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November 1966

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CONTENTS

List of Stations.....1
Provisional Epicenters.....2
Seismogram Interpretations.....14

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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March 4, 2011

1966

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 seismograms 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
NOV	H M S	DEG	DEG	KM		
1	02 22 45.7	40.3 N	140.1 E	170	4.4	HONSHU, JAPAN.
1	03 35 17.4	6.5 S	128.9 E	204	4.6	BANDA SEA.
1	04 52 13.2	10.8 N	94.7 E	48	4.8	ANDAMAN ISLANDS REGION.
1	05 43 29*	52.0 N	173.0 E	28	4.4	NEAR ISLANDS, ALEUTIAN ISLANDS.
1	07 01 00.7	43.2 N	143.5 E	132	5.2	HOKKAIDO, JAPAN REGION. FELT.
1	07 40 28.0	40.2 N	106.9 W	33	4.0	COLORADO.
1	11 32 08.2	31.3 N	131.7 E	8	4.6	KYUSHU, JAPAN.
1	13 27 04*	24.1 N	126.5 E	112		RYUKYU ISLANDS.
1	14 28 29*	37.3 N	114.3 W	33		SOUTHERN NEVADA.
1	14 55 30.9	16.0 N	97.4 W	33	4.5	OAXACA, MEXICO.
1	16 45 03*	15.0 S	173.2 W	33	4.6	TONGA ISLANDS.
1	17 47 02*	15.3 S	172.3 W	20	4.4	SAMOA ISLANDS REGION.
1	17 53 37.5	50.2 N	157.1 E	34	4.4	KURILE ISLANDS.
1	19 50 20*	40.3 N	125.1 W	33	4.0	OFF COAST OF NORTHERN CALIFORNIA.
1	19 58 04*	19.4 S	177.4 W	576	3.5	FIJI ISLANDS REGION.
1	22 22 22*	35.0 N	23.6 E	21	4.8	CRETE.
2	00 22 06*	31.7 N	131.8 E	104	4.2	KYUSHU, JAPAN.
2	00 59 07.7	36.8 N	69.1 E	34	4.6	HINDU KUSH REGION.
2	04 43 11.2	37.3 N	114.3 W	33		SOUTHERN NEVADA.
2	05 35 51*	18.3 S	178.0 W	604	3.9	FIJI ISLANDS REGION.
2	09 14 07*	37.7 N	141.8 E	61	4.2	NEAR EAST COAST OF HONSHU, JAPAN.
2	11 37 07.9	6.9 N	73.0 W	160	4.1	NORTHERN COLOMBIA.
2	11 50 54.5	28.9 N	139.3 E	399	4.4	BONIN ISLANDS REGION.
2	17 25 46.9	43.0 N	145.7 E	50	4.1	HOKKAIDO, JAPAN REGION. FELT.
2	18 51 18*	14.1 N	91.9 W	33	4.1	GUATEMALA.
2	20 00 11.6	6.2 S	153.6 E	37	4.6	NEW BRITAIN REGION.
3	03 29 13.2	15.1 S	167.5 E	124	4.8	NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE AND NORSUP.
3	08 04 54*	17.6 S	63.7 W	37	4.4	BOLIVIA.
3	09 02 13.0	21.5 S	68.9 W	104	4.7	CHILE-BOLIVIA BORDER REGION.
3	11 15 41.9	35.5 N	118.4 W	3	3.6	CENTRAL CALIFORNIA. MAG. 3 (PAS), 3.2-3.6 (BRK). 35°31.2′N., 118°24.1′ W. HYPOCENTER BY PASADENA.
3	11 16 55.7	35.5 N	118.4 W	0		CENTRAL CALIFORNIA. MAG. 3 (PAS). 35° 32.2′N., 118°23.9′W. HYPOCENTER BY PASADENA.
3	11 31 55*	37.4 N	114.2 W	33		SOUTHERN NEVADA.
3	11 37 21.9	19.1 N	67.9 W	37	5.2	MONA PASSAGE.
3	13 01 42*	17.1 S	179.0 W	628	3.5	FIJI ISLANDS REGION.
3	13 17 50*	38.8 N	30.9 E	5	4.6	TURKEY.
3	13 26 34.0	15.4 S	75.3 W	73	4.4	NEAR COAST OF PERU.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
3	16 24 32.7	19.2 N	68.0 W	33	5.6	NORTH ATLANTIC OCEAN. MAG. 6-6 1/4 (PAS), 5 1/4 (PAL). FELT AT CAYEY AND CAGUAS, PUERTO RICO.
3	17 26 06*	19.3 N	67.9 W	19	4.2	MONA PASSAGE.
3	20 12 16.6	44.6 N	149.1 E	47	4.1	KURILE ISLANDS. FELT.
3	21 11 16.5	7.6 S	107.9 E	33	5.1	JAVA.
3	21 43 10.3	6.6 N	60.4 E	33	5.1	CARLSBERG RIDGE.
4	02 02 00*	0.0 N	126.2 E	33	4.5	MOLUCCA PASSAGE.
4	03 00 38.5	36.0 N	141.2 E	36	3.9	NEAR EAST COAST OF HONSHU, JAPAN.
4	03 55 03.2	35.0 S	107.6 W	33	4.8	EASTER ISLAND CORDILLERA.
4	06 05 19.2	14.7 N	93.3 W	33	4.7	NEAR COAST OF CHIAPAS, MEXICO.
4	06 36 38.9	14.7 N	93.3 W	33	4.8	NEAR COAST OF CHIAPAS, MEXICO.
4	06 49 26*	14.7 N	93.3 W	33	4.1	NEAR COAST OF CHIAPAS, MEXICO.
4	07 13 05*	15.0 N	93.2 W	49	3.9	NEAR COAST OF CHIAPAS, MEXICO.
4	07 15 19.8	28.4 N	130.4 E	33	4.4	RYUKYU ISLANDS.
4	07 21 30.7	28.4 N	130.4 E	33	4.8	RYUKYU ISLANDS.
4	08 21 15*	14.7 N	92.7 W	33	4.3	NEAR COAST OF CHIAPAS, MEXICO.
4	08 55 50.8	4.4 S	77.8 W	57	4.6	NORTHERN PERU.
4	09 00 55.8	39.9 N	78.0 E	51	4.2	SOUTHERN SINKIANG PROV., CHINA.
4	09 15 01*	4.4 S	77.8 W	86	4.5	NORTHERN PERU.
4	10 52 57.4	19.2 N	67.8 W	33	4.7	MONA PASSAGE. FELT.
4	11 01 32.9	45.2 N	151.5 E	33		KURILE ISLANDS.
4	13 39 58*	15.9 N	61.1 W	34		LEEWARD ISLANDS.
4	14 49 59.4	17.0 N	99.6 W	33	4.8	GUERRERO, MEXICO. FELT AT ACAPULCO.
4	15 43 07.0	26.0 S	178.4 E	594	4.9	SOUTH OF FIJI ISLANDS.
4	17 36 35*	14.1 N	93.7 W	33	3.9	NEAR COAST OF CHIAPAS, MEXICO.
4	20 30 12.6	49.3 N	128.7 W	33	4.2	VANCOUVER ISLAND REGION.
4	22 17 33*	34.1 N	72.5 E	33		WEST PAKISTAN.
5	02 13 50.7	41.7 S	80.1 E	33	5.4	MID-INDIAN RISE.
5	02 23 10.8	44.5 N	111.1 W	33	3.6	HEBGEN LAKE REGION.
5	02 30 12.8	19.2 S	169.3 E	13	5.3	NEW HEBRIDES ISLANDS. MAG. 5.3-5.7 (BRK). FELT ON TANA AND AT PORT VILA.
5	02 42 44*	19.3 S	169.3 E	19	4.3	NEW HEBRIDES ISLANDS.
5	05 14 36*	19.2 S	67.5 W	237	4.2	SOUTHERN BOLIVIA.
5	05 18 19.1	31.7 N	115.5 W	33	4.3	BAJA CALIFORNIA. MAG. 4.7 (PAS).
5	05 43 19*	19.3 S	169.2 E	33		NEW HEBRIDES ISLANDS.
5	06 57 31.3	54.2 N	164.2 W	58	4.2	UNIMAK ISLAND REGION.
5	07 08 33*	14.6 N	93.2 W	33	3.8	NEAR COAST OF CHIAPAS, MEXICO.
5	09 37 41*	5.7 S	146.9 E	149		EAST NEW GUINEA REGION.
5	10 46 06*	6.1 S	151.6 E	62	4.5	NEW BRITAIN REGION.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
5	12 19 48*	15.8 S	174.5 W	33	4.4	TONGA ISLANDS.
5	12 45 13.5	15.2 S	175.1 W	33	5.5	TONGA ISLANDS. MAG. 6-6 1/4 (PAS), 5.6 (BRK).
5	13 31 30.9	35.9 N	120.6 W	19	4.2	CENTRAL CALIFORNIA. MAG. 3.3 (BRK).
5	13 42 07.5	22.6 S	172.8 E	72	4.9	LOYALTY ISLANDS REGION.
5	14 45 00.000					37° 10′ 12″N. 116° 02′ 50″W. NEVADA TEST SITE. "SIMMS". SHOT ELEVATION 1105.2 METERS (AEC).
5	16 03 49.2	11.0 S	166.9 E	41	4.5	SANTA CRUZ ISLANDS.
5	16 06 21*	45.1 N	151.5 E	33		KURILE ISLANDS.
5	18 53 03.3	28.2 N	84.0 E	33	5.1	NEPAL.
5	21 36 47*	59.5 N	152.2 W	102	4.5	SOUTHERN ALASKA.
5	23 59 45*	44.4 N	149.1 E	40	4.2	KURILE ISLANDS.
6	01 28 35.8	4.7 S	153.0 E	69		NEW IRELAND REGION.
6	01 28 53.8	39.9 N	78.1 E	47	4.5	SOUTHERN SINKIANG PROV., CHINA.
6	03 50 09.4	45.4 N	151.3 E	41	4.6	KURILE ISLANDS.
6	08 29 14.6	59.9 N	29.9 W	33	4.8	NORTH ATLANTIC OCEAN.
6	08 36 05.3	24.2 S	67.0 W	184	4.5	CHILE-ARGENTINA BORDER REGION.
6	10 50 54*	47.9 N	119.1 W	33		WASHINGTON.
6	14 22 07*	19.3 S	169.3 E	33		NEW HEBRIDES ISLANDS.
6	14 43 17.4	17.9 S	178.6 W	560	5.0	FIJI ISLANDS REGION.
6	18 51 41.7	42.2 N	19.1 E	19	4.4	YUGOSLAVIA. FELT AT BAR AND TITOGRAD.
6	19 46 52*	20.3 S	178.5 W	412	4.1	FIJI ISLANDS REGION.
6	21 51 41.7	1.5 N	66.9 E	33	4.8	CARLSBERG RIDGE.
6	23 49 55.9	20.2 S	69.3 W	111	4.4	NORTHERN CHILE.
7	00 42 58.6	32.8 N	104.3 E	33	4.7	SZECHWAN PROVINCE, CHINA.
7	04 08 14.4	34.1 N	80.7 E	45	4.7	TIBET.
7	06 10 05.0	37.3 N	114.2 W	33		SOUTHERN NEVADA.
7	07 00 04*	19.7 S	69.4 W	128	4.1	NORTHERN CHILE.
7	08 30 46.4	46.3 N	153.3 E	25	4.5	KURILE ISLANDS.
7	08 55 51.5	7.2 N	125.5 E	92	5.0	MINDANAO, PHILIPPINE ISLANDS. FELT AT DAVAO AND CAGAYAN DE ORO.
7	12 49 58.5	22.5 S	68.6 W	103	4.6	NORTHERN CHILE.
7	13 16 45.8	41.9 S	88.3 E	33	5.1	SOUTHEAST INDIAN RISE.
7	13 23 37*	29.3 S	71.4 W	51	4.4	NEAR COAST OF CENTRAL CHILE.
7	14 29 06*	22.2 S	68.8 W	110	4.1	NORTHERN CHILE.
7	17 37 39.9	15.3 S	173.3 W	33	5.0	TONGA ISLANDS.
7	18 41 08.3	46.8 N	151.4 E	125	4.5	KURILE ISLANDS.
7	20 26 15.1	5.9 S	152.1 E	43	5.0	NEW BRITAIN REGION.
7	20 31 30.2	7.7 S	75.9 W	115	5.0	NORTHERN PERU.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
7	23 24 04*	19.3 S	169.3 E	146	4.1	NEW HEBRIDES ISLANDS.
7	23 28 32*	44.0 N	127.2 W	33	4.0	OFF COAST OF OREGON.
8	03 14 12.0	36.1 N	50.8 E	38	5.0	IRAN.
8	03 19 17.3	23.4 S	115.2 W	33	5.0	EASTER ISLAND CORDILLERA.
8	03 50 09.2	51.5 N	178.5 W	49	4.7	ANDREANOF ISLANDS, ALEUTIAN IS.
8	11 35 57.9	52.5 N	173.1 E	41	4.9	NEAR ISLANDS, ALEUTIAN ISLANDS.
8	13 15 18.7	35.1 N	140.1 E	60	4.7	NEAR EAST COAST OF HONSHU, JAPAN.
8	13 35 36*	45.3 N	150.4 E	33		KURILE ISLANDS.
8	14 30 03.0	25.9 N	96.8 E	51	4.2	BURMA.
8	14 55 35*	10.6 S	78.5 W	33	4.5	NEAR COAST OF PERU.
8	15 36 30.6	4.7 S	102.0 E	33	5.1	SOUTHERN SUMATRA.
9	02 01 58.1	14.9 S	71.7 W	132	4.5	PERU. FELT AT AREQUIPA.
9	02 17 26*	58.0 N	152.1 W	33	4.3	KODIAK ISLAND REGION.
9	02 35 13*	57.1 N	150.6 W	34	4.5	GULF OF ALASKA.
9	03 18 27*	19.4 N	109.1 W	33	4.2	REVILLA GIGEDO ISLANDS REGION.
9	05 40 02.6	28.7 S	68.8 W	86	4.4	LA RIOJA PROVINCE, ARGENTINA.
9	07 30 17*	4.2 S	105.6 W	33	4.1	NORTHERN EASTER I. CORDILLERA.
9	07 55 15.8	58.8 S	25.6 W	33	4.6	SOUTH SANDWICH ISLANDS REGION.
9	10 11 48.6	39.0 N	70.8 E	27	4.6	TADZHIK SSR.
9	10 48 47.1	37.6 N	72.3 E	190	4.7	TADZHIK SSR.
9	11 26 24.2	26.9 N	125.6 E	36	5.3	NORTHEAST OF TAIWAN.
9	14 09 44.9	51.9 N	173.8 W	50	4.8	ANDREANOF ISLANDS, ALEUTIAN IS. MAG. 4.8 (BRK).
9	15 12 27.9	39.2 N	20.6 E	43	5.0	GREECE-ALBANIA BORDER REGION. FELT AT PREVEZA AND PARGA, GREECE.
9	17 54 03*	18.7 S	67.4 W	245	4.1	BOLIVIA.
9	20 37 18.0	19.4 N	67.8 W	33	4.2	MONA PASSAGE.
9	21 55 37.6	19.2 N	67.9 W	18	4.7	MONA PASSAGE.
10	03 02 32.7	31.9 S	68.4 W	113	6.0	SAN JUAN PROVINCE, ARGENTINA. FELT AT SAN JUAN AND MENDOZA.
10	05 06 12.0	27.5 N	142.2 E	33	4.6	BONIN ISLANDS REGION.
10	06 58 11*	20.0 S	178.0 W	539	4.1	FIJI ISLANDS REGION.
10	09 56 24.4	55.8 S	27.4 W	80	4.8	SOUTH SANDWICH ISLANDS REGION.
10	13 29 55*	51.1 N	178.7 E	33	4.3	RAT ISLANDS, ALEUTIAN ISLANDS.
10	17 28 21*	37.3 N	114.2 W	33		SOUTHERN NEVADA.
10	22 05 04*	20.8 S	178.5 W	457	4.3	FIJI ISLANDS REGION.
11	01 34 34*	51.2 N	175.8 E	33	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
11	03 19 16.0	25.0 N	109.2 W	33	4.3	GULF OF CALIFORNIA.
11	03 26 11*	34.0 N	142.6 E	33	3.9	OFF EAST COAST OF HONSHU, JAPAN.

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NOV	H M S	DEG	DEG	KM		
11	09 47 37.2	18.9 S	168.8 E	84	4.9	NEW HEBRIDES ISLANDS. FELT AT PORT VILA.
11	12 00 00.138					37° 08' 04"N. 116° 02' 59"W. NEVADA TEST SITE. "AJAX". SHOT ELEVATION 1043.3 METERS (AEC).
11	15 31 04.5	52.2 N	169.1 W	40	5.4	FOX ISLANDS, ALEUTIAN ISLANDS.
11	16 03 37.3	50.2 N	155.5 E	136	5.1	KURILE ISLANDS. FELT.
11	16 16 13.0	45.5 N	16.0 E	29	4.9	YUGOSLAVIA. SLIGHT DAMAGE AT TUPUSKO AND GLINA.
11	16 45 35*	39.6 N	110.5 W	15	3.2	UTAH.
11	17 38 14*	55.2 S	1.2 W	33		BOUVET ISLAND REGION.
11	17 57 43.4	17.6 S	177.2 W	390	4.6	FIJI ISLANDS REGION.
11	18 21 05.8	40.4 N	127.0 W	33	4.7	OFF COAST OF NORTHERN CALIFORNIA. MAG. 4.9 (BRK).
11	18 35 12.3	52.7 N	169.3 W	37	4.4	FOX ISLANDS, ALEUTIAN ISLANDS.
11	20 17 46.7	1.2 S	79.2 W	120	4.0	ECUADOR.
11	22 33 33.7	31.6 S	71.5 W	33	4.7	NEAR COAST OF CENTRAL CHILE. FELT AT LOS VILOS.
12	00 44 20.6	19.6 N	64.4 W	30	4.4	VIRGIN ISLANDS.
12	04 07 27.6	8.7 N	83.4 W	35	4.7	COSTA RICA.
12	04 57 38.1	8.6 S	127.2 E	33	4.5	TIMOR.
12	06 00 41*	41.9 N	112.8 W	33		UTAH.
12	06 15 32.6	10.7 S	166.2 E	177	4.2	SANTA CRUZ ISLANDS.
12	08 28 22*	23.3 N	61.6 E	33	4.7	NEAR COAST OF WEST PAKISTAN.
12	09 00 03.4	2.6 S	139.0 E	48		NEAR N. COAST OF WEST NEW GUINEA.
12	09 50 57.5	26.7 S	175.7 W	58	5.0	SOUTH OF TONGA ISLANDS.
12	11 50 30.6	23.9 S	67.7 W	118	5.6	CHILE-ARGENTINA BORDER REGION. MAG. 5.1-5.5 (BRK).
12	12 01 42.2	33.0 N	130.3 E	7	5.0	KYUSHU, JAPAN. FELT.
12	12 16 47.1	25.1 N	68.0 E	33	5.1	WEST PAKISTAN.
12	12 49 43.7	41.7 N	144.1 E	36	5.8	HOKKAIDO, JAPAN REGION. MAG. 5.3-5.7 (BRK). FELT.
12	13 28 23*	41.6 N	143.8 E	57	4.1	HOKKAIDO, JAPAN REGION.
12	13 56 19.0	41.3 N	144.6 E	33	4.5	HOKKAIDO, JAPAN REGION.
12	15 56 05.0	4.8 S	134.1 E	33	5.4	WEST NEW GUINEA REGION.
12	17 15 52.6	41.6 N	144.3 E	33	4.6	HOKKAIDO, JAPAN REGION.
12	17 23 57.1	15.0 S	166.6 E	46	4.6	NEW HEBRIDES ISLANDS.
12	17 33 54.5	45.5 N	151.7 E	37	4.8	KURILE ISLANDS.
12	18 45 00.0	15.7 S	167.2 E	30	5.2	NEW HEBRIDES ISLANDS. MAG. 6 1/2 (PAS), 6.4-6.6 (BRK). FELT AT PORT VILA, NORSUP AND SANTO.
12	19 32 24.7	18.9 S	175.6 W	250	4.1	TONGA ISLANDS.
12	23 04 58.8	41.6 N	144.2 E	33	4.7	HOKKAIDO, JAPAN REGION.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
13	00 00 13*	40.2 N	124.8 W	33		NEAR COAST OF NORTHERN CALIF.
13	01 18 58.5	11.0 S	74.7 W	46	4.8	PERU.
13	02 51 52.7	17.1 N	62.0 W	85	5.6	LEEWARD ISLANDS. FELT ON ANTIGUA, GUADELOUPE, AND MONTSERRAT.
13	02 56 27.5	41.6 N	144.2 E	33	4.4	HOKKAIDO, JAPAN REGION.
13	03 03 33.2	11.1 S	166.3 E	167	4.7	SANTA CRUZ ISLANDS.
13	03 41 48*	24.1 S	111.9 E	33	4.9	WEST OF AUSTRALIA.
13	05 02 29.0	15.9 S	179.7 W	103	4.5	FIJI ISLANDS REGION.
13	05 37 22.0	15.8 S	167.4 E	23	4.9	NEW HEBRIDES ISLANDS. FELT AT NORSUP.
13	06 04 09.0	13.5 N	89.6 W	69	4.6	EL SALVADOR. FELT AT SAN SALVADOR.
13	11 42 27.0	17.2 N	61.4 W	61	5.1	LEEWARD ISLANDS. FELT ON ANTIGUA, GUADELOUPE, AND MONTSERRAT.
13	13 07 46.7	16.1 N	95.0 W	57	4.1	OAXACA, MEXICO.
13	13 23 23*	0.3 N	16.8 W	33	4.5	NORTH OF ASCENSION ISLAND.
13	14 24 39.8	8.3 S	74.2 W	172	4.9	PERU-BRAZIL BORDER REGION.
13	14 29 54.5	17.3 N	61.3 W	65	4.9	LEEWARD ISLANDS. FELT ON ANTIGUA AND GUADELOUPE.
13	15 03 05*	34.6 N	23.6 E	43	4.7	CRETE.
13	16 51 49*	14.5 S	166.6 E	33	4.3	NEW HEBRIDES ISLANDS.
13	18 50 37*	44.2 N	128.7 W	33	4.1	OFF COAST OF OREGON.
13	21 10 04.1	53.7 N	169.2 E	33	4.8	KOMANDORSKY ISLANDS REGION.
14	03 08 26.5	2.0 N	99.1 E	133	5.4	NORTHERN SUMATRA.
14	08 44 44*	1.3 S	15.9 W	33	4.9	NORTH OF ASCENSION ISLAND.
14	11 34 50*	39.0 N	118.5 W	33		NEVADA.
14	12 58 37.9	18.4 S	69.4 W	132	5.5	NORTHERN CHILE.
14	14 05 21*	35.3 N	136.9 E	102		SOUTHERN HONSHU, JAPAN.
14	14 30 52.2	41.7 N	112.7 W	33		UTAH.
14	17 58 58.0	8.3 S	120.6 E	54	4.9	FLORES ISLAND REGION.
14	20 02 35.9	39.9 N	104.7 W	5	4.4	COLORADO. FELT AT DENVER AND DERBY.
14	21 44 31.7	19.1 S	69.2 W	125	4.5	NORTHERN CHILE.
15	00 08 07.8	51.3 N	179.9 W	50	5.1	ANDREANOF ISLANDS, ALEUTIAN IS.
15	05 28 58*	31.0 N	115.3 W	33	4.3	BAJA CALIFORNIA.
15	05 36 27.7	36.6 N	120.4 W	3		CENTRAL CALIFORNIA. MAG. 3.2 (BRK). 36°35.7′N., 120°21.0′W. HYPOCENTER BY BERKELEY.
15	05 44 41.2	36.6 N	120.4 W	3		CENTRAL CALIFORNIA. MAG. 3.4 (BRK). 36°34.7′N., 120°20.2′W. HYPOCENTER BY BERKELEY.
15	09 23 35*	18.1 S	173.7 W	36	4.1	TONGA ISLANDS.
15	10 20 38*	41.9 N	143.5 E	33	4.0	HOKKAIDO, JAPAN REGION.
15	16 19 06.8	51.2 N	176.5 W	43	5.1	ANDREANOF ISLANDS, ALEUTIAN IS.
15	16 26 03.4	51.3 N	176.5 W	57	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
15	17 08 25.8	51.3 N	176.5 W	56	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.
15	17 32 33.7	15.2 S	72.7 W	106		SOUTHERN PERU.
15	18 03 15*	17.8 S	178.5 W	550		FIJI ISLANDS REGION.
15	20 05 31*	3.0 S	141.6 E	33		NEW GUINEA.
15	20 25 46*	51.5 N	176.5 W	61	3.9	ANDREANOF ISLANDS, ALEUTIAN IS.
15	22 16 03*	51.3 N	176.5 W	57	4.2	ANDREANOF ISLANDS, ALEUTIAN IS.
15	22 17 06*	51.3 N	176.6 W	67	4.6	ANDREANOF ISLANDS, ALEUTIAN IS.
16	00 33 19.3	51.3 N	176.4 W	53	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.
16	00 45 24*	16.3 N	98.9 W	33	3.8	NEAR COAST OF GUERRERO, MEXICO.
16	00 54 32.4	18.3 S	168.1 E	19	5.0	NEW HEBRIDES ISLANDS. FELT AT PORT VILA.
16	01 58 06.0	51.4 N	176.3 W	54	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
16	02 00 36.1	51.3 N	170.4 W	33	4.7	FOX ISLANDS, ALEUTIAN ISLANDS.
16	02 26 11*	6.1 S	153.1 E	93	4.8	NEW BRITAIN REGION.
16	03 39 46*	6.6 S	147.3 E	88		EAST NEW GUINEA REGION.
16	04 35 08*	39.8 N	142.1 E	33	4.1	NEAR EAST COAST OF HONSHU, JAPAN.
16	05 58 31*	19.5 S	176.3 W	51	4.8	FIJI ISLANDS REGION.
16	08 08 13.1	13.1 S	166.5 E	45	5.2	NEW HEBRIDES ISLANDS.
16	17 22 25.6	17.0 S	72.9 W	64	4.4	NEAR COAST OF PERU.
16	18 15 45.8	30.8 N	141.8 E	33	4.3	SOUTH OF HONSHU, JAPAN.
16	20 44 01.2	46.6 N	153.7 E	36	4.8	KURILE ISLANDS.
16	22 55 13.1	33.2 S	179.5 W	41	4.8	SOUTH OF KERMADEC ISLANDS.
16	23 16 10.3	52.6 N	169.5 W	42	5.1	FOX ISLANDS, ALEUTIAN ISLANDS.
17	00 33 13*	19.2 S	177.5 W	553	4.2	FIJI ISLANDS REGION.
17	07 08 30*	32.2 N	40.5 W	33	4.5	NORTH ATLANTIC RIDGE.
17	13 54 01.7	51.4 N	176.3 W	61	4.6	ANDREANOF ISLANDS, ALEUTIAN IS.
17	14 41 48.7	51.2 N	176.3 W	47	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
17	14 43 11.9	51.3 N	176.3 W	52	4.8	ANDREANOF ISLANDS, ALEUTIAN IS.
17	15 13 00.8	51.4 N	176.3 W	48	4.2	ANDREANOF ISLANDS, ALEUTIAN IS.
17	15 54 55*	51.4 N	176.4 W	35	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
17	17 21 43.0	37.3 N	71.7 E	141		AFGHANISTAN-USSR BORDER REGION.
17	18 28 53.6	7.2 S	31.4 E	33	3.6	LAKE TANGANYIKA REGION.
17	19 04 35*	51.1 N	176.3 W	33		ANDREANOF ISLANDS, ALEUTIAN IS.
17	19 27 07.4	46.6 N	153.7 E	41	4.6	KURILE ISLANDS.
17	19 50 37.2	51.3 N	176.3 W	51	4.0	ANDREANOF ISLANDS, ALEUTIAN IS.
17	20 26 02*	0.4 N	30.2 E	33		UGANDA.
17	21 27 05.7	51.3 N	176.3 W	49	4.0	ANDREANOF ISLANDS, ALEUTIAN IS.
17	21 45 58*	51.4 N	176.0 W	48	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
18	00 25 52.7	51.4 N	176.2 W	57	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
18	08 02 46.2	5.8 S	152.1 E	49	4.7	NEW BRITAIN REGION.
18	09 12 10.7	36.2 S	100.3 W	33	5.1	SOUTHERN PACIFIC OCEAN. MAG. 4.6 (BRK).
18	12 43 48.8	27.4 N	142.4 E	33	4.4	BONIN ISLANDS REGION.
18	15 02 00.040					37° 02′ 34″N. 116° 00′ 37″W. NEVADA TEST SITE. "CERISE". SHOT ELEVATION 1015.3 METERS (AEC).
18	15 15 05.0					"CERISE" COLLAPSE.
18	18 07 53.8	73.4 N	6.7 E	33	4.6	GREENLAND SEA.
18	18 48 44.5	73.4 N	6.7 E	33	4.8	GREENLAND SEA.
18	19 43 35.7	24.1 N	46.3 W	33	4.8	NORTH ATLANTIC RIDGE.
18	20 19 57*	51.4 N	180.0 W	48	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
18	21 17 31.4	24.1 N	46.3 W	33	4.4	NORTH ATLANTIC RIDGE.
18	22 26 27*	34.1 N	139.2 E	52		NEAR S. COAST OF HONSHU, JAPAN.
19	00 30 32.7	19.5 N	64.3 W	38	4.1	VIRGIN ISLANDS.
19	02 17 12*	36.1 N	139.8 E	43		HONSHU, JAPAN.
19	02 32 19*	17.7 S	178.6 W	587	3.6	FIJI ISLANDS REGION.
19	03 02 20*	16.1 S	74.3 W	33	4.4	NEAR COAST OF PERU.
19	05 19 55.2	37.5 N	141.4 E	61	5.3	NEAR EAST COAST OF HONSHU, JAPAN. MAG. 5.8 (BRK). FELT.
19	05 29 49*	24.1 N	45.9 W	33	4.4	NORTH ATLANTIC RIDGE.
19	06 56 39*	4.3 S	144.1 E	154		NEAR NORTH COAST OF NEW GUINEA.
19	07 12 38.6	35.0 N	23.5 E	25	5.4	CRETE.
19	07 31 14.2	40.4 N	142.7 E	41	4.9	NEAR EAST COAST OF HONSHU, JAPAN.
19	07 42 27.8	18.4 N	95.3 E	53	5.3	BURMA.
19	08 34 16*	24.1 N	45.9 W	33	4.5	NORTH ATLANTIC RIDGE.
19	08 50 10*	16.2 S	167.9 E	159		NEW HEBRIDES ISLANDS.
19	13 53 05.1	14.3 N	144.3 E	38	4.4	MARIANA ISLANDS.
19	14 09 34.0	14.3 N	144.1 E	33	4.7	MARIANA ISLANDS.
19	14 19 35.1	43.2 N	88.1 E	33	4.5	NORTHERN SINKIANG PROV., CHINA.
19	14 50 19*	5.5 S	147.2 E	155		EAST NEW GUINEA REGION.
19	16 01 46*	9.2 N	85.8 W	25	4.3	OFF COAST OF COSTA RICA.
19	16 39 03.0	56.8 N	154.1 W	33	4.6	KODIAK ISLAND REGION.
19	17 40 58.4	24.2 N	46.5 W	33	4.8	NORTH ATLANTIC RIDGE.
19	18 20 29.2	10.7 S	79.1 W	26	4.8	OFF COAST OF PERU.
19	18 39 32.0	42.5 N	71.3 E	33		KIRGIZ SSR.
19	18 49 42.4	41.3 N	73.2 E	61		KIRGIZ SSR.
19	19 05 36.7	37.1 N	71.3 E	110	4.8	AFGHANISTAN-USSR BORDER REGION.
19	20 29 43.0	36.1 N	70.6 E	123	4.6	HINDU KUSH REGION.
20	00 59 50.9	24.1 N	46.4 W	33	4.9	NORTH ATLANTIC RIDGE.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
20	01 52 45.7	12.2 S	76.5 W	101	4.2	NEAR COAST OF PERU.
20	02 59 49*	35.0 N	69.3 E	79	4.8	HINDU KUSH REGION.
20	04 21 44.6	6.6 S	154.4 E	57	4.9	SOLOMON ISLANDS.
20	04 33 25*	51.3 N	177.0 W	58	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
20	05 43 48*	51.4 N	176.9 W	57	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
20	05 47 05.5	51.5 N	176.5 W	55	4.8	ANDREANOF ISLANDS, ALEUTIAN IS.
20	06 09 33*	15.4 S	69.5 W	116	4.1	PERU-BOLIVIA BORDER REGION.
20	07 25 56.4	18.2 N	68.4 W	96	4.7	MONA PASSAGE.
20	07 34 36*	21.6 S	67.8 W	93	4.2	CHILE-BOLIVIA BORDER REGION.
20	09 29 59.3	51.4 N	176.5 W	54	5.3	ANDREANOF ISLANDS, ALEUTIAN IS. FELT ON ADAK.
20	15 47 26.7	42.2 N	125.8 W	33	4.5	OFF COAST OF OREGON.
20	16 47 32.7	55.1 S	129.4 W	33	5.0	SOUTH PACIFIC CORDILLERA.
20	18 53 31.9	55.3 S	128.7 W	33	4.7	SOUTH PACIFIC CORDILLERA.
20	20 57 09.2	41.9 N	126.7 W	33	4.5	OFF COAST OF NORTHERN CALIFORNIA.
20	21 13 45.7	51.4 N	176.6 W	54	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.
20	21 16 27*	22.3 S	69.0 W	117	3.9	NORTHERN CHILE.
20	22 41 12.9	24.4 N	122.6 E	97	4.8	TAIWAN REGION. FELT AT ILAN.
20	23 35 45.7	27.6 N	67.7 E	26	4.9	WEST PAKISTAN.
21	02 22 36*	51.8 N	179.9 E	49	4.6	RAT ISLANDS, ALEUTIAN ISLANDS. FELT ON ADAK.
21	06 46 08*	37.4 N	114.2 W	33		SOUTHERN NEVADA.
21	07 35 03*	18.5 S	168.9 E	128		NEW HEBRIDES ISLANDS.
21	08 07 51*	7.3 S	129.2 E	149	4.6	BANDA SEA.
21	11 11 59.0	18.7 N	102.5 W	60	4.7	MICHOACAN, MEXICO. FELT.
21	12 19 30.5	46.7 N	152.5 E	66	5.6	KURILE ISLANDS. FELT.
21	12 32 44.9	15.5 S	167.5 E	130		NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE.
21	13 48 45.0	34.4 N	116.8 W	1		SOUTHERN CALIFORNIA. MAG. 3.4 (PAS), 4.5 (BRK). 34°25.9'N., 116°49.2'W. HYPOCENTER BY PASADENA.
21	19 18 31.5	36.1 N	137.5 E	257	4.3	HONSHU, JAPAN.
21	20 06 32*	38.3 N	22.0 E	20		GREECE.
22	04 11 36.0	5.9 S	152.3 E	43	4.9	NEW BRITAIN REGION.
22	06 29 53.1	48.0 N	146.8 E	452	5.7	SEA OF OKHOTSK. MAG. 6 1/4-6 1/2 (PAS), 6.2 (BRK). FELT.
22	07 01 10.7	58.0 S	25.3 W	32	5.6	SOUTH SANDWICH ISLANDS REGION.
22	07 20 32*	37.4 N	114.2 W	33		SOUTHERN NEVADA.
22	07 41 03.8	37.3 N	114.2 W	33		SOUTHERN NEVADA.
22	08 52 15.9	52.1 N	172.6 E	33	5.1	NEAR ISLANDS, ALEUTIAN ISLANDS.
22	11 58 04*	26.2 S	177.5 W	139	3.7	SOUTH OF FIJI ISLANDS.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
22	12 14 07.7	19.2 N	67.9 W	22	4.6	MONA PASSAGE.
22	15 54 58.7	52.2 N	172.6 E	33	4.6	NEAR ISLANDS, ALEUTIAN ISLANDS.
22	19 35 48*	51.9 N	176.4 W	69	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
22	21 38 13.4	59.9 N	148.0 W	33	3.8	KENAI PENINSULA, ALASKA.
23	02 02 28*	32.1 N	137.1 E	524		SOUTH OF HONSHU, JAPAN.
23	02 19 13.6	14.9 S	166.8 E	45	5.6	NEW HEBRIDES ISLANDS. MAG. 5 3/4-6 (PAS), 5.5-5.9 (BRK).
23	02 27 54.2	37.3 N	114.2 W	33		SOUTHERN NEVADA.
23	07 42 24*	44.9 N	111.3 W	33	3.7	HEBGEN LAKE REGION.
23	08 21 01.3	14.8 S	166.8 E	21		NEW HEBRIDES ISLANDS.
23	13 47 14*	35.7 N	140.4 E	16		NEAR EAST COAST OF HONSHU, JAPAN.
23	18 17 59*	20.1 S	177.7 W	465	4.2	FIJI ISLANDS REGION.
23	20 48 02.6	34.1 S	139.1 E	33	4.1	NEAR SOUTH COAST OF AUSTRALIA.
24	06 53 37.4	56.6 N	152.8 W	33	4.8	KODIAK ISLAND REGION.
24	07 31 53.2	30.7 S	177.8 W	18	5.0	KERMADEC ISLANDS REGION.
24	08 41 59*	56.6 N	152.8 W	33	4.0	KODIAK ISLAND REGION.
24	10 08 54.8	63.6 N	151.1 W	28	3.9	CENTRAL ALASKA.
24	12 59 16*	25.5 S	179.4 E	520	4.2	SOUTH OF FIJI ISLANDS.
24	15 07 24.2	56.6 N	152.8 W	33	4.6	KODIAK ISLAND REGION.
24	16 26 29*	55.3 S	30.0 W	33	4.9	SOUTH SANDWICH ISLANDS REGION.
24	16 45 46*	39.3 S	91.9 W	33	5.1	WEST CHILE RISE.
24	18 51 48.3	44.5 N	146.5 E	170	4.0	KURILE ISLANDS.
24	19 10 53.7	17.2 N	146.0 E	86	5.2	MARIANA ISLANDS.
24	20 09 07.5	43.7 N	145.8 E	127	4.6	HOKKAIDO, JAPAN REGION.
25	03 18 51.1	15.5 S	179.3 E	33	5.0	FIJI ISLANDS.
25	03 31 52*	19.5 N	67.5 W	33	3.9	MONA PASSAGE.
25	03 44 22*	7.2 S	128.9 E	139	4.6	BANDA SEA.
25	04 49 05.1	1.9 N	79.2 W	38	4.5	NEAR COAST OF ECUADOR.
25	05 52 52*	41.7 N	108.0 W	33		WYOMING.
25	19 32 48.5	44.8 N	148.2 E	115	4.2	KURILE ISLANDS.
25	20 31 36.2	41.7 N	73.0 E	33	4.9	KIRGIZ SSR.
25	20 57 57.1	8.4 S	147.7 E	16		EAST NEW GUINEA REGION.
25	21 28 59*	0.8 N	30.0 E	33		UGANDA.
26	02 18 17.5	25.6 S	70.7 W	54	5.6	NEAR COAST OF NORTHERN CHILE.
26	03 23 45*	78.2 N	4.5 E	33	4.7	GREENLAND SEA.
26	04 30 58.7	40.3 N	125.4 W	33	4.6	OFF COAST OF NORTHERN CALIFORNIA. MAG. 4.8 (BRK).
26	05 25 14.3	35.6 N	140.1 E	69	4.4	NEAR EAST COAST OF HONSHU, JAPAN.
26	05 35 37*	42.6 N	144.9 E	40	4.3	HOKKAIDO, JAPAN REGION.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
26	05 38 37*	7.4 N	102.8 W	33	4.2	OFF COAST OF MEXICO.
26	05 56 40*	40.3 N	125.3 W	33	4.4	OFF COAST OF NORTHERN CALIFORNIA. MAG. 4.7 (BRK).
26	06 06 24.4	31.3 S	68.8 W	119	4.2	SAN JUAN PROVINCE, ARGENTINA.
26	07 38 34.9	35.6 N	140.1 E	66	4.1	NEAR EAST COAST OF HONSHU, JAPAN.
26	08 00 53.6	23.8 S	70.3 W	92	4.3	NEAR COAST OF NORTHERN CHILE.
26	10 40 13.0	28.2 S	71.3 W	33	4.1	NEAR COAST OF CENTRAL CHILE.
26	10 55 57.9	15.1 N	94.2 W	24	4.3	NEAR COAST OF OAXACA, MEXICO.
26	13 49 29.4	37.9 N	58.5 E	31	4.5	IRAN-USSR BORDER REGION.
26	17 05 07.9	42.6 N	144.6 E	52	3.9	HOKKAIDO, JAPAN REGION.
27	01 10 38.2	6.9 N	73.0 W	154	4.2	NORTHERN COLOMBIA.
27	03 02 01*	77.2 N	7.9 E	33	4.5	SVALBARD REGION.
27	04 10 42.5	60.1 N	145.9 W	16	4.9	SOUTHERN ALASKA.
27	04 15 32.4	60.1 N	145.9 W	14	4.5	SOUTHERN ALASKA.
27	07 00 48*	52.6 N	34.0 W	33	4.4	NORTH ATLANTIC OCEAN.
27	08 59 59*	23.4 S	179.8 W	495	4.3	SOUTH OF FIJI ISLANDS.
27	11 01 12.2	49.4 N	155.8 E	57	4.9	KURILE ISLANDS. FELT.
27	12 48 04.1	48.1 N	155.0 E	49	4.7	KURILE ISLANDS.
27	13 41 18.7	17.5 N	145.5 E	210	5.4	MARIANA ISLANDS.
27	14 23 40.8	60.3 N	145.9 W	15	4.2	SOUTHERN ALASKA.
27	14 37 52*	6.2 S	112.0 E	558		JAVA.
27	18 01 06.1	43.9 N	146.0 E	112	4.0	KURILE ISLANDS.
27	18 11 26.9	15.3 S	166.3 E	23	4.5	NEW HEBRIDES ISLANDS.
27	20 13 02.0	78.5 N	5.8 E	33	5.5	SVALBARD REGION. MAG. 6 (PAS).
27	20 56 24*	52.6 N	169.2 W	33	4.2	FOX ISLANDS, ALEUTIAN ISLANDS.
28	01 36 18.0	0.5 N	77.4 W	127	4.2	COLOMBIA-ECUADOR BORDER REGION.
28	02 20 57*	30.4 N	105.4 W	33	3.8	TEXAS-MEXICO BORDER REGION.
28	03 04 10.6	5.4 S	151.2 E	78	4.7	NEW BRITAIN REGION. FELT AT RABAUL.
28	07 32 53.6	6.7 N	82.6 W	33	5.7	SOUTH OF PANAMA. MAG. 6 1/2-6 3/4 (PAS), 5.4-5.8 (BRK).
28	08 17 10.8	7.4 S	154.8 E	16	4.9	SOLOMON ISLANDS.
28	10 08 09.4	16.9 S	174.3 W	122	4.5	TONGA ISLANDS.
28	11 49 29.1	54.1 N	161.0 E	34	4.3	NEAR EAST COAST OF KAMCHATKA.
28	12 57 22*	50.3 N	18.8 E	10		POLAND.
28	14 48 54.0	22.4 S	171.5 E	132	4.9	LOYALTY ISLANDS REGION.
28	16 46 13*	15.4 N	61.0 W	152		LEEWARD ISLANDS.
28	18 46 37*	37.3 N	114.2 W	33		SOUTHERN NEVADA.
28	19 28 56*	17.7 N	145.6 E	317	4.6	MARIANA ISLANDS.
28	20 10 42*	18.4 N	95.8 W	67	4.4	VERA CRUZ, MEXICO.

DATE 1966	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
NOV	H M S	DEG	DEG	KM		
28	21 55 45*	33.8 N	133.5 E	24		SHIKOKU, JAPAN.
29	00 53 02.0	18.2 N	64.6 W	152	3.9	VIRGIN ISLANDS.
29	01 11 51*	37.3 N	114.2 W	33		SOUTHERN NEVADA.
29	01 16 58*	37.4 N	114.2 W	33		SOUTHERN NEVADA.
29	02 51 21*	19.8 S	176.0 W	202	4.1	FIJI ISLANDS REGION.
29	03 17 22.2	11.5 S	166.3 E	84	4.5	SANTA CRUZ ISLANDS.
29	05 03 50.4	26.3 N	44.8 W	33	5.0	NORTH ATLANTIC RIDGE.
29	06 00 03*	26.3 N	44.6 W	33	4.5	NORTH ATLANTIC RIDGE.
29	06 32 06.0	6.6 S	154.4 E	122	4.4	SOLOMON ISLANDS.
29	08 00 09.5	15.9 S	176.8 W	375	4.7	FIJI ISLANDS REGION.
29	09 21 22.7	9.8 S	90.6 E	33	5.0	SOUTH INDIAN OCEAN.
29	10 11 00.3	36.4 N	70.0 E	215	4.4	HINDU KUSH REGION.
29	12 10 23.4	21.4 S	68.9 W	119	4.5	CHILE-BOLIVIA BORDER REGION.
29	14 08 16.0	42.1 N	143.0 E	63	4.0	HOKKAIDO, JAPAN REGION.
29	17 16 33.8	41.5 N	144.2 E	44	4.5	HOKKAIDO, JAPAN REGION.
29	19 25 35.5	9.0 N	77.4 W	33	4.0	NEAR NORTH COAST OF COLOMBIA.
29	19 56 57.1	12.1 N	140.6 E	33	4.7	WEST CAROLINE ISLANDS.
29	22 17 30.4	14.7 S	167.4 E	166	5.4	NEW HEBRIDES ISLANDS. MAG. 5 1/2-5 3/4 (PAS), 5.4-5.8 (BRK). FELT AT NORSUP AND SANTO.
29	22 54 50.1	9.1 S	109.8 W	33	4.6	NORTHERN EASTER I. CORDILLERA.
30	00 04 38.1	46.7 N	152.9 E	57	4.2	KURILE ISLANDS.
30	00 30 29.5	30.7 N	141.8 E	35	4.8	SOUTH OF HONSHU, JAPAN.
30	02 20 46*	34.7 N	23.5 E	33		CRETE.
30	03 36 34*	38.2 N	141.3 E	49	4.0	NEAR EAST COAST OF HONSHU, JAPAN.
30	08 43 20*	8.4 N	83.0 W	49	4.1	COSTA RICA.
30	08 50 06*	48.4 N	154.6 E	51	4.1	KURILE ISLANDS.
30	13 00 39.5	73.0 N	6.1 E	33	4.8	GREENLAND SEA.
30	14 59 16.9	23.5 S	68.9 W	85	4.8	NORTHERN CHILE.
30	22 10 26.0	4.7 S	153.0 E	72	4.9	NEW IRELAND REGION. FELT AT RABAUL AND UPPER WARANGOI.

Date and Station	Phase (GCT)
	h m s
NOV 1	
ADK IP	01 42 33.5
IS	42 43.1
NOV 1	
H-02 22 45.7	
40.3N 140.1E	
h ABOUT 170KM	
COL IP	02 31 01.6
HHM E(P)	02 33 41.3
BMO EP	02 33 43.5
EUR IP	02 34 08.5
NOV 1	
ADK E(P)	02 48 00.7
NOV 1	
BMO E(P)	03 28 43.4
NOV 1	
H-05 43 29.2	
52.0N 173.0E	
h ABOUT 28KM	
ADK EP	05 45 04.9
ES	46 13.3
COL EP	05 48 40.0
NEW IP	05 51 30.5
BOZ E(P)	05 52 04.5
EUR IP D	05 52 17.4
EPCP	53 42.0
NOV 1	
BMO EP	06 53 13.1
NOV 1	
H-07 01 00.7	
43.2N 143.5E	
h ABOUT 132KM	
ADK IP	07 06 40.5
COL IP	07 08 49.8
NEW IP	07 11 26.5
IpP	11 58.0
HHM EP	07 11 37.0
BMO EP	07 11 39.8
BOZ IP C	07 11 56.0
EpP	12 27.2
EUR IP	07 12 06.1
BCN EP	07 12 24.0
TUC EP	07 12 51.4
NOV 1	
NEW IP	07 23 43.8
IS	24 39.0

Date and Station	Phase (GCT)
	h m s
NOV 1	
H-07 40 28.0	
40.2N 106.9W	
h ABOUT 33KM	
FGU IP C	07 41 01.8
IL	41 26.5
GCA EP	07 41 41.0
I	41 44.0
IL	42 39.6
EUR IP	07 42 12.0
BMO E(P)	07 42 38.8
NOV 1	
COL IP	08 07 57.6
NOV 1	
COL IP	09 10 20.3
IS	11 03.0
NOV 1	
H-11 32 08.2	
31.3N 131.7E	
h ABOUT 8KM	
COL EP	11 42 04.8
HHM E(P)	11 44 25.3
NOV 1	
BMO E(P)	11 42 54.7
NOV 1	
ADK EP	12 38 58.1
IS	39 22.4
NOV 1	
GCA EP	12 51 13.0
ES	51 37.0
NOV 1	
SJG EP	13 25 31.4
IS	25 56.8
NOV 1	
H-14 28 28.7	
37.3N 114.3W	
h ABOUT 33KM	
GCA IP	14 29 04.5
IS	29 30.0
EUR IP	14 29 09.0
TUC (PN)	14 29 53.9
NOV 1	
BMO EP	14 30 53.0
NOV 1	
BCN EP	14 43 53.7
IS	44 13.4
NOV 1	
H-14 55 30.9	
16.0N 097.4W	
h ABOUT 33KM	
TUC EP	15 00 06.2
EL	05 51.0

Date and Station	Phase (GCT)
	h m s
BCN EP	15 00 56.4
EUR IP	15 01 25.7
BOZ EP	15 01 54.0
E	02 03.0
BMO EP	15 02 06.9
EPCP	04 48.4
NEW EP	15 02 30.0
COL IP	15 05 30.9
NOV 1	
H-16 45 02.9	
15.0S 173.2W	
h ABOUT 33KM	
EUR EP	16 56 51.0
BMO E(P)	16 57 01.0
E	57 19.3
COL IP	16 57 21.2
NOV 1	
BCN E(P)	16 45 14.4
NOV 1	
BUT EP	16 57 55.9
NOV 1	
BOZ (PN)	17 01 06.2
EL	01 14.7
HHM E(P)	17 01 20.3
E	01 40.8
E	02 32.1
NOV 1	
BOZ (PN)	17 02 02.7
EL	02 10.6
NOV 1	
SJG EP	17 24 37.0
IS	25 02.5
NOV 1	
H-17 47 02.0	
15.3S 172.3W	
h ABOUT 20KM	
BMO EP	17 59 00.1
COL IP	17 59 20.6
NOV 1	
H-17 53 37.5	
50.2N 157.1E	
h ABOUT 34KM	
EUR EP	18 03 37.5
NOV 1	
EUR EP	18 00 20.0
NOV 1	
SJG EP	18 17 06.5
IS	17 31.9
NOV 1	
COL EP	19 21 18.0

Date and Station	Phase (GCT)
	h m s
NOV 1	
GCA EP	19 50 10.0
IS	50 36.8
NOV 1	
H-19 50 20.0	
40.3N 125.1W	
0 ABOUT 33KM	
UKI (PN)	19 50 50.5
SLD EP	19 51 25.9
BMO E(P)	19 52 07.4
NOV 1	
BOZ E(P)	20 22 16.5
NOV 1	
CSC E(P)	20 35 52.1
NOV 1	
COL EP	21 54 47.0
EUR E(P)	21 58 19.4
NOV 1	
HHM E(P)	22 14 43.8
BOZ E(P)	22 14 46.5
E	14 55.0
NOV 1	
ALQ E(P)	22 28 24.3
E	29 06.0
BOZ E(P)	22 30 00.0
E	31 09.5
HHM E(P)	22 30 02.0
NOV 1	
BOZ EPN	22 45 09.5
EPG	45 13.0
EL	45 19.7
NOV 1	
EUR IP C	23 33 54.4
IS	34 14.6
NOV 1	
BMO EPN	23 36 34.7
NOV 1	
NEW EP	23 59 03.0
NOV 2	
H-00 22 05.6	
31.7N 131.8E	
h ABOUT 104KM	
BMO E(P)	00 34 11.5
BOZ E(P)	00 34 25.0
EUR EP	00 34 32.2
NOV 2	
H-00 59 07.7	
36.8N 069.1E	
h ABOUT 34KM	
COL EP	01 10 45.0

Date and Station	Phase	Phase (GCT) h m s
NOV 2		
COL	EP	01 23 11.0
NOV 2		
EUR	E(P)	02 11 15.3
NOV 2		
BMO	EPN	03 02 25.1
NOV 2		
EUR	EP	03 47 29.5
NOV 2		
H-04 43 11.2		
37.3N 114.3W		
h ABOUT 33KM		
BCN	IP D	04 43 35.5
	IS	43 54.9
GCA	IP C	04 43 46.0
	IS	44 12.8
EUR	IP	04 43 51.2
TUC	(PN)	04 44 35.5
ALQ	E(P)	04 45 03.1
BMO	EPN	04 45 06.8
NOV 2		
SLD	E(P)	04 46 14.9
NOV 2		
COL	IP	05 32 11.2
NOV 2		
H-05 35 51.2		
18.3S 178.0W		
h ABOUT 604KM		
EUR	EP	05 47 08.5
TUC	EP	05 47 09.5
BMO	EP	05 47 18.2
COL	IP	05 47 29.3
NOV 2		
FGU	EP	08 07 40.5
	ILG	08 07.3
NOV 2		
H-09 14 06.9		
37.7N 141.8E		
h ABOUT 61KM		
BMO	E(P)	09 25 21.8
EUR	IP	09 25 45.0
ALQ	E(P)	09 26 32.0
NOV 2		
BMO	E(P)	10 45 10.7
EUR	E(P)	10 45 32.5
NOV 2		
UKI	(PN)	11 03 25.7
BMO	IP	11 04 41.9
NOV 2		
BHP	IP	11 06 31.5
	I	07 16.0
NOV 2		
H-11 37 07.9		
06.9N 073.0W		
h ABOUT 160KM		
EUR	E(P)	11 45 51.2
NOV 2		
COL	E(P)	11 38 24.0
NEW	EP	11 40 51.0
BOZ	E(P)	11 41 11.3
EUR	IP	11 41 57.5
TUC	E(P)	11 42 45.8
	E	42 55.3
NOV 2		
H-11 50 54.5		
28.9N 139.3E		
h ABOUT 399KM		
BMO	E(P)	12 02 16.5
EUR	EP	12 02 35.3
ALQ	E(P)	12 03 18.0
NOV 2		
GUA	EP	12 04 31.0
	IS	05 22.0
NOV 2		
BCN	E(P)	12 09 30.5
NOV 2		
NEW	EP	12 15 36.0
EUR	EP	12 15 49.7
NOV 2		
EUR	EP	12 21 26.1
NOV 2		
BMO	EP	14 05 38.1
NOV 2		
CED	EP	15 36 56.7
	ES	37 08.8
NOV 2		
BMO	EP	15 50 03.4
NOV 2		
BOZ	EPN	16 58 11.0
	EPG	58 14.5
	EL	58 22.0
HHM	E(P)	16 58 42.7
	E	59 18.2
NOV 2		
H-17 25 46.9		
43.0N 145.7E		
h ABOUT 50KM		
COL	EP	17 33 37.0
BMO	EP	17 36 28.9
	EpP	36 40.7
EUR	EP	17 36 54.0
NOV 2		
BCN	EP	18 27 10.0
	ES	27 29.2
GCA	EP	18 27 20.5
	IS	27 46.3
EUR	E(P)	18 27 25.5
NOV 2		
EUR	E(P)	18 41 23.2
NOV 2		
H-18 51 18.0		
14.1N 91.9W		
h ABOUT 33KM		
ALQ	IP	18 56 37.5
EUR	EP	18 57 52.5
BMO	E(P)	18 58 30.7
NOV 2		
EUR	E(P)	19 04 45.5
NOV 2		
BOZ	EPN	19 18 07.9
	EPG	18 11.0
	EL	18 19.2
HHM	E(P)	19 18 39.2
	E	19 13.2
NOV 2		
H-20 00 11.6		
06.2S 153.6E		
h ABOUT 37KM		
COL	EP	20 12 33.0
BMO	E(P)	20 13 26.2
EUR	IP	20 13 29.0
NOV 2		
ALQ	EP	21 28 59.0
	I	29 31.0
NOV 2		
COL	EP	21 48 02.5
NOV 2		
EUR	EP	22 17 23.0
NOV 2		
ALQ	E(P)	22 28 53.6
	E	59 33.8
NOV 2		
HHM	E(P)	22 44 01.2
	E	44 36.7
NOV 2		
BMO	EPN	23 06 00.6
NOV 2		
GCA	E(P)	23 09 40.0
	IS	10 05.9
NOV 2		
EUR	E(P)	23 40 14.0
NOV 3		
COL	IP	00 08 22.1
	EL	09 04.2
NOV 3		
EUR	EP	00 12 30.1
NOV 3		
TUC	E(P)	00 48 00.7
NOV 3		
BMO	EP	01 00 09.3
NOV 3		
COL	E(P)	01 52 27.5
NOV 3		
WSC	E(P)	02 29 53.7
	E	30 17.7
NOV 3		
COL	EP	02 41 42.0
NOV 3		
COL	EP	02 53 23.0
BMO	IP	02 57 21.5
NOV 3		
H-03 29 13.2		
15.1S 167.5E		
h ABOUT 124KM		
COL	EP	03 41 42.3
EUR	IP D	03 41 57.9
	EpP	42 34.8
	EPP	45 28.5
BMO	EP	03 42 01.4
	EpP	42 36.3
TUC	EP	03 42 06.0
	EpP	42 40.5
NEW	EP	03 42 07.0
NOV 3		
SLD	EP	03 42 09.4
NOV 3		
EUR	IP	05 43 21.0
NOV 3		
H-08 04 53.9		
17.6S 063.7W		
h ABOUT 37KM		
ALQ	E(P)	08 15 40.0
EUR	IP	08 16 33.6
BOZ	E(P)	08 16 41.5
BMO	EP	08 16 56.7
NOV 3		
BOZ	IPN	08 44 51.0
	IL	45 07.5

Date and Station	Phase (GCT)
	h m s
NOV 3	
HHM E(P)	08 45 47.5
E	46 45.0
NOV 3	
H-09 02 13.0	
21.5S 68.9W	
h ABOUT 104KM	
TUC EP	09 12 56.0
BCN EP	09 13 27.4
EUR EP	09 13 45.5
EPCP	13 57.9
BOZ EP	09 13 58.2
E(pP)	14 23.3
BMO IP	09 14 10.3
EpP	14 35.5
NEW EP	09 14 21.0
NOV 3	
COL EP	10 28 57.0
NOV 3	
H-11 15 41.9	
35.5N 118.4W	
h ABOUT 3KM	
SLD E(P)	11 16 28.9
BCN E(P)	11 16 37.2
EUR EPN	11 16 50.6
EPG	17 02.7
EL	18 02.2
NOV 3	
H-11 31 55.0	
37.4N 114.2W	
h ABOUT 33KM	
BCN EP	11 32 19.6
ES	32 39.2
GCA EP	11 32 30.0
ES	32 55.9
EUR EP	11 32 35.0
IPG	32 40.1
E(S)	33 03.8
NOV 3	
BHP I(P)	11 40 40.8
IS	41 00.0
NOV 3	
H-11 37 21.9	
19.1N 067.9W	
h ABOUT 37KM	
SJG IP D	11 37 53.2
IS	38 18.0
CSC E(P)	11 41 40.2
E	44 47.0
WSC EP	11 42 08.2
E	45 29.2
IS	45 56.2
ALQ IP C	11 44 35.0
ES	50 27.0
TUC EP	11 45 00.8
EpP	45 11.5
E(S)	51 13.0
FGU EP	11 45 08.4
SLC EP	11 45 22.1
EsP	45 39.0
BCN EP C	11 45 32.8
EpP	45 44.4
BOZ IP D	11 45 33.5
E	46 00.0
BUT EP	11 45 39.3
EUR IPC	11 45 44.1
HHM EP	11 45 50.6
NEW IP	11 46 06.9
E	46 41.0
SLD IP D	11 46 13.7
COL IP	11 48 22.2
NOV 3	
COL IP	12 31 08.9
NOV 3	
H-13 17 50.3	
38.8N 30.9E	
h ABOUT 5KM	
BMO EP	13 31 01.3
NOV 3	
H-13 26 34.0	
15.4S 75.3W	
h ABOUT 73KM	
TUC E(P)	13 36 24.4
EUR IP	13 37 19.5
BOZ E(P)	13 37 34.5
E	37 44.3
BMO E(P)	13 37 46.8
NEW EP	13 38 01.0
NOV 3	
EUR EP	13 43 32.7
NOV 3	
SJG EP	14 09 29.5
NOV 3	
COL E(P)	14 42 27.0
NOV 3	
GCA EP	15 01 41.2
IS	02 08.0
NOV 3	
BOZ EPN	15 02 27.5
EPG	02 31.5
EL	02 42.5
NOV 3	
H-16 24 32.7	
19.2N 068.0W	
h ABOUT 33KM	
SJG IP D	16 25 04.6
IS	25 28.6
ISCS	40 00.7
BHP IP D	16 28 04.1
CSC EP	16 28 49.5
E	31 09.0
E(S)	32 08.0
WSC IP	16 29 19.0
I	34 25.1
ALQ EP C	16 31 45.2
EpP	31 54.5
ES	37 34.0
TUC IP	16 32 11.2
E(S)	38 04.0
FGU IP C	16 32 17.4
GCA IP C	16 32 24.2
SLC EP	16 32 32.1
E	32 57.7
E	33 09.2
BCN IP C	16 32 43.5
I(sP)	32 56.1
EPP	34 21.6
BOZ IP C	16 32 43.7
IS	39 16.0
IL	42 32.5
BUT EP	16 32 48.8
ES	39 29.3
EsS	40 18.3
EL	42 44.3
EUR IP C	16 32 54.2
EPCS	38 23.8
HHM IP C	16 33 03.4
IS	39 56.4
ESCS	42 55.4
BMO EP	16 33 10.7
NEW IP	16 33 17.6
SLD IP	16 33 23.7
E	40 01.2
COL IP C	16 35 32.5
EPP	37 49.9
ES	44 32.0
EL	52 33.0
HON E(P)	16 37 03.0
ES	47 30.0
NOV 3	
SJG I(P)	16 37 09.5
I(S)	37 32.0
NOV 3	
GUA EP	16 47 08.0
NOV 3	
SJG EP	16 54 57.5
IS	55 23.5
NOV 3	
EUR E(P)	17 03 10.4
NOV 3	
H-17 26 06.0	
19.3N 67.9W	
h ABOUT 19KM	
SJG EP	17 26 39.2
IS	27 03.8
BOZ E(P)	17 34 18.0
BMO E(P)	17 34 45.3
NEW EP	17 34 52.0
NOV 3	
SJG EP	17 42 28.5
IS	42 53.3
NOV 3	
SJG EP	18 07 28.7
IS	07 52.3
NOV 3	
EUR E(P)	18 37 41.3
NOV 3	
SJG EP	18 44 18.8
ES	44 44.0
NOV 3	
SJG EP	18 48 24.3
NOV 3	
BCN EP	18 51 16.1
IS	51 35.2
GCA EP	18 51 25.5
IS	51 52.5
EUR E(P)	18 51 31.0
ALQ E(P)	18 52 42.0
I	54 16.5
NOV 3	
SJG EP	18 55 01.2
ES	55 26.0
NOV 3	
SJG EP	19 10 28.5
IS	10 53.7
NOV 3	
EUR E(P)	19 30 30.0
NOV 3	
SJG EP	19 42 24.0
IS	42 48.5
NOV 3	
SJG EP	19 52 32.0
IS	52 57.2
NOV 3	
SJG EP	20 05 32.0
IS	05 57.8

Date and Station	Phase	(GCT) h m s
NOV 3		
H-20 12 16.6		
44.6N 149.1E		
h ABOUT 47KM		
COL	E(P)	20 19 45.0
NOV 3		
FGU	IP C	20 24 41.2
	IS	25 00.1
GCA	EP	20 25 04.9
	IS	25 28.5
NOV 3		
SJG	EP	20 41 21.2
COL	EP	20 46 39.0
NOV 3		
SJG	EP	20 48 08.5
	IS	48 33.0
NOV 3		
SJG	EP	20 58 18.7
	ES	58 44.5
NOV 3		
H-21 11 16.5		
7.6S 107.9E		
h ABOUT 33KM		
BMO	EP'	21 30 16.3
HHM	EP'	21 30 16.9
BOZ	EP'	21 30 21.0
EUR	EP'	21 30 24.5
NOV 3		
BOZ	E(P)	21 33 39.5
EUR	E(P)	21 33 41.6
NOV 3		
H-21 43 10.3		
6.6N 060.4E		
h ABOUT 33KM		
BOZ	EP'	22 02 15.7
BMO	EP'	22 02 16.2
EUR	IP'	22 02 28.8
NOV 3		
EUR	EP	21 58 52.5
	E(S)	59 43.5
NOV 3		
ALQ	E(P)	22 43 45.0
	I	44 10.6
NOV 3		
SJG	IP D	22 52 25.7
	IS	52 50.0
NOV 3		
BOZ	E(P)	22 58 16.0
NOV 3		
SJG	IP	23 17 46.0
	IS	18 09.1
NOV 3		
SJG	EP	23 36 04.5
	ES	36 28.0
NOV 3		
SJG	EP	23 44 24.3
	IS	44 48.3
NOV 3		
SJG	EP	23 50 24.0
	IS	50 49.3
NOV 4		
EUR	E(P)	00 24 25.7
	ES	24 58.2
	IL	25 04.1
NOV 4		
SJG	EP	02 07 44.4
	ES	08 06.0
NOV 4		
EUR	E(P)	02 31 38.5
NOV 4		
COL	EP	02 41 56.4
NOV 4		
COL	E(P)	02 47 56.0
NOV 4		
H-03 55 03.2		
35.0S 107.6W		
h ABOUT 33KM		
SJG	EP	04 05 44.0
TUC	E(P)	04 05 54.5
ALQ	E(P)	04 06 12.5
EUR	IP	04 06 40.7
FGU	E(P)	04 06 50.5
BMO	E(P)	04 07 10.0
BOZ	E(P)	04 07 12.5
	E	07 31.3
NEW	EP	04 07 29.0
NOV 4		
SJG	IP	04 10 13.0
	IS	10 40.0
NOV 4		
BMO	E(P)	04 14 50.7
NOV 4		
SJG	EP	04 28 23.0
	ES	28 49.5
NOV 4		
SJG	EP	04 31 26.0
	IS	31 51.0
NOV 4		
SJG	E(P)	04 33 23.5
	IS	33 48.0
NOV 4		
SJG	IP	04 44 13.3
	IS	44 39.2
NOV 4		
SLD	IP D	04 53 46.4
	IS	53 52.6
EUR	EP	04 55 04.0
	IL	56 15.5
NOV 4		
SJG	IP	05 19 20.6
	IS	19 46.7
NOV 4		
H-06 05 19.2		
14.7N 093.3W		
h ABOUT 33KM		
ALQ	EP	06 10 27.1
	E	10 36.1
TUC	EP	06 10 30.8
	E(S)	14 57.0
BCN	EP	06 11 16.5
	E	11 27.9
FGU	EP	06 11 25.3
	E	11 35.5
EUR	IP	06 11 43.0
BOZ	EP	06 12 07.2
	E	12 21.2
BMO	EP	06 12 21.3
HHM	EP	06 12 33.7
NEW	EP	06 12 42.0
COL	EP	06 15 38.0
NOV 4		
H-06 36 38.9		
14.7N 093.3W		
h ABOUT 33KM		
ALQ	EP C	06 41 46.5
	E	41 52.0
TUC	EP	06 41 50.7
	E(S)	46 14.0
BCN	EP C	06 42 36.2
FGU	EP	06 42 45.2
SLC	EP	06 42 53.5
EUR	IP	06 43 03.0
BOZ	EP	06 43 27.0
BUT	EP	06 43 33.1
NEW	EP	06 44 02.0
COL	EP	06 46 57.0
NOV 4		
EUR	EP	06 38 52.7
NOV 4		
H-06 49 26.0		
14.7N 93.3W		
h ABOUT 33KM		
FGU	E(P)	06 55 32.8
EUR	E(P)	06 55 58.0
BMO	E(P)	06 56 32.4
NOV 4		
H-07 13 05.0		
15.0N 93.2W		
h ABOUT 49KM		
ALQ	E(P)	07 18 09.0
TUC	E(P)	07 18 11.8
NOV 4		
H-07 15 19.8		
28.4N 130.4E		
h ABOUT 33KM		
BMO	E(P)	07 27 52.3
NOV 4		
H-07 21 30.7		
28.4N 130.4E		
h ABOUT 33KM		
COL	EP	07 31 45.0
	EpP	31 55.0
NEW	EP	07 33 50.0
HHM	E(P)	07 34 01.2
BMO	EP	07 34 03.0
	EpP	34 13.7
BOZ	E(P)	07 34 17.7
	EpP	34 27.3
EUR	E(P)	07 34 30.1
NOV 4		
BMO	E(P)	08 16 47.9
NOV 4		
SJG	EP	08 18 17.0
	IS	18 42.0
NOV 4		
H-08 21 15.0		
14.7N 92.7W		
h ABOUT 33KM		
ALQ	EP	08 26 26.5
TUC	E(P)	08 26 29.0
BCN	EP	08 27 15.5
FGU	EP	08 27 24.4
EUR	IP	08 27 42.2
BOZ	E(P)	08 28 06.7
BMO	EP'	08 28 19.9
COL	EP	08 31 36.0

Date and Station	Phase (GCT)
	h m s
NOV 4	
SJG E(P)	08 35 14.5
IS	35 38.0
NOV 4	
SJG EP	08 52 08.0
IS	52 32.2
NOV 4	
H-08 55 50.8	
4.4S 77.8W	
h ABOUT 57KM	
SJG EP	09 01 11.8
ALQ EP D	09 04 22.9
TUC EP	09 04 27.2
E	04 36.0
FGU EP	09 05 08.8
EUR EP	09 05 26.2
E	05 51.9
BOZ IP C	09 05 41.2
E	05 50.6
BMO E(P)	09 05 55.5
HHM E(P)	09 06 02.9
NEW IP	09 06 11.7
COL E(P)	09 08 25.9
NOV 4	
H-09 00 55.8	
39.9N 78.0E	
h ABOUT 51KM	
COL E(P)	09 12 01.5
BOZ E(P)	09 14 11.7
NOV 4	
H-09 15 01.0	
4.4S 77.8W	
h ABOUT 86KM	
SJG EP	09 20 16.5
ALQ EP	09 23 29.0
TUC E(P)	09 23 33.7
FGU E(P)	09 24 15.4
EUR EP	09 24 32.9
EbP	24 58.6
BMO E(P)	09 25 02.2
NOV 4	
SJG EP	10 29 04.5
IS	29 28.0
NOV 4	
SJG EP	10 35 21.5
IS	35 44.0

Date and Station	Phase (GCT)
	h m s
NOV 4	
H-10 52 57.4	
19.2N 067.8W	
h ABOUT 33KM	
SJG IP D	10 53 28.5
ES	53 54.0
ALQ EP	11 00 11.0
SLC EP	11 00 58.5
BCN EP	11 01 08.5
BOZ EP	11 01 09.7
E	01 46.5
BUT EP	11 01 12.1
EUR IP	11 01 23.0
HHM EP	11 01 28.7
E	02 02.4
BMO EP	11 01 36.5
NEW EP	11 01 43.0
COL EP	11 04 00.0
NOV 4	
H-11 01 32.9	
45.2N 151.5E	
h ABOUT 33KM	
COL E(P)	11 08 51.0
NOV 4	
SJG EP	12 05 20.5
IS	05 46.5
NOV 4	
SJG EP	12 31 01.5
IS	31 25.5
NOV 4	
GCA EP	12 36 54.0
IS	37 20.5
BCN EP	12 37 44.6
IS	38 04.8
NOV 4	
SJG EP	12 53 34.0
IS	53 58.5
NOV 4	
H-13 39 58.0	
15.9N 061.1W	
h ABOUT 34KM	
SJG EP	13 41 16.1
ES	42 20.0
NOV 4	
SJG EP	13 58 38.3
IS	59 03.0
NOV 4	
H-14 49 59.4	
17.0N 099.6W	
h ABOUT 33KM	

Date and Station	Phase (GCT)
	h m s
TUC EP	14 54 13.0
EL	59 05.0
ALQ EPD	14 54 19.0
BCN EP	14 55 07.0
EL	15 02 13.0
FGU EP	14 55 25.0
EUR IP C	14 55 36.9
E	58 25.0
EL	04 03.7
SLD IP	14 55 46.7
BOZ IP C	14 56 09.7
EPP	57 13.7
BMO EP	14 56 19.1
HHM EP	14 56 36.9
COL EP	14 59 47.0
NOV 4	
SJG E(P)	14 56 13.5
IS	56 38.0
NOV 4	
H-15 43 07.0	
26.0S 178.4E	
h ABOUT 594KM	
BCN EP	15 54 57.7
EUR IP D	15 55 02.2
EbP	57 15.4
BMO E(P)	15 55 12.4
COL EP	15 55 22.0
NOV 4	
EUR EP	16 55 12.8
NOV 4	
BOZ EPN	17 01 05.5
EL	01 15.7
BUT EP	17 01 08.9
HHM E(P)	17 01 16.7
E	01 30.7
E	02 31.7
NEW IP	17 02 08.0
NOV 4	
BOZ EPN	17 31 23.0
EL	31 34.5
NOV 4	
ALQ E(P)	17 48 11.2
E	48 49.0
NOV 4	
SJG IP	18 04 19.4
IS	04 43.7
NOV 4	
ALQ EP	19 17 37.0

Date and Station	Phase (GCT)
	h m s
NOV 4	
BMO EP	19 54 46.7
NOV 4	
ALQ EP	19 57 57.0
E	58 07.5
NOV 4	
FGU IP	20 26 28.8
IS	26 47.5
NOV 4	
ALQ EP	20 29 33.2
E	35 06.0
NOV 4	
H-20 30 12.6	
49.3N 128.7W	
h ABOUT 33KM	
NEW EP	20 32 04.0
BMO EP	20 32 21.2
BOZ E(P)	20 33 05.3
SLD EP	20 33 21.3
EUR E(P)	20 33 24.8
COL EP	20 34 29.0
NOV 4	
FGU IP C	21 14 26.9
IS	14 30.9
NOV 4	
EUR EP	21 16 01.8
NOV 4	
ALQ E(P)	21 57 54.0
E	58 13.5
NOV 4	
ALQ E(P)	22 27 20.0
E	28 06.0
NOV 4	
ALQ EP	22 45 39.5
E	46 05.0
NOV 4	
ALQ EP	22 57 41.4
E	58 01.0
NOV 4	
SJG IP	23 01 24.0
IS	01 51.0
NOV 4	
EUR E(P)	23 26 34.7
NOV 4	
BMO E(P)	23 46 43.6
NOV 5	
SJG EP	00 17 56.5
IS	18 23.0
NOV 5	
SJG EP	01 22 08.5
ES	22 33.5

Date and Station	Phase	(GCT) h m s
NOV 5		
H-02 13 50.7		
41.7S 080.1E		
h ABOUT 33KM		
COL	EP'	02 33 22.0
TUC	EP'	02 33 54.0
NEW	EP'	02 33 55.0
HHM	EP'	02 33 57.4
EUR	IP'	02 33 58.2
	EPP	38 59.0
BOZ	EP'	02 34 00.0
	E	34 10.0
	E	35 13.5
FGU	EP'	02 34 00.3
	E	35 25.9
ALQ	EP'	02 34 00.8
BCN	EP'	02 34 07.0
BUT	EP'	02 34 08.4
NOV 5		
H-02 23 10.8		
44.5N 111.1W		
h ABOUT 33KM		
BOZ	IP	02 23 29.3
	IL	23 43.7
BZM	EP	02 23 30.0
	EL	23 49.0
BUT	EP	02 23 41.0
BMO	EPN	02 24 17.2
HHM	E(P)	02 24 17.6
	EL	25 23.6
NEW	EP	02 24 35.0
EUR	E(P)	02 24 45.5
NOV 5		
H-02 30 12.8		
19.2S 169.3E		
h ABOUT 13KM		
COL	EP	02 43 11.0
BCN	EP	02 43 15.0
EUR	IP	02 43 18.0
	IPP	43 23.0
	EPP	46 57.0
BMO	EP	02 43 22.7
TUC	E(P)	02 43 23.0
NEW	EP	02 43 30.0
NOV 5		
BMO	E(P)	02 31 11.8

Date and Station	Phase	(GCT) h m s
NOV 5		
EUR	E(P)	03 24 49.9
NOV 5		
BCN	E(P)	03 29 52.0
	ES	30 09.9
EUR	EP	03 30 06.5
	ES	30 48.4
NOV 5		
FGU	E(P)	03 39 30.3
	IS	39 52.8
NOV 5		
FGU	EP	03 57 05.7
	ES	57 31.3
	ILG	57 34.2
NOV 5		
H-05 14 35.7		
19.2S 067.5W		
h ABOUT 237KM		
BMO	E(P)	05 26 10.8
NOV 5		
H-05 18 19.1		
31.7N 115.5W		
h ABOUT 33KM		
CED	EP	05 19 04.7
	IS	19 43.7
TUC	EPN	05 19 18.7
BCN	IP D	05 19 24.9
	I(S)	20 23.1
	IL	20 38.0
GCA	IP D	05 19 52.0
	IL	21 33.0
SLD	IP	05 20 04.5
	ES	21 18.5
	IL	21 27.0
EUR	EP	05 20 13.8
	E	20 31.6
	EL	22 31.5
ALQ	E(P)	05 20 19.0
	EL	22 46.0
FGU	E(P)	05 20 54.1
	E	21 43.3
	ELG	23 50.3
BMO	EP	05 21 33.4
BOZ	E(P)	05 21 50.5
NEW	EP	05 22 16.0
COL	EP	05 25 47.1
NOV 5		
COL	EP	06 35 59.0
NOV 5		
ADK	EP	06 57 09.5
	E	57 47.0

Date and Station	Phase	(GCT) h m s
NOV 5		
H-06 57 31.3		
54.2N 164.2W		
h ABOUT 58KM		
ADK	E(P)	06 59 25.0
COL	EP	07 00 41.0
EUR	EP	07 04 23.4
	I	04 33.5
BCN	E(P)	07 04 59.3
NOV 5		
ALQ	EP	07 07 19.5
NOV 5		
H-07 08 33.0		
14.6N 93.2W		
h ABOUT 33KM		
ALQ	E(P)	07 13 40.5
TUC	E(P)	07 13 44.0
BOZ	E(P)	07 15 20.0
NOV 5		
SJG	IP	09 01 16.0
	IS	01 39.7
NOV 5		
EUR	EP	10 28 20.3
COL	E(P)	10 31 26.0
NOV 5		
H-10 46 06.3		
6.1S 151.6E		
h ABOUT 62KM		
COL	IP	10 58 28.6
EUR	EP	10 59 27.6
NOV 5		
EUR	EP	11 21 15.0
	E	21 29.4
NOV 5		
BCN	EP	12 10 55.5
	IS	11 15.9
GCA	EP	12 10 55.5
	E	11 05.5
NOV 5		
H-12 19 48.1		
15.8S 174.5W		
h ABOUT 33KM		
BCN	E(P)	12 31 36.8
EUR	E(P)	12 31 48.2
BMO	E(P)	12 31 53.2
ALQ	E(P)	12 32 08.0
BOZ	E(P)	12 32 12.7
COL	EP	12 32 13.0

Date and Station	Phase	(GCT) h m s
NOV 5		
SJG	IP	12 32 30.0
	IS	32 54.5
NOV 5		
H-12 45 13.5		
15.2S 175.1W		
h ABOUT 33KM		
GUA	E(P)	12 54 08.0
	ES	13 01 08.0
SLD	EP	12 56 40.8
	EPP	59 31.9
BCN	IP C	12 57 02.2
	EPP	59 52.5
TUC	E(P)	12 57 07.7
	ES	13 07 00.0
EUR	IP C	12 57 07.8
	EPP	13 00 00.6
GCA	EP	12 57 17.0
BMO	IP	12 57 18.8
NEW	EP	12 57 27.0
ALQ	IP D	12 57 32.0
	E	57 45.0
	ES	13 07 52.0
COL	IP	12 57 33.7
	ES	13 07 52.0
BUT	EP	12 57 34.0
FGU	EP	12 57 35.3
HHM	EP	12 57 39.3
BOZ	EP	12 57 39.5
	E(S)	13 08 12.0
NOV 5		
H-13 31 30.9		
35.9N 120.6W		
h ABOUT 19KM		
SLD	IP C	13 31 54.7
	I(S)	32 03.0
	EL	32 11.2
EUR	EP	13 32 50.3
	EPG	33 07.7
	EL	34 11.9
NOV 5		
H-13 42 07.5		
22.6S 172.8E		
h ABOUT 72KM		
BCN	E(P)	13 54 49.0
TUC	E(P)	13 55 02.8
EUR	IP	13 55 04.4
COL	EP	13 55 09.0
BMO	E(P)	13 55 11.7

Date and Station	Phase (GCT)
	h m s
NOV 5	
BCN E(P)	14 35 35.5
ES	35 55.7
EUR EP	14 35 50.1
E(S)	36 20.6
NOV 5	
H-14 45 00.0	
37.2N 116.0W	
h ABOUT 0KM	
BCN IP C	14 45 29.2
IS	45 51.5
EUR IP	14 45 39.9
GCA E(P)	14 46 00.2
ES	46 45.0
SLD E(P)	14 46 16.4
E(S)	47 04.3
TUC (PN)	14 46 38.0
BMO EPN	14 46 57.5
NOV 5	
BMO E(P)	14 55 52.0
COL EP	14 56 36.0
NOV 5	
EUR E(P)	15 01 46.0
NOV 5	
H-16 03 49.2	
11.0S 166.9E	
h ABOUT 41KM	
COL EP	16 16 11.0
EUR IP	16 16 32.7
BMO EP	16 16 35.0
NOV 5	
EUR E(P)	18 19 50.1
NOV 5	
ALQ E(P)	18 32 07.0
E	32 37.5
NOV 5	
H-18 53 03.3	
28.2N 084.0E	
h ABOUT 33KM	
COL IP	19 05 06.3
NOV 5	
BCN E(P)	19 08 38.5
NOV 5	
HHM E(P)	19 19 46.6
E	20 22.6
NOV 5	
EUR E(P)	21 05 53.2
NOV 5	
COL IP	21 23 30.6

Date and Station	Phase (GCT)
	h m s
NOV 5	
H-21 36 47.0	
59.5N 152.2W	
h ABOUT 102KM	
COL IP	21 38 12.0
NEW EP	21 41 47.0
BMO EP	21 42 07.2
NOV 5	
ALQ E(P)	22 27 57.0
E	28 42.0
NOV 5	
ALQ EP	22 39 20.4
E	39 46.2
NOV 5	
BMO EP	22 53 07.0
NOV 5	
EUR EP	23 26 36.0
NOV 5	
BHP IP D	23 42 24.5
IS	43 24.0
NOV 5	
BMO EP	23 49 43.0
NOV 5	
H-23 59 44.6	
44.4N 149.1E	
h ABOUT 40KM	
COL EP	24 07 15.0
EUR EP	24 10 33.8
NOV 6	
EUR E(P)	00 39 05.4
NOV 6	
H-01 28 35.8	
04.7S 153.0E	
h ABOUT 69KM	
COL EP	01 40 47.0
NOV 6	
H-01 28 53.8	
39.9N 078.1E	
h ABOUT 47KM	
COL E(P)	01 40 01.2
NOV 6	
SJG IP	01 43 14.0
IS	43 42.8
NOV 6	
BMO EP	03 04 55.0
NOV 6	
BOZ (PN)	03 05 40.0
EPG	05 44.5
EL	06 24.5
NOV 6	
H-03 50 09.4	
45.4N 151.3E	
h ABOUT 41KM	

Date and Station	Phase (GCT)
	h m s
COL EP	03 57 25.0
BMO E(P)	04 00 23.2
BOZ E(P)	04 00 36.5
E	00 50.0
EUR IP	04 00 50.1
NOV 6	
BMO EP	03 52 48.8
COL EP	03 53 49.0
NOV 6	
BMO E(P)	07 07 58.3
EUR EP	07 08 11.7
NOV 6	
H-08 29 14.6	
59.9N 029.9W	
h ABOUT 33KM	
COL IP	08 37 45.8
BOZ EP	08 37 54.0
NEW EP	08 37 57.0
BMO EP	08 38 17.0
ALQ E(P)	08 38 37.0
EUR IP	08 38 45.1
NOV 6	
H-08 36 05.3	
24.2S 067.0W	
h ABOUT 184KM	
ALQ EP	08 46 57.1
TUC E(P)	08 46 58.5
EUR IP	08 47 46.2
NOV 6	
COL E(P)	08 45 40.0
NOV 6	
H-10 50 54.0	
47.9N 119.1W	
h ABOUT 33KM	
NEW IP	10 51 17.5
ES	51 37.0
BMO EP	10 51 45.0
HHM E(P)	10 51 45.9
EL	52 35.9
BOZ E(P)	10 52 17.5
EL	53 54.0
NOV 6	
BMO EP	13 22 48.0
COL E(P)	13 23 42.5
NOV 6	
EUR IP C	13 58 22.6

Date and Station	Phase (GCT)
	h m s
NOV 6	
BMO E(P)	13 59 14.5
NOV 6	
EUR EP	14 23 45.6
NOV 6	
H-14 43 17.4	
17.9S 178.6W	
h ABOUT 560KM	
SLD IP C	14 54 13.7
BCN IP	14 54 33.7
EUR EP	14 54 38.6
EPCP	54 48.9
EPP	57 49.5
TUC IP C	14 54 40.4
EPP	56 41.0
BMO EP	14 54 48.0
COL IP	14 54 56.8
NEW IP	14 54 57.0
ALQ EP	14 55 01.0
BUT EP	14 55 05.4
HHM E(P)	14 55 05.9
BOZ IPC	14 55 07.0
NOV 6	
BMO E(P)	18 13 04.2
NOV 6	
H-18 51 41.7	
42.2N 019.1E	
h ABOUT 19KM	
BMO E(P)	19 04 17.2
NOV 6	
H-19 46 52.3	
20.3S 178.5W	
h ABOUT 412KM	
TUC EP	19 58 35.5
BMO E(P)	19 58 45.5
COL IP	19 58 58.3
NOV 6	
H-21 51 41.7	
01.5N 066.9E	
h ABOUT 33KM	
ALQ EP'	22 11 11.5
NOV 6	
SJG EP	21 54 03.0
IS	54 24.0
NOV 6	
SJG EP	21 57 22.5
IS	57 44.2

Date and Station	Phase	(GCT) h m s
NOV 6		
SJG	EP	22 15 55.0
	IS	16 16.4
NOV 6		
H-23 49 55.9		
20.2S 069.3W		
h ABOUT 111KM		
ALQ	EP	24 00 27.2
	EpP	00 52.2
EUR	IP	24 01 20.1
BOZ	E(P)	24 01 32.0
BMO	EP	24 01 44.9
	EpP	02 11.0
NOV 7		
H-00 42 58.6		
32.8N 104.3E		
h ABOUT 33KM		
COL	EP	00 53 56.0
HHM	E(P)	00 56 09.8
NOV 7		
EUR	IP	00 58 56.5
BMO	E(P)	00 59 29.9
NOV 7		
EUR	EP	01 01 39.4
BMO	E(P)	01 02 30.3
NOV 7		
H-04 08 14.4		
34.1N 080.7E		
h ABOUT 45KM		
COL	EP	04 19 48.0
NOV 7		
H-06 10 05.0		
37.3N 114.2W		
h ABOUT 33KM		
BCN	EP D	06 10 29.4
	IS	16 10 49.0
GCA	EP	06 10 39.5
	IS	11 06.7
	IL	11 09.0
EUR	EP	06 10 45.0
	E(S)	11 17.0
NOV 7		
BMO	E(P)	06 49 01.8
COL	EP	06 49 12.0
NOV 7		
H-07 00 04.2		
19.7S 069.4W		
h ABOUT 128KM		
BMO	E(P)	07 11 48.7
	E	12 10.9
NOV 7		
SJG	EP	07 53 09.5
	IS	53 34.9
NOV 7		
SLD	IP C	08 16 43.3
	IS	17 03.6
NOV 7		
EUR	E(P)	08 18 03.6
NOV 7		
H-08 30 46.4		
46.3N 153.3E		
h ABOUT 25KM		
COL	EP	08 37 51.0
EUR	EP	08 41 15.7
NOV 7		
H-08 55 51.5		
07.2N 125.5E		
h ABOUT 92KM		
COL	IP	09 08 03.8
NEW	EP	09 09 39.0
BMO	E(P)	09 09 44.7
BOZ	EP'	09 14 10.0
	E	14 23.2
ALQ	EP'	09 14 27.5
SJG	EP'	09 15 42.0
NOV 7		
COL	E(P)	09 03 31.5
NOV 7		
EUR	E(P)	09 10 15.9
NOV 7		
BMO	EP	09 24 13.3
NOV 7		
BMO	E(P)	09 31 24.3
NOV 7		
UKI	E(P)	11 47 39.4
SLD	EP	11 48 15.9
EUR	IP	11 48 52.3
NOV 7		
H-12 49 58.5		
22.5S 068.6W		
h ABOUT 103KM		
ALQ	EP D	13 00 45.4
	EpP	01 12.8
EUR	IP	13 01 36.0
BOZ	E(P)	13 01 46.5
	EsP	02 28.5
BMO	EP	13 02 00.2
	EpP	02 28.2
HHM	E(P)	13 02 05.9
NOV 7		
H-13 16 45.8		
41.9S 088.3E		
h ABOUT 33KM		
COL	EP'	13 36 17.0
BMO	EP'	13 37 27.4
EUR	EP'	13 37 29.2
NEW	EP'	13 37 38.0
NOV 7		
GUA	EP	14 05 52.7
BMO	E(P)	14 18 15.0
EUR	EP	14 18 27.0
NOV 7		
H-14 29 05.9		
22.2S 068.8W		
h ABOUT 110KM		
BMO	EP	14 41 05.8
	EpP	41 33.6
NOV 7		
EUR	EP	14 44 52.0
NOV 7		
BCN	E(P)	15 16 09.7
NOV 7		
SLD	EP	17 34 07.2
NOV 7		
H-17 37 39.9		
15.3S 173.3W		
h ABOUT 33KM		
EUR	E(P)	17 49 27.1
	E	49 30.8
TUC	E(P)	17 49 27.5
	E	49 44.3
BMO	EP	17 49 39.1
NEW	EP	17 49 50.0
ALQ	EP	17 49 51.5
FGU	EP	17 49 55.0
HHM	E(P)	17 49 58.3
COL	IP	17 49 58.9
BOZ	EP	17 50 00.0
	E	50 40.5
NOV 7		
BUT	EP	17 50 16.3
	ES	52 57.3
NOV 7		
H-18 41 08.3		
46.8N 151.4E		
h ABOUT 125KM		
COL	EP	18 48 05.0
EUR	EP	18 51 30.9
NOV 7		
COL	IP	19 05 40.0
	IL	06 13.4
NOV 7		
SJG	EP	19 13 03.5
	IS	13 26.0
NOV 7		
H-20 26 15.1		
05.9S 152.1E		
h ABOUT 43KM		
COL	IP C	20 38 36.7
	IpP	38 48.1
BMO	EP	20 39 32.4
NEW	EP	20 39 34.0
EUR	IP D	20 39 36.2
	IpP	39 48.0
NOV 7		
H-20 31 30.2		
07.7S 075.9W		
h ABOUT 115KM		
ALQ	IP C	20 40 25.4
	EpP	40 56.0
EUR	EP	20 41 26.5
	EpP	41 58.4
BOZ	EP	20 41 39.6
	EpP	42 13.2
HHM	E(P)	20 42 01.0
	EpP	42 32.0
NEW	EP	20 42 08.0
	EpP	42 41.0
COL	IP	20 44 15.0
NOV 7		
BMO	EP	21 03 04.9
NOV 7		
ALQ	E(P)	21 48 22.5
	E	49 02.0
NOV 7		
FGU	IP C	21 56 57.6
	IS	57 16.5
NOV 7		
SJG	EP	22 03 04.5
	IS	03 28.2
NOV 7		
ALQ	EP	22 29 45.0
	E	30 25.0
BOZ	E(P)	22 30 35.0
	E	30 46.7
NOV 7		
ALQ	E(P)	22 52 41.5
	E	53 07.0

Date and Station	Phase (GCT)
	h m s
NOV 7	
H-23 28 32.3	
44.0N 127.2W	
h ABOUT 33KM	
BMO E(P)	23 30 17.1
E	30 27.6
EUR E(P)	23 30 54.0
NOV 7	
COL EP	23 32 39.8
NOV 8	
EUR IP	00 06 01.8
NOV 8	
ADK E(P)	00 10 35.6
IS	10 57.5
NOV 8	
COL E(P)	00 55 10.4
NOV 8	
H-03 14 12.0	
36.1N 050.8E	
h ABOUT 38KM	
COL EP	03 26 10.0
NOV 8	
H-03 19 17.3	
23.4S 115.2W	
h ABOUT 33KM	
TUC EP	03 28 53.5
ALQ EP	03 29 13.8
EUR IP	03 29 41.6
BOZ E(P)	03 30 12.5
NEW EP	03 30 35.0
HHM EP	03 30 35.1
NOV 8	
ADK IP	03 27 50.3
IS	28 04.3
NOV 8	
H-03 50 09.2	
51.5N 178.5W	
h ABOUT 49KM	
ADK IP	03 50 30.4
IS	50 46.5
COL EP	03 54 50.0
NEW IP	03 57 29.7
I	57 38.0
HHM E(P)	03 57 44.6
BOZ EP	03 58 07.5
E	58 15.5
EUR IP	03 58 15.5
ALQ EP	03 59 22.0

Date and Station	Phase (GCT)
	h m s
NOV 8	
EUR EP	04 29 07.5
NOV 8	
ADK IP	04 41 28.7
IS	41 45.0
NOV 8	
EUR IP	05 11 04.1
BMO EP	05 11 32.6
NOV 8	
H-11 35 57.9	
52.5N 173.1E	
h ABOUT 41KM	
ADK IP	11 37 32.0
ES	38 42.0
COL EP	11 41 03.9
NEW IP	11 43 55.4
IpP	44 04.0
HHM EP	11 44 09.6
BMO EP	11 44 10.1
BOZ IP C	11 44 32.0
EpP	44 41.3
EUR IP	11 44 42.9
ALQ EP	11 45 46.0
EpP	45 55.0
NOV 8	
SJG EP	12 53 07.5
IS	53 31.0
NOV 8	
H-13 15 18.7	
35.1N 140.1E	
h ABOUT 60KM	
COL EP	13 24 18.0
NEW EP	13 26 38.0
BMO EP	13 26 49.7
HHM E(P)	13 26 50.1
BOZ E(P)	13 27 06.2
EUR IP	13 27 12.5
NOV 8	
H-14 30 03.0	
25.9N 96.8E	
h ABOUT 51KM	
COL E(P)	14 41 59.0
NOV 8	
H-14 55 35.4	
10.6S 078.5W	
h ABOUT 33KM	
BMO E(P)	15 06 16.4

Date and Station	Phase (GCT)
	h m s
NOV 8	
BCN EP	14 57 53.8
IS	57 13.4
EUR IP C	14 58 10.9
IS	58 40.9
NOV 8	
H-15 36 30.6	
4.7S 102.0E	
h ABOUT 33KM	
BMO EP'	15 55 32.5
BOZ EP'	15 55 39.2
EUR IP'	15 55 43.0
ESKP	59 05.7
NOV 8	
BCN E(P)	16 22 12.0
EL	22 28.0
EUR EP	16 22 29.7
NOV 8	
NEW EP	18 14 24.0
NOV 8	
BMO IPG	18 44 58.2
NOV 8	
BUT EP	19 33 33.2
HHM E(P)	19 34 16.1
E	34 55.0
NOV 8	
ALQ E(P)	20 28 03.0
E	28 42.6
NOV 8	
EUR IP	20 55 32.2
NOV 8	
BOZ E(P)	21 16 54.8
NOV 8	
BMO E(P)	21 22 03.2
NOV 8	
BOZ E(P)	21 45 57.8
NOV 8	
BUT EP	22 07 02.2
NOV 8	
BHP EP	22 48 14.0
IS	48 55.5
NOV 8	
EUR IP	23 40 51.2
NOV 9	
BMO EP	00 19 26.4
NOV 9	
H-02 01 58.1	
14.9S 071.7W	
h ABOUT 132KM	
ALQ EP	02 11 50.1
EUR E(P)	02 12 46.0

Date and Station	Phase (GCT)
	h m s
BMO EP	02 13 12.1
NOV 9	
H-02 17 25.7	
58.0N 152.1W	
h ABOUT 33KM	
COL IP	02 19 11.8
EUR E(P)	02 23 30.6
NOV 9	
H-02 35 12.9	
57.1N 150.6W	
h ABOUT 34KM	
COL EP	02 37 08.0
NEW IP	02 40 05.5
HHM EP	02 40 22.1
E	40 34.1
BMO EP	02 40 26.1
EPCP	44 05.9
BOZ E(P)	02 40 49.4
E	41 05.5
EUR EP C	02 41 08.0
E	41 21.5
EPCP	44 17.9
TUC EP	02 42 19.5
ALQ EP	02 42 20.5
NOV 9	
CED EP	03 09 06.2
IS	09 26.7
EUR EP	03 09 59.0
NOV 9	
H-03 18 26.9	
19.4N 109.1W	
h ABOUT 33KM	
TUC EP	03 21 32.0
ALQ E(P)	03 22 08.0
EUR IP	03 23 10.0
BMO E(P)	03 23 56.8
BOZ E(P)	03 24 00.0
NOV 9	
H-05 40 02.6	
28.7S 068.8W	
h ABOUT 86KM	
BMO E(P)	05 52 32.3
NOV 9	
EUR EP	06 54 56.5
NOV 9	
H-07 30 17.3	
04.2S 105.6W	
h ABOUT 33KM	
EUR E(P)	07 38 24.2

Date and Station	Phase	(GCT) h m s
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

Date and Station	Phase (GCT)
	h m s
COL EP'	03 20 59.0
EpP'	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

Date and Station	Phase (GCT)
	h m s
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

Date and Station	Phase (GCT)
	h m s
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

Date and Station	Phase (GCT)
	h m s
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

Date and Station	Phase	Phase (GCT) h m s
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
CSC EP	00 49 00.0
E	49 11.0
ES	52 48.0
WSC E(P)	00 49 16.4
E	49 55.9
E	50 02.4
EPCP	53 13.4
ES	53 25.2
TUC EP	00 52 22.0
E	52 35.0
BOZ EP	00 52 49.3
E	53 05.7
EUR IP	00 53 02.5
BMO EP	00 53 16.2
NEW IP	00 53 21.3
COL EP	00 55 30.0
NOV 12	
COL E(P)	01 08 26.0
NOV 12	
EUR EP	02 41 32.0
E(S)	42 10.5
NOV 12	
COL IP	02 45 36.1
EUR IP	02 46 28.2
NOV 12	
TUC E(P)	02 48 20.5
ALQ EP	02 48 57.0
EUR IP	02 49 58.1
BMO E(P)	02 50 48.4
NOV 12	
BUT IP	03 00 47.5
NOV 12	
H-04 07 27.6	
8.7N 083.4W	
h ABOUT 35KM	
BHP E(P)	04 08 19.7
IL	09 14.0
SJG EP	04 11 52.5
I	12 06.4
ES	15 39.0
CSC EP	04 12 52.0
ALQ E(P)	04 14 04.0
TUC EP	04 14 14.5
EUR IP	04 15 20.1
BMO E(P)	04 15 49.8
COL IP	04 18 45.4
NOV 12	
BMO EP	04 09 58.3

Date and Station	Phase (GCT)
	h m s
NOV 12	
COL E(P)	04 28 02.0
EUR E(P)	04 31 38.0
NOV 12	
H-04 57 38.1	
08.6S 127.2E	
h ABOUT 33KM	
BMO EP'	05 16 14.6
EUR IP'	05 16 20.5
ALQ EP'	05 16 36.9
NOV 12	
H-06 00 40.9	
41.9N 112.8W	
h ABOUT 33KM	
SLC IP	06 01 03.1
FGU EP	06 01 25.3
I	01 28.9
IS	02 03.2
EUR EP	06 01 34.5
E	01 47.0
IL	02 30.0
BOZ E(P)	06 01 37.5
NOV 12	
NEW EP	06 04 26.0
NOV 12	
H-06 15 32.6	
10.7S 166.2E	
h ABOUT 177KM	
COL EP	06 27 37.0
EUR IP	06 28 02.0
TUC EP	06 28 13.0
NOV 12	
ADK IP	07 11 32.4
IS	12 13.8
NOV 12	
SJG EP	07 13 50.5
EUR E(P)	07 18 05.0
NOV 12	
BMO EP'	07 20 10.9
NOV 12	
COL IP	07 47 42.8
EUR IP	07 48 30.0
NOV 12	
BHP EP	08 25 53.0
IS	26 52.8
NOV 12	
H-09 00 03.4	
02.6S 139.0E	
h ABOUT 48KM	
COL EP	09 12 36.5

Date and Station	Phase (GCT)
	h m s
SJG EP'	09 19 53.0
NOV 12	
GUA EP	09 04 16.0
ES	07 26.0
NOV 12	
ADK IP	09 07 00.0
IS	07 22.0
NOV 12	
TUC EP	09 17 49.6
COL EP	09 21 23.0
NOV 12	
H-09 50 57.5	
26.7S 175.7W	
h ABOUT 58KM	
TUC EP	10 03 29.4
EUR IP	10 03 34.1
ALQ EP	10 03 51.0
COL EP	10 04 08.0
NOV 12	
GCA EP	10 18 11.8
IS	18 21.5
NOV 12	
COL IP	10 53 08.6
NOV 12	
BHP EP C	11 13 34.5
IS	14 34.0
NOV 12	
TUC (PN)	11 42 42.0
NOV 12	
ALQ E(P)	11 46 11.5
NOV 12	
H-11 50 30.6	
23.9S 067.7W	
h ABOUT 118KM	
BHP IP D	11 57 10.5
SJG IP D	11 58 07.0
I	58 16.7
EPP	59 51.3
ES	12 04 09.0
E	04 20.0
CSC EP	12 00 17.0
E	00 52.0
WSC EP	12 00 44.9
EPCP	01 19.9
ALQ IP D	12 01 26.2
E	01 39.5
EPCP	01 49.0
TUC IP C	12 01 27.4
EPP	03 54.5
FGU IP D	12 02 02.5

Date and Station	Phase (GCT)
	h m s
SLC EP	12 02 07.9
EPCP	02 19.2
E	02 29.7
EUR IP	12 02 15.5
SLD IP D	12 02 23.0
BOZ IP D	12 02 28.0
E	03 22.5
BUT EP	12 02 32.6
BMO EP	12 02 38.9
HHM IP	12 02 43.6
NEW IP	12 02 50.0
COL IP	12 04 35.3
NOV 12	
H-12 01 42.2	
33.0N 130.3E	
h ABOUT 7KM	
GUA IP	12 06 53.0
COL E(P)	12 11 30.5
NEW EP	12 13 51.0
BMO EP	12 13 58.9
HHM EP	12 14 00.0
BOZ EP	12 14 14.5
E	14 30.5
SLD EP	12 14 14.8
EUR IP	12 14 21.9
FGU EP	12 14 35.1
NOV 12	
H-12 16 47.1	
25.1N 068.0E	
h ABOUT 33KM	
COL E(P)	12 29 26.7
NOV 12	
NEW EP	12 17 40.0
NOV 12	
ALQ E(P)	12 29 32.5
NOV 12	
H-12 49 43.7	
41.7N 144.1E	
h ABOUT 36KM	
ADK E(P)	12 55 42.3
COL IP C	12 57 48.9
IS	13 04 20.0
EL	07 42.0
NEW EP	13 00 24.0

Date and Station	Phase	Phase (GCT) h m s
HHM	EP	13 00 34.3
	IPP	00 44.3
	ESP	00 50.1
	EPP	03 18.1
BMO	EP	13 00 36.6
BUT	EP	13 00 49.2
SLD	EP	13 00 51.0
	IPP	01 01.2
BOZ	IP C	13 00 52.7
	EPCP	01 15.0
	EPP	03 38.0
EUR	IP D	13 01 02.8
	IPP	01 11.4
	E	04 05.7
	ES	10 25.3
SLC	EP	13 01 12.4
	EPP	01 21.4
FGU	EP	13 01 20.6
TUC	EP	13 01 46.0
	ES	11 45.0
ALQ	EP	13 01 52.0
	EPCP	02 02.0
	ES	11 54.0
NOV 12		
H-13 28 23.3		
41.6N 143.8E		
h ABOUT 57KM		
COL	E(P)	13 36 29.0
NOV 12		
BMO	E(P)	13 47 16.6
NOV 12		
H-13 56 19.0		
41.3N 144.6E		
h ABOUT 33KM		
COL	EP	14 04 25.0
BMO	E(P)	14 07 11.6
EUR	IP	14 07 37.4
NOV 12		
GUA	IP	14 14 58.0
	I(S)	15 12.0
NOV 12		
GUA	IP	15 30 34.0
	IS	30 58.0
NOV 12		
GUA	EP	15 40 55.0
	IS	41 10.0
NOV 12		
BOZ	E(P)	15 44 06.5
	E	44 54.5
BMO	E(P)	15 44 47.2
NOV 12		
H-15 56 05.0		
04.8S 134.1E		
h ABOUT 33KM		
GUA	EP	16 00 50.0
KIP	IP	16 07 25.5
COL	EP	16 08 58.0
SLD	IP	16 10 11.6
BMO	EP	16 10 18.4
	EP'	14 28.9
FUR	IP	16 10 29.6
	IP'	14 33.2
ALQ	EP'	16 14 49.0
BHP	IP'	16 15 43.0
SJG	EP'	16 15 58.5
	I	16 26.0
NOV 12		
COL	EP	16 04 44.0
NOV 12		
EUR	EP	16 25 44.2
BMO	E(P)	16 25 49.5
	E	26 05.1
NOV 12		
GUA	IP	17 10 02.0
	IS	10 15.0
NOV 12		
H-17 15 52.6		
41.6N 144.3E		
h ABOUT 33KM		
COL	EP	17 24 00.0
BMO	E(P)	17 26 45.8
EUR	E(P)	17 27 10.5
ALQ	E(P)	17 28 02.0
NOV 12		
H-17 23 57.1		
15.0S 166.6E		
h ABOUT 46KM		
COL	IP	17 36 36.3
EUR	EP	17 36 54.0
BMO	E(P)	17 36 57.0
NOV 12		
H-17 33 54.5		
45.5N 151.7E		
h ABOUT 37KM		
COL	IP	17 41 08.9
BMO	E(P)	17 44 03.6
EUR	IP	17 44 31.2
	I	44 44.4
NOV 12		
EUR	E(P)	17 59 31.5
NOV 12		
ALQ	EP	18 25 16.0
NOV 12		
H-18 45 00.0		
15.7S 167.2E		
h ABOUT 30KM		
GUA	EP	18 52 05.0
	ES	57 40.0
KIP	IP	18 53 59.5
ADK	E(P)	18 56 06.0
SLD	EP	18 57 36.7
	E	57 58.8
	EPP	19 00 50.5
	EPKKP	15 43.5
	EP'P'	23 52.7
COL	EP D	18 57 42.0
	IS	19 08 10.0
EUR	IP C	18 57 57.8
	I	58 21.4
	EPP	19 01 36.6
	E(S)	08 43.5
	EP'P'	19 23 40.9
BMO	EP	18 58 01.6
TUC	E(P)	18 58 05.5
	E	58 29.2
HHM	E(P)	18 58 07.5
	EPKKP	19 15 22.0
NEW	EP	18 58 08.0
BOZ	E(P)	18 58 13.2
FGU	EP	18 58 22.8
ALQ	EP	18 58 28.0
	E	58 50.5
	EPP	19 02 14.0
	E	03 16.5
SJG	EP'	19 04 05.3
	EPP	06 15.0
	ESKP	07 24.0
	E	07 47.2
NOV 12		
BUT	EP	18 59 23.7
NOV 12		
NEW	EP	19 14 50.0
NOV 12		
H-19 32 24.7		
18.9S 175.6W		
h ABOUT 250KM		
BMO	E(P)	19 44 21.3
COL	EP	19 44 38.0
NOV 12		
EUR	EP	19 57 51.9
	E(S)	58 24.5
NOV 12		
EUR	EP	21 02 06.6
	E(S)	02 34.8
NOV 12		
SLD	EP	21 07 07.6
NOV 12		
ALQ	E(P)	22 31 38.6
	E	31 46.0
	E	32 26.0
NOV 12		
ALQ	E(P)	22 42 07.0
NOV 12		
ALQ	EP	22 51 46.0
	E	52 11.2
NOV 12		
H-23 04 58.8		
41.6N 144.2E		
h ABOUT 33KM		
COL	IP	23 13 05.0
NEW	IP	23 15 39.5
HHM	EP	23 15 50.0
BMO	EP	23 15 51.9
BOZ	EP C	23 16 09.2
EUR	IP	23 16 17.1
ALQ	EP D	23 17 07.2
NOV 12		
WSC	E(P)	23 18 49.4
NOV 13		
H-00 00 12.7		
40.2N 124.8W		
h ABOUT 33KM		
UKI	E(P)	00 00 41.0
EUR	EP	00 01 57.9
BMO	E(P)	00 01 58.6
NOV 13		
EUR	EP	00 27 46.0
	E(S)	28 21.6
NOV 13		
SLD	EP	00 31 34.0
	E(S)	32 07.7
NOV 13		
COL	EP	00 39 19.0
EUR	EP	00 39 36.5
NOV 13		
H-01 18 58.5		
11.0S 074.7W		
h ABOUT 46KM		

Date and Station	Phase (GCT)
	h m s
SJG EP	01 25 08.5
ALQ E(P)	01 28 25.0
FGU EP	01 29 08.7
EUR E(P)	01 29 24.9
SLD EP	01 29 34.8
BOZ EP	01 29 38.5
BMO E(P)	01 29 52.3
NEW EP	01 30 06.0
COL EP	01 32 07.5
NOV 13	
EUR IP	01 28 42.2
BMO E(P)	01 29 16.5
NOV 13	
H-02 51 52.7	
17.1N 062.0W	
h ABOUT 85KM	
SJG IP D	02 52 56.1
IS	53 46.0
ESCS	03 07 09.2
EsSCS	07 47.3
BHP IP C	02 56 08.5
I	56 34.7
CSC IP	02 57 03.0
E	57 22.0
E	57 33.0
ES	03 01 25.5
WSC IP	02 57 13.6
I	03 01 03.6
ESCP	03 04 04.1
ALQ IP D	02 59 49.0
EpP	03 00 08.6
EPCP	01 40.0
ESCP	05 20.0
TUC IP D	03 00 14.0
EpP	00 33.5
FGU IP D	03 00 18.5
IPP	02 11.3
SLC IP	03 00 31.9
E	00 46.9
BOZ IP D	03 00 41.5
EpP	01 00.0
EPCS	05 48.2
EUR IP D	03 00 53.4
IpP	01 10.3
ESCP	05 56.0
HHM EP	03 00 59.0
E	01 11.0
EpP	01 19.0
BMO IP	03 01 07.5
ESCP	05 57.8

Date and Station	Phase (GCT)
	h m s
NEW IP	03 01 12.7
IpP	01 31.0
SLD IP D	03 01 21.5
EpP	01 41.5
COL IP	03 03 14.1
EpP	03 33.0
NOV 13	
H-02 56 27.5	
41.6N 144.2E	
h ABOUT 33KM	
COL E(P)	03 04 43.0
BOZ EP	03 07 38.0
EpP	07 47.5
EsP	07 53.0
EPP	10 25.0
ALQ E(P)	03 08 37.0
NOV 13	
H-03 03 33.2	
11.1S 166.3E	
h ABOUT 167KM	
COL IP	03 15 40.7
SLD E(P)	03 15 41.5
EUR EP	03 16 04.4
BMO E(P)	03 16 06.5
NOV 13	
EUR IP	03 28 59.0
SLD IP C	03 29 05.5
I	29 12.4
HHM E(P)	03 29 06.5
NOV 13	
H-03 41 48.0	
24.1S 111.9E	
h ABOUT 33KM	
BOZ EP'	04 01 04.7
BMO EP'	04 01 08.3
EUR EP'	04 01 11.5
ALQ IP'C	04 01 25.0
E	01 31.0
NOV 13	
ALQ E(P)	04 59 59.2
NOV 13	
H-05 02 29.0	
15.9S 179.7W	
h ABOUT 103KM	
EUR EP	05 14 33.8
TUC E(P)	05 14 38.0
BMO E(P)	05 14 42.6
COL EP	05 14 48.0

Date and Station	Phase (GCT)
	h m s
NOV 13	
H-06 04 09.0	
13.5N 089.6W	
h ABOUT 69KM	
CSC EP	06 09 00.0
E	09 17.0
ALQ EP	06 09 40.0
TUC E(P)	06 09 44.5
FGU EP	06 10 33.9
E	10 48.8
EUR IP D	06 10 55.7
EPCP	13 27.1
SLD EP	06 11 11.5
EPCP	13 33.0
BOZ EP	06 11 14.0
BMO E(P)	06 11 30.6
EPCP	13 39.8
COL EP	06 14 39.0
NOV 13	
HHM E(P)	06 13 42.2
NEW IP	06 13 46.5
NOV 13	
EUR E(P)	06 51 07.5
NOV 13	
H-11 42 27.0	
17.2N 061.4W	
h ABOUT 61KM	
SJG EP	11 43 35.6
IS	44 28.9
ALQ EP	11 50 29.0
TUC EP	11 50 54.4
SLC EP	11 51 12.2
BOZ EP	11 51 19.0
E	51 42.0
EUR IP	11 51 33.3
BMO EP	11 51 46.6
NEW EP	11 51 51.0
SLD EP	11 52 02.0
COL IP D	11 53 52.5
NOV 13	
H-13 07 46.7	
16.1N 095.0W	
h ABOUT 57KM	
ALQ EP D	13 12 32.0
TUC EP	13 12 34.3
EUR EP	13 13 46.8

Date and Station	Phase (GCT)
	h m s
BMO E(P)	13 14 42.5
NOV 13	
ADK E(P)	13 18 57.0
ES	19 46.5
COL E(P)	13 22 51.5
EUR EP	13 26 21.5
NOV 13	
SJG EP	13 53 38.7
ES	54 00.6
NOV 13	
H-14 24 39.8	
08.3S 074.2W	
h ABOUT 172KM	
BHP IP C	14 28 39.6
SJG IP C	14 30 10.0
WSC EP	14 32 54.6
E	33 35.3
ALQ EP	14 33 38.6
EpP	34 13.5
EsP	34 33.2
TUC EP	14 33 43.0
E	34 30.5
FGU EP	14 34 22.1
EpP	34 59.6
EsP	35 17.1
EUR IP	14 34 39.2
SLD EP	14 34 50.8
BOZ EP	14 34 52.0
EpP	35 32.5
BMO EP	14 35 06.3
HHM E(P)	14 35 08.7
E	36 02.4
NEW IP	14 35 20.5
IpP	36 01.0
COL EP	14 37 24.0
EpP	38 05.0
NOV 13	
H-14 29 54.5	
17.3N 061.3W	
h ABOUT 65KM	
SJG IP	14 31 03.2
IS	31 59.0
TUC IP	14 38 21.8
BOZ EP	14 38 47.5
EUR IP	14 39 00.8
BMO E(P)	14 39 13.5
NEW IP	14 39 18.0
EpP	39 35.0

Date and Station	Phase (GCT) h m s
SLD E(P)	14 39 18.4
COL E(P)	14 41 19.0
NOV 13	
SJG EP	15 17 52.5
ES	18 49.5
NOV 13	
SJG EP	15 20 10.5
IS	21 06.6
NOV 13	
COL EP	15 27 51.5
E(S)	29 09.6
NOV 13	
BMO E(P)	15 36 43.2
NOV 13	
SJG EP	16 16 10.0
ES	17 05.0
NOV 13	
COL E(P)	16 58 56.0
NOV 13	
ALQ E(P)	17 32 30.0
NEW EP	17 33 07.0
NOV 13	
SLD EP	18 32 14.8
EL	32 49.4
NOV 13	
H-18 50 36.6	
44.2N 128.7W	
h ABOUT 33KM	
BMO EP	18 52 35.4
NEW EP	18 52 47.0
EUR EP	18 53 10.6
ALQ EP	18 55 04.5
NOV 13	
H-21 10 04.1	
53.7N 169.2E	
h ABOUT 33KM	
COL IP	21 15 17.8
E	15 26.0
NEW EP	21 18 16.0
BMO EP	21 18 31.4
BOZ EP	21 18 51.5
E	19 11.3
EUR IP	21 19 04.9
TUC EP	21 20 02.5
ALQ EP	21 20 07.0
NOV 13	
EUR IP	21 58 15.9

Date and Station	Phase (GCT) h m s
NOV 13	
EUR EP	22 06 44.3
EL	07 40.0
NOV 13	
NEW EP	22 09 35.0
NOV 13	
BOZ E(P)	23 05 21.5
NOV 13	
HHM E(P)	23 29 16.6
E	30 08.1
NOV 13	
BUT EPN	23 34 39.7
EL	34 56.7
NOV 14	
COL IP	00 19 33.2
NOV 14	
EUR IP	00 59 14.6
NOV 14	
H-03 08 26.5	
02.0N 099.1E	
h ABOUT 133KM	
NEW EP'	03 27 04.0
BMO EP'	03 27 08.5
BOZ EP'	03 27 14.0
SLD EP'	03 27 16.3
EUR EP'	03 27 18.2
EpP'	27 54.7
ALQ EP'	03 27 34.6
EpP'	28 11.0
ESKP	30 53.8
NOV 14	
FGU EP	03 30 33.6
NOV 14	
EUR IP	03 54 35.4
NOV 14	
COL EP	04 11 34.5
TUC E(P)	04 16 53.0
NOV 14	
BOZ EPN	04 48 12.0
EPG	48 15.5
EL	48 29.5
BUT E(P)	04 48 27.5
NOV 14	
COL E(P)	05 27 42.5
NOV 14	
SLD EP	06 49 58.0
E(S)	50 34.3
NOV 14	
ALQ E(P)	08 35 11.0

Date and Station	Phase (GCT) h m s
NOV 14	
EUR E(P)	08 35 34.7
EL	36 11.0
BMO EP	08 36 59.1
NOV 14	
H-08 44 44.0	
01.3S 015.9W	
h ABOUT 33KM	
BMO E(P)	08 58 22.4
NOV 14	
SJG EP	11 07 14.0
ES	07 41.6
NOV 14	
H-11 34 50.2	
39.0N 118.5W	
h ABOUT 33KM	
EUR IP	11 35 21.8
SLD EP	11 35 34.5
IS	36 08.3
BCN E(P)	11 35 58.5
NOV 14	
COL E(P)	11 49 33.0
I(S)	50 37.5
NOV 14	
H-12 58 37.9	
18.4S 069.4W	
h ABOUT 132KM	
SJG EP	13 05 28.0
IS	10 50.5
IsS	11 51.0
ALQ IP D	13 08 57.0
EpP	09 32.5
EsP	09 42.0
TUC IP D	13 09 00.3
BCN IP D	13 09 33.0
FGU EP D	13 09 37.2
EpP	10 09.4
EUR IP	13 09 51.3
SLD IP D	13 10 00.5
EpP	10 36.1
BOZ IP D	13 10 03.5
EpP	10 35.5
BUT IP	13 10 07.4
EpP	10 38.5
BMO IP	13 10 16.2
EpP	10 48.0
HHM IP	13 10 20.6
E	11 01.6
NEW IP	13 10 28.0
COL EP	13 12 16.3
EPP	16 11.5

Date and Station	Phase (GCT) h m s
NOV 14	
H-14 30 52.2	
41.7N 112.7W	
h ABOUT 33KM	
SLC IP	14 31 11.6
EL	31 29.1
FGU IP	14 31 36.4
I	31 39.0
ILG	32 13.8
EUR IP	14 31 43.9
BOZ IPC	14 31 53.5
BMO EPN	14 31 59.7
ES	32 50.6
BUT EP	14 32 03.2
IS	32 56.7
HHM E(P)	14 32 34.1
ELG	34 09.6
NEW EP	14 32 44.0
NOV 14	
BCN EP	14 34 05.8
NOV 14	
COL EP	15 08 57.0
NOV 14	
COL EP	15 47 23.5
NOV 14	
COL EP	16 05 32.7
NOV 14	
EUR EP	16 27 06.5
BMO EP	16 27 34.7
NOV 14	
SJG E(P)	16 44 48.0
NOV 14	
BOZ E(P)	18 16 04.5
COL EP	18 17 19.9
NOV 14	
BMO E(P)	18 19 02.8
NOV 14	
ALQ E(P)	18 34 04.0
NOV 14	
ADK EP	18 57 23.6
IS	57 46.5
NOV 14	
EUR EP	19 57 42.1
NOV 14	
H-20 02 35.9	
39.9N 104.7W	
h ABOUT 5KM	
FGU EP	20 03 37.8
ILG	04 30.0
ALQ E(P)	20 03 57.0

Date and Station	Phase (GCT)
	h m s
SLC E(P)	20 04 14.3
ES	05 23.5
EUR EP	20 04 47.5
BMO E(P)	20 05 10.6
NOV 14	
ADK EP	20 11 15.3
ES	11 29.5
NOV 14	
EUR IP	20 19 00.5
NOV 14	
ADK IP	21 00 56.7
IS	01 09.5
NOV 14	
KIP EP	21 25 31.6
NOV 14	
BOZ EPN	21 31 27.0
EL	31 38.0
NOV 14	
H-21 44 31.7	
19.1S 069.2W	
h ABOUT 125KM	
ALQ E(P)	21 54 46.2
BMO EP	21 56 14.8
EpP	56 46.2
HHM E(P)	21 56 19.3
NEW EP	21 56 26.0
NOV 14	
SLC EP	22 08 24.5
EL	09 09.0
NOV 14	
SLC EP	22 13 04.8
NOV 14	
ALQ E(P)	22 28 51.0
E	29 30.0
NOV 14	
EUR IP	22 56 16.0
GCA EP	22 56 36.4
IS	57 02.5
ALQ E(P)	22 57 52.0
NOV 14	
HHM E(P)	23 45 08.5
E	45 49.0
NOV 15	
H-00 08 07.8	
51.3N 179.9W	
h ABOUT 50KM	
ADK IP	00 08 41.4
I	08 42.8
IS	09 08.3
COL EP	00 12 52.0
NEW IP	00 15 35.5

Date and Station	Phase (GCT)
	h m s
BMO EP	00 15 49.4
E	16 05.6
BOZ IP C	00 16 13.0
IpP	16 24.7
EUR IP	00 16 21.5
BCN E(P)	00 16 43.8
FGU EP	00 16 46.1
TUC E(P)	00 17 20.0
ALQ EP	00 17 27.0
SJG EP	00 21 04.0
NOV 15	
ALQ E(P)	01 21 29.5
NOV 15	
BMO E(P)	01 27 37.7
NOV 15	
EUR EP	02 25 06.8
E(S)	25 38.8
NOV 15	
KIP EP	02 25 44.0
NOV 15	
COL EP	04 34 22.0
SJG EP	04 41 39.0
NOV 15	
H-05 28 57.7	
31.0N 115.3W	
h ABOUT 33KM	
TUC (PN)	05 30 00.0
EL	31 03.5
BCN E(P)	05 30 12.5
EPG	30 30.6
EL	31 33.0
EUR E(P)	05 31 02.0
ALQ E(P)	05 31 03.0
NOV 15	
H-05 36 27.7	
36.6N 120.4W	
h ABOUT 3KM	
SLD EP D	05 36 43.3
I	36 44.7
IS	36 58.8
EUR EP	05 37 41.2
E	37 51.5
IS	38 49.5
NOV 15	
H-05 44 41.2	
36.6N 120.4W	
h ABOUT 3KM	
SLD IP C	05 44 58.2
IS	45 12.3

Date and Station	Phase (GCT)
	h m s
EUR EP	05 45 54.1
IPG	46 09.4
ELG	47 02.5
TUC EP	05 46 57.0
NOV 15	
ADK EP	06 10 47.5
ES	11 09.0
NOV 15	
BOZ EPN	06 17 50.5
EPG	18 07.5
EL	18 12.0
NOV 15	
COL EP	06 35 05.0
NOV 15	
H-09 23 35.3	
18.1S 173.7W	
h ABOUT 36KM	
COL EP	09 36 08.0
NOV 15	
H-10 20 37.8	
41.9N 143.5E	
h ABOUT 33KM	
COL EP	10 28 45.0
NOV 15	
COL IP	10 58 06.9
SJG EP	11 05 23.0
NOV 15	
H-16 19 06.8	
51.2N 176.5W	
h ABOUT 43KM	
ADK IP	16 19 21.4
IS	19 30.0
COL IP	16 23 38.5
NEW IP	16 26 19.3
BMO IP	16 26 32.7
E	26 59.8
HHM IP	16 26 33.8
EpP	26 47.5
BOZ IP C	16 26 57.5
IpP	27 10.0
BUT E(P)	16 27 02.5
EUR IP	16 27 04.2
BCN IP D	16 27 27.2
TUC EP	16 28 03.0
ALQ EP	16 28 11.5
NOV 15	
H-16 26 03.4	
51.3N 176.5W	
h ABOUT 57KM	

Date and Station	Phase (GCT)
	h m s
ADK IP C	16 26 16.5
IS	26 24.9
COL EP	16 30 35.0
E	30 41.0
NEW IP	16 33 14.0
BMO EP	16 33 27.1
HHM EP	16 33 29.0
BOZ EP	16 33 51.8
E	34 16.5
EUR IP	16 33 59.0
NOV 15	
ADK IP D	16 58 02.7
IS	58 16.7
NOV 15	
H-17 08 25.8	
51.3N 176.5W	
h ABOUT 56KM	
ADK IP	17 08 38.8
IS	08 50.3
COL EP	17 12 58.0
NEW EP	17 15 36.0
BMO E(P)	17 15 49.5
HHM EP	17 15 51.0
BOZ EP	17 16 14.5
EpP	16 27.0
EUR IP	17 16 21.0
NOV 15	
BCN E(P)	17 28 23.0
IL	28 50.5
EUR E(P)	17 29 02.3
EL	30 15.5
NOV 15	
ADK IP	17 37 57.0
IS	38 05.2
NOV 15	
SJG EP	17 57 21.6
IS	57 45.0
NOV 15	
H-18 03 14.7	
17.8S 178.5W	
h ABOUT 550KM	
ALQ E(P)	18 15 04.0
E	16 13.0
E	16 50.0
NOV 15	
BCN E(P)	19 03 39.8
NOV 15	
ALQ E(P)	20 16 41.5
E	17 12.5

Date and Station	Phase (GCT) h m s
NOV 15	
EUR EP	20 23 49.5
NOV 15	
ADK IP	20 25 14.3
IS	25 22.6
NOV 15	
H-20 25 46.0	
51.5N 176.5W	
h ABOUT 61KM	
ADK IP	20 25 56.9
ES	26 10.5
COL EP	20 30 15.0
NEW EP	20 32 54.0
BMO E(P)	20 33 12.1
BOZ E(P)	20 33 32.0
NOV 15	
ADK IP	21 36 09.4
IS	36 21.2
COL E(P)	21 40 28.0
NOV 15	
H-22 16 03.2	
51.3N 176.5W	
h ABOUT 57KM	
ADK IP	22 16 15.7
IS	16 30.0
COL EP	22 20 34.0
NEW EP	22 23 13.0
HHM E(P)	22 23 27.8
E	24 30.8
BMO EP	22 23 30.8
BOZ EP	22 23 50.7
EpP	24 05.5
EUR E(P)	22 24 05.0
NOV 15	
H-22 17 05.7	
51.3N 176.6W	
h ABOUT 67KM	
ADK IP	22 17 18.9
IS	17 32.0
COL EP	22 21 36.5
NEW IP	22 24 15.7
BMO E(P)	22 24 28.3
BOZ E(P)	22 24 53.0
EpP	25 10.5
EsP	25 21.0
ALQ E(P)	22 26 09.8
NOV 15	
ADK EP	22 18 00.2
ES	18 14.4
NOV 15	
ADK IP	22 27 45.0
IS	27 57.8
BUT E(P)	22 35 27.0
NOV 15	
BOZ EPN	22 47 48.5
EL	48 03.0
NOV 15	
COL EP	23 42 02.4
BCN E(P)	23 46 19.8
NOV 16	
COL IP	00 32 50.8
NOV 16	
H-00 33 19.3	
51.3N 176.4W	
h ABOUT 53KM	
ADK IP	00 33 32.6
IS	33 45.2
COL EP	00 37 50.0
NEW EP	00 40 30.0
BMO E(P)	00 40 42.7
E	41 01.2
HHM EP	00 40 43.7
E	41 02.5
BOZ EP	00 41 08.0
EpP	41 19.0
NOV 16	
H-00 45 24.0	
16.3N 098.9W	
h ABOUT 33KM	
TUC E(P)	00 49 47.0
ALQ E(P)	00 49 54.2
BMO E(P)	00 51 53.0
NOV 16	
H-00 54 32.4	
18.3S 168.1E	
h ABOUT 19KM	
COL E(P)	01 07 27.5
BMO E(P)	01 07 43.1
NOV 16	
TUC E(P)	01 15 33.6
NOV 16	
H-01 58 06.0	
51.4N 176.3W	
h ABOUT 54KM	
ADK IP	01 58 17.5
IS	58 31.2
COL EP	02 02 35.0
NEW EP	02 05 14.0
BMO E(P)	02 05 28.2
HHM E(P)	02 05 32.5
BOZ EP	02 05 51.3
EUR E(P)	02 05 59.5
NOV 16	
H-02 00 36.1	
51.3N 170.4W	
h ABOUT 33KM	
ADK EP	02 01 33.0
ES	02 15.6
COL EP	02 04 43.2
NEW IP	02 07 18.0
BMO EP	02 07 31.1
EPCP	09 58.5
HHM EP	02 07 33.5
BOZ IP	02 07 57.0
E	08 11.4
EUR IP	02 08 02.8
TUC EP	02 09 04.4
ALQ EP	02 09 13.0
EPCP	10 41.0
NOV 16	
H-02 26 11.4	
06.1S 153.1E	
h ABOUT 93KM	
COL EP	02 38 27.0
EUR IP	02 39 23.4
NOV 16	
BCN EP	02 56 41.3
NOV 16	
BMO E(P)	05 49 11.6
COL EP	05 49 32.0
NOV 16	
H-05 58 30.6	
19.5S 176.3W	
h ABOUT 51KM	
BCN EP	06 10 36.9
TUC E(P)	06 10 42.5
EUR E(P)	06 10 47.7
BMO EP	06 10 54.3
ALQ E(P)	06 11 05.5
E	11 11.0
NEW E(P)	06 11 10.0
COL EP	06 11 10.0
HHM E(P)	06 11 18.1
BOZ E(P)	06 11 18.7
NOV 16	
ALQ E(P)	06 04 27.0
NOV 16	
COL EP	06 16 48.0
NEW EP	06 19 44.0
NOV 16	
H-08 08 13.1	
13.1S 166.5E	
h ABOUT 45KM	
COL IP	08 20 43.7
BCN EP D	08 21 04.8
EUR IP	08 21 05.3
BMO EP	08 21 06.3
NEW EP	08 21 13.0
TUC E(P)	08 21 14.5
HHM E(P)	08 21 23.1
E	21 33.1
BOZ E(P)	08 21 27.2
ALQ E(P)	08 21 33.5
NOV 16	
COL EP	08 26 29.4
NOV 16	
ALQ E(P)	08 38 29.0
BMO EP	08 38 35.5
NOV 16	
BMO E(P)	08 46 48.0
NOV 16	
ADK EP	13 45 12.9
IS	45 22.3
NOV 16	
COL EP	14 13 39.0
NOV 16	
COL IP	15 02 19.2
NOV 16	
ADK IP	15 05 54.2
IS	06 05.3
NOV 16	
BOZ E(P)	15 06 10.5
E	06 22.0
NOV 16	
COL EP	15 10 18.0
EUR E(P)	15 13 25.2
E	13 42.7
NOV 16	
COL EP	16 06 10.0

Date and Station	Phase (GCT)
	h m s
NOV 16	
H-17 22 25.6	
17.0S 72.9W	
h ABOUT 64KM	
ALQ EP	17 32 33.0
EUR IP	17 33 30.6
BMO EP	17 33 55.0
NOV 16	
SJG IP	17 34 23.0
IL	34 57.6
NOV 16	
BOZ EPN	17 47 23.0
EL	47 34.0
NOV 16	
SJG E(P)	18 04 31.5
ES	04 56.0
NOV 16	
ADK EP	18 09 01.6
COL EP	18 13 20.0
NOV 16	
H-18 15 45.8	
30.8N 141.8E	
h ABOUT 33KM	
COL IP	18 25 10.6
NEW EP	18 27 22.0
BMO E(P)	18 27 31.2
NOV 16	
BOZ E(P)	18 16 42.7
NOV 16	
ALQ E(P)	18 42 15.0
E	42 55.6
NOV 16	
COL IP C	18 43 17.0
IS	43 29.2
NOV 16	
EUR EP	19 17 59.0
NOV 16	
BMO EPN	20 21 38.3
NOV 16	
H-20 44 01.2	
46.6N 153.7E	
h ABOUT 36KM	
COL IP	20 51 01.6
BMO EP	20 53 58.5
E	54 14.8
EUR IP	20 54 26.9
ALQ EP	20 55 21.0
NOV 16	
EUR E(P)	21 59 52.5
EL	22 00 38.0
NOV 16	
COL EP	22 09 34.0
E	10 02.0
NOV 16	
ALQ EP	22 26 39.0
E	26 46.2
E	27 26.4
NOV 16	
COL EP	22 36 29.0
NOV 16	
BOZ EPN	22 43 39.5
EL	43 50.0
NOV 16	
H-22 55 13.1	
33.2S 179.5W	
h ABOUT 41KM	
TUC EP	23 08 19.0
EUR IP	23 08 24.1
BMO E(P)	23 08 37.1
NOV 16	
H-23 16 10.3	
52.6N 169.5W	
h ABOUT 42KM	
ADK EP	23 17 17.6
IS	18 08.2
COL IP	23 20 02.0
NEW IP	23 22 43.0
BMO EP	23 22 57.2
E	23 13.5
EPCP	25 29.5
HHM EP	23 22 59.3
E	23 07.3
E	23 13.8
EPCP	25 30.8
BOZ EP	23 23 22.5
I	23 29.5
E	23 35.5
EPCP	25 39.0
EUR EP	23 23 30.8
I	23 36.9
I	23 47.0
EPCP	25 42.2
FGU EP	23 23 55.2
TUC EP	23 24 34.0
E	24 41.2
ALQ EP	23 24 39.5
NOV 16	
BMO EP	23 36 54.4
NOV 16	
SLD EP	23 49 13.8
EL	49 46.3
EUR IP	23 49 50.1
NOV 16	
ALQ E(P)	23 54 09.0
EL	54 42.0
NOV 17	
EUR IP	00 02 29.2
NOV 17	
H-00 33 12.6	
19.2S 177.5W	
h ABOUT 553KM	
EUR EP	00 44 35.4
TUC EP	00 44 36.3
BMO EP	00 44 45.6
ALQ EP	00 44 57.0
COL IP	00 44 58.0
BOZ E(P)	00 45 03.5
NOV 17	
BOZ EPN	00 47 00.0
EL	47 11.5
NOV 17	
EUR E(P)	00 48 52.0
NOV 17	
ADK IP	01 57 29.9
IS	57 38.5
NOV 17	
BMO E(P)	02 10 38.2
NOV 17	
COL E(P)	04 06 42.7
NOV 17	
EUR EP	04 25 45.0
NOV 17	
COL E(P)	04 57 09.7
NOV 17	
SLD EP	05 14 38.7
IL	15 03.9
NOV 17	
SJG IP	05 58 41.5
IS	59 08.0
NOV 17	
ALQ E(P)	06 12 11.0
E	13 08.5
COL IP	06 17 55.4
NOV 17	
COL EP	06 50 42.0
NOV 17	
SJG EP	07 03 36.0
I(S)	04 03.5
NOV 17	
H-07 08 30.2	
32.2N 040.5W	
h ABOUT 33KM	
NEW EP	07 18 24.0
EUR EP	07 18 35.2
BMO E(P)	07 18 35.8
NOV 17	
BMO EP	07 46 33.8
NOV 17	
NEW EP	08 39 52.0
NOV 17	
BHP EP D	10 40 47.3
IS	41 18.3
NOV 17	
COL IP	12 05 04.8
NOV 17	
COL IP	12 09 52.8
NOV 17	
H-13 54 01.7	
51.4N 176.3W	
h ABOUT 61KM	
ADK IP	13 54 13.5
COL EP	13 58 31.0
EL	14 03 56.0
NEW IP	14 01 10.7
BMO EP	14 01 23.9
E	01 42.0
HHM EP	14 01 25.3
E	01 43.3
BOZ IP C	14 01 48.5
I	01 55.4
I	02 16.0
EUR IP	14 01 56.0
BCN EP	14 02 19.0
TUC E(P)	14 02 55.7
ALQ E(P)	14 02 56.4
NOV 17	
ADK IP	14 37 00.4
IS	37 19.2
NOV 17	
COL EP	14 37 48.5
NOV 17	
H-14 41 48.7	
51.2N 176.3W	
h ABOUT 47KM	
ADK IP	14 42 02.2
IS	42 11.4
COL IP	14 46 21.0
NEW EP	14 48 59.0
BMO EP	14 49 12.8
HHM EP	14 49 14.2

Date and Station	Phase (GCT) h m s
BOZ EP	14 49 37.5
EpP	49 48.5
EPP	51 21.5
EUR IP	14 49 44.4
BCN E(P)	14 50 08.0
TUC E(P)	14 50 41.0
NOV 17	
H-14 43 11.9	
51.3N 176.3W	
h ABOUT 52KM	
ADK IP	14 43 25.3
COL I(P)	14 47 43.0
NEW IP	14 50 22.1
I	50 40.0
BMO EP	14 50 34.6
EpP	50 48.8
HHM EP	14 50 37.7
EpP	50 53.7
BOZ IP C	14 50 59.3
SLD E(P)	14 51 04.5
NOV 17	
ADK IP	14 54 31.2
IS	54 40.0
NOV 17	
H-15 13 00.8	
51.4N 176.3W	
h ABOUT 48KM	
ADK IP	15 13 12.8
IS	13 22.1
COL EP	15 17 31.0
NEW EP	15 20 11.0
HHM E(P)	15 20 25.7
BMO E(P)	15 20 28.1
BOZ EP	15 20 48.2
NOV 17	
KIP EP	15 18 41.7
NOV 17	
H-15 54 55.0	
51.4N 176.4W	
h ABOUT 35KM	
ADK IP	15 55 05.3
IS	55 18.1
COL EP	15 59 26.0
NEW EP	16 02 07.0
BMO E(P)	16 02 20.7
HHM E(P)	16 02 22.2
BOZ EP	16 02 45.0
EUR IP	16 02 52.5
NOV 17	
EUR E(P)	16 07 03.0
EL	08 11.4
NOV 17	
BMO EP	16 17 33.8
NOV 17	
COL IP	17 19 43.0
NOV 17	
COL EP	17 31 23.4
NOV 17	
EUR IP	18 18 34.7
NOV 17	
H-19 04 35.0	
51.1N 176.3W	
h ABOUT 33KM	
ADK IP	19 04 49.9
IS	05 01.1
COL EP	19 09 09.5
NEW EP	19 11 47.0
BOZ E(P)	19 12 26.0
EUR E(P)	19 12 32.0
NOV 17	
H-19 27 07.4	
46.6N 153.7E	
h ABOUT 41KM	
COL IP	19 34 07.2
BMO EP	19 37 07.2
EpP	37 20.5
HHM E(P)	19 37 12.2
BOZ EP	19 37 23.5
EpP	37 34.5
EUR IP	19 37 32.4
ALQ EP	19 38 27.0
NOV 17	
BMO E(P)	19 40 40.7
NOV 17	
H-19 50 37.2	
51.3N 176.3W	
h ABOUT 51KM	
ADK IP	19 50 49.8
IS	50 58.9
COL E(P)	19 55 09.0
BMO EP	19 58 03.6
BOZ EP	19 58 25.5
E	58 31.5
NOV 17	
BMO E(P)	21 25 45.8
NOV 17	
H-21 27 05.7	
51.3N 176.3W	
h ABOUT 49KM	
ADK IP	21 27 19.3
IS	27 29.1
COL EP	21 31 36.0
NEW IP	21 34 15.6
IpP	34 27.0
BMO EP	21 34 28.4
BOZ EP	21 34 53.5
IpP	35 05.0
NOV 17	
H-21 45 58.2	
51.4N 176.0W	
h ABOUT 48KM	
ADK IP	21 46 10.4
IS	46 24.0
COL EP	21 50 27.0
NEW IP	21 53 06.6
BMO E(P)	21 53 23.0
BOZ EP	21 53 44.5
EpP	53 55.3
EUR EP	21 53 51.5
NOV 17	
HHM EP	21 53 04.7
NOV 17	
SJG EP	22 10 01.4
IS	10 25.7
NOV 17	
SJG EP	22 12 53.5
IS	13 18.0
NOV 17	
COL EP	22 21 02.0
BOZ E(P)	22 24 19.3
E	24 32.5
NOV 17	
ADK IP	22 27 02.3
IS	27 14.5
NOV 17	
BOZ EPN	22 40 19.7
EL	40 31.4
NOV 17	
ALQ E(P)	22 46 22.0
NOV 17	
BOZ E(P)	23 00 00.0
E	00 09.3
NOV 17	
BMO EP	23 36 09.1
NOV 18	
ADK IP	00 14 22.7
IS	14 33.6
NOV 18	
H-00 25 52.7	
51.4N 176.2W	
h ABOUT 57KM	
ADK IP	00 26 04.7
COL EP	00 30 21.0
NEW IP	00 33 00.7
BMO EP	00 33 14.2
HHM EP	00 33 16.3
EpP	33 29.4
EUR IP	00 33 45.8
ALQ E(P)	00 35 06.0
NOV 18	
ADK IP	00 34 14.7
IS	34 29.4
NOV 18	
SJG EP	01 15 04.7
IS	15 28.8
NOV 18	
EUR EP	04 22 37.0
EL	23 15.7
NOV 18	
BCN E(P)	05 38 22.0
NOV 18	
SJG EP	05 58 42.3
IS	59 05.0
NOV 18	
NEW EP	06 47 42.0
NOV 18	
NEW IP	06 54 37.8
NOV 18	
H-08 02 46.2	
05.8S 152.1E	
h ABOUT 49KM	
COL IP	08 15 07.2
EUR EP	08 16 06.7
NOV 18	
COL E(P)	09 08 43.0
NOV 18	
H-09 12 10.7	
36.2S 100.3W	
h ABOUT 33KM	
BHP I(P)	09 20 54.5
IS	28 02.0
SJG EP	09 22 32.5
I	26 50.0
ES	31 04.0

Date and Station	Phase (GCT)
	h m s
TUC EP	09 23 12.4
E(S)	32 20.0
ALQ EP C	09 23 26.5
EPP	23 35.0
EPCP	23 46.0
CSC EP	09 23 31.0
E	23 35.0
BCN EP	09 23 39.8
SLD EP D	09 23 53.9
EUR EP C	09 24 00.4
I	24 06.5
EPP	26 40.0
SLC E(P)	09 24 03.3
E	24 26.3
BOZ EP	09 24 29.2
I	24 50.5
EPP	27 44.1
BMO EP	09 24 29.6
BUT E(P)	09 24 32.5
HHM EP	09 24 43.9
E	24 07.4
NEW EP	09 24 46.0
E	25 09.0
NOV 18	
ALQ E(P)	09 31 52.5
BOZ E(P)	09 32 19.7
EUR E(P)	09 32 43.5
NEW EP	09 32 45.0
NOV 18	
ADK IP	09 41 46.2
IS	42 00.1
COL E(P)	09 46 05.0
NOV 18	
BCN IP	10 57 02.5
GCA EP	10 57 52.0
EUR EP	10 57 59.7
E	58 56.0
TUC E(P)	10 58 17.5
NOV 18	
H-12 43 48.8	
27.4N 142.4E	
h ABOUT 33KM	
NEW EP	12 55 36.0
BMO EP	12 55 44.3
E	55 56.0
HHM E(P)	12 55 47.4
BOZ E(P)	12 56 00.0

Date and Station	Phase (GCT)
	h m s
EUR IP	12 56 04.8
NOV 18	
ADK IP	13 22 28.2
IS	22 40.0
NOV 18	
BCN IP D	14 37 03.8
ES	37 22.0
EUR IP	14 37 19.1
ALQ E(P)	14 38 29.5
E	38 43.0
EL	40 03.6
BMO EPN	14 38 48.1
NOV 18	
H-15 02 00.0	
37.0N 116.0W	
h ABOUT 0KM	
BCN IP C	15 02 26.7
EUR IP	15 02 41.5
GCA IP	15 02 58.0
IL	03 53.0
SLD E(P)	15 03 13.5
I	03 18.3
EL	04 11.5
SLC E(P)	15 03 17.7
TUC EP	15 03 36.8
EL	05 23.0
ALQ IP	15 04 00.0
BOZ E(P)	15 04 20.0
EL	06 57.0
NOV 18	
H-15 15 05.0	
37.0N 116.0W	
h ABOUT 0KM	
BCN IP D	15 15 33.0
EUR IP	15 15 47.3
SLC E(P)	15 16 19.3
SLD E(P)	15 16 23.6
E	17 23.7
BMO E(P)	15 17 11.8
NOV 18	
H-18 07 53.8	
73.4N 6.7E	
h ABOUT 33KM	
NEW E(P)	18 17 08.0
BMO EP	18 17 31.2
FGU E(P)	18 17 46.2
EUR EP	18 18 06.0
ALQ E(P)	18 18 19.2

Date and Station	Phase (GCT)
	h m s
NOV 18	
NEW EP	18 16 33.0
E	16 48.0
FGU EP	18 17 08.0
NOV 18	
SLD E(P)	18 27 18.5
EL	27 50.3
NOV 18	
ALQ EP	18 33 48.5
E	34 24.5
NOV 18	
H-18 48 44.5	
73.4N 6.7E	
h ABOUT 33KM	
COL EP	18 56 28.0
HHM E(P)	18 57 51.6
NEW IP	18 57 58.5
BOZ E(P)	18 58 08.0
BMO EP	18 58 21.3
FGU EP	18 58 35.9
EUR IP	18 58 56.8
TUC E(P)	18 59 33.0
NOV 18	
BOZ EPN	19 22 54.0
EL	23 05.0
NOV 18	
H-19 43 35.7	
24.1N 046.3W	
h ABOUT 33KM	
SJG E(P)	19 48 04.0
EL	52 40.0
ALQ EP	19 52 50.0
BOZ EP	19 53 15.0
E	53 25.5
TUC E(P)	19 53 18.0
BCN E(P)	19 53 40.0
NEW EP	19 53 40.0
EUR IP	19 53 40.2
BMO EP	19 53 43.3
COL EP	19 55 04.0
NOV 18	
EUR IP	20 18 55.6
NOV 18	
H-20 19 56.5	
51.4N 180.0W	
h ABOUT 48KM	
ADK IP	20 20 30.7
IS	20 57.3

Date and Station	Phase (GCT)
	h m s
COL EP	20 24 41.7
NEW EP	20 27 24.0
BMO E(P)	20 27 38.0
BOZ EP	20 28 01.5
E	28 06.0
EUR EP	20 28 09.5
NOV 18	
ALQ EP	20 30 06.4
E	30 40.8
NOV 18	
ALQ EP	20 31 23.0
E	31 26.0
E	32 05.6
NOV 18	
EUR EP	20 44 40.0
NOV 18	
H-21 17 31.4	
24.1N 046.3W	
h ABOUT 33KM	
TUC E(P)	21 27 28.0
NEW EP	21 27 36.0
BMO E(P)	21 27 51.9
NOV 18	
BOZ EPN	21 29 46.5
EL	29 52.4
NOV 18	
EUR E(P)	22 00 40.0
EL	00 24.1
NOV 18	
FGU IP C	22 12 43.1
IS	13 03.8
BOZ E(P)	22 13 30.0
NOV 18	
BOZ EPN	22 39 29.0
EL	39 39.5
NOV 18	
SLD EP C	23 40 08.8
IS	40 27.8
EUR E(P)	23 41 15.2
NOV 18	
EUR E(P)	23 55 44.8
NOV 19	
GCA E(P)	00 02 07.8
E(S)	02 30.0
NOV 19	
H-00 30 32.7	
19.5N 064.3W	
h ABOUT 38KM	
SJG IP	00 31 07.5
IS	31 34.0
BOZ E(P)	00 39 00.0

Date and Station	Phase (GCT) h m s
BMO EP	00 39 28.1
NEW EP	00 39 33.0
NOV 19	
SJG EP	00 42 52.5
E(S)	43 18.5
NOV 19	
BCN E(P)	01 09 54.5
NOV 19	
COL EP	02 09 58.0
BOZ EP	02 13 19.5
EUR IP	02 13 30.8
NOV 19	
H-02 32 19.4	
17.7S 178.6W	
h ABOUT 587KM	
EUR E(P)	02 43 37.7
COL EP	02 43 56.4
NOV 19	
BOZ E(P)	02 46 29.0
NOV 19	
BOZ E(P)	03 03 20.5
E	03 49.0
NOV 19	
SJG EP	03 53 56.2
IS	54 36.1
NOV 19	
SJG EP	04 20 35.2
IS	21 01.5
NOV 19	
NEW EP	04 27 47.0
NOV 19	
H-05 19 55.2	
37.5N 141.4E	
h ABOUT 61KM	
COL EP	05 28 35.0
NEW IP	05 31 00.7
EpP	31 15.0
BMO EP	05 31 12.4
HHM E(P)	05 31 17.7
E	31 25.4
BOZ IP C	05 31 29.0
IPCP	31 43.0
EUR IP C	05 31 36.0
IPCP	31 49.0
SLD E(P)	05 31 38.8
TUC EP	05 32 17.2
ALQ EPC	05 32 22.8
EpP	32 37.0

Date and Station	Phase (GCT) h m s
NOV 19	
EUR EP	05 40 43.0
NOV 19	
H-06 56 38.8	
04.3S 144.1E	
h ABOUT 154KM	
COL EP	07 08 55.6
BMO E(P)	07 10 05.0
NOV 19	
H-07 12 38.6	
35.0N 023.5E	
h ABOUT 25KM	
WSC EP	07 24 26.5
E	25 17.3
SJG EP	07 24 46.5
CSC EP	07 24 56.5
HHM EP	07 25 31.7
E	26 15.2
NEW IP	07 25 37.8
BUT EP	07 25 38.2
BOZ IP C	07 25 39.0
BMO EP	07 25 50.0
FGU EP	07 25 51.5
EUR IP	07 26 11.0
TUC E(P)	07 26 26.0
NOV 19	
H-07 31 14.2	
40.4N 142.7E	
h ABOUT 41KM	
COL EP	07 39 33.0
NEW EP	07 42 03.0
HHM E(P)	07 42 16.2
EpP	42 27.7
BMO E(P)	07 42 16.8
BOZ EP	07 42 33.5
EpP	42 45.7
EUR EP	07 42 42.2
IpP	42 54.0
SLD I(P)	07 42 43.2
BCN E(P)	07 43 11.1
ALQ EP	07 43 32.0
EpP	43 43.0
NOV 19	
H-07 42 27.8	
18.4N 095.3E	
h ABOUT 53KM	
COL EP	07 54 55.0

Date and Station	Phase (GCT) h m s
EUR EP'	08 01 05.9
BOZ EP'	08 01 11.5
BMO EP'	08 01 14.3
ALQ IP'	08 01 21.4
E	01 43.8
TUC EP'	08 01 22.0
NOV 19	
H-08 34 15.7	
24.1N 045.9W	
h ABOUT 33KM	
NEW EP	08 44 22.0
NOV 19	
EUR EP	09 03 34.0
NOV 19	
ADK IP	09 11 09.4
IS	11 18.8
NOV 19	
SJG EP	10 48 01.8
IS	48 26.0
NOV 19	
BMO EP	10 49 33.0
NOV 19	
ADK IP	11 44 39.3
IS	44 52.5
NOV 19	
EUR EP	13 28 39.0
NOV 19	
H-13 53 05.1	
14.3N 144.3E	
h ABOUT 38KM	
GUA EP	13 53 22.0
IS	53 35.0
BMO E(P)	14 05 42.5
NOV 19	
H-14 09 34.0	
14.3N 144.1E	
h ABOUT 33KM	
GUA EP	14 09 52.0
BMO EP	14 22 12.0
EUR EP	14 22 24.6
NOV 19	
H-14 19 35.1	
43.2N 088.1E	
h ABOUT 33KM	
COL E(P)	14 30 05.5
NOV 19	
H-16 01 46.0	
9.2N 85.8W	
h ABOUT 25KM	
ALQ EP	16 08 12.0
E	08 18.0

Date and Station	Phase (GCT) h m s
EUR IP	16 09 27.8
BOZ E(P)	16 09 39.5
BMO EP	16 09 55.2
NOV 19	
BMO EP	16 25 15.1
NOV 19	
H-16 39 03.0	
56.8N 154.1W	
h ABOUT 33KM	
COL EP	16 41 07.0
NEW EP	16 44 14.0
HHM E(P)	16 44 28.7
BOZ E(P)	16 44 56.0
EUR IP	16 45 13.1
BCN EP	16 45 41.5
TUC E(P)	16 46 23.0
NOV 19	
GUA E(P)	17 26 24.0
E(S)	28 26.0
NOV 19	
BMO E(P)	17 39 33.0
NOV 19	
H-17 40 58.4	
24.2N 046.5W	
h ABOUT 33KM	
SJG EP	17 45 25.3
ALQ EP	17 50 13.0
BOZ EP	17 50 34.5
TUC E(P)	17 50 39.0
BCN E(P)	17 51 01.0
NEW EP	17 51 01.0
EUR IP	17 51 03.2
BMO E(P)	17 51 05.4
COL EP	17 52 26.0
NOV 19	
H-18 20 29.2	
10.7S 079.1W	
h ABOUT 26KM	
BHP IP C	18 24 57.0
IS	28 40.5
IL	30 41.0
SJG EP	18 26 49.0
ALQ EP C	18 29 40.6
E	29 46.6
TUC E(P)	18 29 41.5

Date and Station	Phase (GCT)
	h m s
BCN EP	18 30 19.8
FGU EP	18 30 24.4
EUR EP	18 30 40.2
E	30 46.5
I	30 58.3
BOZ E(P)	18 30 56.7
E	31 19.4
BMO EP	18 31 09.4
NEW EP	18 31 26.0
COL IP	18 33 31.4
NOV 19	
ALQ EP	18 48 29.8
E	48 54.0
NOV 19	
H-18 49 42.4	
41.3N 073.2E	
h ABOUT 61KM	
COL EP	19 00 44.6
NOV 19	
H-19 05 36.7	
37.1N 071.3E	
h ABOUT 110KM	
COL EP	19 17 01.0
NOV 19	
ADK IP	19 45 08.8
IS	45 18.0
NOV 19	
H-20 29 43.0	
36.1N 70.6E	
h ABOUT 123KM	
COL EP	20 41 15.0
NOV 19	
BMO IPG	20 48 02.6
NOV 19	
ADK IP	21 20 16.5
IS	20 29.8
NOV 19	
SLC E(P)	21 58 03.3
EUR EP	21 58 47.7
E(S)	59 25.0
NOV 19	
ADK IP	22 31 26.5
IS	31 36.0
NOV 19	
BOZ E(P)	23 06 00.0
NOV 19	
ALQ EP	23 10 11.5
E	10 20.0
NOV 19	
ADK IP	23 27 51.6
IS	28 04.4

Date and Station	Phase (GCT)
	h m s
NOV 20	
BMO EP	00 33 18.4
COL EP	00 33 29.0
NOV 20	
H-00 59 50.9	
24.1N 046.4W	
h ABOUT 33KM	
SJG E(P)	01 04 23.0
ALQ EP	01 09 05.0
FGU EP	01 09 18.6
BOZ E(P)	01 09 28.5
TUC E(P)	01 09 32.0
BMO E(P)	01 09 53.2
NEW EP	01 09 54.0
EUR IP	01 09 55.4
COL EP	01 11 20.0
NOV 20	
H-01 52 45.7	
12.2S 76.5W	
h ABOUT 101KM	
ALQ E(P)	02 02 07.0
EbP	02 29.0
NOV 20	
ADK EP	01 57 05.0
IS	57 13.5
NOV 20	
TUC E(P)	02 02 29.5
E	02 41.4
FGU EP	02 03 13.1
EUR E(P)	02 03 28.0
BMO E(P)	02 03 55.4
NEW EP	02 04 12.0
NOV 20	
SJG IP	02 05 20.2
IS	06 02.5
NOV 20	
COL EP	02 06 14.0
NOV 20	
ADK IP	02 09 12.0
IS	09 21.2
NOV 20	
ALQ EP	02 20 36.5
NOV 20	
ALQ EP	02 31 56.0
E	33 07.0
NOV 20	
H-02 59 49.0	
35.0N 69.3E	
h ABOUT 79KM	

Date and Station	Phase (GCT)
	h m s
COL EP	03 11 31.0
NOV 20	
H-04 21 44.6	
6.6S 154.4E	
h ABOUT 57KM	
GUA E(P)	04 26 32.0
E(S)	30 39.0
COL EP	04 34 03.0
BMO IP	04 34 54.9
NEW IP	04 34 56.5
EUR EP	04 34 58.0
E	35 09.6
BOZ E(P)	04 35 13.5
FGU EP	04 35 20.8
NOV 20	
ADK IP	04 24 30.2
I	24 43.0
NOV 20	
H-04 33 24.8	
51.3N 177.0W	
h ABOUT 58KM	
ADK IP	04 33 37.8
IS	33 46.8
COL EP	04 37 58.0
NEW EP	04 40 36.0
BMO E(P)	04 40 51.4
BOZ EP	04 41 14.7
EbP	41 26.0
NOV 20	
ADK IP	04 51 23.0
IS	51 32.3
COL E(P)	04 55 43.0
BOZ E(P)	04 59 00.0
NOV 20	
ADK IP	05 22 30.5
IS	22 38.9
NOV 20	
H-05 43 48.1	
51.4N 176.9W	
h ABOUT 57KM	
ADK IP	05 44 00.6
IS	44 10.0
COL EP	05 48 20.0
NEW EP	05 51 00.0
BMO E(P)	05 51 13.9
BOZ EP	05 51 37.0

Date and Station	Phase (GCT)
	h m s
NOV 20	
H-05 47 05.5	
51.5N 176.5W	
h ABOUT 55KM	
ADK IP	05 47 16.5
IS	47 25.5
COL EP	05 51 34.0
NEW IP	05 54 15.1
BMO EP	05 54 28.4
HHM EP	05 54 30.0
E	54 50.8
BOZ IP C	05 54 52.7
E	55 09.0
EUR EP	05 55 05.5
BCN EP	05 55 23.4
TUC EP	05 56 00.7
ALQ EP	05 56 08.4
NOV 20	
NEW EP	06 06 22.0
NOV 20	
H-06 09 33.0	
15.4S 069.5W	
h ABOUT 116KM	
BMO E(P)	06 20 57.3
NOV 20	
H-07 25 56.4	
18.2N 068.4W	
h ABOUT 96KM	
SJG IP	07 26 31.4
IS	26 57.3
ALQ EP	07 33 04.5
BCN EP	07 34 02.7
BOZ EP	07 34 04.5
HHM E(P)	07 34 24.8
BMO EP	07 34 30.5
NEW IP	07 34 38.0
COL EP	07 36 53.0
NOV 20	
H-07 34 36.2	
21.6S 067.8W	
h ABOUT 93KM	
BMO EP	07 46 38.0
NOV 20	
ADK IP	08 11 18.7
IS	11 27.8
COL EP	08 15 38.0
NEW EP	08 18 16.0

Date and Station	Phase	Phase (GCT) h m s
BOZ	EP	08 18 55.5
NOV 20		
BCN	E(P)	09 19 51.0
NOV 20		
H-09 29 59.3		
51.4N 176.5W		
h ABOUT 54KM		
ADK	IP	09 30 11.0
COL	IP	09 34 28.4
	ES	38 23.0
NEW	IP	09 37 09.9
BMO	EP	09 37 23.2
HHM	IP	09 37 25.8
BOZ	IP C	09 37 47.5
	EPP	39 27.5
EUR	IP	09 37 55.5
SLC	EP	09 38 08.6
	EpP	38 23.6
BCN	EP	09 38 18.0
FGU	EP	09 38 20.2
TUC	EP	09 38 55.5
	EpP	39 09.0
ALQ	EP	09 39 02.2
CSC	EP	09 40 50.0
	EpP	41 05.0
	EPCP	41 16.0
NOV 20		
NEW	EP	09 43 02.0
HHM	E(P)	09 43 15.8
NOV 20		
ADK	IP	11 38 31.3
	IS	38 40.5
COL	E(P)	11 42 50.0
NOV 20		
GUA	IP	11 56 23.0
	IS	56 53.0
NOV 20		
GUA	IP	13 36 23.0
	IS	36 32.0
NOV 20		
ALQ	EP	13 54 25.0
	E	55 25.5
TUC	(PN)	13 54 41.0
NOV 20		
COL	EP	14 12 53.7
	E(S)	13 46.2
BOZ	EP	14 16 04.5
	E	16 17.5
NOV 20		
BMO	EP	15 25 18.6
NOV 20		
H-15 47 26.7		
42.2N 125.8W		
h ABOUT 33KM		
BMO	EP	15 49 06.3
EUR	EP	15 49 22.9
BUT	E(P)	15 49 53.9
COL	E(P)	15 52 57.5
NOV 20		
COL	EP	15 56 03.0
NOV 20		
GUA	IP	15 57 02.0
	IS	57 25.0
NOV 20		
H-16 47 32.7		
55.1S 129.4W		
h ABOUT 33KM		
TUC	E(P)	17 00 24.0
ALQ	EP	17 00 38.0
	E	00 43.0
BCN	EP	17 00 41.0
EUR	E(P)	17 01 02.5
COL	EP'	17 06 22.0
NOV 20		
SLD	EP	16 50 09.8
	IS	50 28.6
NOV 20		
BHP	EP	17 08 09.5
NOV 20		
SJG	E(P)	17 12 31.3
NOV 20		
ALQ	EP	18 03 56.5
	E	05 02.0
NOV 20		
ADK	EP	18 33 22.7
	IS	33 32.1
NOV 20		
H-18 53 31.9		
55.3S 128.7W		
h ABOUT 33KM		
TUC	E(P)	19 06 21.6
ALQ	E(P)	19 06 37.0
COL	EP'	19 12 21.0
NOV 20		
BMO	EP	20 01 25.2
BOZ	E(P)	20 01 38.3
NOV 20		
BOZ	E(P)	20 03 16.5
NOV 20		
H-20 57 09.2		
41.9N 126.7W		
h ABOUT 33KM		
BMO	IP	20 58 57.8
EUR	IP	20 59 14.2
NEW	EP	20 59 25.0
BUT	E(P)	20 59 47.4
BOZ	E(P)	20 59 49.5
TUC	E(P)	21 00 53.0
ALQ	E(P)	21 01 12.0
COL	EP	21 02 41.0
NOV 20		
BMO	EP	21 00 43.1
NOV 20		
BMO	EP	21 09 49.3
NOV 20		
H-21 13 45.7		
51.4N 176.6W		
h ABOUT 54KM		
ADK	IP	21 13 56.8
	IS	14 06.3
COL	EP	21 18 17.0
NEW	IP	21 20 56.0
BMO	EP	21 21 10.0
NOV 20		
H-21 16 27.0		
22.3S 69.0W		
h ABOUT 117KM		
BOZ	E(P)	21 28 11.5
BMO	EP	21 28 26.0
NOV 20		
BMO	EP	21 17 40.0
NOV 20		
BMO	E(P)	21 20 35.8
BOZ	E(P)	21 21 07.5
	E	21 22.5
	E	21 35.0
NOV 20		
ALQ	E(P)	21 27 40.0
	E	28 43.5
NOV 20		
NEW	EP	22 08 16.0
NOV 20		
H-22 41 12.9		
24.4N 122.6E		
h ABOUT 97KM		
COL	EP	22 52 03.0
NEW	IP	22 54 04.2
	EpP	54 28.0
HHM	EP	22 54 11.8
BMO	EP	22 54 13.3
BUT	EP	22 54 21.9
BOZ	E(P)	22 54 25.5
NOV 21		
BCN	EP	00 07 09.0
	E(S)	07 27.5
EUR	E(P)	00 07 24.1
	ES	07 56.5
NOV 21		
HHM	E(P)	00 56 41.7
NEW	IP	00 56 46.8
BMO	E(P)	00 57 11.3
NOV 21		
TUC	EP	01 21 51.2
NOV 21		
NEW	EP	02 21 03.0
NOV 21		
H-02 22 35.9		
51.8N 179.9E		
h ABOUT 49KM		
ADK	IP	02 23 09.8
COL	EP	02 27 19.0
NEW	EP	02 30 02.0
BMO	EP	02 30 16.6
BOZ	E(P)	02 30 40.0
EUR	EP	02 30 49.0
TUC	E(P)	02 31 49.0
	E	32 11.2
NOV 21		
NEW	EP	02 30 21.0
HHM	E(P)	02 30 40.2
NOV 21		
HHM	EP	02 32 22.4
BOZ	E(P)	02 32 44.7
NOV 21		
NEW	EP	02 35 52.0

Date and Station	Phase (GCT)
	h m s
NOV 21	
GUA IP	04 34 08.0
IS	34 26.0
NOV 21	
TUC E(P)	05 54 04.5
NOV 21	
H-06 46 07.6	
37.4N 114.2W	
h ABOUT 33KM	
BCN EP	06 46 33.0
ES	46 52.5
GCA EP	06 46 43.0
ES	47 07.5
EUR IP	06 46 47.3
NOV 21	
EUR E(P)	07 59 06.5
NOV 21	
BHP IP C	10 22 35.7
IS	23 13.5
NOV 21	
H-11 11 59.0	
18.7N 102.5W	
h ABOUT 60KM	
TUC IP D	11 15 37.5
IPP	15 54.5
ALQ EP	11 15 53.0
EPP	16 11.5
BCN EP	11 16 35.3
FGU EP	11 17 01.6
I	17 14.0
EPP	17 36.2
EUR IP	11 17 09.1
SLD IP D	11 17 16.4
E	17 37.4
BOZ IP C	11 17 46.0
E	18 04.7
BUT EP	11 17 50.4
E	18 03.9
EPCP	21 01.9
BMO IP	11 17 54.9
HHM EP	11 18 13.2
EpP	18 25.7
EPCP	21 07.7
NEW EP	11 18 21.0
EPCP	21 09.3
SJG EP	11 18 42.8
EpP	18 54.5
EsP	18 59.8
COL IP	11 21 26.2
IPCP	22 27.4

Date and Station	Phase (GCT)
	h m s
NOV 21	
ADK IP	11 50 11.5
IS	50 24.5
COL EP	11 54 28.0
NOV 21	
H-12 19 30.5	
46.7N 152.5E	
h ABOUT 66KM	
ADK IP	12 24 05.8
COL IP	12 26 31.0
NEW IP	12 29 14.9
EpP	29 31.0
HHM IP	12 29 26.7
EpP	29 44.2
EPCP	30 15.2
BMO EP	12 29 28.9
BUT EP	12 29 41.9
BOZ IP D	12 29 47.0
EpP	30 04.5
EUR IP D	12 29 56.8
IpP	30 13.5
FGU IP D	12 30 15.6
BCN IP D	12 30 16.0
IpP	30 32.7
TUC IP	12 30 46.0
EpP	31 03.0
ALQ IP D	12 30 50.8
IpP	31 08.0
IPP	33 37.0
NOV 21	
H-12 32 44.9	
15.5S 167.5E	
h ABOUT 130KM	
COL EP	12 45 14.0
EUR E(P)	12 45 30.0
NOV 21	
CED IP	12 36 36.8
IS	36 47.5
BCN EP	12 37 09.5
EL	37 42.2
EUR E(P)	12 38 03.0
NOV 21	
CED IP	13 37 39.9
IS	37 46.2
EUR E(P)	13 39 09.5
NOV 21	
H-13 48 45.0	
34.4N 116.8W	
h ABOUT 1KM	

Date and Station	Phase (GCT)
	h m s
CED E(P)	13 48 50.7
IS	49 05.1
BCN EP	13 49 22.0
IL	49 56.3
SLD E(P)	13 49 54.5
GCA E(P)	13 50 00.0
IL	51 19.5
EUR IP	13 50 03.9
NOV 21	
GUA IP	14 20 36.0
IS	20 43.0
NOV 21	
SJG EP	14 48 10.0
IS	48 29.5
NOV 21	
GUA IP	15 05 18.0
IS	05 33.0
NOV 21	
COL IP	15 38 01.2
NOV 21	
SJG EP	18 32 26.4
ES	32 59.7
NOV 21	
EUR EP	19 09 09.5
E	09 49.7
NOV 21	
H-19 18 31.5	
36.1N 137.5E	
h ABOUT 257KM	
COL EP	19 27 13.0
NEW EP	19 29 34.0
HHM E(P)	19 29 43.7
BMO IP	19 29 45.9
EUR IP	19 30 08.5
NOV 21	
LVN IP	19 34 43.0
NOV 21	
EUR EP	21 18 37.3
NOV 21	
EUR EP	22 00 45.5
NOV 21	
GUA EP	22 42 20.4
NOV 21	
EUR IP	23 15 04.7
NOV 21	
SJG IP	23 20 33.6
ES	20 50.6
NOV 21	
BCN EP	23 35 17.1

Date and Station	Phase (GCT)
	h m s
NOV 21	
LVN EP	23 36 51.0
NOV 22	
LVN EP	00 36 51.0
NOV 22	
ADK IP	00 56 33.5
IS	56 46.8
NOV 22	
BCN EP	01 11 41.9
E(S)	12 01.3
GCA E(P)	01 11 53.0
ES	12 18.5
NOV 22	
LVN EP	01 13 41.0
NOV 22	
LVN EP	02 13 41.0
NOV 22	
BOZ E(P)	02 28 28.5
NOV 22	
EUR IP	03 38 05.3
NOV 22	
H-04 11 36.0	
5.9S 152.3E	
h ABOUT 43KM	
COL IP	04 23 56.8
BMO EP	04 24 53.0
NEW EP	04 24 54.0
EUR IP	04 24 57.3
NOV 22	
LVN IP	04 21 43.0
NOV 22	
NEW EP	04 39 30.0
NOV 22	
COL EP	04 48 15.0
NOV 22	
GUA IP	05 02 01.0
IS	02 15.0
NOV 22	
COL EP	05 03 11.0
NOV 22	
LVN IP	05 21 43.0
NOV 22	
H-06 29 53.1	
48.0N 146.8E	
h ABOUT 452KM	
ADK IP	06 34 27.3

Date and Station	Phase	(GCT)
		h m s
COL	IP C	06 36 30.6
	IpP	37 58.5
	EsP	38 47.0
	EsPP	40 16.0
	IS	41 47.5
	EsS	44 20.0
	EL	45 13.0
SIT	EP	06 37 34.5
	EpP	39 02.6
NEW	EP	06 39 14.0
	EPP	41 37.0
HHM	IP C	06 39 24.5
	IPCP	40 03.0
	E	41 07.6
BMO	IP	06 39 28.9
	E	41 09.7
UKI	E(P)	06 39 31.0
BUT	IP	06 39 39.4
BOZ	IP C	06 39 44.8
	IPCP	40 15.0
	I	41 41.8
	EPP	42 08.0
	ES	47 48.0
SLD	IP C	06 39 47.7
	IPCP	40 16.8
EUR	IP C	06 39 56.9
	IpP	41 35.2
	EsPP	44 59.3
	ES	48 10.4
SLC	IP	06 40 05.0
	EPCP	40 24.2
FGU	IP C	06 40 12.3
	IPCP	40 34.1
BCN	IP C	06 40 16.0
	EpP	41 55.8
TUC	IP C	06 40 44.2
	EPCP	41 03.5
	ES	49 42.0
ALQ	IP C	06 40 47.3
	ES	49 50.0
WSC	IP	06 41 39.6
CSC	EP	06 41 53.2
NOV 22		
LVN	IP	06 42 12.5
NOV 22		
H-07 01 10.7		
58.0S 025.3W		
h ABOUT 32KM		
SJG	IP	07 13 33.0
ALQ	EP'	07 19 48.0
	E	22 32.5
TUC	EP'	07 19 48.0
BCN	EP'	07 19 58.2
FGU	EP'	07 20 00.3
EUR	IP'	07 20 04.5
SLD	IP'C	07 20 06.2
	E	23 29.7
BOZ	EP'C	07 20 09.5
	E	21 06.0
BUT	EP'	07 20 10.9
BMO	EP'	07 20 13.0
HHM	IP'	07 20 14.5
NEW	IP'	07 20 16.4
COL	IP'	07 20 54.0
	I	21 03.1
NOV 22		
ALQ	EP	07 07 14.0
HHM	E(P)	07 08 12.0
BUT	E(P)	07 08 22.4
NEW	EP	07 08 24.0
NOV 22		
ADK	IP	07 19 56.5
NOV 22		
H-07 20 31.8		
37.4N 114.2W		
h ABOUT 33KM		
BCN	EP	07 20 57.0
	ES	21 16.3
GCA	EP	07 21 06.0
	I	21 07.5
	IS	21 33.0
EUR	(PN)	07 21 11.0
TUC	(PN)	07 21 56.5
NOV 22		
EUR	IP	07 29 58.0
FGU	EP	07 30 05.3
ALQ	E(P)	07 30 28.0
NOV 22		
GUA	IP	07 45 32.0
	IS	45 41.0
NOV 22		
H-07 41 03.8		
37.3N 114.2W		
h ABOUT 33KM		
BCN	EP	07 41 28.5
	ES	41 45.2
	IL	41 47.5
GCA	EP	07 41 38.0
	I	41 39.0
	IS	42 05.5
EUR	IP	07 41 44.1
TUC	(PN)	07 42 29.0
NOV 22		
EUR	EP	08 16 39.6
	I	16 46.0
	EL	17 25.0
NOV 22		
SJG	EP	08 23 46.6
	IS	24 11.2
NOV 22		
H-08 52 15.9		
52.1N 172.6E		
h ABOUT 33KM		
ADK	E(P)	08 53 55.9
	ES	55 35.9
COL	EP	08 57 26.5
NEW	IP	09 00 17.5
HHM	E(P)	09 00 31.7
BMO	IP	09 00 32.1
	ESCP	05 50.7
BOZ	E(P)	09 00 53.5
EUR	IP	09 01 04.7
TUC	EP	09 02 02.3
ALQ	EP C	09 02 08.0
NOV 22		
GUA	EP	12 01 31.0
NOV 22		
H-12 14 07.7		
19.2N 067.9W		
h ABOUT 22KM		
ALQ	EP	12 21 22.2
	E	23 18.4
TUC	E(P)	12 21 54.0
FGU	EP	12 21 56.2
BOZ	EP	12 22 20.7
	E	22 25.0
BCN	EP	12 22 20.9
EUR	IP	12 22 31.8
BMO	EP	12 22 47.9
NEW	EP	12 22 54.0
SLD	E(P)	12 23 07.7
COL	EP	12 25 09.5
NOV 22		
SJG	IP	12 24 05.0
	IS	24 29.5
NOV 22		
COL	EP	13 25 10.0
NOV 22		
BMO	E(P)	14 25 06.8
NOV 22		
COL	EP	15 15 37.0
NOV 22		
H-15 54 58.7		
52.2N 172.6E		
h ABOUT 33KM		
COL	IP	16 00 09.5
NEW	EP	16 03 01.0
BMO	EP	16 03 15.1
	E	03 36.4
HHM	E(P)	16 03 16.5
	E	03 37.5
BOZ	EP	16 03 36.5
	EpP	03 47.0
EUR	IP	16 03 47.0
TUC	E(P)	16 04 45.5
ALQ	EP	16 04 51.0
	EpP	05 01.0
NOV 22		
GUA	IP	18 15 57.0
	IS	16 12.0
NOV 22		
SLD	E(P)	18 58 28.5
NOV 22		
H-19 35 48.4		
51.9N 176.4W		
h ABOUT 69KM		
ADK	IP	19 35 58.7
	IS	36 11.1
COL	EP	19 40 14.0
NEW	EP	19 42 55.0
BMO	EP	19 43 09.8
HHM	E(P)	19 43 15.5
	E	43 38.3
BOZ	EP	19 43 32.7
EUR	E(P)	19 43 42.5
NOV 22		
ADK	IP	20 05 20.7
	IS	05 33.0
NOV 22		
BCN	EP	20 57 53.0
EUR	EP	20 58 19.0
	IL	59 04.4
NOV 22		
H-21 38 13.4		
59.9N 148.0W		
h ABOUT 33KM		

Date and Station	Phase (GCT)
	h m s
COL IP	21 39 29.1
ES	40 30.3
NEW EP	21 42 59.0
BMO EP	21 43 23.7
NOV 22	
EUR E(P)	22 05 19.0
EL	06 06.8
BMO E(P)	22 06 12.3
NOV 22	
ALQ E(P)	22 20 09.0
NOV 22	
TUC EP	22 30 19.5
ES	30 39.0
NOV 22	
BMO E(P)	22 46 04.1
NOV 22	
ALQ E(P)	22 59 28.5
E	59 55.5
NOV 23	
COL E(P)	00 45 59.5
NOV 23	
H-02 19 13.6	
14.9S 166.8E	
h ABOUT 45KM	
GUA EP	02 26 10.0
EPP	27 31.0
HON IP	02 28 06.9
ES	35 26.0
SLD E(P)	02 31 41.3
EPP	35 05.0
COL EP	02 31 52.0
BCN EP	02 32 07.5
EPP	07 35 41.0
EUR E(P)	02 32 08.0
EPP	35 41.2
BMO EP	02 32 11.7
NEW IP	02 32 18.0
HHM E(P)	02 32 26.3
BOZ E(P)	02 32 30.5
EPP	36 20.0
ALQ E(P)	02 32 37.0
SJG EP'	02 38 09.6
E	38 16.5
NOV 23	
H-02 27 54.2	
37.3N 114.2W	
h ABOUT 33KM	
LVN IP	02 28 17.0
ES	28 36.0

Date and Station	Phase (GCT)
	h m s
BCN IPC	02 28 18.9
IL	28 37.8
GCA EP	02 28 28.4
I	28 29.5
IS	28 55.4
EUR IP	02 28 34.0
TUC EPN	02 29 18.7
ALQ E(P)	02 29 40.0
E	31 19.5
BMO EPN	02 29 53.2
NOV 23	
BHP EP	02 48 34.0
E	56 15.0
NOV 23	
HHM E(P)	03 29 52.3
NOV 23	
ADK IP	04 34 21.6
NOV 23	
FGU IP C	05 37 27.6
IS	37 38.3
NOV 23	
EUR E(P)	05 55 22.0
ALQ E(P)	05 55 40.0
NOV 23	
H-07 42 23.9	
44.9N 111.3W	
h ABOUT 33KM	
BOZ IPNC	07 42 37.0
EL	42 49.5
BZM EP	07 42 38.5
BUT EP	07 42 49.6
HHM EPN	07 43 24.3
EPG	43 34.8
BMO EPN	07 43 27.8
NEW IP	07 43 41.5
EUR E(P)	07 44 03.1
NOV 23	
HHM EPN	07 44 16.3
EL	44 28.3
NOV 23	
TUC E(P)	07 59 13.5
NOV 23	
ADK IP	08 20 23.7
IS	20 32.0
COL EP	08 24 39.0
BOZ EP	08 27 57.0
EUR E(P)	08 28 04.2

Date and Station	Phase (GCT)
	h m s
NOV 23	
EUR EP	09 10 20.5
EL	11 02.3
NOV 23	
BMO E(P)	09 39 47.3
BOZ EP	09 40 11.5
E	40 25.5
EUR IP	09 40 19.2
NOV 23	
GUA E(P)	10 52 38.0
NOV 23	
GUA IP	11 02 28.0
IS	02 41.0
NOV 23	
BMO E(P)	11 04 58.8
NOV 23	
SJG EP	12 06 22.0
ES	06 47.3
NOV 23	
BMO EP	12 38 55.8
NOV 23	
NEW EP	15 46 03.0
NOV 23	
GUA IP	16 13 58.0
ES	15 02.0
NOV 23	
EUR E(P)	16 28 08.0
NOV 23	
EUR EP	16 34 41.1
NOV 23	
H-18 17 59.2	
20.1S 177.7W	
h ABOUT 465KM	
TUC EP	18 29 34.0
EUR IP	18 29 34.0
BMO EP	18 29 44.4
ALQ EP	18 29 54.8
COL IP	18 29 57.2
NOV 23	
ALQ E(P)	18 32 39.0
E	33 14.4
NOV 23	
EUR EP	19 13 04.3
NOV 23	
BMO E(P)	19 53 14.1
NOV 23	
ALQ E(P)	21 25 01.0
E	25 42.0
NOV 23	
BMO EP	21 43 44.8

Date and Station	Phase (GCT)
	h m s
NOV 23	
GUA IP	21 52 12.0
IS	52 41.0
NOV 23	
BMO E(P)	22 04 35.3
E	04 47.9
NOV 23	
ALQ E(P)	22 24 03.5
NOV 23	
EUR E(P)	22 26 57.4
NOV 23	
BCN E(P)	22 59 46.5
EL	23 00 21.5
NOV 23	
BMO IPN	23 58 13.3
NOV 24	
EUR IP	01 22 07.5
NOV 24	
ALQ E(P)	01 34 52.5
EUR IP	01 34 52.6
NOV 24	
SJG EP	02 15 05.0
ES	15 24.0
NOV 24	
CSC EP	02 40 02.2
NOV 24	
CSC E(P)	02 45 05.0
NOV 24	
BMO EP	03 07 15.6
BOZ E(P)	03 07 33.5
EUR EP	03 07 44.3
NOV 24	
TUC EP	05 54 43.0
E	55 04.3
NOV 24	
SJG EP	06 49 50.4
IS	50 15.5
NOV 24	
H-06 53 37.4	
56.6N 152.8W	
h ABOUT 33KM	
COL E(P)	06 55 40.0
NEW EP	06 58 41.0
HHM E(P)	06 58 56.0
BMO IP	06 59 00.4
BUT EP	06 59 17.7
BOZ EP	06 59 23.5
SLD EP	06 59 33.5

Date and Station	Phase	(GCT) h m s
EUR	IP D	06 59 40.9
	I	59 48.0
	EPCP	07 02 46.0
	ESCP	07 06 25.4
FGU	EP	07 00 02.9
BCN	EP	07 00 09.8
TUC	EP	07 00 51.5
ALQ	EP	07 00 53.6
	ESCP	06 56.0
NOV 24		
H-07 31 53.2		
30.7S 177.8W		
h ABOUT 18KM		
SLD	EP	07 44 32.4
TUC	EP	07 44 50.0
EUR	IP	07 44 54.1
BMO	EP	07 45 06.0
ALQ	EP	07 45 09.0
BOZ	EP	07 45 23.5
NOV 24		
H-08 41 58.7		
56.6N 152.8W		
h ABOUT 33KM		
COL	E(P)	08 44 04.0
BMO	E(P)	08 47 21.7
EUR	E(P)	08 48 02.0
NOV 24		
COL	E(P)	09 02 53.0
NEW	IP	09 04 29.6
	E	05 27.0
SLD	EP	09 04 29.6
EUR	IP	09 04 45.5
NOV 24		
EUR	E(P)	09 09 11.0
NOV 24		
H-10 08 54.8		
63.6N 151.1W		
h ABOUT 28KM		
COL	EP	10 09 26.0
NOV 24		
SJG	IP	10 59 05.9
	IS	59 09.5
NOV 24		
H-12 59 15.9		
25.5S 179.4E		
h ABOUT 520KM		
TUC	EP	13 11 11.5
EUR	EP	13 11 12.7
BMO	E(P)	13 11 23.0
NOV 24		
H-15 07 24.2		
56.6N 152.8W		
h ABOUT 33KM		
COL	E(P)	15 09 27.2
NEW	IP	15 12 29.0
BMO	IP	15 12 47.7
EUR	EP	15 13 28.0
NOV 24		
SJG	EP	15 12 16.5
	ES	12 23.5
NOV 24		
H-16 26 29.1		
55.3S 030.0W		
h ABOUT 33KM		
BMO	EP'	16 45 23.3
NOV 24		
EUR	E(P)	16 29 10.2
NOV 24		
H-16 45 46.4		
39.3S 091.9W		
h ABOUT 33KM		
SJG	EP	16 56 01.5
TUC	E(P)	16 57 09.5
ALQ	E(P)	16 57 21.0
	EPCP	57 35.5
	ES	17 07 04.0
BCN	EP	16 57 42.0
FGU	E(P)	16 57 56.3
SLD	EP	16 58 01.0
EUR	E(P)	16 58 02.2
BOZ	EP	16 58 23.0
	IpP	58 34.5
BUT	E(P)	16 58 27.5
	IpP	58 38.0
BMO	EP	16 58 29.3
NEW	EP	16 58 40.0
HHM	EP	16 58 40.1
NOV 24		
BHP	IP D	17 01 40.5
	IS	06 38.5
NOV 24		
SJG	EP	17 30 39.5
	ES	31 21.0
NOV 24		
H-18 51 48.3		
44.5N 146.5E		
h ABOUT 170KM		
COL	EP	18 59 13.0
BMO	EP	19 02 06.4
EUR	EP	19 02 32.5
NOV 24		
H-19 10 53.7		
17.2N 146.0E		
h ABOUT 86KM		
GUA	EP	19 11 51.0
	ES	12 33.0
COL	EP	19 21 21.0
NEW	IP	19 23 04.6
SLD	EP	19 23 07.3
	EpP	23 29.0
BMO	EP	19 23 09.0
	EpP	23 33.5
HHM	EP	19 23 14.3
EUR	IP	19 23 22.5
BUT	IP	19 23 23.9
	IpP	23 46.2
BOZ	EP C	19 23 27.0
	IpP	23 51.0
BCN	EP	19 23 32.7
SLC	EP	19 23 35.6
FGU	EP	19 23 42.7
TUC	E(P)	19 23 53.5
	EpP	24 15.0
ALQ	EP	19 24 04.0
NOV 24		
BMO	E(P)	19 19 18.5
NOV 24		
H-20 09 07.5		
43.7N 145.8E		
h ABOUT 127KM		
COL	IP	20 16 45.8
NEW	EP	20 19 23.0
HHM	EP	20 19 34.3
BMO	EP	20 19 36.2
BOZ	EP	20 19 53.0
EUR	IP	20 20 03.0
BCN	EP	20 20 20.8
NOV 24		
NEW	EP	21 14 58.0
NOV 24		
SJG	EP	22 19 03.7
	IS	19 14.4
NOV 24		
ALQ	E(P)	22 26 19.4
	E	26 27.0
	E	27 07.5
BCN	EP	22 27 10.6
EUR	E(P)	22 27 45.0
NOV 25		
BMO	E(P)	01 09 10.6
NOV 25		
BMO	E(P)	01 11 34.6
NOV 25		
COL	EP	02 23 34.0
NOV 25		
COL	EP	02 29 04.0
NOV 25		
BMO	E(P)	02 36 09.8
NOV 25		
EUR	IP	03 08 08.0
BMO	EP	03 08 11.7
ALQ	EP	03 08 18.0
NOV 25		
H-03 18 51.1		
15.5S 179.3E		
h ABOUT 33KM		
EUR	IP	03 31 06.6
TUC	E(P)	03 31 10.5
BMO	EP	03 31 15.5
COL	IP	03 31 19.2
SLC	EP	03 31 23.5
NEW	EP	03 31 24.0
ALQ	E(P)	03 31 31.5
FGU	EP	03 31 32.6
BUT	EP	03 31 33.2
	E	31 47.7
BOZ	EP	03 31 35.0
NOV 25		
H-03 31 51.5		
19.5N 067.5W		
h ABOUT 33KM		
SJG	IP	03 32 22.6
	IS	32 45.6
ALQ	EP	03 39 06.2
BMO	EP	03 40 30.8
NOV 25		
BMO	E(P)	04 39 28.4

Date and Station	Phase (GCT)
	h m s
NOV 25	
H-04 49 05.1	
1.9N 079.2W	
h ABOUT 38KM	
ALQ EP D	04 56 51.6
FGU EP	04 57 39.0
EUR EP	04 58 00.1
BMO EP	04 58 29.5
NOV 25	
H-05 52 52.4	
41.7N 108.0W	
h ABOUT 33KM	
FGU IP D	05 53 15.7
IS	53 34.8
EUR E(P)	05 54 29.0
NOV 25	
EUR EP	08 48 24.3
NOV 25	
BMO E(P)	09 27 44.0
NOV 25	
SJG EP	11 40 09.8
ES	40 32.9
NOV 25	
SLC EP	13 43 56.6
E	44 17.1
E	44 38.4
NOV 25	
BCN E(P)	14 30 19.1
NOV 25	
EUR E(P)	16 15 34.2
IL	16 12.9
NOV 25	
TUC EP	16 45 20.0
NOV 25	
BCN EP	18 14 39.4
NOV 25	
COL E(P)	18 21 18.0
BMO EP	18 22 55.2
EUR E(P)	18 23 11.0
NOV 25	
ALQ EP	19 11 09.1
E	11 20.0
TUC EP	19 11 12.5
EUR E(P)	19 12 08.0
SLD EP	19 12 19.5
NOV 25	
BOZ EPN	19 14 52.0
EL	15 05.5

Date and Station	Phase (GCT)
	h m s
NOV 25	
EUR E(P)	19 30 32.3
EL	31 27.5
NOV 25	
H-19 32 48.5	
44.8N 148.2E	
h ABOUT 115KM	
COL E(P)	19 40 11.0
EUR EP	19 43 31.6
NOV 25	
COL IP	20 27 30.0
NOV 25	
H-20 31 36.2	
41.7N 73.0E	
h ABOUT 33KM	
COL EP	20 42 40.0
NOV 25	
H-20 57 57.1	
8.4S 147.7E	
h ABOUT 16KM	
COL EP	21 10 43.0
EUR E(P)	21 11 50.0
NOV 25	
EUR E(P)	21 21 01.0
NOV 25	
EUR IP	21 46 17.1
NOV 25	
ALQ E(P)	21 51 34.0
E	52 10.0
NOV 25	
ALQ E(P)	21 57 20.5
E	57 50.5
NOV 25	
BOZ EPN	21 57 25.5
EL	57 32.5
NOV 25	
SJG IP	22 11 39.0
ES	12 04.5
NOV 25	
BUT EP	22 50 23.5
TUC E(P)	22 51 43.0
NOV 26	
EUR E(P)	00 11 38.0
NOV 26	
H-02 18 17.5	
25.6S 070.7W	
h ABOUT 54KM	
SJG IP D	02 26 16.0
ALQ IP D	02 29 20.5
IpP	29 32.0
TUC IP	02 29 20.7
EpP	29 34.0

Date and Station	Phase (GCT)
	h m s
BCN IP D	02 29 50.3
FGU IP D	02 29 57.6
IpP	30 11.0
SLC EP	02 30 00.7
EpP	30 12.7
EUR IP	02 30 09.0
SLD IP D	02 30 15.0
EpP	30 28.5
BOZ IP D	02 30 23.5
E	30 34.8
BUT EP	02 30 27.5
HHM IP	02 30 40.1
NEW IP	02 30 45.5
EpP	31 02.0
NOV 26	
BOZ E(P)	02 32 33.0
E	32 51.7
NOV 26	
EUR E(P)	02 46 13.4
E(S)	46 46.2
NOV 26	
ALQ E(P)	02 56 46.5
NOV 26	
H-03 23 45.0	
78.2N 004.5E	
h ABOUT 33KM	
COL EP	03 30 46.0
NEW E(P)	03 32 36.0
BUT EP	03 32 40.0
IpP	32 49.5
BMO EP	03 32 54.9
EpP	33 03.8
FGU EP	03 33 13.7
EUR E(P)	03 33 32.3
IpP	33 40.5
ALQ EP	03 33 51.5
BCN E(P)	03 34 03.9
TUC EP	03 34 14.5
EpP	34 23.2
NOV 26	
BMO EPN	03 36 39.0
NOV 26	
H-04 30 58.7	
40.3N 125.4W	
h ABOUT 33KM	
UKI E(P)	04 31 31.0
SLD IP D	04 32 07.3
IS	32 56.4

Date and Station	Phase (GCT)
	h m s
EUR IP D	04 32 45.2
I	32 55.0
EL	34 39.7
BMO EP	04 32 48.3
BCN E(P)	04 33 18.0
NEW IP	04 33 20.6
SLC EP	04 33 28.7
BOZ EPC	04 33 41.0
HHM E(P)	04 33 42.1
FGU EP	04 33 53.7
TUC E(P)	04 34 23.5
ALQ EP	04 34 44.6
NOV 26	
LVN IP	05 16 14.0
NOV 26	
H-05 25 14.3	
35.6N 140.1E	
h ABOUT 69KM	
COL EP	05 34 10.0
BMO EP	05 36 42.6
EpP	36 59.4
BOZ EP	05 37 00.0
EpP	37 16.0
EUR EP	05 37 05.5
IpP	37 22.8
TUC EP	05 37 46.0
EpP	38 03.8
NOV 26	
H-05 35 36.7	
42.6N 144.9E	
h ABOUT 40KM	
COL IP	05 43 33.1
NOV 26	
H-05 38 36.6	
7.4N 102.8W	
h ABOUT 33KM	
TUC E(P)	05 44 09.4
EUR E(P)	05 45 20.5
NEW EP	05 46 32.0
NOV 26	
ALQ E(P)	05 52 49.0
BMO EP	05 53 27.5
NOV 26	
H-05 56 39.6	
40.3N 125.3W	
h ABOUT 33KM	
UKI E(P)	05 57 12.6

Date and Station	Phase	(GCT) h m s
SLD	EP	05 57 46.7
	ES	58 40.4
EUR	IP	05 58 25.0
BMO	EP	05 58 27.8
NEW	EP	05 59 02.0
BOZ	E(P)	05 59 09.5
HHM	E(P)	05 59 22.6
NOV 26		
H-06 06 24.4		
31.3S 068.8W		
h ABOUT 119KM		
EUR	EP	06 18 37.9
NOV 26		
H-07 38 34.9		
35.6N 140.1E		
h ABOUT 66KM		
BMO	E(P)	07 50 03.5
EUR	EP	07 50 25.6
NOV 26		
H-08 00 53.6		
23.8S 070.3W		
h ABOUT 92KM		
SJG	EP	08 08 34.5
ALQ	E(P)	08 11 44.0
TUC	E(P)	08 11 44.5
EUR	EP	08 12 33.2
BMO	EP	08 12 58.3
NOV 26		
BMO	EP	10 29 38.7
NOV 26		
H-10 40 13.0		
28.2S 071.3W		
h ABOUT 33KM		
EUR	E(P)	10 52 17.0
NOV 26		
H-10 55 57.9		
15.1N 094.2W		
h ABOUT 24KM		
ALQ	EP	11 00 59.8
TUC	EP	11 01 02.7
	EPCS	08 18.0
BCN	EP	11 01 48.6
EUR	IP	11 02 16.0
BMO	EP	11 02 54.4
COL	IP	11 06 12.5

Date and Station	Phase	(GCT) h m s
NOV 26		
H-13 49 29.4		
37.9N 058.5E		
h ABOUT 31KM		
COL	IP	14 01 14.8
NOV 26		
H-17 05 07.9		
42.6N 144.6E		
h ABOUT 52KM		
COL	IP	17 13 04.5
NOV 26		
ALQ	E(P)	20 06 44.6
	EL	07 50.5
TUC	E(P)	20 06 51.5
NOV 26		
BMO	EP	20 16 44.5
NOV 26		
EUR	IP	20 35 26.8
BMO	EP	20 36 15.5
NOV 26		
SJG	IP	20 59 33.0
	IS	59 50.0
NOV 26		
EUR	IP	21 40 46.0
NOV 26		
BOZ	EPN	21 57 32.5
	EL	57 43.5
NOV 26		
EUR	EP	21 59 37.9
	E	59 44.1
	EL	22 00 28.6
NOV 26		
BMO	E(P)	22 25 37.2
NOV 26		
BUT	EP	23 05 38.0
NOV 27		
EUR	EP	00 30 28.0
NOV 27		
H-01 10 38.2		
06.9N 073.0W		
h ABOUT 154KM		
BOZ	E(P)	01 19 25.7
NOV 27		
COL	E(P)	02 43 30.0
EUR	E(P)	02 48 46.4
NOV 27		
H-03 02 00.8		
77.2N 007.9E		
h ABOUT 33KM		
BMO	EP	03 11 20.0
NOV 27		
COL	EP	03 05 23.0

Date and Station	Phase	(GCT) h m s
NOV 27		
H-04 10 42.5		
60.1N 145.9W		
h ABOUT 16KM		
COL	IP	04 11 56.2
	EL	13 08.0
BRW	IP	04 13 37.3
	EL	17 20.0
NEW	EP	04 15 21.0
HHM	EP	04 15 35.1
BMO	EP	04 15 47.3
	E	15 52.5
BUT	EP	04 16 00.0
BOZ	EP	04 16 06.7
EUR	EP C	04 16 33.6
SLD	EP	04 16 34.0
FGU	EP	04 16 48.1
BCN	E(P)	04 17 05.0
ALQ	EP	04 17 42.6
TUC	EP	04 17 46.0
NOV 27		
H-04 15 32.4		
60.1N 145.9W		
h ABOUT 14KM		
COL	IP	04 16 52.4
	EL	18 16.0
BRW	EP	04 18 29.8
NEW	EP	04 20 11.0
HHM	EP	04 20 28.1
	I	20 31.1
BMO	EP	04 20 37.1
BOZ	EP	04 20 56.0
	E	25 44.0
SLD	E(P)	04 21 21.0
EUR	IP	04 21 23.0
ALQ	E(P)	04 22 33.0
TUC	E(P)	04 22 36.0
NOV 27		
BOZ	EPN	04 15 39.0
	EL	15 50.5
NOV 27		
COL	IP	05 20 42.8
	IS	20 48.0
BRW	E(P)	05 22 29.2
NOV 27		
COL	EP	06 02 02.0

Date and Station	Phase	(GCT) h m s
NOV 27		
ALQ	E(P)	06 48 58.0
NOV 27		
H-07 00 47.6		
52.6N 034.0W		
h ABOUT 33KM		
BOZ	E(P)	07 09 32.5
FGU	EP	07 09 45.8
COL	EP	07 09 58.0
BMO	EP	07 09 58.4
EUR	E(P)	07 10 21.9
NOV 27		
BOZ	E(P)	09 36 06.4
NOV 27		
BMO	EP	10 07 20.1
NOV 27		
BOZ	E(P)	10 56 30.3
NOV 27		
H-11 01 12.2		
49.4N 155.8E		
h ABOUT 57KM		
COL	IP	11 07 42.1
BMO	EP	11 10 48.2
BOZ	EP C	11 11 06.5
EUR	IP	11 11 17.8
TUC	E(P)	11 12 09.2
ALQ	EP	11 12 13.6
NOV 27		
ALQ	EP	11 10 30.0
NOV 27		
SJG	EP	11 12 43.0
	IS	13 07.5
NOV 27		
EUR	E(P)	11 47 52.0
NOV 27		
H-12 48 04.1		
48.1N 155.0E		
h ABOUT 49KM		
COL	E(P)	12 54 46.5
BMO	EP	12 57 48.3
BOZ	EP	12 58 07.5
	E	58 28.7
EUR	IP	12 58 18.0
ALQ	E(P)	12 59 13.2
NOV 27		
H-13 41 18.7		
17.5N 145.5E		
h ABOUT 210KM		

Date and Station	Phase (GCT)
	h m s
KIP IP	13 50 18.0
COL IP D	13 51 32.5
BRW I(P)	13 51 35.2
NEW IP	13 53 16.3
EpP	54 11.0
SLD IP D	13 53 18.7
BMO IP	13 53 21.2
EpP	54 15.8
HHM IP	13 53 26.6
I	53 39.1
EpP	54 24.1
EPP	56 41.1
BUT E(P)	13 53 34.0
EpP	54 29.0
EUR IP D	13 53 34.5
IPP	56 54.0
BOZ IP D	13 53 38.7
IpP	54 34.0
EPP	57 03.0
BCN IP D	13 53 44.5
SLC IP	13 53 46.7
FGU IP D	13 53 54.7
EpP	54 52.1
EPP	57 28.9
TUC EP	13 54 05.0
EPP	57 46.0
ALQ EP D	13 54 15.5
EpP	55 11.0
EPP	58 03.0
NOV 27	
SJG EP	14 03 14.5
FGU EP	14 04 24.4
NOV 27	
H-14 23 40.8	
60.3N 145.9W	
h ABOUT 15KM	
COL EP	14 24 52.0
EL	26 06.0
BRW E(P)	14 26 37.0
NEW IP	14 28 21.9
HHM E(P)	14 28 32.6
BMO EP	14 28 45.0
BOZ EP	14 29 03.0
EUR IP	14 29 34.1
TUC EP	14 30 47.0
NOV 27	
TUC E(P)	14 58 35.6

Date and Station	Phase (GCT)
	h m s
NOV 27	
ALQ E(P)	15 00 38.0
E	01 44.0
NOV 27	
H-18 01 06.1	
43.9N 146.0E	
h ABOUT 112KM	
COL E(P)	18 08 42.4
NOV 27	
H-18 11 26.9	
15.3S 166.3E	
h ABOUT 23KM	
COL E(P)	18 24 25.0
EUR IP	18 24 29.1
BMO EP	18 24 32.1
NOV 27	
COL E(P)	19 45 10.0
NOV 27	
ALQ E(P)	19 59 44.5
E	20 00 52.2
NOV 27	
H-20 13 02.0	
78.5N 005.8E	
h ABOUT 33KM	
BRW E(P)	20 19 16.7
COL IP	20 20 02.0
I	20 10.5
HHM IP	20 21 42.1
IpP	21 49.6
NEW IP	20 21 47.0
IpP	21 55.0
BUT EP	20 22 00.0
EpP	22 07.9
BOZ EPC	20 22 00.0
IpP	22 10.0
BMO IP	20 22 12.2
EpP	22 21.0
FGU EP C	20 22 30.9
SLC EP	20 22 35.3
EpP	22 43.6
EUR IP C	20 22 49.1
IpP	22 57.0
EPP	25 06.3
ALQ EP C	20 23 09.0
SLD IP D	20 23 12.0
BCN IPC	20 23 12.2
EpP	23 21.0
EPCP	23 57.0
TUC IP C	20 23 31.5
ES	32 07.0

Date and Station	Phase (GCT)
	h m s
SJG E(P)	20 24 07.0
NOV 27	
H-20 56 24.4	
52.6N 169.2W	
h ABOUT 33KM	
ADK E(P)	20 57 33.5
COL EP	21 00 14.0
EUR EP	21 03 44.2
NOV 27	
EUR IP	22 42 14.8
NOV 27	
EUR E(P)	22 44 19.4
EL	45 02.3
NOV 27	
TUC E(P)	23 22 04.0
NOV 27	
COL E(P)	23 36 35.0
NOV 28	
TUC E(P)	00 29 14.0
NOV 28	
COL EP	01 33 42.0
ES	35 36.0
BMO E(P)	01 37 35.0
NOV 28	
H-01 36 18.0	
.5N 77.4W	
h ABOUT 127KM	
ALQ EP	01 44 13.0
NOV 28	
H-02 20 57.3	
30.4N 105.4W	
h ABOUT 33KM	
ALQ EPN	02 22 06.0
TUC (PN)	02 22 11.0
EUR E(P)	02 23 57.5
NOV 28	
BCN E(P)	02 26 10.0
NOV 28	
H-03 04 10.6	
5.4S 151.2E	
h ABOUT 78KM	
COL EP	03 16 27.0
EUR IP	03 17 29.1
NOV 28	
EUR EP	04 52 14.6
NOV 28	
BCN E(P)	06 35 13.9

Date and Station	Phase (GCT)
	h m s
NOV 28	
H-07 32 53.6	
6.7N 82.6W	
h ABOUT 33KM	
BHP I(P)	07 33 43.3
IS	34 37.0
SJG EP D	07 37 19.8
ES	41 06.0
ALQ EP	07 39 50.0
ES	45 34.0
TUC E(P)	07 39 57.0
EPP	41 32.0
ES	45 50.0
FGU EP	07 40 39.2
EPP	42 19.5
BCN EP	07 40 39.3
SLC IP	07 40 50.4
EUR EP D	07 41 02.5
EPCP	42 52.0
BOZ IP C	07 41 16.5
EPP	43 15.0
ES	48 12.0
SLD EP C	07 41 18.9
BUT IP	07 41 24.8
BMO EP	07 41 34.6
HHM IP	07 41 42.1
I	41 50.6
NEW EP	07 41 50.0
BRW E(P)	07 45 01.8
NOV 28	
COL EP	07 43 53.0
NOV 28	
BOZ EP	07 56 12.0
E	56 20.7
NOV 28	
H-08 17 10.8	
07.4S 154.8E	
h ABOUT 16KM	
COL IP	08 29 36.6
BRW E(P)	08 29 52.0
EUR EP	08 30 30.5
NOV 28	
H-10 08 09.4	
16.9S 174.3W	
h ABOUT 122KM	
TUC E(P)	10 19 55.5
EUR IP	10 19 56.0
BMO EP	10 20 08.5

Date and Station	Phase	(GCT) h m s
ALQ	EP	10 20 20.0
	EPCP	20 31.0
	E	21 05.0
FGU	EP	10 20 24.0
COL	IP	10 20 27.2
BOZ	EP	10 20 28.0
NOV 28		
H-11 49 29.1		
54.1N 161.0E		
h ABOUT 34KM		
COL	E(P)	11 55 12.0
EUR	IP	11 59 03.2
NOV 28		
TUC	EP	11 57 28.5
COL	EP	11 57 47.0
NOV 28		
TUC	PN	13 17 03.8
NOV 28		
H-14 48 54.0		
22.4S 171.5E		
h ABOUT 132KM		
BCN	EP	15 01 42.5
EUR	IP	15 01 46.6
COL	EP	15 01 49.0
TUC	E(P)	15 01 49.4
NOV 28		
COL	EP	15 48 06.0
NOV 28		
SJG	EP	17 41 00.0
	IS	41 17.5
NOV 28		
H-18 46 37.4		
37.3N 114.2W		
h ABOUT 33KM		
LVN	EP	18 47 00.0
	E(S)	47 21.0
BCN	EPC	18 47 01.5
	ES	47 21.0
GCA	EP	18 47 13.0
	IS	47 39.3
EUR	EP	18 47 18.0
NOV 28		
EUR	E(P)	18 54 04.9
NOV 28		
H-19 28 55.9		
17.7N 145.6E		
h ABOUT 317KM		
COL	IP	19 38 57.9
NEW	EP	19 40 40.0
BMO	IP	19 40 45.5
EUR	IP D	19 40 58.3
NOV 28		
ALQ	E(P)	19 47 27.0
	E	48 06.0
NOV 28		
H-20 10 42.0		
18.4N 95.8W		
h ABOUT 67KM		
ALQ	IP D	20 15 05.0
	E	15 08.0
TUC	EP	20 15 07.6
BOZ	E(P)	20 16 48.5
BMO	EP	20 17 03.7
NEW	EP	20 17 25.0
COL	IP	20 20 25.7
NOV 28		
ALQ	EP	22 11 12.0
	E	11 47.4
NOV 28		
ALQ	E(P)	22 20 43.0
	E	21 19.0
COL	E(P)	22 21 12.0
NOV 28		
BCN	E(P)	23 19 19.8
	EL	19 50.2
EUR	EP	23 20 05.5
NOV 29		
H-00 53 02.0		
18.2N 064.6W		
h ABOUT 152KM		
SJG	IP C	00 53 31.5
	IS	53 53.0
NEW	EP	01 01 57.0
NOV 29		
H-01 11 51.4		
37.3N 114.2W		
h ABOUT 33KM		
LVN	IP	01 12 14.0
	E(S)	12 32.0
BCN	IPD	01 12 16.0
	IS	12 34.2
GCA	IP	01 12 27.6
	IS	12 54.0
EUR	IP	01 12 31.6
TUC	EPN	01 13 15.5
BMO	EPN	01 13 47.1
NOV 29		
H-01 16 58.3		
37.4N 114.2W		
h ABOUT 33KM		
BCN	EP	01 17 23.0
	ES	17 41.5
GCA	E(P)	01 17 33.0
	ES	18 01.0
EUR	EP	01 17 38.6
	IPG	17 45.2
	EL	18 18.0
NOV 29		
COL	E(P)	01 38 48.0
NOV 29		
COL	E(P)	01 39 31.0
NOV 29		
H-02 51 21.0		
19.8S 176.0W		
h ABOUT 202KM		
TUC	E(P)	03 03 14.1
BMO	EP	03 03 26.3
BOZ	EP	03 03 48.4
NOV 29		
H-03 17 22.2		
11.5S 166.3E		
h ABOUT 84KM		
COL	EP	03 29 40.0
EUR	EP	03 30 02.9
NOV 29		
BOZ	E(P)	04 59 30.2
NOV 29		
H-05 03 50.4		
26.3N 044.8W		
h ABOUT 33KM		
SJG	E(P)	05 08 39.0
ALQ	EP	05 13 08.0
BOZ	EP	05 13 27.0
	I	13 32.5
	E	13 40.5
TUC	E(P)	05 13 36.0
NEW	IP	05 13 51.1
BCN	EP	05 13 54.8
BMO	EP	05 13 56.7
EUR	EP	05 14 00.0
	IPCP	14 48.1
COL	EP	05 15 11.0
NOV 29		
BOZ	E(P)	05 04 18.2
NOV 29		
H-06 00 02.5		
26.3N 044.6W		
h ABOUT 33KM		
NEW	IP	06 10 04.6
COL	E(P)	06 11 24.0
NOV 29		
H-06 32 06.0		
6.6S 154.4E		
h ABOUT 122KM		
EUR	EP	06 45 10.0
NOV 29		
H-08 00 09.5		
15.9S 176.8W		
h ABOUT 375KM		
BCN	EP	08 11 23.6
EUR	IP	08 11 34.8
TUC	EP	08 11 37.5
BMO	EP	08 11 45.1
NEW	IP	08 11 54.7
	EPP	14 55.0
COL	IP	08 11 56.4
ALQ	EP	08 11 59.0
	EPP	13 27.0
HHM	E(P)	08 12 03.0
BOZ	EPC	08 12 05.0
NOV 29		
BMO	E(P)	08 18 35.2
EUR	EP	08 19 08.9
NOV 29		
H-09 21 22.7		
09.8S 090.6E		
h ABOUT 33KM		
NEW	EP'	09 40 41.0
EUR	EP'	09 40 48.1
BCN	EP'	09 40 54.2
FGU	EP'C	09 40 55.8
TUC	EP'	09 41 06.5
	I	41 13.0
ALQ	EP'	09 41 09.0
	EPP	44 50.5
NOV 29		
H-10 11 00.3		
36.4N 070.0E		
h ABOUT 215KM		
COL	IP	10 22 18.0
NOV 29		
COL	EP	10 54 39.0

Date and Station	Phase (GCT)
	h m s
NOV 29	
H-12 10 23.4	
21.4S 068.9W	
h ABOUT 119KM	
TUC E(P)	12 21 03.5
EUR EP	12 21 52.7
BMO EP	12 22 17.4
NOV 29	
EUR IP	12 32 56.2
NOV 29	
EUR E(P)	13 09 53.8
NOV 29	
COL E(P)	13 25 40.0
NOV 29	
H-14 08 16.0	
42.1N 143.0E	
h ABOUT 63KM	
COL EP	14 16 19.0
BMO EP	14 19 08.0
EpP	19 22.2
BOZ E(P)	14 19 24.0
EpP	19 39.0
NOV 29	
SLD EP	15 11 07.5
NOV 29	
TUC EP	15 51 45.7
NOV 29	
ALQ E(P)	16 32 32.0
NOV 29	
H-17 16 33.8	
41.5N 144.2E	
h ABOUT 44KM	
COL IP	17 24 39.1
NEW EP	17 27 14.0
BMO EP	17 27 26.9
BOZ E(P)	17 27 42.0
EpP	27 52.7
EUR IP	17 27 56.5
ALQ E(P)	17 28 45.0
NOV 29	
BMO E(P)	19 02 38.9
BUT EP	19 02 40.9
NOV 29	
TUC (PN)	19 08 50.3
NOV 29	
H-19 25 35.5	
9.0N 077.4W	
h ABOUT 33KM	
BHP IP C	19 26 08.5
IS	26 33.2
ALQ EP	19 32 44.5
NEW EP	19 34 38.0
NOV 29	
H-19 56 57.1	
12.1N 140.6E	
h ABOUT 33KM	
COL EP	20 08 15.0
BMO EP	20 09 55.2
E	10 16.3
NOV 29	
EUR E(P)	21 46 11.2
NOV 29	
H-22 17 30.4	
14.7S 167.4E	
h ABOUT 166KM	
SLD EP	22 29 46.4
EpP	30 27.5
COL IP	22 29 52.4
ES	40 04.0
BCN EP	22 30 02.7
EpP	30 45.9
EUR EP C	22 30 09.0
IpP	30 50.2
EsP	31 12.3
IPP	33 42.0
EPKKP	47 47.0
BMO IP	22 30 13.0
EpP	30 53.8
NEW IP	22 30 18.6
EpP	31 01.0
BOZ E(P)	22 30 30.5
E	31 18.5
FGU EP	22 30 32.9
EpP	31 14.4
ALQ EP	22 30 34.0
EpP	31 20.0
EPP	34 31.0
SJG EP'	22 36 19.0
E	37 06.0
E	39 40.0
NOV 29	
H-22 54 50.1	
9.1S 109.8W	
h ABOUT 33KM	
ALQ E(P)	23 03 06.5
BCN EP	23 03 07.0
EUR IP	23 03 34.1
BMO EP	23 04 14.0
BOZ EP	23 04 15.5
EpP	04 26.0
EPCP	05 26.5
NOV 29	
BHP IP C	22 56 23.0
IL	23 11 51.0
NOV 29	
ALQ P	23 38 49.0
E	39 14.0
NOV 30	
H-00 04 38.1	
46.7N 152.9E	
h ABOUT 57KM	
COL E(P)	00 11 37.0
EUR EP	00 15 04.0
NOV 30	
EUR IP	00 18 43.7
NOV 30	
H-00 30 29.5	
30.7N 141.8E	
h ABOUT 35KM	
COL EP	00 39 58.0
NEW EP	00 42 08.0
BMO EP	00 42 15.3
HHM E(P)	00 42 17.9
EPCP	42 30.1
BOZ EP	00 42 32.3
EUR IP	00 42 34.6
NOV 30	
BOZ E(P)	01 03 24.6
NOV 30	
H-03 36 34.1	
38.2N 141.3E	
h ABOUT 49KM	
COL E(P)	03 45 11.2
EUR EP	03 48 13.3
NOV 30	
EUR EP	04 26 36.1
NOV 30	
BMO E(P)	04 45 04.8
NOV 30	
BOZ E(P)	05 31 10.3
NOV 30	
H-08 43 20.0	
8.4N 83.0W	
h ABOUT 49KM	
BHP IP D	08 44 12.7
EL	45 05.6
BOZ E(P)	08 51 27.5
NOV 30	
H-08 50 05.8	
48.4N 154.6E	
h ABOUT 51KM	
COL EP	08 56 48.2
EUR E(P)	09 00 19.2
NOV 30	
COL E(P)	10 03 47.0
NOV 30	
NEW EP	11 13 19.0
NOV 30	
EUR E(P)	12 07 29.3
NOV 30	
H-13 00 39.5	
73.0N 006.1E	
h ABOUT 33KM	
COL EP	13 08 25.0
NEW EP	13 09 54.0
BOZ EP	13 10 03.5
BMO EP	13 10 17.2
FGU EP	13 10 32.7
EUR IP	13 10 52.2
ALQ EP	13 11 06.1
BCN E(P)	13 11 14.0
TUC E(P)	13 11 28.4
NOV 30	
COL EP	13 36 41.0
NOV 30	
COL EP	14 38 52.0
NOV 30	
NEW EP	14 44 09.0
NOV 30	
H-14 59 16.9	
23.5S 068.9W	
h ABOUT 85KM	
ALQ E(P)	15 10 09.5
E	10 43.0
TUC EP	15 10 11.3
E	10 45.0
FGU EP	15 10 47.9
EUR IP	15 11 00.1
BOZ EP	15 11 13.2
EPCP	11 25.5
BMO EP	15 11 24.3
HHM EP	15 11 28.9
NEW EP	15 11 36.0

Date and Station	Phase	Phase (GCT)	Date and Station	Phase	Phase (GCT)	Date and Station	Phase	Phase (GCT)	Date and Station	Phase	Phase (GCT)
		h m s			h m s			h m s			h m s
NOV 30											
ALQ	E(P)	15 13 50.0									
	E	14 54.5									
NOV 30											
LVN	IP	19 03 22.0									
NOV 30											
BOZ	EPN	19 07 44.7									
	E	07 54.5									
	EL	07 59.5									
NOV 30											
COL	E(P	21 57 58.0									
NOV 30											
EUR	IP	22 05 35.9									
NOV 30											
H-22 10 26.0											
4.7S 153.0E											
h ABOUT 72KM											
COL	EP	22 22 35.8									
	EpP	22 52.3									
BMO	EP	22 23 31.7									
	E	23 54.5									
EUR	IP	22 23 35.6									
NOV 30											
ALQ	E(P)	22 27 02.0									
	E	27 06.0									
	E	27 46.0									
NOV 30											
NEW	EP	22 52 13.0									
NOV 30											
BOZ	EPN	22 55 40.0									
	EL	55 51.4									