14.2
MAY 31		
BOZ	E(P)	07 00 28.0
MAY 31		
BOZ	E(P)	09 24 53.0
MAY 31		
H-11 09 02.7		
61.5N 140.6W		
h ABOUT 033KM		
COL	EP	11 10 14.0
EUR	EP	11 14 41.3
MAY 31		
BOZ	EP	11 31 05.2
FGU	EP	11 32 00.2
EUR	E(P)	11 32 41.4
	E	32 55.9
MAY 31		
BUT	EP	11 31 30.5
	E(S)	31 57.5
HHM	E(P)	11 32 09.0
	ES	33 02.0
MAY 31		
H-11 37 53.6		
45.0N 111.2W		
h ABOUT 015KM		
BOZ	EP	11 38 06.2
BUT	EP	11 38 21.0
	IL	38 47.0
SLC	EP	11 38 34.5
	EL	40 00.0
HHM	EP	11 38 54.2
	EL	40 04.2
EUR	EP	11 39 28.1
MAY 31		
BUT	EP	11 40 38.0
	IS	41 05.0
MAY 31		
BOZ	E(P)	11 43 32.0
BUT	EP	11 43 49.0
	ES	44 13.8
MAY 31		
BUT	EP	11 45 21.0
	IS	45 47.0
HHM	E(P)	11 45 44.0
	I	46 08.0
	ES	47 05.0
EUR	IP	11 46 28.3
MAY 31		
H-12 00 29.4		
20.3S 175.5W		
h ABOUT 166KM		
COL	E(P)	12 14 55.0
MAY 31		
H-14 08 02.8		
30.7S 178.2W		
h ABOUT 057KM		
TUC	IP	14 20 56.0
	IpP	21 12.0
EUR	IP	14 21 00.5
ALQ	EP	14 21 15.0
	IpP	21 31.5
MAY 31		
ALQ	EP	15 41 03.0
EUR	E	15 42 33.3
MAY 31		
FGU	EP	15 48 50.0
MAY 31		
BOZ	EP	17 45 04.2
MAY 31		
SJP	EP	19 18 22.0
	ES	18 42.7
MAY 31		
EUR	IP	21 49 05.6
MAY 31		
H-21 53 46.4		
11.2N 091.2W		
h ABOUT 033KM		
ALQ	E(P)	21 59 28.0
TUC	EP	21 59 34.8
EUR	IP	22 00 44.5
MAY 31		
GCA	E(P)	22 00 23.5
MAY 31		
EUR	IP	22 25 29.4
MAY 31		
TUC	IP	22 50 07.0
EUR	E(P)	22 52 05.0