USCGS
,40

SEISMOLOGICAL BULLETIN

December, 1964

COAST & GEODETIC SURVEY

MSI - 288

NOV 29 1965

LIBRARY BRANCH

CONTENTS

List of stations 1
Provisional epicenters 2
Seismogram interpretations 11

U. S. DEPARTMENT OF COMMERCE

John T. Connor, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

Robert M. White, Administrator

COAST AND GEODETIC SURVEY—WASHINGTON

James C. Tison Jr., Director

FOR OFFICIAL DISTRIBUTION

National Oceanic and Atmospheric Administration

ERRATA NOTICE

One or more conditions of the original document may affect the quality of the image, such as:

Discolored pages
Faded or light ink
Binding intrudes into the text

This has been a co-operative project between the NOAA Central Library and the Climate Database Modernization Program, National Climate Data Center (NCDC). To view the original document, please contact the NOAA Central Library in Silver Spring, MD at (301) 713-2607 x124 or Library.Reference@noaa.gov

HOV Services
Imaging Contractor
12200 Kiln Court
Beltsville, MD 20704-1387
March 4, 2011

SEISMOLOGICAL BULLETIN

1964

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

Albuquerque, New Mexico (ALQ) WWNSS
**Balboa Heights, C. Z. (BHP) WWNSS
The Panama Canal Co.
*Boulder City, Nev. (BCN)
Bureau of Reclamation
*Bozeman, Mont. (BOZ) WWNSS
*Bozeman, Mont. (BZM)
Montana State College
*Butte, Mont. (BUT)
Montana School of Mines
*Chicago, Ill. (CHK)
University of Chicago and
U. S. Weather Bureau
College, Alaska (COL) WWNSS
*Columbia, S. C. (CSC)
University of South Carolina
*Eureka, Nev. (EUR)
Eureka Corporation Limited
*Flaming Gorge, Utah (FGL)
Bureau of Reclamation
Glen Canyon, Ariz. (GCA)
Bureau of Reclamation
Guam, M. I. (GUA) WWNSS
Honolulu, Hawaii (HON)
*Hungry Horse, Mont. (HHM)
Bureau of Reclamation
Kipapa, Hawaii (KIP) WWNSS
**Philadelphia, Pa. (PHI)
The Franklin Institute
**Rapid City, S. D. (RCD) WWNSS
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJG) WWNSS
Sitka, Alaska (SIT)
Tucson, Ariz. (TUC) WWNSS
Ukiah, Calif. (UKI)
International Latitute Observatory
Washington, D. C. (WAS)

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

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

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

All seismograms are on file in the Coast and Geodetic Survey. Requests for information on seismogram copies of the World-Wide Network observatories should be addressed to:

U. S. Department of Commerce
Coast and Geodetic Survey
Seismology Division
Washington Science Center
Rockville, Maryland 20852

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
1	02 33 20*	7.0 S	75.5 W	254	3.6	NORTHERN PERU.
1	04 53 23.9	18.9 S	175.8 W	232	5.5	TONGA ISLANDS. FELT AT LEONE, AMERICAN SAMOA.
1	07 39 50.2	79.5 N	3.9 E	33	4.7	GREENLAND SEA.
1	10 11 06*	14.2 S	113.4 W	33	4.3	NORTHERN EASTER I. CORDILLERA.
1	11 45 20.6	10.6 N	93.4 E	33	4.7	ANDAMAN ISLANDS REGION.
1	11 47 02.4	30.9 S	177.9 W	33	4.9	KERMADEC ISLANDS REGION.
1	13 13 17*	13.4 N	119.5 E	179	5.0	PHILIPPINE ISLANDS REGION.
1	15 28 21*	37.8 N	117.8 W	33	3.7	CALIFORNIA-NEVADA BORDER REGION. MAG. 4 (BRK).
2	01 18 59*	19.6 N	120.8 E	98	4.6	PHILIPPINE ISLANDS REGION.
2	07 58 27*	77.5 N	18.5 E	33		SVALBARD REGION.
2	08 17 41.9	22.4 S	70.3 W	79	4.3	NEAR COAST OF NORTHERN CHILE.
2	08 20 45.6	30.6 N	42.0 W	33	5.2	NORTH ATLANTIC RIDGE.
2	08 21 43.3	29.5 N	81.3 E	23	5.1	NEPAL.
2	09 17 49.9	37.8 N	118.1 W	33	3.9	CALIFORNIA-NEVADA BORDER REGION. MAG. 4 1/4 (BRK).
2	09 34 26*	60.4 N	153.9 W	33		SOUTHERN ALASKA.
2	10 08 39.6	9.1 S	158.0 E	42	5.6	SOLOMON ISLANDS.
2	11 33 36.6	21.9 S	175.2 W	33	4.6	TONGA ISLANDS.
2	12 31 45*	38.9 N	70.6 E	33	4.7	AFGHANISTAN-USSR BORDER REGION.
2	13 13 16.9	13.4 N	144.7 E	99		MARIANA ISLANDS.
2	13 18 29.0	53.8 N	165.4 W	35	5.0	FOX ISLANDS, ALEUTIAN ISLANDS.
2	14 27 15.4	49.1 S	121.4 E	16		SOUTH OF AUSTRALIA.
2	15 20 11.4	19.6 S	177.8 W	396	4.3	FIJI ISLANDS REGION.
2	22 03 00*	44.4 N	149.4 E	33	4.4	KURILE ISLANDS.
3	02 00 29*	13.8 N	89.0 W	41	4.2	EL SALVADOR.
3	03 50 01.2	15.0 S	66.8 E	46	6.1	MID-INDIAN RISE.
3	08 16 55.4	6.1 S	150.6 E	35	4.7	NEW BRITAIN REGION.
3	08 28 38.5	19.4 N	155.5 W	24	4.7	HAWAII REGION. FELT ON OAHU AND MAUI.
3	09 44 16*	24.4 N	109.2 W	33	4.0	GULF OF CALIFORNIA.
3	14 51 10.9	12.3 N	88.5 W	33	4.1	OFF COAST OF CENTRAL AMERICA.
3	17 10 59*	19.5 S	69.2 W	180	4.2	NORTHERN CHILE.
3	22 32 38*	36.6 N	55.6 E	33	4.7	IRAN.
4	00 38 54.7	15.4 S	173.9 W	33	4.5	TONGA ISLANDS.
4	01 54 49.3	7.8 N	102.7 W	33	4.9	OFF COAST OF MEXICO.
4	07 33 32*	18.7 N	105.1 W	33	4.0	OFF COAST OF JALISCO, MEXICO.
4	07 43 47*	77.3 N	6.4 E	33	4.9	SVALBARD REGION.
4	09 21 14.2	21.3 S	67.4 W	60	4.7	CHILE-BOLIVIA BORDER REGION.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
4	11 39 58*	35.6 N	118.4 W	14	3.3	CENTRAL CALIFORNIA. MAG. 3-3 1/4 (PAS), 3.8 (BRK).
4	15 48 43.4	6.4 S	150.7 E	19	5.2	NEW BRITAIN REGION. FELT AT WALINDI.
4	21 11 40.0	5.5 S	151.2 E	101	5.2	NEW BRITAIN REGION. FELT AT RABAUL.
5	02 16 13*	85.7 N	88.7 E	33	4.5	NORTH OF SEVERNAYA ZEMLYA.
5	04 57 06.6	77.4 N	6.0 E	33	5.3	SVALBARD REGION.
5	05 14 39.6	20.9 S	178.5 W	529	5.2	FIJI ISLANDS REGION.
5	05 18 06.7	19.1 S	169.0 E	160	4.5	NEW HEBRIDES ISLANDS.
5	08 29 06.6	15.9 N	147.1 E	42		MARIANA ISLANDS REGION.
5	10 32 39.2	17.8 S	167.8 E	33	4.4	NEW HEBRIDES ISLANDS. FELT AT PORT VILA.
5	19 50 01.6	59.4 N	144.8 W	33	4.7	GULF OF ALASKA.
5	21 15 00.1					37° 06' 52"N. 116° 03' 12"W. NEVADA TEST SITE. "CREPE". SHOT ELEVATION 869.9 METERS (AEC).
5	22 31 44.3	54.0 N	161.5 E	38	5.2	NEAR EAST COAST OF KAMCHATKA.
5	23 19 28.5					"CREPE" COLLAPSE.
5	23 51 38.8	53.9 N	161.5 E	38	5.3	OFF EAST COAST OF KAMCHATKA.
5	23 55 59.2	54.0 N	161.5 E	39	5.0	NEAR EAST COAST OF KAMCHATKA.
6	01 53 06*	14.7 S	173.3 W	33	4.5	SAMOA ISLANDS REGION.
6	03 15 37.7	15.4 S	70.5 W	164	4.6	SOUTHERN PERU.
6	04 27 16*	2.3 S	138.3 E	33	5.0	WEST NEW GUINEA.
6	05 03 57.5	17.9 N	143.5 E	13	4.7	MARIANA ISLANDS REGION.
6	05 41 06.9	18.0 S	178.5 W	551	5.6	FIJI ISLANDS REGION.
6	08 12 49.3	23.8 S	176.1 W	209		SOUTH OF FIJI ISLANDS.
6	11 09 37*	17.8 N	146.5 E	16	4.8	MARIANA ISLANDS.
6	12 30 48*	47.6 N	152.9 E	33	4.5	KURILE ISLANDS.
6	23 53 02*	53.2 N	159.8 E	33	4.3	NEAR EAST COAST OF KAMCHATKA.
7	03 39 04.1	12.0 N	122.3 E	40	5.2	LUZON, PHILIPPINE ISLANDS.
7	06 02 21.5	5.5 S	80.3 W	345	3.5	NEAR COAST OF NORTHERN PERU.
7	08 58 43.8	5.4 S	151.3 E	54	5.8	NEW BRITAIN REGION. MAG. 6 3/4 (PAS), 5 1/2-5 3/4 (BRK), 6 (PAL). FELT AT RABAUL.
7	10 07 42.0	18.1 S	68.7 W	95	4.4	CHILE-BOLIVIA BORDER REGION.
7	13 08 05.0	5.1 S	153.3 E	57	4.4	NEW IRELAND REGION.
7	15 43 29.7	5.1 S	145.9 E	219	5.0	EAST NEW GUINEA REGION.
7	15 55 56.8	6.4 S	76.2 W	177	4.7	NORTHERN PERU.
7	18 30 17*	51.7 N	158.0 E	50	5.1	NEAR EAST COAST OF KAMCHATKA.
7	18 52 47.6	6.7 N	82.2 W	30	5.2	SOUTH OF PANAMA. MAG. 4 3/4 (BRK), 5 1/4-5 1/2 (PAL).
7	19 31 35*	7.6 S	128.0 E	144		BANDA SEA.
7	20 41 42.0	18.9 S	69.6 W	127	4.4	NORTHERN CHILE.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
7	21 03 48.3	2.6 N	79.8 W	38	4.4	SOUTH OF PANAMA.
8	04 11 53.7	11.5 N	87.0 W	48	5.0	NEAR COAST OF NICARAGUA. MAG. 4 3/4-5 (PAL).
8	09 14 29*	21.3 S	81.8 W	33	4.8	SOUTHEAST CENTRAL PACIFIC OCEAN.
8	16 11 25*	45.0 N	130.1 W	28	4.3	OFF COAST OF OREGON.
8	17 49 46.3	34.7 N	139.2 E	31	5.2	NEAR S. COAST OF HONSHU, JAPAN. MAG. 4 3/4-5 (BRK). FELT AT TOKYO.
8	19 17 26*	67.5 N	137.0 W	33	3.7	NORTHERN YUKON TERRITORY, CANADA.
8	20 55 55.3	19.0 N	64.0 W	55	4.5	VIRGIN ISLANDS.
9	06 19 33.3	19.5 S	176.9 W	290	3.8	FIJI ISLANDS REGION.
9	06 42 32*	43.1 N	145.2 E	39	4.8	HOKKAIDO, JAPAN REGION.
9	07 21 18*	60.8 N	144.2 W	33	4.0	SOUTHERN ALASKA.
9	07 51 10*	51.1 N	170.5 W	33	4.2	FOX ISLANDS, ALEUTIAN ISLANDS.
9	11 22 22*	35.1 S	109.7 W	33	4.7	EASTER ISLAND CORDILLERA.
9	13 35 42.4	27.5 S	63.2 W	586	5.9	SANTIAGO DEL ESTERO PROV., ARG. MAG. 6 (PAS), 5-5 1/2 (BRK), 6 1/4 (PAL).
9	14 22 03*	13.2 N	87.2 W	200	3.9	HONDURAS.
9	16 44 02.2	20.4 S	68.0 W	83	5.0	CHILE-BOLIVIA BORDER REGION.
9	18 28 38.2	41.1 N	21.0 E	30	4.8	YUGOSLAVIA. FELT IN MACEDONIA.
9	19 06 16.9	40.9 N	20.6 E	23	4.9	GREECE-ALBANIA BORDER REGION. FELT.
9	19 12 21*	1.1 S	77.4 W	242	4.5	ECUADOR.
9	22 51 45*	4.7 N	126.9 E	33	4.8	TALAUD ISLANDS.
10	02 35 40*	1.9 N	76.7 W	191	4.5	COLOMBIA.
10	11 53 45.2	19.5 N	155.3 W	10	5.1	HAWAII REGION.
10	15 10 25.6	36.5 S	110.5 W	33	5.3	EASTER ISLAND CORDILLERA.
10	15 11 05.5	40.4 N	138.9 E	33	6.0	EASTERN SEA OF JAPAN. MAG. 5 3/4-6 (BRK), 6 (PAL).
10	19 43 27*	44.7 N	149.2 E	22	4.6	KURILE ISLANDS.
10	20 25 40*	8.4 S	127.1 E	33		TIMOR.
10	23 30 51.4	40.2 N	139.0 E	39	5.4	NEAR WEST COAST OF HONSHU, JAPAN.
11	05 25 58.0	28.1 N	52.8 E	61	5.0	SOUTHERN IRAN.
11	05 29 15*	18.7 S	178.4 W	635	4.1	FIJI ISLANDS REGION.
11	11 18 23*	60.1 N	146.6 W	33	4.0	SOUTHERN ALASKA.
11	12 48 08.9	29.0 N	53.2 E	74		SOUTHERN IRAN.
11	13 03 44*	16.4 N	98.4 W	33	3.9	NEAR COAST OF GUERRERO, MEXICO.
11	16 04 58.2	38.9 N	130.0 E	550	5.6	SEA OF JAPAN.
11	19 03 26*	15.3 S	173.4 W	33	4.5	TONGA ISLANDS.
11	19 21 53*	39.2 N	118.4 W	33	4.2	NEVADA.
11	22 42 59.4	6.3 S	131.2 E	47	5.8	TANIMBAR ISLANDS REGION.
12	00 22 19*	46.7 N	112.8 W	33		MONTANA.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
12	02 19 52.2	15.0 S	173.8 W	33	5.0	TONGA ISLANDS.
12	07 20 00.0	6.9 S	150.6 E	33	5.9	NEW BRITAIN REGION. FELT.
12	07 57 44.3	7.0 S	150.7 E	30	5.0	NEW BRITAIN REGION.
12	07 59 24.6	39.6 N	117.9 W	33	3.4	NEVADA. MAG. 3 1/4-3 1/2 (BRK).
12	09 22 16.3	19.0 S	169.5 E	261	4.1	NEW HEBRIDES ISLANDS.
12	10 10 17.0	52.6 N	169.3 W	33	4.8	FOX ISLANDS, ALEUTIAN ISLANDS.
12	11 16 55*	2.6 N	76.1 W	51	3.9	COLOMBIA.
12	12 49 05*	39.7 N	119.7 W	33		NEVADA. MAG. 3-3 1/4 (BRK).
12	13 11 50.2	35.3 N	23.0 E	60	4.4	CRETE.
12	13 14 01.8	39.2 N	114.2 W	33		NEVADA.
12	13 32 02.9	39.6 N	119.6 W	33		NEVADA. MAG. 3-3 1/2 (BRK).
12	14 20 35.1	35.4 S	71.5 W	89	4.3	CENTRAL CHILE.
12	19 44 55.7	26.1 S	175.9 W	85	4.9	SOUTH OF TONGA ISLANDS.
12	21 17 21.0	40.3 N	125.1 W	33	5.1	OFF COAST OF NORTHERN CALIFORNIA. MAG. 3 1/2 (BRK).
12	22 15 51*	20.2 S	174.0 W	33	5.0	TONGA ISLANDS.
12	23 07 46.1	5.8 S	147.1 E	68	5.0	EAST NEW GUINEA REGION.
13	00 13 40*	34.0 S	179.1 W	112	5.3	SOUTH OF KERMADEC ISLANDS.
13	00 32 09.4	65.2 N	164.9 W	33	4.9	ALASKA. FELT AT NOME.
13	00 33 24.7	64.9 N	165.7 W	15	5.4	ALASKA. MAG. 6 (PAL). FELT AT NOME.
13	06 37 07.3	15.0 S	167.2 E	131	5.2	NEW HEBRIDES ISLANDS.
13	13 15 49.8	20.1 N	122.0 E	33	4.8	PHILIPPINE ISLANDS REGION.
13	13 51 50*	46.2 N	151.9 E	33	4.7	KURILE ISLANDS.
13	14 26 15*	45.2 N	150.4 E	33	4.8	KURILE ISLANDS.
13	16 51 39.2	7.9 N	137.0 E	33	4.9	WEST CAROLINE ISLANDS.
13	19 12 57.1	10.7 S	165.0 E	33	5.3	SANTA CRUZ ISLANDS.
14	01 59 05.6	54.3 S	2.4 W	33		SOUTH ATLANTIC RIDGE. MAG. 6 (PAL).
14	02 45 07*	12.1 N	143.9 E	33	4.4	SOUTH OF MARIANA ISLANDS.
14	03 35 14.5	44.2 N	81.6 E	33	4.2	NORTHERN SINKIANG PROV., CHINA.
14	06 41 23.1	28.2 N	140.8 E	115	5.0	BONIN ISLANDS REGION.
14	08 15 41.4	38.0 N	117.8 W	33	3.6	NEVADA.
14	11 04 17.4	41.3 N	77.1 E	33	4.5	KIRGIZ-SINKIANG BORDER REGION.
14	15 52 34.2	33.4 N	142.0 E	33	4.5	OFF EAST COAST OF HONSHU, JAPAN.
14	17 16 47.7	55.8 N	160.1 W	33	4.6	ALASKA PENINSULA.
14	18 49 41*	40.5 N	138.3 E	26	4.7	EASTERN SEA OF JAPAN.
14	21 29 06*	13.9 N	90.5 W	33	4.4	NEAR COAST OF GUATEMALA. FELT.
15	01 16 41.7	15.5 S	173.3 W	14	4.6	TONGA ISLANDS. FELT AT APIA.
15	01 58 38.9	8.5 N	71.5 W	53	4.3	VENEZUELA.
15	02 51 36.6	34.9 N	26.2 E	60	4.4	CRETE.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
15	03 40 16.5	20.8 N	106.6 W	33	5.1	OFF COAST OF JALISCO, MEXICO. MAG. 4 3/4 (BRK), 4 1/2 (PAL).
15	03 53 57*	42.7 N	143.6 E	135	4.4	HOKKAIDO, JAPAN REGION.
15	05 06 22.8	2.3 N	126.6 E	45		MOLUCCA PASSAGE.
15	07 54 07.3	78.0 N	7.6 E	33	4.4	SVALBARD REGION.
15	07 58 49.9	76.2 N	9.3 E	33	4.8	SVALBARD REGION.
15	08 24 20.7	7.1 N	73.2 W	119		NORTHERN COLOMBIA.
15	11 38 06*	51.2 N	171.3 W	33	4.4	FOX ISLANDS, ALEUTIAN ISLANDS.
15	12 13 25.8	14.7 N	91.7 W	118	5.4	GUATEMALA. MAG. 5 1/4 (BRK), 5 1/4-5 1/2 (PAL). FELT.
15	15 03 40*	45.4 N	150.9 E	33	4.7	KURILE ISLANDS.
15	16 20 11*	7.2 S	76.9 W	33	4.8	NORTHERN PERU.
15	17 31 46.4	36.5 N	34.6 E	53	4.5	TURKEY.
15	21 03 15.9	40.0 N	28.9 E	33	4.9	TURKEY. FELT AT BURSA.
15	22 34 07.7	51.0 N	169.6 W	33	5.0	FOX ISLANDS, ALEUTIAN ISLANDS.
16	02 21 30.7	3.2 S	147.5 E	33	4.9	BISMARCK SEA.
16	03 08 12.1	3.2 S	147.3 E	33	4.8	BISMARCK SEA.
16	03 55 17.4	6.0 N	125.3 E	121	5.6	MINDANAO, PHILIPPINE ISLANDS. FELT AT DAVAO.
16	03 57 17.2	21.6 S	169.6 E	44	4.3	LOYALTY ISLANDS REGION.
16	12 20 44.2	21.7 S	169.6 E	21	4.3	LOYALTY ISLANDS REGION.
16	18 26 39.0	20.1 N	121.9 E	19	4.4	PHILIPPINE ISLANDS REGION.
16	19 20 26.3	21.8 S	175.3 W	33	5.4	TONGA ISLANDS.
16	19 28 50.0	24.8 N	122.4 E	61	4.8	TAIWAN REGION.
16	20 00 00.0					37° 02' 05" N. 116° 00 44 W. NEVADA TEST SITE. "PARROT". SHOT ELEVATION 1036.6 METERS (AEC).
16	20 10 00.1					37° 10' 40" N. 116° 04 01 W. NEVADA TEST SITE. "MUDPACK". SHOT ELEVATION 1181.4 METERS (AEC).
17	00 47 15*	55.8 N	161.9 E	33	4.4	NEAR EAST COAST OF KAMCHATKA.
17	01 08 51*	7.8 S	117.4 E	33		BALI SEA.
17	01 37 47*	19.7 S	169.6 E	33	4.5	NEW HEBRIDES ISLANDS.
17	02 33 26.5	35.5 N	141.8 E	81	4.4	NEAR EAST COAST OF HONSHU, JAPAN.
17	04 03 45.7	27.6 N	140.0 E	468	4.6	BONIN ISLANDS REGION.
17	04 43 56.8	1.8 N	84.6 W	33	4.6	OFF COAST OF ECUADOR.
17	05 18 34.8	45.4 N	150.1 E	17	5.3	KURILE ISLANDS.
17	06 35 36.9	3.2 S	147.2 E	33	4.8	BISMARCK SEA.
17	10 28 41.7	21.0 S	175.0 W	33	4.4	TONGA ISLANDS.
17	11 25 32*	40.3 N	127.3 W	33	4.2	OFF COAST OF NORTHERN CALIFORNIA. MAG. 3 3/4 (BRK).
17	12 11 52*	41.9 N	126.0 W	33	4.6	OFF COAST OF NORTHERN CALIFORNIA.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
17	13 59 25.3	16.0 N	96.9 W	36	4.9	OAXACA, MEXICO.
17	14 33 43*	24.3 S	179.6 E	600	4.1	SOUTH OF FIJI ISLANDS.
17	14 58 26.3	21.5 S	66.9 W	190	4.3	SOUTHERN BOLIVIA.
17	18 48 02.4	31.6 N	138.0 E	376	4.9	SOUTH OF HONSHU, JAPAN.
17	23 44 46.2	51.4 N	177.9 W	57	5.5	ANDREANOF ISLANDS, ALEUTIAN IS. MAG. 4 3/4 (BRK), 5 1/4-5 1/2 (PAL).
18	00 10 59.6	18.8 S	168.9 E	69	4.4	NEW HEBRIDES ISLANDS. FELT AT PORT VILA.
18	00 35 19*	27.8 N	52.8 E	33		SOUTHERN IRAN.
18	02 29 10*	60.7 N	147.4 W	33	3.8	SOUTHERN ALASKA.
18	06 05 18.8	37.3 N	142.0 E	33	4.6	OFF EAST COAST OF HONSHU, JAPAN.
18	06 50 18.2	37.3 N	141.8 E	62	4.0	NEAR EAST COAST OF HONSHU, JAPAN.
18	09 10 19*	44.1 N	149.4 E	33	4.7	KURILE ISLANDS.
18	10 53 28.4	51.3 N	178.0 W	33	4.8	ANDREANOF ISLANDS, ALEUTIAN IS.
18	18 59 34*	29.5 N	114.2 W	33	5.1	BAJA CALIFORNIA.
18	19 35 00.1					37° 04' 58"N. 116° 20' 33"W. NEVADA TEST SITE. "SULKY". SHOT ELEVATION 1596.8 METERS (AEC).
18	22 07 34.3	7.0 N	73.1 W	149	4.0	NORTHERN COLOMBIA.
19	01 59 03*	35.3 N	28.2 E	52		EASTERN MEDITERRANEAN SEA.
19	04 07 38*	29.8 N	114.1 W	33	5.3	BAJA CALIFORNIA. MAG. 4 3/4 (PAS), 4 3/4 (BRK).
19	06 41 27.3	32.8 S	177.6 W	203	4.4	SOUTH OF KERMADEC ISLANDS.
19	08 30 23*	55.9 S	28.0 W	33		SOUTH SANDWICH ISLANDS REGION.
19	12 53 27.6	37.8 S	72.9 W	64	4.8	CENTRAL CHILE.
19	18 18 31*	8.9 S	112.8 E	336	4.4	JAVA.
19	23 31 57.3	28.0 N	56.9 E	50	5.3	SOUTHERN IRAN.
20	03 31 36.0	29.5 N	81.0 E	33	5.2	NEPAL.
20	08 32 35*	18.7 S	177.6 W	628	4.6	FIJI ISLANDS REGION.
20	08 44 42.5	33.9 S	72.0 W	28	4.8	OFF COAST OF CENTRAL CHILE.
20	08 45 58*	52.1 N	177.1 W	140	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
20	11 26 32.6	20.1 S	177.7 W	463	4.8	FIJI ISLANDS REGION.
20	13 31 54.7	37.5 N	141.6 E	40	4.9	NEAR EAST COAST OF HONSHU, JAPAN.
20	15 27 16*	80.5 N	123.1 E	33	4.8	EAST OF SEVERNAYA ZEMLYA.
20	15 45 25.3	22.2 S	69.1 W	100	4.5	NORTHERN CHILE. FELT AT CALAMA.
20	21 56 03.2	35.9 N	114.9 W	5		CALIFORNIA-NEVADA BORDER REGION. FELT AT BOULDER CITY, NEVADA.
20	22 18 22*	35.9 N	114.8 W	5		CALIFORNIA-NEVADA BORDER REGION.
20	22 43 35*	18.6 S	69.5 W	129	4.3	NORTHERN CHILE.
20	23 14 45.9	36.6 N	140.3 E	83	4.3	NEAR EAST COAST OF HONSHU, JAPAN.
21	07 28 48.1	5.9 S	154.3 E	40	4.8	SOLOMON ISLANDS.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
21	08 07 25*	56.6 N	34.7 W	33	4.3	NORTH ATLANTIC OCEAN.
21	17 36 29.0	60.5 N	146.8 W	43	5.0	SOUTHERN ALASKA.
21	18 32 03.0	63.1 N	150.3 W	111	4.8	CENTRAL ALASKA.
21	19 23 21*	13.0 N	124.5 E	33	5.5	LUZON, PHILIPPINE ISLANDS.
21	21 38 47*	45.2 N	112.7 W	33	3.5	MONTANA.
21	21 54 58*	44.9 N	112.7 W	44	3.9	EASTERN IDAHO.
21	22 55 09*	45.0 N	112.0 W	33		MONTANA.
22	00 24 48.7	9.5 S	71.3 W	614	5.3	PERU-BRAZIL BORDER REGION.
22	00 46 33*	21.[illegible] S	179.3 W	663	4.6	FIJI ISLANDS REGION.
22	02 30 08.7	20.7 S	178.2 W	85	4.7	FIJI ISLANDS REGION.
22	04 36 34.7	28.2 N	57.0 E	42	5.5	SOUTHERN IRAN. MAG. 5 1/2-5 3/4 (PAL).
22	08 01 12.6	18.4 N	68.8 W	115	5.6	MONA PASSAGE. MAG. 6 (PAS), 5 1/2-5 3/4 (PAL). FELT WIDELY ON PUERTO RICO.
22	10 28 46.7	44.9 N	112.5 W	33	4.3	EASTERN IDAHO.
22	11 58 10.1	22.2 S	179.7 W	600	5.0	SOUTH OF FIJI ISLANDS.
22	15 45 28*	45.4 N	112.2 W	33	4.0	MONTANA.
22	18 28 18.3	7.2 N	126.8 E	384	4.9	MINDANAO, PHILIPPINE ISLANDS. FELT AT DAVAO.
22	20 54 35.3	31.9 N	117.1 W	14	6.3	OFF W. COAST OF BAJA CALIFORNIA. MAG. 5.6 (PAS), 6-6 1/4 (PAL). MINOR DAMAGE AT ENSENADA, MEXICO AND SAN DIEGO. FELT AT EL CENTRO AND LOS ANGELES.
22	21 34 21.1	51.4 N	177.9 W	65	4.6	ANDREANOF ISLANDS, ALEUTIAN IS.
23	02 38 36.7	19.9 S	169.7 E	129	4.1	NEW HEBRIDES ISLANDS.
23	03 50 14*	51.8 N	175.8 W	33	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
23	05 46 45*	59.4 S	26.9 W	33	6.0	SOUTH SANDWICH ISLANDS REGION.
23	06 30 38*	27.4 S	63.1 W	580	4.4	SANTIAGO DEL ESTERO PROV., ARG.
23	07 36 02.9	7.1 S	129.4 E	111	5.0	BANDA SEA.
23	09 16 52.9	51.1 N	175.5 W	33	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.
23	10 16 22*	23.6 S	179.0 W	33	4.9	SOUTH OF FIJI ISLANDS.
23	10 52 17.5	27.9 N	57.0 E	33	4.8	SOUTHERN IRAN.
23	11 11 50.9	19.7 S	68.5 W	163	4.3	CHILE-BOLIVIA BORDER REGION.
23	16 04 18*	23.2 S	114.0 W	33	4.5	EASTER ISLAND REGION.
23	16 11 39*	52.2 N	168.2 W	160	4.8	FOX ISLANDS, ALEUTIAN ISLANDS.
23	18 42 47*	37.5 N	114.7 W	33		SOUTHERN NEVADA.
23	19 47 59.3	30.3 N	131.1 E	33	5.4	KYUSHU, JAPAN.
24	01 08 37.7	36.2 N	70.9 E	158	5.6	HINDU KUSH REGION. FELT AT PESHAWAR AND REASALPUR.
24	02 06 05*	28.1 N	57.4 E	33		SOUTHERN IRAN.
24	09 38 07*	36.4 N	135.2 E	33	4.4	SEA OF JAPAN.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
24	18 45 45.5	4.4 S	153.1 E	93	6.1	NEW IRELAND REGION. FELT AT RABAUL AND LONDOLOVIT.
24	19 25 52.5	3.9 N	96.9 E	141	5.4	NORTHERN SUMATRA.
24	19 49 58.5	52.7 N	168.8 W	35	4.3	FOX ISLANDS, ALEUTIAN ISLANDS.
24	19 55 01.3	35.1 N	139.2 E	66	5.0	NEAR S. COAST OF HONSHU, JAPAN.
24	22 51 35*	44.7 N	110.8 W	33	4.0	YELLOWSTONE NATIONAL PARK, WYO.
24	23 48 37.2	23.9 S	179.9 W	473	4.6	SOUTH OF FIJI ISLANDS.
25	01 08 26.8	8.2 N	126.0 E	62	5.5	MINDANAO, PHILIPPINE ISLANDS.
25	02 31 15.8	18.6 S	169.1 E	209	4.3	NEW HEBRIDES ISLANDS.
25	03 16 47.1	15.2 S	173.2 W	11	4.5	TONGA ISLANDS.
25	08 02 08.5	9.9 S	159.8 E	35	5.1	SOLOMON ISLANDS. FELT AT HONIARA.
25	08 05 52.9	7.8 N	80.8 W	45	4.4	PANAMA.
25	08 48 37.7	18.8 S	69.0 W	117	5.1	NORTHERN CHILE.
25	09 51 02*	22.5 S	67.3 W	92	4.6	CHILE-BOLIVIA BORDER REGION.
25	13 50 50*	35.2 N	139.1 E	104	4.8	NEAR S. COAST OF HONSHU, JAPAN.
25	14 09 48*	32.3 N	113.7 W	33	4.4	W. ARIZ. - MEXICO BORDER REGION.
25	16 30 01.9	18.0 N	101.2 W	81	4.8	GUERRERO, MEXICO.
25	17 01 32.2	34.8 N	139.3 E	33	5.1	NEAR S. COAST OF HONSHU, JAPAN. SLIGHT DAMAGE ON OSHIMA. FELT AT TOKYO.
25	17 56 40.1	25.3 S	68.1 W	101	5.0	CHILE-ARGENTINA BORDER REGION.
26	01 19 05.9	18.0 N	91.8 W	33	3.5	GULF OF CAMPECHE.
26	04 57 14*	19.7 S	178.3 W	510	4.7	FIJI ISLANDS REGION.
26	08 16 28.9	16.7 N	99.6 W	33	5.4	NEAR COAST OF GUERRERO, MEXICO. MAG. 4 1/4 (BRK). FELT ABOARD M.S. POLYROVER AT 16° 17' N. 99° 47' W.
26	10 57 17.2	43.1 N	145.2 E	12	4.3	HOKKAIDO, JAPAN REGION.
26	14 30 29.1	51.8 N	156.8 E	136	5.7	KAMCHATKA. MAG. 6 (BRK), 5 (PAL).
26	20 58 14.4	39.6 N	110.3 W	0	3.9	UTAH. PROBABLE ROCKBURST.
26	23 50 23.8	59.3 N	152.9 W	35		SOUTHERN ALASKA.
27	10 14 51*	51.2 N	177.2 E	33	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
27	17 43 21.4	12.9 N	125.4 E	33	5.9	SAMAR, PHILIPPINE ISLANDS. MAG. 5 1/4-5 1/2 (PAL). FELT AT CATARMAN, CATBALOGAN AND VIRAC.
27	17 51 46*	7.2 N	73.4 W	113	4.1	NORTHERN COLOMBIA.
28	04 55 03*	11.9 S	165.6 E	111	4.9	SANTA CRUZ ISLANDS.
28	16 16 11.0	22.1 S	179.6 W	611	6.2	SOUTH OF FIJI ISLANDS. MAG. 6 1/4-6 1/2 (PAS).
28	16 47 40*	12.3 N	44.6 W	33	4.9	NORTH ATLANTIC RIDGE.
28	17 04 57.0	86.7 N	68.7 E	33	5.7	NORTH OF FRANZ JOSEF LAND.
28	23 50 41*	51.5 N	175.0 W	33	4.9	ANDREANOF ISLANDS, ALEUTIAN IS.
29	00 28 54.4	52.2 N	175.1 W	33	4.5	ANDREANOF ISLANDS, ALEUTIAN IS.

DATE 1964	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
DEC	H M S	DEG	DEG	KM		
29	00 44 20.1	51.5 N	175.0 W	35	4.6	ANDREANOF ISLANDS, ALEUTIAN IS.
29	01 40 08.4	51.5 N	175.0 W	38	4.7	ANDREANOF ISLANDS, ALEUTIAN IS.
29	02 07 03.4	59.6 N	145.3 W	33	4.6	GULF OF ALASKA.
29	03 30 44.3	38.1 N	144.0 E	40	4.9	OFF EAST COAST OF HONSHU, JAPAN.
29	06 35 02.2	51.4 N	174.9 W	22	5.0	ANDREANOF ISLANDS, ALEUTIAN IS.
29	06 39 08.0	51.5 N	174.8 W	33	5.3	ANDREANOF ISLANDS, ALEUTIAN IS.
29	10 09 42.4	51.8 N	175.1 W	76	4.4	ANDREANOF ISLANDS, ALEUTIAN IS.[1]
29	12 50 43.5	40.5 N	139.0 E	16	5.1	NEAR WEST COAST OF HONSHU, JAPAN.
29	22 59 22.0	17.2 S	178.7 W	493	4.9	FIJI ISLANDS REGION.
29	23 22 42.1	6.2 S	155.5 E	50	5.2	SOLOMON ISLANDS. FELT AT KIETA.
30	01 14 22*	36.6 N	34.7 E	33		TURKEY.
30	09 26 40*	9.6 S	109.1 W	33	4.5	NORTHERN EASTER I. CORDILLERA.
30	09 58 01*	8.7 S	109.3 W	33	4.6	NORTHERN EASTER I. CORDILLERA.
30	13 08 50.2	12.4 N	142.0 E	100	4.9	SOUTH OF MARIANA ISLANDS.
30	13 15 55*	16.7 S	175.0 W	33	4.8	TONGA ISLANDS.
30	13 19 47.4	62.6 S	165.8 E	33	5.2	BALLENY ISLANDS REGION.
30	14 00 46*	19.1 N	107.8 W	33	3.9	OFF COAST OF JALISCO, MEXICO.
30	15 27 25.8	31.3 N	138.8 E	261	5.4	SOUTH OF HONSHU, JAPAN.
30	16 04 39*	36.1 S	179.4 W	33	4.6	EAST OF NORTH ISLAND, N.Z.
30	16 49 46.4	41.6 N	141.7 E	42	4.3	HOKKAIDO, JAPAN REGION.
30	21 30 58.8	23.3 S	179.9 W	547	5.2	SOUTH OF FIJI ISLANDS.
30	23 37 41.0	36.4 N	69.9 E	123	5.3	HINDU KUSH REGION.
31	01 04 38*	18.9 N	107.9 W	33	4.4	OFF COAST OF JALISCO, MEXICO.
31	01 47 13*	28.7 N	139.4 E	426	4.7	BONIN ISLANDS REGION.
31	03 14 26*	60.0 N	147.0 W	58	4.1	SOUTHERN ALASKA.
31	10 41 03.6	35.0 N	116.6 W	14	3.9	CENTRAL CALIFORNIA. MAG. 3 1/2 (PAS), 3 1/2-4 (BRK).
31	12 46 22.4	7.4 S	156.0 E	48	4.8	SOLOMON ISLANDS.
31	16 18 01.7	35.8 N	25.6 E	86	5.1	CRETE. FELT.
31	23 13 30.9	4.6 S	153.0 E	77	5.1	NEW IRELAND REGION. FELT AT RABAUL.
31	23 34 52.9	52.0 N	175.4 E	33	4.7	RAT ISLANDS, ALEUTIAN ISLANDS.

Date and Station	Phase	(GCT) h m s
DEC 01		
COL	E(P)	00 01 41.3
DEC 01		
TUC	E(P)	00 13 02.8
DEC 01		
GCA	IP	01 16 30.5
BCN	EP	01 17 14.8
	EL	18 07.0
DEC 01		
H-02 33 19.6		
7.0S 075.5W		
h ABOUT 254KM		
ALQ	I(P)	02 41 57.7
DEC 01		
COL	EP	02 54 26.6
DEC 01		
EUR	EP	02 59 52.5
	EL	03 00 24.5
DEC 01		
TUC	E(P)	03 38 32.0
DEC 1		
H-04 53 23.9		
18.9S 175.8W		
h ABOUT 232KM		
KIP	IP	05 01 08.7
HON	EP	05 01 09.0
BCN	IP C	05 05 06.4
	EPP	06 01.7
TUC	IP C	05 05 11.7
	EPP	06 06.8
	E(S)	15 00.0
EUR	IP	05 05 12.6
	IPP	06 08.1
GCA	IP	05 05 21.7
SLC	IP	05 05 29.6
ALQ	IP	05 05 35.0
	IPP	06 31.8
COL	IP	05 05 40.0
	E	05 59.4
	EPP	06 36.7
BUT	EP	05 05 41.1
HHM	EP	05 05 41.8
BOZ	EP	05 05 43.0
	EPP	06 40.0
DEC 01		
BOZ	E(P)	05 42 12.2
DEC 01		
COL	EP	05 45 04.0
DEC 01		
COL	EP	07 31 42.5

Date and Station	Phase	(GCT) h m s
DEC 1		
H-07 39 50.2		
79.5N 003.9E		
h ABOUT 033KM		
COL	EP	07 46 42.0
RCD	EP	07 48 43.0
EUR	EP	07 49 32.6
ALQ	I(P)	07 49 52.8
BCN	EP	07 49 55.7
TUC	EP	07 50 15.2
DEC 01		
TUC	EP	08 22 33.0
EUR	EP	08 22 37.6
DEC 01		
COL	EP	08 33 46.0
DEC 1		
H-10 11 05.6		
14.2S 113.4W		
h ABOUT 033KM		
BCN	E(P)	10 20 00.7
EUR	E(P)	10 20 30.4
COL	E(P)	10 23 35.3
DEC 01		
COL	IP	10 57 21.6
	E	57 50.2
DEC 1		
H-11 45 20.6		
10.6N 093.4E		
h ABOUT 033KM		
EUR	IP'	12 04 15.6
BCN	EP'	12 04 23.0
ALQ	IP'	12 04 31.0
TUC	EP'	12 04 31.7
SJG	EP'	12 04 55.0
DEC 1		
H-11 47 02.4		
30.9S 177.9W		
h ABOUT 033KM		
BCN	EP	11 59 56.0
	EPP	12 00 11.5
TUC	EP	11 59 58.0
	F	12 00 09.0
EUR	EP	12 00 02.5
	EPP	00 18.3
ALQ	I(P)	12 00 18.0
BOZ	EP	12 00 32.5

Date and Station	Phase	(GCT) h m s
DEC 01		
ALQ	IP	12 07 42.8
TUC	E(P)	12 07 44.0
DEC 01		
COL	FP	13 25 50.4
DEC 01		
BOZ	FP	13 30 25.5
DEC 1		
H-15 28 20.9		
37.8N 117.8W		
h ABOUT 033KM		
EUR	IP	15 28 55.4
	EL	29 33.1
BCN	EP	15 29 09.0
	I(S)	29 47.0
DEC 01		
SJG	EP	16 04 42.5
	EL	05 33.0
DEC 01		
SJG	E(P)	16 21 12.0
	E	21 28.0
	FL	22 14.2
DEC 01		
COL	EP	16 33 22.6
DEC 01		
BOZ	E(P)	16 44 08.0
DEC 01		
COL	E(P)	17 49 34.5
DEC 01		
COL	FP	18 16 51.7
DEC 01		
BCN	IP C	19 12 37.8
	IS	12 41.5
DEC 01		
SLC	EP	20 28 35.9
DEC 01		
BOZ	EP	21 52 51.0
	E(L)	53 02.0
DEC 01		
BOZ	IP	22 15 54.5
	I(L)	16 05.0
DEC 01		
ALQ	EP	22 25 44.2
	I	25 54.5
DEC 01		
BCN	EP	22 39 49.5
	EL	40 25.0
DEC 01		
GCA	EP	23 04 27.3
DEC 01		
EUR	EP	23 18 44.3
	EL	19 21.3

Date and Station	Phase	(GCT) h m s
BCN	E(P)	23 18 56.0
	EL	19 43.0
DEC 02		
ALQ	IP	00 20 43.0
	I	21 08.2
DEC 2		
H-01 18 58.6		
19.6N 120.8E		
h ABOUT 098KM		
COL	EP	01 30 18.5
DEC 02		
COL	E(P)	01 21 08.8
DEC 02		
GUA	EP	02 02 44.0
	IS	03 11.0
DEC 02		
COL	EP	02 23 49.5
	E	24 07.4
DEC 02		
COL	EP	02 31 22.0
DEC 02		
EUR	EP	03 18 24.6
	E(S)	18 57.9
DEC 02		
BOZ	IP	03 37 58.7
	E(S)	38 01.5
DEC 02		
HHM	EP	04 09 37.2
	E	13 04.7
DEC 02		
COL	E(P)	06 24 41.7
DEC 02		
COL	EP	06 35 18.2
DEC 02		
COL	EP	06 47 08.9
	E(S)	47 55.0
DEC 02		
GCA	EP	07 03 38.3
DEC 02		
COL	E(P)	07 05 10.8
DEC 02		
SJG	EP	07 47 39.5
	E	48 19.5
DEC 02		
COL	E(P)	08 04 09.3
DEC 2		
H-08 17 41.9		
22.4S 070.3W		
h ABOUT 079KM		
SJG	EP	08 25 08.8
ALQ	EP	08 28 26.3
TUC	EP	08 28 29.0

Date and Station	Phase (GCT) h m s
RCD EP	08 29 02.5
EUR EP	08 29 16.8
BOZ EP	08 29 29.0
HHM EP	08 29 45.7
DEC 2	
H-08 20 45.6	
30.6N 042.0W	
h ABOUT 033KM	
SJG EP	08 26 11.5
ES	30 40.0
EL	32 19.0
ALQ EP	08 30 06.3
BOZ EP	08 30 17.0
BUT EP	08 30 23.6
HHM EP	08 30 25.7
SLC E(P)	08 30 25.9
TUC EP	08 30 38.7
E(S)	38 48.0
EUR EP	08 30 48.4
BCN EP	08 30 52.2
COL E(P)	08 31 52.8
DEC 02	
H-08 21 43.3	
29.5N 081.3E	
h ABOUT 023KM	
COL EP	08 33 45.4
DEC 02	
COL EP	08 29 08.0
DEC 02	
COL IP	08 52 22.3
DEC 2	
H-09 17 49.9	
37.8N 118.1W	
h ABOUT 033KM	
EUR IP	09 18 31.6
EL	19 06.6
BCN E(P)	09 18 40.5
IS	19 14.0
IL	19 22.5
GCA EP	09 19 24.5
DEC 2	
H-09 34 25.7	
60.4N 153.9W	
h ABOUT 033KM	
COL EP	09 35 46.1
I	36 19.3
ES	36 45.6
HHM EP	09 39 54.7
BOZ EP	09 40 22.0
EUR EP	09 40 47.7
DEC 2	
H-10 08 39.6	
09.1S 158.0E	
h ABOUT 042KM	
COL IP	10 21 04.1
E(PCP)	21 09.8
BCN E(P)	10 21 41.5
EUR IP	10 21 49.1
I	21 54.4
BOZ E(P)	10 22 12.0
DEC 02	
GUA EP	11 30 36.4
EL	30 51.5
DEC 02	
COL EP	11 34 29.0
DEC 2	
H-11 33 36.6	
21.9S 175.2W	
h ABOUT 033KM	
EUR EP	11 46 00.5
ALQ E(P)	11 46 17.5
COL EP	11 46 30.0
DEC 02	
COL FP	12 17 57.8
DEC 2	
H-12 31 44.7	
38.9N 070.6E	
h ABOUT 033KM	
COL IP	12 43 10.0
DEC 02	
COL EP	12 41 55.7
DEC 02	
H-13 13 16.9	
13.4N 144.7E	
h ABOUT 099KM	
GUA IP	13 13 32.0
IS	13 42.0
DEC 02	
KIP E(P)	13 22 42.0
ET	59 11.0
DEC 2	
H-13 18 29.0	
53.8N 165.4W	
h ABOUT 035KM	
COL EP	13 21 50.0
SIT E(P)	13 22 39.9
HHM EP	13 24 55.4
FPCP	27 42.7
KIP E(P)	13 25 03.0
BOZ EP	13 25 21.5
EPP	25 30.5
EUR IP	13 25 30.0
ESCP	31 38.5
BCN EP	13 25 56.7
GCA EP	13 26 07.5
RCD EP	13 26 09.5
TUC E(P)	13 26 36.2
ESCP	32 09.7
ALQ EP	13 26 41.0
I(PP)	28 23.7
ESCP	32 11.8
SJG EP	13 30 42.9
DEC 02	
EUR EP	14 42 04.1
EL	42 41.6
DEC 02	
COL EP	15 18 23.4
DEC 2	
H-15 20 11.4	
19.6S 177.8W	
h ABOUT 396KM	
EUR EP	15 31 52.8
COL EP	15 32 13.2
DEC 02	
COL E(P)	15 43 07.1
DEC 02	
COL E(P)	16 43 58.4
DEC 02	
HHM E(P)	17 12 20.0
EL	13 02.6
DEC 02	
COL FP	17 30 54.0
DEC 02	
BOZ E(P)	17 43 42.5
DEC 02	
EUR EP	19 10 37.0
IL	11 12.7
DEC 02	
HHM EP	19 43 57.5
EUR EP	19 44 11.4
DEC 02	
HHM E(P)	19 58 42.0
DEC 02	
COL EP	20 13 11.5
DEC 02	
BOZ EP	20 50 38.5
E(L)	51 09.5
DEC 02	
EUR EP	21 58 05.1
DEC 02	
H-22 03 00.2	
44.4N 149.4E	
h ABOUT 033KM	
COL IP	22 10 30.1
E	10 43.8
BOZ FP	22 13 40.7
EUR EP	22 13 49.5
ALQ E(P)	22 14 42.0
DEC 02	
BOZ EP	23 02 12.2
DEC 02	
BCN IP	23 10 40.0
IS	10 47.0
DEC 02	
EUR FP	23 44 19.4
I	44 27.0
EL	44 57.9
DEC 03	
GCA E(P)	00 53 57.8
E	54 04.4
DEC 03	
BOZ E(P)	01 53 47.6
EUR EP	01 54 38.4
ALQ E(P)	01 55 27.6
DEC 3	
H-02 00 28.6	
13.8N 089.0W	
h ABOUT 041KM	
TUC E(P)	02 06 11.3
DEC 03	
BOZ E(P)	03 05 39.3
DEC 03	
COL E(P)	03 17 07.0
DEC 3	
H-03 50 01.2	
15.0S 066.8E	
h ABOUT 046KM	
GUA E(P)	04 02 04.0
COL EP'	04 08 56.0
EPP	10 46.9
SJG EP'	04 09 18.0
ESKP	12 50.0
CSC IP'	04 09 36.0
BOZ EP'	04 09 43.0
RCD EP'	04 09 43.0
IP'	09 48.0
BUT EP'	04 09 46.2

Date and Station	Phase	(GCT) h m s
SLC	EP'	04 09 49.8
EUR	IP'	04 09 52.4
	IPP	13 55.8
ALQ	EP'	04 09 56.0
	I	10 34.5
	IPP	14 13.5
GCA	EP'	04 09 56.2
BCN	EP'	04 09 57.5
	EPP	14 14.8
TUC	EP'	04 10 00.5
	EPP	14 35.0
DEC 03		
COL	E(P)	04 39 14.1
DEC 03		
COL	IP	05 48 14.0
	E	48 22.0
DEC 03		
EUR	EP	07 22 20.5
DEC 3		
H-08 16 55.4		
6.1S 150.6E		
h ABOUT 035KM		
GUA	IP	08 21 31.0
	E(S)	25 20.0
COL	EP	08 29 18.0
	E	29 48.7
EUR	EP	08 30 23.1
DEC 3		
H-08 28 38.5		
19.4N 155.5W		
h ABOUT 024KM		
HON	IP	08 29 25.7
	IS	29 58.0
KIP	IP	08 29 26.6
EUR	IP	08 36 08.7
BCN	EP	08 36 10.0
TUC	E(P)	08 36 30.0
GCA	EP	08 36 32.3
BOZ	EP	08 36 51.0
COL	IP	08 37 00.3
DEC 03		
TUC	E(P)	08 43 59.2
	E	44 56.6
DEC 03		
ALQ	E(P)	08 45 52.6
	E	48 49.0
EUR	EP	08 46 55.9
DEC 3		
H-09 44 16.4		
24.4N 109.2W		
h ABOUT 033KM		
TUC	EP	09 46 10.6
	EL	47 52.0
ALQ	EP	09 46 51.7
BCN	E(P)	09 47 22.9
	EL	52 25.9
EUR	IP	09 48 07.2
	I	48 13.2
	E	50 08.4
DEC 03		
EUR	EP	09 56 46.0
	E	56 56.9
DEC 03		
COL	EP	11 44 14.6
DEC 03		
EUR	EP	12 58 16.8
	EL	58 47.4
DEC 03		
SLC	E(P)	13 43 17.8
	E	43 41.9
BOZ	EP	13 43 41.2
EUR	EP	13 43 56.2
DEC 3		
H-14 51 10.9		
12.3N 088.5W		
h ABOUT 033KM		
ALQ	E(P)	14 57 03.5
	E(PCP)	00 18.4
TUC	EP	14 57 10.5
BOZ	E(P)	14 58 33.2
DEC 03		
EUR	IP	15 07 01.4
	EL	07 37.6
BCN	EP	15 07 15.5
	EL	08 02.3
DEC 03		
COL	EP	15 25 15.8
	E	25 28.6
DEC 03		
BOZ	E(P)	17 12 34.5
DEC 03		
EUR	EP	17 36 59.8
DEC 03		
HON	EP	17 56 47.0
	ES	57 22.0
KIP	IP	17 56 48.5
	ES	57 23.0
DEC 03		
BOZ	EP	19 05 02.0
	E(L)	05 12.0
DEC 03		
COL	IP	19 40 25.4
BOZ	E(P)	19 44 29.8
EUR	EP	19 44 57.3
ALQ	E(P)	19 46 07.0
DEC 03		
BOZ	E(P)	19 58 52.5
	E(L)	59 41.5
DEC 03		
COL	IP	20 14 03.3
DEC 03		
TUC	E(P)	20 36 46.2
DEC 03		
COL	EP	21 56 10.6
DEC 03		
EUR	EP	22 14 34.2
	EL	15 24.5
DEC 3		
H-22 32 37.6		
36.6N 055.6E		
h ABOUT 033KM		
COL	IP	22 44 29.5
	E	44 36.7
DEC 03		
GCA	E(P)	23 20 46.3
	E	21 15.7
TUC	E(P)	23 21 25.6
DEC 03		
EUR	EP	23 29 42.0
	EL	30 18.0
DEC 03		
TUC	E(P)	23 47 06.4
DEC 04		
BUT	E(P)	00 07 56.1
DEC 4		
H-00 38 54.7		
15.4S 173.9W		
h ABOUT 033KM		
EUR	EP	00 50 45.3
TUC	E(P)	00 50 46.1
ALQ	E(P)	00 51 09.9
COL	EP	00 51 13.0
BOZ	EP	00 51 16.6
DEC 04		
COL	EP	01 35 10.8
DEC 04		
BOZ	EP	01 40 59.5
	E(S)	41 11.5
DEC 4		
H-01 54 49.3		
07.8N 102.7W		
h ABOUT 033KM		
TUC	E(P)	02 00 16.0
	E	00 32.0
	E(S)	04 40.0
ALQ	EP	02 00 32.0
BCN	EP	02 00 58.0
SLC	E(P)	02 01 24.6
EUR	IP	02 01 30.5
BOZ	EP	02 02 10.8
HHM	E(P)	02 02 35.2
COL	EP	02 05 30.0
DEC 04		
BCN	E(P)	02 41 25.0
	I	41 29.5
	IL	42 07.8
EUR	EP	02 41 43.8
	I	41 57.4
DEC 04		
TUC	E(P)	02 42 53.7
DEC 04		
TUC	E(P)	02 50 33.1
DEC 04		
COL	EP	03 35 09.7
DEC 04		
COL	E(P)	04 52 30.5
DEC 04		
COL	IP	05 56 57.3
DEC 04		
COL	EP	07 22 30.5
DEC 4		
H-07 33 32.1		
18.7N 105.1W		
h ABOUT 033KM		
TUC	E(P)	07 36 55.4
ALQ	E(P)	07 37 22.3
DEC 4		
H-07 43 47.2		
77.3N 006.4E		
h ABOUT 033KM		
COL	EP	07 50 55.8
HHM	EP	07 52 34.5
RCD	E(P)	07 52 52.0
BOZ	EP	07 52 52.9

Date and Station	Phase (GCT)
	h m s
EUR EP	07 53 42.4
E	53 47.4
ALQ EP	07 53 59.3
BCN EP	07 54 03.0
TUC EP	07 54 22.2
E	54 28.5
DEC 4	
H-09 21 14.2	
21.3S 067.4W	
h ABOUT 060KM	
ALQ IP	09 32 03.7
I	32 32.4
TUC E(P)	09 32 06.0
EUR EP	09 32 55.1
E	33 07.6
BOZ EP	09 33 07.6
DEC 04	
EUR EP	09 28 58.0
EL	29 32.8
DEC 4	
H-11 39 58.0	
35.6N 118.4W	
h ABOUT 014KM	
BCN EP	11 40 46.0
I(S)	41 20.0
EL	41 31.5
EUR EP	11 41 08.3
I	41 20.9
E(S)	42 04.4
DEC 04	
TUC E(P)	11 43 42.4
DEC 04	
COL E(P)	11 56 44.6
DEC 04	
HON ES	15 06 34.0
DEC 4	
H-15 48 43.4	
6.4S 150.7E	
h ABOUT 019KM	
GUA E(P)	15 53 26.7
IS	57 16.0
KIP EP	15 58 32.0
HON EP	15 58 34.0
COL EP	16 01 12.0
EUR EP	16 02 14.7
EPP	06 15.8
BCN EP	16 02 19.0
EPP	06 13.3
HHM E(P)	16 02 21.0
BOZ E(P)	16 02 28.6

Date and Station	Phase (GCT)
	h m s
TUC EPP	16 06 37.2
E(S)	14 14.0
DEC 04	
COL EP	16 26 07.4
DEC 04	
COL E(P)	16 56 49.2
DEC 04	
COL EP	18 26 44.7
DEC 04	
EUR EP	19 01 12.6
DEC 04	
ALQ E(P)	19 21 06.0
DEC 04	
COL EP	20 37 14.5
DEC 4	
H-21 11 40.0	
05.5S 151.2E	
h ABOUT 101KM	
GUA IP	21 16 07.0
IS	19 34.0
COL EP	21 23 54.0
EUR IP	21 24 56.0
E(PP)	25 26.4
BCN EP	21 25 00.0
HHM E(P)	21 25 02.6
BOZ EP	21 25 10.6
DEC 04	
ALQ E(P)	21 27 07.5
E	29 33.5
DEC 04	
TUC EP	21 54 46.2
E(L)	55 02.5
DEC 04	
BCN E(P)	22 38 28.0
EL	39 02.4
DEC 04	
SJG IP D	22 41 51.0
IS	41 53.7
DEC 04	
TUC IP	22 52 28.9
DEC 04	
COL EP	23 15 06.6
DEC 04	
EUR EP	23 39 22.7
DEC 05	
TUC E(P)	01 02 39.2
DEC 05	
TUC E(P)	02 09 59.5

Date and Station	Phase (GCT)
	h m s
DEC 5	
H-02 16 13.4	
85.7N 088.7E	
h ABOUT 033KM	
COL IP	02 22 01.4
BOZ EP	02 24 57.0
EUR EP	02 25 41.9
ALQ E(P)	02 26 14.7
DEC 05	
COL EP	02 28 20.4
DEC 05	
COL IP	03 07 10.8
DEC 5	
H-04 57 06.6	
77.4N 006.0E	
h ABOUT 033KM	
TUC E(P)	05 07 40.5
DEC 05	
COL EP	05 11 55.6
DEC 5	
H-05 14 39.6	
20.9S 178.5W	
h ABOUT 529KM	
BCN EP	05 26 09.0
EUR EP	05 26 14.1
TUC EP	05 26 14.4
GCA EP	05 26 23.3
ALQ IP	05 26 35.2
COL IP	05 26 36.2
BOZ EP	05 26 42.8
DEC 5	
H-05 18 06.7	
19.1S 169.0E	
h ABOUT 160KM	
COL E(P)	05 30 45.7
EUR EP	05 30 53.7
TUC EP	05 30 59.5
DEC 5	
H-08 29 06.6	
15.9N 147.1E	
h ABOUT 042KM	
GUA E(P)	08 29 54.8
ES	30 31.7
COL EP	08 39 46.3
EUR EP	08 41 40.9
BOZ E(P)	08 41 48.6
COL E(P)	09 58 52.8

Date and Station	Phase (GCT)
	h m s
DEC 05	
H-10 32 39.2	
17.8S 167.8E	
h ABOUT 033KM	
COL E(P)	10 45 30.2
DEC 05	
BOZ EP	12 48 14.3
DEC 05	
EUR EP	13 57 40.4
DEC 05	
EUR IP	14 12 02.3
EL	12 36.3
BCN E(P)	14 12 13.5
E	12 16.2
EL	12 57.5
DEC 05	
COL EP	14 27 12.7
DEC 05	
GUA EP	14 43 05.7
EL	43 30.0
DEC 05	
SJG IP	15 36 20.0
IS	36 32.0
DEC 05	
SLC EP	18 46 22.2
DEC 5	
H-19 50 01.6	
59.4N 144.8W	
h ABOUT 033KM	
SIT EP	19 51 18.0
COL IP	19 51 25.0
ES	52 26.0
EL	52 53.0
HHM IP	19 54 44.2
BUT E(P)	19 55 05.2
BOZ EP	19 55 16.0
E	55 27.0
EUR IP	19 55 42.7
I	55 53.9
SLC E(P)	19 55 47.0
ALQ E(P)	19 56 52.5
TUC E(P)	19 56 56.0
E	57 07.0
DEC 05	
BCN E(P)	20 12 15.0
EL	12 50.0
DEC 05	
SJG IP	20 26 48.9
IS	27 20.0
DEC 05	
KIP ET	20 38 48.0

Date and Station	Phase	Phase (GCT) h m s
DEC 05		
COL	E(P)	21 09 42.9
DEC 05		
H-21 15 00.1		
37.1N 116.1W		
h ABOUT 000KM		
BCN	IP C	21 15 28.2
EUR	IP	21 15 40.2
GCA	IP	21 15 58.0
SLC	IP	21 16 18.6
	I	16 33.6
TUC	EP	21 16 37.3
	E	17 00.2
UKI	E(P)	21 16 44.0
ALQ	IP	21 17 00.0
BOZ	E(P)	21 17 19.0
	E	17 32.6
BUT	EP	21 17 19.5
HHM	EP	21 17 47.3
RCD	IP	21 17 55.0
COL	IP	21 21 43.1
	E	21 52.5
KIP	EP	21 22 34.0
DEC 05		
COL	EP	21 31 33.5
	I	31 46.2
DEC 05		
BCN	EP	21 35 49.8
EUR	EP	21 36 02.1
	EL	36 35.8
DEC 05		
TUC	EP	22 26 17.5
DEC 5		
H-22 31 44.3		
54.0N 161.5E		
h ABOUT 038KM		
COL	IP	22 37 25.8
	IpP	37 37.4
KIP	EP	22 39 54.0
HHM	E(P)	22 40 38.1
BOZ	EP	22 41 01.9
	EpP	41 12.5
EUR	IP	22 41 16.1
	IpP	41 27.4
SLC	EP	22 41 23.9
BCN	EP	22 41 38.0
	EpP	41 49.4
	E	42 05.6
RCD	EP	22 41 40.0
	EpP	41 51.0
GCA	E(P)	22 41 45.0
TUC	E(P)	22 42 11.0
	EpP	42 22.4
ALQ	IP	22 42 14.3
H-23 19 28.5		
37.1N 116.1W		
h ABOUT 000KM		
BCN	IP	23 19 49.4
EUR	IP	23 20 01.2
GCA	EP	23 20 26.8
TUC	E(P)	23 21 03.6
ALQ	E(P)	23 21 31.5
DEC 5		
H-23 51 38.8		
53.9N 161.5E		
h ABOUT 038KM		
COL	EP	23 57 21.0
KIP	EP	23 59 48.0
EUR	IP	00 01 10.1
	IpP	01 21.3
SLC	EP	00 01 20.2
BCN	EP	00 01 33.0
	EpP	01 44.0
	E	02 00.5
GCA	EP	00 01 40.0
TUC	EP	00 02 06.0
	EpP	02 17.1
ALQ	IP	00 02 09.2
DEC 5		
H-23 55 59.2		
54.0N 161.5E		
h ABOUT 039KM		
COL	EP	00 01 41.0
KIP	IP	00 04 13.9
UKI	E(P)	00 04 55.0
EUR	IP	00 05 31.1
	IpP	05 42.1
SLC	IP	00 05 40.3
BCN	EP	00 05 52.8
	EpP	06 04.0
	E	06 20.0
GCA	E(P)	00 06 00.5
TUC	EP	00 06 26.0
	EpP	06 37.5
ALQ	EP	00 06 28.7
DEC 06		
EUR	EP	00 32 54.6
DEC 6		
H-01 53 05.9		
14.7S 173.3W		
h ABOUT 033KM		
COL	IP	02 05 21.8
BOZ	E(P)	02 05 23.0
DEC 06		
UKI	E(P)	02 36 19.5
DEC 06		
UKI	E(P)	02 38 15.5
DEC 06		
TUC	E(P)	02 48 45.7
	E	48 51.6
DEC 06		
COL	EP	02 54 24.0
DEC 06		
TUC	E(P)	03 02 53.1
DEC 6		
H-03 15 37.7		
15.4S 070.5W		
h ABOUT 164KM		
RCD	E(P)	03 26 09.0
BOZ	EP	03 26 41.0
	EpP	27 25.0
DEC 06		
COL	EP	03 19 14.3
DEC 6		
H-04 27 15.5		
02.3S 138.3E		
h ABOUT 033KM		
GUA	E(P)	04 31 12.0
	E(S)	34 26.0
KIP	EP	04 38 05.0
COL	EP	04 39 49.5
	E	39 57.7
EUR	EP	04 41 22.7
SJG	EP'	04 47 09.0
DEC 6		
H-05 03 57.5		
17.9N 143.5E		
h ABOUT 013KM		
GUA	E(P)	05 05 08.0
COL	EP	05 14 39.0
BUT	E(P)	05 16 40.3
EUR	EP	05 16 42.6
BOZ	E(P)	05 16 46.2
DEC 06		
COL	EP	05 16 28.4
DEC 06		
BOZ	E(P)	05 20 29.3
DEC 06		
COL	IP	05 40 56.9
	I	41 06.4
DEC 6		
H-05 41 06.9		
18.0S 178.5W		
h ABOUT 551KM		
KIP	EP	05 48 28.0
EUR	EP	05 52 29.0
	E(pP)	54 31.8
TUC	EP	05 52 30.6
	EpP	54 31.5
COL	E(P)	05 52 47.2
	E(pP)	54 54.7
ALQ	EP	05 52 51.0
BOZ	EP	05 52 57.2
	E(pP)	55 03.2
DEC 06		
COL	E(P)	06 25 06.6
DEC 06		
COL	IP	07 16 32.0
DEC 06		
H-08 12 49.3		
23.8S 176.1W		
h ABOUT 209KM		
KIP	EP	08 21 09.0
HON	E	08 28 24.0
	EL	37 10.0
COL	E(P)	08 23 32.7
BCN	EP	08 24 53.2
TUC	E(P)	08 24 56.5
EUR	EP	08 24 59.5
	EpP	25 57.2
GCA	E(P)	08 25 06.5
ALQ	EP	08 25 17.5
BOZ	EP	08 25 29.3
	E	25 44.5
COL	IP	08 25 31.5
	E	26 00.0
DEC 06		
EUR	EP	08 51 06.1
	EL	51 44.6
BCN	EP	08 51 22.3
	EL	52 02.0

Date and Station	Phase (GCT)
	h m s
DEC 06	
COL EP	08 51 44.6
DEC 6	
H-11 09 36.9	
17.8N 146.5E	
h ABOUT 016KM	
GUA E(P)	11 10 46.5
EL	11 29.0
COL FP	11 20 10.2
BOZ EP	11 22 15.7
E	22 48.3
EUR EP	11 23 11.1
DEC 06	
SJG EP	12 01 29.9
EL	02 06.5
DEC 06	
COL F(P)	12 15 30.6
DEC 6	
H-12 30 48.0	
47.6N 152.9E	
h ABOUT 033KM	
COL IP	12 37 44.3
EUR EP	12 41 13.9
DEC 06	
FUR FP	13 11 25.1
DEC 06	
COL E(P)	14 02 35.1
DEC 06	
SJG IP	14 41 11.0
I	41 48.5
IL	41 56.0
DEC 06	
SJG EP	16 04 47.5
EL	05 19.5
DEC 06	
TUC E(P)	16 12 03.0
DEC 06	
COL EP	16 21 22.5
DEC 06	
COL EP	17 09 20.0
DEC 06	
SJG IP C	17 32 30.6
IS	32 47.5
DEC 06	
BCN IP D	21 29 48.2
EUR EP	21 30 48.0
E(S)	31 30.2
DEC 06	
COL EP	23 12 51.1
DEC 06	
COL EP	23 42 59.6
E	43 17.6

Date and Station	Phase (GCT)
	h m s
DEC 6	
H-23 53 01.5	
53.2N 159.8E	
h ABOUT 033KM	
COL E(P)	23 58 55.7
EUR EP	00 02 44.0
ALQ E(P)	00 03 40.8
DEC 07	
COL EP	00 35 23.2
DEC 07	
SJG IP	01 12 05.2
IL	12 47.0
DEC 07	
BOZ E(P)	01 29 15.0
E(L)	29 46.0
DEC 07	
COL EP	01 50 28.5
DEC 07	
EUR EP	03 23 57.5
DEC 7	
H-03 39 04.1	
12.0N 122.3E	
h ABOUT 040KM	
COL EP	03 51 06.6
IPP	51 15.5
ALQ EP'	03 57 41.0
DEC 07	
BOZ E(P)	04 07 30.0
DEC 07	
COL E(P)	05 22 52.7
DEC 07	
EUR EP	05 25 27.6
DEC 07	
EUR EP	05 47 12.2
HHM E(P)	05 47 12.2
BOZ EP	05 47 22.2
DEC 07	
EUR EP	05 52 31.2
DEC 7	
H-06 02 21.5	
05.5S 080.3W	
h ABOUT 345KM	
ALQ IP	06 10 23.0
EUR EP	06 11 27.4
DEC 07	
EUR E(P)	07 16 19.5
DEC 07	
COL EP	07 37 20.0

Date and Station	Phase (GCT)
	h m s
DEC 7	
H-08 58 43.8	
05.4S 151.3E	
h ABOUT 054KM	
GUA IP	09 03 15.0
E(S)	07 01.0
KIP IP	09 08 21.5
COL IP	09 11 01.9
E	11 20.5
UKI E(P)	09 11 37.0
EUR IP	09 12 04.8
E(PP)	16 01.6
EPKKP	28 57.6
BCN IP C	09 12 08.8
EPP	16 01.3
HHM IP	09 12 11.0
GCA EP	09 12 20.5
BUT EP	09 12 15.4
EPP	16 17.1
BOZ EP	09 12 19.0
EPP	12 34.4
EPKKP	28 47.0
TUC EP	09 12 23.6
E(PP)	16 25.9
E(S)	23 12.0
ALQ IP	09 12 40.2
E	28 55.0
RCD IP C	09 12 46.0
EPKKP	28 07.0
CSC IP'	09 17 37.0
SJG IP'	09 18 03.2
I	18 10.5
EPP	21 10.5
ISKP	21 48.3
DEC 07	
COL E(P)	09 28 43.8
DEC 07	
FUR EP	09 36 21.0
DEC 07	
EUR EP	09 57 36.5
E(S)	58 17.0
DEC 07	
TUC E(P)	10 24 34.8
DEC 07	
COL IP	11 28 07.1
E	28 14.9
DEC 07	
BOZ EP	11 31 12.2
EUR E(P)	11 31 14.5
DEC 07	
EUR E(P)	12 29 03.5

Date and Station	Phase (GCT)
	h m s
ALQ E(P)	12 29 12.3
BOZ E(P)	12 29 18.5
DEC 07	
EUR EP	12 51 58.4
DEC 7	
H-13 08 05.0	
05.1S 153.3E	
h ABOUT 057KM	
COL EP	13 20 20.0
EUR E(P)	13 21 23.9
DEC 7	
H-15 43 29.7	
5.1S 145.9E	
h ABOUT 219KM	
GUA IP	15 47 33.0
E(S)	50 51.0
KIP EP	15 53 25.0
COL IP	15 55 40.3
EUR E(P)	15 56 49.4
DEC 07	
GUA E(P)	15 47 04.0
E(L)	47 32.5
DEC 7	
H-15 55 56.8	
06.4S 076.2W	
h ABOUT 177KM	
SJG EP	16 01 18.0
I	01 27.7
I	01 58.0
ALQ EP	16 04 36.0
TUC EP	16 04 40.6
EUR FP	16 05 37.4
BOZ EP	16 05 51.3
COL FP	16 08 28.5
DEC 07	
BOZ IP	16 19 21.2
E(L)	19 27.0
DEC 07	
BCN EP	16 21 08.0
IS	21 30.2
EUR IP	16 21 16.9
IL	21 51.5
GCA EP	16 21 47.0
DEC 07	
ALQ I(P)	16 23 14.7
TUC E(P)	16 24 05.0
DEC 07	
RCD IP	16 40 32.0

Date and Station	Phase	(GCT) h m s
DEC 07		
BOZ	EP	17 44 53.7
DEC 07		
COL	EP	17 59 33.0
DEC 7		
H-18 30 16.9		
51.7N 158.0E		
h ABOUT 050KM		
COL	IP	18 36 24.9
	E(pP)	36 39.2
HHM	E(P)	18 39 32.4
BOZ	IP C	18 39 55.0
EUR	IP	18 40 08.3
BCN	EP	18 40 29.0
TUC	E(P)	18 41 01.0
ALQ	IP	18 41 04.5
DEC 7		
H-18 52 47.6		
6.7N 082.2W		
h ABOUT 030KM		
CSC	EP	18 58 30.0
ALQ	IP	18 59 47.5
	I(PP)	19 01 16.7
TUC	EP	18 59 56.1
	E	19 00 08.5
	E(PP)	01 20.3
	E(S)	05 48.0
GCA	EP	19 00 24.5
RCD	E(P)	19 00 34.0
BCN	EP C	19 00 37.8
	E	01 49.0
	EPCP	02 20.8
SLC	IP	19 00 47.9
EUR	IP	19 00 59.4
	E	01 16.2
	FPP	02 58.4
BOZ	EP	19 01 13.0
	I	01 14.0
	E(S)	08 00.0
BUT	EP	19 01 19.7
HHM	EP	19 01 35.9
	I	01 37.7
COL	EP	19 04 18.8
	I	04 24.7
DEC 07		
COL	EP	20 22 04.1
DEC 7		
H-20 41 42.0		
18.9S 069.6W		
h ABOUT 127KM		
ALQ	I(P)	20 52 04.0
EUR	E(P)	20 52 50.5
BOZ	E(P)	20 53 10.2
	E	53 37.2
DEC 07		
COL	EP	20 42 32.0
DEC 7		
H-21 03 48.3		
02.6N 079.8W		
h ABOUT 038KM		
ALQ	IP	21 11 28.3
TUC	E(P)	21 11 29.3
EUR	EP	21 12 35.9
	EPCP	13 57.3
BOZ	EP	21 12 49.4
	E	12 57.0
DEC 07		
TUC	EP	22 56 41.0
DEC 07		
BOZ	IP	23 48 09.0
	E(L)	48 16.5
DEC 8		
H-04 11 53.7		
11.5N 087.0W		
h ABOUT 048KM		
CSC	E(P)	04 16 58.0
ALQ	EP	04 17 54.7
TUC	E(P)	04 18 15.0
	E(PCP)	21 04.9
GCA	E(P)	04 18 33.8
EUR	E(P)	04 19 09.5
BOZ	EP	04 19 25.9
	E	19 33.4
COL	EP	04 22 46.0
DEC 08		
HHM	EP	04 21 41.9
DEC 08		
COL	IP	04 45 33.2
DEC 08		
COL	E(P)	05 02 05.9
DEC 08		
TUC	EP	05 46 08.1
	E	46 28.9
DEC 08		
COL	EP	06 23 12.9
DEC 08		
COL	EP	06 46 57.7
DEC 8		
H-09 14 29.4		
21.3S 081.8W		
h ABOUT 033KM		
TUC	E(P)	09 24 35.8
ALQ	IP	09 24 40.5
RCD	EP	09 25 27.0
EUR	IP	09 25 30.9
BOZ	EP	09 25 52.2
COL	EP	09 28 09.5
DEC 08		
TUC	E(P)	09 27 01.7
	E	28 00.0
DEC 08		
RCD	EP	10 11 05.0
DEC 08		
GCA	IP	10 44 01.5
EUR	EP	10 44 22.9
DEC 08		
BOZ	EP	12 26 19.0
DEC 08		
BCN	IP D	14 05 37.7
	IS	05 39.8
DEC 08		
EUR	EP	14 06 24.2
	E	07 07.8
DEC 08		
COL	E(P)	14 12 11.6
DEC 08		
EUR	EP	15 50 53.8
	E(S)	51 51.3
DEC 8		
H-16 11 24.8		
45.0N 130.1W		
h ABOUT 028KM		
HHM	EP	16 14 11.7
EUR	IP	16 14 15.6
ALQ	IP	16 16 05.3
DEC 8		
H-17 49 46.3		
34.7N 139.2E		
h ABOUT 031KM		
GUA	IP	17 54 36.0
	ES	58 20.0
COL	IP	17 58 55.9
	E(pP)	59 05.4
HHM	IP	18 01 26.6
BUT	EP	18 01 38.9
BOZ	EP	18 01 43.0
EUR	EP	18 01 47.4
	EPP	04 55.0
SLC	IP	18 01 59.0
BCN	EP	18 02 04.6
	EPP	02 10.0
	FSP	02 13.5
GCA	EP	18 02 11.5
RCD	EP	18 02 13.0
TUC	EP	18 02 28.9
ALQ	IP	18 02 35.0
	EPP	05 58.3
HON	ES	18 07 19.0
	EL	12 45.0
	EL	14 52.0
DEC 08		
COL	E(P)	18 12 17.4
DEC 08		
SLC	EP	18 51 16.0
DEC 08		
TUC	EP	19 01 41.6
	E	02 05.3
DEC 8		
H-19 17 26.4		
67.5N 137.0W		
h ABOUT 033KM		
COL	EP	19 18 42.3
	E	19 01.0
	EL	20 01.0
DEC 08		
TUC	E(P)	20 49 31.7
	E	49 56.4
DEC 8		
H-20 55 55.3		
19.0N 064.0W		
h ABOUT 055KM		
SJG	IP C	20 56 31.1
	IS	56 58.2
	IL	57 15.6
CSC	E(P)	21 00 43.0
ALQ	IP	21 03 33.8
RCD	EP	21 03 35.0
TUC	EP	21 04 00.0
BOZ	EP	21 04 25.5
EUR	EP	21 04 39.5
	E	04 55.8
COL	EP	21 07 03.5
DEC 08		
SJG	IP	22 05 05.7
	I	05 33.0
	I	05 39.0

Date and Station	Phase (GCT)
	h m s
DEC 08	
COL EP	22 52 47.7
DEC 08	
GUA EP	22 58 35.0
E(S)	58 44.0
DEC 09	
EUR EP	00 54 15.5
DEC 09	
EUR EP	00 57 11.4
DEC 09	
TUC E(P)	01 04 56.2
DEC 09	
EUR EP	03 09 20.3
DEC 09	
COL EP	04 27 17.5
DEC 09	
COL E(P)	05 07 20.1
DEC 09	
SJG E(P)	05 09 28.0
DEC 9	
H-06 19 33.3	
19.5S 176.9W	
h ABOUT 290KM	
COL E(P)	06 31 44.9
DEC 9	
H-06 42 31.6	
43.1N 145.2E	
h ABOUT 039KM	
COL EP	06 50 25.0
I	51 05.7
BOZ EP	06 53 31.2
EUR EP	06 53 40.8
BCN EP	06 53 58.5
TUC E(P)	06 54 25.8
ALQ EP	06 54 31.5
DEC 9	
H-07 21 18.1	
60.8N 144.2W	
h ABOUT 033KM	
COL IP	07 22 26.4
E(S)	23 20.2
EUR E(P)	07 27 05.1
DEC 09	
ALQ E(P)	07 37 34.0
DEC 9	
H-07 51 09.9	
51.1N 170.5W	
h ABOUT 033KM	
COL EP	07 55 20.9

Date and Station	Phase (GCT)
	h m s
DEC 09	
COL E(P)	08 11 58.7
DEC 9	
H-11 22 22.1	
35.1S 109.7W	
h ABOUT 033KM	
TUC EP	11 33 13.8
ALQ E(P)	11 33 31.0
BCN EP	11 33 38.0
E▸P	33 45.8
EUR IP	11 33 58.7
E▸P	34 06.0
DEC 09	
PHI IP	12 54 02.7
DEC 9	
H-13 35 42.4	
27.5S 063.2W	
h ABOUT 586KM	
BHP IP	13 42 21.0
IS	43 18.0
SJG IP D	13 43 09.0
E▸P	45 06.7
EsP	46 13.0
ISCP	47 43.5
IS	49 02.8
E(SCS)	52 00.5
E(SS)	52 33.0
CSC EP	13 45 15.0
ALQ IP	13 46 23.3
IS	55 10.5
GCA IP	13 46 47.2
BCN IP C	13 46 51.5
I▸P	48 56.0
E	54 57.0
E(SKS)	56 10.1
E	14 01 23.0
P'P'	16 12.0
SLC IP	13 47 01.2
ISKS	56 28.7
EUR IP	13 47 08.0
I▸P	49 13.0
EsP	50 08.0
E(PP)	50 28.2
I(SKS)	56 39.6
IPKKP	14 05 26.8
EP'P'	13 26.3
ESKPP'	15 58.5
BOZ IP C	13 47 17.5
E(▸P)	49 24.0
BUT IP	13 47 22.0
UKI E(P)	13 47 27.0
HHM IP	13 47 33.0
I▸P	49 40.2

Date and Station	Phase (GCT)
	h m s
COL E(P)	13 49 20.4
E▸P	51 24.8
E(P')	53 11.8
EPKKP	14 04 05.2
GUA EP'	13 54 29.0
DEC 09	
SJG EP	13 40 30.5
E(S)	41 16.5
DEC 9	
H-14 22 03.1	
13.2N 087.2W	
h ABOUT 200KM	
TUC E(P)	14 27 38.6
EUR EP	14 28 49.3
DEC 09	
COL EP	14 33 12.0
DEC 09	
EUR EP	16 03 11.8
DEC 9	
H-16 44 02.2	
20.4S 068.0W	
h ABOUT 083KM	
SJG EP	16 51 18.0
EsP	51 45.0
E	52 00.0
ALQ EP	16 54 42.0
IsP	55 11.2
TUC EP	16 54 44.8
EsP	55 13.2
E	55 28.1
GCA EP	16 55 10.0
BCN IP	16 55 16.3
IsP	55 46.0
EUR IP	16 55 34.3
EPCP	55 46.2
EsP	56 04.5
BOZ EP	16 55 46.6
EsP	56 16.3
HHM IP	16 56 04.1
EsP	56 34.3
DEC 9	
H-18 28 38.2	
41.1N 021.0E	
h ABOUT 030KM	
COL IP	18 40 12.4
BOZ EP	18 41 07.5
DEC 09	
EUR EP	18 45 25.9
FL	46 07.4
DEC 9	
H-19 06 16.9	
40.9N 020.6E	
h ABOUT 023KM	

Date and Station	Phase (GCT)
	h m s
COL EP	19 17 53.0
DEC 9	
H-19 12 21.1	
01.1S 077.4W	
h ABOUT 242KM	
SJG EP	19 16 58.5
I	17 35.3
ALQ I(P)	19 20 15.0
I▸P	21 00.0
TUC IP D	19 20 21.0
E▸P	21 05.6
EUR IP	19 21 19.8
E▸P	22 04.6
BOZ EP	19 21 32.8
E▸P	22 18.8
COL EP	19 24 19.0
DEC 09	
GCA E(P)	20 38 32.2
IS	38 44.0
DEC 09	
TUC E(P)	20 50 57.3
E	51 29.9
DEC 09	
EUR EP	21 10 02.9
DEC 09	
COL IP	21 10 21.3
E	10 25.4
DEC 09	
EUR EP	21 35 17.5
DEC 09	
CSC IP	22 29 44.0
DEC 9	
H-22 51 44.6	
04.7N 126.9E	
h ABOUT 033KM	
COL E(P)	23 04 11.5
DEC 09	
TUC E(P)	22 58 19.0
DEC 09	
TUC E(P)	23 20 21.0
DEC 09	
TUC E(P)	23 25 17.5
DEC 10	
COL E(P)	00 48 32.0
DEC 9	
H-02 35 39.9	
01.9N 076.7W	
h ABOUT 193KM	
EUR EP	02 44 37.9
DEC 10	
COL IP	02 46 55.4

Date and Station	Phase	(GCT) h m s
DEC 10		
COL	E(P)	03 51 53.2
DEC 10		
COL	FP	04 20 15.2
DEC 10		
COL	EP	07 30 41.0
DEC 10		
SJG	E(P)	08 13 20.0
DEC 10		
BHP	IP	09 23 24.0
	IS	24 14.0
DEC 10		
COL	IP	10 42 39.8
	E	42 48.4
DEC 10		
EUR	EP	10 53 01.5
	EL	53 45.0
DEC 10		
BCN	FP	10 55 31.0
	F	55 34.0
DEC 10		
COL	EP	11 15 17.0
DEC 10		
COL	EP	11 38 43.2
DEC 10		
H-11 53 45.2		
19.5N 155.3W		
h ABOUT 010KM		
HON	IP	11 54 33.1
	IS	55 11.0
KIP	IP	11 54 33.6
	IS	55 12.0
BCN	E(P)	12 01 15.0
	E	01 20.4
EUR	IP	12 01 16.8
	E	01 33.7
	EPCP	03 24.6
TUC	E(P)	12 01 37.6
GCA	E(P)	12 01 40.0
HHM	EP	12 01 56.1
COL	IP	12 02 08.0
	E	02 11.7
ALQ	EP	12 02 08.7
DEC 10		
COL	E(P)	12 20 19.7
DEC 10		
COL	IP	13 37 36.3
DEC 10		
COL	EP	14 35 40.4
DEC 10		
H-15 10 25.6		
36.5S 110.5W		
h ABOUT 033KM		
TUC	EP	15 21 24.5
ALQ	EP	15 21 43.8
	I	23 34.3
BCN	EP	15 21 49.0
	E	22 27.0
FUR	IP	15 22 09.8
	I	22 30.3
CSC	E(P)	15 22 13.0
SLC	EP	15 22 15.5
DEC 10		
H-15 11 05.5		
40.4N 138.9E		
h ABOUT 033KM		
GUA	ES	15 21 34.0
COL	IP	15 19 37.4
	I(PP)	20 19.3
	ES	26 16.0
	EL	38 31.0
SIT	E(P)	15 20 37.8
KIP	IP	15 20 44.2
	E(S)	28 40.0
	EL	36 40.0
HON	EP	15 20 47.0
	E(S)	27 42.0
HHM	IP	15 22 19.4
	EP'P'	50 13.0
EUR	IP	15 22 47.8
	E(PP)	25 44.8
UKI	E(P)	15 22 21.0
BUT	E(P)	15 22 31.1
BOZ	EP	15 22 37.2
SLC	IP	15 22 56.5
BCN	IP C	15 23 04.1
	I	23 11.3
	EPP	25 57.5
TUC	IP C	15 23 30.4
DEC 10		
GUA	EP	15 15 23.0
DEC 10		
KIP	IP	15 52 52.2
	ES	53 27.0
DEC 10		
BUT	E(P)	16 44 25.1
HHM	IP	16 44 43.0
	IS	45 08.9
DEC 10		
COL	EP	16 46 07.8
DEC 10		
COL	EP	17 16 56.3
DEC 10		
COL	EP	17 35 30.3
DEC 10		
COL	IP	17 50 51.3
	I	50 58.1
DEC 10		
ALQ	I(P)	18 38 42.4
EUR	E(P)	18 39 26.0
DEC 10		
COL	IP	19 02 28.4
DEC 10		
EUR	EP	19 05 54.7
DEC 10		
COL	EP	19 34 23.1
DEC 10		
H-19 43 26.8		
44.7N 149.2E		
h ABOUT 022KM		
COL	IP	19 50 58.0
	E	51 05.9
EUR	EP	19 54 17.7
ALQ	E(P)	19 55 10.2
DEC 10		
H-20 25 39.9		
08.4S 127.1E		
h ABOUT 033KM		
EUR	EP'	20 44 26.2
ALQ	EP'	20 44 42.8
DEC 10		
BCN	IP D	22 34 02.4
DEC 10		
BCN	E(P)	23 25 27.5
DEC 10		
H-23 30 51.4		
40.2N 139.0E		
h ABOUT 039KM		
COL	IP	23 39 23.4
	I▸P	39 30.4
BUT	EP	23 42 19.1
EUR	IP	23 42 33.0
SLC	E(P)	23 42 41.2
BCN	EP	23 42 49.0
	I▸P	42 57.0
TUC	EP	23 43 15.4
	E▸P	43 23.5
ALQ	EP	23 43 19.5
	I▸P	43 27.4
DEC 11		
COL	EP	00 09 35.4
DEC 11		
TUC	E(P)	00 14 18.0
DEC 11		
COL	EP	01 42 40.3
	I	43 45.4
DEC 11		
COL	FP	03 24 31.8
	I	24 40.0
DEC 11		
ALQ	E(P)	03 28 34.0
DEC 11		
BCN	E(P)	03 36 59.0
	E	37 05.5
	EL	38 16.0
EUR	FP	03 37 11.8
DEC 11		
ALQ	E(P)	03 44 32.0
DEC 11		
COL	EP	03 53 54.1
DEC 11		
EUR	EP	04 24 32.4
DEC 11		
BCN	E(P)	04 26 59.0
DEC 11		
H-05 25 58.0		
28.1N 052.8E		
h ABOUT 061KM		
COL	F(P)	05 38 28.3
	E	38 34.2
DEC 11		
H-05 29 14.7		
18.7S 178.4W		
h ABOUT 635KM		
EUR	EP	05 40 31.9
TUC	EP	05 40 33.0
COL	IP	05 40 52.8
ALQ	E(P)	05 40 54.2
DEC 11		
COL	E(P)	06 52 36.6
DEC 11		
EUR	EP	06 53 13.3
DEC 11		
COL	EP	07 11 30.6
DEC 11		
COL	EP	07 17 19.1
	E	17 32.3

Date and Station	Phase (GCT)
	h m s
DEC 11	
ALQ E(P)	08 50 41.3
DEC 11	
COL E(P)	09 25 23.6
DEC 11	
H-11 18 23.0	
60.1N 146.6W	
h ABOUT 033KM	
COL EP	11 19 35.4
E(S)	20 40.4
DEC 11	
TUC E(P)	11 42 21.5
DEC 11	
COL E(P)	12 06 53.2
DEC 11	
H-12 48 08.9	
29.0N 053.2E	
h ABOUT 074KM	
COL E(P)	13 00 38.4
DEC 11	
COL EP	13 03 11.0
DEC 11	
H-13 03 44.0	
16.4N 098.4W	
h ABOUT 033KM	
TUC EP	13 08 10.0
ALQ I(P)	13 08 14.4
DEC 11	
COL EP	13 33 32.2
DEC 11	
BCN IP C	15 10 13.2
DEC 11	
COL E(P)	15 11 04.5
DEC 11	
COL EP	15 27 19.3
DEC 11	
H-16 04 58.2	
38.9N 130.0E	
h ABOUT 550KM	
COL IP D	16 13 20.3
I	13 34.1
EPCP	14 03.1
EpP	15 10.0
I(sP)	16 09.6
HHM IP	16 15 52.2
EpP	17 48.2
EUR EP	16 16 19.1
E(pP)	18 21.1
BCN EP	16 16 35.0
E	16 45.0
EpP	18 38.5
TUC IP	16 16 58.9
EpP	19 07.0

Date and Station	Phase (GCT)
	h m s
ALQ IP	16 17 01.2
IpP	19 06.8
DEC 11	
EUR EP	16 48 04.2
BCN EP	16 48 12.7
I	48 22.5
ALQ E(P)	16 48 15.8
TUC E(P)	16 48 24.0
DEC 11	
BCN IP	17 46 28.3
IS	46 49.5
DEC 11	
COL EP	17 52 17.2
DEC 11	
COL IP	18 18 34.0
DEC 11	
BCN IP	18 53 47.7
IL	54 12.5
DEC 11	
H-19 03 25.8	
15.3S 173.4W	
h ABOUT 033KM	
COL EP	19 15 45.0
DEC 11	
H-19 21 52.6	
39.2N 118.4W	
h ABOUT 033KM	
EUR IP	19 22 21.6
IL	22 51.8
BCN EP	19 22 55.5
E(S)	23 34.0
IL	23 48.7
DEC 11	
EUR EP	20 40 27.5
DEC 11	
BUT IP	21 24 47.9
DEC 11	
COL E(P)	21 32 50.8
DEC 11	
H-22 42 59.4	
06.3S 131.2E	
h ABOUT 047KM	
ALQ IP'	23 01 48.0
DEC 11	
COL EP	22 59 22.0
DEC 11	
BCN EP	23 35 49.5
IL	36 26.0
EUR EP	23 36 20.4
DEC 12	
COL EP	00 11 32.3

Date and Station	Phase (GCT)
	h m s
DEC 12	
H-00 22 18.5	
46.7N 112.8W	
h ABOUT 033KM	
BUT IP	00 22 31.6
IL	22 43.6
BZM EP	00 22 45.8
HHM IP	00 22 47.8
IS	23 11.7
DEC 12	
H-02 19 52.2	
15.0S 173.8W	
h ABOUT 033KM	
BCN EP	02 31 35.0
E	31 41.5
TUC E(P)	02 31 41.0
EUR E(P)	02 31 41.2
GCA E(P)	02 31 52.3
ALQ EP	02 32 06.4
COL EP	02 32 09.0
DEC 12	
SJG IP	04 38 43.5
IL	39 26.5
DEC 12	
COL EP	05 22 06.8
DEC 12	
HON IP	06 07 53.6
ES	08 20.0
KIP IP	06 07 54.4
ES	08 22.0
DEC 12	
HHM E(P)	06 09 24.0
EL	10 00.7
DEC 12	
SJG E(P)	06 21 40.5
EL	23 03.0
DEC 12	
SJG IP C	07 04 29.0
IS	04 49.0
DEC 12	
H-07 20 00.0	
06.9S 150.6E	
h ABOUT 033KM	
GUA IP	07 24 44.0
HON ES	07 37 58.0
EL	46 33.0
KIP EP	07 29 53.0
COL EP	07 32 30.4
EpP	32 42.6

Date and Station	Phase (GCT)
	h m s
EUR EP	07 33 31.5
IpP	33 44.0
EPP	37 32.1
EPKKP	50 13.2
BCN EP	07 33 35.5
EPP	37 31.2
HHM E(P)	07 33 40.0
TUC E(P)	07 33 51.5
EPP	37 56.8
EPKKP	50 24.0
ALQ EP	07 34 07.5
EPP	38 24.9
EPKKP	50 07.3
DEC 12	
H-07 57 44.3	
07.0S 150.7E	
h ABOUT 030KM	
COL IP	08 10 16.7
EpP	10 26.9
EUR EP	08 11 16.8
DEC 12	
H-07 59 24.6	
39.6N 117.9W	
h ABOUT 033KM	
EUR IP	07 59 49.1
IS	08 00 11.0
BCN E(P)	08 00 29.7
E	00 34.7
EL	01 28.5
DEC 12	
H-09 22 16.3	
19.0S 169.5E	
h ABOUT 261KM	
COL EP	09 34 44.0
EUR E(P)	09 34 47.3
BCN E(P)	09 34 48.0
DEC 12	
COL EP	09 58 17.0
DEC 12	
EUR EP	09 58 42.9
E(S)	59 19.7
DEC 12	
H-10 10 17.0	
52.6N 169.3W	
h ABOUT 033KM	
COL IP	10 14 10.0
HHM EP	10 17 04.7
E	19 35.7
EUR EP	10 17 37.2
I	17 52.5
E(PCP)	19 47.9
BCN E(P)	10 18 02.0

Date and Station	Phase	(GCT)
		h m s
TUC	E(P)	10 18 40.2
ALQ	EP	10 18 47.0
DEC 12		
EUR	EP	10 29 03.8
BCN	EP	10 29 15.5
ALQ	E(P)	10 29 16.5
TUC	E(P)	10 29 18.5
	E	29 24.6
DEC 12		
COL	EP	10 42 36.0
	E	42 41.5
DEC 12		
H-11 16 54.7		
2.6N 076.1W		
h ABOUT 051KM		
ALQ	IP	11 24 50.5
TUC	E(P)	11 24 59.5
DEC 12		
H-12 49 04.9		
39.7N 119.7W		
h ABOUT 033KM		
EUR	IP	12 49 49.8
	IL	50 30.3
BCN	E(P)	12 50 37.6
	EL	51 55.0
DEC 12		
COL	E(P)	12 50 06.4
DEC 12		
COL	EP	13 05 24.9
DEC 12		
H-13 14 01.8		
39.2N 114.2W		
h ABOUT 033KM		
EUR	IP	13 14 26.0
BCN	EP	13 14 50.6
	IS	15 26.8
	IL	15 37.0
GCA	E(P)	13 14 54.3
DEC 12		
H-13 32 02.9		
39.6N 119.6W		
h ABOUT 033KM		
EUR	IP	13 32 45.2
	E(S)	33 25.3
BCN	E	13 33 32.5
	E	33 39.4
	EL	34 39.0
DEC 12		
H-14 20 35.1		
35.4S 071.5W		
h ABOUT 089KM		
ALQ	IP	14 32 21.7
EUR	EP	14 33 03.2
DEC 12		
BCN	EP	15 06 38.2
	EL	07 00.2
DEC 12		
BCN	EP	15 19 42.5
	IL	20 06.0
DEC 12		
COL	E(P)	15 45 04.5
DEC 12		
COL	EP	16 36 46.0
DEC 12		
COL	E(P)	17 12 06.4
DEC 12		
EUR	IP	17 29 58.9
DEC 12		
COL	EP	18 42 30.2
DEC 12		
HHM	EP	19 27 51.7
	EL	28 21.2
DEC 12		
H-19 44 55.7		
26.1S 175.9W		
h ABOUT 085KM		
BCN	EP	19 57 20.5
	EPP	57 39.8
TUC	EP	19 57 22.8
EUR	EP	19 57 27.7
ALQ	IP	19 57 45.0
	I	57 56.2
COL	E(P)	19 58 12.0
DEC 12		
H-21 17 21.0		
40.3N 125.1W		
h ABOUT 033KM		
UKI	EP	21 17 51.5
EUR	IP	21 19 05.8
	IL	21 03.9
BCN	E(P)	21 19 38.7
SLC	EP	21 19 48.4
HHM	EP	21 20 02.8
TUC	EP	21 20 43.2
ALQ	EP	21 21 04.5
DEC 12		
TUC	IP	21 54 59.2
	E(S)	55 16.7
DEC 12		
H-22 15 50.9		
20.2S 174.0W		
h ABOUT 033KM		
TUC	EP	22 27 59.0
EUR	EP	22 28 02.3
	E	28 17.7
ALQ	EP	22 28 22.5
COL	IP	22 28 35.8
	I	28 51.3
DEC 12		
COL	E(P)	22 39 44.6
DEC 12		
BCN	E(P)	22 40 55.0
	IL	41 29.5
DEC 12		
H-23 07 46.1		
05.8S 147.1E		
h ABOUT 068KM		
COL	IP	23 20 13.8
DEC 13		
PHI	E(P)	00 00 14.0
	E	01 33.5
DEC 13		
H-00 13 39.6		
COL	IP	10 41 31.0
34.0S 179.1W		
h ABOUT 112KM		
TUC	E(P)	00 26 36.0
	E	26 40.0
EUR	E(P)	00 26 45.0
DEC 13		
H-00 32 09.4		
65.2N 164.9W		
h ABOUT 033KM		
COL	IP	00 33 54.2
HHM	IP	00 38 28.7
	I	38 33.8
EUR	IP	00 39 26.0
	I	39 30.5
ALQ	E(P)	00 40 29.0
TUC	E(P)	00 40 32.6
DEC 13		
H-00 33 24.7		
64.9N 165.7W		
h ABOUT 015KM		
COL	E(P)	00 35 17.0
	E	35 46.0
	EL	37 12.0
HHM	IP	00 39 48.7
	IPP	39 52.8
BUT	E(P)	00 40 08.0
EUR	IP	00 40 45.6
	IPP	40 50.1
	E(PCP)	43 06.0
SLC	IP	00 40 49.4
BCN	IP D	00 41 14.0
	IPP	41 18.2
GCA	EP	00 41 17.0
ALQ	EP	00 41 48.3
	IPP	41 53.0
TUC	EP	00 41 51.5
	IPP	41 56.8
DEC 13		
COL	EP	00 47 59.0
DEC 13		
COL	E(P)	00 50 21.8
DEC 13		
COL	E(P)	00 55 12.1
DEC 13		
COL	E(P)	02 02 12.1
DEC 13		
COL	EP	03 52 05.0
DEC 13		
COL	EP	04 08 05.9
	E	08 38.3
DEC 13		
EUR	EP	04 13 38.8
DEC 13		
COL	EP	04 35 17.2
DEC 13		
TUC	E(P)	04 41 22.0
ALQ	E(P)	04 41 40.7
EUR	E(P)	04 42 33.4
DEC 13		
COL	EP	05 02 25.1
	E	04 13.8
DEC 13		
COL	E(P)	06 49 04.4
DEC 13		
COL	EP	07 13 49.2
DEC 13		
COL	EP	10 44 09.5
DEC 13		
COL	E(P)	10 57 15.1
DEC 13		
SIT	EP	11 16 00.0
	E(L)	16 18.5
DEC 13		
H-13 15 49.8		
20.1N 122.0E		
h ABOUT 033KM		

Date and Station	Phase (GCT)
	h m s
COL EP	13 27 12.0
HHM E(P)	13 29 15.0
EUR EP	13 29 33.3
EPP	33 41.6
ALQ IP'	13 34 19.2
DEC 13	
EUR EP	13. 32 42.1
TUC EP	13 33 02.1
DEC 13	
COL EP	13 33 32.1
E	33 43.8
DEC 13	
EUR E(P)	13 46 25.6
DEC 13	
H-13 51 50.2	
46.2N 151.9E	
h ABOUT 033KM	
COL IP	13 58 59.1
E	59 13.0
EUR IP	14 02 24.3
DEC 13	
H-14 26 15.3	
45.2N 150.4E	
h ABOUT 033KM	
COL IP	14 33 36.1
I	33 48.9
EUR EP	14 36 58.9
DEC 13	
GCA E(P)	16 32 40.3
DEC 13	
H-16 51 39.2	
7.9N 137.0E	
h ABOUT 033KM	
COL EP	17 03 27.5
EUR EP	17 05 14.2
SJG EP'	17 11 17.0
I	11 23.0
DEC 13	
GCA IP	18 07 03.5
F	07 34.2
DEC 13	
H-19 12 57.1	
10.7S 165.0E	
h ABOUT 033KM	
COL EP	19 25 20.3
E	25 38.8
EUR IP	19 25 47.3
BCN FP	19 25 47.5
ALQ I(P)	19 26 17.6

Date and Station	Phase (GCT)
	h m s
DEC 13	
COL EP	20 32 52.0
DEC 13	
COL EP	21 03 27.7
DEC 13	
TUC E(P)	21 48 10.2
DEC 13	
COL EP	22 23 18.0
DEC 13	
EUR EP	22 48 46.0
EL	49 12.2
DEC 13	
EUR EP	23 24 28.5
IL	24 51.2
DEC 13	
BUT EP	23 45 47.3
DEC 14	
COL EP	00 21 23.3
DEC 14	
TUC E(P)	00 44 12.0
DEC 14	
COL E(P)	01 29 11.7
DEC 14	
TUC E(P)	01 31 57.0
DEC 14	
H-01 59 05.6	
54.3S 002.4W	
h ABOUT 033KM	
BHP EP	02 12 00.0
ALQ EP'	02 18 02.7
IPP	20 02.0
TUC EP'	02 18 11.0
GCA EP'	02 18 15.0
BCN EP'	02 18 19.0
EPP	20 35.5
BUT EP'	02 18 23.0
HHM EP'	02 18 24.0
EUR EP'	02 18 31.1
EPP	20 55.3
COL EP'	02 19 04.0
IP'	19 44.8
EPP	23 15.7
DEC 14	
HON E	02 41 19.0
EL	03 04 50.0
KIP E	02 41 20.0
EL	03 05 22.0
DEC 14	
H-02 45 07.4	
12.1N 143.9E	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
GUA EP	02 45 34.2
E(S)	45 54.2
EUR EP	02 58 06.6
DEC 14	
H-03 35 14.5	
44.2N 081.6E	
h ABOUT 033KM	
COL EP	03 45 50.0
EUR E(P)	03 48 37.4
DEC 14	
ALQ IP	03 43 38.0
E	47 45.2
DEC 14	
BUT E(P)	04 41 06.0
DEC 14	
COL EP	05 01 17.8
DEC 14	
ALQ I(P)	05 02 07.0
DEC 14	
ALQ IP	05 25 08.4
DEC 14	
COL EP	05 51 42.7
DEC 14	
H-06 41 23.1	
28.2N 140.8E	
h ABOUT 115KM	
GUA E(P)	06 44 52.6
COL IP	06 50 58.2
HHM IP C	06 53 14.9
BUT IP	06 53 25.3
EUR IP	06 53 31.7
EPP	54 04.7
BCN EP	06 53 44.5
ALQ IP	06 54 15.5
DEC 14	
ALQ I(P)	07 11 50.8
DEC 14	
ALQ E(P)	07 31 14.0
TUC E(P)	07 31 55.0
DEC 14	
COL EP	07 28 45.6
DEC 14	
EUR EP	07 42 35.9
EL	43 13.1
DEC 14	
COL EP	08 03 51.0

Date and Station	Phase (GCT)
	h m s
DEC 14	
H-08 15 41.4	
38.0N 117.8W	
h ABOUT 033KM	
EUR EP	08 16 15.2
EL	16 53.2
BCN EP	08 16 30.0
I(S)	17 10.4
DEC 14	
COL EP	09 46 25.5
DEC 14	
H-11 04 17.4	
41.3N 077.1E	
h ABOUT 033KM	
COL EP	11 15 18.5
DEC 14	
COL EP	11 18 37.0
DEC 14	
COL IP	12 09 01.1
DEC 14	
COL IP	13 28 34.8
DEC 14	
EUR EP	13 28 55.6
DEC 14	
H-15 52 34.2	
33.4N 142.0E	
h ABOUT 033KM	
COL IP	16 01 43.0
E	01 58.0
EUR EP	16 04 30.7
E	04 45.9
DEC 14	
COL E(P)	16 27 32.4
DEC 14	
EUR EP	16 28 09.7
DEC 14	
GUA EP	17 05 33.5
E(S)	06 30.5
DEC 14	
H-17 16 47.7	
55.8N 160.1W	
h ABOUT 033KM	
COL IP	17 19 24.1
EUR EP	17 23 24.7
DEC 14	
H-18 49 40.7	
40.5N 138.3E	
h ABOUT 026KM	
COL IP	18 58 15.4
F	58 23.8
DEC 14	
COL EP	19 56 29.5

Date and Station	Phase	(GCT) h m s
DEC 14		
COL	EP	20 34 52.0
DEC 14		
TUC	E(P)	20 57 18.0
DEC 14		
H-21 29 05.8		
13.9N 090.5W		
h ABOUT 033KM		
BCN	EP	21 35 19.0
	E	35 23.5
	E	35 38.5
EUR	EP	21 35 48.2
DEC 14		
COL	IP	22 21 14.6
DEC 14		
COL	EP	23 32 06.0
DEC 14		
EUR	EP	23 41 10.8
DEC 15		
COL	IP	01 06 09.2
DEC 15		
H-01 16 41.7		
15.5S 173.3W		
h ABOUT 014KM		
BCN	EP	01 28 26.5
TUC	E(P)	01 28 32.6
EUR	EP	01 28 33.2
GCA	EP	01 28 43.2
COL	IP	01 29 05.3
DEC 15		
H-01 58 38.9		
8.5N 071.5W		
h ABOUT 053KM		
SJG	IP	02 01 12.8
EUR	EP	02 07 32.9
COL	EP	02 10 29.0
DEC 15		
COL	EP	02 39 19.5
DEC 15		
H-03 40 16.5		
20.8N 106.6W		
h ABOUT 033KM		
TUC	EP	03 43 08.2
	E(L)	45 33.0
BCN	IP D	03 44 11.5
	E	45 36.0
	E(PCP)	48 57.0
GCA	IP	03 44 12.0
EUR	IP	03 44 52.4
SLC	IP	03 44 53.3
BUT	EP	03 45 43.4
CSC	EP	03 45 51.0
HHM	EP	03 46 06.3
	EPCP	49 18.8
SJG	EP	03 47 34.0
COL	EP	03 49 20.5
	EPCP	50 33.5
DEC 15		
H-03 53 56.6		
42.7N 143.6E		
h ABOUT 135KM		
COL	IP	04 01 47.7
DEC 15		
BCN	E(P)	04 17 33.5
DEC 15		
COL	E(P)	04 28 25.4
DEC 15		
HHM	EP	04 31 34.8
EUR	EP	04 32 12.3
	E	32 33.1
DEC 15		
H-05 06 22.8		
2.3N 126.6E		
h ABOUT 045KM		
COL	EP	05 18 59.4
EUR	EP	05 24 52.9
DEC 15		
EUR	EP	05 24 06.1
TUC	E(P)	05 24 09.6
BCN	E(P)	05 24 12.5
DEC 15		
COL	EP	05 26 13.7
DEC 15		
COL	EP	07 35 25.6
DEC 15		
COL	E(P)	07 51 16.1
DEC 15		
H-07 54 07.3		
78.0N 007.6E		
h ABOUT 033KM		
EUR	EP	08 03 58.8
BCN	EP	08 04 21.2
DEC 15		
H-07 58 49.9		
76.2N 009.3E		
h ABOUT 033KM		
BUT	EP	08 08 03.4
EUR	EP	08 08 56.6
ALQ	E(P)	08 09 11.3
BCN	EP	08 09 17.5
TUC	E(P)	08 09 31.0
DEC 15		
H-08 24 20.7		
7.1N 073.2W		
h ABOUT 119KM		
BHP	IP	08 25 56.0
	IS	27 09.0
TUC	E(P)	08 32 09.8
EUR	E(P)	08 33 05.1
DEC 15		
COL	E(P)	08 26 10.0
DEC 15		
GUA	E(P)	09 26 11.0
DEC 15		
COL	IP	10 01 09.2
DEC 15		
COL	IP	10 43 52.9
DEC 15		
GCA	EP	11 32 45.5
EUR	E(P)	11 33 15.6
DEC 15		
H-11 38 06.1		
51.2N 171.3W		
h ABOUT 033KM		
COL	IP	11 42 19.1
EUR	EP	11 45 37.5
	EPCP	47 40.6
ALQ	E(P)	11 46 47.3
DEC 15		
H-12 13 25.8		
14.7N 091.7W		
h ABOUT 118KM		
BHP	IP	12 16 26.0
CSC	IP C	12 18 10.0
	E	18 17.0
ALQ	IP	12 18 33.1
	IL	24 04.6
TUC	EP	12 18 38.0
	E	18 51.0
	ES	22 54.0
	ESCP	25 48.0
SJG	EP	12 18 38.0
	PPCP	22 34.0
	ES	22 51.0
	EL	25 14.0
	ISCP	25 47.0
GCA	IP	12 19 12.5
BCN	IP C	12 19 23.0
	IPCP	22 26.5
	ESCP	26 03.0
	EL	28 26.5
EUR	IP	12 19 49.3
	FPCP	22 15.6
	ESCP	26 13.6
	FSCS	30 14.2
	EL	31 14.0
BUT	E(P)	12 20 12.0
HHM	EP	12 20 36.8
	ESCP	26 31.8
COL	IP	12 23 39.8
	E	23 48.0
	EPP	24 08.9
	IPCP	24 22.2
	ESCP	28 14.5
KIP	IP	12 23 41.7
	E(S)	32 13.0
	FL	39 44.0
HON	I(S)	12 32 13.0
	EsS	32 51.0
	E	39 43.0
DEC 15		
COL	IP	12 21 32.9
DEC 15		
COL	EP	12 53 08.2
DEC 15		
ALQ	I(P)	14 13 06.0
	I	16 38.5
DEC 15		
H-15 03 40.2		
45.4N 150.9E		
h ABOUT 033KM		
COL	IP	15 10 57.9
EUR	EP	15 14 20.4
DEC 15		
COL	EP	15 38 45.4
DEC 15		
GUA	E(P)	16 02 00.5
	E(S)	02 16.0
DEC 15		
BUT	EP	16 17 27.3
	IL	17 56.3
DEC 15		
H-16 20 11.0		
07.2S 076.9W		
h ABOUT 033KM		
ALQ	I(P)	16 29 07.7
TUC	E(P)	16 29 11.2
EUR	EP	16 30 08.9
DEC 15		
TUC	E(P)	16 24 57.6

Date and Station	Phase (GCT)
	h m s
DEC 15	
BUT E(P)	17 12 12.0
DEC 15	
SLC E(P)	17 17 45.4
HHM E(P)	17 18 12.0
DEC 15	
TUC E(P)	17 37 32.7
DEC 15	
COL EP	17 49 13.1
DEC 15	
BUT E(P)	18 16 16.0
DEC 15	
COL EP	18 17 56.7
DEC 15	
BUT E(P)	18 28 06.0
DEC 15	
BUT EP	18 54 11.3
IL	54 40.3
FGU E(P)	18 54 35.2
SLC EP	18 54 41.3
HHM E(P)	18 54 56.0
E	56 03.8
EUR EP	18 55 14.7
DEC 15	
FGU EP	19 20 46.5
DEC 15	
HHM E(P)	19 45 49.0
DEC 15	
BUT EP	20 52 41.4
EL	53 03.4
DEC 15	
H-21 03 15.9	
40.0N 028.9E	
h ABOUT 033KM	
COL EP	21 14 58.2
HHM IP	21 15 55.8
DEC 15	
BUT EP	21 25 02.4
IL	25 30.4
DEC 15	
COL EP	21 40 01.0
DEC 15	
TUC E(P)	21 44 03.9
E(L)	44 25.7
DEC 15	
TUC EP	21 54 30.4
E(L)	54 47.0
DEC 15	
BCN EP	22 27 52.5
TUC EP	22 27 58.5

Date and Station	Phase (GCT)
	h m s
ALQ IP	22 28 23.1
DEC 15	
COL EP	22 28 31.0
E	28 45.0
E	28 52.7
DEC 15	
H-22 34 07.7	
51.0N 169.6W	
h ABOUT 033KM	
COL E(P)	22 38 12.5
HHM IP	22 41 01.6
E(PCP)	43 30.2
EUR EP	22 41 30.0
EPCP	43 39.3
BCN EP	22 41 54.0
TUC EP	22 42 32.7
ALQ EP	22 42 40.7
DEC 15	
EUR EP	23 40 18.1
DEC 16	
H-02 21 30.7	
03.2S 147.5E	
h ABOUT 033KM	
GUA ES	02 28 25.0
COL EP	02 33 50.0
E	34 03.4
EUR E(P)	02 35 03.6
DEC 16	
BUT EP	03 01 42.6
I	01 45.4
IL	02 02.6
DEC 16	
GUA IS	03 04 33.0
DEC 16	
H-03 08 12.1	
03.2S 147.3E	
h ABOUT 033KM	
GUA ES	03 15 23.0
COL EP	03 20 33.3
EUR E(P)	03 21 49.9
DEC 16	
H-03 55 17.4	
06.0N 125.3E	
h ABOUT 121KM	
GUA EP	03 59 50.0
COL EP	04 07 32.0
EUR EP	04 09 28.1
EP'	13 33.9
TUC EP'	04 13 47.2
EPP	14 44.0

Date and Station	Phase (GCT)
	h m s
ALQ IP'	04 13 51.5
ISKP	17 16.7
SJG EP'	04 15 04.2
DEC 16	
BUT EP	04 23 03.4
F	23 31.4
HHM E(P)	04 23 49.0
EUR EP	04 24 05.4
DEC 16	
UKI EP	05 25 21.7
E(S)	25 42.0
EUR EP	05 26 23.7
DEC 16	
COL E(P)	05 32 12.6
DEC 16	
COL EP	06 36 27.8
E	36 49.2
DEC 16	
COL E(P)	07 24 48.6
DEC 16	
COL EP	08 32 35.0
DEC 16	
GUA E(P)	11 59 52.5
E(S)	12 00 02.0
DEC 16	
EUR EP	13 16 40.2
E(S)	17 17.7
DEC 16	
COL EP	13 16 23.3
I	16 35.3
DEC 16	
COL EP	13 28 09.5
I	28 20.3
DEC 16	
EUR EP	13 32 08.0
EL	32 45.2
BCN E(P)	13 32 20.5
EL	33 01.8
DEC 16	
EUR EP	14 26 01.3
EL	26 38.8
DEC 16	
COL IP	15 30 35.1
DEC 16	
COL IP	16 02 29.6
DEC 16	
EUR IP	16 46 36.7
EL	46 53.3
DEC 16	
ALQ I(P)	16 54 43.8

Date and Station	Phase (GCT)
	h m s
DEC 16	
H-18 26 39.0	
20.1N 121.9E	
h ABOUT 019KM	
COL EP	18 38 04.0
DEC 16	
H-19 20 26.3	
21.8S 175.3W	
h ABOUT 033KM	
TUC EP	19 32 45.0
EUR EP	19 32 47.5
E	32 54.3
GCA EP	19 32 56.3
COL EP	19 33 18.7
I(PP)	33 27.4
DEC 16	
H-19 28 50.0	
24.8N 122.4E	
h ABOUT 061KM	
COL EP	19 39 43.4
E	40 31.0
HHM EP	19 41 51.0
EUR E(P)	19 42 14.2
DEC 16	
TUC EP	19 43 59.0
E(S)	44 18.4
BCN EP	19 45 14.0
H-20 00 00.0	
37.0N 116.0W	
h ABOUT 000KM	
BCN IP C	20 00 27.8
EUR IP	20 00 41.5
GCA IP	20 01 05.9
TUC E(P)	20 01 37.0
ALQ E(P)	20 02 03.0
DEC 16	
COL IP	20 01 00.8
DEC 16	
BCN IP	20 04 07.3
I	04 41.0
H-20 10 00.1	
37.2N 116.1W	
h ABOUT 000KM	
BCN IP C	20 10 29.8
IS	10 53.8
EUR IP	20 10 39.4
GCA IP	20 11 00.0

Date and Station	Phase	Phase (GCT) h m s
TUC	E(P)	20 11 25.4
ALQ	E(P)	20 12 03.0
DEC 16		
EUR	EP	20 32 24.1
	E(S)	33 21.8
BCN	EP	20 32 30.5
	EL	33 01.0
DEC 16		
COL	EP	20 59 02.5
DEC 16		
COL	EP	21 40 25.3
DEC 16		
GCA	IP	21 40 00.0
	IS	40 28.0
DEC 16		
FGU	EP	21 40 07.0
	IS	40 37.5
DEC 16		
FGU	E(P)	22 17 25.5
	E(S)	17 44.5
DEC 16		
COL	EP	22 18 01.0
DEC 16		
COL	EP	23 05 16.6
	E	05 29.1
DEC 16		
BUT	E(P)	23 52 14.0
DEC 16		
COL	EP	23 54 51.5
DEC 17		
H-00 47 15.2		
55.8N 161.9E		
h ABOUT 033KM		
COL	EP	00 52 44.0
EUR	EP	00 56 42.5
	EPCP	57 47.7
DEC 17		
H-01 08 51.2		
7.8S 117.4E		
h ABOUT 033KM		
EUR	EP*	01 27 46.8
DEC 17		
COL	E(P)	01 26 36.8
DEC 17		
EUR	EP	01 37 39.8
DEC 17		
H-02 33 26.5		
35.5N 141.8E		
h ABOUT 081KM		
COL	EP	02 42 17.0
EUR	EP	02 45 10.4
	F	45 36.2
TUC	E(P)	02 45 50.5
ALQ	IP	02 45 58.0
DEC 17		
HHM	E(P)	03 02 19.0
	E	02 30.1
	EL	03 23.9
DEC 17		
H-04 03 45.7		
27.6N 140.0E		
h ABOUT 468KM		
COL	IP	04 12 52.9
HHM	IP	04 15 05.0
BUT	EP	04 15 15.6
EUR	IP	04 15 21.4
BCN	EP	04 15 34.0
TUC	EP	04 15 56.4
ALQ	IP	04 16 04.0
DEC 17		
COL	EP	04 26 22.5
DEC 17		
H-04 43 56.8		
01.8N 084.6W		
h ABOUT 033KM		
SJG	EP	04 49 13.5
ALQ	IP	04 51 20.7
GUA	E(P)	04 51 56.0
BCN	E(P)	04 52 04.0
EUR	EP	04 52 28.5
COL	E(P)	04 55 47.2
DEC 17		
H-05 18 34.8		
45.4N 150.1E		
h ABOUT 017KM		
COL	IP C	05 25 58.2
	I	26 12.2
HHM	IP	05 28 51.4
	E	29 10.9
BUT	EP	05 29 05.6
EUR	IP	05 29 21.2
	I	29 34.2
	E(PP)	31 46.6
SLC	E(P)	05 29 30.5
FGU	E(P)	05 29 39.5
BCN	IP	05 29 39.7
	E	29 51.2
RCD	EP	05 29 45.0
	F	29 56.0
GCA	EP	05 29 47.0
TUC	IP C	05 30 09.0
	F	30 19.2
ALQ	IP	05 30 14.0
	I	30 26.8
DEC 17		
COL	E(P)	05 39 40.9
DEC 17		
H-06 35 36.9		
3.2S 147.2E		
h ABOUT 033KM		
COL	IP	06 47 59.0
EUR	E(P)	06 49 10.0
DEC 17		
ALQ	E(P)	06 40 20.0
DEC 17		
COL	EP	06 59 10.0
DEC 17		
COL	IP	08 42 50.2
DEC 17		
COL	EP	09 53 03.8
DEC 17		
H-10 28 41.7		
21.0S 175.0W		
h ABOUT 033KM		
EUR	EP	10 41 10.3
DEC 17		
H-11 25 32.0		
40.3N 127.3W		
h ABOUT 033KM		
EUR	EP	11 27 38.9
DEC 17		
GUA	IP	11 49 58.7
	ES	50 13.0
DEC 17		
H-12 11 52.0		
41.9N 126.0W		
h ABOUT 033KM		
EUR	IP	12 13 50.6
TUC	EP	12 15 30.5
ALQ	E(P)	12 15 49.8
DEC 17		
COL	EP	12 46 55.4
DEC 17		
H-13 59 25.3		
16.0N 096.9W		
h ABOUT 036KM		
TUC	IP C	14 04 03.5
	EL	10 10.5
ALQ	IP	14 04 05.2
	IL	10 43.0
GCA	EP	14 04 44.8
BCN	IP C	14 04 52.7
	E	05 19.4
	EL	13 10.3
FGU	EP	14 05 07.5
RCD	E(P)	14 05 18.0
EUR	IP	14 05 21.9
	EPCP	08 28.5
	EL	15 05.2
HHM	EP	14 06 17.5
	F	06 28.0
COL	EP	14 09 25.2
	E	10 12.7
DEC 17		
H-14 33 43.3		
24.3S 179.6E		
h ABOUT 600KM		
TUC	E(P)	14 45 28.2
EUR	E(P)	14 45 28.8
COL	EP	14 45 51.0
DEC 17		
COL	EP	14 48 40.3
DEC 17		
TUC	EP	14 51 22.2
DEC 17		
H-14 58 26.3		
21.5S 066.9W		
h ABOUT 190KM		
EUR	EP	15 09 54.9
DEC 17		
COL	EP	15 37 11.0
DEC 17		
EUR	EP	16 28 08.8
	EL	28 27.3
DEC 17		
SLC	EP	17 37 03.3
DEC 17		
H-18 48 02.4		
31.6N 138.0E		
h ABOUT 376KM		
COL	EP	18 56 58.7
	E(PP)	59 08.5
EUR	IP	18 59 40.6
BCN	EP	18 59 54.3
ALQ	IP	19 00 24.0
DEC 17		
COL	IP	19 34 22.1

Date and Station	Phase (GCT)
	h m s
DEC 17	
COL EP	20 13 45.0
DEC 17	
COL EP	21 55 05.7
DEC 17	
EUR EP	21 55 54.4
DEC 17	
COL EP	22 20 30.5
DEC 17	
EUR EP	22 49 17.0
DEC 17	
H-23 44 46.2	
51.4N 177.9W	
h ABOUT 057KM	
COL EP	23 49 22.0
I	50 36.0
ES	53 04.0
I(SCP)	57 02.4
KIP EP	23 51 24.0
EL	59 42.0
ET	00 26 42.0
ROZ IP	23 52 41.0
EUR IP	23 52 48.7
E(SCP)	58 22.5
ES	59 25.5
SLC IP	23 53 02.2
BCN EP	23 53 11.0
E(pP)	53 24.3
FGU EP	23 53 13.5
GCA EP	23 53 21.8
RCD EP	23 53 26.0
E(pP)	53 39.0
TUC IP C	23 53 48.6
E(pP)	54 04.5
E(S)	00 01 07.0
ALQ IP	23 53 55.2
CSC IP C	23 55 42.0
E	55 51.0
SJG EP	23 57 37.0
DEC 18	
H-00 10 59.6	
18.8S 168.9E	
h ABOUT 069KM	
COL EP	00 23 48.6
EUR E(P)	00 24 23.2
DEC 18	
COL EP	00 12 34.7
DEC 18	
BCN EP	00 22 27.0

Date and Station	Phase (GCT)
	h m s
DEC 18	
COL EP	00 49 31.3
I	49 40.0
DEC 18	
SJG EP	01 23 50.0
EL	24 28.0
DEC 18	
H-02 29 10.4	
60.7N 147.4W	
h ABOUT 033KM	
COL EP	02 30 13.3
E(S)	30 56.5
DEC 18	
COL EP	03 56 50.5
DEC 18	
COL EP	05 55 20.4
DEC 18	
EUR EP	05 58 54.0
DEC 18	
H-06 05 18.8	
37.3N 142.0E	
h ABOUT 033KM	
COL EP	06 14 01.8
EUR EP	06 17 00.9
IpP	17 11.0
TUC E(P)	06 17 43.0
ALQ IP	06 17 49.7
IpP	17 59.6
DEC 18	
COL EP	06 39 00.5
DEC 19	
TUC E(P)	06 43 17.3
E	44 11.3
DEC 18	
COL EP	06 43 44.3
I	43 59.0
DEC 18	
H-06 50 18.2	
37.3N 141.8E	
h ABOUT 062KM	
COL EP	06 58 58.4
EUR EP	07 01 57.8
ALQ E(P)	07 02 45.7
DEC 18	
EUR EP	07 06 24.8
EL	06 59.4
BCN E(P)	07 06 29.8
I	06 39.4
EL	07 15.4
DEC 18	
COL IP	07 20 30.4

Date and Station	Phase (GCT)
	h m s
DEC 18	
H-09 10 18.6	
44.1N 149.4E	
h ABOUT 033KM	
COL EP	09 17 51.0
E	18 15.4
DEC 18	
H-10 53 28.4	
51.3N 178.0W	
h ABOUT 033KM	
COL IP	10 58 07.8
EUR IP	11 01 33.1
TUC E(P)	11 02 33.5
ALQ E(P)	11 02 41.0
DEC 18	
TUC E(P)	12 30 40.1
EUR EP	12 30 40.8
DEC 18	
TUC E(P)	15 25 28.5
DEC 18	
COL EP	15 36 35.4
DEC 18	
TUC EP	18 48 47.8
DEC 18	
COL E(P)	18 58 03.7
DEC 18	
H-18 59 34.4	
29.5N 114.2W	
h ABOUT 033KM	
TUC EP	19 00 34.6
E	00 46.5
E(S)	01 14.0
BCN IP C	19 01 08.9
I	01 43.0
EL	02 47.5
GCA IP	19 01 27.2
ALQ IP	19 01 38.7
EUR IP	19 01 59.6
IL	05 01.4
FGU E(P)	19 02 28.0
BUT EP	19 03 27.1
COL E(P)	19 07 24.0
DEC 18	
TUC E(P)	19 09 09.0
BCN E(P)	19 09 28.5
EL	11 33.0
DEC 18	
TUC E(P)	19 24 07.2
E(L)	25 00.0

Date and Station	Phase (GCT)
	h m s
BCN E(P)	19 24 37.9
E	25 14.5
E	26 19.5
EL	26 41.5
ALQ E(P)	19 25 13.8
DEC 18	
TUC EP	19 28 48.0
BCN EP	19 29 34.1
E	30 09.0
E	31 14.0
EL	31 37.0
ALQ E(P)	19 30 14.2
H-19 35 00.1	
37.1N 116.3W	
h ABOUT 000KM	
BCN IP	19 35 31.0
I(S)	35 44.0
EUR IP	19 35 41.9
E(S)	36 08.9
DEC 18	
TUC E(P)	19 40 01.7
E	40 12.0
E(L)	40 54.0
BCN EP	19 40 30.4
E	41 06.0
E	42 10.0
EL	42 26.8
DEC 18	
TUC E(P)	19 52 17.0
BCN E(P)	19 52 48.5
EL	54 07.5
DEC 18	
ALQ E(P)	19 56 05.0
FGU E(P)	19 56 58.0
DEC 18	
EUR EP	20 04 51.6
DEC 18	
TUC E(P)	20 12 03.7
DEC 18	
BCN EP	20 17 10.2
E	17 44.3
E	18 48.6
EL	19 13.7
TUC EP	20 17 37.7
E	17 52.9
E(L)	18 31.0
GCA E(P)	20 18 29.3
ALQ EP	20 18 40.0
EUR EP	20 19 05.4
DEC 18	
SJG E(P)	20 19 34.0
I	19 36.5

Date and Station	Phase	Phase (GCT) h m s
DEC 18		
COL	IP	20 56 44.8
	E	56 51.7
DEC 18		
GUA	IP	21 44 27.9
	I(S)	44 41.8
DEC 18		
H-22 07 34.3		
7.0N 079.1W		
h ABOUT 149KM		
SJG	EP	22 10 33.0
TUC	EP	22 15 22.5
EUR	EP	22 16 17.9
DEC 18		
FGU	E(P)	22 17 01.5
	E(S)	17 22.0
DEC 18		
BCN	E(P)	22 20 55.8
	F	21 07.0
DEC 18		
EUR	IP	22 27 28.5
DEC 18		
COL	IP	22 54 41.4
DEC 18		
COL	EP	23 26 59.0
	I	27 10.0
DEC 18		
HHM	EP	23 52 17.0
DEC 19		
BCN	E(P)	00 03 53.5
	E	04 29.0
	EL	05 30.0
DEC 19		
TUC	E(P)	00 04 34.6
DEC 19		
BCN	E(P)	00 21 17.2
DEC 19		
BCN	E(P)	00 23 49.5
DEC 19		
TUC	E(P)	00 51 33.6
DEC 19		
H-01 59 03.1		
35.3N 028.2E		
h ABOUT 052KM		
COL	E(P)	02 11 12.2
DEC 19		
EUR	EP	03 15 50.8
DEC 19		
COL	IP	03 58 27.3
DEC 19		
H-04 07 38.0		
29.8N 114.1W		
h ABOUT 033KM		
TUC	EP	04 08 35.0
	E	08 48.0
	E(S)	09 10.0
BCN	IP C	04 09 08.5
	E	09 45.0
	EL	10 48.5
GCA	IP	04 09 27.2
ALQ	IP	04 09 39.0
EUR	IP	04 09 59.4
	EL	12 31.2
SLC	E(P)	04 10 05.4
	E	10 22.4
FGU	E(P)	04 10 29.8
COL	EP	04 15 23.6
DEC 19		
TUC	E(P)	05 01 52.8
DEC 19		
BCN	EP	05 38 54.2
	IS	39 21.0
DEC 19		
COL	E(P)	06 33 22.8
DEC 19		
FGU	E(P)	06 53 48.5
	IS	54 22.8
EUR	E(P)	06 53 58.8
DEC 19		
COL	EP	06 58 20.9
DEC 19		
COL	EP	07 20 36.0
DEC 19		
COL	E(P)	08 04 03.0
DEC 19		
H-08 30 22.5		
55.9S 028.0W		
h ABOUT 033KM		
COL	EP'	08 50 08.0
DEC 19		
COL	EP	10 33 00.5
DEC 19		
COL	E(P)	11 11 22.2
DEC 19		
COL	IP	11 25 43.3
DEC 19		
TUC	EP	11 36 21.8
DEC 19		
COL	EP	11 59 56.9
DEC 19		
H-12 53 27.6		
37.8S 072.9W		
h ABOUT 064KM		
TUC	EP	13 05 21.0
ALQ	IP	13 05 25.3
GCA	EP	13 05 46.3
EUR	EP	13 06 05.3
RCD	E(P)	13 06 10.0
DEC 19		
COL	EP	18 41 55.7
DEC 19		
TUC	E(P)	20 26 11.2
DEC 19		
COL	EP	22 28 38.1
DEC 19		
COL	EP	23 48 13.5
DEC 20		
COL	EP	00 35 34.5
DEC 20		
COL	EP	01 02 43.7
DEC 20		
COL	EP	01 12 29.0
DEC 20		
TUC	E(P)	03 22 22.8
DEC 20		
FGU	E(P)	03 25 10.5
	I	25 13.2
	E	25 40.0
GCA	IP	03 25 31.0
EUR	EP	03 25 59.5
DEC 20		
COL	EP	03 41 12.5
	I	41 33.8
DEC 20		
TUC	E(P)	03 49 58.6
DEC 20		
TUC	E(P)	03 58 38.8
DEC 20		
COL	EP	04 08 21.7
DEC 20		
TUC	E(P)	04 44 04.0
DEC 20		
COL	IP	05 09 47.5
	E	10 05.6
DEC 20		
COL	IP	05 19 59.0
DEC 20		
COL	EP	06 06 58.6
DEC 20		
H-08 32 35.3		
18.7S 177.6W		
h ABOUT 628KM		
COL	IP	08 44 13.0
DEC 20		
H-08 44 42.5		
33.9S 072.0W		
h ABOUT 028KM		
TUC	E(P)	08 56 25.2
ALQ	EP	08 56 27.5
BCN	E(P)	08 56 50.7
EUR	EP	08 57 10.2
DEC 20		
H-08 45 57.5		
52.1N 177.1W		
h ABOUT 140KM		
COL	EP	08 50 17.9
BOZ	EP	08 53 37.2
EUR	EP	08 53 46.8
TUC	E(P)	08 54 47.5
DEC 20		
COL	EP	08 57 57.6
DEC 20		
TUC	E(P)	10 26 34.5
	E(L)	27 16.0
DEC 20		
GUA	EP	11 13 51.4
	E(S)	14 07.0
DEC 20		
COL	E(P)	11 24 28.8
DEC 20		
H-11 26 32.6		
20.1S 177.7W		
h ABOUT 463KM		
BCN	E(P)	11 38 03.9
	EpP	39 53.2
EUR	IP	11 38 08.2
	EpP	39 58.9
TUC	IP	11 38 08.8
	EpP	39 59.0
ALQ	E(P)	11 38 29.2
	EpP	40 19.6
COL	IP	11 38 31.0
	EpP	40 21.0
BOZ	EP	11 38 36.1
DEC 20		
COL	EP	12 24 20.7
DEC 20		
COL	EP	12 55 47.4
DEC 20		
H-13 31 54.7		
37.5N 141.6E		
h ABOUT 040KM		

Date and Station	Phase (GCT)
	h m s
COL IP	13 40 36.8
HHM IP	13 43 12.0
E▸P	43 24.0
BOZ IP C	13 43 29.4
E▸P	43 41.7
EUR IP	13 43 36.6
E▸P	43 48.6
BCN EP	13 43 52.3
I▸P	44 04.5
TUC EP	13 44 18.0
E▸P	44 30.0
ALQ IP	13 44 24.3
DEC 20	
GUA EP	13 45 19.8
E(S)	45 39.0
DEC 20	
H-15 27 16.0	
80.5N 123.1E	
h ABOUT 033KM	
COL EP	15 32 54.5
I	32 58.1
HHM EP	15 35 49.4
FUR EP	15 36 54.4
ALQ E(P)	15 37 32.9
DEC 20	
H-15 45 25.3	
22.2S 069.1W	
h ABOUT 100KM	
SJG E(P)	15 53 14.5
ALQ IP	15 56 09.7
TUC EP	15 56 11.5
E▸P	56 36.4
BCN EP	15 56 42.2
E▸P	57 07.5
E▸P	57 19.7
EUR EP	15 57 12.4
E▸P	57 37.2
BUT FP	15 57 18.0
E▸P	57 43.1
HHM EP	15 57 29.4
DEC 20	
COL IP	16 35 50.7
DEC 20	
TUC E(P)	17 06 28.6
ALQ E(P)	17 06 34.2
DEC 20	
COL EP	19 10 36.8

Date and Station	Phase (GCT)
	h m s
DEC 20	
TUC EP	19 34 17.0
E(S)	34 36.6
DEC 20	
H-21 56 03.2	
35.9N 114.9W	
h ABOUT 005KM	
BCN I(P)	21 56 05.5
GCA EP	21 56 54.5
IS	57 31.0
EUR IP	21 57 01.2
TUC IP	21 57 19.3
DEC 20	
ALQ EP	21 58 06.0
DEC 20	
H-22 18 21.7	
35.9N 114.8W	
h ABOUT 005KM	
BCN I(P)	22 18 24.8
EUR E(P)	22 19 20.0
DEC 20	
EUR IP	22 31 20.2
DEC 20	
H-22 43 35.3	
18.6S 069.5W	
h ABOUT 129KM	
ALQ EP	22 53 55.6
EUR EP	22 54 05.4
DEC 20	
H-23 14 45.9	
36.6N 140.3E	
h ABOUT 083KM	
COL EP	23 23 34.4
EUR EP	23 26 40.7
DEC 21	
EUR EP	00 34 53.7
DEC 21	
COL IP	01 10 16.9
DEC 21	
COL E(P)	01 45 20.7
DEC 21	
COL EP	02 59 28.2
DEC 21	
HHM E(P)	03 30 01.0
EL	30 58.0
BOZ E(P)	03 30 16.2
DEC 21	
COL EP	03 45 04.6
DEC 21	
TUC E(P)	04 37 07.0

Date and Station	Phase (GCT)
	h m s
DEC 21	
H-07 28 48.1	
05.9S 154.3E	
h ABOUT 040KM	
COL IP	07 41 06.7
I(PCP)	41 09.1
EUR FP	07 42 01.9
DEC 21	
H-08 07 24.8	
56.6N 034.7W	
h ABOUT 033KM	
BOZ EP	08 15 56.2
COL EP	08 16 06.6
DEC 21	
COL FP	08 28 01.3
DEC 21	
BOZ EP	08 30 34.4
EUR EP	08 30 38.1
DEC 21	
FUR EP	12 04 10.1
EL	04 56.6
DEC 21	
FUR FP	12 11 03.9
FL	11 33.7
DEC 21	
FGU EP	14 50 37.5
I	50 40.3
GCA IP	14 50 58.6
ES	51 32.5
EUR EP	14 51 28.1
BCN E(P)	14 51 28.3
E	51 39.0
EL	52 50.0
TUC E(P)	14 52 22.7
DEC 21	
COL EP	15 59 20.2
DEC 21	
BUT IP	16 40 59.3
BOZ FP	16 41 12.5
DEC 21	
H-17 36 29.0	
60.5N 146.8W	
h ABOUT 043KM	
COL IP D	17 37 36.2
E(S)	38 38.2
SIT E(P)	17 38 05.0
HHM IP C	17 41 24.8
BUT EP	17 41 42.1
BOZ EP	17 41 54.5

Date and Station	Phase (GCT)
	h m s
EUR IP	17 42 21.5
EPCP	45 28.9
E(SCP)	49 07.5
BCN EP	17 42 52.5
I	42 57.7
GCA E(P)	17 42 56.6
TUC IP D	17 43 34.4
EPCP	45 54.0
DEC 21	
COL E(P)	17 51 18.3
DEC 21	
GUA IP	18 27 47.1
E(S)	27 54.0
DEC 21	
H-18 32 03.0	
63.1N 150.3W	
h ABOUT 111KM	
COL IP	18 32 39.5
SIT E(P)	18 34 15.5
HHM IP D	18 37 16.5
BOZ EP	18 37 43.8
E	38 09.7
EUR IP	18 38 14.8
E▸P	38 39.6
EPCP	41 34.6
ESCP	44 37.6
FGU IP	18 38 26.3
BCN IP C	18 38 45.2
E▸P	39 09.9
EPCP	41 15.2
ESCP	44 50.0
TUC EP	18 39 25.0
E▸P	39 50.4
DEC 21	
COL EP	19 19 03.9
DEC 21	
H-19 23 20.8	
13.0N 124.5E	
h ABOUT 033KM	
COL EP	19 35 15.4
DEC 21	
COL EP	20 00 27.4
DEC 21	
BUT IP	20 27 06.1
DEC 21	
GUA EP	20 32 33.3
DEC 21	
H-21 38 47.3	
45.2N 112.7W	
h ABOUT 033KM	
BOZ IP C	21 39 01.0

Date and Station	Phase	(GCT) h m s
BUT	EP	21 39 05.1
	IS	39 21.1
BZM	IP	21 39 09.5
HHM	E(P)	21 39 42.0
	EL	40 38.4
DEC 21		
HHM	E(P)	21 49 40.0
	EL	50 35.4
DEC 21		
H-21 54 58.0		
44.9N 112.7W		
h ABOUT 044KM		
BOZ	IP	21 55 15.7
BUT	IP	21 55 19.1
	IS	55 37.1
HHM	EP	21 55 51.4
	I	56 04.4
	EL	56 42.0
SLC	E(P)	21 56 00.0
	E	56 35.0
FGU	E(P)	21 56 14.0
	F	56 20.0
FUR	EP	21 56 28.1
	E	57 04.6
DEC 21		
BCN	E(P)	21 57 42.6
	E	58 21.5
	EL	59 46.0
DEC 21		
COL	EP	22 01 23.0
DEC 21		
COL	EP	22 03 37.5
DEC 21		
FGU	EP	22 15 13.3
	EL	15 33.5
DEC 21		
H-22 55 08.8		
45.0N 112.0W		
h ABOUT 033KM		
BZM	I(P)	22 55 22.7
	IS	56 43.8
BOZ	IP	22 55 24.3
BUT	EP	22 55 28.1
	IS	55 45.1
HHM	E(P)	22 56 01.0
	I	56 13.4
	IL	57 00.4
DEC 22		
H-00 24 48.7		
9.5S 071.3W		
h ABOUT 614KM		
SJG	EP	00 29 52.8
	I	31 24.5
	IS	33 53.0
CSC	IP D	00 32 06.0
	IPCP	33 38.0
ALQ	IP	00 33 28.0
	I(SCP)	37 21.0
TUC	IP D	00 33 33.2
	IPCP	34 22.8
GCA	EP	00 33 58.0
RCD	IP	00 34 03.5
	E	34 18.0
BCN	IP D	00 34 07.2
	IPCP	34 42.0
	IpP	36 12.0
	EP'P'	01 03 08.5
FGU	IP	00 34 07.8
SLC	IP	00 34 15.4
EUR	IP	00 34 26.2
	EPCP	34 54.3
	EpP	36 29.5
	E(SCP)	37 56.7
	EP'P'	01 03 07.5
BUT	IP	00 34 41.8
	IpP	36 49.5
BOZ	EP'P'	01 03 07.0
HHM	IP D	00 34 55.3
	EpP	36 54.8
	EP'P'	01 02 54.3
COL	EP	00 36 57.5
	EpP	39 08.8
	EPP	40 53.6
	E	42 13.6
	ESKS	46 08.2
GUA	EP'	00 43 17.6
DEC 22		
GUA	EP	00 42 11.0
DEC 22		
H-00 46 32.9		
21.3S 179.3W		
h ABOUT 663KM		
BCN	EP	00 57 54.5
EUR	EP	00 57 59.8
TUC	EP	00 58 00.0
ALQ	I(P)	00 58 20.4
FGU	EP	00 58 23.5
COL	IP	00 58 19.8
	E(pP)	01 00 33.2
DEC 22		
H-02 30 08.7		
20.7S 178.2W		
h ABOUT 085KM		
COL	IP	02 42 50.2
DEC 22		
BOZ	EP	02 51 31.2
	I(S)	51 48.0
BZM	E(P)	02 51 39.0
HHM	E(P)	02 52 17.0
	EL	53 06.3
DEC 22		
COL	IP	02 59 40.1
DEC 22		
BOZ	EP	03 33 12.0
DEC 22		
BCN	E(P)	03 47 31.0
	EL	48 26.5
EUR	EP	03 48 03.6
DEC 22		
SJG	E(P)	04 12 45.0
DEC 22		
H-04 36 34.7		
28.2N 057.0E		
h ABOUT 042KM		
COL	IP	04 49 09.4
	I	49 17.2
	EPKKP	05 07 13.5
HHM	E(P)	04 50 33.0
	E	53 42.3
BOZ	EP'	04 54 54.5
BUT	EP'	04 54 57.0
EUR	EP'	04 55 09.8
	EPKKP	05 06 16.1
ALQ	EP'	04 55 14.5
	EPKKP	05 05 47.0
BCN	EP'	04 55 17.8
	EPKKP	05 05 52.0
TUC	EP'	04 55 21.5
DEC 22		
GUA	E(P)	04 38 18.2
	E(S)	38 34.0
DEC 22		
COL	EP	05 30 43.5
DEC 22		
COL	EP	06 19 08.1
DEC 22		
BOZ	EP	06 44 28.2
	E	44 35.5
DEC 22		
H-08 01 12.6		
18.4N 068.8W		
h ABOUT 115KM		
SJG	IP D	08 01 53.4
	I(S)	02 17.6
	I	02 26.0
	ISCS	16 23.5
	IsSCS	17 18.5
BHP	IP C	08 04 28.0
	I	05 48.0
CSC	IP	08 05 27.0
	ES	08 42.0
PHI	E(P)	08 06 15.0
	I	06 43.8
ALQ	IP	08 08 15.7
	IpP	08 41.1
RCD	IP D	08 08 25.0
	IpP	08 50.5
	ISCP	14 14.0
	EPCS	14 26.0
TUC	IP C	08 08 40.0
	IpP	09 06.0
	ESCP	14 21.0
FGU	EP	08 08 48.8
	IpP	09 15.0
GCA	IP	08 08 54.5
SLC	IP	08 09 03.3
	IpP	09 29.5
BOZ	IP C	08 09 15.6
BUT	IP	08 09 22.6
	IpP	09 48.3
EUR	IP	08 09 24.6
	IpP	09 50.5
	EPCP	10 59.6
	ESCP	14 43.8
HHM	IP C	08 09 35.5
	IpP	10 01.2
SIT	E(P)	08 11 21.0
COL	IP C	08 12 05.4
	IpP	12 36.3
DEC 22		
EUR	EP	09 18 13.6
DEC 22		
SJG	EP	09 22 04.5
	IL	22 36.0
DEC 22		
RCD	EP	10 13 15.0
DEC 22		
H-10 28 46.7		
44.9N 112.5W		
h ABOUT 033KM		
BOZ	IP	10 29 02.1

Date and Station	Phase (GCT)
	h m s
BUT IP	10 29 07.1
IS	29 25.1
HHM IP D	10 29 40.9
I	29 52.1
E	30 07.1
IS	30 24.0
SLC EP	10 29 49.7
FGU E(P)	10 29 58.0
E	30 02.3
EUR IP	10 30 15.3
RCD EP	10 30 29.0
EL	32 18.0
GCA EP	10 30 43.5
BCN E(P)	10 31 02.0
F	31 30.0
EL	33 31.0
ALQ EP	10 31 22.8
COL EP	10 34 36.0
DEC 22	
BUT I(P)	10 32 41.1
I(S)	32 58.0
DEC 22	
BOZ EP	10 37 05.0
E(S)	37 21.5
BUT EP	10 37 09.1
IS	37 25.9
DEC 22	
BOZ EP	11 28 04.2
DEC 22	
H-11 58 10.1	
22.2S 179.7W	
h ABOUT 600KM	
BCN EP	12 09 41.0
E	09 50.5
EpP	11 52.0
TUC IP C	12 09 46.4
IpP	11 53.0
EUR IP	12 09 47.5
EpP	11 58.7
ALQ IP	12 10 06.4
EpP	12 16.6
COL EP	12 10 07.1
EpP	12 19.4
FGU EP	12 10 10.2
BOZ EP	12 10 14.0
EpP	12 24.7
DEC 22	
BCN EP	12 19 12.0
DEC 22	
GUA EP	15 12 07.0
ES	12 21.0

Date and Station	Phase (GCT)
	h m s
DEC 22	
H-15 45 28.3	
45.4N 112.2W	
h ABOUT 033KM	
BOZ IP	15 45 38.1
I(S)	45 51.0
BUT EP	15 45 42.0
I(S)	45 55.0
IL	46 11.0
BZM IP	15 45 45.5
IS	45 59.0
HHM E(P)	15 46 18.0
E	46 26.1
EL	47 23.1
EUR EP	15 47 04.5
E(S)	48 20.3
DEC 22	
SJG EP	16 18 45.6
IL	19 25.0
DEC 22	
BOZ IP	16 44 06.2
I(S)	44 11.0
HHM E(P)	16 44 54.0
DEC 22	
H-18 28 18.3	
07.2N 126.8E	
h ABOUT 384KM	
COL IP	18 39 55.7
DEC 22	
SIT E(P)	18 35 27.5
COL EP	18 36 39.0
E	36 49.6
DEC 22	
COL E(P)	18 43 07.0
DEC 22	
BCN E(P)	20 31 29.5
EL	32 34.5
DEC 22	
H-20 54 35.3	
31.9N 117.1W	
h ABOUT 014KM	
BCN IP D	20 55 44.0
TUC E(P)	20 55 52.0
I	55 54.0
GCA IP	20 56 17.5
EUR IP D	20 56 29.2
ALQ IP	20 56 50.8
SLC EP	20 57 02.3
I	57 24.8
IL	59 52.0
FGU EP	20 57 16.2
I	57 19.0

Date and Station	Phase (GCT)
	h m s
BOZ EP	20 58 03.1
EL	21 02 08.0
BUT EP	20 58 06.0
EL	21 01 59.0
RCD EP	20 58 27.0
E	59 04.0
E(S)	21 01 48.0
EL	03 12.0
HHM EP	20 58 30.8
E(S)	21 01 52.0
EL	03 26.0
CSC EP	21 00 47.0
E(S)	05 54.0
EL	10 24.0
PHI E(S)	21 06 16.8
F	07 25.5
IL	12 34.5
COL E(P)	21 01 55.5
F	02 34.5
EL	15 54.0
SJG EP	21 03 14.5
EL	13 42.0
DEC 22	
H-21 34 21.1	
51.4N 177.9W	
h ABOUT 065KM	
COL EP	21 38 57.0
BOZ EP	21 42 14.5
EUR IP	21 42 22.5
ALQ EP	21 43 29.2
DEC 22	
BUT E(P)	22 51 43.0
DEC 22	
HHM E(P)	23 23 24.0
DEC 23	
COL EP	01 29 24.0
DEC 23	
COL E(P)	01 59 04.5
DEC 23	
H-02 38 36.7	
19.9S 169.7E	
h ABOUT 129KM	
COL EP	02 51 24.5
DEC 23	
TUC E(P)	02 59 27.5
DEC 23	
BOZ E(P)	03 09 41.0
DEC 23	
COL EP	03 29 42.7

Date and Station	Phase (GCT)
	h m s
DEC 23	
H-03 50 14.3	
51.8N 175.8W	
h ABOUT 033KM	
COL EP	03 54 40.0
HHM EP	03 57 35.7
BOZ EP	03 57 59.6
EUR FP	03 58 08.8
DEC 23	
H-05 46 44.8	
59.4S 026.9W	
h ABOUT 033KM	
BCN EP'	06 05 30.5
HHM EP'	06 05 46.7
COL IP'	06 06 35.9
DEC 23	
ALQ E(P)	06 06 20.6
DEC 23	
H-06 30 37.7	
27.4S 063.1W	
h ABOUT 580KM	
ALQ IP	06 41 18.5
TUC E(P)	06 41 20.6
BCN EP	06 41 47.2
EUR EP	06 42 05.7
HHM EP	06 42 28.8
DEC 23	
TUC E(P)	06 35 29.0
DEC 23	
H-07 36 02.9	
07.1S 129.4E	
h ABOUT 111KM	
COL EP	07 49 06.0
EUR EP'	07 54 31.9
EPP	55 27.6
BCN EP'	07 54 35.0
TUC EP'	07 54 41.0
RCD EP'	07 54 45.0
ALQ IP'	07 54 47.6
SJG EP'	07 55 52.5
E	56 38.8
DEC 23	
COL IP	09 10 35.1
DEC 23	
H-09 16 52.9	
51.1N 175.5W	
h ABOUT 033KM	

Date and Station	Phase (GCT)
	h m s
COL EP	09 21 30.0
HHM EP	09 24 16.6
BOZ EP	09 24 39.5
EUR EP	09 24 45.4
IpP	24 54.0
EPCP	26 39.6
TUC E(P)	09 25 46.5
EpP	25 54.5
ALQ IP	09 25 54.0
DEC 23	
BCN EP	09 17 03.5
E	17 57.0
DEC 23	
TUC E(P)	09 33 30.0
DEC 23	
RCD EP	09 37 05.5
DEC 23	
BOZ EP	09 44 21.4
DEC 23	
H-10 16 21.5	
23.6S 179.0W	
h ABOUT 033KM	
EUR EP	10 28 59.5
TUC EP	10 28 59.7
DEC 23	
BCN EP	10 21 39.0
DEC 23	
SJG EP	10 50 02.0
IS	50 14.8
DEC 23	
BCN EP	10 58 55.3
DEC 23	
H-11 11 50.9	
19.7S 068.5W	
h ABOUT 163KM	
SJG EP	11 18 51.5
DEC 23	
BOZ EP	13 03 22.0
ES	03 36.0
BUT EP	13 03 25.7
IL	03 42.0
HHM E(P)	13 04 09.0
EL	04 56.5
DEC 23	
SJG IP C	14 23 49.2
IS	24 12.5
DEC 23	
COL E(P)	14 26 13.1
DEC 23	
SJG IP	14 44 14.3
IS	44 39.3

Date and Station	Phase (GCT)
	h m s
DEC 23	
BOZ IP	14 58 48.4
E(S)	59 06.0
BUT IP	14 58 52.4
IL	59 09.2
DEC 23	
BCN IP C	14 59 23.9
IS	59 25.5
DEC 23	
H-16 04 17.8	
23.2S 114.0W	
h ABOUT 033KM	
EUR EP	16 14 39.8
DEC 23	
H-16 11 38.6	
52.2N 168.2W	
h ABOUT 160KM	
COL EP	16 15 22.0
BCN E(P)	16 19 04.7
TUC E(P)	16 19 43.5
DEC 23	
H-18 42 47.3	
37.5N 114.7W	
h ABOUT 033KM	
BCN IP D	18 43 09.3
IS	43 26.2
EUR IP	18 43 22.1
EL	43 55.1
GCA E(P)	18 43 33.0
DEC 23	
GUA EP	19 38 30.0
DEC 23	
H-19 47 59.3	
30.3N 131.1E	
h ABOUT 033KM	
COL EP	19 58 01.5
HHM EP	20 00 22.7
BOZ EP	20 00 36.5
E	00 48.0
BUT E(P)	20 00 38.0
BCN EP	20 00 57.0
TUC E(P)	20 01 19.8
E	01 32.5
DEC 23	
BCN E(P)	19 52 14.9
EL	53 17.5
DEC 23	
TUC E(P)	19 55 01.2
DEC 23	
BOZ IP	20 05 53.7

Date and Station	Phase (GCT)
	h m s
BUT EP	20 06 07.2
IL	06 23.2
DEC 23	
BOZ IP C	20 10 07.6
ES	10 22.6
BUT EP	20 10 11.7
IL	10 27.2
BZM E(P)	20 10 14.5
HHM E(P)	20 10 54.0
EL	11 42.2
DEC 23	
HHM EP	20 21 52.2
EL	22 38.2
DEC 23	
EUR EP	20 58 59.5
DEC 23	
COL EP	21 53 04.4
I	53 12.3
DEC 23	
ALQ E(P)	21 57 08.8
DEC 23	
EUR EP	22 27 27.7
DEC 23	
BCN EP	23 01 27.4
EL	02 06.8
DEC 23	
EUR EP	23 15 08.2
EL	15 59.7
DEC 23	
BOZ EP	23 42 29.0
DEC 24	
COL E(P)	00 05 57.0
DEC 24	
BCN IP	01 03 26.5
IS	03 31.0
DEC 24	
H-01 08 37.7	
36.2N 070.9E	
h ABOUT 158KM	
COL EP	01 20 01.3
I(pP)	20 36.2
DEC 24	
TUC E(P)	01 29 08.0
DEC 24	
TUC E(P)	01 38 37.0
ALQ E(P)	01 38 48.8
DEC 24	
COL IP	02 29 03.1
DEC 24	
COL EP	02 54 44.0
DEC 24	
EUR EP	03 13 58.9

Date and Station	Phase (GCT)
	h m s
DEC 24	
COL EP	03 36 21.0
DEC 24	
SJG EP	04 04 22.0
EL	05 25.0
DEC 24	
COL E(P)	05 35 31.7
DEC 24	
COL E(P)	07 13 40.7
DEC 24	
EUR EP	07 30 12.6
TUC E(P)	07 30 13.0
DEC 24	
COL IP	08 40 10.8
DEC 24	
H-09 38 07.2	
36.4N 135.2E	
h ABOUT 033KM	
COL EP	09 47 17.7
BOZ EP	09 50 07.5
EUR EP	09 50 14.8
TUC E(P)	09 50 55.1
DEC 24	
HHM E(P)	11 37 08.0
EL	38 01.0
DEC 24	
BCN EP	13 45 28.8
DEC 24	
SJG IP	14 01 42.0
IS	01 45.0
DEC 24	
TUC E(P)	15 35 51.0
DEC 24	
COL E(P)	15 43 14.0
DEC 24	
COL E(P)	16 51 52.7
DEC 24	
H-18 45 45.5	
04.4S 153.1E	
h ABOUT 093KM	
GUA IP	18 50 11.0
IS	53 50.0
HON E	19 02 54.0
EL	10 40.0
COL IP C	18 57 52.8
E(pP)	58 11.1
BCN E(P)	18 58 55.3
EpP	59 23.1

Date and Station	Phase (GCT)
	h m s
FUR IP	18 58 53.0
EpP	59 13.6
I	59 20.5
EPP	19 02 38.2
EPKKP	16 00.6
HHM FP	18 59 00.0
EPKKP	19 15 55.0
TUC E(P)	18 59 06.5
EPKKP	19 15 41.0
BOZ FP	18 59 07.4
EPKKP	19 15 50.5
SJG EP'	19 05 06.3
ESKP	08 35.5
DEC 24	
COL EP	19 16 27.2
DEC 24	
H-19 25 52.5	
3.9N 096.9E	
h ABOUT 141KM	
BOZ EP'	19 44 38.7
FUR EP'	19 44 44.6
ESKP	48 08.8
TUC EP'	19 44 45.0
ESKP	48 18.6
F	48 23.9
DEC 24	
H-19 49 58.5	
52.7N 168.8W	
h ABOUT 035KM	
COL EP	19 53 45.3
HHM E(P)	19 56 42.0
BOZ FP	19 57 07.5
F	57 14.2
FUR E(P)	19 57 16.4
TUC E(P)	19 58 14.6
DEC 24	
H-19 55 01.3	
35.1N 139.2E	
h ABOUT 066KM	
COL IP	20 04 03.6
HHM FP	20 06 34.0
BUT EP	20 06 46.3
BOZ EP	20 06 50.0
EUR IP	20 06 57.0
BCN EP	20 07 12.0
E	07 23.0
TUC EP	20 07 36.6
DEC 24	
COL EP	20 13 24.6

Date and Station	Phase (GCT)
	h m s
DEC 24	
EUR EP	20 16 18.0
DEC 24	
COL EP	20 58 34.0
DEC 24	
BOZ EP	21 05 16.5
DEC 24	
UKI E(P)	21 39 48.5
DEC 24	
BOZ EP	21 48 46.0
DEC 24	
BCN EP	22 39 44.0
DEC 24	
H-22 51 34.7	
44.7N 110.8W	
h ABOUT 033KM	
BOZ EP	22 51 52.2
BZM E(P)	22 51 52.5
IS	52 11.2
BUT E(P)	22 52 05.0
E(S)	52 35.3
SLC E(P)	22 52 37.0
HHM E(P)	22 52 41.0
EUR EP	22 53 11.3
DEC 24	
H-23 48 37.2	
23.9S 179.9W	
h ABOUT 473KM	
HON E(P)	23 56 56.0
TUC E(P)	00 00 29.9
DEC 25	
BCN EP	00 24 49.0
DEC 25	
EUR IP	00 26 03.2
DEC 25	
H-03 16 47.1	
15.2S 173.2W	
h ABOUT 011KM	
TUC E(P)	03 28 36.8
COL EP	03 29 09.0
BOZ EP	03 29 09.4
DEC 25	
TUC E(P)	05 22 37.5
E(L)	23 36.6
BCN EP	05 22 47.7
EL	23 40.7
DEC 25	
TUC E(P)	05 30 17.4
E	30 30.4
E(L)	31 24.3

Date and Station	Phase (GCT)
	h m s
BCN E(P)	05 30 23.4
E	30 33.9
EL	31 33.9
DEC 25	
GUA EP	05 44 32.0
E(S)	44 43.5
DEC 25	
TUC E(P)	05 49 48.0
DEC 25	
TUC E(P)	05 54 36.5
E(L)	55 35.2
BCN E(P)	05 54 36.6
E	54 46.6
EL	55 40.6
DEC 25	
GUA EP	05 45 55.1
ES	46 18.4
DEC 25	
COL EP	07 13 43.0
DEC 25	
H-08 02 08.5	
09.9S 159.8E	
h ABOUT 035KM	
COL IP	08 14 35.5
E(pP)	14 46.0
EUR IP	08 15 15.7
BCN FP	08 15 17.0
DEC 25	
H-08 05 52.9	
07.8N 080.8W	
h ABOUT 045KM	
BHP IP	08 06 21.0
IL	08 07.0
SJG EP	08 09 57.0
TUC E(P)	08 13 00.8
EUR E(P)	08 14 03.2
BOZ EP	08 14 15.3
DEC 25	
H-08 48 37.7	
18.8S 069.0W	
h ABOUT 117KM	
SJG EP C	08 55 33.5
E	56 03.5
E	56 29.2
IS	09 01 05.7
ALQ IP	08 59 01.7
TUC EP	08 59 04.6
EsP	59 49.4
BCN FP	08 59 36.8
EpP	09 00 07.5
EsP	00 22.0

Date and Station	Phase (GCT)
	h m s
EUR IP	08 59 54.9
E(PCP)	09 00 11.2
EpP	00 26.1
EsP	00 40.4
BOZ EP	09 00 07.0
EpP	00 39.0
BUT F(pP)	09 00 43.4
DEC 25	
H-09 51 02.2	
22.5S 067.3W	
h ABOUT 092KM	
ALQ IP	10 01 54.3
TUC EP	10 01 56.1
EpP	02 22.9
BCN EP	10 02 26.5
EpP	02 54.5
EsP	03 06.0
EUR EP	10 02 44.9
EPCP	02 56.5
BOZ EP	10 02 57.2
EsP	03 37.0
HHM EP	10 03 14.0
EpP	03 42.0
DEC 25	
SJG EP	09 59 03.0
DEC 25	
BCN E(P)	10 54 27.0
EL	55 48.0
TUC E(P)	10 54 29.3
E(S)	55 26.0
DEC 25	
COL EP	11 16 50.4
I	17 12.9
DEC 25	
COL IP	11 42 14.4
DEC 25	
TUC E(P)	11 44 54.5
E(S)	45 55.0
DEC 25	
COL EP	11 49 22.0
DEC 25	
COL IP	12 00 48.4
DEC 25	
H-13 50 49.6	
35.2N 139.1E	
h ABOUT 104KM	
GUA IP	13 55 39.0
E(S)	59 24.0
COL IP	13 59 48.0
HHM EP	14 02 18.5
BUT EP	14 02 30.8

Date and Station	Phase	(GCT)
		h m s
BOZ	EP	14 02 35.0
EUR	IP	14 02 41.1
BCN	EP	14 02 56.5
ALQ	EP	14 03 27.0
DEC 25		
TUC	E(P)	14 00 59.2
DEC 25		
TUC	E(P)	14 05 56.0
	E(S)	06 45.0
BCN	E(P)	14 06 25.0
	E	06 33.0
	EL	07 46.0
EUR	EP	14 07 54.8
DEC 25		
H-14 09 48.1		
32.3N 113.7W		
h ABOUT 033KM		
TUC	EP	14 10 26.1
BCN	EP	14 10 44.2
	I	10 52.1
	EL	12 15.0
ALQ	EP	14 11 26.5
EUR	E(P)	14 11 41.9
	IL	14 11.9
COL	EP	14 17 11.7
DEC 25		
TUC	E(P)	14 16 22.0
	E(S)	16 34.0
BCN	E(P)	14 16 57.0
	EL	18 09.0
DEC 25		
BCN	EP	14 18 18.5
	EL	18 37.6
EUR	EP	14 18 29.1
	E	20 16.1
DEC 25		
COL	IP	14 44 04.7
DEC 25		
COL	EP	14 57 02.3
DEC 25		
TUC	E(P)	15 01 13.6
DEC 25		
TUC	E(P)	15 11 05.0
	E	11 12.9
DEC 25		
TUC	E(P)	16 02 00.3
	E	02 07.0
BCN	EP	16 02 20.5
	EL	03 48.0

Date and Station	Phase	(GCT)
		h m s
DEC 25		
TUC	E(P)	16 28 35.1
	E	29 06.9
DEC 25		
H-16 30 01.9		
18.0N 101.2W		
h ABOUT 081KM		
TUC	EP	16 33 51.5
	E(S)	37 04.0
ALQ	EP	16 34 03.7
BCN	EP C	16 34 47.0
	I	34 58.5
EUR	IP	16 35 20.8
	I	35 29.8
	E(PP)	36 15.1
	EL	43 19.2
BOZ	EP	16 35 55.0
	E	36 04.5
BUT	EP	16 36 00.3
	E	36 08.3
HHM	EP	16 36 23.0
	E	36 31.0
SJG	EP	16 36 34.5
	E	36 40.9
COL	IP	16 39 35.1
	I	39 44.5
DEC 25		
COL	EP	16 35 35.2
	E	36 31.7
DEC 25		
H-17 01 32.2		
34.8N 139.3E		
h ABOUT 033KM		
COL	IP	17 10 40.5
	E	11 04.4
HHM	EP	17 13 10.0
	E	13 18.0
BOZ	EP	17 13 26.0
	E	13 29.3
EUR	IP	17 13 33.3
	EPCP	13 44.8
BCN	EP	17 13 48.5
TUC	EP	17 14 12.7
ALQ	EP	17 14 18.0
DEC 25		
COL	E(P)	17 03 37.8
DEC 25		
GUA	EP	17 06 46.0
	ES	10 21.0
DEC 25		
BOZ	EP	17 31 22.2

Date and Station	Phase	(GCT)
		h m s
DEC 25		
COL	IP	17 34 47.7
DEC 25		
H-17 56 40.1		
25.3S 068.1W		
h ABOUT 101KM		
SJG	EP	18 04 32.0
ALQ	IP	18 07 42.8
TUC	EP	18 07 43.6
	EpP	08 11.0
BCN	EP	18 08 13.6
	EpP	08 40.5
FGU	EP	18 08 19.4
EUR	IP	18 08 32.4
	EPCP	08 41.1
	EpP	08 59.8
BOZ	EP	18 08 44.1
	FpP	09 11.0
BUT	IP	18 08 48.3
	EpP	09 16.2
	EsP	09 27.8
HHM	IP	18 09 00.9
	IpP	09 27.5
COL	EP	18 10 51.8
DEC 25		
COL	EP	18 02 28.8
DEC 25		
BOZ	E(P)	18 25 02.0
DEC 25		
TUC	E(P)	20 31 22.7
	E(S)	32 05.4
BCN	EP	20 32 20.0
	EL	33 23.5
DEC 25		
COL	IP	21 02 56.3
	E	03 03.9
DEC 25		
TUC	E(P)	21 42 34.4
	E	42 46.7
	E(S)	43 21.0
BCN	EP	21 43 00.8
	EL	44 24.0
ALQ	EP	21 44 03.7
DEC 26		
COL	E(P)	00 52 47.6
DEC 26		
H-01 19 05.9		
18.0N 091.8W		
h ABOUT 033KM		
ALQ	EP	01 23 53.8
TUC	EP	01 24 02.1

Date and Station	Phase	(GCT)
		h m s
DEC 26		
COL	EP	02 19 07.9
DEC 26		
TUC	E(P)	02 41 46.6
DEC 26		
COL	E(P)	03 06 54.0
DEC 26		
ALQ	IP	04 46 19.8
TUC	E(P)	04 46 23.0
DEC 26		
H-04 57 14.3		
19.7S 178.3W		
h ABOUT 510KM		
TUC	EP	05 08 45.5
COL	IP	05 09 07.7
BOZ	EP	05 09 14.2
DEC 26		
BUT	EP	06 13 37.2
	EL	13 52.2
DEC 26		
BUT	EP	06 48 11.2
	EL	48 27.7
DEC 26		
TUC	E(P)	06 49 15.6
	E(S)	50 00.5
DEC 26		
COL	IP	06 52 42.8
	E	53 06.4
DEC 26		
TUC	E(P)	06 55 43.3
	E(S)	56 23.0
DEC 26		
TUC	E(P)	07 15 03.0
	E(S)	15 49.0
BCN	E(P)	07 15 40.8
	EL	16 50.5
DEC 26		
COL	EP	07 43 02.7
DEC 26		
COL	EP	07 51 00.8
DEC 26		
H-08 16 28.9		
16.7N 099.6W		
h ABOUT 033KM		
TUC	EP C	08 20 46.1
	ES	24 28.0
ALQ	IP	08 20 53.2
	IL	26 40.0
BHP	EP	08 21 12.0
GCA	IP	08 21 32.8

Date and Station	Phase (GCT)
	h m s
BCN IP C	08 21 39.0
EL	29 02.5
CSC EP	08 21 44.0
FGU IP	08 21 58.5
SLC IP	08 22 04.4
BOZ IP	08 22 42.7
EPCP	25 48.0
EL	32 55.0
BUT IP C	08 22 48.4
EPCP	25 50.2
E	32 11.2
EL	33 33.2
SJG EP	08 22 53.0
E	23 01.5
HHM IP C	08 23 09.5
EL	34 41.0
COL EP	08 26 19.2
E	26 25.1
I▸P	26 29.0
IPCP	27 20.2
EL	48 06.0
DEC 26	
TUC E(P)	09 25 45.8
DEC 26	
ALQ E(P)	09 57 43.5
DEC 26	
H-10 57 17.2	
43.1N 145.2E	
h ABOUT 012KM	
COL EP	11 05 13.7
BOZ EP	11 08 20.6
BCN E(P)	11 08 37.0
E	08 59.5
DEC 26	
COL EP	11 32 35.6
DEC 26	
COL EP	13 05 24.0
DEC 26	
FGU EP	14 27 32.5
DEC 26	
H-14 30 29.1	
51.8N 156.8E	
h ABOUT 136KM	
COL IP	14 36 32.9
E▸P	37 05.2
IS	41 24.8
ESCP	42 58.1
EL	44 26.0
SIT E(P)	14 37 39.0
HON EP	14 38 42.0
E(S)	45 22.0
EL	49 11.0
KIP IP	14 38 42.2
E▸P	39 13.0
ET	15 27 09.0
HHM IP C	14 39 37.8
UKI EP	14 39 47.0
E▸P	40 17.8
BUT IP C	14 39 56.1
E(S)	47 42.1
BOZ EP	14 40 01.8
E▸P	40 32.0
E(S)	47 44.0
SLC IP	14 40 24.1
BCN IP C	14 40 36.0
I▸P	41 08.0
ES	48 50.5
GCA IP	14 40 43.2
TUC EP	14 41 07.9
E(S)	49 52.0
EP'P'	15 09 29.1
ALQ IP	14 41 11.3
CSC EP	14 42 29.0
E	42 45.0
SJG EP'	14 48 10.5
DEC 26	
BOZ E(P)	16 00 23.0
DEC 26	
COL EP	16 11 21.3
DEC 26	
COL EP	17 26 53.2
DEC 26	
GUA EP	18 36 55.2
DEC 26	
COL E(P)	18 43 42.2
DEC 26	
BCN E(P)	18 45 41.2
E	45 49.3
E	46 00.0
DEC 26	
TUC E(P)	19 04 05.5
DEC 26	
BOZ EP	19 10 42.7
DEC 26	
BOZ EP	19 20 31.8
E	20 51.0
DEC 26	
COL EP	19 29 52.0
DEC 26	
TUC E(P)	19 43 37.3
DEC 26	
COL E(P)	20 04 48.5
DEC 26	
COL EP	20 26 39.1
DEC 26	
H-20 58 14.4	
39.6N 110.3W	
h ABOUT 000KM	
SLC EP	20 58 46.3
FGU E(P)	20 58 53.7
I	58 56.3
I	59 09.4
GCA EP	20 59 03.2
BCN E(P)	20 59 21.5
E	59 45.5
EL	21 00 42.0
EUR E(P)	20 59 27.0
ALQ EP	20 59 40.3
TUC E	21 00 21.0
EL	02 05.6
DEC 26	
COL EP	21 06 39.7
DEC 26	
COL EP	22 10 21.5
DEC 26	
GUA EP	22 22 13.0
DEC 26	
BHP IP	22 50 51.0
IS	51 16.0
DEC 26	
FGU EP	22 56 29.5
EL	56 52.5
DEC 26	
COL EP	22 59 22.0
DEC 26	
COL EP	23 30 22.6
DEC 26	
H-23 50 23.8	
59.3N 152.9W	
h ABOUT 035KM	
COL IP	23 51 54.3
EL	53 30.0
HHM EP	23 55 45.0
EUR EP	23 56 38.5
EPCP	59 03.5
ALQ EP	23 57 44.8
IPCP	59 56.5
TUC E(P)	23 57 46.1
DEC 27	
COL EP	00 03 03.5
DEC 27	
COL EP	00 28 24.7
DEC 27	
COL E(P)	00 37 55.6
E	38 08.2
DEC 27	
COL EP	00 59 15.8
DEC 27	
COL EP	01 41 11.5
DEC 27	
COL IP	02 01 23.5
DEC 27	
TUC E(P)	02 04 26.5
E(L)	05 16.6
EUR E(P)	02 06 08.0
EL	08 21.4
ALQ EP	02 06 05.5
DEC 27	
COL EP	07 08 39.0
DEC 27	
COL EP	08 11 14.0
DEC 27	
COL EP	08 29 14.2
DEC 27	
TUC E(P)	08 29 44.4
DEC 27	
COL EP	08 53 10.2
DEC 27	
BOZ EP	09 37 28.4
DEC 27	
H-10 14 51.0	
51.2N 177.2E	
h ABOUT 033KM	
COL IP	10 19 51.0
BOZ EP	10 23 10.9
EUR IP	10 23 21.0
E(▸P)	23 32.9
EPCP	24 54.5
TUC E(P)	10 24 19.4
E(▸P)	24 32.0
DEC 27	
COL E(P)	10 28 48.6
DEC 27	
COL EP	10 40 29.8
DEC 27	
COL EP	11 56 34.0
DEC 27	
EUR IP	15 23 13.5
IL	23 36.0
DEC 27	
COL EP	15 47 23.6
DEC 27	
COL E(P)	15 57 41.7

Date and Station	Phase	(GCT) h m s
DEC 27		
COL	EP	17 37 42.3
DEC 27		
H-17 43 21.4		
12.9N 125.4E		
h ABOUT 033KM		
GUA	IP	17 47 42.0
	ES	51 14.0
HON	ES	18 04 28.0
	E	21 34.0
COL	IP	17 55 12.5
	EPCP	55 26.2
HHM	E(P)	17 57 05.0
BUT	E(P)	17 57 10.0
BOZ	E(P)	17 57 16.4
	EPP	18 01 29.8
ALQ	EP'	18 01 58.3
TUC	EP'	18 02 14.0
BHP	EP'	18 03 04.0
SJG	EP'	18 03 05.5
DEC 27		
H-17 51 45.5		
7.2N 073.4W		
h ABOUT 113KM		
SJG	E(P)	17 54 46.5
EUR	EP	18 00 27.7
BOZ	E(P)	18 00 34.0
DEC 27		
COL	EP	18 31 12.0
DEC 27		
COL	EP	20 41 49.9
DEC 27		
BOZ	IP	21 02 12.1
	EL	02 23.5
BUT	IP	21 02 22.2
	IL	02 40.2
HHM	E(P)	21 02 53.0
	E(L)	03 59.0
DEC 27		
COL	EP	22 03 29.0
DEC 27		
COL	E(P)	23 26 17.6
DEC 27		
COL	EP	23 57 53.0
DEC 28		
COL	E(P)	02 28 20.5
DEC 28		
TUC	E(P)	02 55 44.3
	E(S)	56 26.0
DEC 28		
TUC	E(P)	03 20 14.5
	E(S)	21 43.0
DEC 28		
COL	EP	03 40 52.0
DEC 28		
BUT	EP	03 45 37.0
DEC 28		
EUR	EP	04 47 57.5
DEC 28		
COL	EP	04 52 05.3
	I	52 14.5
DEC 28		
H-04 55 03.3		
11.9S 165.6E		
h ABOUT 111KM		
COL	E(P)	05 07 16.0
EUR	EP	05 07 54.4
DEC 28		
COL	EP	05 05 07.5
	E	05 25.3
DEC 28		
BUT	EP	06 15 52.2
DEC 28		
COL	EP	06 27 18.2
DEC 28		
COL	EP	10 57 11.4
DEC 28		
BCN	E(P)	10 59 23.5
	E	11 00 08.0
EUR	EP	10 59 52.0
	E(S)	11 00 54.2
DEC 28		
EUR	EP	11 36 05.0
DEC 28		
COL	EP	11 55 06.5
DEC 28		
COL	IP	12 00 15.4
DEC 28		
BOZ	EP	12 45 38.2
DEC 28		
COL	EP	13 34 50.0
DEC 28		
COL	E(P)	14 27 22.0
DEC 28		
COL	EP	14 50 07.1
DEC 28		
COL	EP	14 58 57.0
DEC 28		
SJG	EP	15 41 46.0
	IL	42 45.0
DEC 28		
H-16 16 11.0		
22.1S 179.6W		
h ABOUT 611KM		
HON	IP	16 23 58.6
	EpP	25 46.0
	EsP	26 57.0
	IS	30 17.0
	ISCS	32 56.0
	IsS	33 32.0
	EL	36 50.0
KIP	IP	16 23 58.7
	ISCS	32 56.0
	IsS	33 36.0
	EL	36 52.0
GUA	IP	16 24 10.0
	E(S)	30 57.0
UKI	E(P)	16 27 22.0
BCN	EP C	16 27 41.2
	IpP	29 51.4
TUC	EP	16 27 46.0
	EpP	29 54.0
	E(S)	37 36.0
EUR	IP C	16 27 46.5
	IpP	29 55.3
	EPP	31 16.4
	EpPP	33 07.5
	E(S)	37 32.3
	EPKKP	45 46.8
	EP'P'	53 55.5
	ESKPP'	56 16.3
GCA	IP	16 27 54.5
SIT	EP	16 27 56.2
SLC	EP	16 28 02.1
	I	28 03.6
	EpP	30 13.6
ALQ	IP	16 28 06.2
	IpP	30 18.0
COL	EP D	16 28 06.6
	E	28 26.5
	EpP	30 18.9
	ESKS	37 38.0
	EsS	41 53.0
	EP'P'	53 37.6
FGU	EP	16 28 09.6
	I	28 11.0
BUT	EP	16 28 13.3
	EpP	30 24.5
	ES	38 23.0
HHM	EP	16 28 13.7
	EpP	30 27.2
	EPKKP	45 31.2
	EP'P'	53 48.0
BOZ	IP	16 28 14.0
	EpP	00 23.8
	ESKS	37 52.7
	ES	38 28.0
	EP'P'	53 41.5
SJG	EP'	16 33 49.5
	EpP'	36 09.0
	ISKS	39 48.5
	E	41 09.0
	ES	42 15.0
	PKKP	44 17.0
	EsS	46 10.0
	EP'P'	52 29.5
DEC 28		
H-16 47 40.1		
12.3N 044.6W		
h ABOUT 033KM		
SJG	EP	16 52 29.0
BOZ	EP	16 58 20.5
EUR	EP	16 58 39.0
COL	EP	17 00 11.6
DEC 28		
H-17 04 57.0		
86.7N 068.7E		
h ABOUT 033KM		
COL	EP	17 10 47.5
HHM	EP	17 13 12.4
	IpP	13 20.2
BUT	EP	17 13 31.5
BOZ	EP	17 13 34.0
	EpP	13 41.8
FGU	IP	17 14 09.5
SLC	EP	17 14 11.1
EUR	IP	17 14 20.9
	IpP	14 29.0
	EPCP	15 23.9
GCA	EP	17 14 38.5
BCN	EP	17 14 46.0
	EpP	14 54.2
ALQ	IP	17 14 51.0
CSC	E(P)	17 14 51.0
TUC	EP	17 15 08.3
DEC 28		
BOZ	EP	17 43 31.3
DEC 28		
COL	EP	18 48 00.3
DEC 28		
BOZ	EP	19 25 19.8
DEC 28		
COL	EP	20 10 02.4
DEC 28		
TUC	E(P)	20 47 07.8
	E(L)	47 37.4
DEC 28		
COL	EP	21 17 10.8

Date and Station	Phase (GCT)
	h m s
DEC 28	
COL IP	21 20 09.7
DEC 28	
BOZ EP	21 51 37.0
DEC 28	
TUC EP	22 08 30.4
E(S)	08 39.0
DEC 28	
TUC E(P)	22 12 43.7
DEC 28	
SJG IP	22 26 49.8
IS	27 10.4
DEC 28	
COL EP	23 46 52.5
DEC 28	
H-23 50 41.4	
51.5N 175.0W	
h ABOUT 033KM	
COL EP	23 55 07.0
HHM E(P)	23 58 14.0
BOZ E(P)	23 58 24.7
EUR E(P)	23 58 35.9
E	58 53.6
DEC 29	
H-00 28 54.4	
52.2N 175.1W	
h ABOUT 033KM	
COL EP	00 33 15.0
HHM E(P)	00 36 11.0
EUR EP	00 36 44.2
DEC 29	
H-00 44 20.1	
51.5N 175.0W	
h ABOUT 035KM	
COL EP	00 48 45.0
HHM EP	00 51 39.6
BOZ EP	00 52 03.8
EUR EP	00 52 10.1
TUC E(P)	00 53 10.9
ALQ EP	00 53 17.9
DEC 29	
COL E(P)	01 30 41.5
DEC 29	
BOZ EP	01 33 59.2
DEC 29	
H-01 40 08.4	
51.5N 175.0W	
h ABOUT 038KM	

Date and Station	Phase (GCT)
	h m s
COL EP	01 44 33.0
E(S)	48 15.0
HHM EP	01 47 28.4
BOZ EP	01 47 51.3
BUT E(P)	01 47 56.0
EUR EP	01 47 59.2
TUC E(P)	01 49 00.0
ALQ EP	01 49 06.0
CSC E(P)	01 50 52.0
DEC 29	
COL EP	01 41 28.6
DEC 29	
HON E	01 41 30.0
EL	55 28.0
DEC 29	
H-02 07 03.4	
59.6N 145.3W	
h ABOUT 033KM	
COL IP	02 08 24.0
I	08 26.9
IS	09 35.0
HHM EP	02 11 48.4
BUT E(P)	02 12 12.0
BOZ EP	02 12 20.0
EUR EP	02 12 46.8
ALQ E(P)	02 13 57.8
TUC E(P)	02 14 00.0
DEC 29	
BOZ IP	03 04 59.1
I(S)	05 14.2
DEC 29	
H-03 30 44.3	
38.1N 144.0E	
h ABOUT 040KM	
COL IP	03 39 14.9
E	39 20.2
BOZ EP	03 42 09.1
EUR IP	03 42 16.2
ALQ IP	03 43 04.8
DEC 29	
COL EP	04 14 46.8
DEC 29	
H-06 35 02.2	
51.4N 174.9W	
h ABOUT 022KM	
COL IP	06 39 30.4
I	39 49.2

Date and Station	Phase (GCT)
	h m s
HHM EP	06 42 24.4
BOZ EP	06 42 47.2
EUR IP	06 42 54.6
BCN EP	06 43 18.0
E	43 47.2
RCD EP	06 43 33.0
I	43 45.0
TUC E(P)	06 43 54.1
ALQ E(P)	06 43 55.0
CSC EP	06 45 50.0
DEC 29	
COL EP	06 37 41.2
DEC 29	
H-06 39 08.0	
51.5N 174.8W	
h ABOUT 033KM	
COL EP	06 43 33.4
E(S)	47 12.3
HHM IP	06 46 26.2
I	46 40.4
ESCP	52 26.4
BOZ EP	06 46 50.0
EUR IP	06 46 57.5
BCN EP	06 47 20.0
I	47 44.7
RCD EP	06 47 37.0
E	47 49.0
TUC EP	06 47 58.3
ALQ IP	06 48 05.8
CSC EP	09 49 53.0
DEC 29	
COL EP	06 51 39.0
DEC 29	
COL EP	07 14 00.0
DEC 29	
H-10 09 42.4	
51.8N 175.1W	
h ABOUT 076KM	
COL IP	10 14 02.7
E(S)	17 42.6
BOZ EP	10 17 19.5
EUR EP	10 17 27.6
BCN E(P)	10 17 51.5
E	17 59.8
E	18 16.5
TUC E(P)	10 18 22.6
ALQ EP	10 18 38.2

Date and Station	Phase (GCT)
	h m s
DEC 29	
COL IP	10 18 10.0
DEC 29	
COL EP	11 41 18.1
DEC 29	
COL IP	11 53 15.2
E	55 06.5
DEC 29	
COL EP	12 40 20.5
DEC 29	
H-12 50 43.5	
40.5N 139.0E	
h ABOUT 016KM	
COL IP	12 59 17.8
I	59 33.0
HHM EP	13 02 00.4
BOZ EP	13 02 18.0
EUR EP	13 02 27.3
BCN EP	13 02 44.5
E	02 52.0
ALQ IP	13 03 15.2
DEC 29	
GUA EP	14 47 34.3
DEC 29	
COL EP	14 59 15.0
DEC 29	
COL EP	15 06 59.3
DEC 29	
TUC E(P)	15 22 02.5
DEC 29	
COL IP	15 30 23.4
DEC 29	
COL EP	15 43 17.8
E	43 25.0
DEC 29	
SLC E(P)	16 29 55.0
EUR EP	16 30 37.1
TUC E(P)	16 31 32.6
DEC 29	
TUC IP	17 44 14.2
ES	44 33.8
DEC 29	
COL EP	18 52 45.0
DEC 29	
COL EP	19 02 03.8
DEC 29	
COL E(P)	19 09 43.0
DEC 29	
COL EP	19 16 43.0

Date and Station	Phase	(GCT) h m s
DEC 29		
COL	E(P)	19 19 07.4
DEC 29		
COL	EP	20 21 35.3
DEC 29		
COL	IP	22 22 37.0
DEC 29		
H-22 59 22.0		
17.2S 178.7W		
h ABOUT 493KM		
BCN	E(P)	23 10 43.0
TUC	E(P)	23 10 49.6
	EpP	12 44.6
COL	IP	23 11 05.5
	EpP	13 01.5
DEC 29		
H-23 22 42.1		
6.2S 155.5E		
h ABOUT 050KM		
COL	IP	23 34 57.9
EUR	EP	23 35 53.0
BCN	EP	23 35 55.5
DEC 30		
COL	IP	00 21 31.3
	E	21 39.5
DEC 30		
COL	EP	03 45 31.8
DEC 30		
COL	EP	03 58 05.0
DEC 30		
COL	EP	04 35 14.5
DEC 30		
COL	EP	05 44 26.0
DEC 30		
TUC	E(P)	05 54 59.5
DEC 30		
BCN	E(P)	05 57 45.2
	FL	58 58.0
TUC	E(P)	05 57 59.0
DEC 30		
COL	EP	06 17 00.0
DEC 30		
EUR	EP	06 54 27.8
DEC 30		
BOZ	E(P)	08 20 26.5
EUR	EP	08 20 40.0
DEC 30		
H-09 26 39.5		
9.6S 109.1W		
h ABOUT 033KM		
ALQ	E(P)	09 34 50.0
EUR	EP	09 35 28.2
BOZ	E(P)	09 36 08.5
DEC 30		
H-09 58 01.2		
8.7S 109.3W		
h ABOUT 033KM		
TUC	E(P)	10 05 40.6
ALQ	EP	10 06 03.8
BCN	EP	10 06 12.0
EUR	EP	10 06 42.1
BOZ	E(P)	10 07 22.0
COL	EP	10 10 04.0
DEC 30		
COL	EP	11 03 39.3
DEC 30		
EUR	EP	11 04 17.7
DEC 30		
H-13 08 50.2		
12.4N 142.0E		
h ABOUT 100KM		
GUA	EP	13 09 37.6
	E(S)	10 10.7
COL	EP	13 19 54.0
	EpP	20 19.7
EUR	EP	13 21 46.5
DEC 30		
H-13 15 55.3		
16.7S 175.0W		
h ABOUT 033KM		
BCN	EP	13 27 44.3
	E	27 50.0
TUC	E(P)	13 27 54.2
EUR	EP	13 27 55.7
ALQ	EP	13 28 18.1
COL	EP	13 28 24.0
BOZ	EP	13 28 26.4
	E	28 33.5
DEC 30		
H-13 19 47.4		
62.6S 165.8E		
h ABOUT 033KM		
BOZ	EP'	13 38 48.0
HHM	EP'	13 38 58.0
COL	EP'	13 39 05.0
DEC 30		
H-14 00 46.0		
19.1N 107.8W		
h ABOUT 033KM		
BCN	EP	14 04 54.5
EUR	EP	14 05 35.8
DEC 30		
BOZ	EP	14 43 15.0
DEC 30		
COL	E(P)	15 11 13.4
DEC 30		
H-15 27 25.8		
31.3N 138.8E		
h ABOUT 261KM		
GUA	EP	15 31 23.2
COL	IP	15 36 32.0
KIP	IP	15 36 45.0
HON	IP	15 36 45.7
HHM	IP D	15 38 54.0
	E(S)	48 23.8
BUT	IP	15 39 06.2
	IpP	40 06.2
SLC	IP	15 39 23.9
BCN	EP	15 39 28.5
	EpP	40 27.5
	EPP	42 43.0
FGU	IP	15 39 31.2
TUC	EP	15 39 51.6
	EPP	43 20.7
ALQ	IP	15 39 57.8
DEC 30		
UKI	E(P)	15 52 01.9
DEC 30		
H-16 04 38.8		
36.1S 179.4W		
h ABOUT 033KM		
TUC	E(P)	16 17 53.3
DEC 30		
COL	EP	16 06 55.0
DEC 30		
TUC	EP	16 48 19.1
DEC 30		
H-16 49 46.4		
41.6N 141.7E		
h ABOUT 042KM		
COL	EP	16 58 02.0
BOZ	EP	17 01 03.9
EUR	EP	17 01 12.6
ALQ	E(P)	17 02 01.3
DEC 30		
TUC	E(P)	17 39 46.6
	E	39 55.0
DEC 30		
TUC	EP	17 45 45.0
	ES	46 04.5
DEC 30		
TUC	EP	18 11 26.0
DEC 30		
EUR	EP	18 50 23.4
DEC 30		
COL	IP	18 56 42.4
	E	57 08.4
DEC 30		
H-21 30 58.8		
23.3S 179.9W		
h ABOUT 547KM		
HON	EP	21 38 58.0
KIP	EP	21 38 59.0
BCN	EP	21 42 39.0
	EPCP	42 49.7
	EpP	44 38.5
	EPP	46 05.5
TUC	EP C	21 42 43.8
	EpP	44 40.7
EUR	IP	21 42 44.3
	E	45 06.5
ALQ	IP	21 43 04.3
COL	EP	21 43 06.0
	E	43 12.5
	EpP	45 05.3
FGU	IP	21 43 08.5
HHM	E(P)	21 43 11.0
BOZ	EP	21 43 11.5
	EpP	45 13.0
DEC 30		
COL	IP	21 49 32.1
DEC 30		
EUR	EP	23 15 40.3
DEC 30		
H-23 37 41.0		
36.4N 069.9E		
h ABOUT 123KM		
COL	E(P)	23 49 07.5
DEC 31		
H-01 04 37.5		
18.9N 107.9W		
h ABOUT 033KM		
TUC	EP	01 07 50.0
	E(L)	11 00.0

Date and Station	Phase (GCT)
	h m s
ALQ IP	01 08 22.7
BCN EP	01 08 49.0
EUR IP	01 09 27.9
FGU E(P)	01 09 31.4
RCD E(P)	01 10 09.5
BOZ EP	01 10 17.0
HHM E(P)	01 10 41.0
COL EP	01 13 53.2
E(PCP)	15 05.8
DEC 31	
H-01 47 12.9	
28.7N 139.4E	
h ABOUT 426KM	
COL IP	01 56 18.7
HHM IP D	01 58 33.7
BOZ EP	01 58 48.0
EUR IP	01 58 51.3
E(PCP)	58 59.8
BCN EP	01 59 04.5
TUC E(P)	01 59 26.9
ALQ I(P)	01 59 33.9
DEC 31	
COL EP	02 42 15.0
DEC 31	
H-03 14 25.9	
60.0N 147.0W	
h ABOUT 058KM	
COL EP	03 15 39.0
HHM EP	03 19 19.5
E	19 23.7
EUR E(P)	03 20 15.5
DEC 31	
COL EP	03 34 49.5
DEC 31	
EUR EP	04 28 49.8
EL	29 25.0
DEC 31	
COL EP	04 32 37.2
DEC 31	
COL EP	06 15 05.0
DEC 31	
COL E(P)	06 32 18.0
DEC 31	
BOZ E(P)	06 36 45.0
DEC 31	
COL IP	06 45 36.8

Date and Station	Phase (GCT)
	h m s
DEC 31	
COL EP	08 47 35.0
DEC 31	
COL EP	10 22 09.0
DEC 31	
H-10 41 03.6	
35.0N 116.6W	
h ABOUT 014KM	
BCN IP	10 41 36.3
IS	42 03.0
EUR IP	10 42 12.8
E	42 29.0
GCA E(P)	10 42 13.8
TUC E(P)	10 42 26.0
E(L)	43 59.3
ALQ E	10 43 35.8
DEC 31	
COL EP	11 06 34.5
DEC 31	
COL IP	11 37 14.1
DEC 31	
H-12 46 22.4	
7.4S 156.0E	
h ABOUT 048KM	
COL EP	12 58 43.0
EUR EP	12 59 33.1
DEC 31	
BOZ E(P)	13 42 34.6
DEC 31	
COL EP	13 58 21.6
DEC 31	
SJG IP D	14 59 20.0
IL	15 00 16.5
DEC 31	
H-16 18 01.7	
35.8N 025.6E	
h ABOUT 086KM	
COL IP	16 30 00.3
RCD E(P)	16 30 42.0
HHM IP C	16 30 48.3
BOZ EP	16 30 55.1
DEC 31	
TUC EP	17 54 21.8
DEC 31	
GCA EP	21 29 13.3
DEC 31	
ALQ E(P)	21 46 00.0
DEC 31	
BOZ EP	22 25 22.6

Date and Station	Phase (GCT)
	h m s
DEC 31	
COL EP	22 41 08.0
DEC 31	
H-23 13 30.9	
4.6S 153.0E	
h ABOUT 077KM	
GUA IP	23 17 58.0
E(S)	21 40.0
COL EP	23 25 40.0
IP	25 57.6
E	26 11.6
EUR EP	23 26 41.0
DEC 31	
COL EP	23 32 40.3
DEC 31	
H-23 34 52.9	
52.0N 175.4E	
h ABOUT 033KM	
COL EP	23 39 54.0
EUR IP	23 43 29.5

Date and Station	Phase (GCT)
	h m s