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SEISMOLOGICAL BULLETIN

December, 1962

COAST & GEODETIC SURVEY
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U. S. DEPARTMENT OF COMMERCE

Luther H. Hodges, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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1962

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

Albuquerque, New Mexico (ALQ) WWNSS
**Balboa Heights, C. Z. (BHP) WWNSS
The Panama Canal Co.
*Boulder City, Nev. (BCN)
Bureau of Reclamation
*Bozeman, Mont. (BOZ)
Montana State College
*Butte, Mont. (BUT)
Montana School of Mines
*Chicago, Ill. (CHI)
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)
**Philadelphia, Pa. (PHI)
The Franklin Institute
**Rapid City, S. D. (RCD) WWNSS
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJP)
Sitka, Alaska (SIT)
*Thule, Greenland (THU)
U. S. Army Ionosphere Station
Tucson, Ariz. (TUC)
Tucson, Ariz. Telemeter (TUT)
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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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. Minor earthquakes are listed at the end of the bulletin.

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:

Director
U. S. Coast and Geodetic Survey
Washington, D. C. 20230
ATTN: Seismology Data Center

Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
1	00 35 50.1	34.3 N.	116.9 W.	San Bernardino County, California. Slight damage at Big Bear City. h about 33 km. Mag. 4¼.
1	00 44 48.0	34.3 N.	116.9 W.	San Bernardino County, California. h about 33. Mag. 2¾-3.
1	00 57 30.4	34.3 N.	117.0 W.	San Bernardino County, California. h about 33 km. Mag. 2½-2¾.
1	01 50 20.4	52.4 N.	170.1 W.	Fox Islands, Aleutian Islands. h about 38 km. Mag. 5¼-5½ (Pal).
1	04 16 59.6	29.7 S.	177.7 W.	Kermadec Islands. h about 52 km.
1	13 32 24.8	30.8 S.	71.3 W.	Central Chile. h about 68 km.
1	14 06 02.8	34.3 N.	116.9 W.	San Bernardino County, California. h about 33 km. Mag. 3.
1	21 02 51.8	17.7 S.	178.7 W.	Fiji Islands region. h about 620 km.
2	00 41 39.7	34.3 N.	117.0 W.	San Bernardino County, California. h about 33 km. Mag. 4¼-4½.
2	05 30 53.8	9.9 S.	159.9 E.	Solomon Islands. Felt at Honiara. h about 34 km.
2	09 49 48.4	13.5 N.	146.0 E.	Mariana Islands. h about 67 km.
2	16 12 53.4	18.9 S.	168.5 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
2	18 19 55.5	36.5 N.	70.8 E.	Hindu Kush. h about 201 km.
2	22 21 29.5	35.8 N.	50.1 E.	Iran. Felt at Tehran. h about 36 km.
2	22 37 23.6	7.9 S.	111.9 E.	Java. h about 153 km.
2	23 36 23.7	35.5 N.	50.1 E.	Iran. Felt at Tehran. h about 33 km.
3	12 50 36.9	12.9 S.	169.2 E.	Santa Cruz Islands region. h about 632 km.
4	01 31 43.9	8.0 S.	147.7 E.	New Guinea. h about 91 km.
4	03 29 40.8	10.1 N.	103.6 W.	Off coast of Guerrero, Mexico. h about 33 km.
4	06 15 35.6	36.9 N.	141.0 E.	Near east coast of Honshu, Japan. Felt in central and northeast Honshu. h about 77 km.
4	07 23 04.2	21.8 S.	65.6 W.	Southern Bolivia. h about 300 km.
4	08 16 18.8	36.1 N.	123.5 E.	Yellow Sea. h about 33 km.
4	10 34 27.8	6.1 S.	149.9 E.	New Britain. Felt at Kandrian. h about 83 km.
4	16 40 06.0	16.5 S.	172.8 W.	Samoa Islands region. h about 33 km. Mag. 5-5¼.
4	17 49 59.4	39.8 N.	104.7 W.	Colorado. Slight damage in the Denver area. h about 33 km.
4	17 53 27.5	3.8 S.	131.4 E.	Ceram Island region. h about 33 km.
4	18 46 01.6	44.6 N.	147.9 E.	Kurile Islands. h about 171 km.
4	19 31 29.8	4.6 N.	122.5 E.	Celebes Sea. h about 586 km.
5	00 19 40.9	32.7 N.	97.3 E.	Tsinghai Province, China. h about 74 km.
5	01 16 06.3	10.9 S.	161.6 E.	Solomon Islands. h about 33 km.
5	05 11 11.2	17.7 S.	178.6 W.	Fiji Islands region. h about 565 km.
5	11 38 10.6	10.3 S.	77.9 W.	Near coast of Peru. h about 50 km.
5	12 24 32.6	20.8 S.	178.9 W.	Fiji Islands region. h about 591 km.
5	13 48 00.4	39.9 N.	104.6 W.	Colorado. Slight damage in the Derby-Dupont area. h about 33 km.
6	02 13 25.1	30.7 N.	142.0 E.	South of Honshu, Japan. h about 33 km.
6	03 45 20.5	23.3 S.	68.1 W.	Northern Chile. h about 123 km.
6	04 04 09.9	49.0 N.	154.4 E.	Kurile Islands. h about 85 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
6	06 44 17.0	45.6 S.	73.4 W.	Near coast of southern Chile. Felt. h about 33 km.
6	08 52 48.6	53.4 N.	153.5 E.	Sea of Okhotsk. h about 506 km.
6	10 08 08.0	53.1 N.	169.3 W.	Fox Islands, Aleutian Islands. h about 33 km.
6	11 28 11.9	22.0 S.	113.7 W.	Easter Island region. h about 33 km.
6	16 05 37.0	40.2 N.	110.6 W.	Northeastern Utah. h about 33 km.
6	17 16 08.5	55.0 N.	161.7 E.	Near east coast of Kamchatka. h about 33 km.
6	17 55 18.5	3.7 S.	131.4 E.	Ceram Island region. h about 33 km.
6	22 36 45.8	34.0 S.	71.1 W.	Central Chile. h about 88 km.
7	00 06 23.9	10.8 S.	164.0 E.	Solomon Islands region. h about 100 km.
7	07 27 45.4	15.3 N.	61.2 W.	Windward Islands. h about 149 km.
7	09 36 01.5	38.0 N.	106.3 E.	Inner Mongolia. h about 33 km.
7	12 55 37.2	30.2 S.	179.4 W.	Kermadec Islands. h about 364 km.
7	14 03 37.0	29.2 N.	139.2 E.	South of Honshu, Japan. Felt in the Tokyo area. h about 411 km. Mag. 6¾.
7	19 00 00.099			37°03'06" N., 116°01'46" W. Nevada Test Site. TENDRAC. Shot elevation = 923.8 meters (AEC).
7	23 55 03.0	13.9 N.	120.6 E.	Near west coast of Luzon, Philippine Islands. h about 178 km.
8	01 43 43.8	62.6 N.	151.6 W.	Southern Alaska. h about 33 km.
8	09 02 54.4	36.5 N.	55.0 E.	Northern Iran. Felt at Shahrud. h about 33 km.
8	11 28 23.3	4.9 S.	154.0 E.	New Ireland region. h about 100 km.
8	14 19 00.1	37.1 N.	95.5 E.	Tsinghai Province, China. h about 33 km.
8	18 00 39.1	23.7 S.	69.1 W.	Northern Chile. h about 84 km.
8	18 18 28.7	15.4 S.	173.4 W.	Tonga Islands region. Felt at Apia. h about 33 km. Mag. 6¾.
8	21 27 22.2	25.8 S.	63.4 W.	Santiago del Estero Province, Argentina. Felt in Buenos Aires. h about 620 km. Mag. 6¾-7.
8	22 55 01.2	50.5 N.	176.8 W.	Andreanof Islands, Aleutian Islands. h about 33 km.
9	07 30 12.2	5.4 S.	147.9 E.	Near north coast of New Guinea. h about 173 km.
9	10 17 39.5	43.5 N.	147.3 E.	Kurile Islands region. h about 34 km.
9	14 15 56.3	22.3 S.	177.0 W.	Fiji Islands region. h about 117 km.
9	14 27 04.1	4.7 S.	153.7 E.	New Britain region. Felt at Rabaul. h about 117 km.
9	17 37 46.9	7.1 S.	129.1 E.	Banda Sea. h about 194 km.
9	20 54 13.7	17.7 S.	173.6 W.	Tonga Islands region. h about 60 km.
9	21 17 02.0	39.9 N.	140.5 E.	Northern Honshu, Japan. h about 33 km.
10	04 56 20.0	28.1 S.	62.7 E.	Indian Ocean. h about 33 km.
10	06 11 56.2	8.4 S.	157.4 E.	Solomon Islands. h about 39 km.
10	16 09 58.3	49.7 N.	155.8 E.	Kurile Islands region. h about 45 km.
10	16 56 04.5	27.2 S.	176.8 W.	Kermadec Islands region. h about 88 km.
10	23 04 36.3	7.9 S.	108.5 E.	Near south coast of Java. h about 141 km.
11	02 34 09.5	48.9 S.	124.6 E.	About 2000 km. south of Australia. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
11	10 28 17.5	39.4 N.	110.3 W.	Central Utah. h about 33 km.
11	13 54 36.3	19.7 S.	178.4 W.	Fiji Islands. h about 630 km.
11	16 14 47.1	39.1 N.	144.3 E.	Off east coast of Honshu, Japan. h about 44 km.
11	17 51 58.9	24.8 S.	177.6 W.	Tonga Islands region. h about 98 km.
11	18 09 57.9	4.6 S.	144.0 E.	New Guinea. h about 51 km.
11	18 23 30.8	5.3 S.	150.6 E.	Bismarck Sea. h about 58 km.
11	23 32 57.0	3.5 N.	126.9 E.	Molucca Passage. h about 63 km.
12	00 02 58.4	33.0 N.	136.0 E.	Near south coast of Honshu, Japan. h about 407 km.
12	10 08 48.5	4.8 S.	153.8 E.	New Britain region. Felt at Rabaul, Karlai and Doilene. h about 94 km. Mag. 6-6¼ (Pal).
12	11 29 39.5	39.6 N.	140.5 E.	Northern Honshu, Japan. h about 66 km.
12	13 56 32.4	60.3 S.	25.9 W.	Sandwich Islands region. h about 33 km.
12	15 50 08.0	18.6 S.	168.6 E.	New Hebrides Islands. h about 102 km.
12	17 25 00.117			37°10'07" N., 116°12'22" W. Nevada Test Site. MADISON. Shot elevation = 187.6 meters (AEC).
12	18 45 00.123			37°02'46" N., 116°00'56" W. Nevada Test Site. NUMBAT. Shot elevation = 992.1 meters (AEC).
12	22 56 45.8	4.6 N.	96.5 E.	Sumatra. h about 138 km.
13	00 25 24.5	7.9 N.	93.8 E.	Nicobar Islands. h about 224 km.
13	04 21 21.2	63.3 N.	149.7 W.	Central Alaska. h about 47 km.
13	08 10 44.5	40.2 N.	125.2 W.	Off coast of northern California. h about 33 km.
13	08 13 34.4	4.7 S.	153.8 E.	New Ireland region. h about 112 km.
13	14 57 27.9	61.4 N.	147.2 W.	Kenai Peninsula, Alaska. h about 69 km.
13	16 45 59.1	2.8 N.	127.9 E.	Halmahera region. h about 33 km.
13	22 45 27.1	34.9 N.	27.8 E.	Dodecanese Islands region. h about 45 km.
13	23 20 42.6	20.4 N.	122.0 E.	Batan Islands, Philippine Islands. h about 147 km.
14	08 53 48.7	4.7 S.	153.8 E.	Solomon Islands region. h about 109 km.
14	13 06 52.3	41.8 N.	141.1 E.	Northern Honshu, Japan. h about 97 km.
14	16 52 49.7	50.4 N.	90.6 E.	Outer Mongolia-U. S. S. R. border. h about 30 km.
14	18 01 30.8	43.8 N.	148.3 E.	Kurile Islands region. h about 125 km.
15	02 37 56.4	17.3 S.	178.9 W.	Fiji Islands. h about 509 km.
15	03 48 38.0	67.2 N.	13.7 E.	Near coast of central Norway. h about 33 km.
15	06 34 59.8	40.7 N.	117.5 W.	Nevada. h about 33 km. Mag. 4½-4¾.
15	14 22 35.2	4.6 S.	152.1 E.	New Britain. Felt at Rabaul. h about 53 km.
15	15 28 12.1	18.9 S.	177.3 W.	Fiji Islands. h about 602 km.
16	05 25 26.6	3.1 S.	139.5 E.	Near north coast of western New Guinea. h about 43 km.
16	06 34 15.6	36.2 N.	71.3 E.	Hindu Kush. h about 145 km.
16	11 06 45.7	38.7 N.	117.5 W.	Nevada. h about 33 km.
16	22 21 27.1	15.6 N.	92.1 W.	Chiapas, Mexico. h about 187 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
17	02 15 49.7	4.2 S.	127.6 E.	Ceram region. h about 33 km.
17	11 00 16.0	2.1 N.	122.9 E.	Celebes Sea. h about 393 km.
17	12 29 52.2	0.2 N.	124.3 E.	Celebes. h about 126 km.
17	17 25 40.8	38.0 N.	106.1 E.	Inner Mongolia. h about 33 km.
17	22 02 45.2	8.2 S.	120.5 E.	Flores region. h about 151 km.
18	02 06 09.2	39.8 N.	71.4 E.	Kirghiz S. S. R. h about 77 km.
18	02 54 47.1	21.6 N.	143.1 E.	Mariana Islands region. h about 306 km.
18	03 51 00.2	23.8 N.	93.9 E.	India-Burma border. h about 124 km.
18	07 21 02.9	35.0 N.	28.0 E.	Dodecanese Islands region. h about 37 km.
18	07 48 36.6	35.2 S.	104.8 W.	Easter Island region. h about 33 km.
18	10 33 58.4	28.3 S.	178.2 W.	Kermadec Islands. h about 214 km.
18	11 30 07.3	24.7 S.	180.0	Fiji Islands. h about 486 km.
18	12 37 16.1	2.7 N.	129.1 E.	Halmahera region. h about 96 km.
18	20 47 41.5	43.7 N.	147.0 E.	Kurile Islands region. h about 80 km.
18	20 56 32.3	18.4 S.	176.9 W.	Fiji Islands region. h about 308 km.
18	22 47 18.1	54.1 N.	170.8 E.	Near Islands, Aleutian Islands. h about 33 km.
19	05 17 18.1	51.5 N.	170.8 W.	Fox Islands, Aleutian Islands. h about 33 km.
19	11 01 39.8	31.2 S.	178.1 W.	Kermadec Islands. h about 28 km.
19	12 56 19.7	4.7 S.	154.0 E.	Solomon Islands. Felt at Rabaul and Metlik. h about 98 km.
19	20 15 56.8	24.0 S.	179.4 W.	Fiji Islands region. h about 422 km.
20	02 00 51.1	6.8 S.	129.3 E.	Banda Sea. h about 189 km.
20	08 32 37.3	20.0 S.	174.1 W.	Tonga Islands region. h about 33 km.
20	08 47 23.3	23.4 S.	179.3 E.	Fiji Islands region. h about 512 km.
20	18 20 55.8	61.8 S.	161.2 E.	Balleny Islands region. h about 29 km.
20	19 32 27.4	17.8 N.	144.6 E.	Mariana Islands. h about 33 km.
20	20 57 19.7	13.8 S.	167.0 E.	New Hebrides Islands. h about 155 km.
21	00 44 19.7	9.0 S.	112.4 E.	Near south coast of Java. h about 64 km.
21	01 26 31.5	4.2 S.	152.9 E.	New Britain region. Felt at Rabaul. h about 150 km.
21	02 11 20.7	51.2 N.	179.8 E.	Rat Islands, Aleutian Islands. h about 60 km.
21	03 28 35.3	15.4 N.	121.8 E.	Central Luzon, Philippine Islands. Felt at Manila. h about 46 km.
21	06 27 49.1	52.5 N.	168.7 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	06 31 42.4	52.6 N.	168.6 W.	Fox Islands, Aleutian Islands. h about 39 km.
21	06 45 26.5	17.0 S.	173.4 W.	Tonga Islands region. h about 53 km.
21	07 07 05.9	52.8 N.	168.8 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	08 36 53.9	52.8 N.	168.6 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	08 42 48.3	52.4 N.	168.5 W.	Fox Islands, Aleutian Islands. h about 33 km. Mag. 6½.
21	08 50 08.2	52.8 N.	168.1 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	09 00 41.4	52.4 N.	168.5 W.	Fox Islands, Aleutian Islands. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
21	09 10 01.6	52.5 N.	168.5 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	09 33 15.5	42.4 N.	142.3 E.	Near south coast of Hokkaido, Japan. Felt on Hokkaido and northeast Honshu. h about 27 km.
21	09 42 46.0	22.8 S.	66.5 W.	Jujuy Province, Argentina. h about 200 km.
21	14 40 40.3	52.6 N.	168.3 W.	Fox Islands, Aleutian Islands. h about 16 km.
21	15 10 22.9	52.5 N.	168.7 W.	Fox Islands, Aleutian Islands. h about 33 km.
21	15 28 17.6	52.7 N.	168.8 W.	Fox Islands, Aleutian Islands. h about 49 km.
21	17 35 56.1	4.6 S.	153.8 E.	New Ireland region. h about 95 km.
21	17 47 29.7	13.9 N.	51.6 E.	Gulf of Aden. h about 33 km.
21	18 20 44.7	15.3 N.	121.7 E.	Central Luzon. Felt at Manila. h about 55 km.
21	20 27 13.3	52.4 N.	168.5 W.	Fox Islands, Aleutian Islands. h about 40 km.
21	21 27 51.6	0.9 S.	80.9 W.	Near coast of Ecuador. Felt at Guayaquil and Quito. h about 33 km.
22	00 52 23.4	22.0 S.	170.1 E.	Loyalty Islands region. h about 33 km. Mag. 6½-6¾.
22	01 13 03.5	21.8 S.	170.0 E.	Loyalty Islands region. h about 33 km.
22	01 28 48.9	21.9 S.	170.1 E.	Loyalty Islands region. h about 33 km.
22	01 59 50.3	9.2 S.	112.4 E.	Near south coast of Java. h about 69 km.
22	06 35 57.1	1.1 S.	81.0 W.	Near coast of Ecuador. h about 33 km.
22	09 24 41.5	0.9 N.	125.8 E.	Molucca Sea. h about 33 km.
22	11 28 03.4	15.1 S.	173.0 W.	Samoa Islands region. h about 55 km.
22	14 09 29.7	4.7 N.	125.7 E.	Near south coast of Mindanao, Philippine Islands. h about 18 km.
22	15 20 31.0	52.5 N.	168.8 W.	Fox Islands, Aleutian Islands. h about 47 km. Mag. 6¼.
22	23 27 59.5	5.1 S.	151.2 E.	New Britain. Felt at Rabaul. h about 105 km.
23	00 43 56.3	41.3 N.	20.4 E.	Albania-Yugoslavia border region. h about 33 km.
23	03 46 03.6	22.1 S.	169.9 E.	Loyalty Islands region. h about 33 km.
23	06 28 00.8	38.4 N.	73.3 E.	Hindu Kush region. h about 118 km.
23	08 19 13.7	15.2 N.	119.8 E.	Near west coast of central Luzon. Felt at Manila. h about 54 km.
23	10 21 55.3	15.3 N.	121.7 E.	Near east coast of central Luzon. Felt at Manila. h about 52 km.
23	10 48 14.1	52.5 N.	168.9 W.	Fox Islands, Aleutian Islands. h about 53 km.
23	15 04 37.6	52.5 N.	168.3 W.	Fox Islands, Aleutian Islands. h about 33 km.
23	15 34 30.5	38.1 S.	179.4 W.	Off east coast of North Island, New Zealand. h about 31 km.
23	18 52 38.8	52.5 N.	169.0 W.	Fox Islands, Aleutian Islands. h about 33 km.
23	20 15 13.3	1.4 S.	152.5 E.	New Ireland region. h about 205 km.
24	00 23 53.1	59.1 S.	26.0 W.	Sandwich Islands region. h about 33 km.
24	03 42 42.1	39.1 N.	139.0 E.	Near west coast of northern Honshu, Japan. h about 33 km.
24	10 44 21.9	74.2 N.	52.3 E.	Novaya Zemlya. h about 0 km.
24	11 11 42.0	73.6 N.	57.5 E.	Novaya Zemlya. h about 0 km.
24	11 40 46.8	21.9 S.	170.2 E.	Loyalty Islands region. h about 33 km.
24	17 43 05.3	8.4 S.	78.7 W.	Near coast of Peru. h about 80 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
25	12 09 45.3	36.2 S.	100.5 W.	Easter Island region. h about 33 km.
25	12 43 58.9	28.2 S.	63.2 W.	Santiago del Estero Province, Argentina. h about 589 km.
25	13 30 32.1	51.3 N.	178.8 E.	Rat Islands, Aleutian Islands. h about 33 km.
25	13 35 57.2	73.4 N.	56.5 E.	Novaya Zemlya. h about 0 km.
25	18 57 45.4	36.7 N.	141.0 E.	Near east coast of Honshu, Japan. h about 80 km.
26	01 19 15.2	16.9 N.	99.9 W.	Near coast of Guerrero, Mexico. h about 35 km.
26	05 28 36.7	52.5 N.	168.4 W.	Fox Islands, Aleutian Islands. h about 33 km.
26	06 12 54.5	15.1 N.	61.4 W.	Windward Islands. h about 150 km.
26	08 58 11.1	39.3 N.	10.6 W.	Off coast of Portugal. Slight damage at Lisbon. h about 19 km.
26	14 58 56.4	38.6 N.	72.8 E.	Tadzhik S. S. R. h about 188 km.
26	22 25 15.5	53.9 N.	168.7 E.	Komandorskie Islands region. h about 33 km. Mag. 6½.
26	23 25 16.7	23.9 N.	65.4 E.	Arabian Sea. h about 34 km.
26	23 46 14.7	54.0 N.	168.8 E.	Komandorskie Islands region. h about 33 km.
27	01 28 47.6	53.9 N.	168.7 E.	Komandorskie Islands region. h about 33 km.
27	01 37 57.1	23.7 S.	65.4 W.	Jujuy Province, Argentina. h about 227 km.
27	04 13 54.7	14.8 S.	173.2 W.	Samoa Islands region. h about 54 km.
27	06 45 35.3	5.1 S.	152.2 E.	New Britain. h about 66 km.
27	08 24 48.1	12.5 N.	120.9 E.	Mindoro, Philippine Islands. h about 33 km.
27	11 13 45.9	28.8 S.	68.1 W.	La Rioja Province, Argentina. h about 88 km.
27	12 48 17.9	9.1 S.	113.1 E.	Off south coast of Java. h about 40 km.
27	14 02 02.1	4.9 S.	145.1 E.	Near north coast of New Guinea. h about 35 km.
27	18 18 42.0	39.9 N.	142.0 E.	Near east coast of northern Honshu, Japan. h about 36 km.
28	10 01 23.6	48.4 N.	113.9 W.	Montana. Felt at Big Fork and Linfor. h about 33 km.
28	14 47 08.1	53.7 N.	163.7 W.	Fox Islands, Aleutian Islands. h about 33 km.
28	19 50 10.7	42.9 N.	145.4 E.	Near east coast of Hokkaido, Japan. h about 41 km.
28	21 39 08.0	17.1 S.	14.1 W.	South Atlantic Ocean. h about 33 km.
28	23 29 40.6	35.6 N.	24.2 E.	Near north coast of Crete. Felt. h about 82 km.
29	04 12 12.7	2.3 N.	127.2 E.	Halmahera region. h about 64 km.
29	08 04 24.8	23.7 N.	65.4 E.	Arabian Sea. h about 33 km.
29	10 41 04.6	20.2 S.	70.3 W.	Near coast of northern Chile. Felt at Arequipa, Peru. h about 49 km. Mag. 6¾.
29	14 47 41.4	31.2 S.	177.9 W.	Kermadec Islands region. h about 43 km. Mag. 6-6¼.
29	15 20 42.3	31.4 S.	177.6 W.	Keramdec Islands region. h about 41 km.
29	18 13 59.3	31.6 S.	177.8 W.	Kermadec Islands region. h about 33 km.
29	18 19 40.7	31.5 S.	177.6 W.	Kermadec Islands region. h about 33 km.
30	01 57 43.7	14.9 S.	166.6 E.	New Hebrides Islands. h about 49 km.
30	07 07 10.5	15.4 N.	119.7 E.	Near west coast of central Luzon, Philippine Islands. Felt at Manila. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
December	h m s	°	°	
30	13 23 09.3	28.2 S.	175.7 W.	Kermadec Islands region. h about 39 km.
30	15 25 25.1	37.5 N.	72.9 E.	Hindu Kush region. h about 35 km.
30	17 47 15.4	21.1 S.	169.3 E.	Loyalty Islands. h about 71 km.
30	18 16 21.4	4.7 S.	153.7 E.	New Britain region. Felt at Rabaul. h about 116 km.
30	21 16 42.5	5.0 N.	125.8 E.	Near south coast of Mindanao, Philippine Islands. h about 33 km.
30	22 08 38.3	42.6 N.	144.3 E.	Near south coast of Hokkaido, Japan. h about 86 km.
30	22 50 25.9	27.1 S.	176.5 W.	Kermadec Islands region. h about 49 km.
31	02 48 35.5	8.1 S.	120.9 E.	Flores Sea. h about 33 km.
31	08 00 25.3	52.8 N.	160.7 E.	Off east coast of Kamchatka. h about 53 km.
31	11 01 04.4	0.5 N.	99.9 E.	Sumatra. h about 67 km.
31	15 42 23.0	62.5 N.	149.5 W.	Central Alaska. h about 113 km.
31	17 19 15.3	4.7 S.	153.6 E.	New Britain region. Felt at Rabaul. h about 122 km.
31	18 28 24.6	15.3 N.	121.5 E.	Luzon, Philippine Islands. h about 67 km.
31	19 40 10.5	22.7 S.	171.4 E.	Loyalty Islands region. h about 39 km.
31	20 49 35.3	47.1 N.	122.0 W.	Pierce County, Washington. Slight damage. h about 33 km.
31	21 45 04.8	28.4 S.	178.4 W.	Kermadec Islands region. h about 243 km.
31	23 37 18.9	21.6 S.	176.8 W.	Tonga Islands region. h about 33 km.

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Date and Station	Phase	(GCT) h m s
DEC 01		
H-00 35 50.1		
34.3N 116.9W		
h ABOUT 033KM		
BCN	IP	00 36 27.0
	I	36 32.2
	ES	37 02.8
EUR	IP	00 37 08.0
	IL	38 39.0
TUC	EP	00 37 12.4
	IS	38 22.4
	IL	38 27.0
ALQ	EP	00 37 57.5
	I	38 18.3
FGU	EP	00 38 00.4
	IL	40 30.4
DEC 01		
BCN	EP	00 41 19.8
	ES	41 57.6
DEC 01		
H-00 44 48.0		
34.3N 116.9W		
h ABOUT 033KM		
BCN	EP	00 45 24.3
	E	45 31.8
	ES	46 01.4
EUR	IP	00 46 06.0
	IL	47 31.0
DEC 01		
COL	EP	00 49 50.0
DEC 01		
H-00 57 30.4		
34.3N 117.0W		
h ABOUT 033KM		
BCN	E(P)	00 58 07.3
	I	58 13.2
	IS	58 44.0
EUR	EP	00 58 49.0
DEC 01		
SLC	EP	00 57 58.9
DEC 01		
COL	E(P)	01 02 36.0
DEC 01		
BCN	EP	01 15 43.1
	I	15 48.0
	ES	16 18.6
EUR	IP	01 16 24.0
	IL	17 49.0
DEC 01		
H-01 50 20.4		
52.4N 170.1W		
h ABOUT 038KM		
COL	IP	01 54 15.0
	I(PP)	54 46.0
	ES	57 26.0
	EL	59 14.0
KIP	EP	01 56 44.0
	EPP	57 51.0
	ES	02 02 08.0
HHM	IP	01 57 13.0
	IPCP	59 44.0
BUT	EP	01 57 30.8
	I	57 46.3
	E	58 01.3
	EPP	58 50.3
	EPCP	59 43.8
	E	02 00 16.3
	ES	04 08.9
BOZ	EP	01 57 38.0
	E	57 53.0
	E	58 22.0
EUR	IP	01 57 45.0
	ES	02 03 40.0
BCN	EP	01 58 08.0
	I	58 26.2
FGU	EP	01 58 09.4
TUC	EP	01 58 48.0
	I	59 05.9
TUT	EP	01 58 48.0
	E	59 02.9
ALQ	IP	01 58 54.0
	EPP	02 00 52.0
CHI	EP	01 59 42.0
CSC	EP	02 00 49.0
SJP	IP	02 02 47.4
DEC 01		
HHM	IP	02 17 49.0
DEC 01		
BCN	IP	03 52 24.6
	I	52 31.4
	IS	53 00.4
EUR	IP	03 53 06.0
	IL	54 31.0
DEC 01		
H-04 16 59.6		
29.7S 177.7W		
h ABOUT 052KM		
HON	IP	04 26 21.0
KIP	IP	04 26 21.4
BCN	IP	04 29 47.1
TUT	IP	04 29 49.3
	I	30 07.3
TUC	EP	04 29 49.4
	IPP	30 06.0
EUR	IP	04 29 53.0
	IPP	30 10.0
	EPKKP	47 24.0
SLC	EP	04 30 08.7
	EPP	30 24.9
ALQ	IP	04 30 08.8
FGU	EP	04 30 15.3
BUT	IP	04 30 20.9
	IPP	30 38.8
	I	31 20.2
BOZ	E(P)	04 30 24.0
COL	IP	04 30 25.9
	EPP	34 20.0
DEC 01		
BCN	E(P)	05 08 34.9
	IS	09 10.4
DEC 01		
EUR	EP	05 41 02.0
ALQ	EP	05 42 32.3
DEC 01		
BCN	IP	06 59 04.9
	I	59 09.9
	ES	59 40.9
EUR	IP	06 59 46.0
	IL	07 01 11.0
DEC 01		
EUR	IP	08 41 04.0
	IL	42 30.0
DEC 01		
EUR	EP	10 06 44.0
DEC 01		
BCN	EP	10 36 50.8
	I	36 57.6
	IS	37 26.9
FGU	E(P)	10 37 27.1
EUR	IP	10 37 32.0
	IL	38 58.0
DEC 01		
COL	EP	11 16 19.0
DEC 01		
BCN	IP	11 58 48.3
DEC 01		
H-13 32 24.8		
30.8S 071.3W		
h ABOUT 068KM		
SJP	I(P)	13 41 05.4
ALQ	IP	13 43 51.0
BCN	EP	13 44 18.5
FGU	E(P)	13 44 26.4
EUR	IP	13 44 36.0
	IPP	44 50.0
BUT	IP	13 44 55.2
	IPP	45 09.9
DEC 01		
H-14 06 02.8		
34.3N 116.9W		
h ABOUT 033KM		
BCN	EP	14 06 40.3
	I	06 47.8
	IS	07 16.1
EUR	IP	14 07 21.0
	IL	08 45.0
DEC 01		
ALQ	EP	14 08 40.9
DEC 01		
FGU	EP	16 38 19.1
DEC 01		
TUC	E(P)	18 47 49.0
DEC 01		
TUC	EP	19 45 20.5
ALQ	IP	19 45 52.0
	IS	46 32.5
DEC 01		
BCN	EP	20 45 32.0
	I	45 55.5
DEC 01		
H-21 02 51.8		
17.7S 178.7W		
h ABOUT 620KM		
HON	IP	21 10 06.0
KIP	IP	21 10 06.2
UKI	EP	21 13 43.4
BCN	IP	21 14 03.5
EUR	IP	21 14 07.0
	EPP	16 17.0
	EsP	17 22.0
TUC	IP	21 14 10.3
SLC	EP	21 14 24.4
COL	IP	21 14 26.9
	EPP	16 39.0
	EPP	18 06.0
	EPPP	19 51.0
	ES	24 11.0
FGU	IP	21 14 32.7
BUT	IP	21 14 34.2
HHM	IP	21 14 35.5
DEC 01		
TUC	E(P)	22 58 39.0

Date and Station	Phase (GCT)
	h m s
DEC 02	
COL EP	00 10 46.0
DEC 02	
TUC E(P)	00 12 36.5
EUR EP	00 13 14.0
DEC 02	
H-00 41 39.7	
34.3N 117.0W	
h ABOUT 033KM	
BCN IP	00 42 17.0
I	42 24.4
ES	42 51.5
EUR IP	00 42 57.0
IL	44 27.0
TUC E(P)	00 43 03.0
I	44 35.0
IL	44 38.0
ALQ EP	00 43 46.0
I	44 18.0
IL	46 05.0
FGU EP	00 43 50.1
IL	46 21.1
BUT I(P)	00 44 35.7
DEC 02	
FGU EP	00 54 19.6
I	54 21.2
ES	54 52.6
DEC 02	
COL EP	01 52 07.0
DEC 02	
BCN E(P)	01 59 09.0
DEC 02	
COL EP	02 27 50.0
DEC 02	
EUR IP	03 07 57.0
IL	09 21.0
DEC 02	
COL EP	03 25 44.0
E	29 17.0
DEC 02	
EUR EP	03 36 50.0
COL IP	03 37 49.2
I	38 01.0
DEC 02	
H-05 30 53.8	
9.9S 159.9E	
h ABOUT 034KM	
COL IP	05 43 21.0
I	43 27.0
EUR IP	05 44 01.0
DEC 02	
SJP IP	08 57 41.0
IS	57 51.0

Date and Station	Phase (GCT)
	h m s
DEC 02	
BUT I(P)	08 59 20.0
DEC 02	
FGU EP	09 28 14.3
DEC 02	
H-09 49 48.4	
13.5N 146.0E	
h ABOUT 067KM	
GUA IP	09 50 09.9
COL EP	10 00 41.0
E	02 04.0
EUR IP	10 02 33.0
BUT EP	10 02 33.8
I	03 00.7
FGU EP	10 02 51.2
DEC 02	
EUR EP	12 25 04.0
COL EP	12 25 11.0
E	25 40.0
ALQ EP	12 25 27.5
DEC 02	
EUR E(P)	13 00 54.0
DEC 02	
EUR EP	13 17 45.0
DEC 02	
FGU EP	14 21 07.1
I	21 26.1
DEC 02	
EUR EP	14 48 54.0
COL IP	14 49 41.7
DEC 02	
H-16 12 53.4	
18.9S 168.5E	
h ABOUT 033KM	
COL EP	16 25 49.0
E	26 08.0
EUR EP	16 25 55.0
DEC 02	
TUC EP	18 08 45.8
DEC 02	
H-18 19 55.5	
36.5N 070.8E	
h ABOUT 201KM	
COL EP	18 31 14.0
DEC 02	
ALQ IP	18 46 00.5
DEC 02	
BCN E(P)	21 19 41.0
IS	20 11.2

Date and Station	Phase (GCT)
	h m s
DEC 02	
H-22 21 29.5	
35.8N 050.1E	
h ABOUT 036KM	
COL IP	22 33 29.0
DEC 02	
COL EP	22 24 15.6
DEC 02	
FGU EP	22 59 31.5
ALQ IP	22 59 48.8
DEC 02	
H-23 36 23.7	
35.5N 050.1E	
h ABOUT 033KM	
COL IP	23 48 26.0
DEC 03	
COL IP	00 30 02.0
DEC 03	
FGU E(P)	00 48 47.0
DEC 03	
EUR E(P)	01 03 51.0
DEC 03	
FGU E(P)	02 36 33.0
E(S)	36 56.0
DEC 03	
EUR IP	03 50 49.0
DEC 03	
ALQ EP	04 53 01.5
DEC 03	
ALQ IP	05 08 35.5
DEC 03	
TUC E(P)	09 41 53.2
DEC 03	
TUC E(P)	09 53 10.5
DEC 03	
TUC E(P)	10 06 49.3
DEC 03	
COL IP	10 44 54.4
E	47 43.0
EUR IP	10 48 29.0
FGU IP	10 48 50.4
TUC EP	10 49 29.5
ALQ IP	10 49 34.5
DEC 03	
COL IP	11 34 32.1
IS	34 52.0
DEC 03	
EUR EP	11 40 27.0
I	40 40.0

Date and Station	Phase (GCT)
	h m s
DEC 03	
H-12 50 36.9	
12.9S 169.2E	
h ABOUT 632KM	
KIP EP	12 58 13.0
COL IP	13 02 01.9
EUR IP	13 02 17.0
BUT E(P)	13 02 37.1
FGU E(P)	13 02 40.8
ALQ IP	13 02 44.2
DEC 03	
TUT EP	16 02 54.9
ES	03 14.0
DEC 03	
FGU IP	18 05 56.5
IS	06 05.7
DEC 03	
ALQ EP	18 23 31.3
DEC 03	
COL IP	18 55 46.4
EUR IP	18 59 21.0
DEC 03	
COL EP	20 04 47.0
DEC 03	
TUT EP	20 55 54.0
ES	56 12.9
ALQ IP	20 56 26.3
I	57 06.0
DEC 03	
EUR EP	22 06 21.0
DEC 04	
COL EP	00 58 18.5
DEC 04	
H-01 31 43.9	
08.0S 147.7E	
h ABOUT 091KM	
COL IP	01 44 18.1
DEC 04	
COL EP	01 32 24.0
E	32 39.0
DEC 04	
ALQ IP	02 14 05.5
EUR EP	02 15 21.0
DEC 04	
FGU IP	03 04 40.2
I(S)	05 04.4
EUR EP	03 05 29.0
ALQ EP	03 05 46.5

Date and Station	Phase	(GCT) h m s
DEC 04		
H-03 29 40.8		
10.1N 103.6W		
h ABOUT 033KM		
TUC	EP	03 34 45.3
	ES	39 05.0
TUT	E(P)	03 34 46.0
ALQ	IP	03 35 02.0
	IS	39 36.0
	IL	43 02.0
FGU	E(P)	03 35 58.4
EUR	IP	03 35 59.0
BOZ	EP	03 36 41.0
BUT	E(P)	03 36 48.5
COL	EP	03 40 03.0
DEC 04		
COL	EP	04 26 52.0
DEC 04		
BUT	E(P)	04 56 26.1
	E(S)	56 45.6
DEC 04		
H-06 15 35.6		
36.9N 141.0E		
h ABOUT 077KM		
COL	EP	06 24 19.4
	I▸P	24 30.0
EUR	EP	06 27 18.0
	I▸P	27 28.0
ALQ	IP	06 28 05.5
DEC 04		
BCN	E(P)	07 12 46.7
DEC 04		
H-07 23 04.2		
21.8S 065.6W		
h ABOUT 300KM		
SJP	IP	07 30 07.9
	I▸P	31 14.0
ALQ	IP	07 33 36.0
	I▸P	34 46.8
TUT	IP	07 33 39.4
TUC	IP	07 33 39.8
	E▸P	34 49.0
BCN	IP	07 34 09.6
	E▸P	35 21.0
FGU	EP	07 34 12.2
SLC	EP	07 34 18.7
	E▸P	35 31.9
EUR	IP	07 34 27.0
	I▸P	35 40.0
BOZ	EP	07 34 36.0
	E▸P	35 49.0
BUT	IP	07 34 41.6
	E	35 23.6
	E▸P	35 55.1
HHM	EP	07 34 54.5
COL	EP	07 36 43.5
	EP'	40 55.0
	EPP	41 08.0
DEC 04		
SJP	EP	07 59 42.5
DEC 04		
SJP	EP	08 02 00.9
EUR	IP	08 05 22.0
DEC 04		
H-08 16 18.8		
36.1N 123.5E		
h ABOUT 033KM		
COL	EP	08 26 06.0
HHM	EP	08 28 35.6
EUR	EP	08 29 02.0
FGU	EP	08 29 13.2
DEC 04		
SJP	EP	08 39 51.6
ALQ	IP	08 43 36.0
TUC	E(P)	08 43 46.2
EUR	EP	08 44 45.0
COL	EP	08 47 47.0
DEC 04		
HHM	IP	10 02 07.0
DEC 04		
H-10 34 27.8		
06.1S 149.9E		
h ABOUT 083KM		
COL	EP	10 46 49.0
EUR	EP	10 47 55.0
DEC 04		
EUR	EP	10 46 39.0
DEC 04		
EUR	IP	11 04 36.0
DEC 04		
FGU	E(P)	11 30 45.1
DEC 04		
FGU	EP	11 48 06.1
DEC 04		
BCN	IP	14 56 20.0
	I(S)	56 45.2
DEC 04		
BCN	IP	16 00 28.7
EUR	IP	16 00 40.6
GCA	EP	16 00 59.7
SLC	E(P)	16 01 38.2
	E	03 05.6
FGU	E(P)	16 01 41.0
BUT	I(P)	16 02 15.1
DEC 04		
ALQ	EP	16 02 14.0
	I	02 32.3
	I	04 24.0
DEC 04		
BCN	E(P)	16 29 19.2
	E(S)	29 44.2
EUR	IP	16 29 31.1
DEC 04		
H-16 40 06.0		
16.5S 172.8W		
h ABOUT 033KM		
KIP	EP	16 47 45.0
BCN	E(P)	16 51 42.3
EUR	IP	16 51 56.0
ALQ	IP	16 52 19.5
SLC	E(P)	16 52 20.3
BUT	E(P)	16 52 28.1
	EL	17 24 05.0
BOZ	E(P)	16 52 30.0
COL	IP	16 52 30.9
DEC 04		
COL	EP	17 16 07.5
EUR	IP	17 19 23.0
DEC 04		
BOZ	E(P)	17 34 09.0
EUR	IP	17 35 29.0
DEC 04		
COL	EP	17 43 27.0
DEC 04		
H-17 49 59.4		
39.8N 104.7W		
h ABOUT 033KM		
FGU	IP	17 50 58.0
	I(S)	51 50.0
ALQ	IP	17 51 16.5
	I	51 28.5
	IS	52 35.0
SLC	E(P)	17 51 39.8
	E	52 49.6
EUR	IP	17 52 07.0
BOZ	E(P)	17 52 16.0
	ES	53 59.0
BUT	E(P)	17 52 20.0
BCN	E(P)	17 52 40.2
	E	54 15.7
DEC 04		
H-18 46 01.6		
44.6N 147.9E		
h ABOUT 171KM		
COL	EP	18 53 22.0
DEC 04		
H-19 31 29.8		
04.6N 122.5E		
h ABOUT 586KM		
COL	IP	19 43 10.0
DEC 04		
EUR	E(P)	20 43 58.0
ALQ	E(P)	20 44 17.0
DEC 04		
BCN	E(P)	22 54 42.7
	ES	55 13.0
DEC 04		
FGU	IP	23 39 35.2
	I(S)	39 47.7
CSC	EP	23 43 39.0
DEC 05		
H-00 19 40.9		
32.7N 097.3E		
h ABOUT 074KM		
COL	EP	00 30 48.0
DEC 05		
SJP	IP	00 31 00.6
	IS	31 21.0
DEC 05		
FGU	EP	00 44 44.7
	ES	46 14.7
DEC 05		
H-01 16 06.3		
10.9S 161.6E		
h ABOUT 033KM		
COL	IP	01 28 35.4
EUR	IP	01 29 09.0
DEC 05		
ALQ	E(P)	01 40 49.5
DEC 05		
EUR	E(P)	02 22 24.0
DEC 05		
BUT	IP	03 11 26.6
HHM	EP	03 11 40.5
	I	12 08.5

Date and Station	Phase (GCT)
	h m s
BOZ E(P)	03 11 50.0
DEC 05	
H-05 11 11.2	
17.7S 178.6W	
h ABOUT 565KM	
EUR IP	05 22 32.0
COL IP	05 22 50.4
DEC 05	
EUR EP	06 39 22.0
DEC 05	
TUC EP	09 41 49.9
DEC 05	
H-11 38 10.6	
10.3S 077.9W	
h ABOUT 050KM	
SJP E(P)	11 44 27.5
ALQ IP	11 47 21.0
IpP	47 31.0
EUR IP	11 48 20.0
HHM E(P)	11 48 57.5
COL EP	11 51 10.0
EpP	51 28.0
DEC 05	
H-12 24 32.6	
20.8S 178.9W	
h ABOUT 591KM	
EUR IP	12 36 03.0
COL IP	12 36 24.1
E	37 23.0
DEC 05	
H-13 48 00.4	
39.9N 104.6W	
h ABOUT 033KM	
FGU IP	13 48 58.5
ALQ EP	13 49 17.0
I	49 29.0
IS	50 31.5
IL	51 20.8
SLC E(P)	13 49 37.0
IS	50 51.6
BOZ E(P)	13 50 14.0
E	51 42.0
ES	51 55.0
HHM EP	13 50 34.5
BUT I(P)	13 50 38.3
I	51 33.8
I(S)	52 07.6
BCN E(P)	13 50 42.2
ES	52 34.0
TUT E(P)	13 50 45.2

Date and Station	Phase (GCT)
	h m s
TUC EP	13 50 45.9
DEC 05	
CSC EP	13 58 13.0
DEC 05	
THU EP	14 20 16.5
DEC 05	
BOZ E(P)	15 18 02.0
BUT IP	15 18 17.1
IS	18 40.1
DEC 05	
FGU EP	16 52 28.0
DEC 05	
ALQ EP	18 28 36.5
DEC 05	
FGU EP	19 13 29.4
I	14 02.9
DEC 05	
ALQ IP	19 17 26.0
DEC 05	
ALQ E(P)	21 02 53.5
E	03 10.5
DEC 05	
HHM IP	21 36 37.3
IS	37 06.5
DEC 06	
COL IP	00 06 00.9
EUR EP	00 09 27.0
I	09 41.0
DEC 06	
BCN IP	00 58 28.9
DEC 06	
ALQ EP	01 02 25.0
DEC 06	
TUC EP	01 17 18.0
TUT E(P)	01 17 21.0
DEC 06	
H-02 13 25.1	
30.7N 142.0E	
h ABOUT 033KM	
COL EP	02 22 50.0
BUT EP	02 25 22.5
EUR EP	02 25 29.0
SLC E(P)	02 25 40.8
FGU EP	02 25 48.7
DEC 06	
COL EP	02 35 39.8
E	36 05.0
EUR IP	02 39 06.0
ALQ E(P)	02 39 57.0

Date and Station	Phase (GCT)
	h m s
DEC 06	
THU EP	02 54 47.0
DEC 06	
THU EP	03 02 54.5
DEC 06	
CSC EP	03 32 57.0
E	33 07.0
DEC 06	
H-03 45 20.5	
23.3S 068.1W	
h ABOUT 123KM	
SJP EP	03 52 54.3
EPP	54 37.0
ALQ IP	03 56 11.5
IsP	56 58.8
TUT EP	03 56 13.0
EpP	03 56 49.0
BCN IP	03 56 43.8
SLC EP	03 56 54.3
EUR IP	03 57 01.0
I	57 10.0
BOZ EP	03 57 13.0
BUT EP	03 57 17.2
DEC 06	
FGU EP	03 56 18.2
DEC 06	
H-04 04 09.9	
49.0N 154.4E	
h ABOUT 085KM	
COL IP	04 10 45.8
THU IP	04 13 09.5
UKI EP	04 13 50.2
EpP	14 09.7
BUT EP	04 14 03.7
EpP	14 22.6
BOZ EP	04 14 10.0
EpP	14 30.0
EUR IP	04 14 18.0
IpP	14 38.0
SLC EP	04 14 28.8
FGU EP	04 14 37.3
I	15 15.7
BCN IP	04 14 38.8
EpP	14 57.7
TUC EP	04 15 10.4
ALQ IP	04 15 14.0
IpP	15 34.5
DEC 06	
FGU E(P)	05 22 36.6

Date and Station	Phase (GCT)
	h m s
DEC 06	
H-06 44 17.0	
45.6S 073.4W	
h ABOUT 033KM	
SJP EP	06 54 47.6
TUC EP	06 56 48.6
ALQ IP	06 56 52.8
BCN EP	06 57 09.9
EUR IP	06 57 28.0
FGU E(P)	06 57 34.6
COL EP'	07 03 09.0
DEC 06	
TUC IP	06 56 13.3
DEC 06	
FGU EP	07 14 59.1
ES	15 23.6
DEC 06	
EUR IP	07 19 48.0
DEC 06	
FGU IP	08 22 05.6
E	22 40.6
DEC 06	
H-08 52 48.6	
53.4N 153.5E	
h ABOUT 506KM	
COL IP	08 58 24.7
EUR IP	09 02 06.0
IPCP	02 46.0
IpP	03 44.0
DEC 06	
FGU E(P)	09 03 22.5
I	03 56.5
DEC 06	
FGU EP	09 32 25.5
E(S)	32 36.5
DEC 06	
H-10 08 08.0	
53.1N 169.3W	
h ABOUT 033KM	
COL EP	10 11 53.0
EUR EP	10 15 27.0
FGU EP	10 15 53.5
DEC 06	
H-11 28 11.9	
22.0S 113.7W	
h ABOUT 033KM	
EUR IP	11 38 26.0
DEC 06	
COL EP	15 59 04.0

Date and Station	Phase (GCT)
	h m s
DEC 06	
H-16 05 37.0	
40.2N 110.6W	
h ABOUT 033KM	
FGU EP	16 05 55.3
E(S)	06 18.3
EUR EP	16 06 39.0
ALQ EP	16 07 08.8
ES	08 19.0
DEC 06	
FGU IP	16 12 16.8
DEC 06	
EUR EP	16 29 35.0
DEC 06	
H-17 16 08.5	
55.0N 161.7E	
h ABOUT 033KM	
COL EP	17 21 44.0
EUR IP	17 25 38.0
I	25 47.0
DEC 06	
COL IP	17 54 50.3
EUR EP	17 54 55.0
DEC 06	
FGU IP	18 44 12.2
IS	44 36.7
DEC 06	
FGU EP	20 10 37.1
ES	11 02.1
DEC 06	
ALQ EP	21 29 35.5
DEC 06	
H-22 36 45.8	
34.0S 071.1W	
h ABOUT 088KM	
EUR EP	22 49 05.0
DEC 06	
ALQ EP	23 05 26.0
DEC 07	
H-00 06 23.9	
10.8S 164.0E	
h ABOUT 100KM	
COL EP	00 18 42.0
EUR IP	00 19 10.0
DEC 07	
FGU EP	00 44 13.0
E(S)	44 39.0
DEC 07	
FGU EP	00 47 44.7
E	48 28.0

Date and Station	Phase (GCT)
	h m s
DEC 07	
FGU EP	01 53 10.0
E	53 31.0
DEC 07	
EUR IP	03 02 04.0
I	02 20.0
DEC 07	
FGU EP	05 20 41.9
ES	22 01.9
DEC 07	
H-07 27 45.4	
15.3N 061.2W	
h ABOUT 149KM	
SJP I(P)	07 29 07.8
IS	30 11.0
EUR EP	07 36 52.0
COL EP	07 39 11.0
EpP	39 49.0
DEC 07	
BCN IP	09 03 27.8
DEC 07	
H-09 36 01.5	
38.0N 106.3E	
h ABOUT 033KM	
COL IP	09 46 24.1
IPCP	46 51.0
E	47 20.0
I	50 40.0
HHM IP	09 48 46.2
BUT IP	09 48 58.4
EUR IP	09 49 18.0
FGU EP	09 49 23.7
DEC 07	
H-12 55 37.2	
30.2S 179.4W	
h ABOUT 364KM	
EUR IP	13 08 01.0
DEC 07	
COL EP	13 04 50.0
DEC 07	
H-14 03 37.0	
29.2N 139.2E	
h ABOUT 411KM	
KIP EP	14 12 41.0
COL IP D	14 12 41.0
I	15 50.0
IS	19 57.0
ISCS	21 44.0
EsS	22 32.0
HON EP C	14 12 43.0
IS	20 00.0
THU IP D	14 14 25.5

Date and Station	Phase (GCT)
	h m s
UKI EP C	14 14 51.5
E	15 15.1
E	15 43.5
EpP	16 22.0
EPP	17 53.0
ES	24 08.5
HHM IP C	14 14 57.5
E	15 25.2
EpP	16 30.2
E	17 32.2
ES	24 25.2
BUT IP C	14 15 07.4
E	15 34.9
EpP	16 42.0
IsP	17 29.9
IPP	18 14.4
EPPP	20 20.0
E	24 10.3
IS	24 39.9
FSP	25 27.4
EP'P'	41 46.0
ESKPP'	44 38.9
EUR IP C	14 15 15.0
IpP	16 50.0
EPP	18 29.0
IS	24 56.0
IPKKP	33 42.0
E	40 31.0
ESKPP'	44 39.0
SLC EP D	14 15 25.4
E	16 05.2
IpP	17 00.2
EsP	17 48.9
EPP	18 47.7
ES	25 08.2
P'P'	41 34.2
BCN EP C	14 15 28.2
IpP	17 02.4
IsP	17 51.4
IPP	18 49.8
EPPP	20 53.8
ES	25 12.2
EPKKP	33 36.2
EP'P'	41 29.2
ISKPP'	44 20.9
FGU EP	14 15 32.5
IpP	17 09.5
IS	25 16.5
TUC EP	14 15 51.2
EpP	17 27.3
EPP	19 30.5
ES	25 46.6
TUT EP	14 15 52.7
I	15 54.2
EpP	17 28.4
EPP	19 31.3
ES	25 45.0
ALQ IP C	14 15 56.0
EPP	19 38.0
IS	24 59.0
SJP EP'	14 21 54.7
EpP'	23 35.4
IsP'	24 30.8

Date and Station	Phase (GCT)
	h m s
DEC 07	
ALQ EP	18 46 22.0
DEC 07	
H-19 00 00.1	
37.1N 116.0W	
h ABOUT 000KM	
BCN IP	19 00 28.2
EUR IP	19 00 41.6
TUC IP	19 01 38.0
E	02 02.2
ES	02 43.0
TUT EP	19 01 38.0
ALQ IP	19 01 59.8
COL EP	19 06 44.3
DEC 07	
BUT I(P)	19 01 59.3
FGU IP	19 02 02.6
DEC 07	
BCN E(P)	19 13 53.1
DEC 07	
BCN E(P)	19 21 11.3
DEC 07	
EUR IP	19 26 23.5
ALQ EP	19 28 13.2
DEC 07	
SJP IP	21 34 35.0
I	40 20.0
I	43 30.0
DEC 07	
COL IP	22 00 34.0
E	00 50.0
DEC 07	
TUC EP	22 58 20.3
DEC 07	
COL EP	23 04 00.0
EUR EP	23 06 54.0
DEC 07	
BCN IP	23 24 17.0
DEC 07	
H-23 55 03.0	
13.9N 120.6E	
h ABOUT 178KM	
COL EP	24 06 43.5
DEC 08	
H-01 43 43.8	
62.6N 151.6W	
h ABOUT 033KM	
COL IP	01 44 30.8
IS	44 56.0
EUR EP	01 50 05.0

Date and Station	Phase (GCT) h m s
DEC 08	
COL EP	03 11 35.0
EUR EP	03 16 03.0
DEC 08	
BCN IP	05 21 58.4
DEC 08	
ALQ EP	05 25 09.0
DEC 08	
H-09 02 54.4	
36.5N 055.0E	
h ABOUT 033KM	
COL EP	09 14 47.0
I	15 10.0
DEC 08	
BCN E(P)	11 07 58.3
IS	08 29.3
DEC 08	
EUR EP	11 18 15.0
DEC 08	
H-11 28 23.3	
4.9S 154.0E	
h ABOUT 100KM	
COL EP	11 40 30.0
EpP	40 55.0
DEC 08	
H-14 19 00.1	
37.1N 095.5E	
h ABOUT 033KM	
COL IP	14 29 51.7
EUR EP	14 32 38.0
DEC 08	
H-18 00 39.1	
23.7S 069.1W	
h ABOUT 084KM	
SJP I(P)	18 08 40.7
ALQ IP	18 11 32.0
IpP	11 56.0
TUT EP	18 11 34.9
EpP	11 57.6
EsP	12 08.0
TUC EP	18 11 35.0
EsP	12 05.6
BCN IP	18 12 04.3
EpP	12 28.0
EUR IP	18 12 22.0
IpP	12 45.0
BUT IP	18 12 40.7
IpP	13 03.7
EsP	13 19.7
COL EP	18 14 44.0

Date and Station	Phase (GCT) h m s
DEC 08	
H-18 18 28.7	
15.4S 173.4W	
h ABOUT 033KM	
HON EP	18 25 59.0
p	26 10.0
KIP IP D	18 25 59.0
E	26 10.0
UKI EP D	18 29 50.2
EPP	32 28.2
BCN IP D	18 30 10.7
E	30 22.4
E	30 28.3
E	31 53.2
EPP	32 58.7
EUR IP D	18 30 16.0
TUC IP D	18 30 17.8
I	30 38.8
EL	52 17.0
TUT IP D	18 30 18.3
SLC EP D	18 30 35.0
ALQ IP D	18 30 41.1
I	32 22.0
IS	40 48.0
EL	55 58.0
BUT IP D	18 30 46.7
I	31 00.7
EPP	33 44.7
ES	40 57.0
EL	56 00.0
COL IP D	18 30 47.6
ES	40 47.0
EL	56 24.0
HHM EP D	18 30 48.0
DEC 08	
H-21 27 22.2	
25.8S 063.4W	
h ABOUT 620KM	
SJP IP D	21 34 34.7
IpP	36 27.0
ISCP	39 03.0
IS	40 25.0
I	41 23.0
CSC EP D	21 36 44.0
WAS EP	21 37 07.6
IS	44 24.0
CHI P	21 37 41.0
ALQ IP C	21 37 52.5
IS	46 40.0
TUC IP C	21 37 55.0
IpP	39 57.2
IS	46 40.0

Date and Station	Phase (GCT) h m s
TUT IP C	21 37 55.3
IpP	39 59.2
ES	46 38.0
BCN IP C	21 38 22.6
IpP	40 26.0
EsP	41 22.0
EPP	41 34.3
E	44 10.8
ES	47 33.8
EPKKP	57 16.0
E	57 45.3
EP'P'	22 04 51.3
I	05 21.8
ESKPP'	07 25.8
I	07 52.8
EUR E(P)	21 38 27.0
BUT IP C	21 38 52.2
IpP	41 00.2
IsP	41 51.0
EPP	42 09.0
EpPP	44 00.0
EPPP	44 32.0
ESKS	48 19.0
IS	48 29.1
E	49 15.0
I	52 13.5
E	54 25.0
EPKKP	57 00.1
E	57 57.0
ISKPP'	22 07 30.0
UKI EP C	21 38 58.9
EpP	41 09.2
EPP	42 30.7
ES	48 44.0
E	49 14.0
EPKKP	57 00.2
EP'P'	22 05 06.2
ESKPP'	07 31.0
HHM EP C	21 39 03.0
EpP	41 05.0
ES	48 02.0
E	52 27.0
E	54 57.0
THU E(P)	21 40 18.0
HON E(P)	21 40 31.0
IpP	42 40.0
ES	50 06.0
COL EP	21 40 52.0
ES	52 15.0
EPKKP	56 04.0
DEC 08	
KIP E(P)	21 44 41.0
DEC 08	
H-22 55 01.2	
50.5N 176.8W	
h ABOUT 033KM	
COL IP	22 59 41.8
E	23 02 36.0
IS	03 28.0
I	03 41.0
E	08 12.0

Date and Station	Phase (GCT) h m s
SIT EP	23 00 21.0
EL	05 01.0
KIP IP	23 01 32.0
HON EP	23 01 33.0
UKI EP	23 02 26.2
E	02 57.4
E	03 07.2
EPCP	04 31.2
HHM IP	23 02 33.2
I	04 39.0
E	07 37.0
BUT EP	23 02 48.7
I	03 27.2
I	03 35.9
IPCP	04 39.3
I	06 14.9
EUR IP	23 03 02.0
SLC IP	23 03 16.5
I	03 54.8
EPCP	04 35.5
THU IP	23 03 19.0
BCN EP	23 03 24.4
I	04 23.1
EPP	05 13.5
TUC IP	23 04 02.2
I	04 30.0
EL	20 42.0
TUT EP	23 04 03.0
F	04 26.0
F	04 37.0
ALQ EP	23 04 05.0
I	04 09.0
IPCP	05 24.0
CHI P	23 04 57.0
CSC IP	23 05 59.0
ES	14 57.0
SJP IP	23 07 52.4
I	08 32.0
DEC 08	
COL IP	23 23 59.2
DEC 08	
COL EP	23 33 45.0
DEC 09	
TUC E(P)	03 30 50.9
ALQ IP	03 30 53.2
EUR EP	03 32 12.0
DEC 09	
BUT EP	08 14 15.0
IS	14 34.1
DEC 09	
HHM EP	10 10 05.6
F	10 52.6

Date and Station	Phase	Phase (GCT) h m s
DEC 09		
H-10 17 39.5		
43.5N 147.3E		
h ABOUT 034KM		
COL	IP	10 25 23.2
HHM	EP	10 28 11.6
EUR	EP	10 28 40.0
ALQ	EP	10 29 31.2
DEC 09		
CSC	EP	11 42 01.0
DEC 09		
COL	IP	11 55 31.7
	IS	55 48.0
DEC 09		
COL	E(P)	13 19 35.0
DEC 09		
H-14 15 56.3		
22.3S 177.0W		
h ABOUT 117KM		
EUR	IP	14 28 13.0
ALQ	IP	14 28 33.8
COL	IP	14 28 41.0
	I	28 59.0
	IpP	29 18.0
	EPP	32 19.0
DEC 09		
H-14 27 04.1		
4.7S 153.7E		
h ABOUT 117KM		
COL	IP	14 39 10.7
	IPP	39 40.0
DEC 09		
HHM	IP	18 12 51.6
	E	13 15.6
DEC 09		
EUR	EP	20 02 53.0
DEC 09		
H-20 54 13.7		
17.7S 173.6W		
h ABOUT 060KM		
BCN	EP	21 06 01.6
	IpP	06 16.0
TUC	EP	21 06 07.5
	EpP	06 21.6
EUR	EP	21 06 08.0
	IpP	06 22.0
TUT	EP	21 06 08.1
	EpP	06 21.9
	EsP	06 32.5
SLC	E(P)	21 06 27.5
	EpP	06 40.5
ALQ	EP	21 06 31.0
	IpP	06 45.0
BUT	EP	21 06 37.7
COL	IP	21 06 40.6
	IpP	06 52.5
	I	07 07.0
BUT	I(P)	21 06 52.6
DEC 09		
H-21 17 02.0		
39.9N 140.5E		
h ABOUT 033KM		
COL	EP	21 25 31.0
	I	25 33.8
	I	25 40.5
HHM	EP	21 28 12.6
BUT	EP	21 28 27.5
EUR	IP	21 28 40.0
SLC	E(P)	21 28 50.0
BCN	EP	21 28 57.1
DEC 09		
ALQ	EP	21 26 58.0
	I	29 28.4
TUT	E(P)	21 26 58.2
DEC 09		
BCN	E(P)	22 42 59.2
	I	43 05.3
	IS	43 36.3
DEC 09		
BCN	E(P)	23 26 29.0
	I	26 33.1
EUR	IP	23 26 34.0
	IS	27 23.0
ALQ	IP	23 27 05.5
	E	27 16.5
	IS	28 15.8
TUT	E(P)	23 27 26.8
DEC 10		
EUR	EP	00 27 52.0
DEC 10		
H-04 56 20.0		
28.1S 062.7E		
h ABOUT 033KM		
SJP	EP'	05 15 31.4
CSC	EP'	05 16 02.0
BUT	EP'	05 16 17.8
	I	17 04.8
	EPP	20 46.8
HHM	EP'	05 16 19.0
	I	16 54.3
	E(PP)	20 34.3
SLC	EP'	05 16 23.6
	E	17 25.6
	EPP	21 11.2
EUR	IP'	05 16 25.0
	I	17 35.0
	IPP	21 20.0
ALQ	IP'	05 16 25.0
	I	17 35.0
	IPP	21 24.5
BCN	EP'	05 16 28.0
	I	17 51.5
	EPP	21 22.9
TUT	EP'	05 16 28.1
	E	17 55.2
	EPP	22 48.3
TUC	EP'	05 16 28.2
	E	17 55.3
DEC 10		
COL	IP	05 07 31.3
EUR	EP	05 10 50.0
DEC 10		
COL	EP	05 15 25.0
	E	18 17.0
DEC 10		
H-06 11 56.2		
08.4S 157.4E		
h ABOUT 039KM		
COL	IP	06 24 19.8
EUR	IP	06 25 07.0
	I	25 15.0
DEC 10		
COL	IP	08 06 49.1
DEC 10		
BUT	EP	10 21 26.7
	IS	21 44.0
DEC 10		
EUR	IP	10 39 52.0
DEC 10		
COL	EP	14 56 24.0
DEC 10		
BUT	EP	15 16 33.3
DEC 10		
H-16 09 58.3		
49.7N 155.8E		
h ABOUT 045KM		
COL	IP	16 16 28.6
EUR	IP	16 20 04.0
	IpP	20 17.0
DEC 10		
COL	IP	16 49 46.7
DEC 10		
H-16 56 04.5		
27.2S 176.8W		
h ABOUT 088KM		
BCN	EP	17 08 36.1
TUT	EP	17 08 38.6
TUC	EP	17 08 39.0
	EpP	08 51.2
EUR	IP	17 08 42.0
SLC	E(P)	17 08 57.4
ALQ	IP	17 08 59.0
BUT	EP	17 09 10.5
COL	EP	17 09 15.0
DEC 10		
EUR	EP	16 56 22.0
DEC 10		
ALQ	IP	17 40 49.8
EUR	EP	17 42 03.0
DEC 10		
ALQ	IP	19 27 05.2
DEC 10		
EUR	EP	21 08 22.0
COL	EP	21 09 45.0
DEC 10		
BCN	IP	23 39 07.5
DEC 11		
ALQ	EP	00 41 02.5
DEC 11		
H-02 34 09.5		
48.9S 124.6E		
h ABOUT 033KM		
EUR	EP'	02 53 31.0
DEC 11		
BCN	E(P)	09 03 16.1
	I	03 39.9
	E	03 47.5
DEC 11		
H-10 28 17.5		
39.4N 110.3W		
h ABOUT 033KM		
SLC	IP	10 28 45.4
BCN	E(P)	10 29 43.2
	E	30 19.5
	E	30 56.1
TUC	E(P)	10 30 21.4
TUT	E(P)	10 30 22.1
DEC 11		
COL	IP	12 44 39.6
	IS	44 59.0

Date and Station	Phase (GCT)
	h m s
DEC 11	
H-13 54 36.3	
19.7S 178.4W	
h ABOUT 630KM	
EUR EP	14 05 58.0
COL IP	14 06 18.0
EpP	08 32.0
DEC 11	
H-16 14 47.1	
39.1N 144.3E	
h ABOUT 044KM	
COL IP	16 23 08.7
E	23 27.0
EUR EP	16 26 13.0
DEC 11	
BUT IP	17 16 00.2
IS	16 39.0
BOZ EP	17 16 20.0
ES	16 58.0
HHM EP	17 16 21.3
I	16 34.3
IS	17 07.3
EUR E(P)	17 16 40.0
EL	18 02.0
DEC 11	
H-17 51 58.9	
24.8S 177.6W	
h ABOUT 098KM	
EUR EP	18 04 30.0
ALQ E(P)	18 04 47.2
COL EP	18 04 58.4
E	08 08.0
EPP	08 40.0
DEC 11	
H-18 09 57.9	
4.6S 144.0E	
h ABOUT 051KM	
COL EP	18 22 29.0
DEC 11	
H-18 23 30.8	
5.3S 150.6E	
h ABOUT 058KM	
COL EP	18 35 50.3
EUR EP	18 36 54.0
DEC 11	
TUC IP	19 11 10.3
TUT E(P)	19 11 12.6
DEC 11	
ALQ IP	21 29 04.0
DEC 11	
COL EP	21 36 49.0

Date and Station	Phase (GCT)
	h m s
DEC 11	
TUC EP	23 04 32.8
TUT E(P)	23 04 34.7
DEC 11	
H-23 32 57.0	
03.5N 126.9E	
h ABOUT 063KM	
COL E(P)	23 45 34.0
DEC 12	
H-00 02 58.4	
33.0N 136.0E	
h ABOUT 407KM	
COL EP	00 11 49.2
I	11 55.0
EUR EP	00 14 35.0
EpP	16 11.0
DEC 12	
COL EP	01 05 01.0
DEC 12	
BUT EP	03 18 23.0
DEC 12	
BUT EP	04 27 04.5
DEC 12	
COL EP	07 01 58.0
DEC 12	
H-10 08 48.5	
04.8S 153.8E	
h ABOUT 094KM	
KIP E	10 18 08.0
I	18 19.0
IpP	18 31.0
HON E(P)	10 18 11.0
IpP	18 29.0
IS	25 44.0
COL IP	10 20 54.6
EpP	21 20.0
ES	30 39.0
EUR IP	10 21 56.0
IpP	22 18.0
E(PP)	25 54.0
BCN EP	10 22 00.3
IpP	22 25.6
HHM EP	10 22 02.3
IsP	22 33.3
ALQ E(P)	10 22 35.0
IpP	22 58.5
TUT E(P)	10 22 35.9
BUT E(P)	10 22 37.0
E	23 10.0
E	24 09.0
I	26 25.4
SLC E(P)	10 22 38.8

Date and Station	Phase (GCT)
	h m s
TUC E(P)	10 22 39.9
BOZ E(P)	10 22 42.0
E	26 48.0
SJP EP'	10 28 07.0
EsP'	28 51.0
ESKS	31 18.0
DEC 12	
THU IP	10 23 18.0
DEC 12	
THU IP	10 26 10.0
S	27 40.0
DEC 12	
BOZ E(P)	10 27 36.0
BUT I(P)	10 27 45.0
I	28 16.1
EL	53 00.0
DEC 12	
H-11 29 39.5	
39.6N 140.5E	
h ABOUT 066KM	
COL EP	11 38 07.5
E	38 14.0
EUR IP	11 41 15.0
DEC 12	
TUT E(P)	12 15 02.4
ES	16 13.8
DEC 12	
BCN IP	13 13 53.1
E(S)	14 11.1
EUR IP	13 14 18.0
I(S)	14 59.0
ALQ IP	13 15 00.0
I	15 20.5
I	16 39.0
DEC 12	
THU EP	13 22 09.0
DEC 12	
THU IP	13 22 33.0
DEC 12	
COL EP	13 55 17.9
DEC 12	
H-13 56 32.4	
60.3S 025.9W	
h ABOUT 033KM	
HHM EP'	14 15 39.3
COL EP'	14 16 19.0
I	16 28.3
I	16 40.0
DEC 12	
THU IP	14 00 57.0
DEC 12	
EUR EP	14 14 30.0

Date and Station	Phase (GCT)
	h m s
DEC 12	
H-17 25 00.1	
37.2N 116.2W	
h ABOUT 000KM	
BCN IP	17 25 29.9
E(S)	25 55.7
EUR IP	17 25 39.2
GCA IP	17 26 00.0
SLC EP	17 26 19.4
TUC EP	17 26 39.6
TUC EP	17 26 40.0
TUT EP	17 26 40.1
FGU IP	17 26 40.3
ALQ EP	17 27 02.5
BUT E(P)	17 27 20.0
E	28 15.0
EL	29 48.0
BOZ E(P)	17 27 23.0
EL	30 04.0
COL EP	17 31 42.6
DEC 12	
H-18 45 00.1	
37.0N 116.0W	
h ABOUT 000KM	
BCN IP	18 45 26.7
E(S)	45 48.7
EUR IP	18 45 41.4
SLC E(P)	18 46 19.4
TUT E(P)	18 46 37.7
TUC E(P)	18 46 37.9
ALQ IP	18 46 59.5
E	47 29.0
IL	49 12.3
COL EP	18 51 44.2
DEC 12	
BCN IP	18 55 10.8
I(S)	55 32.9
EUR IP	18 55 25.1
TUT E(P)	18 56 29.9
TUC E(P)	18 56 30.4
ALQ IP	18 57 14.5
DEC 12	
COL EP	19 59 40.5
DEC 12	
TUC IP	22 31 09.9

Date and Station	Phase (GCT) h m s
DEC 12	
H-22 56 45.8	
4.6N 096.5E	
h ABOUT 138KM	
COL EP	23 10 03.0
EPP	13 14.0
EPKKP	26 40.0
I	27 11.0
EUR IP'	23 15 35.0
ALQ EP'	23 15 41.0
I	15 50.0
ISKP	19 16.0
BCN EP'	23 15 41.4
ESKP	18 58.9
TUC EP'	23 15 51.4
ESKP	19 15.4
E	19 49.4
SJP EP'	23 16 20.3
I	16 42.0
DEC 12	
TUT EP	23 19 16.2
DEC 13	
H-00 25 24.5	
7.9N 093.8E	
h ABOUT 224KM	
EUR EP'	00 44 02.0
SJP EP'	00 44 43.1
DEC 13	
THU EP	02 27 22.5
DEC 13	
H-04 21 21.2	
63.3N 149.7W	
h ABOUT 047KM	
COL IP	04 21 52.5
IS	22 16.9
HHM EP	04 26 33.2
EL	34 54.2
BOZ EP	04 27 09.0
E	27 14.0
EL	36 23.0
EUR IP	04 27 38.0
SLC EP	04 27 42.0
BCN E(P)	04 28 08.0
ALQ IP	04 28 43.6
TUT EP	04 28 48.9
TUC EP	04 28 48.9
HON EP	04 29 11.0
KIP EP	04 29 11.0
SJP EP	04 32 34.2

Date and Station	Phase (GCT) h m s
DEC 13	
COL EP	07 00 07.0
DEC 13	
H-08 10 44.5	
40.2N 125.2W	
h ABOUT 033KM	
EUR IP	08 12 26.0
GCA EP	08 13 25.4
DEC 13	
H-08 13 34.4	
04.7S 153.8E	
h ABOUT 112KM	
COL EP	08 25 40.2
EPP	26 10.0
EUR EP	08 26 40.0
DEC 13	
BUT EP	09 31 41.6
ES	32 00.0
DEC 13	
ALQ IP	11 24 30.0
EUR EP	11 25 19.0
DEC 13	
SIT IP	11 59 40.8
I(S)	59 48.0
DEC 13	
H-14 57 27.9	
61.4N 147.2W	
h ABOUT 069KM	
COL IP	14 58 20.6
IS	59 03.0
SIT I(P)	14 59 09.9
EL	15 01 12.0
HHM EP	15 02 26.3
EL	10 13.3
BUT EP	15 02 47.2
E	10 38.0
EL	11 17.0
BOZ EP	15 02 58.0
EL	11 17.0
EUR IP	15 03 24.0
SLC EP	15 03 28.6
BCN EP	15 03 50.0
ALQ IP	15 04 31.6
IPCP	06 52.0
TUC EP	15 04 37.0
TUT EP	15 04 37.2
DEC 13	
SJP E(P)	15 08 56.1

Date and Station	Phase (GCT) h m s
DEC 13	
H-16 45 59.1	
2.8N 127.9E	
h ABOUT 033KM	
COL EP	16 58 35.0
DEC 13	
ALQ IP	17 44 53.9
DEC 13	
BCN EP	18 12 50.5
ES	13 26.8
DEC 13	
ALQ E(P)	19 01 10.0
DEC 13	
ALQ EP	19 05 23.0
I	05 33.5
DEC 13	
ALQ EP	22 09 16.5
I	09 41.8
DEC 13	
H-22 45 27.1	
34.9N 027.8E	
h ABOUT 045KM	
COL EP	22 57 37.0
DEC 14	
COL EP	00 35 34.0
DEC 14	
BUT I(P)	02 13 23.4
DEC 14	
SJP EP	04 31 44.0
IS	32 24.0
DEC 14	
BUT E(P)	04 53 19.0
DEC 14	
H-08 53 48.7	
04.7S 153.8E	
h ABOUT 109KM	
COL EP	09 05 55.0
IPP	06 24.0
DEC 14	
ALQ EP	12 14 57.5
DEC 14	
H-13 06 52.3	
41.8N 141.1E	
h ABOUT 097KM	
COL IP	13 15 00.8
EUR EP	13 18 12.0
DEC 14	
ALQ IP	13 09 53.0
EUR IP	13 10 24.0
DEC 14	
THU IP	14 27 36.5

Date and Station	Phase (GCT) h m s
DEC 14	
H-16 52 49.7	
50.4N 090.6E	
h ABOUT 030KM	
COL EP	17 02 31.0
EUR EP	17 05 37.0
ALQ EP	17 06 05.4
DEC 14	
EUR IP	18 00 40.5
DEC 14	
H-18 01 30.8	
43.8N 148.3E	
h ABOUT 125KM	
COL IP	18 08 58.7
EUR EP	18 12 16.0
DEC 14	
ALQ IP	18 03 25.9
BCN EP	18 03 56.2
EUR IP	18 04 16.0
DEC 14	
ALQ IP	19 29 43.6
DEC 14	
EUR E(P)	19 52 06.0
DEC 15	
COL E(P)	02 50 48.0
DEC 15	
H-03 48 38.0	
67.2N 013.7E	
h ABOUT 033KM	
COL EP	03 57 13.0
EUR EP	03 59 31.0
DEC 15	
COL EP	04 49 11.0
DEC 15	
H-06 34 59.8	
40.7N 117.5W	
h ABOUT 033KM	
EUR IP	06 35 25.0
SLC EP	06 36 02.6
EL	37 02.6
BCN EP	06 36 14.4
E	36 29.9
EL	37 36.4
BUT IP	06 36 35.9
I	36 44.4
E	36 53.4
EL	38 18.9
TUT E(P)	06 37 25.5
E	38 05.0
E	38 24.9
E	40 08.5

Date and Station	Phase (GCT)
	h m s
TUC EP	06 37 26.5
I	38 05.5
E	40 09.0
ALQ EP	06 37 30.6
E	38 14.5
IL	40 25.3
COL EP	06 41 10.4
E	41 31.0
IPCP	44 11.0
DEC 15	
H-14 22 35.2	
4.6S 152.1E	
h ABOUT 053KM	
COL E(P)	14 34 59.0
DEC 15	
H-15 28 12.1	
18.9S 177.3W	
h ABOUT 602KM	
COL IP	15 39 56.0
F	41 02.0
E	41 20.0
E(PP)	43 01.0
DEC 15	
COL EP	19 48 03.0
ALQ EP	19 50 45.5
DEC 15	
ALQ IP	20 20 53.9
DEC 15	
COL EP	23 29 06.0
DEC 16	
H-06 34 15.6	
36.2N 071.3E	
h ABOUT 145KM	
COL EP	06 45 39.8
EpP	46 09.0
EsP	46 26.0
DEC 16	
H-11 06 45.7	
38.7N 117.5W	
h ABOUT 033KM	
EUR IP	11 07 09.0
IS	07 29.0
BCN EP	11 07 38.6
E	07 48.8
FGU EP	11 08 23.5
DEC 16	
GCA EP	11 08 18.5
ES	09 27.5
BCN E(P)	11 08 27.5
E(S)	08 40.5
DEC 16	
BCN EP	12 15 15.0
E(S)	15 54.0

Date and Station	Phase (GCT)
	h m s
DEC 16	
ALQ E(P)	13 01 32.5
DEC 16	
COL EP	13 35 11.0
DEC 16	
COL IP	18 34 59.7
DEC 16	
ALQ IP	21 58 05.0
DEC 16	
H-22 21 27.1	
15.6N 092.1W	
h ABOUT 187KM	
ALQ IP	22 26 18.5
I	26 42.8
BCN EP	22 27 09.8
EpP	27 44.3
COL IP	22 31 27.9
EpP	32 08.0
DEC 16	
THU EP	23 14 56.0
DEC 17	
H-02 15 49.7	
4.2S 127.6E	
h ABOUT 033KM	
COL EP	02 28 54.0
DEC 17	
ALQ EP	06 45 05.0
DEC 17	
H-11 00 16.0	
02.1N 122.9E	
h ABOUT 393KM	
KIP IP	11 11 41.1
HON IP	11 11 41.6
COL IP	11 12 21.3
E(pP)	14 08.0
EPP	15 57.0
BUT E(P)	11 14 11.7
IP'	18 06.1
EPP.	18 47.1
E	20 12.7
E	23 41.1
EUR E(P)	11 14 14.0
IP'	18 07.0
IPP	18 55.0
BOZ EP'	11 18 08.0
EPP	18 58.0
SLC EP'	11 18 12.1
EPP	19 12.6
BCN EP'	11 18 12.7
E	19 09.2
TUT EP'	11 18 19.5
EPP	19 42.5

Date and Station	Phase (GCT)
	h m s
TUC EP'	11 18 20.5
EPP	19 42.5
ALQ IP'	11 18 24.2
EPP	19 54.0
DEC 17	
COL EP	11 33 42.3
DEC 17	
H-12 29 52.2	
.2N 124.3E	
h ABOUT 126KM	
COL EP	12 42 35.0
DEC 17	
H-17 25 40.8	
38.0N 106.1E	
h ABOUT 033KM	
COL IP	17 36 02.9
IP	36 17.0
IPCP	36 52.0
EUR IP	17 38 57.0
DEC 17	
COL EP	17 26 11.0
EUR EP	17 26 21.0
DEC 17	
EUR EP	17 48 55.0
DEC 17	
EUR EP	17 54 05.0
DEC 17	
BHP P	19 22 19.0
DEC 17	
SLC EP'	19 39 06.8
EUR IP'	19 39 12.0
BUT E(P')	19 39 15.1
COL EP'	19 40 34.0
DEC 17	
ALQ IP	20 15 03.0
DEC 17	
SLC EP	20 28 31.3
EUR EP	20 28 37.0
DEC 17	
EUR IP	20 44 29.0
DEC 17	
BCN EP	22 56 32.5
DEC 17	
ALQ EP	23 03 49.2
DEC 18	
H-02 06 09.2	
39.8N 071.4E	
h ABOUT 077KM	
COL IP	02 17 20.9

Date and Station	Phase (GCT)
	h m s
EUR EP	02 19 54.0
DEC 18	
H-02 54 47.1	
21.6N 143.1E	
h ABOUT 306KM	
GUA IP	02 56 44.0
IS	58 20.0
COL IP	03 04 33.5
IpP	05 42.0
BUT IP	03 06 45.5
I	07 50.4
IpP	07 59.3
BOZ EP	03 06 47.0
EPP	10 10.0
EUR IP	03 06 48.0
BCN EP	03 06 58.9
E	07 09.4
E	07 20.4
E(PP)	09 50.4
SLC EP	03 06 59.2
E	07 04.7
DEC 18	
ALQ IP	03 22 29.2
DEC 18	
COL EP	04 03 18.0
DEC 18	
EUR E(P)	05 44 34.0
DEC 18	
H-07 21 02.9	
35.0N 028.0E	
h ABOUT 037KM	
COL EP	07 33 10.0
DEC 18	
H-07 48 36.6	
35.2S 104.8W	
h ABOUT 033KM	
EUR EP	08 00 17.0
DEC 18	
COL EP	08 21 44.0
DEC 18	
H-10 33 58.4	
28.3S 178.2W	
h ABOUT 214KM	
HON EP	10 42 54.0
KIP E	10 43 43.0
BCN EP	10 46 23.7
IpP	47 16.4
TUC IP	10 46 26.1
E	46 49.2
IpP	47 19.1
EUR IP	10 46 30.0
IpP	47 22.0

Date and Station	Phase	(GCT) h m s
SLC	EP	10 46 44.8
	EpP	47 36.4
ALQ	IP	10 46 45.8
	IpP	47 38.0
COL	IP	10 47 00.0
	EpP	47 55.1
BUT	I(P)	10 47 49.8
DEC 18		
EUR	EP	11 04 11.0
DEC 18		
H-11 30 07.3		
24.7S 180.0E		
h ABOUT 486KM		
EUR	IP	11 42 04.0
COL	EP	11 42 27.0
DEC 18		
H-12 37 16.1		
2.7N 129.1E		
h ABOUT 096KM		
COL	EP	12 49 43.0
EUR	EP'	12 55 34.0
DEC 18		
HHM	IP	13 49 40.1
	IS	50 16.0
BUT	E(P)	13 50 16.2
	E(S)	50 48.2
BOZ	EP	13 50 32.0
	E	51 07.0
	ES	51 53.0
DEC 18		
H-20 47 41.5		
43.7N 147.0E		
h ABOUT 080KM		
COL	EP	20 55 19.0
EUR	EP	20 58 37.0
DEC 18		
H-20 56 32.3		
18.4S 176.9W		
h ABOUT 308KM		
COL	IP	21 08 38.2
DEC 18		
ALQ	EP	21 51 30.0
DEC 18		
H-22 47 18.1		
54.1N 170.8E		
h ABOUT 033KM		
COL	IP	22 52 23.0
EUR	IP	22 56 10.0
ALQ	IP	22 57 12.8
DEC 18		
ALQ	EP	23 03 10.0
DEC 18		
BCN	EP	23 07 20.0
	ES	07 57.8
DEC 19		
BUT	EP	03 09 39.1
	ES	10 12.6
DEC 19		
H-05 17 18.1		
51.5N 170.8W		
h ABOUT 033KM		
COL	IP	05 21 38.1
EUR	IP	05 24 47.0
BCN	EP	05 25 10.3
TUC	IP	05 25 49.2
ALQ	IP	05 25 56.3
DEC 19		
COL	IP	05 19 25.8
DEC 19		
ALQ	EP	08 11 18.5
DEC 19		
H-11 01 39.8		
31.2S 178.1W		
h ABOUT 028KM		
TUC	E(P)	11 14 38.5
EUR	EP	11 14 42.0
DEC 19		
EUR	EP	11 32 18.0
COL	IP	11 33 18.0
	I	33 29.0
DEC 19		
GUA	EP	12 37 42.0
	ES	38 06.0
EUR	EP	12 50 11.0
DEC 19		
H-12 56 19.7		
04.7S 154.0E		
h ABOUT 098KM		
GUA	EP	13 00 53.0
	ES	05 37.0
COL	EP	13 08 26.0
	EpP	08 53.4
EUR	EP	13 09 27.0
DEC 19		
ALQ	EP	13 04 17.9
DEC 19		
BCN	EP	13 09 55.2
DEC 19		
EUR	EP	13 44 00.0
DEC 19		
COL	IP	17 40 45.5
	I	41 05.0
EUR	EP	17 44 19.0
DEC 19		
ALQ	EP	18 15 33.3
DEC 19		
COL	EP	18 45 17.0
	E	49 04.0
DEC 19		
H-20 15 56.8		
24.0S 179.4W		
h ABOUT 422KM		
EUR	IP	20 27 55.0
COL	EP	20 28 17.0
DEC 20		
BUT	EP	00 40 29.1
	ES	41 02.3
BOZ	E(P)	00 40 45.0
	ES	41 33.0
DEC 20		
H-02 00 51.1		
6.8S 129.3E		
h ABOUT 189KM		
COL	EP	02 13 42.0
EUR	EP'	02 19 09.0
ALQ	IP'	02 19 26.0
DEC 20		
BUT	EP	03 09 38.6
	ES	10 12.6
DEC 20		
COL	EP	06 01 08.0
DEC 20		
EUR	EP	07 50 51.0
DEC 20		
H-08 32 37.3		
20.0S 174.1W		
h ABOUT 033KM		
BCN	EP	08 44 40.9
EUR	IP	08 44 47.0
TUC	EP	08 44 48.0
ALQ	IP	08 45 08.2
COL	IP	08 45 20.7
DEC 20		
H-08 47 23.3		
23.4S 179.3E		
h ABOUT 512KM		
TUC	E(P)	08 59 13.3
EUR	EP	08 59 15.0
COL	EP	08 59 33.0
	EpP	09 01 32.0
DEC 20		
COL	EP	08 55 43.0
	E	58 22.0
DEC 20		
COL	EP	15 17 14.0
EUR	EP	15 17 56.0
DEC 20		
COL	EP	18 22 02.0
DEC 20		
SIT	E(P)	18 48 28.8
	E	48 34.7
DEC 20		
TUC	IP	19 06 38.3
DEC 20		
H-19 32 27.4		
17.8N 144.6E		
h ABOUT 033KM		
GUA	EP	19 33 29.5
COL	EP	19 43 04.0
EUR	EP	19 45 05.0
BCN	EP	19 45 16.6
DEC 20		
H-20 57 19.7		
13.8S 167.0E		
h ABOUT 155KM		
COL	EP	21 09 41.0
	EpP	10 20.0
	EsP	10 37.0
EUR	EP	21 09 58.0
DEC 20		
EUR	EP	23 56 01.0
DEC 21		
COL	EP	00 04 41.0
DEC 21		
H-00 44 19.7		
09.0S 112.4E		
h ABOUT 064KM		
COL	EP	00 58 11.0
TUT	E(P')	01 03 17.2
	E(pP')	03 35.0
BUT	EP'	01 03 18.4
EUR	IP'	01 03 19.0
	ESKKP	16 21.0
BOZ	EP'	01 03 22.0
ALQ	EP'	01 03 24.0
	IpP'	03 39.0
	I	04 34.6
	ISKP	07 09.0

Date and Station	Phase (GCT)
	h m s
SLC EP'	01 03 25.0
BCN IP'	01 03 26.3
IpP'	03 47.9
IsP'	04 15.1
F	05 08.8
EPP	05 33.6
EpPP	06 03.6
ESKP	06 37.3
EPKS	06 57.3
ESKKP	16 22.0
TUC EP'	01 03 34.4
E	04 13.9
BHP EP'	01 04 20.0
SJP EP'	01 04 24.5
I	05 41.5
EPP	09 34.1
I	10 22.5
DEC 21	
HON EP	01 08 44.0
ES	15 10.0
DEC 21	
H-01 26 31.5	
4.2S 152.9E	
h ABOUT 150KM	
COL EP	01 38 32.0
EpP	38 57.0
DEC 21	
H-02 11 20.7	
51.2N 179.8E	
h ABOUT 060KM	
COL EP	02 16 07.0
ESCP	23 36.0
EUR IP	02 19 34.0
TUT E(P)	02 20 48.0
TUC E(P)	02 20 48.2
DEC 21	
H-03 28 35.3	
15.4N 121.8E	
h ABOUT 046KM	
COL EP	03 40 26.0
EpP	40 43.0
DEC 21	
BOZ E(P)	04 42 47.0
ES	43 33.0
DEC 21	
H-06 27 49.1	
52.5N 168.7W	
h ABOUT 033KM	
COL EP	06 31 36.0
EL	36 44.0
SIT EP	06 32 17.7
UKI E(P)	06 34 32.6
BUT E(P)	06 34 53.4

Date and Station	Phase (GCT)
	h m s
BOZ EP	06 35 02.0
EUR IP	06 35 07.0
SLC EP	06 35 21.0
BCN EP	06 35 31.0
E	35 54.1
THU EP	06 35 38.5
TUC IP	06 36 10.9
TUT E(P)	06 36 11.0
ALQ EP	06 36 16.5
IPP	38 07.5
SJP IP	06 40 13.0
I	40 23.0
DEC 21	
H-06 31 42.4	
52.6N 168.6W	
h ABOUT 039KM	
COL IP	06 35 30.1
EUR EP	06 39 03.0
SJP EP	06 44 04.6
I	44 15.0
DEC 21	
KIP IP	06 35 31.7
DEC 21	
H-06 45 26.5	
17.0S 173.4W	
h ABOUT 053KM	
EUR E(P)	06 57 46.0
COL EP	06 57 52.0
I	58 15.0
DEC 21	
COL EP	06 49 18.0
DEC 21	
BHP P	07 00 20.0
DEC 21	
H-07 07 05.9	
52.8N 168.8W	
h ABOUT 033KM	
COL EP	07 10 52.3
EUR EP	07 14 24.0
DEC 21	
COL EP	08 19 48.0
DEC 21	
H-08 36 53.9	
52.8N 168.6W	
h ABOUT 033KM	
COL IP	08 40 39.0
HON IP	08 43 36.5
EUR E(P)	08 44 11.0

Date and Station	Phase (GCT)
	h m s
DEC 21	
COL EP	08 37 48.0
DEC 21	
H-08 42 48.3	
52.4N 168.5W	
h ABOUT 033KM	
COL IP	08 46 35.4
IL	51 35.0
SIT EP	08 47 16.0
ES	51 04.0
HON IP	08 49 13.0
IS	54 18.0
KIP EP	08 49 13.0
UKI EP	08 49 28.8
E	49 50.2
EPP	50 33.8
ES	54 56.6
EL	57 22.0
BUT EP	08 49 51.5
I	51 40.4
IPCP	52 20.9
F	54 28.0
EL	57 16.0
BOZ EP	08 50 01.0
EUR IP	08 50 05.0
SLC EP	08 50 20.0
FPP	52 05.0
ES	56 20.0
EL	59 31.0
BCN EP	08 50 27.1
I	50 48.6
FPP	52 12.3
ES	56 41.0
FL	09 00 21.0
THU IP	08 50 37.0
TUC IP	08 51 08.2
TUT E(P)	08 51 08.9
ALQ EP	08 51 15.3
I	51 32.0
IPP	53 09.9
IL	09 02 42.0
BHP P	08 55 05.0
SJP IP	08 55 11.1
DEC 21	
H-08 50 08.2	
52.8N 168.1W	
h ABOUT 033KM	
COL IP	08 53 55.2
EUR E(P)	08 57 42.0
SJP EP	09 02 28.7

Date and Station	Phase (GCT)
	h m s
DEC 21	
H-09 00 41.4	
52.4N 168.5W	
h ABOUT 033KM	
COL IP	09 04 28.0
SIT EP	09 05 09.7
IS	09 06.8
KIP IP	09 07 05.0
UKI E(P)	09 07 26.6
ES	13 17.0
BUT EP	09 07 47.4
I	08 28.0
BOZ EP	09 07 53.0
EUR E(P)	09 07 58.0
SLC E(P)	09 08 12.0
E	08 55.0
BCN EP	09 08 22.6
THU IP	09 08 30.5
TUC IP	09 09 04.3
TUT IP	09 09 06.1
ALQ IP	09 09 09.0
SJP IP	09 13 04.1
DEC 21	
H-09 10 01.6	
52.5N 168.5W	
h ABOUT 033KM	
SIT EP	09 14 29.6
IS	18 11.2
COL E(P)	09 14 47.0
KIP IP	09 16 27.3
UKI EP	09 16 43.6
EL	24 21.0
BUT EP	09 17 03.5
EPP	18 51.1
E	19 42.0
BOZ EP	09 17 12.0
EUR EP	09 17 19.0
SLC EP	09 17 35.0
E	18 02.0
BCN EP	09 17 42.6
THU IP	09 17 50.0
TUC EP	09 18 20.9
I	18 22.6
TUT E(P)	09 18 21.0
I	18 24.6
ALQ IP	09 18 29.0

Date and Station	Phase (GCT)
	h m s
SJP EP	09 22 22.6
I	22 42.0
DEC 21	
SJP IP	09 24 26.0
DEC 21	
SJP EP	09 26 28.0
DEC 21	
H-09 33 15.5	
42.4N 142.3E	
h ABOUT 027KM	
COL IP	09 41 24.4
SIT EP	09 42 25.3
E	46 00.2
KIP IP	09 42 36.8
THU I(P)	09 43 15.0
UKI IP	09 44 13.6
EPCP	44 46.0
E	45 03.1
BUT IP	09 44 25.0
I	44 46.9
E	46 13.0
BOZ EP	09 44 31.0
EUR IP	09 44 39.0
SLC IP	09 44 48.0
E	45 17.7
E	46 08.0
BCN IP	09 44 56.5
I	45 18.8
TUT IP	09 45 23.6
I	45 41.8
TUC IP	09 45 23.9
ALQ IP	09 45 28.0
I	53 30.6
SJP EP'	09 51 50.2
I	51 56.0
DEC 21	
H-09 42 46.0	
22.8S 066.5W	
h ABOUT 200KM	
RHP P	09 49 15.0
SJP IP	09 50 11.0
TUC IP	09 53 33.1
BCN EP	09 54 03.2
SLC EP	09 54 12.0
EPP	55 04.0
EUR IP	09 54 21.0
BUT IP	09 54 36.0
IPP	55 27.5

Date and Station	Phase (GCT)
	h m s
UKI EP	09 54 42.2
COL EP	09 56 39.0
DEC 21	
COL EP	10 13 42.0
DEC 21	
THU EP	11 06 03.5
DEC 21	
COL EP	12 32 10.0
DEC 21	
COL EP	12 40 14.0
EUR EP	12 43 44.0
DEC 21	
ALQ E(P)	13 05 55.0
DEC 21	
ALQ EP	14 18 56.0
IPP	19 09.4
IS	22 38.5
DEC 21	
H-14 40 40.3	
52.6N 168.3W	
h ABOUT 016KM	
COL EP	14 44 28.0
EUR EP	14 47 58.0
DEC 21	
H-15 10 22.9	
52.5N 168.7W	
h ABOUT 033KM	
COL EP	15 14 11.0
EUR EP	15 17 39.0
DEC 21	
H-15 28 17.6	
52.7N 168.8W	
h ABOUT 049KM	
COL EP	15 32 02.8
EUR EP	15 35 33.0
DEC 21	
RHP P	15 57 00.0
EUR EP	16 01 26.2
DEC 21	
H-17 35 56.1	
04.6S 153.8E	
h ABOUT 095KM	
COL IP	17 48 03.8
IPP	48 33.0
DEC 21	
H-17 47 29.7	
13.9N 051.6E	
h ABOUT 033KM	
EUR EP'	18 06 32.0

Date and Station	Phase (GCT)
	h m s
DEC 21	
H-18 20 44.7	
15.3N 121.7E	
h ABOUT 055KM	
COL EP	18 32 29.6
SJP IP'	18 40 19.4
I	18 30.0
RHP EP'	18 40 24.0
DEC 21	
ALQ EP	18 43 57.5
DEC 21	
EUR IP	19 23 26.0
DEC 21	
H-20 27 13.3	
52.4N 168.5W	
h ABOUT 040KM	
COL EP	20 31 01.7
I	31 14.2
EUR EP	20 34 29.0
DEC 21	
H-21 27 51.6	
.9S 080.9W	
h ABOUT 033KM	
RHP P	21 30 12.0
SJP IP	21 33 06.3
I	33 17.0
I	34 24.0
IS	37 45.0
TUT E(P)	21 35 54.0
BCN EP	21 36 34.0
SLC EP	21 36 46.0
EUR IP	21 36 56.0
BOZ E(P)	21 37 13.0
COL EP	21 40 05.0
EPP	43 36.0
DEC 21	
TUC IP	21 59 30.6
DEC 21	
EUR IP	22 26 05.0
DEC 21	
TUC IP	23 19 41.5
DEC 22	
BOZ EP	00 23 04.0
ES	23 19.0
BUT IP	00 23 20.4
IS	23 43.6
DEC 22	
BUT EP	00 27 46.0
ES	28 03.0

Date and Station	Phase (GCT)
	h m s
BOZ EP	00 27 47.0
ES	28 02.0
DEC 22	
H-00 52 23.4	
22.0S 170.1E	
h ABOUT 033KM	
HON IP	01 01 43.0
IS	09 14.0
KIP IP	01 01 43.0
UKI EP	01 05 10.5
BCN EP	01 05 28.5
I	05 45.5
EUR IP	01 05 31.0
COL IP	01 05 31.8
EPKKP	22 46.0
TUC E(P)	01 05 33.1
TUT E(P)	01 05 37.5
SJP IP'	01 11 25.0
ESKP	14 42.0
DEC 22	
H-01 13 03.5	
21.8S 170.0E	
h ABOUT 033KM	
EUR EP	01 26 11.0
COL EP	01 26 11.0
SJP IP'	01 32 05.3
DEC 22	
H-01 28 48.9	
21.9S 170.1E	
h ABOUT 033KM	
BCN EP	01 41 54.0
COL EP	01 41 56.5
(PKKP)	59 12.0
EUR IP	01 41 57.0
SJP IP'	01 47 51.6
I	48 04.0
DEC 22	
H-01 59 50.3	
09.2S 112.4E	
h ABOUT 069KM	
COL EP	02 13 40.0
E	17 07.0
EPP	17 57.0
BUT EP'	02 18 50.9
E	19 13.0
BOZ EP'	02 18 52.0
EUR IP'	02 18 52.0
SLC EP'	02 18 56.4

Date and Station	Phase (GCT)
	h m s
BCN EP'	02 18 57.0
FSKP	22 07.0
TUC EP'	02 19 05.3
I	19 07.0
TUT IP'	02 19 07.1
SJP IP'	02 19 54.4
I	21 12.4
DEC 22	
GUA IP	03 33 54.0
DEC 22	
EUR IP	04 07 12.0
DEC 22	
COL EP	05 01 50.2
DEC 22	
H-06 35 57.1	
1.1S 081.0W	
h ABOUT 033KM	
BHP P	06 38 23.0
SJP IP	06 41 13.6
EUR EP	06 45 05.0
COL E(P)	06 48 12.0
DEC 22	
EUR EP	07 23 59.0
COL EP	07 24 29.2
DEC 22	
BHP P	08 41 05.0
S	41 28.0
DEC 22	
BOZ EP	09 39 53.0
ES	40 08.0
BUT IP	09 40 09.0
DEC 22	
BOZ EP	09 50 13.0
ES	50 28.0
BUT IP	09 50 29.0
IS	50 52.1
DEC 22	
EUR EP	11 01 33.0
DEC 22	
BUT EP	11 06 30.5
ES	06 42.0
BOZ EP	11 06 43.0
ES	07 09.0
DEC 22	
H-11 28 03.4	
15.1S 173.0W	
h ABOUT 055KM	
EUR EP	11 39 47.0
COL IP	11 40 19.0

Date and Station	Phase (GCT)
	h m s
DEC 22	
H-14 09 29.7	
4.7N 125.7E	
h ABOUT 018KM	
COL EP	14 22 01.0
DEC 22	
COL IP	15 19 58.3
EUR EP	15 23 27.0
DEC 22	
H-15 20 31.0	
52.5N 168.8W	
h ABOUT 047KM	
COL IP	15 24 19.0
IS	27 32.0
SIT EP	15 25 01.0
IS	28 46.0
HON IP	15 26 55.4
pP	27 08.5
IS	32 08.0
KIP IP	15 26 56.0
pP	27 06.6
UKI EP	15 27 06.7
E(S)	32 39.0
E(L)	35 10.0
BUT E(P)	15 27 23.2
I	27 53.7
I	28 01.5
I	29 11.0
EPCP	29 43.5
E	30 01.0
ES	33 13.0
I	33 44.5
EL	36 22.0
BOZ EP	15 27 43.0
ES	33 28.0
EL	36 30.0
EUR IP	15 27 49.0
SLC EP	15 27 59.4
ES	34 14.0
EL	37 24.0
BCN EP	15 28 14.5
EL	37 43.0
THU IP	15 28 19.5
TUT EP	15 28 51.7
TUC EP	15 28 53.2
ES	35 47.9
ALQ EP	15 28 57.0
I	29 18.3
IPP	30 36.5
GUA P	15 29 48.0
SJP IP	15 32 52.0
IS	43 13.0
BHP P	15 32 55.0

Date and Station	Phase (GCT)
	h m s
DEC 22	
COL IP	15 32 27.0
DEC 22	
COL IP	15 38 54.5
DEC 22	
BUT EP	15 42 42.0
ES	43 14.3
DEC 22	
COL EP	15 54 54.0
DEC 22	
COL IP	15 55 55.2
DEC 22	
COL EP	19 24 32.0
DEC 22	
TUC IP	22 45 59.9
DEC 22	
H-23 27 59.5	
05.1S 151.2E	
h ABOUT 105KM	
COL IP	23 40 12.0
EpP	40 43.0
EUR IP	23 41 14.0
DEC 23	
H-00 43 56.3	
41.3N 020.4E	
h ABOUT 033KM	
COL EP	00 55 30.0
DEC 23	
COL EP	02 41 10.7
I	41 19.0
DEC 23	
EUR IP	06 23 11.0
DEC 23	
H-06 28 00.8	
38.4N 073.3E	
h ABOUT 118KM	
COL IP	06 39 14.2
DEC 23	
H-08 19 13.7	
152.9N 119.8E	
h ABOUT 054KM	
COL EP	08 31 05.0
EpP	31 13.0
DEC 23	
BHP P	09 14 03.0
S	14 40.0
DEC 23	
EUR EP	09 44 52.0
DEC 23	
H-10 21 55.3	
15.3N 121.7E	
h ABOUT 052KM	
COL EP	10 33 41.0

Date and Station	Phase (GCT)
	h m s
EUR EP	10 35 54.0
EpP	40 13.0
DEC 23	
H-10 48 14.1	
52.5N 168.9W	
h ABOUT 053KM	
COL IP	10 52 02.0
EUR EP	10 55 31.0
DEC 23	
BCN EP	10 56 10.0
DEC 23	
COL EP	11 42 21.0
E	42 36.0
EUR EP	11 46 01.0
DEC 23	
H-15 04 37.6	
52.5N 168.3W	
h ABOUT 033KM	
COL EP	15 08 22.2
E	08 36.5
EUR EP	15 11 53.0
DEC 23	
COL IP	16 06 45.0
DEC 23	
H-18 52 38.8	
52.5N 169.0W	
h ABOUT 033KM	
COL EP	18 56 29.0
EUR EP	18 59 58.0
DEC 23	
COL EP	19 13 03.0
DEC 23	
COL EP	19 42 48.2
EUR IP	19 45 52.0
DEC 23	
COL EP	23 12 35.0
DEC 23	
EUR EP	23 57 10.0
DEC 24	
H-00 23 53.1	
59.1S 026.0W	
h ABOUT 033KM	
EUR EP'	00 42 48.0
BUT EP'	00 42 54.3
COL EP'	00 43 38.0
I	43 47.0
E	43 58.0
DEC 24	
BHP P	03 22 28.0

Date and Station	Phase (GCT)
	h m s
DEC 24	
H-03 42 42.1	
39.1N 139.0E	
h ABOUT 033KM	
COL IP	03 51 23.3
1	51 37.0
BUT EP	03 54 15.0
EUR IP	03 54 28.0
SLC EP	03 54 39.7
ALQ IP	03 55 14.5
DEC 24	
COL IP	03 47 41.0
DEC 24	
BHP P	07 05 14.0
DEC 24	
BHP P	07 30 49.0
DEC 24	
BHP P	07 46 35.0
DEC 24	
H-10 44 21.9	
74.2N 052.3E	
h ABOUT 000KM	
COL EP	10 52 04.0
EUR EP	10 55 15.0
DEC 24	
H-11 11 42.0	
73.6N 057.5E	
h ABOUT 000KM	
COL IP	11 19 26.7
EUR IP	11 22 40.0
DEC 24	
ALQ EP	11 11 44.3
TUC EP	11 11 44.3
DEC 24	
H-11 40 46.8	
21.9S 170.2E	
h ABOUT 033KM	
COL EP	11 53 54.0
EUR E(P)	11 53 57.0
DEC 24	
COL IP	12 49 28.6
DEC 24	
ALQ E(P)	13 17 40.0
DEC 24	
EUR EP	14 02 15.0
DEC 24	
H-17 43 05.3	
8.4S 078.7W	
h ABOUT 080KM	

Date and Station	Phase (GCT)
	h m s
ALQ IP	17 51 57.8
EUR IP	17 52 59.0
COL IP	17 55 51.0
DEC 24	
BUT IP	18 04 27.1
DEC 24	
BHP P	21 19 56.0
DEC 24	
EUR EP	22 43 37.0
DEC 25	
BHP P	03 08 51.0
DEC 25	
COL EP	11 17 30.0
DEC 25	
H-12 09 45.3	
36.2S 100.5W	
h ABOUT 033KM	
TUC E(P)	12 20 47.6
ALQ EP	12 21 02.0
BCN E(P)	12 21 13.0
EUR IP	12 21 35.0
SLC E(P)	12 21 46.0
E	22 31.0
E	23 37.0
BOZ EP	12 22 04.0
BUT EP	12 22 07.3
DEC 25	
H-12 43 58.9	
28.2S 063.2W	
h ABOUT 589KM	
EUR EP	12 55 27.0
DEC 25	
H-13 30 32.1	
51.3N 178.8E	
h ABOUT 033KM	
COL EP	13 35 22.2
EUR IP	13 38 53.0
DEC 25	
H-13 35 57.2	
73.4N 056.5E	
h ABOUT 000KM	
COL EP	13 43 44.0
EUR IP	13 46 57.0
DEC 25	
COL EP	13 54 32.0
E	56 35.0
EUR IP	13 57 53.0

Date and Station	Phase (GCT)
	h m s
DEC 25	
H-18 57 45.4	
36.7N 141.0E	
h ABOUT 080KM	
COL EP	19 06 30.0
EUR EP	19 09 27.0
DEC 25	
EUR EP	19 56 27.0
DEC 25	
COL EP	20 36 37.0
DEC 25	
COL IP	21 09 16.0
E	09 26.0
EUR EP	21 12 47.0
DEC 26	
H-01 19 15.2	
16.9N 099.9W	
h ABOUT 035KM	
TUT EP	01 23 27.9
EL	28 56.0
TUC EP	01 23 28.2
ALQ IP	01 23 35.5
BCN EP	01 24 23.0
SLC EP	01 24 46.7
BUT EP	01 25 31.4
COL EP	01 29 03.0
DEC 26	
COL IP	02 47 54.3
DEC 26	
H-05 28 36.7	
52.5N 168.4W	
h ABOUT 033KM	
COL EP	05 32 24.0
BOZ EP	05 35 48.0
EUR EP	05 35 55.0
DEC 26	
H-06 12 54.5	
15.1N 061.4W	
h ABOUT 150KM	
SJP IP	06 14 16.5
IS	15 20.0
ALQ EP	06 20 56.5
IpP	21 29.2
SLC EP	06 21 38.0
EUR IP	06 22 00.8
EUR IP	06 22 01.0
BUT E(P)	06 22 03.8
EpP	22 28.0

Date and Station	Phase (GCT)
	h m s
COL IP	06 24 20.0
E	24 30.0
DEC 26	
TUC E(P)	06 21 57.2
DEC 26	
H-08 58 11.1	
39.3N 010.6W	
h ABOUT 019KM	
SJP I(P)	09 07 21.6
BOZ EP	09 09 20.0
BUT IP	09 09 23.7
COL IP	09 09 28.6
SLC EP	09 09 40.0
ALQ IP	09 09 41.0
EUR IP	09 10 00.0
TUT EP	09 10 07.1
TUC EP	09 10 07.6
DEC 26	
SJP EP'	11 19 26.7
I	20 02.0
E	23 35.0
DEC 26	
EUR IP	12 20 15.0
DEC 26	
EUR EP	12 50 19.0
DEC 26	
H-14 58 56.4	
38.6N 072.8E	
h ABOUT 188KM	
COL EP	15 10 03.0
DEC 26	
COL EP	17 29 45.0
DEC 26	
EUR IP	20 18 39.0
BCN EP	20 18 39.3
DEC 26	
COL IP	20 43 40.5
DEC 26	
H-22 25 15.5	
53.9N 168.7E	
h ABOUT 033KM	
COL IP	22 30 29.9
I	33 39.0
IS	34 45.0
EP'P'	23 04 01.0
SIT EP	22 31 33.3
E	33 02.3
I(S)	36 41.1
EL	42 02.3
KIP IP	22 32 58.9

Date and Station	Phase (GCT) h m s
HON EP	22 33 00.0
IS	39 17.0
UKI IP	22 33 48.1
EPP	35 33.0
EPPP	36 17.7
ES	40 43.0
EL	47 38.0
BUT E(P)	22 33 52.5
I	34 29.1
IPP	36 00.5
IS	40 59.5
IL	43 48.5
BOZ EP	22 34 07.0
E	34 45.0
EPP	36 17.0
ES	41 15.0
EL	50 00.0
EUR IP	22 34 18.0
ES	41 32.0
SLC EP	22 34 28.7
E	35 04.7
EPP	36 37.0
ES	41 55.0
ESCS	44 04.0
BCN IP	22 34 41.3
E	35 12.0
ES	42 18.8
TUT EP	22 35 16.1
TUC EP	22 35 16.2
ES	43 26.7
EL	50 17.5
ALQ IP	22 35 19.5
SJP IP	22 38 32.5
BHP E(P)	22 38 44.0
S	51 30.0
DEC 26	
H-23 25 16.7	
23.9N 065.4E	
h ABOUT 034KM	
COL IP	23 38 04.4
EUR EP'	23 44 01.0
BCN EP'	23 44 12.3
TUT EP'	23 44 14.7
TUC EP'	23 44 15.3
E	44 22.9
BUT EP'	23 44 15.9
SJP IP'	23 44 30.4
DEC 26	
H-23 46 14.7	
54.0N 168.8E	
h ABOUT 033KM	
COL IP	23 51 28.6
KIP IP	23 53 57.9
HON IP	23 53 58.0
IS	24 00 08.0
UKI EP	23 54 49.0
BUT EP	23 55 00.0
IPCP	56 30.1
EPP	57 01.5
BOZ EP	23 55 06.0
EUR IP	23 55 16.0
BCN EP	23 55 39.0
TUC IP	23 56 14.4
TUT EP	23 56 14.9
ALQ IP	23 56 18.5
IPCP	57 16.5
DEC 27	
H-01 28 47.6	
53.9N 168.7E	
h ABOUT 033KM	
COL IP	01 34 02.2
EUR IP	01 37 50.0
DEC 27	
H-01 37 57.1	
23.7S 065.4W	
h ABOUT 227KM	
EUR EP	01 49 36.0
DEC 27	
H-04 13 54.7	
14.8S 173.2W	
h ABOUT 054KM	
TUC EP	04 25 36.7
EUR EP	04 25 37.0
TUT E(P)	04 25 38.2
COL IP	04 26 09.0
IpP	26 24.6
IsP	26 34.1
BOZ EP	04 26 12.0
EsP	26 37.0
DEC 27	
EUR IP	05 29 16.0
DEC 27	
H-06 45 35.3	
05.1S 152.2E	
h ABOUT 066KM	
COL EP	06 57 51.0
E	58 02.0
DEC 27	
H-11 13 45.9	
28.8S 068.1W	
h ABOUT 088KM	
TUC EP	11 25 07.4
EpP	25 36.1
ALQ IP	11 25 08.0
TUT E(P)	11 25 08.2
EpP	25 37.8
BCN EP	11 25 36.4
EpP	26 05.7
EUR IP	11 25 54.0
IpP	26 22.0
BUT IP	11 26 11.7
IpP	26 40.4
COL EP'	11 32 09.0
DEC 27	
SJP IP	13 03 04.3
IS	03 21.0
DEC 27	
COL EP	13 13 16.0
DEC 27	
H-14 02 02.1	
04.9S 145.1E	
h ABOUT 035KM	
HON IP	14 12 19.6
COL IP	14 14 34.3
EUR EP	14 15 46.0
SJP IP'	14 21 40.0
I	22 04.0
DEC 27	
EUR EP	14 08 36.0
DEC 27	
EUR EP	14 32 06.0
COL EP	14 32 41.0
DEC 27	
COL EP	17 04 21.0
DEC 27	
H-18 18 42.0	
39.9N 142.0E	
h ABOUT 036KM	
COL IP	18 27 07.6
I	27 23.0
I	27 40.0
I	28 13.0
I	30 26.0
THU IP	18 29 00.0
BUT IP	18 30 01.9
I	30 15.1
I	31 04.1
E	31 21.0
BOZ EP	18 30 08.0
EUR IP	18 30 14.0
SLC EP	18 30 23.5
TUT E(P)	18 30 57.0
E	31 11.8
ALQ IP	18 31 02.3
IpP	31 16.3
DEC 28	
EUR EP	03 46 16.0
DEC 28	
EUR EP	04 12 06.0
DEC 28	
ALQ EP	05 28 47.5
DEC 28	
EUR EP	05 37 05.0
DEC 28	
ALQ E(P)	07 40 41.5
I	41 13.0
DEC 28	
H-10 01 23.6	
48.4N 113.9W	
h ABOUT 033KM	
HHM IP	10 01 28.5
BUT EP	10 02 01.5
ES	02 31.0
BOZ EP	10 02 14.0
EL	03 05.0
EUR EP	10 03 35.0
EL	05 59.0
DEC 28	
BOZ EP	10 52 45.0
ES	11 03 23.0
DEC 28	
H-14 47 08.1	
53.7N 163.7W	
h ABOUT 033KM	
EUR IP	14 54 00.0
BCN EP	14 54 26.0
E	55 04.0
DEC 28	
BCN EP	18 30 31.3
IpP	30 45.0
DEC 28	
H-19 50 10.7	
42.9N 145.4E	
h ABOUT 041KM	
COL IP	19 58 04.2
EUR IP	20 01 19.0
BCN EP	20 01 37.2
EpP	01 54.0
DEC 28	
COL EP	21 22 35.0
ALQ EP	21 25 19.5
I	25 28.0

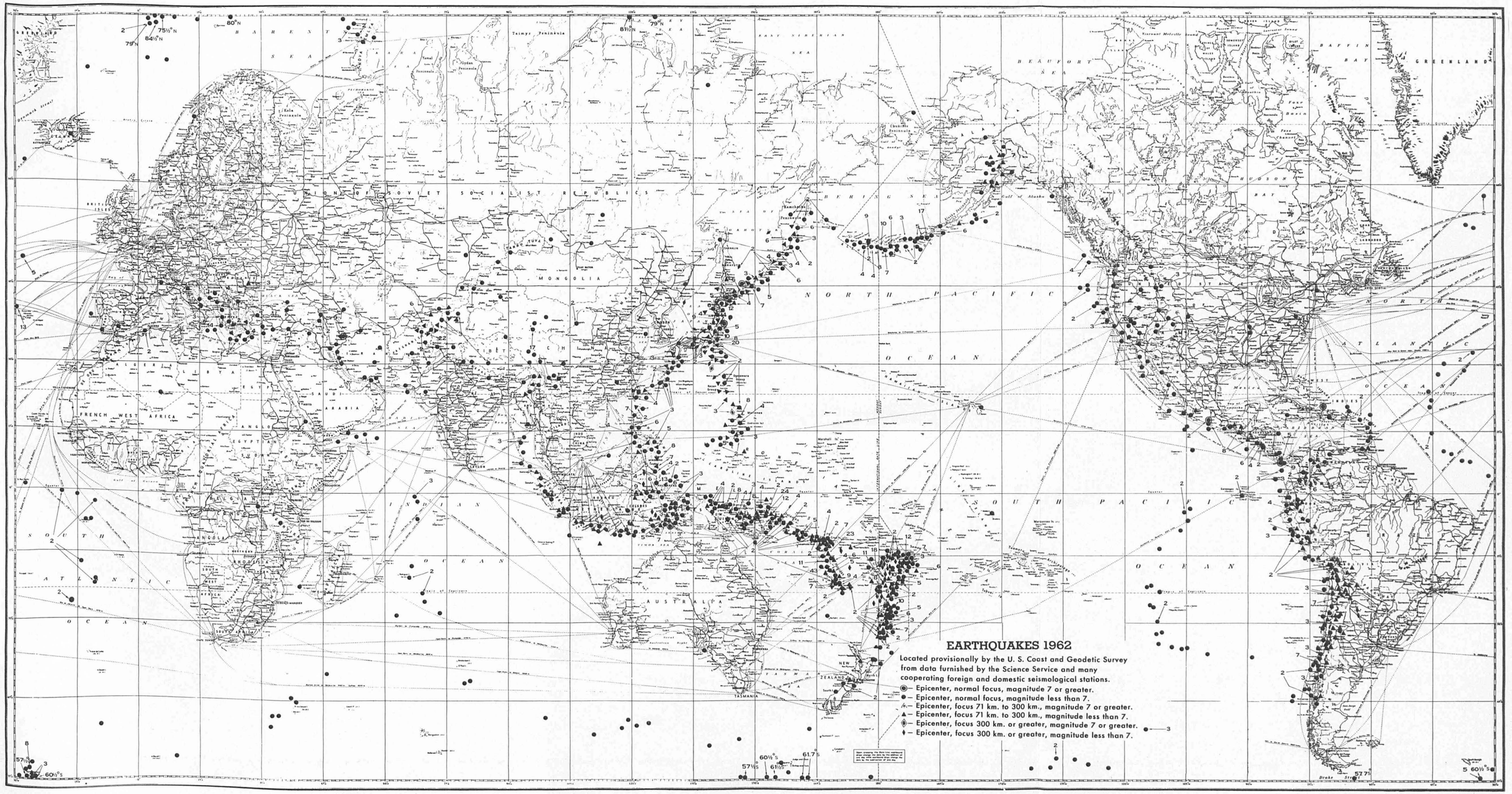
Date and Station	Phase (GCT)
	h m s
DEC 29	
H-04 12 12.7	
2.3N 127.2E	
h ABOUT 064KM	
KIP IP	04 23 50.3
HON IP	04 23 51.0
COL EP	04 24 47.0
EUR EP	04 26 35.0
IP'	30 38.0
EPKKP	41 50.0
SJP IP'	04 32 28.8
DEC 29	
H-08 04 24.8	
23.7N 065.4E	
h ABOUT 033KM	
COL EP	08 17 15.0
E	17 23.0
EUR EP'	08 23 14.0
DEC 29	
H-10 41 04.6	
20.2S 070.3W	
h ABOUT 049KM	
BHP P	10 47 15.0
SJP IP C	10 48 22.0
IS	54 11.0
CSC IP C	10 50 32.0
IS	58 06.0
ALQ IP C	10 51 39.5
TUT EP C	10 51 42.2
TUC EP C	10 51 42.5
ES	11 00 22.4
EL	07 11.0
BCN EP C	10 52 14.2
SLC EP C	10 52 25.2
E	53 36.0
ES	11 01 45.3
EL	19 36.0
EUR IP C	10 52 32.0
ES	11 02 01.0
BUT IP	10 52 50.3
I	53 33.8
E(PP)	56 23.8
ES	11 02 32.0
E	03 00.2
ESCS	03 29.0
EL	15 40.0
UKI EP C	10 52 56.0
E	54 20.0
HON E(P)	10 54 30.0
ISKS	11 05 04.0

Date and Station	Phase (GCT)
	h m s
COL EP	10 54 59.0
E	55 13.0
E(PP)	58 43.0
DEC 29	
BUT I(P)	11 26 34.3
E(S)	26 58.0
DEC 29	
H-14 47 41.4	
31.2S 177.9W	
h ABOUT 043KM	
KIP EP	14 57 19.0
HON EP	14 57 20.0
IS	15 05 09.0
BCN EP	15 00 35.5
E	00 49.2
TUT E(P)	15 00 36.9
E	00 51.7
TUC E(P)	15 00 37.0
E	00 49.9
EUR IP	15 00 41.0
ALQ EP	15 00 55.0
I	00 59.0
SLC E(P)	15 01 11.2
EL	31 00.0
DEC 29	
BHP P	15 14 48.0
DEC 29	
H-15 20 42.3	
31.4S 177.6W	
h ABOUT 041KM	
EUR EP	15 33 43.0
IPP	33 55.0
DEC 29	
H-18 13 59.3	
31.6S 177.8W	
h ABOUT 033KM	
BCN EP	18 26 56.0
E	27 46.0
EUR IP	18 27 03.0
DEC 29	
H-18 19 40.7	
31.5S 177.6W	
h ABOUT 033KM	
BCN E(P)	18 32 35.9
EUR IP	18 32 42.0
COL EP	18 33 17.0
DEC 29	
BCN EP	18 36 16.0
EUR EP	18 36 22.0
ALQ E(P)	18 36 35.0

Date and Station	Phase (GCT)
	h m s
DEC 29	
COL EP	18 43 19.0
DEC 29	
EUR EP	19 53 37.0
DEC 29	
COL EP	20 00 27.0
DEC 29	
ALQ I(P)	20 09 04.5
DEC 30	
H-01 57 43.7	
14.9S 166.6E	
h ABOUT 049KM	
COL IP	02 10 22.6
IPP	10 33.7
EUR IP	02 10 39.0
DEC 30	
ALQ E(P)	02 29 04.6
BCN EP	02 29 29.1
EUR IP	02 30 08.0
DEC 30	
H-07 07 10.5	
15.4N 119.7E	
h ABOUT 033KM	
COL EP	07 19 04.0
DEC 30	
EUR EP	07 14 59.0
DEC 30	
EUR EP	07 16 18.0
DEC 30	
COL IP	13 04 58.4
DEC 30	
H-13 23 09.3	
28.2S 175.7W	
h ABOUT 039KM	
KIP IP	13 32 18.5
EUR EP	13 35 54.0
COL IP	13 36 29.4
DEC 30	
H-15 25 25.1	
37.5N 072.9E	
h ABOUT 035KM	
COL EP	15 36 51.5
DEC 30	
EUR EP	16 01 49.0
DEC 30	
EUR EP	16 29 56.0
COL IP	16 30 26.7

Date and Station	Phase (GCT)
	h m s
DEC 30	
H-17 47 15.4	
21.1S 169.3E	
h ABOUT 071KM	
EUR E(P)	18 00 20.0
DEC 30	
COL EP	18 05 30.0
DEC 30	
COL EP	18 07 47.0
DEC 30	
H-18 16 21.4	
04.7S 153.7E	
h ABOUT 116KM	
COL IP	18 28 26.1
IPP	28 56.0
EUR IP	18 29 26.0
DEC 30	
BCN E(P)	18 29 57.0
DEC 30	
BCN EP	18 31 31.0
DEC 30	
BHP P	18 47 14.0
DEC 30	
COL EP	20 42 12.0
EUR EP	20 45 42.0
DEC 30	
H-21 16 42.5	
05.0N 125.8E	
h ABOUT 033KM	
COL EP	21 29 11.0
DEC 30	
H-22 08 38.3	
42.6N 144.3E	
h ABOUT 086KM	
COL IP	22 16 32.7
EUR IP	22 19 47.0
DEC 30	
H-22 50 25.9	
27.1S 176.5W	
h ABOUT 049KM	
BCN E(P)	23 03 02.0
EUR EP	23 03 08.0
COL EP	23 03 40.0
DEC 30	
BUT EP	23 24 12.0
ES	24 42.4
DEC 31	
BCN EP	01 58 38.8
ES	59 10.3

Date and Station	Phase (GCT)
	h m s
DEC 31	
COL EP	07 54 47.0
E	55 18.0
DEC 31	
H-08 00 25.3	
52.8N 160.7E	
h ABOUT 053KM	
COL EP	08 06 16.0
THU IP	08 09 00.0
BUT EP	08 09 42.5
EUR IP	08 10 02.0
BCN EP	08 10 23.3
ALQ EP	08 10 59.0
DEC 31	
COL EP	09 18 21.0
DEC 31	
H-11 01 04.4	
.5N 099.9E	
h ABOUT 067KM	
EUR IP'	11 20 12.0
ALQ EP'	11 20 18.2
ISKP	24 00.0
DEC 31	
BUT EP	11 24 07.0
ES	24 28.4
DEC 31	
THU IP	11 37 00.0
DEC 31	
BCN EP	12 21 25.0
DEC 31	
COL EP	14 18 05.0
DEC 31	
H-15 42 23.0	
62.5N 149.5W	
h ABOUT 113KM	
COL IP	15 43 04.4
I	43 22.0
IS	43 32.0
BUT EP	15 47 52.2
BOZ EP	15 48 01.0
E>P	48 26.0
EUR IP	15 48 28.0
DEC 31	
COL EP	15 59 18.0
DEC 31	
COL IP	16 36 39.1
DEC 31	
H-17 19 15.3	
4.7S 153.6E	
h ABOUT 122KM	
COL EP	17 31 18.8
FUR EP	17 32 20.0
DEC 31	
H-19 40 10.5	
22.7S 171.4E	
h ABOUT 039KM	
BCN EP	19 53 11.6
E	53 24.9
EUR IP	19 53 15.0
DEC 31	
H-20 49 35.3	
47.1N 122.0W	
h ABOUT 033KM	
BUT IP	20 51 11.5
E	51 44.0
ES	52 26.0
IL	52 37.0
BOZ EP	20 51 27.0
E	51 40.0
IL	53 28.0
UKI EP	20 51 31.8
EL	54 02.0
EUR IP	20 51 45.0
SLC E(P)	20 51 55.9
BCN EP	20 52 33.6
EL	56 09.5
ALQ IP	20 53 33.6
COL IP	20 54 35.3
I	57 27.0
DEC 31	
H-21 45 04.8	
28.4S 178.4W	
h ABOUT 243KM	
EUR EP	21 57 34.0
DEC 31	
TUC EP	21 55 35.2
I	55 38.3
DEC 31	
H-23 37 18.9	
21.6S 176.8W	
h ABOUT 033KM	
EUR EP	23 49 44.0
ALQ IP	23 50 04.0
COL IP	23 50 14.5
E	50 41.0


EARTHQUAKES 1962
Located provisionally by the U. S. Coast and Geodetic Survey from data furnished by the Science Service and many cooperating foreign and domestic seismological stations.
Epicenter, normal focus, magnitude 7 or greater.
Epicenter, normal focus, magnitude less than 7.
Epicenter, focus 71 km. to 300 km., magnitude 7 or greater.
Epicenter, focus 71 km. to 300 km., magnitude less than 7.
Epicenter, focus 300 km. or greater, magnitude 7 or greater.
Epicenter, focus 300 km. or greater, magnitude less than 7.
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BARENTS SEA
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