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SEISMOLOGICAL BULLETIN

December 1966

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U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

March 1969

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National Oceanic and Atmospheric Administration

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LIST OF SEISMOGRAPH STATIONS

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

Adak, Alaska (ADK)
Albuquerque, New Mexico (ALQ) WWNSS
Blue Mountains Observatory, Oregon (BMO)
**Balboa Heights, Canal Zone (BHP) WWNSS
The Panama Canal Company
Barrow, Alaska (BRW)
*Boulder City, Nevada (BCN)
Bureau of Reclamation
*Bozeman, Montana (BOZ) WWNSS
*Bozeman, Montana (BZM)
Montana State College
*Butte, Montana (BUT)
Montana School of Mines
*Cedar Springs, California (CED)
California Department of Water Resources
*Chicago, Illinois (CHK)
University of Chicago and
U. S. Weather Bureau
College, Alaska (COL) WWNSS
*Columbia, South Carolina (CSC)
University of South Carolina
*Eureka, Nevada (EUR)
Eureka Corporation Limited
*Flaming Gorge, Utah (FGU)
Bureau of Reclamation
*Glen Canyon, Arizona (GCA)
Bureau of Reclamation
Guam Mariana Islands (GUA) WWNSS
Honolulu, Hawaii (HON)
*Hungry Horse, Montana (HHM)
Bureau of Reclamation
Kipapa, Hawaii (KIP) WWNSS
Las Vegas, Nevada (LVN)
Newport, Washington (NEW)
**Philadelphia, Pennsylvania (PHI)
The Franklin Institute
**Rapid City, South Dakota (RCD) WWNSS
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan Geophysical Observatory,
Puerto Rico (SJG) WWNSS
San Luis Dam, California (SLD)
Bureau of Reclamation
Sitka, Alaska (SIT)
Tucson, Arizona (TUC) WWNSS
Ukiah, California (UKI)
International Latitude
Washington, D. C. (WAS)
Washington Science Center, Maryland (WSC)

*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 in the Rockville office except those for Balboa Heights. Since January 1, 1959, the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson has not been 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 magnitudes are m_b values of Gutenberg and Richter determined by the C&GS from the P phase only unless otherwise noted. The magnitude quoted is an average value determined from data forwarded by cooperating Standard Stations and other observatories. Mag. (PAS), (PAL), (BRK) are as reported by Pasadena, Palisades, and Berkeley, respectively

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

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
Environmental Science Services Administration
Coast and Geodetic Survey
Seismology Division
Rockville, Maryland 20852

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
1	00 17 48.4	15.2 S	73.1 W	62	4.4	SOUTHERN PERU.
1	00 32 25.7	0.1 S	125.1 E	63	5.2	MOLUCCA SEA.
1	01 23 35*	19.7 S	175.7 W	137	4.1	TONGA ISLANDS.
1	04 29 22.6	60.2 N	146.1 W	20	4.8	SOUTHERN ALASKA.
1	04 56 58.4	14.0 S	167.1 E	132	6.0	NEW HEBRIDES ISLANDS. MAG. 6 3/4 (PAS), 6.4-6.6 (BRK). FELT.
1	07 23 12.5	60.2 N	145.9 W	18	4.1	SOUTHERN ALASKA.
1	09 20 40.9	36.2 N	113.9 W	26	3.7	WESTERN ARIZONA.
1	11 38 25.2	6.2 N	126.6 E	115	5.0	MINDANAO, PHILIPPINE ISLANDS.
1	11 41 37.2	8.8 S	79.4 W	33	4.1	NEAR COAST OF NORTHERN PERU.
1	15 03 44*	30.0 S	75.6 E	33	4.6	MID-INDIAN RISE.
1	15 21 03.5	40.7 N	142.0 E	33	3.9	NEAR EAST COAST OF HONSHU, JAPAN.
1	16 10 08.9	60.2 N	146.1 W	16	3.9	SOUTHERN ALASKA.
1	16 38 29*	57.9 S	25.4 W	50	4.7	SOUTH SANDWICH ISLANDS REGION.
1	16 51 35*	38.4 N	73.3 E	139	3.9	TADZHIK-SINKIANG BORDER REGION.
1	17 11 24*	10.3 S	161.6 E	81	4.7	SOLOMON ISLANDS.
1	18 56 23.0	41.5 N	139.7 E	172	5.4	HOKKAIDO, JAPAN REGION.
1	20 06 36.6	35.7 N	140.0 E	33		NEAR EAST COAST OF HONSHU, JAPAN.
2	02 17 04*	35.7 N	140.8 E	32	4.1	NEAR EAST COAST OF HONSHU, JAPAN.
2	03 07 50.7	28.2 N	53.6 E	22	4.9	SOUTHERN IRAN.
2	07 43 51.9	0.2 S	125.2 E	33	5.2	MOLUCCA SEA.
2	09 31 16.2	3.3 N	128.2 E	71	5.5	NORTH OF HALMAHERA.
2	18 29 10*	10.3 S	161.6 E	83	4.5	SOLOMON ISLANDS.
2	23 01 18.2	22.5 S	69.3 W	33	4.6	NORTHERN CHILE.
2	23 46 52.5	44.4 N	148.8 E	56	4.2	KURILE ISLANDS.
3	00 05 11*	18.8 S	168.8 E	88		NEW HEBRIDES ISLANDS.
3	03 54 04*	17.8 S	177.8 W	389	4.2	FIJI ISLANDS REGION.
3	04 33 42*	15.9 N	93.3 W	89	3.8	NEAR COAST OF CHIAPAS, MEXICO.
3	05 42 35.6	21.0 S	170.2 E	33	4.6	LOYALTY ISLANDS REGION.
3	06 06 37.1	8.8 S	135.5 E	16	4.7	ARAFURA SEA.
3	11 19 24.1	5.8 N	72.5 W	25	4.5	COLOMBIA.
3	14 13 24.4	24.8 S	179.9 E	487	5.1	SOUTH OF FIJI ISLANDS.
3	15 10 33*	5.7 N	72.4 W	21	4.3	COLOMBIA.
3	17 04 56.0	2.1 N	83.4 W	17	4.7	OFF COAST OF CENTRAL AMERICA.
3	22 06 08*	39.0 N	141.6 E	123	3.9	HONSHU, JAPAN.
4	03 31 29*	19.1 S	170.1 E	276		NEW HEBRIDES ISLANDS.
4	04 21 48*	21.4 S	170.5 E	149		LOYALTY ISLANDS REGION.
4	14 18 22*	40.2 S	73.4 W	33	4.2	NEAR COAST OF CENTRAL CHILE.
4	16 24 28*	38.6 N	144.2 E	33	4.1	OFF EAST COAST OF HONSHU, JAPAN.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
4	18 02 10.3	15.4 S	173.2 W	33	4.8	TONGA ISLANDS.
4	23 23 22.0	6.4 S	154.4 E	85	4.6	SOLOMON ISLANDS.
5	00 56 10.0	44.1 N	127.8 W	33	3.6	OFF COAST OF OREGON.
5	01 18 46.5	2.9 N	127.6 E	88	4.3	MOLUCCA PASSAGE.
5	02 36 53.5	2.3 N	97.6 W	33	4.8	WEST OF GALAPAGOS ISLANDS.
5	03 48 14*	2.7 N	97.6 W	33	4.4	WEST OF GALAPAGOS ISLANDS.
5	04 34 57.0	32.4 S	68.6 W	127	4.2	MENDOZA PROVINCE, ARGENTINA.
5	04 49 38.9	21.5 S	174.7 W	33	4.8	TONGA ISLANDS.
5	04 55 39.0	1.4 N	84.4 W	33	4.4	OFF COAST OF ECUADOR.
5	07 23 03.4	32.2 N	131.7 E	23	4.6	KYUSHU, JAPAN.
5	10 10 38*	30.4 N	105.4 W	33	4.2	TEXAS-MEXICO BORDER REGION.
5	13 00 31.0	13.9 N	91.4 W	42	4.1	NEAR COAST OF GUATEMALA.
5	14 09 55.3	12.6 N	144.1 E	32	5.0	SOUTH OF MARIANA ISLANDS.
5	15 21 48.5	16.6 S	167.7 E	29	4.2	NEW HEBRIDES ISLANDS.
5	15 36 24*	11.0 S	162.7 E	43	4.7	SOLOMON ISLANDS.
5	16 10 56.3	11.0 N	89.9 W	33	4.3	OFF COAST OF CENTRAL AMERICA.
5	16 11 27.2	14.4 N	90.5 W	53	4.2	GUATEMALA.
5	17 38 44*	25.9 N	142.5 E	14	4.2	VOLCANO ISLANDS REGION.
5	22 30 33.2	25.8 N	142.6 E	33	4.9	VOLCANO ISLANDS REGION.
6	02 30 52.6	36.3 N	69.4 E	51	5.0	HINDU KUSH REGION.
6	03 22 36.5	4.5 S	134.0 E	33	4.8	WEST NEW GUINEA REGION.
6	05 25 09.0	41.7 S	83.8 W	39	5.3	WEST CHILE RISE.
6	07 18 38.5	50.1 N	159.8 E	15	5.4	KURILE ISLANDS REGION.
6	10 00 42.4	0.7 N	77.0 W	104	4.5	COLOMBIA-ECUADOR BORDER REGION.
6	10 34 30.2	36.8 N	121.6 W	5		CENTRAL CALIFORNIA. MAG. 3.3 EPICENTER AND MAGNITUDE BY BERKELEY. FELT AT HOLLISTER AND SALINAS.
6	10 45 01.7	42.0 N	141.2 E	120	4.4	HOKKAIDO, JAPAN REGION.
6	11 07 49.9	18.2 S	175.1 W	236	4.5	TONGA ISLANDS.
6	18 46 42.5	15.4 S	166.7 E	13		NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE.
6	21 04 42.2	41.4 S	89.5 W	33	4.6	SOUTHERN PACIFIC OCEAN.
6	21 13 28.2	41.3 S	90.0 W	33	4.8	SOUTHERN PACIFIC OCEAN.
6	21 22 22*	30.7 N	41.8 W	33	4.7	NORTH ATLANTIC RIDGE.
6	22 32 21*	24.1 S	67.1 W	191	4.0	CHILE-ARGENTINA BORDER REGION.
6	23 29 48.1	36.5 N	70.3 E	239	4.7	HINDU KUSH REGION.
7	01 07 16.2	37.4 N	114.2 W	33	4.7	SOUTHERN NEVADA. MAG. 4.3-4.4 (BRK).
7	01 27 50.0	37.2 N	114.3 W	33		SOUTHERN NEVADA.
7	04 15 23*	46.9 N	153.7 E	50	4.5	KURILE ISLANDS.
7	06 50 33.1	33.0 N	137.9 E	335	4.2	NEAR S. COAST OF HONSHU, JAPAN.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
7	11 01 11.7	40.1 N	35.7 E	5	4.7	TURKEY.
7	12 08 39*	15.8 S	167.0 E	3		NEW HEBRIDES ISLANDS.
7	13 13 55*	15.4 S	167.6 E	111		NEW HEBRIDES ISLANDS.
7	16 06 59*	20.8 S	178.6 W	522	4.3	FIJI ISLANDS REGION.
7	16 59 29.6	11.9 N	142.7 E	33	5.1	SOUTH OF MARIANA ISLANDS.
7	17 17 45.7	44.5 N	151.7 E	47	5.7	KURILE ISLANDS REGION.
7	18 23 09*	1.6 S	80.3 W	80	4.2	NEAR COAST OF ECUADOR.
7	20 43 58.9	40.9 N	120.1 W	33	4.3	NORTHERN CALIFORNIA. MAG. 3.9-4.1 (BRK).
7	22 09 01.5	51.8 N	175.6 W	41	4.8	ANDREANOF ISLANDS, ALEUTIAN IS.
7	23 25 35.3	36.4 N	70.1 E	229		HINDU KUSH REGION.
7	23 54 35.6	18.3 N	68.5 W	139	5.0	MONA PASSAGE.
8	02 07 07.3	29.4 N	70.0 E	31	5.1	WEST PAKISTAN.
8	05 51 15*	44.6 N	148.4 E	33	4.0	KURILE ISLANDS.
8	06 21 34.1	15.4 S	176.2 W	107	4.4	FIJI ISLANDS REGION.
8	07 23 05.1	30.6 N	114.2 W	14	4.1	GULF OF CALIFORNIA.
8	09 56 47*	6.4 N	72.7 W	203	3.9	NORTHERN COLOMBIA.
8	11 31 18.6	42.1 N	18.9 E	29	5.1	YUGOSLAVIA. MINOR DAMAGE AT BULJARICA AND PETROYAC. FELT AT BAR, BUDYA AND TITOGRAD.
8	11 34 29.2	1.5 S	80.5 W	98	4.5	NEAR COAST OF ECUADOR.
8	12 33 07.8	0.2 S	125.2 E	54	5.3	MOLUCCA SEA.
8	13 02 33*	44.0 N	148.5 E	72	3.6	KURILE ISLANDS.
8	14 05 51.5	39.7 N	141.1 E	98	4.6	HONSHU, JAPAN.
8	15 03 00.1	56.1 N	164.6 E	37	4.9	KOMANDORSKY ISLANDS REGION.
8	20 22 22.8	36.9 N	14.1 W	33	4.4	NORTH ATLANTIC OCEAN.
8	23 18 09.2	60.1 N	146.3 W	27	4.6	SOUTHERN ALASKA.
9	00 53 27.4	23.8 S	179.8 W	496	4.4	SOUTH OF FIJI ISLANDS.
9	01 07 08.9	14.1 S	166.6 E	61	4.4	NEW HEBRIDES ISLANDS.
9	02 00 18.2	21.5 S	178.9 W	532	4.5	FIJI ISLANDS REGION.
9	02 01 50.5	24.1 S	67.1 W	185	4.4	CHILE-ARGENTINA BORDER REGION.
9	04 01 27.7	26.2 S	178.1 E	665	4.7	SOUTH OF FIJI ISLANDS.
9	10 06 54.6	14.2 S	70.1 W	215	4.9	PERU.
9	12 15 58.0	21.8 S	177.8 W	293		FIJI ISLANDS REGION.
9	13 32 35.0	10.6 S	78.9 W	33	4.6	NEAR COAST OF PERU.
9	14 54 42.9	4.1 S	143.8 E	60	5.2	NEW GUINEA.
9	16 43 59.9	51.7 N	174.7 E	33	5.2	NEAR ISLANDS, ALEUTIAN ISLANDS.
9	17 12 09.1	51.6 N	174.6 E	28	4.9	NEAR ISLANDS, ALEUTIAN ISLANDS.
10	01 09 39.5	10.3 N	85.1 W	87	4.3	COSTA RICA.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
10	02 47 43.8	31.1 S	68.3 W	103	4.2	SAN JUAN PROVINCE, ARGENTINA. FELT AT SAN JUAN.
10	08 22 19.5	56.1 S	24.6 W	59	5.2	SOUTH SANDWICH ISLANDS REGION.
10	10 38 39.6	24.2 S	68.0 W	124	5.3	CHILE-ARGENTINA BORDER REGION.
10	11 34 23.0	37.5 N	114.0 W	33		SOUTHERN NEVADA.
10	11 50 29.0	39.5 N	120.2 W	4	4.5	NORTHERN CALIFORNIA. MAG. 3.3-3.5 (BRK).
10	13 06 32.0	14.3 N	92.0 W	60	5.6	NEAR COAST OF CHIAPAS, MEXICO. MAG. 6 1/2 (PAS), 6.5-6.7 (BRK). FELT AT SAN SALVADOR.
10	14 10 22.9	14.6 N	92.3 W	37	4.2	NEAR COAST OF CHIAPAS, MEXICO.
10	14 56 27.9	14.1 N	92.0 W	33	3.9	NEAR COAST OF CHIAPAS, MEXICO.
10	15 16 07.5	14.6 N	92.0 W	33	3.8	NEAR COAST OF CHIAPAS, MEXICO.
10	15 31 46*	45.0 N	149.3 E	85	3.7	KURILE ISLANDS.
10	16 12 37.8	19.8 S	175.5 W	33	4.3	TONGA ISLANDS.
10	17 08 32.3	41.1 N	33.5 E	13	4.9	TURKEY. FELT IN NORTH CENTRAL TURKEY.
10	18 08 14.2	3.6 S	145.5 E	33	5.4	NEAR NORTH COAST OF NEW GUINEA. MAG. 6-6 1/4 (PAS), 5.8-6.2 (BRK).
10	20 23 21*	19.8 S	71.3 W	8	4.4	OFF COAST OF NORTHERN CHILE.
11	02 07 12.4	53.6 N	163.7 W	50	4.3	UNIMAK ISLAND REGION.
11	06 59 32.6	14.1 N	92.4 W	31	4.5	NEAR COAST OF CHIAPAS, MEXICO.
11	07 14 59*	51.7 N	175.7 E	33	4.2	RAT ISLANDS, ALEUTIAN ISLANDS.
11	09 48 11.2	31.7 S	69.7 W	59	4.1	SAN JUAN PROVINCE, ARGENTINA.
11	12 04 42*	17.1 N	98.8 W	75	3.5	GUERRERO, MEXICO.
11	17 21 56*	10.2 N	84.1 W	82	4.3	COSTA RICA.
11	17 34 56.6	11.8 S	166.4 E	47	5.0	SANTA CRUZ ISLANDS.
11	17 57 18.8	15.0 S	167.4 E	120	4.8	NEW HEBRIDES ISLANDS.
11	19 22 00.6	62.7 N	150.9 W	70	4.1	CENTRAL ALASKA.
11	19 47 34.6	42.9 N	144.6 E	60	4.9	HOKKAIDO, JAPAN REGION.
11	19 52 08.4	13.5 N	145.9 E	45	5.3	MARIANA ISLANDS.
11	20 01 03.8	52.9 N	176.0 W	215	5.1	ANDREANOF ISLANDS, ALEUTIAN IS. MAG. 5.1-5.5 (BRK). FELT ON ADAK.
11	20 08 22.6	13.5 N	145.9 E	48	5.4	MARIANA ISLANDS.
11	20 53 36.0	13.2 N	146.1 E	43	4.5	SOUTH OF MARIANA ISLANDS.
11	21 54 51.5	20.4 S	178.1 W	493	3.9	FIJI ISLANDS REGION.
12	02 30 30.5	28.3 S	68.0 W	123	4.1	LA RIOJA PROVINCE, ARGENTINA.
12	03 55 13.4	47.2 N	153.8 E	45	4.1	KURILE ISLANDS.
12	05 27 18.8	21.7 S	179.2 W	562	4.3	FIJI ISLANDS REGION.
12	07 36 13.3	46.3 N	6.5 E	33		SWITZERLAND.
12	09 20 35.7	33.6 N	139.6 E	152	3.7	SOUTH OF HONSHU, JAPAN.
12	10 36 09.3	46.7 N	153.1 E	113	4.3	KURILE ISLANDS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
12	12 35 30.6	14.3 N	91.0 W	52	3.9	GUATEMALA.
12	13 52 38.1	14.6 N	92.9 W	33	3.9	NEAR COAST OF CHIAPAS, MEXICO.
12	17 27 12.6	29.5 N	132.3 E	24	4.6	SOUTHEAST OF SHIKOKU, JAPAN.
12	18 00 58.7	14.2 N	145.8 E	33	4.5	MARIANA ISLANDS.
13	00 59 43*	10.6 S	166.0 E	160	4.6	SANTA CRUZ ISLANDS.
13	04 25 16.1	51.6 N	177.1 E	33	4.5	RAT ISLANDS, ALEUTIAN ISLANDS.
13	05 17 29*	15.5 N	93.2 W	42	3.8	NEAR COAST OF CHIAPAS, MEXICO.
13	07 03 05.3	52.3 N	170.9 W	33	4.3	FOX ISLANDS, ALEUTIAN ISLANDS.
13	09 53 30.2	14.1 N	92.3 W	34	4.6	NEAR COAST OF CHIAPAS, MEXICO.
13	10 01 14.6	15.1 S	166.8 E	34	4.7	NEW HEBRIDES ISLANDS.
13	10 10 06.5	5.1 S	129.7 E	37	4.9	BANDA SEA.
13	10 59 06*	12.4 S	75.1 W	21	4.3	PERU.
13	11 51 39*	14.7 N	92.5 W	33	3.8	NEAR COAST OF CHIAPAS, MEXICO.
13	12 21 02.1	37.3 N	71.9 E	126	5.3	AFGHANISTAN-USSR BORDER REGION.
13	20 16 55.0	23.4 S	179.8 W	422	4.3	SOUTH OF FIJI ISLANDS.
13	21 00 00.1					36°52' 38"N. 115°56'16.0"W. NEVADA TEST SITE. "NEW POINT" SHOT ELEVATION 748.9 METERS (AEC).
14	01 33 13.0	10.6 N	86.8 W	33	4.3	OFF COAST OF COSTA RICA.
14	01 59 06.4	56.7 N	161.7 E	45	4.6	NEAR EAST COAST OF KAMCHATKA.
14	03 44 02.2	52.8 N	177.6 W	252	5.2	ANDREANOF ISLANDS, ALEUTIAN IS. MAG. 5.1-5.5 (BRK). FELT ON ADAK.
14	05 39 31*	15.7 S	70.6 W	212	3.8	SOUTHERN PERU.
14	06 42 24.1	10.9 N	43.2 W	33	4.7	NORTH ATLANTIC RIDGE.
14	06 52 34.2	14.4 N	92.3 W	23	4.4	NEAR COAST OF CHIAPAS, MEXICO.
14	08 24 07*	20.8 S	67.8 W	204	3.8	SOUTHERN BOLIVIA.
14	08 39 45.0	12.6 S	75.0 W	98	4.3	PERU.
14	10 47 38*	21.0 S	179.1 W	593	3.9	FIJI ISLANDS REGION.
14	11 04 24.7	36.1 N	139.6 E	73	4.7	HONSHU, JAPAN. FELT IN THE TOKYO AREA.
14	11 15 52.9	28.7 S	178.4 W	185	4.6	KERMADEC ISLANDS.
14	14 49 59.4	45.7 N	26.4 E	150	4.9	RUMANIA.
14	19 28 36.9	7.0 S	129.6 E	112	4.9	BANDA SEA.
14	21 07 53.1	4.9 S	144.1 E	80	5.7	NEAR NORTH COAST OF NEW GUINEA. MAG. 6 1/4-6 1/2 (PAS), 6.3-6.7 (BRK).
14	23 21 08*	11.2 S	166.6 E	101		SANTA CRUZ ISLANDS.
15	02 08 04.8	21.5 N	94.4 E	98	5.6	BURMA.
15	03 21 46.8	33.3 N	137.7 E	342	4.1	NEAR S. COAST OF HONSHU, JAPAN.
15	04 32 13.1	15.9 S	167.1 E	23	4.9	NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE AND NORSUP.
15	05 17 02.6	16.8 N	145.9 E	71	4.3	MARIANA ISLANDS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
15	08 23 01*	14.1 N	144.7 E	132	4.2	MARIANA ISLANDS.
15	09 26 52.3	5.8 S	147.2 E	86	5.2	EAST NEW GUINEA REGION.
15	13 42 05.6	11.2 S	165.7 E	39	4.6	SANTA CRUZ ISLANDS.
15	14 32 20.8	5.5 S	147.4 E	182	5.4	EAST NEW GUINEA REGION.
15	16 36 15.0	6.4 N	72.7 W	198	3.9	NORTHERN COLOMBIA.
15	18 40 40.5	15.3 S	167.5 E	134		NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE.
15	19 08 26.6	40.5 S	155.8 E	33		SOUTHEAST OF AUSTRALIA.
16	01 02 25*	9.0 S	107.9 W	30	4.3	NORTHERN EASTER I. CORDILLERA.
16	01 27 06.7	49.0 N	156.3 E	38	4.5	KURILE ISLANDS.
16	02 00 44.0	37.0 N	107.0 W	33	4.2	COLORADO.
16	07 32 33*	39.0 N	123.9 W	9	3.9	NEAR COAST OF NORTHERN CALIF. MAG. 3.4 (BRK).
16	09 01 28*	16.3 S	72.5 W	188		NEAR COAST OF PERU.
16	10 06 06*	7.2 S	129.4 E	115		BANDA SEA.
16	12 50 44.8	19.5 S	169.1 E	68	4.2	NEW HEBRIDES ISLANDS.
16	18 08 28*	8.3 S	128.7 E	250		TIMOR SEA.
16	20 52 16.0	29.7 N	80.9 E	15	5.8	NEPAL-INDIA BORDER REGION. FELT IN THE NEW DELHI AREA.
16	21 59 46.2	61.4 N	149.5 W	53	4.1	SOUTHERN ALASKA.
16	22 12 49*	29.6 N	80.9 E	7	5.1	NEPAL-INDIA BORDER REGION.
17	00 59 30.0	5.3 N	82.1 W	38	4.4	SOUTH OF PANAMA.
17	03 30 42.5	5.2 N	77.2 W	72	3.9	NEAR WEST COAST OF COLOMBIA.
17	05 59 07.9	70.8 N	14.0 W	9	5.1	JAN MAYEN ISLAND REGION.
17	06 24 55*	16.8 S	168.8 E	243		NEW HEBRIDES ISLANDS.
17	06 33 47*	12.2 N	140.9 E	64	4.6	WEST CAROLINE ISLANDS.
17	06 35 21.7	12.2 N	140.8 E	33	4.5	WEST CAROLINE ISLANDS.
17	07 46 21.9	3.1 S	130.1 E	33	5.3	CERAM.
17	09 16 17.0	6.5 N	71.3 W	33	4.4	NORTHERN COLOMBIA.
17	09 33 26.9	14.8 S	167.4 E	115		NEW HEBRIDES ISLANDS.
17	12 33 25.4	6.3 N	82.1 W	39	4.2	SOUTH OF PANAMA.
17	13 28 29*	3.1 S	130.2 E	33	4.7	CERAM.
17	15 16 30.2	40.4 N	125.7 W	33	4.7	OFF COAST OF NORTHERN CALIFORNIA. MAG. 4.0 (BRK).
17	16 03 37*	15.1 N	94.1 W	33	3.8	NEAR COAST OF OAXACA, MEXICO.
17	17 41 20.3	22.7 S	68.8 W	105	5.2	NORTHERN CHILE.
17	18 45 50.5	37.1 N	141.2 E	94	4.2	NEAR EAST COAST OF HONSHU, JAPAN.
17	18 51 55*	50.2 N	19.0 E	2		POLAND.
17	20 16 59*	33.7 S	179.9 W	178		SOUTH OF KERMADEC ISLANDS.
18	04 57 57.7	49.9 N	77.8 E	0	5.9	EASTERN KAZAKH SSR. MAG. 5.4-5.6 (BRK).

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
18	05 21 21*	16.6 N	95.8 W	15	3.9	OAXACA, MEXICO.
18	06 23 48.1	12.0 N	140.4 E	33	4.9	WEST CAROLINE ISLANDS.
18	07 42 20.1	35.2 N	27.0 E	41	4.6	DODECANESE ISLANDS.
18	09 48 23.0	10.6 S	161.5 E	52	5.1	SOLOMON ISLANDS.
18	09 58 59*	11.1 N	93.1 E	33	4.4	ANDAMAN ISLANDS REGION.
18	10 22 31.4	21.6 S	68.4 W	122	4.1	CHILE-BOLIVIA BORDER REGION.
18	13 16 49.0	14.9 S	167.4 E	131		NEW HEBRIDES ISLANDS.
18	13 33 16.5	51.4 N	178.6 W	42	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.
18	13 51 39*	43.3 N	3.4 W	33	3.8	SPAIN.
18	14 39 29*	40.9 N	125.0 W	33	4.2	OFF COAST OF NORTHERN CALIFORNIA.
18	22 07 23.0	11.5 S	33.9 E	33	4.5	MALAWI.
18	22 42 39.3	29.5 N	80.9 E	33	4.9	NEPAL-INDIA BORDER REGION.
18	23 06 38.6	27.4 S	71.1 W	33	4.7	NEAR COAST OF NORTHERN CHILE.
18	23 59 33.9	10.6 S	79.0 W	38	4.7	OFF COAST OF PERU.
19	02 10 31.6	16.0 S	71.9 W	115	4.9	SOUTHERN PERU.
19	04 23 29.0	5.2 S	102.5 E	33	4.8	SOUTHERN SUMATRA.
19	08 32 01*	25.2 N	141.2 E	120	3.9	VOLCANO ISLANDS REGION.
19	10 23 57.2	24.9 N	123.0 E	33		SOUTHWESTERN RYUKYU ISLANDS.
19	20 38 20*	15.6 N	94.9 W	43	4.3	NEAR COAST OF OAXACA, MEXICO.
19	20 52 33.3	39.0 N	106.5 W	5	4.6	COLORADO.
19	21 37 22.1	46.3 N	151.7 E	33	4.0	KURILE ISLANDS.
19	22 44 53.5	25.7 S	179.8 W	457	4.1	SOUTH OF FIJI ISLANDS.
20	00 26 27.9	66.7 N	148.6 W	33	4.8	ALASKA. FELT NEAR BETTLES.
20	00 57 53.2	66.7 N	148.8 W	33	4.9	ALASKA. FELT NEAR BETTLES.
20	01 45 02.3	18.9 N	106.2 W	46	4.2	OFF COAST OF JALISCO, MEXICO.
20	02 27 03.7	18.6 N	106.4 W	41	4.5	OFF COAST OF JALISCO, MEXICO. MAG. 5 (PAS).
20	07 55 37.0	18.6 N	106.5 W	33	4.6	OFF COAST OF JALISCO, MEXICO.
20	12 24 14.3	2.9 S	129.8 E	52	5.6	CERAM.
20	12 26 54.6	26.1 S	63.2 W	586	5.7	SANTIAGO DEL ESTERO PROV., ARG. MAG. 6 (PAS).
20	13 07 46.6	25.6 N	142.6 E	29	5.0	VOLCANO ISLANDS REGION.
20	15 30 00.1					37°18'07"N. 116°24'30.0"W. NEVADA TEST SITE. "GREELEY" SHOT ELEVATION 740.7 METERS (AEC).
20	16 20 04.7	7.1 S	126.0 E	427	5.4	BANDA SEA.
20	16 52 28.6	37.3 N	116.5 W	33	3.9	SOUTHERN NEVADA.
20	17 26 15.3	36.3 S	100.8 W	33	4.6	SOUTHERN PACIFIC OCEAN.
20	18 04 04.0	37.4 N	116.6 W	33	3.8	SOUTHERN NEVADA.
20	18 39 41.5	14.5 N	122.1 E	40	5.3	LUZON, PHILIPPINE ISLANDS. FELT IN THE MANILA AREA.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
20	21 50 56.7	25.6 N	142.6 E	33	4.8	VOLCANO ISLANDS REGION.
20	22 44 57*	55.4 N	154.9 W	33	4.2	SOUTH OF ALASKA.
20	23 52 26*	33.9 N	140.1 E	109	4.2	SOUTH OF HONSHU, JAPAN.
21	01 12 45.1	6.7 S	154.9 E	86	4.8	SOLOMON ISLANDS.
21	01 20 00.9	37.4 N	116.4 W	33	2.9	SOUTHERN NEVADA.
21	02 14 26.8	37.4 N	116.5 W	33	3.5	SOUTHERN NEVADA. MAG. 3.4 (BRK).
21	04 04 41*	7.4 S	128.2 E	142	5.0	BANDA SEA.
21	05 30 23*	52.0 N	159.4 E	33	4.3	OFF EAST COAST OF KAMCHATKA.
21	06 02 04.8	37.2 N	116.5 W	33	3.4	SOUTHERN NEVADA.
21	06 29 05.4	25.4 N	142.8 E	33	4.6	VOLCANO ISLANDS REGION.
21	08 52 00.4	20.0 S	169.7 E	249	5.8	NEW HEBRIDES ISLANDS.
21	10 07 27*	36.6 N	70.7 E	239		HINDU KUSH REGION.
21	10 50 03.3	19.7 S	69.2 W	125	4.2	NORTHERN CHILE.
21	11 25 04.0	10.4 S	162.7 E	25	4.5	SOLOMON ISLANDS.
21	11 38 00.5	6.0 N	126.1 E	34	5.5	MINDANAO, PHILIPPINE ISLANDS.
21	12 57 00*	37.4 N	116.4 W	33	3.9	SOUTHERN NEVADA.
21	12 57 57.4	52.2 N	173.7 W	33	4.0	ANDREANOF ISLANDS, ALEUTIAN IS.
21	12 58 19.8	52.1 S	15.0 E	33	5.4	SOUTHWEST OF AFRICA.
21	14 37 29.7	37.3 N	116.4 W	33	3.6	SOUTHERN NEVADA. MAG. 3.5 (BRK).
21	17 53 18.0	32.6 N	138.0 E	425		SOUTH OF HONSHU, JAPAN.
21	19 03 43.0	37.3 N	116.4 W	33		SOUTHERN NEVADA.
21	22 10 59.8	29.7 N	80.8 E	21	5.4	NEPAL-INDIA BORDER REGION.
22	02 12 56*	54.1 N	163.9 W	43	4.1	UNIMAK ISLAND REGION.
22	02 20 09.1	53.9 N	164.0 W	73	4.2	UNIMAK ISLAND REGION.
22	04 15 38*	64.6 N	17.1 W	33	4.8	ICELAND.
22	04 53 54.7	33.7 N	118.3 W	12	4.0	SOUTHERN CALIFORNIA. MAG. 3.5 33°39.4'N, 118°20.5'W, DEPTH 12.4 KM. BY (PAS).
22	05 49 27.0	52.0 N	178.7 E	109	4.9	RAT ISLANDS, ALEUTIAN ISLANDS.
22	07 05 23.0	37.4 N	116.5 W	33		SOUTHERN NEVADA.
22	09 41 44.2	36.6 N	138.5 E	57	4.2	HONSHU, JAPAN.
22	12 10 05.8	52.3 N	158.5 E	55	4.4	NEAR EAST COAST OF KAMCHATKA.
22	12 30 00.6	38.0 N	66.1 E	38	4.4	SOUTHEASTERN UZBEK SSR.
22	12 59 14.5	37.4 N	116.4 W	33	3.4	SOUTHERN NEVADA. MAG. 3.8 (BRK).
22	13 33 24*	31.1 N	141.5 E	33	4.3	SOUTH OF HONSHU, JAPAN.
22	15 57 21.6	15.1 S	72.0 W	128	4.1	SOUTHERN PERU.
22	16 01 59.8	37.4 N	116.5 W	33	3.3	SOUTHERN NEVADA.
22	17 26 36.3	43.7 N	147.2 E	90	4.4	KURILE ISLANDS.
22	17 30 01*	37.3 N	116.5 W	17		SOUTHERN NEVADA.
22	19 24 06.8	48.7 N	154.5 E	75	5.2	KURILE ISLANDS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
23	01 11 15.1	17.8 S	178.5 W	560	5.1	FIJI ISLANDS REGION.
23	02 02 19.8	12.9 N	88.6 W	88	4.5	OFF COAST OF CENTRAL AMERICA.
23	02 11 23.5	36.4 N	70.9 E	83	5.1	HINDU KUSH REGION.
23	02 23 40.0	38.9 N	123.1 W	33	4.5	NEAR COAST OF NORTHERN CALIF. MAG. 3.3-3.7 (BRK).
23	04 57 09*	37.4 N	116.4 W	33		SOUTHERN NEVADA.
23	09 48 53.6	20.1 S	68.3 W	108	4.6	CHILE-BOLIVIA BORDER REGION.
23	14 05 59.5	45.6 N	150.8 E	111	4.4	KURILE ISLANDS.
23	14 31 22.0	0.4 S	97.0 E	33	5.0	SOUTHWEST OF SUMATRA.
23	14 53 11*	4.1 S	135.7 E	29		WEST NEW GUINEA REGION.
23	15 50 22.7	7.2 S	148.3 E	63	6.1	EAST NEW GUINEA REGION. MAG. 6 3/4 (PAS), 7.1-7.3 (BRK). FELT AT PORT MORESBY.
23	16 40 08.2	59.6 N	145.1 W	33	4.4	GULF OF ALASKA.
23	18 59 05.1	7.4 S	74.7 W	139	5.2	PERU-BRAZIL BORDER REGION.
23	22 10 25.0	12.6 N	87.7 W	32	4.5	NEAR COAST OF NICARAGUA.
23	23 49 29.2	54.7 N	162.5 E	44	4.9	NEAR EAST COAST OF KAMCHATKA.
23	23 56 09.4	54.5 N	162.3 E	33	4.8	NEAR EAST COAST OF KAMCHATKA.
24	06 01 01*	25.5 N	142.7 E	33	5.0	VOLCANO ISLANDS REGION.
24	06 36 19*	28.1 S	176.4 W	101	4.5	KERMADEC ISLANDS.
24	20 44 22*	16.1 S	173.3 W	83	4.3	TONGA ISLANDS.
24	22 28 59.7	59.8 N	153.4 W	112	5.0	SOUTHERN ALASKA.
25	02 20 06*	13.5 N	90.8 W	63	3.7	NEAR COAST OF GUATEMALA.
25	02 24 03.7	30.5 N	141.7 E	33	4.2	SOUTH OF HONSHU, JAPAN.
25	05 41 57.9	14.2 N	53.7 E	33	4.7	ARABIAN SEA.
25	05 42 45.9	14.2 N	53.7 E	33	5.2	ARABIAN SEA.
25	05 49 47.9	14.3 N	53.5 E	33	4.8	ARABIAN SEA.
25	11 54 09.0	37.5 N	17.1 W	33	4.5	NORTH ATLANTIC OCEAN.
25	12 26 10.5	0.6 N	83.5 W	33	4.9	OFF COAST OF ECUADOR.
25	12 41 50.9	18.7 S	174.9 W	238	4.3	TONGA ISLANDS.
25	14 26 31.8	4.8 S	152.1 E	106	5.0	NEW BRITAIN REGION.
25	15 41 39*	5.2 S	146.9 E	186	4.6	EAST NEW GUINEA REGION.
25	17 06 56.7	37.5 N	70.2 E	38	4.9	AFGHANISTAN-USSR BORDER REGION.
25	19 51 41.6	35.1 N	28.0 E	49	4.6	EASTERN MEDITERRANEAN SEA.
25	20 21 55.9	1.8 S	150.2 E	72	5.0	NEW IRELAND REGION.
25	23 03 22.3	51.8 N	176.1 E	39	4.8	RAT ISLANDS, ALEUTIAN ISLANDS. FELT ON ATTU.
26	00 39 52*	18.7 S	168.6 E	33		NEW HEBRIDES ISLANDS.
26	01 08 21.0	5.7 S	148.3 E	97	5.1	NEW BRITAIN REGION.
26	01 28 01.3	36.2 N	69.8 E	128	5.0	HINDU KUSH REGION.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
26	02 04 31.6	15.8 S	167.1 E	22		NEW HEBRIDES ISLANDS.
26	02 34 21.0	24.8 N	141.0 E	177	4.5	VOLCANO ISLANDS REGION.
26	03 43 17.0	64.6 N	147.6 W	39	3.8	CENTRAL ALASKA. FELT AT CLEAR.
26	04 21 00.6	38.8 N	40.9 E	30	4.8	TURKEY.
26	05 12 05.9	16.2 N	145.3 E	445	5.1	MARIANA ISLANDS.
26	09 41 18.9	34.6 N	138.8 E	33		NEAR S. COAST OF HONSHU, JAPAN.
26	13 23 19*	52.3 N	172.4 W	51	4.5	ANDREANOF ISLANDS, ALEUTIAN IS.
26	15 30 58*	27.0 S	70.4 W	33	4.5	NEAR COAST OF NORTHERN CHILE.
26	17 16 35.8	11.3 S	164.3 E	33	5.1	SANTA CRUZ ISLANDS REGION.
26	20 29 42.3	10.8 S	79.0 W	19	4.6	OFF COAST OF PERU.
26	21 08 18.2	40.6 N	139.2 E	67	4.3	NEAR WEST COAST OF HONSHU, JAPAN.
26	22 58 53.7	34.0 N	118.6 W	10	4.6	SOUTHERN CALIFORNIA. MAG. 3.6 (PAS), 4 (BRK). 33°59.6'N, 118°35.8'W. FELT IN SANTA MONICA BAY AREA. BY (PAS).
27	01 22 18.4	37.2 N	141.0 E	68	5.5	NEAR EAST COAST OF HONSHU, JAPAN.
27	05 42 15.5	5.9 S	145.3 E	54	5.2	EAST NEW GUINEA REGION.
27	07 02 57*	45.2 N	113.3 W	33	3.8	MONTANA.
27	07 05 29*	45.1 N	113.3 W	33		MONTANA.
27	11 51 05.1	24.2 S	179.7 E	496	4.7	SOUTH OF FIJI ISLANDS.
27	14 02 21.1	78.6 N	7.1 E	33	4.6	SVALBARD REGION.
27	17 25 46.7	9.7 S	160.0 E	57	4.9	SOLOMON ISLANDS.
27	17 30 55.5	19.0 N	145.0 E	298	4.9	MARIANA ISLANDS.
27	20 21 29*	44.5 N	149.8 E	46	3.7	KURILE ISLANDS.
27	21 22 16.5	13.3 N	88.8 W	78	5.4	EL SALVADOR. MAG. 6 (PAS). FELT IN SAN SALVADOR AREA.
27	21 26 10.0	21.3 S	175.7 W	33	5.2	TONGA ISLANDS.
27	21 51 18.2	18.3 N	102.9 W	98	3.7	MICHOACAN, MEXICO.
28	01 03 43*	54.6 N	161.2 E	33	4.4	NEAR EAST COAST OF KAMCHATKA.
28	02 36 39.4	60.5 N	126.5 W	33	3.6	SOUTHERN YUKON TERRITORY, CANADA. MINOR DAMAGE IN WATSON LAKE AREA.
28	08 18 06.1	25.5 S	70.7 W	32	6.8	NEAR COAST OF NORTHERN CHILE. MAG. 7 3/4 (PAS), 7.5-7.8 (BRK). THREE KILLED, AT LEAST SIX INJURED, EXTENSIVE PROPERTY DAMAGE IN THE TALTAL AREA. FELT IN NORTHERN AND CENTRAL CHILE, SOUTHERN PERU AND NORTHERN ARGENTINA. A SEICHE WAS RECORDED AT CALDERA WITH AN AMPLITUDE OF 90 CM.
28	09 25 09.1	25.6 S	71.0 W	33	4.5	OFF COAST OF NORTHERN CHILE.
28	10 09 36.8	25.0 S	70.7 W	57	4.6	NEAR COAST OF NORTHERN CHILE.
28	10 25 58.4	25.3 S	70.7 W	33	4.4	NEAR COAST OF NORTHERN CHILE.
28	10 50 43*	16.1 S	172.9 W	41	4.5	SAMOA ISLANDS REGION.
28	11 29 27.9	25.1 S	70.9 W	48	4.6	NEAR COAST OF NORTHERN CHILE.
28	12 30 46.0	25.6 S	70.8 W	33	4.8	NEAR COAST OF NORTHERN CHILE.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
28	14 38 57.8	25.4 S	70.6 W	33	4.8	NEAR COAST OF NORTHERN CHILE.
28	16 01 35.5	4.4 S	128.5 E	48	4.5	BANDA SEA.
28	21 03 16.2	25.5 S	70.7 W	33	4.7	NEAR COAST OF NORTHERN CHILE.
29	00 20 01.1	25.5 S	70.9 W	33	4.7	NEAR COAST OF NORTHERN CHILE.
29	01 05 57.0	21.0 S	68.3 W	145	4.3	CHILE-BOLIVIA BORDER REGION.
29	01 48 27.6	25.5 S	70.6 W	22	5.4	NEAR COAST OF NORTHERN CHILE. FELT.
29	05 08 48.0	25.7 S	70.6 W	33	4.6	NEAR COAST OF NORTHERN CHILE.
29	06 30 02.1	45.5 N	26.4 E	129	4.3	RUMANIA.
29	07 25 50.3	25.2 S	71.1 W	33	4.1	OFF COAST OF NORTHERN CHILE.
29	07 41 18.7	36.2 N	30.9 E	33	4.6	TURKEY.
29	08 07 06.1	52.3 N	173.3 W	33	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
29	09 29 27*	25.4 S	69.2 W	14	4.6	NORTHERN CHILE.
29	11 26 51.6	29.0 S	71.1 W	39	5.0	NEAR COAST OF CENTRAL CHILE. FELT.
29	11 56 22.9	32.6 S	111.9 W	33	5.1	EASTER ISLAND CORDILLERA. MAG. 6 (PAS).
29	12 52 36.5	32.3 S	71.7 W	71	4.7	NEAR COAST OF CENTRAL CHILE. FELT AT SANTIAGO.
29	14 54 42.4	13.3 N	145.7 E	48	4.6	MARIANA ISLANDS.
29	21 29 28*	1.3 N	126.9 E	66	4.6	MOLUCCA PASSAGE.
29	21 35 21.6	29.8 N	68.2 E	24	5.1	WEST PAKISTAN.
29	22 16 22.3	32.8 S	111.7 W	33	5.4	EASTER ISLAND CORDILLERA. MAG. 6 (PAS), 5-5.4 (BRK).
29	23 08 46.7	38.4 S	175.4 E	150	5.1	NORTH ISLAND, NEW ZEALAND.
29	23 16 20.4	60.6 S	50.5 W	33	5.7	SCOTIA SEA.
30	01 00 25.5	17.9 S	179.0 E	658	5.1	FIJI ISLANDS.
30	02 20 32*	25.5 S	70.9 W	33	4.8	NEAR COAST OF NORTHERN CHILE.
30	03 51 40.3	44.9 N	117.0 W	10	4.2	OREGON.
30	04 04 00.1	25.6 S	70.7 W	9	4.8	NEAR COAST OF NORTHERN CHILE.
30	04 24 42.3	7.2 S	119.9 E	592	5.2	FLORES SEA.
30	04 40 07*	52.8 N	160.4 E	33	4.8	OFF EAST COAST OF KAMCHATKA.
30	07 09 51.0	24.3 S	180.0 E	500	4.2	SOUTH OF FIJI ISLANDS.
30	09 43 45*	21.4 S	170.7 E	44	4.6	LOYALTY ISLANDS REGION.
30	09 53 36.9	24.8 S	70.6 W	45	5.2	NEAR COAST OF NORTHERN CHILE.
30	10 55 04.3	42.5 N	124.8 W	33	4.3	NEAR COAST OF OREGON.
30	11 55 52.7	25.5 S	70.7 W	34	4.9	NEAR COAST OF NORTHERN CHILE.
30	12 30 25.6	25.0 S	70.7 W	34	4.6	NEAR COAST OF NORTHERN CHILE.
30	13 14 50.7	18.0 S	179.0 E	670	4.2	FIJI ISLANDS.
30	17 09 59.0	24.3 S	67.1 W	175	4.5	CHILE-ARGENTINA BORDER REGION.
30	18 35 15*	10.1 N	84.7 W	43	4.4	COSTA RICA.
30	18 52 38*	37.3 N	116.5 W	33	3.2	SOUTHERN NEVADA.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
30	18 53 07.9	17.0 S	168.7 E	249		NEW HEBRIDES ISLANDS.
30	19 20 18.6	18.5 N	145.1 E	418	4.4	MARIANA ISLANDS.
30	20 12 14.6	67.1 N	147.2 W	33		ALASKA.
30	21 17 08.2	44.4 N	148.7 E	33		KURILE ISLANDS.
31	00 29 17.2	55.6 N	110.7 E	33	4.9	LAKE BAIKAL REGION.
31	02 16 25*	23.0 S	68.5 W	99	4.3	NORTHERN CHILE.
31	03 21 30.6	17.4 S	172.1 E	33	4.9	NEW HEBRIDES ISLANDS REGION.
31	12 09 13.9	7.1 S	148.6 E	54		EAST NEW GUINEA REGION.
31	12 31 54.4	25.4 S	70.4 W	49	4.4	NEAR COAST OF NORTHERN CHILE.
31	15 30 29.8	0.5 N	25.0 W	33	4.7	CENTRAL MID-ATLANTIC RIDGE.
31	16 42 08.7	25.3 S	71.2 W	33	4.8	OFF COAST OF NORTHERN CHILE.
31	18 23 06.6	11.9 S	166.4 E	56		SANTA CRUZ ISLANDS. MAG. 7.5 (PAS), 7.4-7.8 (BRK), 7.7 (CGS SURFACE WAVE). FELT STRONGLY AT VANIKORO, LANDSLIDES AND 3 FOOT 4 INCH TSUNAMI INSIDE BARRIER LANGOON.
31	18 53 12.9	11.7 S	166.0 E	33	5.2	SANTA CRUZ ISLANDS.
31	19 38 30.6	11.6 S	165.9 E	33	5.0	SANTA CRUZ ISLANDS.
31	20 59 45.0	11.4 S	165.8 E	33	4.6	SANTA CRUZ ISLANDS.
31	21 20 21.5	12.2 S	165.8 E	33	4.3	SANTA CRUZ ISLANDS.
31	21 40 38*	11.7 S	165.8 E	33	4.2	SANTA CRUZ ISLANDS.
31	22 15 14.0	12.3 S	165.6 E	33		SANTA CRUZ ISLANDS. MAG. 7 1/4-7 1/2 (PAS), 7-7.6 (BRK). 7.3 (CGS SURFACE WAVE). FELT AT VANIKORO, LANDSLIDES AND 2 1/2 FOOT TSUNAMI AT VANIKORO.

Date and Station	Phase (GCT)
	h m s
DEC 1	
H-00 17 48.4	
15.2S 073.1W	
h ABOUT 62KM	
SJG EP	00 24 29.1
EUR EP	00 28 40.0
BMO EP	00 29 06.8
DEC 1	
NEW IP	00 29 41.6
COL EP	00 27 29.5
E	27 44.0
DEC 1	
H-00 32 25.7	
.1S 125.1E	
h ABOUT 63KM	
EUR EP'	00 50 57.3
BOZ EP'	00 51 02.0
ALQ EP'	00 51 14.0
E	51 31.0
DEC 1	
BMO EPN	00 44 16.2
COL E(P)	00 45 30.3
E	48 30.5
DEC 1	
BCN EPN	00 56 20.9
ES	56 38.9
GCA IP	00 56 28.5
E(S)	56 50.3
EUR IP	00 56 45.6
DEC 1	
H-01 23 34.8	
19.7S 175.7W	
h ABOUT 137KM	
BMO EP	01 35 47.6
DEC 1	
SJG EP	02 53 55.5
IS	54 44.0
DEC 1	
COL E(P)	03 34 22.5
BMO EP	03 36 33.6
DEC 01	
H-04 29 22.6	
60.2N 146.1W	
h ABOUT 20KM	
COL IP D	04 30 35.3
IL	31 50.0
BRW EP	04 32 19.5
ADK E(P)	04 33 38.7
NEW IP	04 34 01.5

Date and Station	Phase (GCT)
	h m s
HHM IP	04 34 16.4
I	34 21.4
BUT EP	04 34 39.2
BOZ EP	04 34 46.0
EUR IP	04 35 13.8
SLD E(P)	04 35 19.4
SLC E(P)	04 35 19.6
ALQ E(P)	04 36 22.5
E	42 35.0
TUC EP	04 36 25.0
DEC 1	
H-04 56 58.4	
14.0S 167.1E	
h ABOUT 132KM	
ADK IP	05 07 39.8
UKI E(P)	05 09 13.5
SLD EP C	05 09 17.5
EsP	10 17.7
IPP	12 35.5
EPKKP	27 33.9
EP'P'	35 32.5
COL IP C	05 09 22.4
IpP	09 55.3
FPP	12 42.3
IS	19 36.0
EPKKP	27 19.0
EL	32 06.0
EP'P'	35 28.8
LVN IP	05 09 36.0
BCN IP C	05 09 39.2
IsP	10 40.0
IPP	13 12.9
EPKKP	27 22.3
EP'P'	35 31.5
EUR IP C	05 09 39.9
IPP	13 07.2
ES	20 40.0
EPKKP	27 17.7
EP'P'	35 17.9
BMO EP	05 09 43.5
EP'P'	35 11.5
BRW E(P)	05 09 45.0
E	10 15.8
NEW EP	05 09 48.0
TUC EP	05 09 49.0
E	10 11.0
EPP	13 28.0
EPKKP	27 15.0
EP'P'	35 16.0
SLC EP	05 09 55.1
E	10 08.3
EPP	13 40.3
EpPP	14 24.1
EP'P'	35 21.1

Date and Station	Phase (GCT)
	h m s
HHM EP	05 09 58.1
E	11 29.1
BUT EP	05 10 00.0
BOZ IP C	05 10 02.0
IpP	10 42.5
EPP	13 41.3
EpPP	14 02.7
ES	21 02.3
EPKKP	27 09.0
EP'P'	35 14.5
FCU EP C	05 10 04.0
E	11 20.4
E	27 06.7
EPKKP	27 40.0
ALQ EP C	05 10 07.0
EPP	13 59.5
ES	21 04.0
EPKKP	27 03.5
EP'P'	35 17.0
RCD EP	05 10 30.5
E	14 32.0
EPKKP	26 50.0
WSC EP'	05 15 30.0
E	16 30.5
E	16 50.3
E	17 20.0
SJG EP'	05 15 50.9
EpP'	16 36.0
EsP'	16 54.0
IPP	19 02.0
EpPP	19 46.5
DEC 1	
SJG IP D	06 47 28.0
I(S)	47 38.0
DEC 1	
COL EP	07 14 02.0
DEC 1	
H-07 23 12.5	
60.2N 145.9W	
h ABOUT 18KM	
COL EP	07 24 26.2
E	24 34.3
EL	25 41.0
NEW EP	07 27 51.0
BMO EP	07 28 17.1
BOZ E(P)	07 28 35.5
DEC 1	
COL EP	07 35 48.0
DEC 01	
H-09 20 40.9	
36.2N 113.9W	
h ABOUT 26KM	
BCN IP C	09 20 57.2
IS	21 10.0
LVN IP	09 20 59.0

Date and Station	Phase (GCT)
	h m s
EUR EP	09 21 38.0
EL	22 35.0
TUC EPN	09 21 49.8
ALQ E(P)	09 22 13.0
E	22 31.0
DEC 1	
BMO E(P)	09 45 17.1
DEC 1	
BMO EP	09 48 47.5
DEC 1	
COL EP	10 47 20.0
DEC 1	
COL E(P)	10 57 18.0
DEC 1	
H-11 38 25.2	
06.2N 126.6E	
h ABOUT 115KM	
COL EP	11 50 36.4
DEC 1	
H-11 41 37.2	
08.8S 079.4W	
h ABOUT 33KM	
ALQ E(P)	11 50 35.0
DEC 1	
H-15 21 03.5	
40.7N 142.0E	
h ABOUT 33KM	
BMO EP	15 32 08.8
BOZ E(P)	15 32 24.5
DEC 1	
EUR IP	15 48 50.8
DEC 01	
H-16 10 08.9	
60.2N 146.1W	
h ABOUT 16KM	
COL EP	16 11 22.0
I	11 34.3
ES	12 36.0
NEW EP	16 14 50.0
HHM EP	16 15 03.9
BMO EP	16 15 13.6
BOZ E(P)	16 15 33.0
DEC 1	
BMO EP	16 11 55.7
E	12 01.6
DEC 1	
H-16 38 29.3	
57.9S 025.4W	
h ABOUT 50KM	
BMO EP'	16 57 28.8
E	57 43.1

Date and Station	Phase (GCT) h m s
COL EP'	16 58 19.3
I	58 30.4
DEC 1	
H-17 11 24.4	
10.3S 161.6E	
h ABOUT 81KM	
COL EP	17 23 45.8
EUR IP	17 24 21.0
DEC 1	
COL IP	18 07 03.5
DEC 1	
ALQ E(P)	18 24 02.0
E	24 39.0
DEC 1	
ALQ EP	18 39 36.7
E	40 12.0
DEC 1	
EUR IP	18 42 51.2
SLC EP	18 44 11.4
EL	44 41.9
DEC 1	
H-18 56 23.0	
41.5N 139.7E	
h ABOUT 172KM	
ADK IP	19 02 26.3
COL IP	19 04 31.2
NEW IP	19 07 03.8
IPP	07 45.0
HHM IP	19 07 14.2
IPP	07 55.9
BMO EP	19 07 17.0
BUT IP	19 07 28.7
IPP	08 10.7
SLD IP C	19 07 32.4
EUR IP C	19 07 42.0
IPP	08 23.5
IPP	10 33.4
SLC EP	19 07 50.1
EPCP	08 06.4
EPP	08 33.2
BCN IP C	19 07 59.1
EPP	08 41.7
RCD EP	19 08 02.5
EPP	08 45.0
TUC IP	19 08 25.2
EPP	09 08.0
EPP	11 41.2
ALQ IP	19 08 29.4
IPP	09 12.4

Date and Station	Phase (GCT) h m s
DEC 1	
GCA IP C	19 28 30.7
IS	28 44.8
ALQ E(P)	19 29 27.0
E	30 22.0
DEC 1	
BMO E(P)	20 15 43.1
DEC 1	
BMO E(P)	21 00 20.4
DEC 1	
BOZ EPN	21 30 42.3
EL	30 48.2
DEC 1	
BCN EP	21 57 21.0
DEC 1	
COL EP	22 08 30.0
DEC 1	
EUR E(P)	23 10 22.5
DEC 2	
BOZ E(P)	00 06 20.7
E	06 32.0
DEC 2	
ALQ EP	00 27 43.5
DEC 2	
TUC (PN)	00 39 12.0
DEC 2	
EUR EP	00 42 48.5
DEC 2	
SJG EP	01 20 51.0
IL	21 16.5
DEC 2	
H-03 07 50.7	
28.2N 153.6E	
h ABOUT 22KM	
COL EP	03 20 29.5
DEC 2	
COL E(P)	03 27 04.8
DEC 2	
NEW EP	05 44 50.0
DEC 2	
NEW EP	08 45 12.0
DEC 2	
H-09 31 16.2	
3.3N 128.2E	
h ABOUT 71KM	
GUA EP	09 35 40.5
ADK EP	09 42 00.8
COL EP	09 43 42.0
BMO EP	09 45 17.1
EUR IP	09 45 30.2

Date and Station	Phase (GCT) h m s
BOZ EP'	09 49 38.5
TUC EP'	09 49 49.0
ALQ IP'	09 49 55.0
SJG EP'	09 51 03.2
I	51 25.9
DEC 2	
BMO EP	09 48 47.5
NEW EP	09 49 26.0
E	49 40.0
DEC 2	
EUR E(P)	10 00 51.0
DEC 2	
SJG EP	10 09 33.5
IS	10 01.0
DEC 2	
BOZ E(P)	10 26 31.0
DEC 2	
SJG EP	12 36 50.2
IS	37 08.0
DEC 2	
COL EP	15 38 48.0
DEC 2	
BMO EP	16 21 06.1
DEC 2	
COL EP	18 01 01.0
DEC 2	
BMO E(P)	18 17 40.6
COL EP	18 18 00.0
DEC 2	
COL IP	18 20 31.7
DEC 2	
H-18 29 09.9	
10.3S 161.6E	
h ABOUT 83KM	
COL EP	18 41 31.0
EUR IP	18 42 05.7
DEC 2	
ALQ E(P)	18 37 04.0
EL	37 43.5
DEC 2	
BOZ EPN	19 05 26.0
EL	05 37.0
DEC 2	
BOZ EPN	19 07 53.0
EL	08 04.0
DEC 2	
FGU IPN	21 17 07.1
IPG	17 08.6
ILG	17 27.9
DEC 2	
EUR IP	22 01 44.0

Date and Station	Phase (GCT) h m s
DEC 2	
ALQ E(P)	22 15 03.6
EL	15 29.5
DEC 2	
ALQ E(P)	22 27 18.0
EL	27 58.0
DEC 2	
FGU IP C	22 41 37.4
IS	41 56.2
BOZ EP	22 42 23.7
E	43 22.5
DEC 2	
BOZ EPN	22 55 04.5
EL	55 15.5
DEC 2	
H-23 01 18.2	
22.5S 069.3W	
h ABOUT 33KM	
ALQ EP	23 12 12.5
DEC 2	
ALQ E(P)	23 01 44.4
DEC 2	
ALQ EP	23 11 18.0
DEC 2	
ALQ E(P)	23 26 17.0
EL	26 49.4
DEC 2	
H-23 46 52.5	
44.4N 148.8E	
h ABOUT 56KM	
COL EP	23 54 23.0
DEC 3	
EUR IP	01 54 39.0
DEC 3	
TUC E(P)	02 00 56.2
DEC 3	
BOZ EPN	02 14 06.5
EL	14 17.0
DEC 3	
H-03 54 04.4	
17.8S 177.8W	
h ABOUT 389KM	
TUC E(P)	04 05 40.0
DEC 3	
H-04 33 41.7	
15.9N 093.3W	
h ABOUT 89KM	
ALQ EP	04 38 36.0
DEC 3	
ALQ EP	05 02 15.5
DEC 3	
COL IP	05 12 10.1
BOZ E(P)	05 14 35.4

Date and Station	Phase (GCT)
	h m s
EUR IP	05 15 03.6
DEC 3	
H-05 42 35.6	
21.0S 170.2E	
h ABOUT 33KM	
TUC EP	05 55 43.7
DEC 3	
GUA IP	06 19 56.0
IS	20 12.0
DEC 3	
COL EP	08 34 10.0
DEC 3	
EUR IP	09 44 25.8
DEC 3	
COL IP	10 41 38.8
DEC 3	
H-11 19 24.1	
5.8N 072.5W	
h ABOUT 25KM	
SJG EP	11 22 38.0
BOZ E(P)	11 28 34.8
DEC 3	
COL EP	12 03 09.0
DEC 3	
ALQ EP	13 57 46.6
DEC 3	
EUR EP	14 02 40.3
DEC 3	
H-14 13 24.4	
24.8S 179.9E	
h ABOUT 487KM	
ABK IP	14 24 23.1
SLD EP	14 24 58.9
TUC IP	14 25 20.1
IpP	27 13.3
EP'P'	51 15.0
EUR IP	14 25 21.0
EpP	27 12.2
EP'P'	51 12.5
ALQ EP	14 25 40.0
EpP	27 31.0
COL IP	14 25 43.6
EpP	27 36.0
DEC 3	
BMO EP	14 42 59.3
DEC 3	
H-15 10 32.7	
5.7N 072.4W	
h ABOUT 21KM	
SJG EP	15 13 48.5

Date and Station	Phase (GCT)
	h m s
DEC 3	
EUR IP	15 37 45.9
DEC 3	
H-17 04 56.0	
02.1N 083.4W	
h ABOUT 17KM	
BHP IP	17 06 50.9
SJG EP	17 10 03.6
ALQ EP	17 12 25.0
DEC 3	
BMO IP	18 35 53.7
DEC 3	
H-22 06 08.2	
39.0N 141.6E	
h ABOUT 123KM	
COL E(P)	22 14 27.5
ALQ EP	22 18 24.1
DEC 3	
SLC EP	23 13 18.2
DEC 3	
COL IP D	23 35 35.5
DEC 4	
EUR EP	00 23 35.0
EL	24 25.7
DEC 4	
COL IP	02 26 46.1
DEC 4	
TUC E(P)	05 48 20.0
DEC 4	
NEW EP	06 10 27.0
DEC 4	
COL EP	09 20 40.0
DEC 4	
BCN EP	09 43 48.4
DEC 4	
COL EP	11 25 39.0
DEC 4	
COL EP	11 55 04.0
DEC 4	
ALQ E(P)	12 22 42.0
E	22 53.0
DEC 4	
BOZ E(P)	12 33 10.0
E	33 20.7
DEC 4	
BCN EP	13 18 25.7
DEC 4	
H-14 18 21.9	
40.2S 073.4W	
h ABOUT 33KM	
ALQ EP	14 30 32.5

Date and Station	Phase (GCT)
	h m s
DEC 4	
BCN IP D	14 41 14.2
DEC 4	
COL E(P)	15 37 26.2
DEC 4	
H-16 24 28.0	
38.6N 144.2E	
h ABOUT 33KM	
BMO EP	16 35 33.3
DEC 4	
BCN IP D	17 17 57.8
DEC 4	
COL EP	17 28 05.0
DEC 4	
H-18 02 10.3	
15.4S 173.2W	
h ABOUT 33KM	
BCN EP	18 13 49.3
TUC E(P)	18 13 58.0
NEW EP	18 14 21.0
ALQ E(P)	18 14 25.3
BOZ E(P)	18 14 26.7
BUT E(P)	18 14 27.3
COL IP	18 14 29.3
HHM E(P)	18 14 30.0
DEC 4	
TUC E(P)	18 05 46.0
EPG	05 58.0
BCN E(P)	18 06 06.6
DEC 4	
COL EP	18 08 35.0
DEC 4	
ALQ EP	18 07 06.0
EL	09 24.8
DEC 4	
EUR IP	19 46 24.2
DEC 4	
SJG EP	20 19 09.5
IS	19 34.5
DEC 4	
EUR IP	21 38 18.8
DEC 4	
SJG EP	21 51 49.5
IS	52 14.4
DEC 4	
EUR IP	21 55 37.0
DEC 4	
SLC EP	22 10 51.1

Date and Station	Phase (GCT)
	h m s
DEC 4	
ALQ EP	22 28 35.6
EPG	28 43.0
EL	29 22.0
DEC 4	
H-23 23 22.0	
06.4S 154.4E	
h ABOUT 85KM	
COL IP	23 35 35.6
BMO EP	23 36 27.5
EUR IP	23 36 31.2
DEC 4	
EUR IP	23 49 03.8
DEC 5	
H-00 56 10.0	
44.1N 127.8W	
h ABOUT 33KM	
NEW EP	00 58 12.0
ALQ EP	01 00 30.0
DEC 5	
H-02 36 53.5	
02.3N 097.6W	
h ABOUT 33KM	
TUC E(P)	02 43 21.0
ALQ EP	02 43 33.0
EUR IP	02 44 33.5
RCD EP	02 44 44.0
HHM E(P)	02 45 31.7
COL EP	02 48 15.0
DEC 5	
ALQ EP	02 41 46.0
DEC 5	
ALQ EP	02 48 32.9
E	48 38.0
DEC 5	
COL IP	03 37 11.9
DEC 5	
ALQ EP	03 43 06.2
DEC 5	
ALQ EP	03 48 07.0
E	55 09.0
DEC 5	
H-03 48 14.3	
02.7N 097.6W	
h ABOUT 33KM	
ALQ EP	03 54 50.0
E	04 04 10.0
DEC 5	
BHP EP D	03 56 28.0

Date and Station	Phase (GCT)
	h m s
DEC 05	
H-04 34 57.0	
32.4S 068.6W	
h ABOUT 127KM	
ALQ EP	04 46 31.0
DEC 5	
H-04 49 38.9	
21.5S 174.7W	
h ABOUT 33KM	
TUC E(P)	05 01 53.7
ALQ EP	05 02 16.5
DEC 5	
H-04 55 39.0	
1.4N 084.4W	
h ABOUT 33KM	
BHP EP D	04 57 50.0
IS	05 00 24.0
DEC 5	
NEW IP	05 13 59.1
DEC 5	
COL IP	05 21 20.3
DEC 5	
COL EP	06 37 11.0
DEC 05	
H-07 23 03.4	
32.2N 131.7E	
h ABOUT 23KM	
COL IP	07 32 52.6
NEW EP	07 35 08.0
EPCP	35 18.0
DEC 5	
SJG EP	07 36 01.8
IS	36 28.3
H-10 10 37.8	
30.4N 105.4W	
h ABOUT 33KM	
ALQ EP	10 11 45.8
E	11 54.0
EL	12 51.0
TUC E(P)	10 11 52.0
EL	13 08.0
DEC 5	
H-13 00 31.0	
13.9N 091.4W	
h ABOUT 42KM	
ALQ EP	13 05 53.5
TUC E(P)	13 06 00.1
COL IP	13 10 58.5
DEC 5	
BOZ EPN	13 52 14.0
EL	52 22.0

Date and Station	Phase (GCT)
	h m s
DEC 5	
H-14 09 55.3	
12.6N 144.1E	
h ABOUT 32KM	
GUA IP	14 10 16.0
I	10 25.0
NEW IP	14 22 36.4
EUR IP	14 22 51.8
ALQ E(P)	14 23 31.0
DEC 5	
H-15 36 24.0	
11.0S 162.7E	
h ABOUT 43KM	
COL EP	15 48 52.0
DEC 5	
EUR E(P)	15 48 46.0
DEC 5	
H-16 10 56.3	
11.0N 089.9W	
h ABOUT 33KM	
EUR EP	16 18 03.7
DEC 5	
TUC E(P)	16 38 20.0
EL	39 38.7
DEC 5	
ALQ EP	16 41 38.1
DEC 5	
TUC EP	16 44 00.8
EL	45 20.0
ALQ E(P)	16 44 53.0
E	45 37.0
EL	47 23.6
EUR IP	16 45 53.0
DEC 5	
BCN EP	16 47 36.0
DEC 5	
H-17 38 44.4	
25.9N 142.5E	
h ABOUT 14KM	
BMO E(P)	17 50 49.5
DEC 5	
BOZ E(P)	18 04 05.5
DEC 5	
EUR E(P)	18 38 04.0
DEC 5	
ALQ E(P)	19 58 22.0
E	59 05.5
DEC 5	
NEW EP	20 18 29.0
DEC 5	
ALQ E(P)	20 52 32.5
E	53 13.4

Date and Station	Phase (GCT)
	h m s
EUR E(P)	20 53 39.8
DEC 5	
H-22 30 33.2	
25.8N 142.6E	
h ABOUT 33KM	
COL E(P)	22 40 27.0
BOZ E(P)	22 42 39.5
E	42 53.5
ALQ E(P)	22 43 38.0
E	44 15.0
DEC 5	
BMO EPN	22 41 42.8
EUR EP	22 42 19.0
DEC 5	
NEW IP	22 52 23.6
DEC 6	
BOZ IPN	00 01 37.5
EL	01 45.5
DEC 6	
NEW IP	00 10 17.6
DEC 6	
UKI E(P)	00 14 31.1
DEC 6	
NEW EP	00 25 28.0
ES	26 55.0
DEC 6	
COL E(P)	01 05 05.3
DEC 6	
H-02 30 52.6	
36.3N 069.4E	
h ABOUT 51KM	
COL IP	02 42 30.2
DEC 6	
TUC E(P)	03 29 03.0
EL	29 55.0
EUR EP	03 30 23.7
DEC 6	
BOZ EPN	03 49 58.0
EL	50 03.0
DEC 6	
NEW EP	04 07 25.0
DEC 6	
H-05 25 09.0	
41.7S 083.8W	
h ABOUT 39KM	
TUC EP	05 37 03.1
FGU EP	05 37 43.7
I	37 50.2
EUR IP	05 37 46.8
RCD E(P)	05 37 50.0
E	37 57.0

Date and Station	Phase (GCT)
	h m s
BOZ EP	05 38 07.5
I	38 13.5
E	38 28.5
BUT EP	05 38 10.5
NEW EP	05 38 25.0
DEC 6	
BMO IP	05 55 44.0
DEC 6	
H-07 18 38.5	
50.1N 159.8E	
h ABOUT 15KM	
COL IP D	07 24 54.4
I	25 03.0
FPCP	27 50.5
NEW EP	07 27 45.0
HHK E(P)	07 27 58.7
EPCP	59 06.7
BOZ IP D	07 28 20.0
IPCP	29 17.9
EUR IP	07 28 30.8
SLC EP	07 28 41.3
BCN EP	07 28 45.0
FGU EP	07 28 50.2
IPCP	29 34.7
RCD IP	07 28 58.0
E	29 09.0
TUC IP	07 29 24.0
ALQ IP D	07 29 28.6
E	29 41.0
DEC 6	
NEW EP	07 22 31.0
DEC 6	
COL EP	09 45 28.0
DEC 6	
H-10 00 42.4	
00.7N 077.0W	
h ABOUT 104KM	
ALQ IP D	10 08 41.5
EPP	09 09.4
TUC E(P)	10 08 45.4
EUR IP C	10 09 46.0
EPP	10 14.5
BOZ E(P)	10 10 02.0
BMO E(P)	10 10 16.0
COL E(P)	10 12 50.0
DEC 6	
EUR IP	10 07 49.0

Date and Station	Phase (GCT)
	h m s
DEC 6	
H-10 34 30.2	
36.8N 121.6W	
h ABOUT 5KM	
EUR E(P)	10 35 55.0
E	36 09.1
EL	37 09.2
DEC 6	
H-10 45 01.7	
42.0N 141.2E	
h ABOUT 120KM	
COL IP	10 53 07.5
BOZ E(P)	10 56 10.0
EUR IP	10 56 19.8
ALQ EP	10 57 08.2
DEC 6	
H-11 07 49.9	
18.2S 175.1W	
h ABOUT 236KM	
TUC EP	11 19 31.0
EUR EP	11 19 32.0
BMO IP	11 19 43.8
ALQ IP C	11 19 54.5
COL IP	11 20 01.3
DEC 6	
BOZ EPN	15 52 02.0
EL	52 21.0
DEC 6	
GUA EP	16 34 53.0
ES	35 09.5
DEC 6	
BOZ EPN	17 21 36.5
EL	21 51.0
DEC 6	
BMO EPN	17 36 44.8
DEC 6	
BOZ EPN	17 51 22.0
EL	51 40.5
DEC 6	
TUC (PN)	18 42 36.0
DEC 6	
ALQ E(P)	18 45 47.0
DEC 6	
BOZ EPN	19 00 52.0
EL	01 03.0
DEC 6	
BOZ EPN	19 21 47.0
EL	21 58.0
DEC 6	
BOZ EPN	19 29 32.5
EL	29 52.3

Date and Station	Phase (GCT)
	h m s
DEC 6	
EUR IP	19 38 37.2
BMO E(P)	19 39 24.8
ALQ E(P)	19 40 28.6
EL	40 53.8
DEC 6	
EUR IP	20 27 27.8
DEC 6	
H-21 04 42.2	
41.4S 089.5W	
h ABOUT 33KM	
TUC E(P)	21 16 22.0
EUR I(P)	21 17 16.1
DEC 6	
H-21 13 28.2	
41.3S 090.0W	
h ABOUT 33KM	
ALQ EP	21 25 20.5
E	26 09.0
DEC 6	
H-21 22 22.2	
30.7N 041.8W	
h ABOUT 33KM	
NEW EP	21 32 16.0
COL EP	21 33 28.0
DEC 6	
BOZ IPN	21 57 45.6
EL	58 03.0
BMO EPN	21 58 35.5
DEC 6	
EUR E(P)	22 03 00.5
DEC 6	
BOZ EPN	22 07 11.0
EL	07 22.5
DEC 6	
H-22 32 20.7	
24.1S 067.1W	
h ABOUT 191KM	
BMO EP	22 44 23.3
DEC 6	
BMO EP	22 37 05.2
DEC 6	
BOZ EPN	22 54 36.5
I	54 44.5
IL	55 04.0
DEC 6	
BOZ EPN	23 26 05.0
EL	26 25.0
DEC 7	
BMO E(P)	00 16 22.1
COL EP	00 16 24.0

Date and Station	Phase (GCT)
	h m s
DEC 7	
COL EP	00 42 35.0
DEC 7	
H-01 07 16.2	
37.4N 114.2W	
h ABOUT 33KM	
BCN IP C	01 07 41.2
ES	07 58.0
LVN IP	01 07 43.5
IL	08 01.0
EUR IP	01 07 56.0
SLC E(P)	01 08 20.0
FGU IP	01 08 35.2
I	08 48.0
ELG	09 54.0
TUC EPN	01 08 41.0
ALQ EP	01 08 51.0
E	09 18.5
EL	10 41.5
SLD E(P)	01 08 51.8
E	09 00.0
IL	10 14.7
BMO IPN	01 09 11.9
DEC 7	
BOZ E(P)	01 09 40.5
EL	11 39.5
DEC 7	
BOZ EPN	01 15 47.5
E(S)	16 04.2
E(L)	16 08.0
DEC 7	
GCA EP	01 16 45.5
IS	17 12.2
EUR IP D	01 16 50.7
E	16 56.4
IL	17 31.0
DEC 7	
BCN E(P)	01 21 00.5
ES	21 18.5
EUR EP D	01 21 21.7
I	21 29.8
EL	22 02.5
DEC 7	
H-01 27 50.0	
37.2N 114.3W	
h ABOUT 33KM	
BCN IP C	01 28 09.9
ES	28 29.3
LVN I(P)	01 28 18.5
IS	28 37.0
EUR IP	01 28 32.1
SLC E(P)	01 29 03.0

Date and Station	Phase (GCT)
	h m s
TUC (PN)	01 29 16.0
ALQ E(P)	01 29 34.0
BMO EPN	01 29 47.4
DEC 7	
H-04 15 23.3	
46.9N 153.7E	
h ABOUT 50KM	
COL EP	04 22 19.8
BMO E(P)	04 25 17.2
E	25 28.8
BOZ EP	04 25 36.6
EUR E(P)	04 25 45.5
DEC 7	
EUR EP	05 37 44.5
DEC 7	
ADK IP	06 44 09.8
IS	44 23.4
COL EP	06 48 20.0
EUR EP	06 51 42.6
DEC 7	
ADK IP	06 44 09.8
IS	44 23.4
DEC 7	
H-06 50 33.1	
33.0N 137.9E	
h ABOUT 335KM	
COL EP	06 59 26.0
BMO E(P)	07 01 51.1
EUR IP	07 02 12.0
DEC 7	
COL EP	07 10 48.0
DEC 7	
BHP IP D	07 29 24.9
IS	30 05.5
DEC 7	
EUR EP	07 56 33.3
EL	57 05.0
DEC 7	
BCN E(P)	11 56 16.7
DEC 7	
ADK IP	12 09 14.0
DEC 7	
BMO EP	14 12 40.8
DEC 7	
ALQ EP	14 30 52.0
E	31 50.0
EL	31 49.4
DEC 7	
ADK E(P)	15 59 11.0

Date and Station	Phase (GCT) h m s
DEC 7	
H-16 06 59.3	
20.8S 178.6W	
h ABOUT 522KM	
EUR IP	16 18 34.0
BMO EP	16 18 44.5
COL IP	16 18 55.6
DEC 7	
BMO E(P)	16 20 49.0
DEC 7	
H-16 59 29.6	
11.9N 142.7E	
h ABOUT 33KM	
GUA IPG	17 00 11.0
IS	00 23.0
COL IP D	17 10 42.5
E	11 28.9
NEW IP	17 12 17.6
SLD EP	17 12 18.4
BMO IP	17 12 21.6
EUR IP	17 12 33.6
BOZ EP	17 12 38.5
E	12 43.3
BCN E(P)	17 12 50.4
DEC 7	
BCN EP	17 03 26.1
DEC 7	
H-17 17 45.7	
44.5N 151.7E	
h ABOUT 47KM	
ADK IP	17 22 38.5
COL IP D	17 25 05.9
I	25 16.5
ES	31 03.0
ESCP	31 13.8
E	33 57.0
NEW IP	17 27 44.6
IpP	27 56.0
HHM EP	17 27 56.0
EpP	28 08.2
BMO IP	17 27 57.5
SLD IP D	17 28 12.3
I	28 20.1
IsP	28 38.9
BOZ EP	17 28 16.5
E	31 21.5
EUR IP D	17 28 24.1
I	28 31.1
I	28 49.0
EPP	30 47.0
SLC E(P)	17 28 29.2
FGU EP	17 28 42.5
BCN EP	17 28 42.9
E	28 50.4
EpP	28 56.9
RCD IP	17 28 50.2
E(pP)	29 02.0
TUC EP	17 29 11.8
ALQ IP D	17 29 18.0
E	29 24.0
E	29 28.0
CSC EP	17 30 34.0
DEC 7	
COL E(P)	17 57 13.5
DEC 7	
H-18 23 09.3	
1.6S 080.3W	
h ABOUT 80KM	
ALQ E(P)	18 31 13.1
DEC 7	
EUR E(P)	18 27 11.0
ALQ E(P)	18 27 49.0
E	28 14.0
BUT EP	18 28 10.3
DEC 7	
BCN E(P)	18 45 35.3
E(L)	45 54.7
EUR E(P)	18 46 04.0
EL	46 42.5
DEC 7	
BCN E(P)	19 09 54.9
E(L)	10 10.4
DEC 7	
BMO EP	19 12 19.7
DEC 7	
BCN E(P)	19 14 07.9
E(S)	14 25.9
DEC 7	
BCN EP	19 19 19.0
E(L)	19 35.4
BMO E(P)	19 20 58.8
DEC 7	
BCN E(P)	19 42 16.4
EL	42 37.9
BCN E(P)	18 25 25.9
DEC 10	
COL EP	18 42 38.0
DEC 10	
BMO EPN	19 07 17.0
DEC 10	
BHP IP	19 11 08.0
IS	18 04.0
DEC 10	
H-20 23 21.0	
19.8S 071.3W	
h ABOUT 8KM	
BMO E(P)	20 35 16.8
DEC 10	
ALQ E(P)	20 41 39.2
E	42 04.5
DEC 10	
ADK EP	21 23 47.3
IS	24 20.5
DEC 7	
COL EP	19 43 38.0
DEC 7	
H-20 43 58.9	
46.9N 120.1W	
h ABOUT 33KM	
EUR IP	20 44 50.6
UKI E(P)	20 44 52.5
SLD EP	20 44 59.4
I	45 05.5
IL	45 56.5
BCN EP	20 45 33.7
EL	47 16.8
BMO EPN	20 45 06.3
NEW EP	20 45 55.0
E	46 17.0
BOZ E(P)	20 45 58.0
EL	47 59.0
ALQ E(P)	20 47 05.0
DEC 7	
BCN E(P)	21 29 32.3
E(S)	29 50.8
EUR EP	21 29 46.3
E	29 52.0
EL	29 27.5
DEC 7	
ALQ E(P)	21 52 36.6
E	53 02.4
DEC 7	
BOZ IPND	21 56 03.0
DEC 7	
H-22 09 01.5	
51.8N 175.6W	
h ABOUT 41KM	
ADK IP	22 09 14.0
COL EP	22 13 25.0
NEW IP	22 16 07.8
E	16 25.0
BMO EP	22 16 21.3
HHM EP	22 16 23.4
BOZ EP	22 16 46.0
E	17 05.0
EUR IP	22 16 53.0
TUC EP	22 17 53.6
E	18 11.1
ALQ EP	22 18 01.8
DEC 7	
H-23 54 35.6	
18.3N 068.5W	
h ABOUT 139KM	
SJG IP D	23 55 14.5
IS	55 44.0
BHP IP	23 57 52.8
IS	00 00 34.5
CSC EP	23 58 50.0
E	59 00.0
ES	00 02 20.0
ASC IP	23 59 19.5
I	59 37.8
IpP	59 48.8
E	00 01 04.3
ES	00 03 16.8
ALQ IP D	24 01 38.0
IpP	02 09.4
ES	07 26.0
TUC EP	24 02 03.0
EpP	02 34.0
SLC EP	24 02 24.5
IpP	02 58.7
BCN EP	24 02 36.0
E	02 39.3
EpP	03 07.5
EsP	03 23.1
BUT EP	24 02 42.8
EUR EP	24 02 47.2
E	05 12.8
HHM EP	24 02 58.7
IpP	03 29.2
BMO IP	24 03 04.4
NEW IP	24 03 11.9
EpP	03 43.0
COL EP	24 05 26.0
DEC 8	
H-02 07 07.3	
29.4N 070.0E	
h ABOUT 31KM	
COL EP	02 19 23.0
DEC 8	
BUT EP	03 24 42.3

Date and Station	Phase (GCT)
	h m s
BOZ EP	03 24 43.6
DEC 8	
TUC E(P)	05 25 02.0
DEC 8	
BMO EP	06 13 44.9
DEC 8	
H-06 21 34.1	
15.4S 176.2W	
h ABOUT 107KM	
EUR EP	06 33 21.8
TUC E(P)	06 33 25.0
BMO EP	06 33 34.7
COL EP	06 33 47.0
ALQ EP	06 33 49.2
BOZ EP	06 33 57.0
EPCP	34 02.3
DEC 8	
TUC E(P)	07 10 31.5
DEC 8	
H-07 23 05.1	
30.6N 114.2W	
h ABOUT 14KM	
TUC EPN	07 23 56.7
BCN EP	07 24 27.6
E	24 32.3
E	24 53.8
EL	26 15.0
GCA EP	07 24 44.8
EL	26 51.0
EUR EP	07 25 16.1
EL	28 12.5
BMO E(P)	07 26 34.5
BOZ E(P)	07 26 46.7
NEW EP	07 27 15.0
COL E(P)	07 30 43.0
DEC 8	
TUC (PN)	07 32 00.5
DEC 8	
BMO EP	09 36 27.9
EUR IP	09 37 37.6
DEC 8	
NEW EP	09 38 33.0
DEC 8	
H-09 56 46.5	
6.4N 072.7W	
h ABOUT 203KM	
BMO EP	10 05 59.4

Date and Station	Phase (GCT)
	h m s
DEC 8	
EUR IP	10 51 34.8
DEC. 8	
COL E(P)	11 00 43.5
ES	01 49.6
DEC 8	
COL EP	11 06 39.0
BMO E(P)	11 10 08.8
DEC 8	
H-11 31 18.6	
42.1N 018.9E	
h ABOUT 29KM	
COL IP	11 42 46.1
HHM E(P)	11 43 31.9
EUR IP	11 43 33.0
BOZ EP	11 43 39.5
BMO EP	11 43 52.5
DEC 8	
H-11 34 29.2	
01.5S 080.5W	
h ABOUT 98KM	
ALQ E(P)	11 42 24.8
E	42 34.6
EPP	44 10.6
EUR IP	11 43 33.0
DEC 8	
COL EP	12 31 26.0
DEC 8	
H-12 33 07.8	
.2S 125.2E	
h ABOUT 54KM	
COL EP	12 45 57.0
TUC EP'	12 51 52.5
DEC 8	
COL E(P)	12 44 11.0
DEC 8	
NEW IP	12 45 00.3
IS	45 20.0
BMO EPN	12 45 28.4
HHM E(P)	12 45 33.4
EL	46 19.4
BOZ E(P)	12 45 52.5
EL	47 39.2
DEC 8	
SJG IP	12 57 26.0
IS	57 59.2
DEC 8	
H-14 05 51.5	
39.7N 141.1E	
h ABOUT 98KM	

Date and Station	Phase (GCT)
	h m s
COL EP	14 14 14.0
BMO EP	14 16 56.1
DEC 8	
BOZ IPNC	14 14 12.8
DEC 8	
COL EP	14 42 41.0
DEC 8	
H-15 03 00.1	
56.1N 164.6E	
h ABOUT 37KM	
ADK E(P)	15 05 43.3
BRW EP	15 07 57.2
COL EP	15 08 16.0
IPP	08 26.2
NEW IP	15 11 22.5
IPP	11 33.0
HHM E(P)	15 11 41.9
BOZ E(P)	15 11 57.5
EPP	12 08.5
SLD E(P)	15 12 07.5
I	12 16.3
EUR EP C	15 12 14.0
IPP	12 24.0
BCN E(P)	15 12 37.8
E	12 42.2
RCD E(P)	15 12 47.0
DEC 8	
GUA E(P)	15 07 26.0
E(S)	16 03.0
DEC 8	
COL EP	15 12 44.0
DEC 8	
COL EP	16 23 46.1
E(S)	25 01.8
DEC 8	
BOZ E(P)	17 02 37.5
DEC 8	
COL EP	17 14 51.1
I	15 08.5
IS	16 03.7
DEC 8	
SLD EP	17 19 06.2
BMO IP	17 19 24.7
EUR IP	17 19 35.2
BOZ EP	17 20 17.9
DEC 8	
GUA IP	17 53 17.0
ES	53 30.0

Date and Station	Phase (GCT)
	h m s
DEC 8	
ALQ E(P)	18 00 34.0
EL	01 05.0
EUR E(P)	18 03 22.5
DEC 8	
BOZ (PN)	19 00 10.2
DEC 8	
EUR IP	19 23 38.2
DEC 8	
ALQ EP	21 56 55.8
E	57 21.0
DEC 8	
EUR E(P)	22 05 17.3
EL	05 57.5
DEC 8	
ALQ E(P)	22 28 18.4
DEC 8	
BMO EP	22 35 05.0
E	35 16.0
NEW EP	22 35 06.0
DEC 8	
ALQ E(P)	23 00 29.8
DEC 8	
ALQ E(P)	23 01 17.0
DEC 8	
HHM EP	23 08 02.8
DEC 8	
H-23 18 09.2	
60.1N 146.3W	
h ABOUT 27KM	
COL EP	23 19 22.0
EL	20 37.0
NEW EP	23 22 48.0
BOZ EP	23 23 33.3
EUR IP	23 24 00.2
ALQ EP	23 25 09.6
EPP	27 35.0
TUC E(P)	23 25 12.0
DEC 8	
BMO IP	23 52 21.0
DEC 9	
BMO EPN	00 24 17.3
DEC 9	
H-00 53 27.4	
23.8S 179.8W	
h ABOUT 496KM	
TUC EP	01 05 18.0
EUR EP	01 05 18.2
BMO EP	01 05 28.8

Date and Station	Phase	(GCT) h m s
ALQ	EP	01 05 38.1
DEC 9		
NEW	EP	01 01 17.0
DEC 9		
H-01 07 08.9		
14.1S 166.6E		
h ABOUT 61KM		
COL	EP	01 19 42.4
DEC 9		
BMO	EP	01 36 56.8
DEC 9		
H-02 00 18.2		
21.5S 178.9W		
h ABOUT 532KM		
EUR	EP	02 11 55.9
	E	12 30.7
TUC	IP	02 11 56.3
BMO	EP	02 12 06.2
ALQ	EP	02 12 16.5
	E	12 42.0
	EPP	14 20.6
COL	EP	02 12 17.0
DEC 9		
H-02 01 50.5		
24.1S 067.1W		
h ABOUT 185KM		
BMO	E(P)	02 13 54.6
DEC 9		
BMO	E(P)	02 43 25.9
DEC 9		
COL	EP	03 37 07.5
DEC 9		
H-04 01 27.7		
26.2S 178.1E		
h ABOUT 665KM		
TUC	EP	04 13 17.0
EUR	IP	04 13 18.0
BMO	E(P)	04 13 28.3
ALQ	EP	04 13 37.1
COL	EP	04 13 39.0
DEC 9		
COL	EP	04 44 39.0
DEC 9		
EUR	EP	05 51 46.6
DEC 9		
BMO	EP	06 06 01.5
EUR	IP D	06 06 32.3
	E	07 25.9

Date and Station	Phase	(GCT) h m s
DEC 9		
BMO	EP	06 06 01.5
DEC 9		
NEW	EP	07 59 31.0
DEC 9		
BOZ	IPNC	09 25 54.0
DEC 9		
BOZ	IPNC	09 45 07.0
DEC 9		
EUR	IP	09 57 11.8
SLD	EP	09 57 16.0
DEC 9		
H-10 06 54.6		
14.2S 070.1W		
h ABOUT 215KM		
ALQ	IP D	10 16 39.0
	E	18 32.0
TUC	EP	10 16 42.5
RCD	EP	10 17 15.8
EUR	IP D	10 17 34.7
SLD	EP	10 17 46.0
BMO	EP	10 18 00.7
NEW	EP	10 18 13.0
COL	EP	10 20 05.2
DEC 9		
BRW	E(P)	10 19 12.3
DEC 9		
H-12 15 58.0		
21.8S 177.8W		
h ABOUT 293KM		
COL	EP	12 28 23.0
DEC 9		
EUR	E(P)	12 48 28.6
DEC 9		
ALQ	EP D	13 12 38.6
	EL	12 59.8
DEC 9		
H-13 32 35.0		
10.6S 078.9W		
h ABOUT 33KM		
ALQ	P	13 41 46.0
	E	41 55.0
EUR	IP	13 42 45.6
BOZ	E(P)	13 43 03.0
NEW	EP	13 43 30.0
COL	EP	13 45 36.0
DEC 9		
COL	EP	13 56 34.0

Date and Station	Phase	(GCT) h m s
DEC 9		
H-16 43 59.9		
51.7N 174.7E		
h ABOUT 33KM		
ADK	E(P)	16 45 18.8
	I	45 25.4
	IS	46 18.7
COL	EP	16 49 06.5
	ES	53 22.0
NEW	IP	16 51 54.0
BMO	IP	16 52 08.1
SLD	EP	16 52 27.5
BOZ	EP	16 52 30.6
EUR	EP C	16 52 39.7
	I	52 46.5
	I	54 41.4
	E	17 10 43.7
BCN	EP	16 53 02.8
	E	53 11.8
RCD	EP	16 53 13.8
TUC	EP	16 53 38.3
ALQ	EP C	16 53 44.4
DEC 9		
H-17 12 09.1		
51.6N 174.6E		
h ABOUT 28KM		
ADK	E(P)	17 13 31.3
	E	13 35.4
	EL	14 46.4
COL	EP	17 17 17.0
BRW	EP	17 17 19.3
NEW	EP	17 20 04.0
BMO	E(P)	17 20 18.9
BOZ	E(P)	17 20 41.3
EUR	IP	17 20 50.2
TUC	EP	17 21 49.2
DEC 9		
TUC	(PN)	18 25 34.0
ALQ	E(P)	18 26 35.3
	E	28 51.5
DEC 9		
BOZ	(PN)	19 13 43.5
	E(L)	15 26.0
DEC 9		
ALQ	E(P)	19 17 18.0
	E	17 48.0
DEC 9		
COL	IP	19 58 23.4

Date and Station	Phase	(GCT) h m s
DEC 9		
ALQ	E(P)	20 51 24.0
DEC 9		
ALQ	E(P)	22 00 58.0
	E	02 37.0
DEC 9		
BOZ	(PN)	22 19 48.8
DEC 9		
BOZ	(PN)	23 09 55.5
DEC 9		
EUR	IP	23 19 51.3
DEC 9		
EUR	E(P)	23 56 59.0
DEC 10		
H-01 09 39.5		
10.3N 085.1W		
h ABOUT 87KM		
BHP	EP	01 11 02.2
ALQ	E(P)	01 15 52.0
DEC 10		
SJG	EP	01 42 42.0
	ES	43 18.0
DEC 10		
ADK	IP	03 07 49.1
	IS	08 19.5
EUR	EP	03 15 28.9
DEC 10		
ADK	IP	03 51 18.4
	IS	51 27.5
DEC 10		
SJG	IP D	04 32 37.5
	IS	32 50.5
DEC 10		
COL	EP	06 00 48.0
DEC 10		
ALQ	E(P)	07 58 22.0
	E	59 25.4
DEC 10		
H-08 22 19.5		
56.1S 024.6W		
h ABOUT 59KM		
COL	IP'	08 42 22.0
DEC 10		
COL	IP	09 06 10.0
DEC 10		
EUR	IP	09 15 36.8
DEC 10		
BCN	E(P)	10 25 35.4
	E(L)	26 24.9
EUR	EP	10 25 49.0
	I	25 55.5
	EL	26 20.7

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	h m s
DEC 10	
H-10 38 39.6	
24.2S 068.0W	
h ABOUT 124KM	
SJG EP	10 46 17.9
ALQ IP D	10 49 35.0
E	49 38.6
EpP	50 05.0
TUC IP	10 49 36.0
BCN EP	10 50 06.9
RCD EP	10 50 10.5
SLC EP	10 50 17.7
FUR IP D	10 50 24.2
EpP	50 55.8
SLD IP D	10 50 31.9
BOZ IP D	10 50 37.5
E	50 54.0
EpP	51 09.5
BMO EP	10 50 48.4
HHM EP	10 50 53.2
FpP	51 26.1
NEW EP	10 50 59.0
EpP	51 31.0
COL E(P)	10 52 44.5
GUA EP'	10 58 09.5
DEC 10	
BMO E(P)	11 06 25.2
COL EP	11 07 16.5
DEC 10	
EUR EP	11 07 40.1
EL	10 08 27.5
DEC 10	
BMO E(P)	11 06 25.2
DEC 10	
ALQ E(P)	11 17 41.5
DEC 10	
GCA E(P)	11 29 30.6
ES	29 56.0
EUR EP D	11 29 35.0
I	29 41.4
EL	30 11.5
DEC 10	
H-11 34 23.0	
37.5N 114.0W	
h ABOUT 33KM	
BCN EP	11 34 49.9
E	35 09.9
GCA EP	11 34 58.5
ES	34 22.5
LVN IP	11 34 50.0
IL	35 14.0
EUR IP D	11 35 03.1
DEC 10	
H-11 50 29.0	
39.5N 120.2W	
h ABOUT 4KM	
SLD E(P)	11 51 13.4
IL	51 45.9
EUR E(P)	11 51 23.0
DEC 10	
H-13 06 32.0	
14.3N 092.0W	
h ABOUT 60KM	
BHP IP	13 09 40.2
IS	12 48.6
WSC I(P)	13 11 18.5
CSC EP	13 11 24.0
E	11 36.0
ES	15 20.0
E	16 55.0
TUC EP	13 11 49.0
ES	16 08.0
SJG EP	13 11 51.0
IPCS	19 11.5
GCA EP C	13 12 25.0
PHI EP	13 12 33.4
EpP	12 47.5
LVN IP	13 12 41.0
EL	20 02.0
FGU IP C	13 12 42.5
RCD EP	13 12 47.0
EpP	13 02.0
ES	17 52.0
SLC IP	13 12 51.2
SLD IP C	13 13 16.0
EsP	13 36.2
IPCP	15 57.5
ESCP	19 45.9
BOZ IP C	13 13 24.5
E	13 34.0
EsP	13 45.5
ES	19 04.5
E(L)	25 49.5
BUT EP	13 13 28.8
EL	19 00.8
BMO IP	13 13 39.1
ES	19 28.0
HHM IP	13 13 50.2
IpP	14 02.7
I	14 19.7
IPCP	16 07.7
IS	19 43.2
NEW IP	13 13 59.8
COL IP D	13 16 52.5
IS	25 24.0
ISCS	26 47.0
ESS	29 42.0
EL	31 07.0
HON EP	13 16 58.0
ES	25 50.0
BRW IP C	13 17 29.3
ADK EP	13 18 11.3
I	18 14.0
DEC 10	
GUA EP	13 26 22.0
ES	32 13.0
BMO EP	13 33 49.0
DEC 10	
BMO E(P)	13 36 36.4
DEC 10	
COL EP	13 53 57.0
DEC 10	
H-14 10 22.9	
14.6N 092.3W	
h ABOUT 37KM	
ALQ EP	14 15 36.4
BMO EP	14 17 29.2
NEW EP	14 17 50.0
COL EP	14 20 43.0
DEC 10	
BMO EP	15 03 40.5
DEC 10	
COL E(P)	15 47 54.6
DEC 10	
H-16 12 37.8	
19.8S 175.5W	
h ABOUT 33KM	
BMO E(P)	16 25 01.0
ALQ E(P)	16 25 13.0
COL EP	16 25 22.0
DEC 10	
BMO EP	16 21 26.2
DEC 10	
BUT E(P)	16 33 18.3
E	34 48.8
DEC 10	
COL EP	16 49 07.0
DEC 10	
H-17 08 32.3	
41.1N 033.5E	
h ABOUT 13KM	
COL EP	17 20 12.0
HHM EP	17 21 16.8
NEW IP	17 21 21.1
BMO EP	17 21 35.0
EUR IP	17 21 58.0
DEC 10	
H-18 08 14.2	
03.6S 145.5E	
h ABOUT 33KM	
GUA EP	18 12 10.5
HON EP	18 18 24.0
ES	26 58.0
ADK E(P)	18 18 46.5
COL IP C	18 20 39.4
ES	31 03.0
SLD EP	18 21 36.3
BMO EP	18 21 47.5
NEW EP	18 21 48.0
EUR EP	18 21 55.0
I	25 27.2
HHM E(P)	18 22 00.7
E	24 09.7
BOZ EP	18 22 08.5
E	25 55.0
SJG EP'	18 27 51.0
EPP	31 10.0
ESS	50 07.0
DEC 10	
IS	24 20.5
BMO EP	21 30 53.0
DEC 10	
GUA IP	21 40 34.0
IS	40 51.0
DEC 10	
ADK EP	21 46 01.5
ES	46 36.8
BMO EP	21 52 51.5
DEC 10	
EUR E(P)	22 01 40.5
EL	02 29.5
DEC 10	
ALQ E(P)	22 28 57.6
E	29 05.4
E	29 45.0
DEC 10	
BCN IP D	23 03 29.3
E(S)	03 33.8
LVN IP	23 03 35.0
DEC 11	
EUR IP	00 04 39.9

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NOV 9		
BMO	EP	07 43 33.6
NOV 9		
H-07 55 15.8		
58.8S 025.6W		
h ABOUT 33KM		
HHM	EP'	08 14 16.6
BMO	EP'	08 14 18.0
COL	EP'	08 15 08.0
NOV 9		
SJG	IP	08 52 14.5
	IS	52 54.0
NOV 9		
SJG	EP	09 44 20.0
	IS	44 45.0
NOV 9		
H-10 11 48.6		
39.0N 070.8E		
h ABOUT 27KM		
COL	EP	10 23 13.0
NOV 9		
H-10 48 47.1		
37.6N 072.3E		
h ABOUT 190KM		
COL	E(P)	10 59 58.0
NOV 9		
H-11 26 24.2		
26.9N 125.6E		
h ABOUT 36KM		
COL	EP	11 36 59.0
NEW	IP	11 39 05.2
HHM	EP	11 39 13.1
BMO	EP	11 39 14.5
BUT	EP	11 39 24.0
BOZ	EP	11 39 27.5
EUR	IP	11 39 34.0
NOV 9		
EUR	EP	11 48 55.5
	E(S)	49 30.8
NOV 9		
BOZ	E(P)	11 59 58.7
	E	12 00 09.5
NOV 9		
SJG	IP C	12 11 08.7
	IS	11 17.0
NOV 9		
H-14 09 44.9		
51.9N 173.8W		
h ABOUT 50KM		
ADK	EP	14 10 13.0
	ES	10 36.0
COL	E(P)	14 14 01.0
	E	14 20.0
NEW	IP	14 16 40.5
BMO	EP	14 16 54.2
HHM	EP	14 16 55.6
BOZ	IP	14 17 18.0
EUR	IP	14 17 26.8
BCN	EP	14 17 49.5
ALQ	E(P)	14 18 34.8
NOV 9		
BCN	IP D	14 11 29.6
EUR	EP	14 12 24.4
	I	12 27.0
	EL	13 19.5
NOV 9		
EUR	E(P)	14 18 45.2
	EL	19 23.6
NOV 9		
H-15 12 27.9		
39.2N 020.6E		
h ABOUT 43KM		
HHM	E(P)	15 24 55.1
BMO	E(P)	15 25 14.2
NOV 9		
CED	EP	15 38 20.3
	IS	38 40.5
NOV 9		
EUR	E(P)	17 11 03.4
NOV 9		
SJG	EP	17 14 48.3
	ES	15 11.0
NOV 9		
BOZ	E(P)	17 59 26.8
	E	59 39.5
NOV 9		
ALQ	E(P)	18 09 46.6
	E	10 58.5
NOV 9		
ALQ	E(P)	18 54 02.0
	E	54 27.0
NOV 9		
BCN	E(P)	19 29 14.0
NOV 9		
EUR	E(P)	20 00 51.5
NOV 9		
COL	EP	20 20 11.0
NOV 9		
H-20 37 18.0		
19.4N 067.8W		
h ABOUT 33KM		
SJG	IP D	20 37 50.0
	IS	38 14.5
NEW	EP	20 46 04.0
NOV 9		
ALQ	E(P)	21 02 02.2
	E	02 40.0
NOV 9		
BMO	EP	21 14 26.9
NOV 9		
BMO	E(P)	21 15 15.0
NOV 9		
ADK	IP	21 33 28.0
	IS	33 51.6
NOV 9		
H-21 55 37.6		
19.2N 067.9W		
h ABOUT 18KM		
SJG	IP D	21 56 10.5
	IS	56 35.0
BHP	IP C	21 59 13.4
	I	59 52.0
WSC	EP	22 00 26.3
	ES	04 07.8
ALQ	EP	22 02 53.0
TUC	E(P)	22 03 18.0
BOZ	E(P)	22 03 49.0
	E	04 03.0
	E	04 23.0
HHM	E(P)	22 04 10.7
NEW	IP	22 04 25.2
COL	EP	22 06 39.0
NOV 9		
SJG	EP	22 18 27.8
	IS	18 52.5
NOV 9		
ALQ	E(P)	22 31 44.5
	E	32 24.6
NOV 9		
BMO	E(P)	22 41 46.3
NOV 9		
GCA	EP	23 33 49.1
	ES	34 12.0
NOV 9		
SJG	IP	23 35 32.5
	IS	35 57.0
NOV 10		
BMO	E(P)	00 01 04.3
NOV 10		
SJG	EP	00 14 15.3
	IS	14 33.5
NOV 10		
BMO	EP	01 01 16.7
BOZ	E(P)	01 01 51.5
	E	02 22.0
NOV 10		
SJG	EP	01 56 31.5
	IS	56 56.0
NOV 10		
H-03 02 32.7		
31.9S 068.4W		
h ABOUT 113KM		
BHP	IP D	03 10 14.4
SJG	IP D	03 11 13.6
	IpP	11 41.5
	IsP	11 53.0
	IPP	13 10.5
	ES	18 05.0
CSC	EP	03 13 11.5
	EpP	13 43.0
WSC	IP D	03 13 40.1
	EpP	14 08.3
	IsP	14 17.5
	EPP	16 16.8
TUC	IP D	03 14 05.8
	EPCP	14 18.2
	EpP	14 37.0
ALQ	EP	03 14 07.0
	EsP	14 47.0
GCA	EP	03 14 29.2
FGU	EP D	03 14 40.2
	EpP	15 09.1
SLC	EP	03 14 44.8
EUR	IP D	03 14 50.3
	EpP	15 18.9
	E(S)	24 46.5
	EPKKP	33 38.6
	EP'P'	41 42.4
SLD	IP D	03 14 55.5
	IpP	15 26.7
BOZ	IP D	03 15 05.0
	IpP	15 35.5
	EPKKP	33 32.7
	EP'P'	41 05.0
BUT	IP D	03 15 11.8
	EsP	15 49.8
	EPP	18 28.3
BMO	EP	03 15 12.8
HHM	IP D	03 15 19.3
	EpP	15 52.3
	EsP	16 01.3
	EPP	18 54.3
	EPKKP	33 20.8
NEW	IP	03 15 24.0
	E	15 58.0
	EPKKP	33 20.0

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	h m s
COL EP'	03 20 59.0
EsP'	21 30.1
NOV 10	
H-05 06 12.0	
27.5N 142.2E	
h ABOUT 33KM	
COL EP	05 15 56.4
BMO EP	05 17 46.8
NEW EP	05 18 02.0
EUR IP	05 18 27.7
TUC E(P)	05 19 04.6
NOV 10	
H-06 58 10.8	
20.0S 178.0W	
h ABOUT 539KM	
EUR EP	07 09 39.1
TUC E(P)	07 09 39.6
COL EP	07 10 01.0
NOV 10	
ADK IP	09 32 40.1
IS	32 51.9
NOV 10	
H-09 56 24.4	
55.8S 027.4W	
h ABOUT 80KM	
BMO EP'	10 15 16.6
COL EP'	10 16 05.9
NOV 10	
EUR EP	10 51 03.0
E(S)	51 38.0
NOV 10	
ADK E(P)	10 51 55.0
ES	52 42.0
COL E(P)	10 54 51.0
NOV 10	
EUR EP	10 55 52.5
NOV 10	
EUR IP	10 59 13.2
NOV 10	
BHP IP D	12 27 24.2
IS	27 40.5
NOV 10	
H-13 29 55.4	
51.1N 178.7E	
h ABOUT 33KM	
ADK EP	13 30 41.8
ES	31 15.0
COL EP	13 34 49.0
BMO EP	13 37 45.6
EUR IP	13 38 17.8
NOV 10	
EUR EP	15 52 08.0
EL	52 40.5
NOV 10	
H-17 28 20.9	
37.3N 114.2W	
h ABOUT 33KM	
BCN EP	17 28 44.5
IS	29 05.3
GCA EP	17 28 56.5
IS	29 22.5
EUR EP	17 29 01.3
IS	29 33.4
NOV 10	
COL E(P)	17 32 14.0
NOV 10	
BOZ EPN	19 06 02.0
EL	06 14.5
NOV 10	
EUR E(P)	19 06 40.0
NOV 10	
COL E(P)	19 14 11.0
NOV 10	
COL E(P)	19 29 22.0
NOV 10	
COL IP	20 38 13.1
NOV 10	
BMO E(P)	21 43 28.2
NOV 10	
BOZ EPN	21 49 03.4
EL	49 14.5
NOV 10	
BMO EPN	21 54 22.6
NOV 10	
SLD E(P)	21 58 16.5
NOV 10	
BOZ EPN	22 00 29.5
EL	00 40.5
EUR E(P)	22 01 26.5
EL	02 10.5
NOV 10	
H-22 05 04.3	
20.8S 178.5W	
h ABOUT 457KM	
TUC EP	22 16 44.6
EUR EP	22 16 45.0
BMO EP	22 16 55.7
ALQ EP	22 17 05.6
COL IP	22 17 07.1
NOV 10	
BOZ E(P)	22 06 35.3
NOV 10	
BOZ EP	22 15 57.5
E	17 14.0
NOV 10	
SJG EP	22 20 53.6
IS	21 15.0
NOV 10	
BOZ EPN	22 43 12.3
EL	43 21.3
NOV 10	
ALQ E(P)	23 32 18.0
E	33 48.5
BMO E(P)	23 34 55.5
NOV 10	
BOZ E(P)	23 39 15.2
E	39 39.5
E	40 28.0
NOV 11	
H-01 34 34.0	
51.2N 175.8E	
h ABOUT 33KM	
ADK EP	01 35 43.1
ES	36 35.2
COL EP	01 39 40.0
BMO EP	01 42 38.1
E	42 50.6
EUR IP	01 43 10.5
ALQ E(P)	01 44 12.7
NOV 11	
EUR EP	01 39 46.8
E(S)	40 27.1
NOV 11	
UKI E(P)	02 02 06.6
BMO EP	02 03 23.4
NOV 11	
COL E(P)	02 43 23.0
NOV 11	
H-03 19 16.0	
25.0N 109.2W	
h ABOUT 33KM	
TUC E(P)	03 21 00.8
ALQ EP C	03 21 44.0
EL	24 43.6
EUR IP	03 22 56.0
BOZ EP	03 23 55.5
BMO EP	03 23 56.8
HHM E(P)	03 24 25.0
NEW IP	03 24 29.4
NOV 11	
BCN E(P)	03 25 32.2
COL E(P)	03 25 34.6
NOV 11	
H-03 26 11.4	
34.0N 142.6E	
h ABOUT 33KM	
BMO EP	03 37 41.2
NOV 11	
BCN E(P)	03 57 04.5
ES	57 24.6
EUR EP	03 57 20.9
E(S)	57 53.0
IL	58 01.3
NOV 11	
SIT E(P)	04 44 49.5
BOZ E(P)	04 48 49.0
NOV 11	
COL EP	05 23 15.5
NOV 11	
EUR EP	06 26 30.4
I	26 36.3
E(S)	27 03.9
IL	27 11.0
NOV 11	
SJG IP	07 27 57.5
IS	28 19.2
NOV 11	
H-09 47 37.2	
18.9S 168.8E	
h ABOUT 84KM	
COL E(P)	10 00 25.0
BCN EP	10 00 31.4
EUR EP	10 00 33.0
E	00 48.0
TUC E(P)	10 00 38.0
BMO E(P)	10 00 39.5
NOV 11	
COL IP	10 44 36.7
SIT IP	10 44 44.9
NOV 11	
H-12 00 00.1	
37.1N 116.0W	
h ABOUT 0KM	
BCN IP C	12 00 28.4
IS	00 50.0
EUR IP	12 00 40.5
I	10 54.0
GCA EP	12 00 58.0
IL	01 52.0

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SLD	E(P)	12 01 11.7
	I	01 15.3
	IL	02 08.6
SLC	E(P)	12 01 18.0
	E	01 52.8
TUC	EP	12 01 37.5
FGU	EP	12 01 39.9
	ELG	03 21.1
BMO	EPN	12 01 57.7
ALQ	E(P)	12 02 00.5
	E	02 29.0
	EL	04 30.6
BOZ	EP	12 02 19.5
NEW	EP	12 02 45.0
NOV 11		
BCN	EP	12 10 43.0
	IL	11 17.6
EUR	E(P)	12 10 53.5
GCA	E(P)	12 11 18.0
	EL	12 11.0
SLD	E(P)	12 11 45.0
	EL	12 27.3
SLC	E(P)	12 11 50.3
	E	12 04.3
	E	12 10.3
NOV 11		
COL	IP	14 39 11.1
NOV 11		
WSC	E(P)	15 10 10.3
	E	10 21.8
NOV 11		
H-15 31 04.5		
52.2N 169.1W		
h ABOUT 40KM		
ADK	EP	15 32 14.0
	I	32 19.7
	IS	33 08.5
COL	IP	15 34 55.7
	ES	38 10.0
SIT	IP	15 35 37.0
NEW	IP	15 37 36.8
	IpP	37 48.0
BMO	EP	15 37 49.0
HHM	EP	15 37 52.9
	EPCP	40 28.8
SLD	IP C	15 38 09.0
BUT	EP	15 38 10.2
BOZ	IP D	15 38 16.0
	I	38 37.5
	EPP	39 43.0
EUR	IP	15 38 23.1
	ES	44 21.5
SLC	EP	15 38 37.5
	E	38 55.5
BCN	E(P)	15 38 41.5
FGU	EP	15 38 48.3
TUC	E(P)	15 39 26.0
	ES	46 11.0
ALQ	EP	15 39 32.6
	ES	46 26.0
WSC	EP	15 41 17.3
	EpP	41 29.3
	EsP	41 34.3
CSC	EP	15 41 26.0
	EpP	41 37.0
SJG	EP	15 43 34.5
	ES	53 51.0
NOV 11		
H-16 03 37.3		
50.2N 155.5E		
h ABOUT 136KM		
COL	IP	16 09 56.3
NEW	IP	16 12 47.6
BMO	EP	16 13 02.5
BOZ	IP C	16 13 21.5
	EPCP	14 07.3
EUR	IP C	16 13 32.2
	I	13 40.3
	IpP	14 03.8
BCN	EP	16 13 53.0
ALQ	EP	16 14 28.4
	E	14 35.5
WSC	E(P)	16 15 31.5
NOV 11		
GCA	E(P)	16 19 03.3
	E	19 08.0
	EL	19 41.5
NOV 11		
H-16 45 34.6		
39.6N 110.5W		
h ABOUT 15KM		
FGU	IP	16 46 02.6
	I	46 05.0
	IS	46 24.4
	ILG	46 28.2
GCA	IP C	16 46 20.3
NOV 11		
WSC	E(P)	17 11 54.3
NOV 11		
BCN	EP	17 21 29.0
	IL	21 48.9
GCA	IP	17 21 40.3
	IS	22 05.3
NOV 11		
H-17 57 43.4		
17.6S 177.2W		
h ABOUT 390KM		
EUR	IP D	18 09 14.7
TUC	EP	18 09 16.0
BMO	EP	18 09 24.8
COL	IP	18 09 36.4
	EpP	11 04.0
ALQ	EP	18 09 37.2
BOZ	EP C	18 09 44.5
NOV 11		
COL	IP	17 58 54.5
NOV 11		
H-18 21 05.8		
40.4N 127.0W		
h ABOUT 33KM		
UKI	E(P)	18 21 55.0
SLD	IP C	18 22 28.2
	IS	23 31.2
BMO	EPN	18 23 08.4
EUR	IP	18 23 11.5
NEW	EP	18 23 39.0
BCN	EP	18 23 41.8
SLC	E(P)	18 23 53.7
	E	24 08.5
HHM	E(P)	18 23 58.8
BOZ	EP	18 24 04.2
TUC	EP	18 24 45.2
ALQ	E(P)	18 25 09.0
	E	25 19.0
	EL	30 10.0
COL	EP	18 26 50.0
SJG	E(P)	18 30 54.4
NOV 11		
EUR	E(P)	18 28 33.0
COL	EP	18 30 08.0
NOV 11		
H-18 35 12.3		
52.7N 169.3W		
h ABOUT 37KM		
ADK	EP	18 36 20.5
	IS	37 14.2
COL	EP	18 39 02.0
NEW	EP	18 41 43.0
BOZ	EP	18 42 22.0
	EpP	42 33.4
EUR	EP	18 42 33.3
NOV 11		
BOZ	EPN	19 11 25.7
	EL	11 34.2
NOV 11		
BCN	E(P)	19 37 48.5
NOV 11		
COL	E(P)	20 00 37.5
NOV 11		
BMO	IPN	20 08 02.4
NOV 11		
WSC	E(P)	20 12 53.9
	E	13 01.0
NOV 11		
H-20 17 46.7		
01.2S 079.2W		
h ABOUT 120KM		
SJG	EP	20 22 44.3
NOV 11		
WSC	E(P)	20 52 37.6
	E	52 42.4
NOV 11		
BOZ	EPN	21 52 32.8
NOV 11		
EUR	E(P)	22 01 44.5
NOV 11		
ALQ	EP	22 30 40.6
	E	31 15.8
NOV 11		
H-22 33 33.7		
31.6S 071.5W		
h ABOUT 33KM		
SJG	IP	22 42 23.3
EUR	IP	22 45 52.0
BMO	E(P)	22 46 15.4
NOV 11		
FGU	IP	22 57 50.4
	IS	58 13.5
BOZ	EP	22 58 22.0
	EL	58 44.0
NOV 12		
H-00 44 20.6		
19.6N 064.4W		
h ABOUT 30KM		
SJG	IP C	00 44 55.6
	I	45 05.5
	IS	45 22.0
	I	45 32.5

Date and Station	Phase (GCT)
	h m s
DEC 14	
H-03 44 02.2	
52.8N 177.6W	
h ABOUT 252KM	
ADK IP	03 44 37.5
IS	45 03.8
COL IP C	03 48 10.3
IS	51 38.5
IPCP	53 52.5
ISCP	55 29.0
ISCS	59 10.0
BRW EP	03 48 26.0
SIT E(P)	03 48 58.2
NEW IP	03 50 54.5
HHM IP	03 51 09.0
E	51 30.0
EPCP	53 11.5
BMO IP	03 51 09.1
IPP	52 06.4
SLD IP C	03 51 29.6
IPP	53 20.1
BOZ EP	03 51 31.4
E(PP)	53 21.5
E	56 45.5
EUR IP C	03 51 42.1
I	52 29.5
IPP	53 25.3
SLC EP	03 51 54.5
E	52 48.4
FGU IP C	03 52 04.6
I(PCP)	53 35.3
LVN IP	03 52 07.0
RCD EP	03 52 16.4
TUC IP C	03 52 43.0
EPP	53 41.0
ALQ I(P)	03 52 48.0
EPP	53 47.4
SJG EP	03 56 25.3
DEC 14	
BMO EP	03 56 33.0
SLD EP	03 56 44.1
EUR IP	03 56 50.2
DEC 14	
HHM EP	04 56 34.5
DEC 14	
COL EP	05 26 57.8
DEC 14	
FGU IP	05 31 47.1
IS	32 06.6
ILG	32 07.9

Date and Station	Phase (GCT)
	h m s
DEC 14	
H-05 39 31.4	
15.7S 070.6W	
h ABOUT 212KM	
ALQ E(P)	05 49 23.0
DEC 14	
BCN EPN	06 24 47.3
LVN IP	06 24 52.0
ES	25 10.0
GCA EP	06 24 58.5
IS	25 25.0
EUR EP	06 25 03.3
I	25 09.1
IL	25 41.8
TUC E(P)	06 25 56.3
DEC 14	
H-06 42 24.1	
10.9N 043.2W	
h ABOUT 33KM	
SJG EP	06 47 33.5
ES	51 48.0
RCD E(P)	06 52 33.0
ALQ E(P)	06 52 42.0
TUC E(P)	06 53 04.0
EUR E(P)	06 53 36.0
HHM E(P)	06 53 38.5
NEW EP	06 53 40.0
BMO E(P)	06 53 41.4
EUR I(P)	06 53 45.5
COL EP	06 55 05.0
DEC 14	
H-06 52 34.2	
14.4N 092.3W	
h ABOUT 23KM	
ALQ EP	06 57 50.2
E	57 53.5
EL	07 08 18.0
TUC E(P)	06 57 52.5
BCN EP	06 58 39.3
FGU EP	06 58 47.1
EUR IP	06 59 06.0
BOZ E(P)	06 59 28.5
E	59 37.5
BMO EP	06 59 43.2
HHM E(P)	06 59 55.5
NEW EP	07 00 05.0

Date and Station	Phase (GCT)
	h m s
COL EP	07 02 58.0
DEC 14	
BOZ (PN)	07 01 02.0
EL	01 26.5
DEC 14	
BMO EP	07 42 16.6
DEC 14	
EUR E(P)	08 23 20.7
DEC 14	
H-08 24 06.5	
20.8S 067.8W	
h ABOUT 204KM	
BMO E(P)	08 35 52.2
DEC 14	
H-08 39 45.0	
12.6S 075.0W	
h ABOUT 98KM	
ALQ EP	08 49 15.6
BMO E(P)	08 50 41.3
DEC 14	
H-10 47 38.4	
21.0S 179.1W	
h ABOUT 593KM	
EUR EP	10 59 09.2
TUC EP	10 59 09.5
BMO E(P)	10 59 19.5
COL EP	10 59 29.0
DEC 14	
H-11 04 24.7	
36.1N 139.6E	
h ABOUT 73KM	
COL EP	11 13 19.0
BMO EP	11 15 52.3
EPP	16 06.2
HHM E(P)	11 15 55.5
BOZ E(P)	11 16 08.5
EPP	16 22.5
EUR IP	11 16 15.1
TUC EP	11 16 55.5
EPP	17 10.0
ALQ E(P)	11 17 03.2
DEC 14	
H-11 15 52.9	
28.7S 178.4W	
h ABOUT 185KM	
SLD E(P)	11 28 07.5
TUC EP	11 28 25.8
EUR IP	11 28 29.0

Date and Station	Phase (GCT)
	h m s
BMO EP	11 28 40.6
ALQ EP	11 28 44.5
DEC 14	
BMO E(P)	11 45 56.1
DEC 14	
EUR EP	13 38 42.8
DEC 14	
EUR EP	14 04 46.0
DEC 14	
CED IP	14 39 45.2
IS	40 00.2
DEC 14	
H-14 49 59.4	
45.7N 026.4E	
h ABOUT 150KM	
COL IP	15 00 54.0
HHM EP	15 01 54.0
BMO IP	15 02 15.1
EPP	02 56.2
EUR IP	15 02 38.0
DEC 14	
FGU EP	17 51 42.0
DEC 14	
BOZ E(P)	18 49 38.5
EUR IP	18 50 47.2
DEC 14	
BOZ (PN)	19 21 52.5
EL	22 03.5
DEC 14	
H-19 28 36.9	
7.0S 129.6E	
h ABOUT 112KM	
COL EP	19 41 37.0
ALQ EP'	19 47 20.2
DEC 14	
BCN (PN)	19 38 28.4
DEC 14	
ALQ E(P)	19 52 53.4
E	53 37.5
DEC 14	
EUR EP	19 56 14.5
E	56 41.7
DEC 14	
BCN E(P)	20 08 54.9
DEC 14	
BMO EPN	20 14 40.6
DEC 14	
BMO E(P)	20 42 37.5
DEC 14	
FGU EP C	21 01 40.9

Date and Station	Phase	(GCT) h m s
DEC 14		
H-21 07 53.1		
4.9S 144.1E		
h ABOUT 80KM		
GUA	IP	21 12 06.0
	IS	15 36.0
KIP	IP	21 18 14.0
HON	E(P)	21 18 23.0
	E(S)	26 39.0
ADK	EP	21 19 30.8
COL	IP C	21 20 20.3
	ES	30 41.0
	EPKKP	38 28.5
	EP'P'	46 38.9
BPW	E(P)	21 20 22.5
SLD	IP	21 21 18.2
	EPP	25 20.0
BMO	EP	21 21 28.2
NEW	EP	21 21 30.0
EUR	EP	21 21 34.0
	EPP	25 29.3
	ESKS	32 07.5
	EPKKP	37 48.3
	EP'P'	46 04.3
HHM	EP	21 21 39.0
	EPKKP	37 48.0
BOZ	EP	21 21 46.5
	E	21 59.5
	E(S)	32 21.5
	EPKKP	38 01.5
TUC	E(P)	21 21 57.0
	EP'	26 32.0
	E	37 55.0
ALQ	E(P)	21 22 09.0
	EP'	26 18.0
	EPKKP	37 37.5
WSC	EP'	21 26 52.0
	EPP	30 07.5
CSC	EP'	21 26 54.5
	E	27 13.5
	E	30 10.0
BHP	IP'	21 27 05.5
SJG	IP'C	21 27 27.0
DEC 14		
COL	EP	21 46 39.0
DEC 14		
BHP	EP	22 03 14.8
	IS	11 21.0
	IL	22 29.0
DEC 14		
BMO	EP	22 04 22.6

Date and Station	Phase	(GCT) h m s
DEC 14		
ALQ	EP	22 30 45.0
	EL	31 35.0
DEC 14		
ALQ	E(P)	23 13 25.3
DEC 14		
GCA	EP	23 27 47.2
	ES	28 06.7
EUR	IP	23 28 04.2
DEC 15		
BMO	IP	00 22 48.2
DEC 15		
COL	EP	01 13 48.0
DEC 15		
SLD	EP	01 24 40.3
	IS	25 17.3
EUR	IP	01 25 12.5
DEC 15		
EUR	IP D	02 02 33.5
	I	03 00.7
	I	04 40.3
DEC 15		
H-02 08 04.8		
21.5N 094.4E		
h ABOUT 98KM		
COL	IP C	02 20 13.3
	ES	30 15.7
HHM	EP	02 22 07.5
	EP'	26 19.5
EUR	IP'C	02 26 32.5
	E	27 18.9
SLD	IP'C	02 26 33.2
ALQ	IP'C	02 26 47.0
	E	30 14.4
TUC	IP'	02 26 49.1
	E	30 17.0
DEC 15		
BOZ	(PN)	02 24 34.5
	EL	26 25.0
DEC 15		
EUR	IP	02 37 27.1
BMO	E(P)	02 37 35.0
COL	EP	02 38 43.0
DEC 15		
EUR	E(P)	02 41 45.5
DEC 15		
EUR	EP D	03 02 17.9
DEC 15		
BMO	IP	03 16 46.9

Date and Station	Phase	(GCT) h m s
DEC 15		
H-03 21 46.8		
33.3N 137.7E		
h ABOUT 342KM		
COL	E(P)	03 30 37.0
BMO	EP	03 33 02.4
EUR	EP	03 33 23.0
DEC 15		
COL	E(P)	03 59 03.0
DEC 15		
H-04 32 13.1		
15.9S 167.1E		
h ABOUT 23KM		
COL	EP	04 44 57.0
EUR	E(P)	04 45 13.5
BMO	E(P)	04 45 25.4
DEC 15		
H-05 17 02.6		
16.8N 145.9E		
h ABOUT 71KM		
GUA	E(P)	05 17 54.8
NEW	EP	05 29 17.0
EUR	EP	05 29 34.6
DEC 15		
SJG	EP	05 18 00.0
	ES	18 54.0
DEC 15		
ADK	EP	06 10 08.2
EUR	E(P)	06 11 29.0
DEC 15		
ADK	EP	06 17 24.5
	ES	18 07.8
	E	20 34.6
NEW	EP	06 23 06.0
ALQ	E(P)	06 25 16.8
DEC 15		
BMO	EP	06 17 50.6
DEC 15		
EUR	E(P)	06 28 28.5
DEC 15		
ADK	E(P)	06 55 10.2
	ES	55 58.3
DEC 15		
EUR	EP	07 26 39.6
DEC 15		
SJG	IP D	08 17 21.8
	IS	17 35.0

Date and Station	Phase	(GCT) h m s
DEC 15		
H-08 23 00.9		
14.1N 144.7E		
h ABOUT 132KM		
GUA	IP	08 23 21.0
	IS	23 34.0
BMO	EP	08 35 26.2
EUR	IP	08 35 38.2
DEC 15		
EUR	E(P)	08 52 39.5
DEC 15		
H-09 26 52.3		
05.8S 147.2E		
h ABOUT 86KM		
COL	EP	09 39 18.0
DEC 15		
BOZ	EP	09 27 27.0
DEC 15		
EUR	E(P)	10 25 10.0
DEC 15		
EUR	E(P)	10 28 39.5
DEC 15		
EUR	EP	11 58 18.7
DEC 15		
H-13 42 05.6		
11.2S 165.7E		
h ABOUT 39KM		
COL	EP	13 54 29.0
DEC 15		
EUR	IP	13 54 23.6
DEC 15		
EUR	EP	14 24 34.1
DEC 15		
H-14 32 20.8		
05.5S 147.4E		
h ABOUT 182KM		
COL	IP	14 44 34.4
EUR	E(P)	14 45 32.5
BMO	EP	14 45 36.1
NEW	IP	14 45 36.9
SJG	EP'	14 51 36.2
	I	51 42.5
DEC 15		
BHP	IP	18 02 17.5
	IS	03 16.0
ALQ	E(P)	18 08 56.7
DEC 15		
BCN	EPN	20 08 50.4
DEC 15		
EUR	IP	20 09 48.9

Date and Station	Phase (GCT)
	h m s
DEC 15	
ALQ E(P)	20 38 05.5
EL	38 40.8
DEC 15	
SJG IP	21 40 35.0
IS	40 55.0
DEC 15	
ALQ E(P)	22 21 54.0
DEC 15	
BOZ EPN	22 53 08.5
EL	53 18.5
DEC 15	
EUR IP	23 07 25.8
DEC 15	
BCN EPN	23 22 00.3
GCA IP	23 22 08.5
IS	22 33.0
DEC 15	
EUR E(P)	23 45 24.8
EL	46 08.7
DEC 16	
H-01 02 24.5	
9.0S 107.9W	
h ABOUT 30KM	
TUC E(P)	01 10 09.1
EUR IP	01 11 09.3
BMO E(P)	01 11 50.2
HHM E(P)	01 12 14.8
DEC 16	
LVN E(P)	01 02 30.0
F	04 17.0
DEC 16	
BMO E(P)	01 16 22.5
DEC 16	
BMO E(P)	01 18 22.2
DEC 16	
H-01 27 06.7	
49.0N 156.3E	
h ABOUT 38KM	
COL EP	01 33 40.0
BMO EP	01 36 44.2
EPP	36 57.3
BOZ E(P)	01 36 58.5
EUR IP	01 37 14.0
ALQ EP	01 38 10.0
EPP	38 23.0
DEC 16	
SJG EP	01 48 54.9
ES	49 08.0
DEC 16	
KIP EP	02 01 05.2

Date and Station	Phase (GCT)
	h m s
DEC 16	
H-02 00 44.0	
37.0N 107.0W	
h ABOUT 33KM	
ALQ IP	02 01 17.6
IL	01 45.8
GCA IP	02 01 41.4
IL	02 35.0
TUC EP	02 02 06.0
EL	03 29.0
BCN (PN)	02 02 18.5
E	02 41.5
EL	04 02.0
SLC E(P)	02 02 20.2
EUR IP	02 02 33.5
BMO EP	02 03 22.9
E	03 35.2
DEC 16	
GUA EP	02 29 21.0
ES	29 38.0
DEC 16	
BMO EP	02 41 33.9
HHM E(P)	02 41 40.3
DEC 16	
COL EP	03 24 32.0
DEC 16	
H-07 32 22.8	
39.0N 123.9W	
h ABOUT 9KM	
UKI EP	07 32 44.1
SLD E(P)	07 33 17.0
I	33 19.9
IL	34 05.5
EUR EP	07 34 07.5
DEC 16	
SLD E(P)	10 27 23.2
E	27 28.4
EL	28 46.9
DEC 16	
EUR EP	11 21 02.7
DEC 16	
COL EP	13 45 31.0
BOZ E(P)	13 49 47.0
DEC 16	
SLD E(P)	15 06 22.7
I	06 29.4
IL	06 48.5
DEC 16	
EUR E(P)	15 13 37.0
E	13 42.7
DEC 16	
EUR IP	16 29 00.8

Date and Station	Phase (GCT)
	h m s
DEC 16	
EUR IP	17 48 49.3
DEC 16	
BOZ IPNC	17 52 20.0
E	52 21.5
EL	52 32.5
DEC 16	
NEW EP	17 54 54.0
DEC 16	
NEW EP	18 02 50.0
DEC 16	
EUR IP	20 15 55.0
DEC 16	
ALQ E(P)	20 22 30.0
E	23 09.0
DEC 16	
BOZ (PN)	20 23 45.5
E	23 51.5
EL	23 57.5
DEC 16	
ALQ E(P)	20 29 16.5
E	30 24.0
DEC 16	
H-20 52 16.0	
29.7N 080.9E	
h ABOUT 15KM	
BRW EP	21 03 36.4
COL EP	21 04 16.0
I	04 34.3
EPP	07 12.5
EL	23 38.0
NEW EP	21 06 10.0
HHM E(P)	21 06 12.0
BMO E(P)	21 06 25.6
EUR E(P)	21 06 55.7
EP'	10 49.8
EPP	11 17.2
EPKKP	21 52.0
ALQ EP'	21 10 46.5
E	15 50.0
E	36 00.0
EUR IP'	21 10 47.0
TUC EP'	21 11 03.0
SLD EP'	21 11 18.0
DEC 16	
BOZ E(P)	20 55 33.3
DEC 16	
BOZ E(P)	21 01 29.5
DEC 16	
SJG EP'	21 12 52.0
DEC 16	
EUR IP	21 21 52.5

Date and Station	Phase (GCT)
	h m s
DEC 16	
BOZ EPN	21 37 05.0
E	37 04.9
EL	37 14.5
DEC 16	
EUR E(P)	21 55 06.5
EL	55 51.7
DEC 16	
H-21 59 46.2	
61.4N 149.5W	
h ABOUT 53KM	
COL EP	22 00 40.7
I	00 41.6
I(S)	01 25.1
NEW EP	22 04 42.0
HHM E(P)	22 05 07.5
EUR EP	22 05 51.5
DEC 16	
H-22 12 49.1	
29.6N 080.9E	
h ABOUT 7KM	
COL EP	22 24 52.7
EPP	24 57.2
DEC 16	
COL EP	22 31 40.0
DEC 16	
ALQ EP	23 22 30.0
E	22 55.0
DEC 17	
H-00 59 30.0	
5.3N 82.1W	
h ABOUT 38KM	
BHP IP	01 00 37.2
IS	01 30.2
SJG EP	01 04 07.5
DEC 17	
BMO E(P)	03 31 58.7
DEC 17	
TUC E(P)	05 54 40.0
EL	55 23.0
DEC 17	
H-05 59 07.9	
70.8N 014.0W	
h ABOUT 9KM	
COL IP	06 06 52.9
HHM E(P)	06 07 51.4
NEW EP	06 07 59.0
BOZ EP	06 08 05.0
E	08 10.5
BMO EP	06 08 21.7
SLC EP	06 08 37.0

Date and Station	Phase	(GCT)
		h m s
EUR IP		06 08 56.0
ALQ EP		06 09 04.0
	EPP	11 13.5
SLD EP		06 09 23.5
TUC E(P)		06 09 30.1
DEC 17		
H-06 33 47.4		
12.2N 140.9E		
h ABOUT 64KM		
GUA E(P)		06 34 50.0
DEC 17		
H-06 35 21.7		
12.2N 140.8E		
h ABOUT 33KM		
GUA E(P)		06 36 27.3
COL EP		06 46 37.0
BMO EP		06 48 18.0
EUR EP		06 48 30.7
DEC 17		
EUR IP		07 54 26.1
BMO EP		07 54 35.9
SLC E(P)		07 54 41.8
COL EP		07 54 45.7
	E	54 51.9
DEC 17		
EUR EP		08 12 31.0
DEC 17		
NEW IP		08 26 49.0
DEC 17		
H-09 16 17.0		
6.5N 71.3W		
h ABOUT 33KM		
SLC E(P)		09 24 03.8
EUR EP		09 25 25.0
BMO EP		09 25 49.0
DEC 17		
ALQ EP		09 28 11.8
DEC 17		
BMO E(P)		12 27 17.2
EUR EP		12 27 17.3
DEC 17		
H-12 33 25.4		
6.3N 082.1W		
h ABOUT 39KM		
BHP IP		12 34 22.0
	IS	35 07.4
ALQ EP		12 40 28.5
TUC E(P)		12 40 35.4
EUR E(P)		12 41 39.5
BOZ EP		12 41 53.9
HHM E(P)		12 42 18.1
COL E(P)		12 45 05.5
DEC 17		
H-15 16 30.2		
40.4N 125.7W		
h ABOUT 33KM		
UKI EP		15 17 07.5
SLD IP		15 17 41.3
	EL	18 37.0
EUR IP		15 18 19.2
BMO IP		15 18 22.1
NEW EP		15 18 55.0
BOZ EP		15 19 15.5
	E	19 31.0
TUC E(P)		15 19 57.0
DEC 17		
EUR IP		16 07 44.8
DEC 17		
H-17 41 20.3		
22.7S 068.8W		
h ABOUT 105KM		
SJG E(P)		17 48 49.5
WSC EP		17 51 30.6
	EPP	51 56.8
ALQ IP D		17 52 07.8
TUC EP		17 52 09.0
	EsP	52 47.5
BCN EP		17 52 39.5
	E	52 45.5
	EsP	53 13.5
FGU EP		17 52 44.2
	EPP	53 11.5
SLC EP		17 52 50.1
	EPP	53 17.5
EUR IP D		17 52 58.2
	EPP	53 23.8
	IsP	53 36.7
SLD IP D		17 53 05.8
BOZ EP		17 53 11.5
	EsP	53 49.0
BMO IP		17 53 22.5
HHM EP		17 53 27.6
NEW IP		17 53 34.0
DEC 17		
H-18 45 50.5		
37.1N 141.2E		
h ABOUT 94KM		
BMO EP		18 57 05.5
EUR IP D		18 57 28.5
DEC 17		
BOZ (PN)		19 54 10.5
	E	54 13.5
	EL	54 27.0
BMO EP		19 54 37.7
DEC 17		
BOZ (PN)		20 51 37.0
	EL	51 55.5
DEC 17		
BOZ EPN		21 04 52.5
	E	04 56.5
	EL	05 04.5
DEC 17		
EUR IP		22 04 39.2
DEC 17		
EUR EP		22 34 07.7
DEC 17		
BOZ E(P)		23 40 35.5
DEC 18		
SJG IP C		00 05 51.8
	ES	12 10.0
DEC 18		
BOZ EPN		00 44 04.9
	EL	44 16.5
DEC 18		
NEW EP		00 46 36.0
BOZ EPN		00 47 17.0
DEC 18		
GUA IP		02 09 43.0
	IS	10 11.0
DEC 18		
BMO EP		02 21 44.6
DEC 18		
BMO E(P)		02 22 33.3
DEC 18		
EUR IP		03 54 01.8
DEC 18		
H-04 57 57.7		
49.9N 077.8E		
h ABOUT 0KM		
BRW IP C		05 07 20.9
	EPCP	08 29.9
COL IP		05 08 08.3
ADK IP		05 08 11.4
NEW IP		05 10 17.1
HHM EP		05 10 18.2
BMO EP		05 10 33.6
BOZ IP C		05 10 33.9
WSC EP		05 10 53.8
FGU IP C		05 10 57.6
	EPKKP	27 00.1
SLC IP		05 10 57.8
	E	11 05.8
EUR IP		05 11 02.2
SLD IP C		05 11 09.9
BCN EP		05 11 19.6
ALQ EP C		05 11 26.5
	E	13 27.0
TUC E(P)		05 11 37.0
DEC 18		
BRW EP		05 06 48.3
DEC 18		
H-05 21 20.5		
16.6N 095.8W		
h ABOUT 15KM		
ALQ E(P)		05 26 01.2
TUC E(P)		05 26 02.1
EUR I(P)		05 27 27.9
DEC 18		
BOZ (PN)		05 34 35.5
	EL	34 55.0
DEC 18		
BMO EP		05 36 52.3
DEC 18		
H-06 23 48.1		
12.0N 140.4E		
h ABOUT 33KM		
GUA IP		06 24 58.0
BMO E(P)		06 36 56.7
DEC 18		
H-07 42 20.1		
35.2N 027.0E		
h ABOUT 41KM		
COL EP		07 54 28.0
HHM EP		07 55 17.0
NEW E(P)		07 55 28.0
BMO EP		07 55 34.8
DEC 18		
BOZ IPNC		08 15 58.5
	EL	16 10.0
BUT EPN		08 16 12.4
	EL	16 31.0

Date and Station	Phase (GCT)
	h m s
DEC 18	
NEW EP	08 18 30.0
EUR IP	08 19 28.2
DEC 18	
EUR EP	08 35 13.1
DEC 18	
HHM E(P)	08 58 42.0
NEW IP	08 58 47.7
BMO EP	08 58 56.6
EUR E(P)	08 59 09.6
E	59 15.9
DEC 18	
H-09 48 23.0	
10.6S 161.5E	
h ABOUT 52KM	
COL IP	10 00 48.4
SLO E(P)	10 01 14.0
EUR IP C	10 01 23.2
I	01 33.9
E	17 54.5
BMO EP	10 01 24.1
E	01 35.7
NEW EP	10 01 27.0
E	01 39.0
DEC 18	
H-10 22 31.4	
21.6S 068.4W	
h ABOUT 122KM	
BMO IP	10 34 27.7
DEC 18	
BOZ (PN)	10 29 44.0
EL	30 02.0
DEC 18	
BOZ (PN)	10 46 56.5
EL	47 14.5
DEC 18	
BMO EP	10 58 40.5
DEC 18	
EUR IP	11 12 11.8
DEC 18	
EUR EP	11 26 31.8
DEC 18	
COL EP	11 38 04.0
DEC 18	
COL EP	12 05 50.0
DEC 18	
EUR IP	13 14 23.6
DEC 18	
H-13 33 16.5	
51.4N 178.6W	
h ABOUT 42KM	

Date and Station	Phase (GCT)
	h m s
ADK IP	13 33 39.0
COL EP	13 37 57.0
NEW IP	13 40 38.3
BMO EP	13 40 52.0
BOZ EP	13 41 16.5
DEC 18	
H-13 51 38.6	
43.3N 093.4W	
h ABOUT 33KM	
BMO EP	14 03 15.1
DEC 18	
COL EP	14 29 34.5
DEC 18	
H-14 39 29.3	
40.9N 125.0W	
h ABOUT 33KM	
BMO E(P)	14 41 06.8
EUR IP	14 41 14.0
DEC 18	
EUR IP	15 19 03.1
DEC 18	
BOZ (PN)	15 55 17.5
EL	55 33.5
DEC 18	
BOZ (PN)	16 09 48.0
EL	10 07.5
DEC 18	
BUT EPN	16 55 14.6
EL	55 28.0
DEC 18	
BMO E(P)	16 56 42.0
DEC 18	
EUR IP	17 29 00.2
DEC 18	
BOZ EPN	17 34 32.5
EL	34 48.5
DEC 18	
EUR E(P)	18 05 28.5
EL	06 14.5
DEC 18	
RCD EP	18 11 11.8
E	11 16.0
DEC 18	
ADK EP	18 33 55.1
DEC 18	
BUT EPN	18 46 35.8
EL	46 49.1
BOZ E(P)	18 46 36.5
DEC 18	
EUR EP	18 59 24.7

Date and Station	Phase (GCT)
	h m s
BMO EP	18 59 34.3
DEC 18	
BMO EP	19 01 48.0
DEC 18	
BMO EP	19 06 44.4
DEC 18	
EUR EP D	22 21 59.8
DEC 18	
ALQ E(P)	22 32 47.4
E	32 55.0
E	33 34.4
BCN E(P)	22 33 38.7
DEC 18	
BCN EPN	22 55 08.7
EL	55 41.7
DEC 18	
BMO EP	22 59 56.3
DEC 18	
H-23 06 38.6	
27.4S 071.1W	
h ABOUT 33KM	
EUR E(P)	23 18 39.5
BUT E(P)	23 18 58.0
DEC 18	
BMO EP	23 32 03.2
DEC 18	
H-23 59 33.9	
10.6S 079.0W	
h ABOUT 38KM	
BHP IP	24 04 00.0
IS	11 39.6
IL	23 26.0
ALQ EP	24 08 44.2
TUC E(P)	24 08 45.0
EUR EP	24 09 42.1
BMO E(P)	24 10 07.5
NEW EP	24 10 30.0
COL EP	24 12 34.0
DEC 19	
BCN E(P)	00 09 51.7
DEC 19	
BMO EP	00 21 52.5
E	22 22.6
DEC 19	
EUR IP C	00 33 01.0
E(S)	44 32.5
DEC 19	
EUR E(P)	00 47 56.5
DEC 19	
BMO EP	00 55 23.0

Date and Station	Phase (GCT)
	h m s
DEC 19	
BUT EPN	01 00 15.6
DEC 19	
EUR EP	01 04 25.7
DEC 19	
BOZ (PN)	01 41 11.5
EL	41 28.0
DEC 19	
EUR EP	01 49 55.9
DEC 19	
H-02 10 31.6	
16.0S 071.9W	
h ABOUT 115KM	
ALQ EP C	02 20 30.6
E	21 11.0
TUC E(P)	02 20 33.0
E	21 15.5
EUR EP	02 21 26.0
E	22 18.5
DEC 19	
EUR IP	02 32 00.2
E(S)	36 52.8
EL	40 47.5
DEC 19	
COL EP	04 12 30.0
DEC 19	
H-04 23 29.0	
05.2S 102.5E	
h ABOUT 33KM	
EUR EP'	04 42 41.9
DEC 19	
BMO EP	04 45 06.2
DEC 19	
UKI E(P)	05 47 30.0
DEC 19	
UKI E(P)	07 37 04.0
DEC 19	
EUR E(P)	07 57 21.2
DEC 19	
EUR IP C	08 00 35.0
I	00 44.0
EL	08 30.0
DEC 19	
BMO EP	08 08 00.5
DEC 19	
BMO E(P)	08 09 39.3
DEC 19	
H-08 32 00.5	
25.2N 141.2E	
h ABOUT 120KM	
BMO EP	08 43 59.6
DEC 19	
COL EP	09 04 05.0

Date and Station	Phase	(GCT)
		h m s
DEC 19		
H-10 23 57.2		
24.9N 123.0E		
h ABOUT 33KM		
BMO	E(P)	10 37 06.5
DEC 19		
EUR	IP	11 56 17.5
DEC 19		
NEW	EP	13 04 50.0
DEC 19		
EUR	EP	16 24 35.4
DEC 19		
BOZ	(PN)	17 27 03.0
	EL	27 11.5
DEC 19		
BMO	EP	18 07 26.8
DEC 19		
BOZ	(PN)	18 36 10.0
	EL	36 28.5
DEC 19		
ALQ	EP	18 39 17.0
	E	39 41.8
DEC 19		
BMO	EP	18 47 19.1
DEC 19		
BOZ	(PN)	19 03 12.5
	EL	03 32.5
DEC 19		
H-20 38 19.9		
15.6N 094.9W		
h ABOUT 43KM		
ALQ	EP	20 43 13.2
TUC	EP	20 43 14.5
BMO	EP	20 45 09.0
COL	EP	20 48 27.0
DEC 19		
H-20 52 33.3		
39.0N 106.5W		
h ABOUT 5KM		
FGU	EP	20 53 19.5
	I	53 21.5
	I(S)	53 49.7
	ILG	53 55.5
GCA	EP C	20 53 43.0
	I	53 53.3
	ILG	54 48.5
ALQ	EP	20 53 50.0
DEC 19		
EUR	IP	21 19 33.2
DEC 19		
BOZ	(PN)	21 49 54.0
	EL	50 05.5

Date and Station	Phase	(GCT)
		h m s
DEC 19		
EUR	IP	22 00 09.6
DEC 19		
H-22 44 53.5		
25.7S 179.8W		
h ABOUT 457KM		
EUR	EP	22 56 55.2
BMO	EP	22 57 05.3
DEC 19		
BMO	EP	22 48 00.7
DEC 19		
BUT	EP	22 53 15.1
DEC 19		
EUR	IP	23 29 11.8
DEC 19		
COL	IP	23 51 29.5
DEC 20		
COL	IP	00 16 02.2
DEC 20		
H-00 26 27.9		
66.7N 148.6W		
h ABOUT 33KM		
COL	IP	00 26 56.3
	IS	27 24.0
BRW	IPC	00 27 47.8
	E(S)	28 43.3
NEW	EP	00 31 46.0
BMO	EP	00 32 13.0
BOZ	EP	00 32 25.0
	E	32 39.5
	E	32 52.5
EUR	IP	00 33 01.0
SLD	E(P)	00 33 07.5
FGU	EP	00 33 07.6
ALQ	EP D	00 34 02.2
	E	34 14.5
TUC	EP	00 34 10.0
DEC 20		
BUT	E(P)	00 41 20.1
DEC 20		
H-00 57 53.2		
66.7N 148.8W		
h ABOUT 33KM		
COL	IP	00 58 21.7
	IS	58 50.0
BRW	IPC	00 59 13.0
NEW	EP	01 03 11.0
HHM	EP	01 03 23.0

Date and Station	Phase	(GCT)
		h m s
BMO	EP	01 03 39.7
BOZ	EP	01 03 49.5
EUR	IP	01 04 27.2
ALQ	EP	01 05 27.8
TUC	E(P)	01 05 34.5
DEC 20		
BOZ	EP	01 42 25.0
DEC 20		
H-01 45 02.3		
18.9N 106.2W		
h ABOUT 46KM		
TUC	EP	01 48 18.8
ALQ	EP	01 48 47.5
BCN	EP	01 49 19.8
EUR	EP	01 49 56.0
FGU	EP	01 49 56.5
BMO	EP	01 50 44.8
HHM	E(P)	01 51 08.8
NEW	EP	01 51 13.0
DEC 20		
H-02 27 03.7		
18.6N 106.4W		
h ABOUT 41KM		
TUC	EP	02 30 22.2
	ES	33 03.0
ALQ	E(P)	02 30 51.6
	E	34 00.0
GCA	EP	02 31 23.5
BCN	EP	02 31 23.8
FGU	EP	02 32 00.1
EUR	IP	02 32 00.2
SLD	EP	02 32 00.7
	E	32 18.5
SLC	EP	02 32 03.2
	E	32 10.6
RCD	E(P)	02 32 26.5
	E	36 04.0
BOZ	EP	02 32 45.5
	E	32 59.5
BUT	E(P)	02 32 48.1
HHM	EP	02 33 12.3
NEW	EP	02 33 17.0
DEC 20		
NEW	EP	02 36 18.0

Date and Station	Phase	(GCT)
		h m s
DEC 20		
TUC	E(P)	03 22 56.0
DEC 20		
COL	IP	05 53 22.0
DEC 20		
NEW	EP	06 14 35.0
DEC 20		
H-07 55 37.0		
18.6N 106.5W		
h ABOUT 33KM		
TUC	EP	07 58 57.5
ALQ	EP	07 59 26.6
	E	59 42.0
	EL	08 02 36.0
BCN	EP	07 59 56.8
	E	08 00 10.3
	E	00 35.3
	E(L)	06 52.8
GCA	EP	07 59 57.5
SLD	EP	08 00 34.5
FGU	EP	08 00 34.5
EUR	IP	08 00 35.0
SLC	EP	08 00 35.9
	E	00 43.3
RCD	E(P)	08 01 05.0
	ES	05 36.0
BOZ	EP	08 01 21.0
	E	02 59.5
	E	02 18.5
BMO	EP	08 01 22.9
BUT	E(P)	08 01 23.1
HHM	EP	08 01 46.8
NEW	EP	08 01 51.0
COL	EP	08 04 59.0
	E(S)	22 40.0
DEC 20		
BMO	EP	08 04 38.7
DEC 20		
BOZ	(PN)	10 08 57.0
	EL	09 13.5
DEC 20		
NEW	EP	10 10 42.0
DEC 20		
BUT	EPN	10 18 40.0
NEW	EP	10 19 20.0
	ES	20 27.0
DEC 20		
BOZ	E(P)	11 53 21.5

Date and Station	Phase (GCT)
	h m s
DEC 20	
H-12 24 14.3	
2.9S 129.8E	
h ABOUT 52KM	
SLD IP D	12 38 22.3
I	40 26.7
I	47 57.0
BMO IP	12 38 35.9
E	40 42.4
HHM EP	12 38 39.3
DEC 20	
H-12 26 54.6	
26.1S 063.2W	
h ABOUT 586KM	
BHP IP	12 33 27.0
SJG IP	12 34 10.4
I	35 45.0
IS	39 57.0
ISS	43 04.0
CSC EP	12 36 20.0
EPP	38 16.0
WSC IP	12 36 46.0
EPCP	37 13.0
ALQ IP D	12 37 29.8
IPP	39 31.0
ES	46 11.2
EP'P'	04 52.0
TUC EP	12 37 31.0
IPP	39 34.8
GCA IP D	12 37 53.7
EPP	39 56.0
BCN EP	12 37 57.8
EPCP	38 08.3
EPP	40 02.8
RCD IP	12 37 58.7
ES	47 11.0
E	50 44.0
FGU IP D	12 38 02.1
EPP	40 08.6
ES	47 17.6
EUR IP D	12 38 14.7
IPP	40 23.4
E	41 41.7
ES	47 39.4
ISKS	47 45.5
IPKKP	56 41.0
EPPKKP	58 55.9
BOZ IP D	12 38 25.0
EPP	40 30.5
EP	46 24.5
BUT EP	12 38 28.1
ES	48 18.6
NEW IP	12 38 45.1
E	39 10.0
COL IP'	12 44 21.9

Date and Station	Phase (GCT)
	h m s
BRW IP'C	12 44 34.8
ADK IP'	12 44 48.2
E	47 11.3
GUA EP'	12 45 44.0
DEC 20	
SJG E(P)	12 38 41.5
DEC 20	
COL EP	12 40 27.0
DEC 20	
BCN E(P)	12 47 09.3
DEC 20	
SJG EP	12 41 26.0
DEC 20	
GUA E(P)	12 47 58.0
DEC 20	
EUR IP	12 52 02.4
SLD E(P)	12 52 07.0
DEC 20	
SLD EP	12 56 37.5
E	58 53.0
DEC 20	
BMO EP	13 04 24.2
HHM EP	13 04 29.3
BCN E(P)	13 04 49.8
EUR IP	13 05 08.1
CSC E(P)	13 05 16.0
DEC 20	
BMO EP	13 06 59.7
BOZ EP	13 07 05.0
E	07 09.5
BCN E(P)	13 07 09.8
E	07 26.8
DEC 20	
H-13 07 46.6	
25.6N 142.6E	
h ABOUT 29KM	
COL EP	13 17 42.0
NEW IP	13 19 42.9
BMO EP	13 19 50.0
HHM EP	13 19 53.0
EUR EP	13 20 07.5
ALQ EP	13 20 51.4
DEC 20	
H-15 30 00.1	
37.3N 116.4W	
h ABOUT 0KM	
BCN IPNC	15 30 32.8

Date and Station	Phase (GCT)
	h m s
EUR IP	15 30 37.8
SLD IP C	15 31 00.5
I	31 08.7
SLC EP	15 31 15.9
I	31 17.9
EL	32 44.0
UKI E(P)	15 31 27.0
TUC IP	15 31 42.0
BMO IPN	15 31 54.0
ALQ EP	15 32 03.0
BOZ EPN	15 32 16.5
E(L)	35 35.0
BUT EPN	15 32 18.6
ES	35 00.6
EL	36 01.0
HHM IP	15 32 43.8
RCD IP	15 32 53.0
E	36 34.0
CHK IP	15 34 57.5
EL	39 22.7
SIT EP	15 35 12.3
CSC EP	15 36 00.0
EL	45 18.0
WSC I(P)	15 36 12.5
COL IP C	15 36 39.6
I	36 55.1
E	39 20.5
EL	46 34.0
HON IP	15 37 32.5
KIP IP	15 37 31.6
BRW IP C	15 37 39.4
BHP IP	15 38 05.0
IS	48 05.0
ADK IP	15 38 11.1
SJG IP C	15 38 39.7
IPCP	40 07.0
IPCS	44 03.0
GUA EP	15 42 52.0
DEC 20	
GCA E(P)	15 52 02.5
IL	52 55.0
SLD EP	15 52 04.7
BMO E(P)	15 53 08.0
DEC 20	
BCN EP	15 59 44.8
E	59 56.8
SLD EP	16 00 22.8

Date and Station	Phase (GCT)
	h m s
DEC 20	
BMO EP	16 02 13.6
DEC 20	
BOZ E(P)	16 05 26.5
DEC 20	
EUR IP D	16 11 36.1
DEC 20	
EUR E(P)	16 15 47.2
DEC 20	
H-16 20 04.7	
07.1S 126.0E	
h ABOUT 427KM	
GUA EP	16 25 18.0
COL EP	16 32 39.0
BMO EP'	16 37 54.4
HHM EP'	16 37 57.3
DEC 20	
BCN EP	16 26 33.3
EUR E(P)	16 26 36.0
GCA E(P)	16 27 09.0
EL	28 01.0
BMO E(P)	16 28 15.6
DEC 20	
NEW EP	16 38 47.0
DEC 20	
BMO EP	16 40 45.9
HHM E(P)	16 40 48.3
DEC 20	
H-16 52 28.6	
37.3N 116.5W	
h ABOUT 33KM	
BCN E(P)	16 52 59.2
EUR I(P)	16 53 02.7
SLD E(P)	16 53 36.7
EL	54 29.3
DEC 20	
BMO EPN	16 54 40.4
DEC 20	
ALQ E(P)	17 01 40.2
EL	02 11.0
GCA E(P)	17 01 48.0
IL	02 18.0
DEC 20	
EUR EP	17 10 44.5
DEC 20	
EUR EP	17 16 04.0
EL	16 36.0

Date and Station	Phase	(GCT) h m s
DEC 20		
H-17 26 15.3		
36.3S 100.8W		
h ABOUT 33KM		
SJG	EP	17 36 38.8
EUR	E(P)	17 38 08.5
BMO	EP	17 38 37.6
HHM	EP	17 38 52.8
NEW	EP	17 38 54.0
DEC 20		
EUR	IP	17 28 58.5
	EL	29 27.0
DEC 20		
BMO	EP	17 30 56.0
DEC 20		
EUR	EP	17 39 26.7
DEC 20		
EUR	EP	17 53 44.7
	EL	54 15.0
DEC 20		
EUR	EP	17 59 15.7
	E(L)	59 48.0
DEC 20		
BUT	EPN	18 02 02.6
DEC 20		
BMO	E(P)	18 03 08.5
HHM	E(P)	18 03 23.3
DEC 20		
H-18 04 04.0		
37.4N 116.6W		
h ABOUT 33KM		
BCN	EP	18 04 35.4
EUR	IP D	18 04 38.0
GCA	E(P)	18 05 04.2
	IL	06 03.4
SLD	E(P)	18 05 09.5
	E	05 12.3
	EL	06 03.3
DEC 20		
BMO	EPN	18 06 20.7
DEC 20		
ALQ	E(P)	18 16 36.0
	EL	17 03.0
DEC 20		
EUR	E(P)	18 37 58.1
DEC 20		
EUR	EP	18 39 04.7
DEC 20		
H-18 39 41.5		
14.5N 122.1E		
h ABOUT 40KM		
GUA	EP	18 44 34.0
	ES	48 38.0
BRW	E(P)	18 51 25.3
COL	EP	18 51 32.0
	E	51 42.3
NEW	E(P)	18 53 25.0
BMO	EP	18 53 29.7
HHM	E(P)	18 53 35.0
EUR	E(P)	18 53 51.0
	E	57 11.0
BCN	EP'	18 58 20.3
SJG	EP'	18 59 20.7
PHP	IP'D	18 59 31.3
DEC 20		
BOZ	E(P)	18 57 25.5
	E	57 58.5
	E	58 06.5
ALQ	E(P)	18 57 45.0
	E	58 29.0
DEC 20		
BCN	EP	19 01 55.3
EUR	EP	19 01 58.4
	EL	02 25.0
DEC 20		
ALQ	E(P)	19 08 57.0
	E	09 12.8
EUR	EP	19 09 48.2
BMO	EPN	19 09 53.0
DEC 20		
EUR	E(P)	19 26 16.3
DEC 20		
EUR	EP	20 17 23.3
	IL	17 56.2
DEC 20		
EUR	EP	20 44 38.3
	EL	45 10.0
DEC 20		
BMO	E(P)	20 53 07.9
DEC 20		
EUR	I(P)	20 57 36.9
	IL	58 08.5
DEC 20		
GCA	E(P)	21 00 02.0
	EL	00 44.0
DEC 20		
EUR	E(P)	21 29 07.3
	EL	29 35.2
BMO	EP	21 30 21.8
HHM	E(P)	21 30 22.6
DEC 20		
H-21 50 56.7		
25.6N 142.6E		
h ABOUT 33KM		
NEW	EP	22 02 52.0
BMO	EP	22 02 59.7
HHM	EP	22 03 04.0
EUR	EP D	22 03 16.8
DEC 20		
BCN	EP	21 52 10.7
EUR	EP D	21 52 11.0
DEC 20		
EUR	EP	22 11 15.1
	EL	11 48.0
DEC 20		
ALQ	E(P)	22 28 06.0
	E	28 13.0
	EL	28 53.5
DEC 20		
EUR	E(P)	22 37 26.5
	EL	38 02.5
DEC 20		
H-22 44 56.9		
55.4N 154.9W		
h ABOUT 33KM		
COL	E(P)	22 47 20.0
NEW	IP	22 50 11.4
HHM	EP	22 50 26.8
BMO	EP	22 50 28.4
EUR	EP	22 51 06.5
DEC 20		
ALQ	E(P)	22 58 27.0
	E	58 46.5
DEC 20		
EUR	IP	23 01 09.2
DEC 20		
CED	IP	23 24 09.6
	IS	24 26.6
DEC 20		
HHM	E(P)	23 34 20.8
DEC 20		
H-23 52 25.5		
33.9N 140.1E		
h ABOUT 109KM		
COL	EP	24 01 28.0
BMO	EP	24 03 55.9
EUR	EP	24 04 17.0
DEC 21		
BMO	EP	00 14 46.7
COL	EP	00 15 37.0
DEC 21		
H-01 12 45.1		
6.7S 154.9E		
h ABOUT 86KM		
COL	EP	01 25 01.0
DEC 21		
H-01 20 00.9		
37.4N 116.4W		
h ABOUT 33KM		
LVN	I(P)	01 20 28.0
	E(S)	20 47.0
BCN	EP	01 20 32.0
EUR	IP	01 20 35.0
DEC 21		
SJG	EP	01 20 42.0
	E	21 28.5
DEC 21		
EUR	EP	01 32 00.9
	EL	32 32.5
DEC 21		
EUR	IP D	01 40 07.3
	EL	40 41.0
DEC 21		
H-02 14 26.8		
37.4N 116.5W		
h ABOUT 33KM		
LVN	IP	02 14 54.0
	ES	15 16.0
BCN	EP	02 14 58.3
EUR	IP	02 15 00.5
SLD	E(P)	02 15 33.0
	IL	16 28.3
DEC 21		
ALQ	E(P)	02 16 45.0
	E	18 49.0
DEC 21		
COL	EP	02 37 30.0
DEC 21		
EUR	E(P)	03 41 22.0
DEC 21		
EUR	E(P)	03 58 58.0
	IL	59 29.0
DEC 21		
EUR	EP	04 09 55.1
DEC 21		
SJG	EP	04 23 32.0
	E(S)	23 58.0
NEW	EP	04 30 56.0
DEC 21		
EUR	EP	04 55 28.7
	EL	56 02.5

Date and Station	Phase (GCT)
	h m s
DEC 21	
EUR IP	05 15 55.6
DEC 21	
COL EP	05 23 48.0
DEC 21	
EUR IP D	05 26 30.0
IL	27 01.5
DEC 21	
H-05 30 22.7	
52.0N 159.4E	
h ABOUT 33KM	
COL EP	05 36 25.0
SLC E(P)	05 39 17.2
BMO EP	05 39 39.8
EUR EP	05 40 07.2
E	40 28.6
DEC 21	
BMO E(P)	05 31 41.8
COL EP	05 31 54.0
DEC 21	
COL EP	05 47 15.0
DEC 21	
BMO EP	05 46 27.6
DEC 21	
EUR IP D	05 57 28.2
EL	58 00.8
DEC 21	
H-06 02 04.8	
37.2N 116.5W	
h ABOUT 33KM	
LVN EP	06 02 31.0
ES	02 53.0
BCN (PN)	06 02 37.8
EL	03 03.3
EUR IP	06 02 40.1
BMO EP	06 04 02.3
DEC 21	
TUC E(P)	06 11 25.0
EL	12 30.0
BMO E(P)	06 14 07.7
DEC 21	
H-06 29 05.4	
25.4N 142.8E	
h ABOUT 33KM	
BMO EP	06 41 08.2
HHM E(P)	06 41 11.5
EUR EP	06 41 25.4
DEC 21	
EUR EP	06 58 26.0

Date and Station	Phase (GCT)
	h m s
DEC 21	
EUR E(P)	07 08 30.8
EL	09 04.1
DEC 21	
SJG EP	07 24 56.0
IS	25 14.5
DEC 21	
H-08 52 00.4	
20.0S 169.7E	
h ABOUT 249KM	
GUA IP	08 59 24.0
IS	09 05 14.0
KIP IP	09 00 44.3
IS	07 51.0
SLD IP D	09 04 16.4
ES	14 35.0
UKI E(P)	09 04 16.5
COL IP D	09 04 33.4
IPP	08 10.0
ESKS	14 42.0
ES	15 09.7
BCN EP	09 04 34.8
EpP	05 37.8
EUR IP D	09 04 37.8
IpP	05 40.9
EsP	06 33.0
IPP	08 10.0
ESKS	14 51.3
EPKKP	22 02.8
E'P'	45 07.5
E	48 27.8
TUC EP	09 04 43.2
EpP	05 46.0
ESKS	15 32.0
EP'P'	30 10.0
E	33 24.5
GCA EP D	09 04 48.5
E	05 58.5
ES	15 41.5
NEW EP	09 04 51.0
SLC IP	09 04 54.6
HHM EP	09 04 59.5
ALQ EP	09 05 02.0
E	07 52.0
ESKS	16 07.0
BUT E(P)	09 05 03.0
ESKS	16 07.5
ES	16 16.1
BOZ EP	09 05 03.0
ES	16 03.5
SJG EP'	09 10 36.2
DEC 21	
BRW EP	09 08 41.5

Date and Station	Phase (GCT)
	h m s
DEC 21	
BHP IP C	09 20 15.0
DEC 21	
COL EP	09 15 05.0
DEC 21	
EUR E(P)	09 25 19.2
DEC 21	
EUR E(P)	09 40 40.7
DEC 21	
BMO E(P)	10 05 13.2
DEC 21	
COL E(P)	10 29 34.0
DEC 21	
COL EP	10 42 29.0
DEC 21	
EUR EP	10 45 44.9
EL	46 19.0
DEC 21	
H-11 25 04.0	
10.4S 162.7E	
h ABOUT 25KM	
COL EP	11 37 31.0
EUR I(P)	11 38 11.5
DEC 21	
H-11 38 00.5	
06.0N 126.1E	
h ABOUT 34KM	
COL IP	11 50 22.9
BOZ EP'	11 56 26.0
EUR EP'	11 56 27.0
ALQ EP'	11 56 42.8
SJG EP'	11 57 57.2
DEC 21	
BMO E(P)	11 47 20.5
DEC 21	
SJG IP	12 12 03.0
IS	12 22.5
DEC 21	
BMO EP	12 29 12.7
DEC 21	
EUR EP	12 51 26.9
DEC 21	
H-12 57 00.0	
37.4N 116.4W	
h ABOUT 33KM	
LVN IP	12 57 26.0
ES	57 46.0
BCN EP	12 57 31.3
EUR IP D	12 57 34.4
IL	58 07.2

Date and Station	Phase (GCT)
	h m s
DEC 21	
H-12 57 57.4	
52.2N 173.7W	
h ABOUT 33KM	
ADK EP	12 58 27.0
COL EP	13 02 11.0
NEW EP	13 04 53.0
BMO EP	13 05 07.2
BOZ E(P)	13 05 32.0
EUR EP	13 05 39.4
DEC 21	
H-12 58 19.8	
52.1S 15.0E	
h ABOUT 33KM	
TUC EP'	13 17 39.0
EUR IP'	13 17 50.2
BOZ EP'	13 17 51.5
BUT EP'	13 17 53.7
SLD EP'	13 17 56.5
BMO EP'	13 17 57.6
HHM EP'	13 17 59.5
NEW EP'	13 18 02.0
DEC 21	
BOZ EP	13 21 11.5
E	21 27.5
DEC 21	
BMO EP	13 45 10.0
DEC 21	
TUC (PN)	13 58 49.0
DEC 21	
SJG EP	14 00 14.5
ES	00 54.7
DEC 21	
H-14 37 29.7	
37.3N 116.4W	
h ABOUT 33KM	
LVN EP	14 37 56.0
E(S)	38 17.0
BCN (PN)	14 37 58.3
EL	37 23.8
EUR IP	14 38 03.2
GCA EP	14 38 30.0
IL	39 27.8
SLD I(P)	14 38 37.1
EL	39 24.0
BMO EP	14 39 22.4

Date and Station	Phase (GCT) h m s
DEC 21	
SLC EP	14 39 01.0
E	39 19.9
DEC 21	
CED IP	15 20 38.1
IS	20 53.1
DEC 21	
CED IP	15 30 24.1
IS	30 39.6
DEC 21	
EUR E(P)	16 23 59.0
EL	24 30.8
DEC 21	
ALQ E(P)	18 53 18.2
E	53 42.6
DEC 21	
H-19 03 43.0	
37.3N 116.4W	
h ABOUT 33KM	
BCN E(P)	19 04 13.9
EUR IP	19 04 18.5
DEC 21	
EUR EP	19 11 34.4
FL	12 20.0
DEC 21	
EUR IP C	19 59 20.5
DEC 21	
TUC EP	21 20 47.2
E(S)	25 25.0
ALQ EP	21 21 03.6
EUR EP	21 22 01.4
E	22 20.6
BMO EP	21 22 45.1
HHM E(P)	21 23 08.0
NEW IP	21 23 11.5
DEC 21	
BUT EP	21 44 56.8
HHM E(P)	21 45 36.0
DEC 21	
ADK IP	21 53 51.5
IS	53 55.3
DEC 21	
COL EP	21 55 55.5
DEC 21	
H-22 10 59.8	
29.7N 080.8E	
h ABOUT 21KM	
COL EP	22 23 00.5
DEC 21	
UKI E(P)	22 11 22.0

Date and Station	Phase (GCT) h m s
DEC 21	
BMO EP	22 57 25.4
EUR EP	22 58 09.8
EL	58 42.2
DEC 21	
ADK IP	23 42 25.2
IS	42 28.6
DEC 21	
COL EP	23 53 21.0
DEC 22	
ADK IP	00 19 06.6
IS	19 30.1
DEC 22	
GUA EP	00 20 45.5
DEC 22	
EUR EP	01 48 38.5
IL	48 11.5
CED IP	01 49 16.0
IS	49 31.0
DEC 22	
EUP IP	01 48 39.1
DEC 22	
H-02 12 56.0	
54.1N 163.9W	
h ABOUT 43KM	
ADK EP	02 14 52.0
COL EP	02 16 07.0
BMO EP	02 19 12.5
EUR IP	02 19 48.0
I	19 58.0
DEC 22	
H-02 20 09.1	
53.9N 164.0W	
h ABOUT 73KM	
ADK EP	02 22 02.5
COL EP	02 23 26.0
EUR EP	02 26 58.6
E	27 09.4
DEC 22	
EUR EP	02 29 27.9
ALQ E(P)	02 29 56.0
DEC 22	
EUR EP	02 39 45.7
IL	40 10.4
DEC 22	
EUR EP	02 52 50.2
EL	53 24.0
DEC 22	
EUR IP	03 18 26.7

Date and Station	Phase (GCT) h m s
DEC 22	
EUR EP	03 25 24.5
EL	25 56.3
DEC 22	
SJG EP	03 37 27.5
ES	37 49.3
DEC 22	
COL EP	03 47 14.0
DEC 22	
ADK IP	03 50 07.3
IS	50 25.5
DEC 22	
SJG EP	04 07 22.8
DEC 22	
EUR EP	04 35 02.6
IL	35 36.0
DEC 22	
COL EP	04 39 14.0
DEC 22	
H-04 53 54.7	
33.7N 118.3W	
h ABOUT 12KM	
CED IP	04 54 13.4
IS	54 27.5
BCN (PN)	04 54 52.4
E	55 11.4
EL	55 53.9
SLD E(P)	04 55 09.5
EUR IP	04 55 26.9
DEC 22	
H-05 49 27.0	
52.0N 178.7E	
h ABOUT 109KM	
ADK IP	05 50 12.0
IS	50 46.7
COL EP	05 54 08.0
NEW IP	05 56 52.8
BMO IP	05 57 07.2
BOZ EP	05 57 30.5
EUR IP	05 57 39.4
TUC EP	05 58 38.4
ALQ EP	05 58 44.2
DEC 22	
BMO E(P)	06 02 40.5
EUR EP	06 02 56.9
DEC 22	
EUR EP	06 12 01.0
DEC 22	
HHM EP	06 57 07.5

Date and Station	Phase (GCT) h m s
DEC 22	
H-07 05 23.0	
37.4N 116.5W	
h ABOUT 33KM	
BCN E(P)	07 05 54.8
EUR EP	07 05 57.2
I	06 00.0
IL	06 30.0
DEC 22	
BHP IP	07 22 31.4
IS	22 41.6
DEC 22	
EUR EP	08 15 28.5
EL	15 58.4
DEC 22	
ADK IP	09 03 00.7
DEC 22	
H-09 41 44.2	
36.6N 138.5E	
h ABOUT 57KM	
BMO EP	09 53 14.6
BOZ E(P)	09 53 30.0
DEC 22	
BMO EP	11 24 49.2
E	24 58.1
COL EP	11 27 42.0
DEC 22	
H-12 10 05.8	
52.3N 158.5E	
h ABOUT 55KM	
COL IP	12 16 07.8
BMO EP	12 19 20.4
EUR IP	12 19 52.0
E	20 14.3
DEC 22	
EUR IP	12 22 39.3
DEC 22	
H-12 30 00.6	
38.0N 066.1E	
h ABOUT 38KM	
COL IP	12 41 35.3
DEC 22	
EUR EP	12 40 12.8
BMO EP	12 40 45.1
DEC 22	
ADK IP	12 43 26.9
IS	43 51.5
DEC 22	
H-12 59 14.5	
37.4N 116.4W	
h ABOUT 33KM	

Date and Station	Phase (GCT)
	h m s
BCN EP	12 59 44.9
E(L)	13 00 11.4
EUR IP	12 59 49.8
SLD E(P)	13 00 23.0
EL	01 14.4
DEC 22	
ADK IP	13 01 43.5
IS	02 08.5
DEC 22	
ALQ E(P)	13 01 48.0
E	03 38.0
BMO EP	13 05 09.2
COL IP	13 05 20.1
DEC 22	
H-13 33 24.1	
31.1N 141.5E	
h ABOUT 33KM	
BMO EP	13 45 10.0
DEC 22	
EUR EP	13 51 08.3
EL	51 42.9
DEC 22	
ADK IP	13 54 25.3
IS	54 49.6
DEC 22	
COL EP	14 41 51.0
DEC 22	
H-15 57 21.6	
15.1S 072.0W	
h ABOUT 128KM	
BMO EP	16 08 35.8
DEC 22	
ADK EP	16 01 04.0
E	01 22.5
DEC 22	
H-16 01 59.8	
37.4N 116.5W	
h ABOUT 33KM	
BCN E(P)	16 02 32.0
EUR IP	16 02 35.5
SLD E(P)	16 03 09.0
DEC 22	
EUR IP	16 10 09.0
DEC 22	
EUR IP	16 36 15.0
DEC 22	
EUR E(P)	17 13 26.0
EL	13 57.5
ALQ E(P)	17 14 24.0
E	15 06.0

Date and Station	Phase (GCT)
	h m s
DEC 22	
H-17 26 36.3	
43.7N 147.2E	
h ABOUT 90KM	
COL EP	17 34 13.0
BMO EP	17 37 04.0
BOZ EP	17 37 21.5
EUR EP	17 37 30.5
DEC 22	
H-17 30 01.1	
37.3N 116.5W	
h ABOUT 17KM	
BCN E(P)	17 30 34.0
EUR IP	17 30 38.0
SLD E(P)	17 31 12.1
E	32 02.5
DEC 22	
EUR E(P)	18 02 15.0
DEC 22	
COL EP	18 41 38.0
DEC 22	
H-19 24 06.8	
48.7N 154.5E	
h ABOUT 75KM	
COL EP	19 30 45.4
EpP	31 02.5
NEW IP	19 33 34.5
HHM EP	19 33 46.8
BMO IP	19 33 49.3
BOZ IP D	19 34 08.5
E	34 21.5
EUR IP	19 34 18.2
FGU EP	19 34 36.2
RCD EP	19 34 43.2
TUC EP	19 35 09.0
ALQ EP	19 35 13.4
DEC 22	
ALQ E(P)	19 46 08.5
E	46 45.0
DEC 22	
EUR EP	19 57 10.3
DEC 22	
BMO IP	20 02 16.5
DEC 22	
BMO EPN	20 14 11.4
DEC 22	
COL IP	20 30 46.2

Date and Station	Phase (GCT)
	h m s
DEC 22	
SLD IP C	22 09 30.8
IS	09 46.5
DEC 22	
BUT EPN	22 51 24.3
DEC 22	
BMO E(P)	23 24 59.7
DEC 22	
EUR E(P)	23 38 47.0
DEC 22	
EUR IP	23 47 44.2
DEC 22	
HHM EP	23 51 45.5
BMO E(P)	23 52 24.0
DEC 23	
H-01 11 15.1	
17.8S 178.5W	
h ABOUT 560KM	
GUA EP	01 19 02.5
SLD IP C	01 22 11.4
EpP	24 16.0
EUR IP C	01 22 35.8
E(pP)	25 50.5
TUC IP C	01 22 37.9
EpP	24 40.1
BMO IP	01 22 45.6
EpP	24 49.5
COL IP	01 22 54.2
NEW IP	01 22 54.6
ALQ IP C	01 22 59.2
EpP	25 03.0
HHM EP	01 22 59.7
FGU IP	01 23 00.5
EpP	25 06.0
EPP	26 31.0
BOZ IPC	01 23 04.5
IpP	25 10.5
DEC 23	
BCN EP	01 37 31.0
DEC 23	
H-02 02 19.8	
12.9N 088.6W	
h ABOUT 88KM	
TUC E(P)	02 08 09.0
EpP	08 26.0
FGU EP	02 08 52.3
EpP	09 08.5
EUR EP	02 09 15.4
BOZ EP	02 09 31.5

Date and Station	Phase (GCT)
	h m s
BMO EP	02 09 47.8
EpP	10 03.6
HHM E(P)	02 09 59.7
COL E(P)	02 12 54.5
DEC 23	
H-02 11 23.5	
36.4N 070.9E	
h ABOUT 83KM	
EUR I(P)	02 25 05.1
DEC 23	
H-02 23 40.0	
38.9N 123.1W	
h ABOUT 33KM	
UKI EP	02 23 46.5
SLD IP C	02 24 16.5
EUR E(P)	02 25 03.0
BMO EP	02 25 30.3
DEC 23	
UKI E(P)	02 44 58.7
DEC 23	
BHP EP	03 48 21.0
IS	49 00.0
DEC 23	
H-04 57 09.2	
37.4N 116.4W	
h ABOUT 33KM	
BCN EP	04 57 40.0
EUR IP	04 57 44.0
SLD E(P)	04 58 19.0
DEC 23	
EUR EP	05 28 30.5
EL	29 03.5
DEC 23	
SJG EP	07 03 48.0
IS	04 37.7
DEC 23	
CED IP	08 49 57.0
IS	50 12.5
DEC 23	
NEW EP	09 31 03.0
DEC 23	
H-09 48 53.6	
20.1S 068.3W	
h ABOUT 108KM	
SJG EP	09 56 03.4
ALQ EP	09 59 28.1
E	10 00 11.5
TUC E(P)	09 59 30.0
EUR IP	10 00 20.7

Date and Station	Phase (GCT) h m s
BOZ EP	10 00 33.5
BMO EP	10 00 45.4
EsP	01 16.4
HHM EP	10 00 49.9
NEW EP	10 00 57.0
DEC 23	
BMO EP	11 50 08.3
DEC 23	
SLD EP	14 03 31.5
EUR EP	14 04 07.5
DEC 23	
H-14 05 59.5	
45.6N 150.8E	
h ABOUT 111KM	
BMO EP	14 16 03.8
EUR IP	14 16 31.0
DEC 23	
BMO EP	14 50 05.9
DEC 23	
H-15 50 22.7	
7.2S 148.3E	
h ABOUT 63KM	
GUA IP	15 55 00.0
IS	58 44.0
HON EP	16 00 24.0
ES	08 35.0
COL IP D	16 02 55.0
I	03 17.1
IS	13 15.5
PKKP	20 57.0
EP'P'	28 52.0
BRW IP D	16 03 01.5
I	03 23.6
E(S)	13 22.0
SIT EP	16 03 11.3
ES	13 36.0
SLD IP C	16 03 39.7
I	04 00.5
EPP	07 25.0
ESKS	14 14.0
BMO EP	16 03 54.3
EPKKP	20 54.3
NEW IP	16 03 55.4
I	04 16.0
EUR IP C	16 03 58.2
I	04 20.6
I	04 29.0
EPP	08 56.0
EPPP	10 21.0
ISKS	14 39.0
EPKKP	20 25.5
EP'P'	28 37.5
HHM IP	16 04 02.5
E	05 13.5
EPP	08 08.0
I	17 03.0
E	17 07.0
EPKKP	20 20.2
EP'P'	28 36.0
SLC E(P)	16 04 11.7
E	04 22.9
BOZ EP	16 04 13.0
ESKS	14 52.0
ES	15 12.5
EP'P'	28 33.0
E	45 26.5
TUC EP	16 04 18.2
ESKS	14 59.0
EP'P'	28 36.9
FGU EP	16 04 20.0
ALQ EP	16 04 33.6
EPP	08 45.0
E	08 57.2
ESKS	15 16.0
E	18 11.0
EPKKP	20 18.4
CSC EP'	16 09 22.0
E	09 39.0
E	16 32.0
WSC EP'	16 09 22.1
BHP IP'	16 09 31.0
ISKP	13 00.0
SJG IP'C	16 09 52.5
I	10 14.5
ISKP	13 32.6
E	23 24.0
DEC 23	
UKI E(P)	15 58 05.0
DEC 23	
COL IP	16 13 15.0
DEC 23	
H-16 40 08.2	
59.6N 145.1W	
h ABOUT 33KM	
COL IP	16 41 28.7
NEW EP	16 44 38.0
HHM EP	16 44 52.7
BMO EP	16 45 03.2
E	45 26.5
EUR E(P)	16 45 51.5
DEC 23	
BMO EP	18 06 02.3
DEC 23	
H-18 59 05.1	
07.4S 074.7W	
h ABOUT 139KM	
SJG EP	19 04 32.3
ALQ EP	19 08 00.2
EsP	08 35.0
EUR I(P)	19 08 01.0
IsP	08 43.2
TUC EP	19 08 04.9
E	08 42.0
BCN EP	19 08 41.0
EUR IP	19 09 01.0
SLD IP D	19 09 13.0
BOZ IP	19 09 14.5
BMO EP	19 09 28.2
EPCP	10 01.7
HHM EP	19 09 31.5
EsP	10 08.0
E	10 25.5
NEW IP	19 09 43.2
COL IP	19 11 48.0
DEC 23	
UKI E(P)	20 37 22.0
DEC 23	
UKI E(P)	20 42 53.0
SLD EP	20 43 23.6
EL	44 19.5
DEC 23	
UKI E(P)	20 45 22.0
SLD IP	20 45 52.3
EL	46 50.4
DEC 23	
ALQ E(P)	20 56 29.2
E	57 04.5
DEC 23	
UKI E(P)	21 00 13.0
DEC 23	
UKI E(P)	21 23 19.5
SLD EP	21 23 50.2
E(L)	24 46.2
ALQ E(P)	21 24 33.0
E	25 15.4
BOZ EP	21 24 58.5
DEC 23	
UKI E(P)	21 27 17.2
SLD EP	21 27 47.9
EL	28 43.6
DEC 23	
H-22 10 25.0	
12.6N 087.7W	
h ABOUT 32KM	
ALQ E(P)	22 16 18.5
E	19 30.5
TUC E(P)	22 16 26.0
EUR EP	22 17 33.2
BMO EP	22 18 06.3
HHM E(P)	22 18 14.4
DEC 23	
ALQ E(P)	22 29 16.0
E	29 21.5
DEC 23	
BUT EPN	22 44 36.8
DEC 23	
HHM E(P)	22 45 21.2
DEC 23	
SLD EP	23 08 07.5
EL	08 23.7
DEC 23	
BCN E(P)	23 43 30.0
E	43 36.4
EUR IP	23 43 41.2
SLD EP	23 44 14.5
IL	45 05.9
DEC 23	
BMO EP	23 45 46.5
EUR EP	23 46 48.4
EL	47 18.4
DEC 23	
BMO EP	23 48 18.5
DEC 23	
H-23 49 29.2	
54.7N 162.5E	
h ABOUT 44KM	
COL EP	23 55 01.0
BMO EP	23 58 20.7
BOZ EP	23 58 39.5
EUR IP	23 58 54.8
FGU EP	23 59 11.5
ALQ E(P)	23 59 53.0
DEC 23	
H-23 56 09.4	
54.5N 162.3E	
h ABOUT 33KM	
COL EP	24 01 44.0
BMO EP	24 05 03.1
BOZ EP	24 05 21.5
EUR IP C	24 05 36.8
EPCP	06 40.4

Date and Station	Phase (GCT)
	h m s
DEC 24	
COL EP	00 06 22.0
BMO E(P)	00 09 52.6
EUR EP	00 10 15.0
DEC 24	
BCN E(P)	00 51 07.0
EUR IP	00 51 11.5
DEC 24	
SLD E(P)	00 52 37.5
DEC 24	
SJG EP	02 35 00.8
IS	35 20.6
DEC 24	
BMO E(P)	02 42 38.8
DEC 24	
BOZ (PN)	04 50 01.5
EL	50 13.0
DEC 24	
BUT EPN	04 50 34.3
HHM E(P)	04 50 59.8
DEC 24	
H-06 01 01.4	
25.5N 142.7E	
h ABOUT 33KM	
GUA E(P)	06 03 50.0
ES	06 17.0
COL EP	06 10 56.0
NEW IP	06 12 57.0
BMO EP	06 13 04.3
SLD EP	06 13 07.6
BUT EP	06 13 18.3
EUR IP	06 13 21.8
BOZ E(P)	06 13 22.5
SLC EP	06 13 32.8
BCN EP	06 13 33.6
FGU EP	06 13 40.7
TUC E(P)	06 13 57.0
ALQ EP	06 14 05.8
DEC 24	
BMO EP	06 02 17.8
DEC 24	
EUR E(P)	06 07 12.0
DEC 24	
EUR E(P)	06 22 11.8
DEC 24	
EUR IP	06 25 27.0

Date and Station	Phase (GCT)
	h m s
DEC 24	
H-06 36 18.6	
28.1S 176.4W	
h ABOUT 101KM	
EUR EP	06 48 56.9
BMO EP	06 49 09.4
DEC 24	
BMO EP	07 19 22.8
HHM E(P)	07 19 26.2
EUR E(P)	07 19 37.5
DEC 24	
BMO EP	07 38 03.8
DEC 24	
BOZ EPN	07 54 49.5
EL	55 02.5
DEC 24	
EUR EP	09 13 15.0
DEC 24	
COL IP	10 00 14.8
DEC 24	
BMO E(P)	10 21 39.2
DEC 24	
EUR EP	11 40 46.1
DEC 24	
EUR EP	12 14 47.6
BMO EP	12 15 24.0
DEC 24	
HHM E(P)	12 29 18.8
DEC 24	
ALQ E(P)	13 25 42.0
BMO EP	13 27 40.7
DEC 24	
BMO EP	14 07 40.5
DEC 24	
COL IP	14 24 55.1
I	24 58.5
DEC 24	
COL IP	14 38 26.2
I	38 29.6
DEC 24	
EUR IP	16 19 39.4
DEC 24	
EUR EP	17 42 29.6
EL	43 04.0
DEC 24	
EUR E(P)	19 35 20.5
BMO EP	19 35 30.7
COL EP	19 35 43.2

Date and Station	Phase (GCT)
	h m s
DEC 24	
UKI E(P)	20 43 21.5
DEC 24	
H-20 44 21.8	
16.1S 173.3W	
h ABOUT 83KM	
BMO EP	20 56 18.8
E	56 31.2
COL EP	20 56 39.0
DEC 24	
BMO E(P)	20 58 45.1
EUR E(P)	20 58 45.5
DEC 24	
H-22 28 59.7	
59.8N 153.4W	
h ABOUT 112KM	
COL IP	22 30 22.3
ES	31 24.0
SIT E(P)	22 31 15.5
ADK IP	22 32 29.7
ES	35 13.6
NEW IP	22 34 05.3
EpP	34 28.0
HHM EP	22 34 17.8
BMO EP	22 34 25.8
EpP	34 50.8
BUT EP	22 34 39.8
EpP	35 04.2
BOZ E(P)	22 34 46.0
EpP	35 10.5
SLD EP	22 35 06.3
EUR EP D	22 35 09.2
IpP	35 33.6
I	38 00.4
SLC E(P)	22 35 17.8
EpP	35 41.6
FGU EP	22 35 26.2
IPCP	38 06.0
BCN EP	22 35 39.2
EpP	36 04.2
E	41 45.0
ALQ E(P)	22 36 19.0
EpP	36 43.5
EPCP	38 25.0
TUC EP	22 36 20.5
IpP	36 46.0
SJG EP	22 40 22.0
IpP	40 47.0
DEC 24	
SLD I(P)	22 35 30.8
I	38 06.0

Date and Station	Phase (GCT)
	h m s
DEC 24	
COL IP	22 40 38.0
NEW IP	22 41 11.2
HHM IP	22 41 15.3
BMO IP	22 41 16.8
BOZ EP	22 41 24.5
SLD IP	22 41 32.0
EUR EP	22 41 32.0
FGU EP	22 41 39.5
BCN EP	22 41 45.2
ALQ EP	22 42 03.0
DEC 24	
EUR EP	22 45 29.5
DEC 24	
HHM E(P)	22 58 45.3
DEC 24	
UKI E(P)	22 58 55.5
DEC 25	
BMO E(P)	00 02 53.5
DEC 25	
ALQ E(P)	00 06 36.0
BMO EP	00 08 16.3
E	09 21.7
DEC 25	
EUR E(P)	00 15 57.5
EL	16 30.5
DEC 25	
H-02 24 03.7	
30.5N 141.7E	
h ABOUT 33KM	
BMO EP	02 35 51.8
DEC 25	
FGU EP	05 02 47.8
EpP	03 05.0
DEC 25	
NEW IP	05 03 04.3
IS	03 58.0
EUR EP	05 03 11.5
BMO EPN	05 03 20.3
BOZ E(P)	05 03 27.0
HHM E(P)	05 03 30.4
DEC 25	
H-05 41 57.9	
14.2N 053.7E	
h ABOUT 33KM	
EUR IP'	06 01 06.0

Date and Station	Phase	(GCT)
		h m s
DEC 25		
SLD E(P)		05 43 48.0
DEC 25		
BMO E(P)		06 03 10.9
DEC 25		
EUR E(P)		07 09 11.5
DEC 25		
EUR IP		11 48 27.4
DEC 25		
H-11 54 09.0		
37.5N 017.1W		
h ABOUT 33KM		
BOZ E(P)		12 05 34.0
NEW EP		12 05 11.0
BMO EP		12 05 26.2
	E	06 47.2
DEC 25		
H-12 26 10.5		
.6N 083.5W		
h ABOUT 33KM		
SJG IP D		12 31 27.5
ALQ EP		12 33 47.5
FGU EP		12 34 36.5
FUR EP		12 34 54.6
BMO EP		12 35 27.0
HHM E(P)		12 35 36.5
DEC 25		
BOZ E(P)		12 30 14.3
DEC 25		
BMO EP		12 41 02.2
COL EP		12 41 20.0
DEC 25		
H-12 41 50.9		
18.7S 174.9W		
h ABOUT 238KM		
FUR EP		12 53 34.0
BMO EP		12 53 45.3
COL IP		12 54 04.6
SJG EP		12 59 51.4
DEC 25		
BMO EP		13 04 28.3
DEC 25		
GUA IP		13 38 27.0
	IS	38 41.0
DEC 25		
H-14 26 31.8		
4.8S 152.1E		
h ABOUT 106KM		
COL IP		14 38 41.1
BMO EP		14 39 38.1
NEW EP		14 39 39.0
EUR IP		14 39 42.5
BOZ E(P)		14 39 57.0
DEC 25		
BMO EP		15 39 01.5
DEC 25		
BMO E(P)		15 40 29.7
DEC 25		
H-15 41 39.1		
5.2S 146.9E		
h ABOUT 186KM		
COL E(P)		15 53 51.1
BMO EP		15 54 53.7
NEW EP		15 54 54.0
DEC 25		
EUR E(P)		16 30 49.3
DEC 25		
H-17 06 56.7		
37.5N 070.2E		
h ABOUT 38KM		
COL IP		17 18 28.8
DEC 25		
BHP EP		19 32 06.0
	IS	32 39.2
DEC 25		
H-19 51 41.6		
35.1N 028.0E		
h ABOUT 49KM		
COL EP		20 03 47.0
DEC 25		
H-20 21 55.9		
01.8S 150.2E		
h ABOUT 72KM		
COL E(P)		20 33 54.0
BMO EP		20 35 02.8
NEW EP		20 35 05.0
EUR EP		20 35 06.2
HHM E(P)		20 35 10.9
DEC 25		
GUA E(P)		20 24 19.0
	ES	28 41.0
DEC 25		
COL EP		20 48 00.0
EUR E(P)		20 51 42.0
DEC 25		
BMO E(P)		21 40 54.7
COL EP		21 42 02.5
DEC 25		
SLD EP		23 03 17.4
	EL	03 45.3
EUR IP		23 03 37.0
DEC 25		
H-23 03 22.3		
51.8N 176.1E		
h ABOUT 39KM		
ADK IP		23 04 30.5
	IS	05 22.0
COL EP		23 08 21.0
BRW IPC		23 08 27.1
NEW IP		23 11 07.2
BMO EP		23 11 21.6
HHM EP		23 11 21.9
SLD EP		23 11 42.0
	E	12 05.0
BOZ EP		23 11 44.5
EUR IP		23 11 53.9
BCN E(P)		23 12 18.2
	E	12 35.2
	E	12 44.7
TUC EP		23 12 53.0
ALQ EP		23 12 59.2
	E	14 19.6
DEC 25		
BMO E(P)		23 16 57.9
DEC 26		
H-01 08 21.0		
05.7S 148.3E		
h ABOUT 97KM		
GUA E(P)		01 12 45.6
COL IP		01 20 44.1
DEC 26		
GUA EP		01 12 26.0
DEC 26		
H-01 28 01.3		
36.2N 069.8E		
h ABOUT 128KM		
COL EP		01 39 29.5
	E	40 15.0
DEC 26		
FGU EP		01 34 16.5
	E	34 34.0
	E	34 45.8
DEC 26		
NEW EP		01 38 20.0
	IS	39 16.0
DEC 26		
H-02 34 21.0		
24.8N 141.0E		
h ABOUT 177KM		
COL EP		02 44 09.4
NEW IP		02 46 08.8
BMO EP		02 46 15.9
HHM EP		02 46 18.2
BOZ EP		02 46 33.0
EUR IP		02 46 33.0
DEC 26		
H-03 43 17.0		
64.6N 147.6W		
h ABOUT 39KM		
COL IP		03 43 25.6
	IS	43 34.0
BRW E(P)		03 45 08.0
BMO E(P)		03 48 47.3
DEC 26		
EUR IP		03 46 35.7
DEC 26		
BMO E(P)		04 20 22.3
DEC 26		
H-04 21 00.6		
38.8N 040.9E		
h ABOUT 30KM		
COL EP		04 32 51.0
NEW EP		04 34 04.0
BMO EP		04 34 18.4
DEC 26		
HHM E(P)		04 25 10.5
	E	28 34.0
DEC 26		
BMO EP		04 26 34.7
DEC 26		
NEW EP		04 28 12.0
DEC 26		
ALQ E(P)		04 46 49.0
	E	47 07.4
	EL	47 55.0
TUC (PN)		04 46 54.9
DEC 26		
H-05 12 05.9		
16.2N 145.3E		
h ABOUT 445KM		
GUA IP		05 13 11.0
	IS	14 01.0
COL IP		05 22 04.7
NEW IP		05 23 44.4

Date and Station	Phase (GCT)
	h m s
BMO EP	05 23 48.7
HHM EP	05 23 54.5
EUR IP	05 24 01.5
BOZ EP	05 24 07.0
SLC EP	05 24 13.3
FGU IP D	05 24 21.0
TUC EP	05 24 31.4
ALQ EP	05 24 41.8
DEC 26	
NEW EP	05 46 17.0
DEC 26	
BMO EP	10 29 07.0
DEC 26	
CED IP	11 18 33.0
IS	18 47.0
DEC 26	
ADK EP	12 33 14.0
IS	33 44.5
DEC 26	
H-13 23 19.4	
52.3N 172.4W	
h ABOUT 51KM	
ADK IP	13 23 59.2
ES	24 31.3
COL EP	13 27 25.0
NEW IP	13 30 07.3
HHM EP	13 30 22.0
BMO EP	13 30 21.0
BOZ EP	13 30 46.5
EUR EP C	13 30 53.6
EPCP	32 56.2
DEC 26	
EUR IP	13 36 01.8
DEC 26	
FGU IP	13 55 39.1
IS	56 01.0
BMO EP	13 55 44.2
DEC 26	
H-15 30 57.5	
27.0S 070.4W	
h ABOUT 33KM	
BMO EP	15 43 22.8
DEC 26	
COL EP	16 08 14.0
BMO EP	16 11 12.8
HHM E(P)	16 11 13.0

Date and Station	Phase (GCT)
	h m s
DEC 26	
COL EP	16 52 14.0
DEC 26	
BOZ EP	17 14 52.5
DEC 26	
H-17 16 35.8	
11.3S 164.3E	
h ABOUT 33KM	
COL IP	17 29 02.8
EUR IP	17 29 30.8
BMO EP	17 29 32.6
HHM E(P)	17 29 46.0
DEC 26	
H-20 29 42.3	
10.8S 079.0W	
h ABOUT 19KM	
ALQ EP	20 38 56.0
EpP	39 05.0
EUR I(P)	20 40 04.0
BOZ E(P)	20 40 21.5
COL EP	20 42 46.0
DEC 26	
ALQ E(P)	20 40 17.0
E	40 54.8
DEC 26	
H-21 08 18.2	
40.6N 139.2E	
h ABOUT 67KM	
COL EP	21 16 44.0
HHM E(P)	21 19 26.5
DEC 26	
BMO EP	21 56 08.5
DEC 26	
H-22 58 53.7	
34.0N 118.6W	
h ABOUT 10KM	
CED IP	22 59 13.7
IS	59 28.0
SLD EP	22 59 51.5
IL	23 00 35.8
BCN EPN	22 59 52.3
LVN IP	22 59 53.0
E(S)	23 00 59.0
EUR IP	23 00 23.8
GCA EP	23 00 30.6
E	00 57.0
ELG	02 17.0
FGU EP	23 01 24.0

Date and Station	Phase (GCT)
	h m s
DEC 26	
BMO EP	23 01 56.8
DEC 27	
H-01 22 18.4	
37.2N 141.0E	
h ABOUT 68KM	
GUA E(P)	01 27 34.0
ES	31 43.0
ADK E(P)	01 29 01.7
BRW EP C	01 30 42.0
IpP	30 56.9
COL IP	01 31 01.2
NEW IP	01 33 26.0
IpP	33 41.0
HHM EP	01 33 37.1
EpP	33 51.4
SLD EP	01 33 47.4
IPCP	34 04.4
BMO EP	01 33 37.5
BUT EP	01 33 49.5
BOZ EP	01 33 54.0
EpP	34 08.5
EUR IP C	01 34 01.2
IpP	34 15.0
TUC EP	01 34 42.0
EpP	34 57.0
ALQ IP D	01 34 48.0
EpP	35 02.2
EsP	35 08.0
DEC 27	
BUT EPN	01 37 27.3
EL	37 41.8
HHM EPN	01 38 07.7
EL	38 51.5
DEC 27	
BOZ E(P)	02 11 49.0
DEC 27	
BMO EP	04 50 26.4
E	50 37.0
DEC 27	
H-05 42 15.5	
05.9S 145.3E	
h ABOUT 54KM	
COL EP	05 54 47.0
BMO EP	05 55 50.7
EUR E(P)	05 55 59.5
SJG EP'	06 01 51.8
DEC 27	
EUR IP	07 02 36.5

Date and Station	Phase (GCT)
	h m s
BMO EP	07 03 10.7
DEC 27	
H-07 02 56.9	
45.2N 113.3W	
h ABOUT 33KM	
BUT EPN	07 03 14.5
BZM E(P)	07 03 25.0
HHM EPN	07 03 46.1
E	03 55.6
EL	04 38.1
NEW E(P)	07 04 10.0
ES	05 04.0
EUR I(P)	07 04 31.7
DEC 27	
H-07 05 29.0	
45.1N 113.3W	
h ABOUT 33KM	
BUT EPN	07 05 46.8
EL	06 02.8
BZM E(P)	07 05 57.0
BMO EP	07 06 12.7
HHM E(P)	07 06 19.0
EL	07 11.3
NEW E(P)	07 06 44.0
IS	07 36.0
DEC 27	
SJG EP	07 52 01.5
IS	52 27.2
DEC 27	
BMO EP	08 46 40.0
DEC 27	
UKI E(P)	10 00 00.0
DEC 27	
BUT EPN	10 24 57.0
EL	25 09.8
HHM EPN	10 25 36.1
EL	26 19.1
DEC 27	
H-11 51 05.1	
24.2S 179.7E	
h ABOUT 496KM	
TUC EP	12 02 58.4
EUR IP	12 02 59.3
BMO EP	12 03 09.3
ALQ EP	12 03 18.6
COL EP	12 03 21.0
FGU EP	12 03 22.0

Date and Station	Phase (GCT) h m s
DEC 27	
ADK IP	13 12 56.7
IS	13 28.0
DEC 27	
BRW E(P)	13 23 23.0
DEC 27	
H-14 02 21.1	
78.6N 007.1E	
h ABOUT 33KM	
COL EP	14 09 22.0
HHM E(P)	14 11 03.6
NEW EP	14 11 07.0
BOZ E(P)	14 11 22.0
ALQ E(P)	14 12 29.6
DEC 27	
EUR IP	15 28 57.0
DEC 27	
BMO E(P)	15 48 20.5
DEC 27	
BMO EP	16 00 00.8
COL EP	16 00 12.0
DEC 27	
COL EP	16 09 15.0
DEC 27	
H-17 25 46.7	
9.7S 160.0E	
h ABOUT 57KM	
COL EP	17 38 11.0
EUR EP	17 38 50.0
E	38 58.3
DEC 27	
H-17 30 55.5	
19.0N 145.0E	
h ABOUT 298KM	
GUA E(P)	17 32 18.6
BRW EP D	17 40 48.1
COL EP	17 40 53.0
BOZ E(P)	17 42 02.0
NEW IP	17 42 39.7
BMO IP	17 42 44.6
EPP	43 56.9
HHM EP	17 42 49.6
EUR IP	17 42 58.2
FGU IP	17 43 18.0
EPP	44 24.9
TUC EP	17 43 30.0
ALQ EP	17 43 40.1

Date and Station	Phase (GCT) h m s
DEC 27	
HHM E(P)	19 20 08.6
DEC 27	
COL E(P)	20 29 18.2
DEC 27	
H-21 22 16.5	
13.3N 088.8W	
h ABOUT 78KM	
CSC EP	21 27 07.5
E	27 32.0
ES	31 10.0
SJG EP	21 27 11.0
IPP	27 29.0
IPCP	31 02.7
ES	31 12.0
PPCP	31 19.8
ISCP	34 35.0
ISCS	38 20.3
ALQ EP	21 27 51.5
EPCP	31 13.5
EPPCP	31 31.5
ES	32 20.0
ESCP	34 48.0
ESCS	38 50.0
TUC EP	21 27 58.0
FGU IP D	21 28 45.5
IPP	29 53.8
IPCP	31 28.2
ISCP	35 06.0
ISCS	39 07.0
RCD EP	21 28 48.5
E	28 58.5
SLC IP	21 28 56.0
EUR IP D	21 29 07.6
EPP	29 25.6
EPCP	31 35.7
ISCP	35 17.7
E	38 30.0
SLD IP C	21 29 24.7
IPP	29 41.2
IPCP	31 42.2
BOZ EP	21 29 26.5
E(PP)	30 54.0
ES	35 14.0
BUT EP	21 29 33.6
ES	35 29.6
BMO EP	21 29 42.1
HHM EP	21 29 51.6
EPCP	31 51.4
E	35 37.6
NEW IP	21 30 01.6
IPCP	31 55.0
COL IP	21 32 49.2
BRW EP	21 33 22.9
ADK EP	21 34 09.4

Date and Station	Phase (GCT) h m s
DEC 27	
H-21 26 10.0	
21.3S 175.7W	
h ABOUT 33KM	
COL E(P)	21 39 00.0
DEC 27	
BOZ EP	21 35 27.5
BMO IP	21 35 33.5
DEC 27	
H-21 51 18.2	
18.3N 102.9W	
h ABOUT 98KM	
TUC EP	21 54 55.2
ALQ E(P)	21 55 10.0
DEC 27	
ADK EP	22 03 05.5
ES	03 44.0
DEC 27	
BMO EP	22 40 03.6
DEC 27	
BUT EPN	22 56 24.6
DEC 27	
HHM EPN	22 57 10.4
EL	57 44.4
DEC 27	
EUR E(P)	23 02 10.5
EL	03 19.3
DEC 28	
EUR E(P)	00 03 45.5
DEC 28	
EUR EP	00 37 12.3
DEC 28	
H-01 03 43.3	
54.6N 161.2E	
h ABOUT 33KM	
BMO EP	01 12 40.8
EUR IP	01 13 14.8
DEC 28	
BMO E(P)	01 13 57.2
DEC 28	
LVN IP	02 30 28.0
EUR EP	02 30 34.2
I	30 36.9
ES	31 07.0
DEC 28	
H-02 36 39.4	
60.5N 126.5W	
h ABOUT 33KM	
COL E(P)	02 39 05.5
NEW I(P)	02 39 56.7
EL	43 54.0

Date and Station	Phase (GCT) h m s
BMO EP	02 40 29.1
BOZ EPN	02 40 39.5
EL	46 04.0
HHM E(P)	02 40 00.0
DEC 28	
COL EP	02 39 30.0
E	41 36.0
DEC 28	
EUR EP	02 40 24.4
IL	40 57.5
DEC 28	
BUT E(P)	02 45 39.1
DEC 28	
UKI E(P)	03 42 47.5
DEC 28	
COL EP	04 10 43.0
DEC 28	
UKI E(P)	06 17 45.0
DEC 28	
H-08 18 06.1	
25.5S 070.7W	
h ABOUT 32KM	
BHP EP	08 25 00.0
IS	30 33.0
SJG IP	08 26 06.4
IS	32 29.2
CSC E(P)	08 28 10.0
EPP	30 26.0
ES	36 16.0
WSC IP	08 28 40.5
E(S)	37 16.0
EP'P'	58 14.0
P'P'P'	09 16 39.0
PHI I(P)	08 28 51.6
IS	37 24.6
CHK EP	08 29 03.9
ES	37 41.9
ALQ EP	08 29 10.4
E(S)	38 17.5
EP'P'	57 21.0
TUC EP	08 29 10.5
GCA IP C	08 29 37.0
ES	39 03.0
LVN P(P)	08 29 47.0
E(S)	39 16.0
FGU EP C	08 29 47.0
ES	39 29.2
EPKKP	49 11.5
EP'P'	57 02.0
E	09 06 28.5
P'P'P'	16 56.5
RCD IP	08 29 49.0
E	29 57.0

Date and Station	Phase (GCT)
	h m s
SLC IP	08 29 53.1
IS	39 38.2
EUR IP	08 29 59.0
SLD EP C	08 30 05.2
IS	39 59.5
EPKKP	48 40.7
EP'P'	56 57.5
BOZ EP	08 30 15.0
E(S)	40 34.5
UKI E(P)	08 30 19.5
BMO EP	08 30 23.4
HHM IP C	08 30 30.0
EPKKP	48 33.0
NEW IP	08 30 35.0
IS	40 55.0
HON E(P)	08 31 42.0
SIT EP	08 31 46.0
COL EP	08 32 22.7
I	32 27.3
IPP	36 33.3
ISKS	42 49.0
IPKKP	47 59.0
I	49 11.0
EP'P'	55 42.5
P'P'P'	09 17 33.4
BRW IP'	08 36 41.9
I	36 45.0
IPP	37 31.9
EPKKP	47 30.9
ADK EP'	08 36 52.3
GUA EP'	08 37 39.0
DEC 28	
SJG IP D	09 06 45.5
FGU EP	09 10 27.7
RCD EP	09 10 29.8
E	10 37.5
BMO EP	09 11 03.4
HHM EP	09 11 10.0
E	11 18.0
E	16 36.0
DEC 28	
RCD E(P)	09 16 46.5
DEC 28	
H-09 25 09.1	
25.6S 071.0W	
h ABOUT 33KM	
BMO E(P)	09 37 26.8
HHM E(P)	09 37 31.6
DEC 28	
ALQ E(P)	09 48 42.0

Date and Station	Phase (GCT)
	h m s
HHM E(P)	09 49 50.4
DEC 28	
H-10 09 36.8	
25.0S 070.7W	
h ABOUT 57KM	
SJG IP	10 17 32.0
ALQ E(P)	10 20 36.8
BMO EP	10 21 48.9
HHM EP	10 21 51.6
DEC 28	
H-10 25 58.4	
25.3S 070.7W	
h ABOUT 33KM	
ALQ E(P)	10 37 02.5
BMO EP	10 38 15.5
DEC 28	
H-10 50 43.2	
16.1S 172.9W	
h ABOUT 41KM	
TUC E(P)	11 02 31.0
BMO EP	11 02 43.7
COL EP	11 03 04.0
DEC 28	
H-11 29 27.9	
25.1S 070.9W	
h ABOUT 48KM	
25.1S 070.9W	
ALQ E(P)	11 40 28.8
BMO EP	11 41 42.1
HHM E(P)	11 41 48.0
DEC 28	
NEW EP	13 23 22.0
DEC 28	
EUR EP	13 58 42.0
IS	59 15.0
DEC 28	
H-14 38 57.8	
25.4S 070.6W	
h ABOUT 33KM	
TUC E(P)	14 50 02.4
E	50 15.0
EUR EP	14 50 51.4
BMO EP	14 51 15.6
HHM EP	14 51 22.5
DEC 28	
BMO E(P)	16 43 22.3
DEC 28	
SLD EP	18 28 18.4
IL	28 35.4

Date and Station	Phase (GCT)
	h m s
DEC 28	
ALQ E(P)	19 25 43.0
E	25 51.8
E	26 31.0
DEC 28	
EUR IP	20 00 14.5
DEC 28	
SLD E(P)	20 24 54.3
I	24 59.3
E(S)	25 06.9
IL	25 10.2
DEC 28	
H-21 03 16.2	
25.5S 070.7W	
h ABOUT 33KM	
ALQ EP	21 14 21.8
EUR EP	21 15 09.5
BMO EP	21 15 34.9
HHM EP	21 15 41.0
DEC 28	
EUR EP	21 57 44.0
DEC 28	
EUR EP	22 33 03.0
EL	33 47.5
DEC 28	
EUR EP	22 49 10.8
DEC 28	
ALQ E(P)	22 53 30.2
COL EP	22 58 47.0
DEC 28	
BUT E(P)	23 06 45.5
DEC 28	
HHM E(P)	23 08 07.5
DEC 28	
EUR IP	23 36 03.8
DEC 28	
BMO E(P)	23 54 45.4
E	55 12.7
COL E(P)	23 59 04.0
DEC 29	
H-00 20 01.1	
25.5S 070.9W	
h ABOUT 33KM	
TUC E(P)	00 31 05.5
ALQ EP	00 31 06.0
EUR IP	00 31 54.5
BMO EP	00 32 19.2
DEC 29	
H-01 05 57.0	
21.0S 068.3W	
h ABOUT 145KM	

Date and Station	Phase (GCT)
	h m s
SJG EP	01 13 08.0
ALQ EP	01 16 33.2
TUC E(P)	01 16 35.0
EUR EP	01 17 24.5
BMO EP	01 17 49.1
EpP	18 23.3
DEC 29	
H-01 48 27.6	
25.5S 070.6W	
h ABOUT 22KM	
SJG IP	01 56 29.5
I	56 46.0
ES	02 02 54.0
CSC E(P)	01 58 33.8
E	58 41.0
WSC EP	01 59 03.8
EpP	59 11.3
E	02 00 27.1
TUC E(P)	01 59 34.0
EpP	59 42.0
ALQ EP	01 59 34.2
EpP	59 41.0
GCA EP	02 00 00.1
EpP	00 07.8
FGU EP C	02 00 10.7
EUR IP	02 00 22.9
SLD EP	02 00 29.7
IpP	00 37.0
BOZ EP	02 00 37.3
BUT EP	02 00 37.3
BMO EP	02 00 47.8
HHM EP	02 00 53.5
E	01 28.5
NEW EP	02 00 59.0
COL EP'	02 07 07.0
DEC 29	
ALQ E(P)	02 27 44.2
E	27 51.0
DEC 29	
UKI E(P)	03 56 16.0
DEC 29	
EUR E(P)	03 58 42.5
DEC 29	
EUR EP	04 05 18.5
DEC 29	
SLD E(P)	04 13 20.0
EUR EP	04 14 07.7

Date and Station	Phase	Phase (GCT) h m s
DEC 29		
EUR	EP	04 42 21.0
DEC 29		
HHM	E(P)	05 19 18.0
DEC 29		
SJG	EP	05 20 42.0
	EL	21 56.0
DEC 29		
H-06 30 02.1		
45.5N 026.4E		
h ABOUT 129KM		
BMO	EP	06 42 20.9
	E(pP)	42 54.3
DEC 29		
H-07 41 18.7		
36.2N 030.9E		
h ABOUT 33KM		
BMO	EP	07 54 34.2
DEC 29		
BMO	E(P)	07 56 00.0
DEC 29		
ADK	EP	08 07 39.0
COL	EP	08 11 18.0
EUR	IP	08 14 47.0
DEC 29		
H-11 26 51.6		
29.0S 071.1W		
h ABOUT 39KM		
SJG	EP	11 35 20.0
TUC	E(P)	11 38 10.5
ALQ	EP	11 38 12.4
FGU	EP	11 38 48.2
RCD	EP	11 38 54.0
	E	39 13.5
EUR	IP	11 38 58.7
BMO	EP	11 39 22.9
HHM	EP	11 39 26.6
NEW	IP	11 39 34.6
DEC 29		
H-11 56 22.9		
32.6S 111.9W		
h ABOUT 33KM		
TUC	EP	12 06 58.0
	ES	15 46.0
ALQ	EP	12 07 16.4
	E(S)	16 19.0
	E	20 39.0
EUR	IP	12 07 44.8
FGU	EP	12 07 51.0
BMO	IP	12 08 15.7
RCD	EP	12 08 16.5
HHM	EP	12 08 33.5
NEW	IP	12 08 33.8
DEC 29		
H-12 52 36.5		
32.3S 071.7W		
h ABOUT 71KM		
ALQ	EP	13 04 10.2
FGU	EP	13 04 44.6
EUR	IP	13 04 52.0
BMO	EP	13 05 16.6
HHM	E(P)	13 05 23.0
DEC 29		
ALQ	EP	13 38 59.5
BMO	EP	13 40 12.5
HHM	E(P)	13 40 16.5
DEC 29		
H-14 54 42.4		
13.3N 145.7E		
h ABOUT 48KM		
GUA	IP	14 54 58.0
	IS	55 07.0
COL	EP	15 05 38.0
NEW	EP	15 07 14.0
	EPCP	07 19.0
HHM	E(P)	15 07 28.5
EUR	IP	15 07 29.2
BUT	E(P)	15 07 36.2
DEC 29		
BMO	EP	15 20 11.0
DEC 29		
COL	EP	15 51 33.0
BMO	EP	15 54 06.0
DEC 29		
BMO	EP	17 41 05.7
DEC 29		
ALQ	E(P)	18 13 53.0
	E	14 10.0
DEC 29		
BMO	EP	18 36 34.7
DEC 29		
BMO	IP	19 31 33.8
DEC 29		
EUR	IP	20 01 13.2
DEC 29		
H-21 35 21.6		
29.8N 068.2E		
h ABOUT 24KM		
COL	IP	21 47 39.2
DEC 29		
H-22 16 22.3		
32.8S 111.7W		
h ABOUT 33KM		
BHP	EP D	22 25 28.0
	IS	32 51.0
	IL	44 31.0
TUC	E(P)	22 26 58.3
ALQ	EP	22 27 17.2
	E	36 20.0
	EL	40 38.0
GCA	EP	22 27 30.0
SLD	EP	22 27 33.0
EUR	IP	22 27 45.0
FGU	EP	22 27 52.8
BMO	EP	22 28 15.3
RCD	E(P)	22 28 18.0
	E	28 23.0
	E(S)	38 12.0
BMO	E(P)	22 28 24.7
NEW	EP	22 28 34.0
DEC 29		
BMO	EP	22 37 37.0
DEC 29		
ALQ	E(P)	22 39 24.2
	E	39 49.8
DEC 29		
EUR	E(P)	22 56 47.5
	EL	57 35.0
DEC 29		
H-23 16 20.4		
60.6S 050.5W		
h ABOUT 33KM		
ALQ	EP'	23 34 50.0
BMO	EP'	23 35 03.5
COL	IP'	23 35 50.8
BRW	EP'D	23 36 05.2
DEC 29		
BMO	EP	23 36 15.0
NEW	EP	23 36 41.0
DEC 29		
BMO	E(P)	23 47 00.9
DEC 30		
ALQ	EP	00 07 50.5
	EL	07 24.0
DEC 30		
GUA	EP	00 08 16.0
DEC 30		
BMO	EP	00 20 34.5
EUR	EP	00 20 46.0
DEC 30		
H-01 00 25.5		
17.9S 179.0E		
h ABOUT 658KM		
SLD	IP D	01 11 22.6
EUR	IP C	01 11 46.2
	EPP	14 02.8
TUC	EP	01 11 48.7
	EPP	14 06.0
BMO	IP	01 11 55.1
GCA	EP	01 11 56.6
COL	IP C	01 11 59.0
	IPP	14 17.3
NEW	IP	01 12 03.5
ALQ	EP	01 12 09.8
	EPP	14 28.6
FGU	IP C	01 12 11.0
	EPP	14 29.8
HHM	EP	01 12 12.0
BOZ	EP	01 12 13.5
	EPP	14 33.0
BRW	EP	01 12 16.5
DEC 30		
BRW	IP D	01 58 18.0
DEC 30		
BMO	EP	02 10 04.3
DEC 30		
BMO	IP	03 13 17.3
ALQ	EP	03 15 43.0
DEC 30		
BMO	EP	03 16 55.8
DEC 30		
H-03 51 40.3		
44.9N 117.0W		
h ABOUT 10KM		
BMO	I(P)	03 51 45.0
NEW	EP	03 52 34.0
HHM	E(P)	03 52 43.6
	E	52 56.0
EUR	E(P)	03 53 03.7
	EL	54 21.5

Date and Station	Phase (GCT)
	h m s
DEC 30	
H-04 04 00.1	
25.6S 070.7W	
h ABOUT 9KM	
ALQ EP	04 15 09.0
FGU EP	04 15 46.3
EUR EP	04 15 57.5
BOZ E(P)	04 16 12.0
BMO EP	04 16 21.6
HHM EP	04 16 28.0
DEC 30	
RCD EP	04 16 51.8
DEC 30	
COL EP	04 24 02.0
DEC 30	
H-04 24 42.3	
7.2S 119.9E	
h ABOUT 592KM	
BRW EP	04 37 00.5
EpP	39 14.4
NEW EP'	04 42 22.0
SLD EP'	04 42 23.0
BMO EP'	04 42 23.4
HHM EP'	04 42 24.6
EUR IP'D	04 42 29.1
EpP	44 54.3
BOZ IP'C	04 42 31.0
TUC EP'	04 42 41.0
ALQ EP'	04 42 46.6
DEC 30	
H-04 40 06.8	
52.8N 160.4E	
h ABOUT 33KM	
BRW EP	04 45 40.0
COL IP C	04 46 01.2
HHM E(P)	04 49 05.6
BOZ E(P)	04 49 33.5
EUR IP C	04 49 46.2
I	52 58.3
RCD EP	04 50 16.8
DEC 30	
BMO EP	04 44 41.3
ALQ EP	04 45 11.4
DEC 30	
BMO IP	04 48 41.0

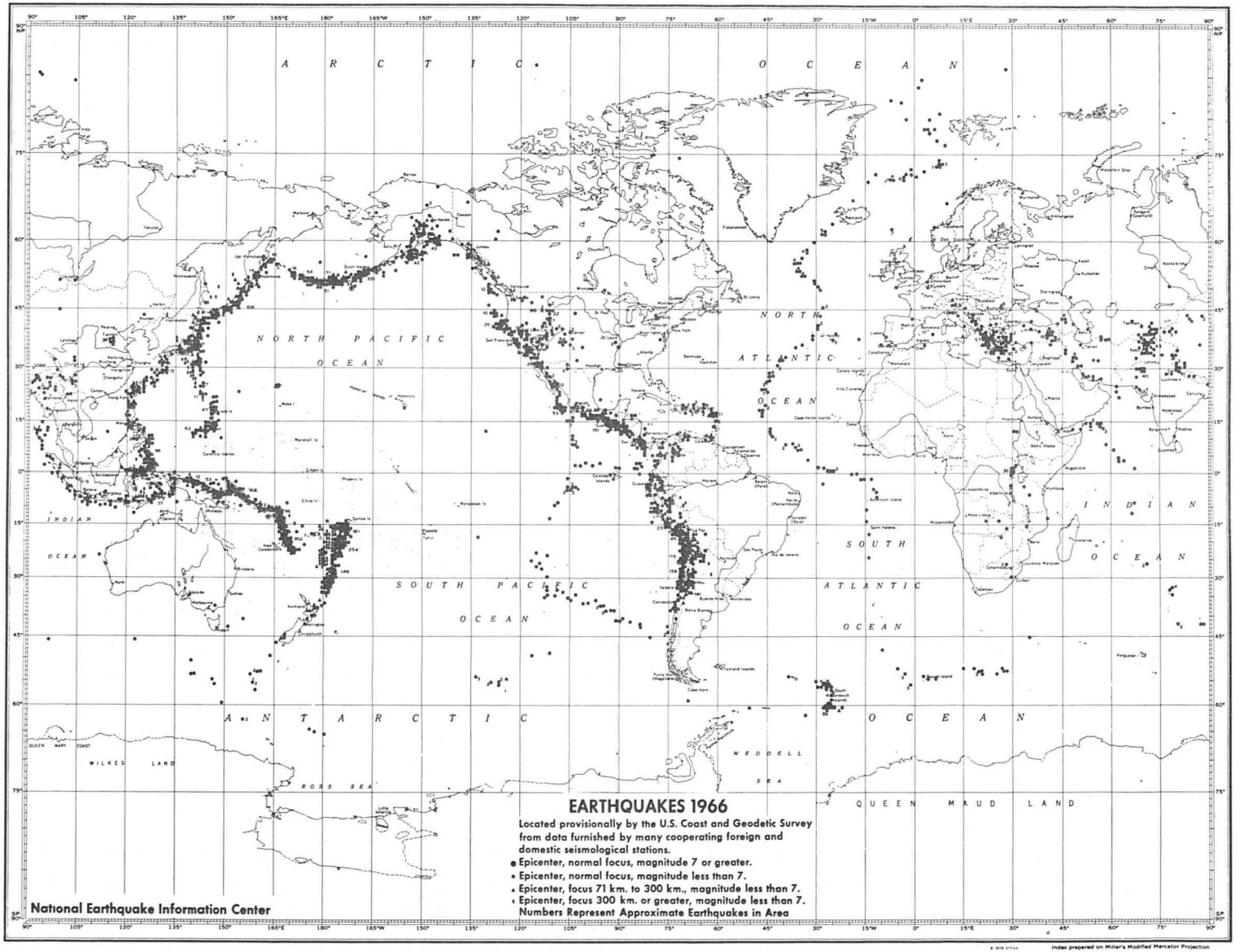
Date and Station	Phase (GCT)
	h m s
DEC 30	
BMO EP	04 52 44.6
DEC 30	
BMO E(P)	04 55 20.8
DEC 30	
NEW EP	05 21 40.0
DEC 30	
FGU EP	05 42 37.1
DEC 30	
BMO EP	06 19 24.0
DEC 30	
H-07 09 51.0	
24.3S 180.0E	
h ABOUT 500KM	
EUR E(P)	07 21 42.5
TUC EP	07 21 43.2
BMO EP	07 21 54.0
COL EP	07 22 04.0
DEC 30	
COL IP C	07 27 03.9
IS	27 41.2
DEC 30	
H-09 53 36.9	
24.8S 070.6W	
h ABOUT 45KM	
SJG EP	10 01 31.0
ALQ IP	10 04 36.8
EpP	04 46.5
TUC EP	10 04 37.8
EpP	04 47.5
GCA EP	10 05 03.0
FGU EP	10 05 14.0
RCD E(P)	10 05 20.5
EUR IP	10 05 26.0
SLD EP	10 05 32.8
BOZ EP	10 05 40.5
E	05 49.5
BUT EP	10 05 44.2
BMO EP	10 05 50.9
EpP	06 01.4
HHM EP	10 05 56.6
EpP	06 08.6
NEW EP	10 06 02.0
DEC 30	
H-10 55 04.3	
42.5N 124.8W	
h ABOUT 33KM	
BMO EP	10 56 31.2

Date and Station	Phase (GCT)
	h m s
DEC 30	
BMO EP	11 15 27.9
DEC 30	
BMO EP	11 18 23.5
DEC 30	
BMO EP	11 21 46.7
DEC 30	
COL EP	11 33 34.9
DEC 30	
H-11 55 52.7	
25.5S 070.7W	
h ABOUT 34KM	
SJG EP	12 03 53.5
ALQ EP	12 06 57.2
E	07 10.0
TUC E(P)	12 06 57.5
FGU EP	12 07 35.0
RCD E(P)	12 07 41.2
EUR IP	12 07 46.3
BMO EP	12 08 10.5
HHM EP	12 08 17.0
NEW EP	12 08 22.0
DEC 30	
H-12 30 25.6	
25.0S 070.7W	
h ABOUT 34KM	
TUC E(P)	12 41 28.0
EpP	41 37.5
ALQ EP	12 41 28.2
FGU EP	12 42 05.5
EpP	42 15.1
RCD E(P)	12 42 12.0
EUR IP	12 42 17.5
BOZ E(P)	12 42 31.5
EpP	42 39.6
BMO EP	12 42 40.5
EpP	42 51.2
HHM EP	12 42 47.6
NEW EP	12 42 53.0
DEC 30	
H-13 14 50.7	
18.0S 179.0E	
h ABOUT 670KM	
EUR EP	13 26 10.9
BMO EP	13 26 19.4
COL IP	13 26 24.0

Date and Station	Phase (GCT)
	h m s
DEC 30	
EUR EP	16 38 24.9
COL EP	16 40 59.0
BRW EP D	16 41 35.0
DEC 30	
EUR E(P)	16 41 32.2
DEC 30	
BMO EP	16 44 03.2
NEW IP	16 44 48.0
DEC 30	
BMO EP	16 46 39.7
HHM E(P)	16 46 40.0
DEC 30	
H-17 09 59.0	
24.3S 067.1W	
h ABOUT 175KM	
ALQ IP D	17 20 51.6
TUC E(P)	17 20 53.0
EUR IP	17 21 40.8
BMO EP	17 22 03.9
HHM EP	17 22 08.7
DEC 30	
EUR IP	17 16 05.1
DEC 30	
BUT EPN	17 45 00.3
HHM E(P)	17 45 46.0
E	46 21.8
DEC 30	
ALQ E(P)	18 18 38.8
EL	19 14.5
DEC 30	
H-18 35 15.2	
10.1N 084.7W	
h ABOUT 43KM	
BHP EP	18 36 33.5
ALQ EP	18 41 36.8
EUR EP	18 42 50.8
BMO EP	18 43 22.7
DEC 30	
SJG EP	18 45 45.5
IL	46 10.0
DEC 30	
H-18 52 37.9	
37.3N 116.5W	
h ABOUT 33KM	
EUR IP	18 53 13.2
DEC 30	
BOZ E(P)	19 06 28.5

Date and Station	Phase	Phase (GCT) h m s
DEC 30		
H-19 20 18.6		
18.5N 145.1E		
h ABOUT 418KM		
GUA	E(P)	19 21 42.0
COL	EP	19 30 08.4
BMO	EP	19 31 56.4
DEC 30		
BMO	IP	19 59 07.9
	ES	20 00 16.2
DEC 30		
H-20 12 14.6		
67.1N 147.2W		
h ABOUT 33KM		
COL	IP D	20 12 47.9
	IS	12 16.2
DEC 30		
COL	EP	20 34 27.0
DEC 30		
COL	EP	21 15 17.0
DEC 30		
BOZ	E(P)	21 46 25.5
DEC 30		
ALQ	E(P)	21 57 36.0
	EL	58 10.0
DEC 30		
SLD	EP	22 21 26.1
DEC 30		
ALQ	E(P)	23 01 36.4
DEC 30		
COL	EP	23 50 08.0
GCA	E(P)	23 53 36.0
	IS	54 01.0
EUR	IP	23 54 01.2
DEC 31		
BMO	EP	00 16 22.3
COL	IP	00 16 43.0
DEC 31		
H-00 29 17.2		
55.6N 110.7E		
h ABOUT 33KM		
COL	EP	00 37 38.0
	E	38 15.0
HHM	E(P)	00 40 25.4
BMO	EP	00 40 37.9
EUR	IP C	00 41 10.2
	I	41 48.4
ALQ	EP	00 41 48.2
	E	42 26.4
DEC 31		
TUC	E(P)	00 34 10.5
COL	E(P)	00 38 15.0
DEC 31		
HHM	EP	00 41 03.7
	E	41 30.7
BMO	E(P)	00 41 16.4
EUR	EP	00 41 48.4
DEC 31		
BMO	E(P)	02 06 27.7
DEC 31		
H-02 16 25.1		
23.0S 068.5W		
h ABOUT 99KM		
BMO	E(P)	02 28 29.5
DEC 31		
BMO	EP	02 46 51.4
DEC 31		
BMO	E(P)	03 13 30.8
DEC 31		
H-03 21 30.6		
17.4S 172.1E		
h ABOUT 33KM		
COL	IP	03 34 15.1
EUR	IP	03 34 17.6
BMO	EP	03 34 23.0
NEW	EP	03 34 31.0
ALQ	EP	03 34 42.2
DEC 31		
BMO	E(P)	04 54 32.8
DEC 31		
HHM	E(P)	05 05 18.0
EUR	IP	05 06 03.2
ALQ	EP	05 06 41.2
DEC 31		
COL	EP	05 14 06.5
	IS	15 19.0
BMO	EP	05 18 38.4
DEC 31		
COL	EP	06 52 30.5
DEC 31		
BMO	EP	09 05 19.6
DEC 31		
H-12 31 54.4		
25.4S 070.4W		
h ABOUT 49KM		
BMO	EP	12 44 10.9
DEC 31		
NEW	EP	15 02 38.0
DEC 31		
H-15 30 29.8		
00.5N 025.0W		
h ABOUT 33KM		
BMO	EP	15 43 33.6
DEC 31		
COL	EP	15 40 06.0
DEC 31		
H-16 42 08.7		
25.3S 071.2W		
h ABOUT 33KM		
ALQ	EP	16 53 12.0
EUR	E(P)	16 53 53.0
BMO	EP	16 54 24.7
DEC 31		
BMO	EP	16 53 47.8
DEC 31		
SJG	IP	17 14 11.9
	IS	14 29.5
DEC 31		
EUR	EP	17 45 50.7
	EL	46 22.5
DEC 31		
H-18 23 06.6		
11.9S 166.4E		
h ABOUT 56KM		
GUA	EP	18 29 40.0
	IS	35 09.0
SLD	EP	18 35 29.0
	I	35 51.6
	IPP	39 14.5
COL	IP	18 35 30.6
BRW	EP	18 35 43.0
	I	36 11.3
EUR	EP	18 35 52.5
BMO	EP	18 35 55.3
	E	36 18.2
NEW	EP	18 36 00.0
	I	36 24.0
TUC	EP	18 36 03.1
GCA	EP	18 36 07.0
	E	36 33.5
	EPKKP	53 46.5
HHM	EP	18 36 10.2
	I	36 42.0
	EPP	39 35.0
	EPKKP	53 58.0
	EP'P'	19 02 05.7
BOZ	EP	18 36 15.0
	E	36 39.0
	E	40 25.0
	EPKKP	52 49.0
FGU	EP	18 36 17.0
	I	36 44.8
ALQ	EP	18 36 22.2
	E	46 56.0
SJG	EP'	18 42 09.5
	EPP	44 20.0
	ESKP	45 38.5
	ESP	54 40.0
	ESKKP	55 03.0
WSC	EP'	18 42 19.7
	EPP	43 34.2
	E	52 24.7
DEC 31		
ADK	EP	18 34 04.4
	I	34 32.8
DEC 31		
BHP	IP D	18 38 19.0
	IS	52 47.0
SJG	EP	18 39 14.0
DEC 31		
COL	EP	18 49 30.0
SLD	E(P)	18 55 55.5
DEC 31		
H-18 53 12.9		
11.7S 166.0E		
h ABOUT 33KM		
COL	EP	19 05 37.0
BRW	EP	19 05 51.0
NEW	EP	19 06 12.0
HHM	EP	19 06 20.0
	E	06 34.0
BUT	EP	19 06 26.0
FGU	E(P)	19 06 32.8
ALQ	E(P)	19 06 37.0
SJG	EP'	19 12 22.0
	ESKP	15 40.2
DEC 31		
COL	EP	19 12 07.7
BMO	EP	19 12 33.4
HHM	EP	19 12 50.7
DEC 31		
SLD	E(P)	19 20 41.2
DEC 31		
H-19 38 30.6		
11.6S 165.9E		
h ABOUT 33KM		

Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)
	h m s		h m s		h m s		h m s
COL EP	19 50 56.0	COL E(P)	22 27 37.0				
		I	27 54.3				
BRW EP	19 51 08.2	ES	38 18.0				
BMO EP	19 51 22.0	SLD EP	22 27 46.0				
		I	27 53.1				
NEW EP	19 51 27.0	EPP	31 17.0				
HHM EP	19 51 38.0	BRW E(P)	22 27 50.2				
		I	28 06.0				
ALQ E(P)	19 51 50.0	EUR EP D	22 28 05.5				
DEC 31		IPP	28 16.0				
HHM E(P)	19 43 00.0	EPP	31 42.5				
E	44 08.7	EPKKP	45 58.6				
		EP'P'	54 07.0				
DEC 31							
BMO E(P)	20 16 05.5	BCN EP	22 28 06.7				
		EPP	31 53.0				
DEC 31							
H-20 59 45.0		BMO EP	22 28 08.0				
11.4S 165.8E		E	28 35.5				
h ABOUT 33KM							
		NEW EP	22 28 11.0				
COL EP	21 12 11.0	E	28 18.0				
		E	28 25.0				
EUR E(P)	21 12 34.0						
		TUC E(P)	22 28 21.2				
BMO EP	21 12 37.7						
		HHM EP	22 28 25.5				
DEC 31							
BRW E(P)	21 03 12.2	BOZ EP	22 28 31.5				
		ES	39 03.5				
DEC 31							
H-21 20 21.5		ALQ E(P)	22 28 38.0				
12.2S 165.8E							
h ABOUT 33KM		DEC 31					
		COL E(P)	22 39 15.2				
COL E(P)	21 32 45.0						
		DEC 31					
EUR EP	21 33 13.4	HHM E(P)	22 45 44.0				
BMO E(P)	21 33 15.5	DEC 31					
		TUC E(P)	22 53 58.0				
DEC 31							
ALQ E(P)	21 27 08.0	BUT E(P)	22 54 02.1				
EL	28 08.0						
		DEC 31					
DEC 31		BMO EP	23 28 37.2				
FGU E(P)	21 38 36.8						
		DEC 31					
DEC 31		COL EP	23 50 26.0				
COL EP	21 43 30.5						
		BMO EP	23 50 44.8				
DEC 31							
H-21 40 38.4							
11.7S 165.8E							
h ABOUT 33KM							
BMO E(P)	21 53 30.8						
DEC 31							
BMO E(P)	21 42 57.2						
DEC 31							
BMO E(P)	22 00 24.0						
DEC 31							
H-22 15 14.0							
12.3S 165.6E							
h ABOUT 33KM							
GUA E(P)	22 21 52.0						
IS	27 07.0						


ARCTIC OCEAN
NORTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
INDIAN OCEAN
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
INDIAN OCEAN
ANTARCTIC OCEAN
WILKES LAND
ROSS SEA
WEDDELL SEA
QUEEN MAUD LAND
EARTHQUAKES 1966
Located provisionally by the U.S. Coast and Geodetic Survey from data furnished by 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 less than 7.
Epicenter, focus 300 km. or greater, magnitude less than 7.
Numbers Represent Approximate Earthquakes in Area
National Earthquake Information Center
Index prepared on Miller's Modified Mercator Projection