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May, 1965

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COAST & GEODETIC SURVEY

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U. S. DEPARTMENT OF COMMERCE

John T. Connor, Secretary

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION

Robert M. White, Administrator

COAST AND GEODETIC SURVEY—WASHINGTON

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March 4, 2011

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.
Barrow, Alaska (BRW)
*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 (FGU)
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 (SJP)
Sitka, Alaska (SIT)
Tucson, Ariz. (TUC) WWNSS
Ukiah, Calif. (UKI)
International Latitude Observatory
Washington, D. C. (WAS)
Washington Science Center, Md. (WSC)

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

All seismogram interpretations are made or revised 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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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
Environmental Science Services Administration
Coast and Geodetic Survey
Seismology Division
Washington, D. C. 20235

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
1	01 58 02.9	60.4 N	145.9 W	13	4.6	SOUTHERN ALASKA.
1	01 59 47.3	37.1 N	27.0 E	33	4.4	TURKEY.
1	02 16 11.4	33.4 N	138.7 E	230	4.6	SOUTH OF HONSHU, JAPAN.
1	04 11 19.1	30.9 N	141.7 E	38	4.6	SOUTH OF HONSHU, JAPAN.
1	05 02 20*	2.6 S	126.2 E	33	4.5	CERAM SEA.
1	08 37 25*	37.6 S	176.7 E	171		NORTH ISLAND, NEW ZEALAND.
1	13 02 44.5	12.3 N	143.7 E	5	5.1	SOUTH OF MARIANA ISLANDS.
1	16 35 39.1	6.8 N	72.8 W	167	4.9	NORTHERN COLOMBIA.
1	19 09 10.1	29.9 N	127.9 E	114	4.3	EAST CHINA SEA.
1	19 53 15.8	53.4 N	172.6 W	33	4.7	ANDREANOF ISLANDS, ALEUTIAN IS.
1	20 02 41*	0.3 N	127.0 E	33	4.5	HALMAHERA.
1	20 41 02*	34.9 N	135.0 E	525	3.8	NEAR S. COAST OF SOUTHERN HONSHU.
1	21 27 54.4	60.4 N	146.0 W	33	5.3	SOUTHERN ALASKA. MAG. 4 3/4-5 (BRK).
1	22 10 25.6	19.1 N	108.1 W	33	4.7	REVILLA GIGEDO ISLANDS REGION.
1	23 45 31.5	1.7 S	77.9 W	167	3.9	ECUADOR.
2	00 03 22.2	30.9 N	141.8 E	33	4.9	SOUTH OF HONSHU, JAPAN.
2	00 34 49.8	30.9 N	141.8 E	33	4.6	SOUTH OF HONSHU, JAPAN.
2	05 47 43.9	19.8 S	69.5 W	117	5.5	NORTHERN CHILE.
2	07 13 42*	28.9 N	128.9 E	30	5.0	RYUKYU ISLANDS.
2	08 31 36*	51.7 N	173.5 E	33	5.0	NEAR ISLANDS, ALEUTIAN ISLANDS.
2	09 05 32*	51.9 N	142.9 E	5	5.0	SAKHALIN ISLAND.
2	10 52 13.5	20.3 S	178.9 W	581	4.9	FIJI ISLANDS REGION.
2	12 46 31*	18.8 N	108.1 W	27	4.0	REVILLA GIGEDO ISLANDS REGION.
2	18 30 03.5	51.2 N	174.1 E	33	4.5	NEAR ISLANDS, ALEUTIAN ISLANDS.
2	22 33 23.5	35.7 N	23.8 E	36	4.5	CRETE.
3	01 09 31.5	32.5 S	70.6 W	77	5.6	CHILE-ARGENTINA BORDER REGION. FELT IN ACONCAQUA, SANTIAGO AND VALPARAISO PROVINCES.
3	01 17 51*	3.4 N	84.1 W	33	4.9	OFF COAST OF CENTRAL AMERICA.
3	02 52 38*	1.7 S	126.3 E	10	4.6	MOLUCCA SEA.
3	03 30 50.1	36.0 N	114.7 W	5	3.9	SOUTHERN NEVADA. FELT AT BOULDER CITY.
3	03 57 02.1	12.1 S	14.8 W	33	4.9	SOUTH ATLANTIC RIDGE.
3	10 01 35.2	13.5 N	89.3 W	23	5.1	EL SALVADOR. 125 KILLED, 400 INJURED, 400 HOMES WRECKED IN SAN SALVADOR CISNEROS DISTRICT, SAN MAROS AND SANTO THOMAS. MAG. 6 1/4 (PAS), 5 1/2-6 1/2 (BRK), 6-6 1/2 (PAL).
3	10 58 39.3	30.7 S	177.3 W	33	4.5	KERMADEC ISLANDS REGION.
3	12 44 51.9	51.3 N	174.5 E	39	5.0	NEAR ISLANDS, ALEUTIAN ISLANDS.
3	12 51 57.2	26.8 S	69.8 W	19	4.8	NORTHERN CHILE.
3	15 13 18.0	4.8 S	34.9 E	15	4.8	TANGANYIKA.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
3	15 15 25.6	20.3 S	177.6 W	483	4.9	FIJI ISLANDS REGION.
3	16 02 14.5	18.5 N	146.0 E	123	4.7	MARIANA ISLANDS.
3	16 09 09.0	24.2 S	67.8 W	114	5.6	CHILE-ARGENTINA BORDER REGION.
3	17 40 58.4	52.0 N	175.8 E	42	5.4	RAT ISLANDS, ALEUTIAN ISLANDS.
3	19 17 30.7	22.1 S	68.8 W	33	4.5	NORTHERN CHILE.
3	21 02 12.0	31.5 N	141.1 E	88	4.2	SOUTH OF HONSHU, JAPAN.
3	23 15 53*	18.9 N	107.9 W	33	3.8	OFF COAST OF JALISCO, MEXICO.
4	00 00 19.3	5.6 S	102.0 E	40	5.2	SOUTHERN SUMATRA.
4	02 02 14*	1.7 S	138.6 E	48	5.1	NEAR N. COAST OF WEST NEW GUINEA.
4	02 22 39.1	26.2 N	126.3 E	95	4.5	RYUKYU ISLANDS.
4	03 40 43.4	56.2 S	27.7 W	33		SOUTH SANDWICH ISLANDS REGION.
4	05 11 48*	31.7 N	49.1 E	17		WESTERN IRAN.
4	05 17 36.9	0.7 N	125.6 E	60	4.9	MOLUCCA PASSAGE.
4	08 00 23*	30.0 N	127.2 E	75	4.6	EAST CHINA SEA.
4	08 34 39.8	41.7 N	79.4 E	6	5.7	KIRGIZ-SINKIANG BORDER REGION.
4	08 39 57.6	7.3 S	129.3 E	155	5.2	BANDA SEA.
4	12 10 41.1	16.5 S	73.2 W	78	4.5	NEAR COAST OF PERU. FELT AT AREQUIPA.
4	18 03 57.7	20.1 S	173.9 W	33	5.2	TONGA ISLANDS.
4	22 38 51*	32.2 N	141.2 E	175	4.7	SOUTH OF HONSHU, JAPAN.
5	00 17 06*	19.6 S	169.3 E	142	4.6	NEW HEBRIDES ISLANDS.
5	03 00 43.4	20.5 S	69.5 W	96	4.6	NORTHERN CHILE.
5	07 09 29.3	17.0 S	176.9 W	33	4.8	FIJI ISLANDS REGION.
5	09 13 56.7	13.9 S	75.9 W	94	4.7	PERU.
5	09 17 24.5	61.0 N	145.1 W	45	4.0	SOUTHERN ALASKA.
5	09 31 00*	19.9 S	174.1 W	33	4.7	TONGA ISLANDS.
5	09 59 03*	7.1 S	153.8 E	73	4.9	NEW BRITAIN REGION.
5	17 45 18.1	29.3 N	128.5 E	61	4.9	EAST CHINA SEA.
5	18 01 13.6	29.1 N	128.5 E	33	4.7	EAST CHINA SEA.
5	21 33 54.9	42.9 N	145.7 E	33	4.9	HOKKAIDO, JAPAN REGION.
5	23 02 01.7	52.6 N	173.5 E	32	5.6	NEAR ISLANDS, ALEUTIAN ISLANDS.
5	23 23 24.9	14.7 N	146.2 E	56	5.4	MARIANA ISLANDS.
6	01 42 22.0	17.7 S	179.0 W	528	3.9	FIJI ISLANDS REGION.
6	02 25 12.0	25.0 S	68.4 W	90	5.1	CHILE-ARGENTINA BORDER REGION.
6	04 22 54*	52.6 N	172.3 E	33	4.2	NEAR ISLANDS, ALEUTIAN ISLANDS.
6	09 52 23.4	15.5 S	167.6 E	97	4.4	NEW HEBRIDES ISLANDS.
6	14 24 04.3	6.1 S	149.1 E	74	6.0	NEW BRITAIN REGION.
6	19 49 04*	18.8 N	108.0 W	33	4.3	REVILLA GIGEDO ISLANDS REGION.
6	19 55 01*	19.1 N	108.0 W	33	4.8	REVILLA GIGEDO ISLANDS REGION.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
6	23 38 38*	9.5 N	124.1 E	551	4.9	MINDANAO, PHILIPPINE ISLANDS.
7	00 38 45*	32.4 N	48.7 E	52	4.5	WESTERN IRAN.
7	01 03 02.8	36.2 N	55.0 E	33	4.8	IRAN.
7	02 29 03.9	13.9 N	145.4 E	57	4.9	MARIANA ISLANDS.
7	06 39 39*	18.6 N	108.0 W	33	3.9	REVILLA GIGEDO ISLANDS REGION.
7	07 31 46.5	30.2 N	129.0 E	131	4.8	KYUSHU, JAPAN.
7	12 07 59*	17.5 S	179.1 W	546	4.1	FIJI ISLANDS REGION.
7	13 02 24.5	56.0 S	27.6 W	102	5.9	SOUTH SANDWICH ISLANDS REGION.
7	14 32 37.0	41.2 N	73.8 E	30	4.5	KIRGIZ SSR.
7	14 42 21.8	36.7 N	26.9 E	162	4.6	DODECANESE ISLANDS.
7	15 43 23.0	32.5 S	178.2 W	33	4.7	SOUTH OF KERMADEC ISLANDS.
7	15 47 11.152					37° 08' 25"N. 116° 04' 00"W. NEVADA TEST SITE "TEE" SHOT ELEVATION 1114.6 METERS (AEC).
7	16 32 30.6	32.4 S	178.3 W	33	5.1	SOUTH OF KERMADEC ISLANDS.
7	16 52 11.9	32.5 S	178.2 W	33	4.6	SOUTH OF KERMADEC ISLANDS.
7	19 11 17*	51.2 N	178.1 E	33	4.3	RAT ISLANDS, ALEUTIAN ISLANDS.
7	22 44 17*	52.7 N	175.6 W	200	4.1	ANDREANOF ISLANDS, ALEUTIAN IS.
7	23 56 11.6	22.2 S	68.5 W	84	5.5	NORTHERN CHILE.
8	01 22 31.6	80.2 N	122.9 E	33	4.7	EAST OF SEVERNAYA ZEMLYA.
8	03 05 38.5	18.4 N	120.4 E	56	5.6	LUZON, PHILIPPINE ISLANDS.
8	03 53 59*	55.6 S	122.7 W	33	4.3	EASTER ISLAND CORDILLERA.
8	11 32 57.1	28.0 S	70.8 W	35	5.4	CENTRAL CHILE. FELT IN COQUIMBO AND VALPARAISO PROVINCES.
8	12 24 45.1	50.8 N	177.1 W	40	4.2	RAT ISLANDS, ALEUTIAN ISLANDS.
8	16 51 42*	50.0 N	177.4 E	33	4.5	RAT ISLANDS, ALEUTIAN ISLANDS.
8	19 09 11*	1.8 S	141.8 E	33	5.4	NEW GUINEA REGION.
8	22 22 36.9	13.5 S	71.4 W	20	4.3	PERU.
9	04 02 50.5	12.3 N	144.0 E	23	5.0	SOUTH OF MARIANA ISLANDS.
9	05 56 40*	17.7 S	69.2 W	179	4.0	PERU-BOLIVIA BORDER REGION.
9	10 59 51*	56.2 N	148.6 W	33	4.0	GULF OF ALASKA.
9	11 28 46*	54.2 N	163.4 W	33	3.8	UNIMAK ISLAND REGION.
9	13 32 34.1	3.0 S	139.6 E	37		WEST NEW GUINEA.
9	14 11 08.1	6.5 N	82.5 W	56	5.1	SOUTH OF PANAMA.
9	14 27 18.6	63.2 N	149.2 W	111	4.0	CENTRAL ALASKA.
9	19 58 59.2	2.9 S	77.4 W	108	4.8	PERU-ECUADOR BORDER REGION.
9	22 12 13*	56.6 N	152.8 W	33	4.4	KODIAK ISLAND REGION.
9	22 27 09.3	6.4 S	148.0 E	63	4.5	NEW BRITAIN REGION.
9	23 46 42.3	16.6 N	99.9 W	33	4.5	NEAR COAST OF GUERRERO, MEXICO.
9	23 51 22.6	23.4 S	179.8 W	555	5.0	SOUTH OF FIJI ISLANDS.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
10	00 02 30*	29.1 N	131.6 E	33	4.4	RYUKYU ISLANDS REGION.
10	01 20 23*	15.6 N	99.9 W	33	3.6	OFF COAST OF GUERRERO, MEXICO.
10	03 52 33.4	6.8 N	73.1 W	167	3.9	NORTHERN COLOMBIA.
10	05 36 52*	0.1 N	25.1 W	33	4.5	CENTRAL MID-ATLANTIC RIDGE.
10	08 35 21.1	17.3 S	70.9 W	121	4.4	NEAR COAST OF PERU. FELT IN SOUTHERN PERU.
10	10 49 24*	5.4 S	147.0 E	226	5.7	EAST NEW GUINEA REGION.
10	10 51 22.8	52.7 S	22.6 E	33		SOUTH OF AFRICA.
10	14 46 33.0	18.3 N	99.7 W	131	4.0	GUERRERO, MEXICO.
11	01 12 04*	45.4 N	150.2 E	69	4.4	KURILE ISLANDS.
11	01 50 25*	41.0 N	111.5 W	15	4.1	UTAH.
11	03 04 58*	44.0 N	147.8 E	34	4.3	KURILE ISLANDS.
11	05 44 30.0	39.9 N	50.9 E	33		CASPIAN SEA.
11	06 39 57.8	49.8 N	77.9 E	0	5.2	EASTERN KAZAKH SSR.
11	08 06 44.2	19.1 N	65.2 W	68	4.2	PUERTO RICO REGION.
11	08 36 36*	50.5 N	176.3 E	27	4.1	RAT ISLANDS, ALEUTIAN ISLANDS.
11	12 04 36*	51.7 N	174.9 E	30	4.5	NEAR ISLANDS, ALEUTIAN ISLANDS.
11	17 37 38.3	61.4 N	149.6 W	58	5.5	SOUTHERN ALASKA. FELT WIDLEY IN THE ANCHORAGE AREA. MAG. 5 3/4 (PAS), 4 3/4 (BRK).
11	18 17 24.0	44.7 N	111.0 W	33	4.2	HEBGEN LAKE REGION.
11	18 32 44*	44.8 N	110.5 W	33		YELLOWSTONE NATIONAL PARK, WYO.
11	20 29 44*	45.0 N	110.7 W	33		MONTANA.
11	21 40 34*	44.9 N	111.2 W	35		HEBGEN LAKE REGION.
11	22 35 59*	45.9 N	26.9 E	84	4.4	RUMANIA.
12	00 28 19*	38.0 N	138.8 E	168	4.1	NEAR WEST COAST OF HONSHU, JAPAN.
12	06 10 53*	50.5 N	176.0 E	33	3.9	RAT ISLANDS, ALEUTIAN ISLANDS.
12	06 45 12*	18.4 S	178.0 W	534	4.0	FIJI ISLANDS REGION.
12	08 05 57.2	3.5 S	137.9 E	78	5.5	WEST NEW GUINEA. FELT AT DARWIN.
12	08 50 57*	4.7 S	34.8 E	33		TANGANYIKA.
12	09 42 37*	13.9 S	77.1 W	20	4.6	OFF COAST OF PERU.
12	10 16 07*	45.3 N	111.2 W	15	3.6	MONTANA.
12	10 33 43.5	6.2 S	130.3 E	125	5.7	BANDA SEA. FELT AT DARWIN. MAG. 5 1/4-5 1/2 (PAL).
12	11 42 38*	27.8 N	142.8 E	33	4.5	BONIN ISLANDS REGION.
12	11 44 26.1	34.3 N	47.4 E	33	4.5	WESTERN IRAN.
12	17 12 37.3	26.2 S	178.4 E	560		SOUTH OF FIJI ISLANDS.
12	18 15 00.098					37° 14' 34"N. 116° 25' 51"W. NEVADA TEST SITE "BUTEO" SHOT ELEVATION 1289.3 METERS (AEC).
12	19 35 41.6	21.9 S	65.9 W	283	5.1	SOUTHERN BOLIVIA.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
13	00 08 16.6	19.6 N	65.4 W	30	4.7	PUERTO RICO REGION. MAG. 4 1/4-4 1/2 (PAL).
13	01 36 33*	25.9 S	70.7 W	25	4.6	NEAR COAST OF NORTHERN CHILE.
13	02 23 23.4	19.3 S	63.8 W	589	5.1	SOUTHERN BOLIVIA.
13	02 56 03.1	53.9 N	159.8 E	100	5.0	NEAR EAST COAST OF KAMCHATKA.
13	04 13 08.6	4.8 N	76.3 W	126	5.3	COLOMBIA. FELT AT CALI AND BOGOTA.
13	04 30 41*	37.0 N	71.4 E	90		AFGHANISTAN-USSR BORDER REGION.
13	06 47 38.5	44.8 N	111.2 W	33		HEBGEN LAKE REGION.
13	06 58 24.8	36.7 N	140.5 E	132	4.2	NEAR EAST COAST OF HONSHU, JAPAN.
13	10 51 15.5	29.8 N	80.5 E	33	5.1	NEPAL-INDIA BORDER REGION.
13	15 08 48*	53.0 N	171.6 E	33	4.2	NEAR ISLANDS, ALEUTIAN ISLANDS.
13	16 37 25.2	46.1 N	151.2 E	68	4.9	KURILE ISLANDS.
13	17 30 05*	26.4 N	109.0 W	33	4.5	GULF OF CALIFORNIA.
13	19 14 23*	40.3 N	126.7 W	33		OFF COAST OF NORTHERN CALIFORNIA. MAG. 4 1/2 (BRK).
13	19 23 16.6	33.2 N	138.0 E	324	4.8	SOUTH OF HONSHU, JAPAN.
13	20 37 59.9	31.1 N	116.0 W	33		BAJA CALIFORNIA.
13	20 50 55.9	23.3 S	175.4 W	60	5.0	TONGA ISLANDS REGION.
13	21 09 16*	39.5 N	20.7 E	33		GREECE-ALBANIA BORDER REGION.
13	22 46 33.0	36.0 S	18.1 W	33	5.2	SOUTH ATLANTIC RIDGE.
14	01 48 42.4	27.6 S	177.1 W	77	4.5	KERMADEC ISLANDS.
14	02 27 00.2	19.0 S	169.5 E	259	4.6	NEW HEBRIDES ISLANDS.
14	09 46 08.6	50.4 N	178.0 E	46	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
14	16 50 15.6	50.3 N	177.7 E	33	5.2	RAT ISLANDS, ALEUTIAN ISLANDS.
14	17 30 24.4	43.7 N	151.9 E	33	4.4	KURILE ISLANDS REGION.
14	17 32 36.227					37° 03' 32"N. 116° 00' 38"W. NEVADA TEST SITE "SCAUP" SHOT ELEVATION 817.5 METERS (AEC).
14	18 46 24.7	37.0 N	116.0 W			"SCAUP" COLLAPSE.
14	21 03 51.2	51.2 N	175.1 E	30	4.1	RAT ISLANDS, ALEUTIAN ISLANDS.
14	23 05 05*	15.1 N	146.0 E	33	4.2	MARIANA ISLANDS.
14	23 28 13.7	20.7 S	177.7 W	467	5.3	FIJI ISLANDS REGION.
15	03 58 24*	34.2 N	135.8 E	344	4.1	NEAR S. COAST OF SOUTHERN HONSHU.
15	05 06 26*	12.4 N	89.5 W	33	4.0	OFF COAST OF CENTRAL AMERICA.
15	06 25 01.5	35.9 N	114.8 W	5	3.8	CALIFORNIA-NEVADA BORDER REGION. FELT AT BOULDER CITY.
15	10 41 08.2	44.9 N	111.0 W	33		HEBGEN LAKE REGION.
15	12 27 26*	42.3 N	141.8 E	78	4.2	HOKKAIDO, JAPAN REGION.
15	12 30 45*	19.5 N	146.0 E	159	4.2	MARIANA ISLANDS REGION.
15	13 04 11.3	44.3 N	110.0 W	33	3.6	YELLOWSTONE NATIONAL PARK, WYO.
15	16 39 02*	48.0 S	165.6 E	15		OFF W. COAST OF S. ISLAND, N.Z.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
15	18 43 07*	40.6 N	48.3 E	33	4.6	EASTERN CAUCASUS.
15	19 53 46.5	51.1 N	178.0 E	24	4.4	RAT ISLANDS, ALEUTIAN ISLANDS.
15	19 55 56.0	51.1 N	178.4 E	23	4.5	RAT ISLANDS, ALEUTIAN ISLANDS.
15	21 01 17.7	52.3 N	173.2 E	10	5.2	NEAR ISLANDS, ALEUTIAN ISLANDS.
15	22 42 48.5	51.2 N	178.5 E	29	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
15	23 33 12.4	16.1 S	174.7 W	253	4.8	TONGA ISLANDS.
15	23 58 34.4	4.1 S	135.1 E	33	5.8	WEST NEW GUINEA REGION.
16	00 45 57*	10.9 N	45.5 E	33		NORTHWESTERN SOMALIA.
16	01 35 55*	35.4 N	28.0 E	34	4.6	EASTERN MEDITERRANEAN SEA.
16	01 59 28*	51.3 N	178.6 E	46	4.1	RAT ISLANDS, ALEUTIAN ISLANDS.
16	05 15 10.0	4.6 S	105.5 W	16	4.6	NORTHERN EASTER I. CORDILLERA.
16	05 38 38.2	6.6 N	72.8 W	183	4.0	NORTHERN COLOMBIA.
16	05 40 30.4	38.6 N	140.8 E	76	4.3	HONSHU, JAPAN.
16	05 56 06*	12.7 S	166.4 E	172	4.4	SANTA CRUZ ISLANDS.
16	09 15 19*	60.5 N	146.1 W	29	4.0	SOUTHERN ALASKA.
16	11 29 41.5	38.2 N	38.9 E	28	4.9	TURKEY. FELT AT MALATYA AND ERZINCAN.
16	11 34 37.2	45.6 N	151.4 E	11	4.9	KURILE ISLANDS.
16	11 35 46.0	5.3 N	125.7 E	36	6.2	MINDANAO, PHILIPPINE ISLANDS. MAG. 5 3/4-6 (PAS).
16	15 19 02*	7.6 S	128.2 E	152	4.8	BANDA SEA.
16	15 51 16.1	5.2 N	82.4 W	33	4.8	SOUTH OF PANAMA.
16	17 36 14.7	44.8 N	111.4 W	15	4.2	HEBGEN LAKE REGION.
16	19 53 57*	6.5 N	72.8 W	189	3.4	NORTHERN COLOMBIA.
16	20 55 06*	52.1 N	175.2 W	33	4.3	ANDREANOF ISLANDS, ALEUTIAN IS.
16	21 06 07.9	51.5 N	174.7 E	31	4.3	NEAR ISLANDS, ALEUTIAN ISLANDS.
17	01 36 23*	51.1 N	177.8 E	33	4.5	RAT ISLANDS, ALEUTIAN ISLANDS.
17	01 38 05*	51.1 N	177.4 E	33	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
17	02 58 35*	4.8 N	125.8 E	103	5.1	TALAUD ISLANDS.
17	04 28 40.9	5.8 S	151.7 E	45	4.9	NEW BRITAIN REGION.
17	07 03 54*	45.5 N	151.2 E	33	4.6	KURILE ISLANDS.
17	07 26 21.3	18.2 N	67.8 W	69	4.1	MONA PASSAGE.
17	13 24 03.7	46.8 N	153.7 E	35	4.6	KURILE ISLANDS.
17	17 19 25.9	22.5 N	121.3 E	21	6.2	TAIWAN REGION. FELT AT HONG KONG AND CALAYON, PHILIPPINES. MAG. 6 1/2 (PAS), 5 3/4-6 (BRK), 7 (PAL).
17	18 05 45.4	21.1 S	175.2 W	75	4.9	TONGA ISLANDS.
17	20 10 10*	54.7 N	175.8 E	18	4.0	BERING SEA.
17	20 21 34.5	55.1 N	165.8 E	68	5.1	KOMANDORSKY ISLANDS REGION.
17	21 24 42.7	45.7 N	151.0 E	33	4.7	KURILE ISLANDS.
17	23 57 48.2	1.5 N	127.3 E	157	4.8	HALMAHERA.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
18	01 04 14.6	17.6 S	49.9 E	33	5.5	MALAGASAY REPUBLIC. FELT.
18	04 36 55*	51.2 N	176.0 E	33	4.3	RAT ISLANDS, ALEUTIAN ISLANDS.
18	06 19 21*	21.5 S	169.9 E	88		LOYALTY ISLANDS REGION.
18	08 04 23.3	25.2 N	142.8 E	10	4.8	VOLCANO ISLANDS REGION.
18	08 14 36.2	0.1 N	123.8 E	178	4.7	NORTHERN CELEBES.
18	08 51 09*	21.6 S	170.3 E	33		LOYALTY ISLANDS REGION.
18	08 52 01.5	18.0 S	168.5 E	143	5.0	NEW HEBRIDES ISLANDS.
18	09 35 06*	32.6 S	178.1 W	33		SOUTH OF KERMADEC ISLANDS.
18	10 27 13.4	13.2 N	49.8 E	33	4.5	EASTERN GULF OF ADEN.
18	10 48 58.6	44.4 N	149.0 E	15	4.3	KURILE ISLANDS.
18	12 08 51.4	29.3 N	128.3 E	34	4.8	EAST CHINA SEA.
18	15 26 37.2	32.6 S	70.4 W	117	4.5	CHILE-ARGENTINA BORDER REGION.
18	16 36 25.9	22.6 S	70.1 W	35	4.6	NEAR COAST OF NORTHERN CHILE.
18	16 37 41.7	20.0 S	177.3 W	516	4.7	FIJI ISLANDS REGION.
18	19 36 32*	8.9 N	83.5 W	33	3.9	COSTA RICA.
18	21 29 29.8	17.9 S	167.2 E	29	5.0	NEW HEBRIDES ISLANDS.
18	22 46 31.7	43.7 N	146.5 E	45	5.4	KURILE ISLANDS.
18	23 28 15.6	32.6 S	179.4 W	365		SOUTH OF KERMADEC ISLANDS.
19	01 06 11*	6.1 S	11.3 W	33	4.6	ASCENSION ISLAND REGION.
19	01 27 06.2	26.4 S	179.1 W	377	4.0	SOUTH OF FIJI ISLANDS.
19	02 00 47*	23.5 S	176.0 W	113	4.1	SOUTH OF FIJI ISLANDS.
19	02 13 47*	25.0 S	112.1 E	33		WESTERN AUSTRALIA.
19	03 00 59.0	9.2 S	159.0 E	50	5.6	SOLOMON ISLANDS. FELT AT HONIARA.
19	03 11 12.5	52.4 N	173.4 E	49	5.1	NEAR ISLANDS, ALEUTIAN ISLANDS.
19	03 51 25*	1.7 S	126.4 E	43	4.8	MOLUCCA SEA.
19	04 21 32.7	22.7 S	176.1 W	81	5.5	SOUTH OF FIJI ISLANDS. FELT ON TONGA.
19	04 38 29.9	22.3 S	176.4 W	98	5.0	SOUTH OF FIJI ISLANDS.
19	05 24 48*	60.9 N	155.7 W	33	4.1	SOUTHERN ALASKA.
19	06 03 58.9	6.5 S	105.4 E	74	6.3	SUNDA STRAIT. MAG. 5 1/2-5 3/4 (PAL).
19	06 17 12.0	27.6 N	110.9 W	33	5.0	GULF OF CALIFORNIA. MAG. 5 1/2-5 3/4 (PAL).
19	08 05 15*	1.8 S	79.5 W	71	4.1	ECUADOR.
19	10 58 26.6	4.9 N	76.2 W	98	4.8	COLOMBIA. FELT AT CALI AND CHINCHINA.
19	10 59 04.1	12.3 S	167.1 E	233	4.2	SANTA CRUZ ISLANDS.
19	11 50 38*	38.3 N	116.1 W	20	3.7	NEVADA.
19	13 07 40.7	5.9 N	82.5 W	22	4.1	SOUTH OF PANAMA.
19	13 59 55.2	4.8 S	152.3 E	70	5.6	NEW BRITAIN REGION. FELT AT RABAUL.
19	15 59 29.0	16.1 S	174.0 W	140	4.5	TONGA ISLANDS.
19	17 09 33.7	51.5 N	176.1 E	33	4.3	RAT ISLANDS, ALEUTIAN ISLANDS.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
19	17 50 04*	6.8 S	154.7 E	73	5.0	SOLOMON ISLANDS.
19	17 56 04.0	45.1 N	151.5 E	33	4.9	KURILE ISLANDS.
19	22 07 14.1	51.6 N	175.2 E	35	5.3	RAT ISLANDS, ALEUTIAN ISLANDS.
19	22 17 51.2	45.4 N	151.7 E	12	4.6	KURILE ISLANDS.
19	23 32 14.0	20.8 S	178.5 W	552	5.4	FIJI ISLANDS REGION. MAG. 4-4 1/4 (BRK).
20	00 40 10.9	14.7 S	167.4 E	16	5.6	NEW HEBRIDES ISLANDS. FELT. MAG. 6 3/4-7 (PAS), 7 (BRK), 7 1/4 (PAL).
20	01 04 51.7	14.4 S	167.4 E	27	5.0	NEW HEBRIDES ISLANDS.
20	02 03 33.5	40.8 S	175.9 E	49	5.6	NORTH ISLAND, NEW ZEALAND.
20	02 13 38.9	51.2 N	173.7 E	41	5.4	NEAR ISLANDS, ALEUTIAN ISLANDS.
20	02 42 13*	50.2 N	178.2 E	33	4.1	RAT ISLANDS, ALEUTIAN ISLANDS.
20	04 30 20*	15.7 S	167.4 E	115	4.2	NEW HEBRIDES ISLANDS.
20	05 29 43.3	14.5 S	167.3 E	21	4.5	NEW HEBRIDES ISLANDS.
20	08 44 20*	15.1 S	167.2 E	33	3.9	NEW HEBRIDES ISLANDS.
20	09 55 13.8	3.9 S	80.8 W	38	4.5	PERU-ECUADOR BORDER REGION.
20	12 01 49*	61.0 N	150.2 W	166	3.9	SOUTHERN ALASKA.
20	12 48 29*	4.3 N	125.3 E	33	4.6	TALAUD ISLANDS.
20	13 37 21.8	3.3 S	135.7 E	49	5.6	WEST NEW GUINEA REGION.
20	14 00 50*	2.2 N	99.6 E	75		NORTHERN SUMATRA.
20	14 06 55.6	1.8 N	99.1 F	73	4.8	NORTHERN SUMATRA.
20	14 25 18*	51.6 N	172.6 E	33		NEAR ISLANDS, ALEUTIAN ISLANDS.
20	14 35 53*	2.3 N	99.5 E	75	4.4	NORTHERN SUMATRA.
20	17 52 26.4	6.8 N	73.0 W	159	4.3	NORTHERN COLOMBIA.
20	20 37 41.4	45.1 S	167.6 E	105	5.5	SOUTH ISLAND, NEW ZEALAND. FELT IN SOUTHERN HALF OF SOUTH ISLAND.
20	22 51 45*	59.8 N	152.6 W	96	4.3	SOUTHERN ALASKA.
21	04 11 08*	14.0 S	166.8 E	113		NEW HEBRIDES ISLANDS.
21	04 13 51*	32.5 N	142.6 E	33	4.3	SOUTH OF HONSHU, JAPAN.
21	06 41 10*	59.4 N	153.4 W	73	3.8	SOUTHERN ALASKA.
21	07 23 29.3	19.7 N	71.6 W	33	4.2	DOMINICAN REPUBLIC REGION.
21	09 58 54*	14.8 S	166.8 E	9	4.3	NEW HEBRIDES ISLANDS. FELT AT LUGANVILLE.
21	11 24 25*	50.6 N	160.0 E	76	4.3	KURILE ISLANDS REGION.
21	13 08 52.110					37° 07' 07"N. 116° 01' 40"W. NEVADA TEST SITE "TWEED" SHOT ELEVATION 1027.8 METERS (AEC).
21	13 51 51.8					"TWEED" COLLAPSE.
21	15 54 20.2	48.5 S	166.7 E	33		OFF W. COAST OF S. ISLAND, N.Z.
21	18 41 08*	35.6 S	179.6 W	33		EAST OF NORTH ISLAND, N.Z.
21	22 58 02*	6.1 N	73.4 W	234	3.6	NORTHERN COLOMBIA.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
21	23 53 43*	51.9 N	174.5 E	33	4.7	NEAR ISLANDS, ALEUTIAN ISLANDS.
22	00 36 49*	20.4 S	70.0 W	33	4.6	NEAR COAST OF NORTHERN CHILE.
22	03 05 43.6	1.3 N	126.3 E	25	5.5	MOLUCCA PASSAGE.
22	03 52 04*	24.1 S	66.8 W	200	4.2	SALTA PROVINCE, ARGENTINA.
22	08 55 17.0	14.5 S	167.3 E	51	4.7	NEW HEBRIDES ISLANDS.
22	10 24 25.5	51.8 N	178.3 W	89	4.6	ANDREANOF ISLANDS, ALEUTIAN IS.
22	10 31 39.5	21.1 S	178.7 W	578	5.8	FIJI ISLANDS REGION. MAG. 5.9 (BRK).
22	13 19 04.5	14.5 S	167.1 E	27	5.1	NEW HEBRIDES ISLANDS.
22	14 10 45.0	14.7 S	167.4 E	17	4.7	NEW HEBRIDES ISLANDS. FELT AT SOLA AND LUGANVILLE.
22	15 25 11*	14.1 S	13.9 W	33	4.7	SOUTH ATLANTIC RIDGE.
22	16 09 29.5	14.1 S	13.8 W	33	5.5	SOUTH ATLANTIC RIDGE.
22	18 18 30*	21.5 S	67.2 W	200	4.1	CHILE-BOLIVIA BORDER REGION.
22	18 52 28.1	40.0 N	141.8 E	38	4.3	NEAR EAST COAST OF HONSHU, JAPAN.
22	19 53 23.8	14.7 S	167.5 E	24	4.6	NEW HEBRIDES ISLANDS. FELT ON SANTO.
23	01 37 00.2	52.3 N	172.8 E	35	4.8	NEAR ISLANDS, ALEUTIAN ISLANDS.
23	03 58 11*	39.9 N	143.5 E	33	4.8	OFF EAST COAST OF HONSHU, JAPAN.
23	04 13 35*	13.9 S	166.3 E	56		NEW HEBRIDES ISLANDS.
23	04 27 08*	51.1 N	179.6 E	47	4.2	RAT ISLANDS, ALEUTIAN ISLANDS.
23	07 04 16.8	28.6 N	142.8 E	33	4.5	BONIN ISLANDS REGION.
23	07 46 33.7	14.1 S	13.9 W	33	5.2	SOUTH ATLANTIC RIDGE.
23	09 48 38.2	17.5 N	145.8 E	129	4.5	MARIANA ISLANDS.
23	14 45 52*	36.4 N	140.9 E	48	4.4	NEAR EAST COAST OF HONSHU, JAPAN.
23	16 05 32.7	24.0 N	102.5 E	33		YUNNAN PROVINCE, CHINA.
23	19 15 07*	45.0 N	113.1 W	33	3.9	MONTANA.
23	23 11 02.0	12.0 N	70.3 W	33	4.7	NEAR COAST OF VENEZUELA.
23	23 46 12.0	52.2 N	175.0 E	22	6.1	RAT ISLANDS, ALEUTIAN ISLANDS. MAG. 6 (PAS), 5-5 1/2 (BRK), 5 1/2-5 3/4 (PAL).
24	03 39 22*	74.3 N	132.4 E	15	4.7	LAPTEV SEA.
24	05 02 11.8	9.5 S	113.0 E	67	5.0	SOUTH OF JAVA.
24	12 05 18*	42.8 N	111.4 W	33		EASTERN IDAHO.
24	13 22 00*	19.0 N	107.9 W	33	3.8	OFF COAST OF JALISCO, MEXICO.
24	13 48 28.8	38.0 N	141.6 E	29	5.0	NEAR EAST COAST OF HONSHU, JAPAN.
24	15 03 15.4	14.7 S	167.4 E	23	4.4	NEW HEBRIDES ISLANDS. FELT ON SANTO.
24	16 40 14*	0.1 S	124.3 E	72		MOLUCCA SEA.
24	23 21 10.6	13.0 N	124.5 E	33	5.9	LUZON, PHILIPPINE ISLANDS. MAG. 5 3/4-6 (PAL).
25	00 48 13.3	37.1 N	117.2 W	33	3.8	CALIFORNIA-NEVADA BORDER REGION. MAG. 4 (BRK).
25	01 30 11.9	22.0 N	144.2 E	98	4.4	VOLCANO ISLANDS REGION.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
25	05 21 03*	12.6 S	166.0 E	96		SANTA CRUZ ISLANDS.
25	05 55 43*	10.7 S	165.1 E	33	4.6	SANTA CRUZ ISLANDS.
25	06 17 37*	22.4 S	173.9 W	144	3.7	TONGA ISLANDS REGION.
25	08 58 41*	52.0 N	174.5 W	29		ANDREANOF ISLANDS, ALEUTIAN IS.
25	13 07 49.7	51.3 N	178.7 E	40	5.5	RAT ISLANDS, ALEUTIAN ISLANDS. MAG. 5 (BRK), 5 3/4-6 (PAL).
25	13 36 36.7	63.0 S	158.6 W	33		SOUTH PACIFIC CORDILLERA.
25	14 04 00*	52.3 N	176.3 E	33	4.2	RAT ISLANDS, ALEUTIAN ISLANDS.
25	16 22 52.0	19.3 S	69.6 W	109	4.8	NORTHERN CHILE.
25	17 23 41.0	35.8 S	179.4 E	31		OFF E. COAST OF N. ISLAND, N.Z.
25	18 34 28.4	17.0 S	175.9 E	16	5.2	FIJI ISLANDS REGION.
25	20 13 19*	17.2 S	175.9 E	33	4.6	FIJI ISLANDS REGION.
26	00 56 34.6	47.5 N	154.5 E	13	4.6	KURILE ISLANDS.
26	04 02 23*	16.3 S	173.0 E	33	4.2	FIJI ISLANDS REGION.
26	04 58 39.2	13.7 N	90.6 W	39	5.2	NEAR COAST OF GUATEMALA. MAG. 5 (BRK), 4 1/2-4 3/4 (PAL).
26	06 42 53.9	35.7 S	180.0 E	63	5.1	OFF E. COAST OF N. ISLAND, N.Z.
26	08 33 26.5	35.7 S	179.9 E	48	4.9	OFF E. COAST OF N. ISLAND, N.Z.
26	08 47 22.0	36.3 N	70.5 E	229	4.6	HINDU KUSH REGION.
26	13 58 03.0	35.3 N	44.6 E	54	4.7	IRAQ.
26	16 03 12*	45.5 N	145.9 E	172	4.3	HOKKAIDO, JAPAN REGION.
26	19 15 52.6	52.0 N	175.0 E	37	5.2	RAT ISLANDS, ALEUTIAN ISLANDS.
26	19 44 10.9	56.1 S	27.6 W	120	6.7	SOUTH SANDWICH ISLANDS REGION.
26	22 00 11.2	33.5 S	179.8 E	102	4.6	SOUTH OF KERMADEC ISLANDS.
26	23 19 11.2	28.5 S	178.1 W	169	4.1	KERMADEC ISLANDS.
26	23 32 03.9	45.4 N	151.3 E	33	4.8	KURILE ISLANDS.
27	01 29 28*	15.1 S	172.9 W	33		SAMOA ISLANDS REGION.
27	03 32 32.9	48.5 N	154.9 E	41	4.6	KURILE ISLANDS.
27	10 51 25.0	20.7 S	169.9 E	143	4.0	NEW HEBRIDES ISLANDS.
27	12 18 52*	24.2 S	65.9 W	190	4.5	SALTA PROVINCE, ARGENTINA.
27	12 29 45.6	14.8 N	94.2 W	21	4.2	OFF COAST OF CHIAPAS, MEXICO.
27	12 56 51*	53.9 N	164.9 W	33	5.0	UNIMAK ISLAND REGION.
27	13 05 55*	25.5 S	179.9 W	467	4.8	SOUTH OF FIJI ISLANDS.
27	13 56 47.5	52.7 N	171.8 E	33	4.5	NEAR ISLANDS, ALEUTIAN ISLANDS.
27	16 52 45*	18.8 N	64.3 W	42	4.2	VIRGIN ISLANDS.
27	19 29 25*	53.7 N	156.7 W	33	5.0	SOUTH OF ALASKA.
27	22 29 52.7	52.4 N	173.5 E	41	5.0	NEAR ISLANDS, ALEUTIAN ISLANDS.
28	00 53 01.4	18.1 S	177.9 W	571		FIJI ISLANDS REGION.
28	03 09 27*	51.3 N	179.1 E	59	4.8	RAT ISLANDS, ALEUTIAN ISLANDS.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
28	05 16 36.3	21.0 N	120.9 E	38	5.0	TAIWAN REGION.
28	05 52 09*	27.0 S	176.2 W	33	4.6	KERMADEC ISLANDS.
28	05 53 15*	51.0 N	178.6 E	33	4.6	RAT ISLANDS, ALEUTIAN ISLANDS.
28	06 41 48*	50.8 N	156.3 E	33	4.8	KURILE ISLANDS.
28	07 03 19*	47.5 N	152.9 E	33	4.6	KURILE ISLANDS.
28	08 18 51*	37.2 N	117.3 W	15	3.8	CALIFORNIA-NEVADA BORDER REGION.
28	08 34 51*	15.3 S	173.2 W	31	5.1	TONGA ISLANDS.
28	09 31 19.1	36.7 N	70.1 E	286	5.0	HINDU KUSH REGION.
28	18 14 10.1	51.6 N	174.5 E	67	5.0	NEAR ISLANDS, ALEUTIAN ISLANDS.
29	01 28 59.0	45.3 S	95.9 E	66	5.5	SOUTHEAST INDIAN RISE.
29	01 47 49.3	35.2 N	22.8 E	68	4.5	MEDITERRANEAN SEA.
29	03 57 46.8	24.1 S	179.7 E	529	4.5	SOUTH OF FIJI ISLANDS.
29	04 14 58.6	35.4 N	22.6 E	59	4.6	MEDITERRANEAN SEA.
29	04 25 11.9	9.9 S	74.1 W	33	4.1	PERU.
29	06 57 57*	29.7 N	129.8 E	60	4.9	RYUKYU ISLANDS.
29	07 30 09.8	18.7 S	169.3 E	234		NEW HEBRIDES ISLANDS.
29	11 44 32*	52.0 N	175.1 E	65	4.3	RAT ISLANDS, ALEUTIAN ISLANDS.
29	11 53 45.8	7.0 N	77.6 W	33	4.0	PANAMA-COLOMBIA BORDER REGION.
29	12 03 29*	39.5 N	110.0 W	33	3.2	UTAH.
29	13 21 28*	42.9 N	12.8 E	33	3.7	CENTRAL ITALY.
29	13 39 48*	42.9 N	13.0 E	33	3.9	CENTRAL ITALY.
29	15 36 31.9	57.8 S	147.3 W	33	5.5	SOUTH PACIFIC CORDILLERA.
29	16 12 14*	17.1 S	172.6 W	33	4.5	TONGA ISLANDS REGION.
29	19 14 25.6	1.7 S	126.7 E	17		MOLUCCA SEA.
29	22 56 13*	63.1 N	24.5 W	33	4.4	ICELAND REGION.
30	00 19 14*	33.7 N	117.6 W	16		SOUTHERN CALIFORNIA.
30	01 14 18.6	51.6 N	174.7 E	38	4.7	NEAR ISLANDS, ALEUTIAN ISLANDS.
30	02 09 03.9	17.0 S	167.8 E	38	4.9	NEW HEBRIDES ISLANDS. FELT ON AMBRIM.
30	02 28 18*	23.7 S	179.3 E	566	3.6	SOUTH OF FIJI ISLANDS.
30	02 37 07*	17.8 N	60.9 W	33	4.2	LEEWARD ISLANDS.
30	03 52 24.7	0.5 S	133.2 E	33	4.9	WEST NEW GUINEA REGION.
30	06 35 31*	14.1 S	173.5 W	8	4.4	SAMOA ISLANDS REGION.
30	07 21 56*	37.7 S	89.3 W	27	4.2	WEST CHILE RISE.
30	08 28 43.0	20.5 S	177.9 W	512	5.0	FIJI ISLANDS REGION.
30	08 48 17.9	26.0 N	95.8 E	88	5.8	BURMA-INDIA BORDER REGION.
30	09 12 46.0	19.0 N	121.1 E	49	4.6	PHILIPPINE ISLANDS REGION.
30	09 29 47*	15.0 S	167.3 E	50	4.3	NEW HEBRIDES ISLANDS.
30	11 38 41.4	36.5 N	70.1 E	220	4.9	HINDU KUSH REGION.

DATE 1965	ORIGIN TIME G. C. T.	LAT.	LONG.	FOCAL DEPTH	MAG CGS	REGION AND REMARKS
MAY	H M S	DEG	DEG	KM		
30	11 55 29.1	17.8 N	60.9 W	18	4.8	LEEWARD ISLANDS.
30	13 54 33.5	71.6 N	7.4 W	17	4.1	JAN MAYEN ISLAND REGION.
30	14 02 29*	22.0 S	68.5 W	124	4.4	NORTHERN CHILE.
30	17 31 04.1	39.4 N	106.3 W	33	4.3	COLORADO.
30	19 21 20*	1.7 N	97.9 W	33	4.6	WEST OF GALAPAGOS ISLANDS.
30	19 28 31*	1.8 N	98.2 W	33	4.5	WEST OF GALAPAGOS ISLANDS.
31	02 04 42.9	32.6 N	78.2 E	33	5.3	KASHMIR-TIBET BORDER REGION.
31	03 20 42*	49.3 N	127.8 W	11	4.7	VANCOUVER ISLAND REGION.
31	03 21 27*	23.2 S	177.0 W	94	4.6	SOUTH OF FIJI ISLANDS.
31	05 07 43.4	44.1 N	128.8 W	33	5.5	OFF COAST OF OREGON.
31	06 48 04*	50.9 N	178.0 E	33	4.5	RAT ISLANDS, ALEUTIAN ISLANDS.
31	08 38 07.5	35.7 N	139.6 E	124	5.5	NEAR S. COAST OF HONSHU, JAPAN. FELT.
31	09 22 21*	42.9 N	12.8 E	33	4.4	CENTRAL ITALY.
31	09 36 06.9	20.2 S	175.9 W	259	4.4	TONGA ISLANDS.
31	10 52 55.3	56.9 N	154.5 W	33	4.2	KODIAK ISLAND REGION.
31	11 15 37.2	42.9 N	12.8 E	33	4.4	CENTRAL ITALY.
31	11 23 45.9	31.4 N	141.9 E	40	4.8	SOUTH OF HONSHU, JAPAN.
31	11 38 28.0	7.5 S	128.7 E	37	6.0	BANDA SEA.
31	14 59 37.4	0.0 S	18.7 W	33	4.5	CENTRAL MID-ATLANTIC RIDGE.
31	17 27 28*	51.4 N	176.7 E	33	4.0	RAT ISLANDS, ALEUTIAN ISLANDS.
31	20 20 15*	60.4 N	146.9 W	33	3.9	SOUTHERN ALASKA.
31	20 46 54.4	11.1 N	86.0 W	28	4.7	NEAR COAST OF NICARAGUA.
31	23 27 10.4	57.4 N	152.7 W	33	4.1	KODIAK ISLAND REGION.
31	23 37 09.2	42.9 S	171.3 E	33	4.9	SOUTH ISLAND, NEW ZEALAND.

Date and Station	Phase (GCT)
	h m s
MAY 1	
TUC E(P)	00 10 41.0
MAY 1	
ALQ E(P)	00 26 19.5
I	30 19.0
TUC E(P)	00 26 45.7
BCN EP	00 27 21.0
EL	28 46.5
MAY 1	
TUC E(P)	01 27 19.5
MAY 1	
H-01 58 02.9	
60.4N 145.9W	
h ABOUT 13KM	
COL IP C	01 59 14.3
SIT E(P)	01 59 36.0
BRW IP	02 00 51.3
I	01 00.5
HHM E(P)	02 01 58.0
EL	10 16.0
BUT EP	02 03 21.4
BOZ EP	02 03 27.0
ES	08 16.0
EL	10 28.0
RCD EP	02 04 17.0
BCN EP	02 04 26.8
ALQ IP	02 05 04.8
TUC FP	02 05 08.9
MAY 1	
H-02 16 11.4	
33.4N 138.7E	
h ABOUT 230KM	
COL IP	02 25 08.7
MAY 1	
COL EP	02 49 11.0
MAY 1	
COL FP	03 09 52.0
MAY 1	
BCN EP	04 04 01.7
EL	04 27.6
TUC E(P)	04 04 13.9
MAY 1	
H-04 11 19.1	
30.9N 141.7E	
h ABOUT 38KM	
GUA EP	04 15 21.7
ES	18 45.0
COL EP	04 20 42.0
BUT E(P)	04 23 04.0

Date and Station	Phase (GCT)
	h m s
TUC E(P)	04 24 03.7
MAY 1	
ALQ E(P)	08 59 44.0
MAY 1	
COL EP	12 02 15.0
MAY 1	
TUC EP	12 24 03.0
MAY 1	
H-13 02 44.5	
12.3N 143.7E	
h ABOUT 5KM	
GUA IP	13 03 15.0
IS	03 38.0
KIP IP	13 12 28.9
I	12 38.5
BRW IP	13 13 52.2
COL IP	13 13 56.7
HHM E(P)	13 15 38.0
BUT EP	13 15 50.9
BOZ EP	13 15 55.5
BCN EP	13 15 57.0
SLC EP	13 16 00.8
TUC E(P)	13 16 16.5
RCD EP	13 16 21.0
ALQ IP	13 16 27.8
MAY 1	
BHP IP C	16 07 15.0
IS	08 33.0
MAY 1	
H-16 35 39.1	
6.8N 072.8W	
h ABOUT 167KM	
SJG EP	16 38 40.5
ES	40 56.4
ALQ EP	16 43 08.2
TUC EP	16 43 28.0
BCN EP	16 44 06.0
COL E(P)	16 47 03.3
MAY 1	
TUC E(P)	19 00 33.4
MAY 1	
H-19 09 10.1	
29.9N 127.9E	
h ABOUT 114KM	
COL EP	19 19 14.0

Date and Station	Phase (GCT)
	h m s
MAY 1	
H-19 53 15.8	
53.4N 172.6W	
h ABOUT 33KM	
COL E(P)	19 57 12.5
I	57 21.0
TUC EP	20 01 54.7
MAY 1	
BCN EP	21 03 45.5
MAY 1	
H-21 27 54.4	
60.4N 146.0W	
h ABOUT 33KM	
COL IP	21 29 03.5
IS	30 00.0
SIT IP	21 29 30.0
HHM E(P)	21 32 45.0
EL	39 30.0
BUT EP	21 33 09.4
EL	41 07.0
SLC EP	21 33 50.8
RCD E(P)	21 33 56.2
E(S)	39 04.0
BCN EP	21 34 16.0
E	35 11.3
ALQ IP	21 34 53.4
IL	41 06.4
TUC FP	21 34 58.0
KIP EP	21 35 25.8
WSC E(P)	21 36 22.3
E	52 09.7
CSC E(P)	21 36 40.0
SJG E(P)	21 39 06.5
WAS E	21 51 45.0
EL	55 44.0
MAY 1	
BCN EP	21 40 51.5
MAY 1	
TUC EP	21 57 33.9
ES	57 51.5
MAY 1	
H-22 10 25.6	
19.1N 108.1W	
h ABOUT 33KM	
TUC E(P)	22 13 35.4
E	13 44.5
ALQ IP	22 14 09.0
BCN EP	22 14 35.0
E	14 43.0

Date and Station	Phase (GCT)
	h m s
SLC EP	22 15 17.3
RCD EP D	22 15 51.0
SJG EP	22 17 57.0
COL EP	22 19 38.0
MAY 1	
H-23 45 31.5	
01.7S 077.9W	
h ABOUT 167KM	
ALQ IP	23 53 34.6
E	54 10.5
TUC EP	23 53 39.6
MAY 2	
H-00 03 22.2	
30.9N 141.8E	
h ABOUT 33KM	
GUA E(P)	00 07 26.0
COL IP	00 12 46.5
BUT EP	00 15 20.0
BOZ EP	00 15 24.0
EUR IP	00 15 27.8
MAY 2	
H-00 34 49.8	
30.9N 141.8E	
h ABOUT 33KM	
COL EP	00 44 13.7
BOZ EP	00 46 51.6
MAY 2	
COL FP	00 50 34.7
MAY 2	
KIP IP	01 17 04.5
MAY 2	
KIP EP	01 26 04.5
MAY 2	
COL FP	05 10 09.0
BOZ IP	05 15 13.0
MAY 2	
H-05 47 43.9	
19.8S 069.5W	
h ABOUT 117KM	
SJG EP	05 54 48.2
IPP	55 13.8
ISP	55 23.5
ES	06 00 26.0
CSC E(P)	05 57 04.0
ALQ IP	05 58 08.5
TUC E(P)	05 58 16.7
RCD IP D	05 58 50.0

Date and Station	Phase	(GCT) h m s
EUR	IP	05 59 07.2
BOZ	EP	05 59 19.2
MAY 2		
H-07 13 42.0		
28.9N 128.9E		
h ABOUT 30KM		
GUA	EP	07 18 27.0
	EL	22 33.0
COL	EP	07 23 54.0
BOZ	EP	07 26 28.0
	E	26 36.0
BUT	E(P)	07 26 32.0
EUR	E(P)	07 26 36.2
BCN	EP	07 26 53.0
MAY 2		
GUA	IP	07 43 25.0
	IS	43 38.0
MAY 2		
BOZ	EP	08 13 38.5
	E	13 50.5
EUR	IP	08 13 48.2
MAY 2		
H-08 31 35.5		
51.7N 173.5E		
h ABOUT 33KM		
COL	IP	08 36 45.8
BOZ	EP	08 40 10.5
EUR	IP	08 40 20.5
MAY 2		
H-09 05 32.0		
51.9N 142.9E		
h ABOUT 5KM		
BOZ	EP	09 16 07.0
EUR	IP	09 16 23.1
MAY 2		
H-10 52 13.5		
20.3S 178.9W		
h ABOUT 581KM		
KIP	IP	10 59 49.5
BCN	EP	11 03 37.5
EUR	IP	11 03 42.4
TUC	E(P)	11 03 43.0
COL	IP	11 04 02.7
ALQ	IP D	11 04 03.0
BOZ	IP	11 04 11.0
MAY 2		
FGU	IP	10 59 52.8
MAY 2		
H-12 46 30.9		
18.8N 108.1W		
h ABOUT 27KM		
TUC	E(P)	12 49 45.5
ALQ	IP	12 50 22.4
EUR	IP	12 51 23.2
MAY 2		
EUR	EP	14 25 42.0
MAY 2		
COL	EP	15 28 14.7
MAY 2		
EUR	IP	18 26 20.2
MAY 2		
H-18 30 03.5		
51.2N 174.1E		
h ABOUT 33KM		
COL	EP	18 35 16.0
BOZ	EP	18 38 37.5
	I	38 48.5
EUR	IP	18 38 46.9
MAY 2		
EUR	IP	22 00 25.3
MAY 2		
BCN	IP C	22 31 42.5
	IS	31 44.7
MAY 2		
EUR	EP	23 10 28.9
MAY 2		
ALQ	IP	23 50 04.5
MAY 2		
EUR	IP	23 52 33.7
MAY 3		
SJG	IP	00 03 22.5
MAY 5		
BCN	IP C	00 05 24.2
	IS	05 25.7
MAY 3		
H-01 09 31.5		
32.5S 070.6W		
h ABOUT 77KM		
SJG	IP D	01 18 21.5
	E	20 18.5
TUC	E(P)	01 20 00.7
CSC	E(P)	01 20 18.0
WSC	IP	01 20 44.7
	EPP	21 09.3
	EPP	23 27.0
TUC	EP	01 21 05.0
	EPP	21 29.6
ALQ	IP	01 21 07.4
	I	25 06.0
BCN	EP	01 21 34.0
	E	22 08.0
RCD	IP D	01 21 43.5
	EPP	22 09.0
EUR	IP	01 21 50.9
MAY 3		
H-01 17 51.4		
3.4N 084.1W		
h ABOUT 33KM		
SJG	EP	01 22 55.5
MAY 3		
BUT	EP	02 48 16.6
	IL	48 27.1
MAY 3		
GUA	E(P)	03 19 10.0
MAY 3		
H-03 30 50.1		
36.0N 114.7W		
h ABOUT 5KM		
BCN	IP C	03 30 54.0
EUR	IP	03 31 47.6
MAY 3		
BCN	IP D	03 46 50.5
	IS	46 52.5
MAY 3		
BCN	IP D	03 52 50.0
	IS	52 52.0
MAY 3		
H-03 57 02.1		
12.1S 014.8W		
h ABOUT 33KM		
BCN	I(P)	04 11 20.5
	IS	11 22.2
MAY 3		
BHP	IP C	08 34 23.5
	IS	34 43.6
MAY 3		
H-10 01 35.2		
13.5N 089.3W		
h ABOUT 23KM		
BHP	IP D	10 04 07.0
	IS	06 08.0
CSC	EP	10 06 27.0
	E	06 34.0
	EPP	06 52.0
	EL	10 32.0
SJG	EP	10 06 36.5
	ES	10 47.0
ALQ	IP	10 07 12.4
	IS	11 52.0
TUC	E(P)	10 07 20.5
	E(S)	12 03.0
WSC	EP	10 07 22.9
	E(L)	14 05.9
WAS	EP	10 07 23.0
	ES	12 08.0
BCN	EP	10 08 04.5
	E	09 13.5
	EL	19 26.0
RCD	EP	10 08 09.0
	ES	13 20.0
SLC	EP	10 08 16.6
HHM	E(P)	10 08 18.0
EUR	IP	10 08 30.5
BUT	EP	10 08 53.1
	EPP	10 25.1
	EL	18 53.1
COL	IP	10 12 11.9
BRW	EP	10 12 46.5
	E	12 54.8
HON	ES	10 21 17.0
	EL	29 04.0
MAY 3		
FGU	IP	10 01 53.7
MAY 3		
BOZ	EP	10 10 18.0
	E	14 30.0
MAY 3		
H-10 58 39.3		
30.7S 177.3W		
h ABOUT 33KM		
EUR	EP	11 11 38.0
MAY 3		
ALQ	IP	11 04 09.5
MAY 3		
H-12 44 51.9		
51.3N 174.5E		
h ABOUT 39KM		
BRW	E(P)	12 49 02.6
COL	IP	12 50 01.8
EUR	IP	12 53 33.8
RCD	EP	12 54 07.5
	EPP	54 18.2
ALQ	EP	12 54 38.0
	IS	13 03 08.5
TUC	E(P)	12 54 43.5
MAY 3		
H-12 51 57.2		
26.8S 069.8W		
h ABOUT 19KM		

Date and Station	Phase (GCT)
	h m s
ALQ IP	13 03 08.5
EUR IP	13 04 02.0
MAY 3	
COL IP	14 40 02.7
MAY 3	
H-15 15 25.6	
20.3S 177.6W	
h ABOUT 483KM	
COL EP	15 27 24.0
MAY 3	
COL E(P)	15 29 18.6
EUR IP	15 32 08.7
MAY 3	
H-16 02 14.5	
18.5N 146.0E	
h ABOUT 123KM	
GUA EP	16 03 29.0
E(S)	04 29.0
MAY 3	
H-16 09 09.0	
24.2S 067.8W	
h ABOUT 114KM	
SJG EP	16 16 49.0
EPP	18 31.5
ALQ IP	16 20 05.5
TUC EP	16 20 07.3
FGU I(P)	16 20 28.6
BCN IP D	16 20 37.6
RCD IP	16 20 40.5
E	20 44.0
SLC IP	16 20 47.9
EUR IP	16 20 55.4
BUT EP	16 21 12.2
COL IP	16 23 15.1
EP'	27 22.0
GUA IP'	16 28 42.0
MAY 3	
H-17 40 58.4	
52.0N 175.8E	
h ABOUT 42KM	
COL EP	17 45 56.0
BRW IP	17 46 01.0
EPCP	49 50.0
EUR IP	17 49 31.8
TUC E(P)	17 50 29.0
MAY 3	
BCN IP	19 08 48.2
IS	09 00.0

Date and Station	Phase (GCT)
	h m s
MAY 3	
COL EP	19 21 10.0
MAY 3	
COL EP	19 25 02.0
MAY 3	
TUC E(P)	20 54 24.5
MAY 3	
H-21 02 12.0	
31.5N 141.1E	
h ABOUT 88KM	
BRW EP	21 11 13.2
MAY 3	
TUC EP	21 19 08.0
ES	19 27.5
MAY 3	
COL EP	21 43 35.0
MAY 3	
TUC EP	22 00 36.0
ES	00 53.0
MAY 4	
H-02 02 13.8	
01.7S 138.6E	
h ABOUT 48KM	
SJG EP'	02 22 13.5
MAY 4	
H-02 22 39.1	
26.2N 126.3E	
h ABOUT 95KM	
GUA E(P)	02 27 21.3
COL EP	02 33 09.0
MAY 4	
H-03 40 43.4	
56.2S 027.7W	
h ABOUT 33KM	
COL IP'	04 00 28.0
BRW IP'	04 00 36.7
E	00 51.7
MAY 4	
H-05 11 48.3	
31.7N 049.1E	
h ABOUT 17KM	
COL EP	05 24 12.0
MAY 4	
H-05 17 36.9	
00.7N 125.6E	
h ABOUT 60KM	
BRW EP	05 30 10.3
MAY 4	
BRW EP	07 56 26.1
MAY 4	
H-08 00 23.3	
30.0N 127.2E	
h ABOUT 75KM	

Date and Station	Phase (GCT)
	h m s
COL EP	08 10 33.0
MAY 4	
H-08 34 39.8	
41.7N 079.4E	
h ABOUT 6KM	
BRW IP	08 44 52.4
I	45 04.7
E	47 21.5
COL IP	08 45 37.7
BUT E(P)	08 46 50.3
HHM EP	08 47 40.0
FGU E(P)	08 48 03.6
RCD EP	08 48 04.0
SLC E(P)	08 48 14.8
EUR I(P)	08 48 24.9
ALQ E(P)	08 48 41.5
I(S)	58 36.5
MAY 4	
H-08 39 57.6	
07.3S 129.3E	
h ABOUT 155KM	
BRW EP	08 52 47.8
COL EP	08 52 55.0
MAY 4	
TUC E(P)	08 52 30.5
BCN E(P)	08 53 04.5
MAY 4	
H-12 10 41.1	
16.5S 073.2W	
h ABOUT 78KM	
ALQ IP	12 20 42.4
EUR IP	12 21 38.3
MAY 4	
H-18 03 57.7	
20.1S 173.9W	
h ABOUT 33KM	
TUC E(P)	18 16 04.5
EUR IP	18 16 07.8
SLC E(P)	18 16 27.7
COL IP	18 16 41.7
MAY 4	
FUR FP	18 14 48.1
MAY 4	
GUA EP	18 29 31.3
ES	29 55.0
MAY 4	
TUC E(P)	20 56 47.8
E(L)	57 20.0

Date and Station	Phase (GCT)
	h m s
MAY 4	
H-22 38 51.3	
32.2N 141.2E	
h ABOUT 175KM	
COL EP	22 47 54.0
MAY 4	
EUR IP	22 40 07.0
MAY 4	
BCN IP	23 01 30.6
IS	01 42.5
MAY 4	
TUC E(P)	23 52 52.8
MAY 5	
H-00 17 05.8	
19.6S 169.3E	
h ABOUT 142KM	
COL IP	00 29 49.6
EUR EP	00 29 55.0
MAY 5	
HHM E(P)	02 10 18.0
FL	10 50.0
BOZ FP	02 10 31.0
E	11 20.0
MAY 5	
H-03 00 43.4	
20.5S 069.5W	
h ABOUT 96KM	
SJG EP	03 07 54.7
TUC E(P)	03 11 20.3
BCN EP	03 11 52.0
EUR IP	03 12 10.2
MAY 5	
SJG IP D	03 19 56.4
IS	20 09.5
MAY 5	
H-07 09 29.3	
17.0S 176.9W	
h ABOUT 33KM	
BCN EP	07 21 34.0
EUR IP	07 21 37.1
TUC EP	07 21 37.5
COL IP	07 21 59.6
ALQ FP	07 22 01.0
BOZ FP	07 22 08.0
MAY 5	
HHM IP	07 25 27.1
IL	25 35.0

Date and Station	Phase (GCT)
	h m s
MAY 5	
H-09 13 56.7	
13.9S 075.9W	
h ABOUT 94KM	
ALQ IP	09 23 32.0
TUC EP	09 23 34.0
FGU I(P)	09 24 03.4
BOZ IP	09 24 45.4
E	25 14.0
COL EP	09 27 09.0
MAY 5	
H-09 17 24.5	
61.0N 145.1W	
h ABOUT 45KM	
COL IP	09 18 25.9
BRW EP	09 20 05.7
E	20 15.6
BOZ EP	09 22 42.0
E	22 47.0
EUR IP	09 23 15.9
MAY 5	
H-09 30 59.9	
19.9S 174.1W	
h ABOUT 33KM	
EUR IP	09 43 10.2
ALQ EP	09 43 29.2
BOZ EP	09 43 41.0
COL EP	09 43 43.0
SJG EP'	09 49 58.0
E	50 30.0
MAY 5	
H-09 59 03.4	
7.1S 153.8E	
h ABOUT 73KM	
COL EP	10 11 24.0
EUR IP	10 12 19.3
MAY 5	
H-17 45 18.1	
29.3N 128.5E	
h ABOUT 61KM	
BRW F(P)	17 55 13.0
BOZ EP	17 58 03.0
MAY 5	
H-18 01 13.6	
29.1N 128.5E	
h ABOUT 33KM	
BRW E(P)	18 11 03.7
BOZ FP	18 14 02.0
MAY 5	
COL EP	18 56 25.4
BRW EP	18 58 08.2
MAY 5	
BOZ IP	21 32 00.0
IL	33 05.0
MAY 5	
SJG IP	21 40 22.5
IS	40 59.0
IL	41 06.5
MAY 5	
H-21 33 54.9	
42.9N 145.7E	
h ABOUT 33KM	
BRW IP	21 41 24.7
E	41 38.3
COL IP	21 41 47.1
BOZ IP	21 44 54.8
EUR IP	21 45 03.6
MAY 5	
GUA IP	22 13 16.2
ES	14 12.5
MAY 5	
BOZ EP	22 20 52.0
MAY 5	
SLC EP	22 26 32.9
MAY 5	
EUR IP	22 48 56.0
MAY 5	
SJG EP	22 54 16.0
IL	55 11.5
MAY 5	
H-23 02 01.7	
52.6N 173.5E	
h ABOUT 32KM	
BRW IP	23 07 05.8
I▸P	07 17.9
IPCP	10 54.3
COL IP	23 07 07.5
KIP EP	23 09 19.1
E	12 27.8
HHM EP	23 10 12.1
E▸P	10 22.9
EUR IP	23 10 45.3
RCD EP D	23 11 18.0
E▸P	11 29.0
TUC EP	23 11 44.0
CSC E(P)	23 13 26.5
MAY 5	
H-23 23 24.9	
14.7N 146.2E	
h ABOUT 56KM	
GUA IP	23 23 52.5
I(S)	24 14.5
BRW EP	23 34 07.5
E	34 18.9
COL IP	23 34 11.1
EUR I(P)	23 35 06.0
HHM E(P)	23 36 01.0
EUR IP	23 36 05.3
BUT IP	23 36 08.2
BOZ FP	23 36 12.1
E	36 20.0
TUC EP	23 36 34.9
MAY 6	
H-01 42 22.0	
17.7S 179.0W	
h ABOUT 528KM	
EUR EP	01 53 46.1
TUC E(P)	01 53 48.9
SJG EP'	02 00 40.5
F	01 18.0
MAY 6	
H-02 25 12.0	
25.0S 068.4W	
h ABOUT 90KM	
SJG EP	02 33 01.5
ALQ IP D	02 36 14.6
E	36 21.5
TUC EP	02 36 15.7
BCN EP	02 36 45.6
EUR IP	02 37 03.8
BOZ IP	02 37 16.5
E	37 45.0
BUT IP	02 37 20.4
MAY 6	
H-04 22 53.9	
52.6N 172.3E	
h ABOUT 33KM	
BRW EP	04 27 59.6
COL EP	04 28 04.0
BOZ EP	04 31 32.0
EUR FP	04 31 43.1
MAY 6	
BHP IP	05 03 08.0
IS	03 36.5
MAY 6	
COL EP	06 06 10.0
MAY 6	
EUR EP	07 08 49.5
I	09 54.7
MAY 6	
BUT E(P)	07 25 35.0
FS	25 58.0
MAY 6	
BOZ E(P)	07 26 00.0
EL	26 29.0
MAY 6	
EUR EP	07 31 48.1
MAY 6	
SJG IP D	08 07 07.0
IS	07 22.0
MAY 6	
SJG EP	08 34 00.6
EL	34 30.1
MAY 6	
H-09 52 23.4	
15.5S 167.6E	
h ABOUT 97KM	
EUR E(P)	10 05 12.2
MAY 6	
H-14 24 04.3	
06.1S 149.1E	
h ABOUT 74KM	
GUA EP	14 28 33.2
EL	32 23.0
BRW IP	14 36 32.9
E	36 53.4
EUR IP	14 37 33.7
BOZ EP	14 37 47.5
MAY 6	
BCN IP	19 11 48.3
IS	12 00.5
MAY 6	
H-19 49 03.8	
18.8N 108.0W	
h ABOUT 33KM	
TUC E(P)	19 52 18.0
BCN EP	19 53 16.5
E▸P	53 27.2
EUR IP	19 53 55.6
SLC EP	19 53 58.0
BOZ FP	19 54 45.0

Date and Station	Phase (GCT)
	h m s
MAY 6	
H-19 55 01.0	
19.1N 108.0W	
h ABOUT 33KM	
TUC EP	19 58 11.3
F	58 20.3
ALQ IP	19 58 45.0
BCN EP	19 59 10.5
EpP	59 19.0
EUR IP	19 59 48.8
SLC IP	19 59 53.7
RCD EP	20 00 26.5
EL	08 20.0
BOZ IP	20 00 38.9
E	01 29.0
E	01 51.0
BRW E(P)	20 04 00.2
COL E(P)	20 04 09.0
MAY 6	
COL EP	20 23 29.0
MAY 6	
BRW EP	22 15 37.1
COL EP	22 15 42.0
MAY 6	
H-23 38 38.1	
9.5N 124.1E	
h ABOUT 551KM	
BRW IP	23 49 38.6
MAY 7	
BOZ EP	00 08 03.0
MAY 7	
H-01 03 02.8	
36.2N 055.0E	
h ABOUT 33KM	
COL I(P)	01 14 56.4
MAY 7	
COL EP	01 59 21.0
MAY 7	
H-02 29 03.9	
13.9N 145.4E	
h ABOUT 57KM	
GUA IP	02 29 17.0
BRW IP	02 39 52.0
COL IP	02 39 56.0
HHM E(P)	02 41 43.0
EUR IP	02 41 49.3
BOZ EP	02 41 55.0

Date and Station	Phase (GCT)
	h m s
MAY 7	
BRW EP	04 09 21.5
COL EP	04 09 43.0
MAY 7	
SJG IP	05 10 53.0
IS	11 08.0
MAY 7	
GUA EP	05 44 31.1
ES	44 40.5
MAY 7	
COL EP	06 38 22.0
TUC E(P)	06 39 21.5
MAY 7	
H-06 39 39.0	
18.6N 108.0W	
h ABOUT 33KM	
ALQ EP	06 43 30.6
MAY 7	
H-07 31 46.5	
30.2N 129.0E	
h ABOUT 131KM	
GUA E(P)	07 36 31.0
E(S)	40 16.0
BRW EP	07 41 21.0
COL EP	07 41 45.0
BUT E(P)	07 44 13.0
BOZ EP	07 44 17.0
EUR IP	07 44 23.8
MAY 7	
EUR EP	08 52 05.8
MAY 7	
BOZ EP	10 14 34.0
MAY 7	
H-12 07 58.9	
17.5S 179.1W	
h ABOUT 546KM	
EUR IP	12 19 21.8
COL IP	12 19 38.9
ALQ EP	12 19 44.0
BOZ EP	12 19 50.0
MAY 7	
H-13 02 24.5	
56.0S 027.6W	
h ABOUT 102KM	
BOZ EP'	13 21 10.0
COL EP'	13 21 54.0
I	22 02.3
BRW EP'	13 22 13.2

Date and Station	Phase (GCT)
	h m s
MAY 7	
EUR IP	13 31 10.9
MAY 7	
H-14 32 37.0	
41.2N 073.8E	
h ABOUT 30KM	
COL EP	14 43 44.0
MAY 7	
BOZ E(P)	14 33 07.0
E	33 43.0
MAY 7	
H-15 43 23.0	
32.5S 178.2W	
h ABOUT 33KM	
EUR EP	15 56 28.0
COL E(P)	15 57 07.6
MAY 7	
H-15 47 11.2	
37.2N 116.0W	
h ABOUT 000KM	
BCN IP C	15 47 39.7
IS	48 04.5
EUR IP	15 47 51.6
SLC EP	15 48 30.2
I	48 44.9
TUC EP	15 48 30.5
ALQ EP	15 48 31.5
BOZ EP	15 49 31.0
MAY 7	
SJG IP D	15 51 06.0
IS	51 19.0
MAY 7	
H-16 32 30.6	
32.4S 178.3W	
h ABOUT 33KM	
EUR EP	16 45 37.2
COL E(P)	16 46 27.0
MAY 7	
H-16 52 11.9	
32.5S 178.2W	
h ABOUT 33KM	
EUR EP	17 05 19.2
MAY 7	
SJG EP	17 58 40.7
IL	59 25.8
MAY 7	
BOZ EP	18 06 23.0
MAY 7	
H-19 11 16.6	
51.2N 178.1E	
h ABOUT 33KM	

Date and Station	Phase (GCT)
	h m s
COL EP	19 16 11.0
BRW E(P)	19 16 21.5
BOZ EP	19 19 33.0
MAY 7	
BOZ EP	20 28 28.5
MAY 7	
SJG EP	21 11 41.0
IL	12 37.5
MAY 7	
COL IP	21 35 14.8
MAY 7	
BOZ E(P)	21 49 33.0
MAY 7	
H-22 44 17.2	
52.7N 175.6W	
h ABOUT 200KM	
COL EP	22 48 22.2
MAY 7	
H-23 56 11.6	
22.2S 068.5W	
h ABOUT 84KM	
SJG IP	24 03 37.2
IS	09 31.0
IsS	10 17.5
ESS	12 50.0
CSC EP	24 05 50.0
EpP	06 18.0
ES	13 17.0
WSC EP	24 06 19.6
E(pP)	06 49.0
EsP	07 01.0
ALQ IP	24 06 58.8
TUC EP	24 07 01.8
IpP	07 30.4
BCN EP	24 07 32.7
EpP	08 00.4
RCD IP C	24 07 36.0
E	07 39.0
FGU IP	24 07 36.2
SLC IP	24 07 42.8
EUR IP	24 07 50.5
BUT IP	24 08 07.0
IpP	08 36.9
COL EP	24 10 12.0
MAY 8	
H-01 22 31.6	
80.2N 122.9E	
h ABOUT 33KM	
BRW EP	01 26 59.0
COL EP	01 28 14.0

Date and Station	Phase	(GCT)
		h m s
BOZ	EP	01 31 29.5
	E	31 38.5
EUR	EP	01 32 11.8
MAY 8		
KIP	IP	01 31 35.9
	IS	31 41.2
MAY 8		
H-03 05 38.5		
18.4N 120.4E		
h ABOUT 56KM		
BRW	E(P)	03 16 57.0
COL	EP	03 17 12.0
MAY 8		
H-03 53 59.1		
55.6S 122.7W		
h ABOUT 33KM		
TUC	E(P)	04 06 46.5
MAY 8		
COL	EP	09 34 03.0
MAY 8		
H-11 32 57.1		
28.0S 070.8W		
h ABOUT 35KM		
SJG	EP	11 41 17.6
	EPCP	42 44.5
WSC	EP	11 43 47.7
TUC	IP C	11 44 13.2
	I▸P	44 25.4
ALQ	IP	11 44 13.6
BCN	EP C	11 44 42.9
	E▸P	44 55.4
FGU	IP	11 44 51.5
RCD	IP D	11 44 52.7
	I▸P	45 04.5
	E	45 08.5
EUR	IP	11 45 01.6
BOZ	IP	11 45 16.3
	E▸P	45 29.0
HHM	EP	11 45 32.1
	E(▸P)	45 47.3
COL	E(P)	11 47 11.6
MAY 8		
H-12 24 45.1		
50.8N 177.1W		
h ABOUT 040KM		
COL	EP	12 29 47.0
BRW	EP	12 29 55.0
BOZ	EP	12 33 06.2
	I▸P	33 17.9
EUR	IP	12 33 15.4
ALQ	E(P)	12 34 21.0
	E▸P	34 33.0
MAY 8		
TUC	E(P)	12 54 55.0
BCN	EP	12 55 26.0
ALQ	EP	12 55 57.8
EUR	EP	12 56 16.1
	I	58 44.2
MAY 8		
H-16 51 42.0		
50.0N 177.4E		
h ABOUT 33KM		
BOZ	EP	17 00 05.0
EUR	IP	17 00 13.1
MAY 8		
COL	EP	17 33 55.0
BRW	E(P)	17 34 08.5
MAY 8		
BOZ	EP	20 44 04.9
	I	44 13.0
MAY 9		
HON	EP	01 31 34.8
	I(S)	31 39.0
KIP	IP	01 31 35.9
	IS	31 41.2
MAY 9		
EUR	IP	01 41 37.1
ALQ	E(P)	01 41 46.0
BCN	EP	01 41 47.5
TUC	EP	01 41 57.2
MAY 9		
COL	EP	03 22 49.0
BRW	E(P)	03 23 20.0
MAY 9		
H-04 02 50.5		
12.3N 144.0E		
h ABOUT 23KM		
GUA	IP D	04 03 17.3
BRW	IP	04 13 53.6
COL	EP	04 13 57.0
EUR	IP	04 15 50.2
BOZ	EP	04 15 55.3
MAY 9		
BCN	IP	08 54 34.2
	IL	54 56.5
EUR	EP	08 55 11.6
MAY 9		
BRW	EP	09 54 03.7
COL	EP	09 54 46.0
MAY 9		
GUA	IP	10 35 54.0
	IS	36 07.0
MAY 9		
H-10 59 51.3		
56.2N 148.6W		
h ABOUT 33KM		
COL	EP	11 01 57.0
BRW	EP	11 03 27.8
MAY 9		
H-11 28 45.5		
54.2N 163.4W		
h ABOUT 33KM		
COL	EP	11 31 54.0
BRW	EP	11 32 48.5
EUR	EP	11 35 36.4
MAY 9		
H-13 32 34.1		
03.0S 139.6E		
h ABOUT 37KM		
HON	IP	13 43 17.5
	I	43 33.0
KIP	IP	13 43 17.7
	I	43 33.4
BRW	IP	13 45 05.8
COL	EP	13 45 08.0
SJG	EP'	13 52 24.0
	E	52 42.0
MAY 9		
H-14 11 08.1		
06.5N 082.5W		
h ABOUT 56KM		
BHP	IP	14 12 04.5
	IS	12 49.0
SJG	EP	14 15 36.2
CSC	EP	14 16 50.0
WSC	EP	14 17 37.5
ALQ	IP	14 18 05.2
TUC	E(P)	14 18 12.0
BCN	EP	14 18 51.4
	EPP	20 37.2
FGU	IP	14 18 55.7
SLC	EP	14 19 04.2
EUR	IP	14 19 17.3
BOZ	IP	14 19 31.8
BUT	IP	14 19 36.0
COL	EP	14 22 39.0
BRW	EP	14 23 07.1
MAY 9		
H-14 27 18.6		
63.2N 149.2W		
h ABOUT 111KM		
COL	IP	14 27 50.5
BRW	IP	14 29 21.1
	I	29 41.7
EUR	EP	14 33 25.9
MAY 9		
EUR	EP	14 38 16.2
MAY 9		
COL	EP	14 54 39.0
MAY 9		
EUR	EP	14 55 26.4
MAY 9		
COL	EP	15 26 08.3
BRW	EP	15 27 50.7
MAY 9		
GUA	IP	17 53 21.5
	ES	53 33.0
MAY 9		
BRW	E(P)	19 24 01.1
COL	EP	19 24 32.0
MAY 9		
EUR	EP	19 37 46.0
MAY 9		
BOZ	E(P)	19 58 09.0
MAY 9		
H-19 58 59.2		
2.9S 077.4W		
h ABOUT 108KM		
SJG	EP	20 04 00.0
	I▸P	04 24.0
ALQ	IP	20 07 17.5
RCD	E(P)	20 08 01.0
BCN	EP	20 08 01.5
EUR	IP	20 08 22.7
	IPCP	09 22.5
BOZ	EP	20 08 36.0
COL	EP	20 11 20.0
BRW	EP	20 11 44.6
	E▸P	12 12.9

Date and Station	Phase (GCT)
	h m s
MAY 9	
COL EP	22 06 31.0
MAY 9	
H-22 12 12.7	
56.6N 152.8W	
h ABOUT 33KM	
COL EP	22 14 17.0
BOZ E(P)	22 18 04.0
MAY 9	
H-22 27 09.3	
6.4S 148.0E	
h ABOUT 63KM	
COL EP	22 39 38.0
SJG EP'	22 46 40.5
MAY 9	
H-23 46 42.3	
16.6N 099.9W	
h ABOUT 33KM	
ALQ IP	23 51 05.8
BCN EP	23 51 51.2
EpP	51 58.5
EL	58 57.5
CSC EP	23 51 59.5
EpP	52 06.0
EUR IP	23 52 22.2
COL FP	23 56 33.0
MAY 9	
H-23 51 22.6	
23.4S 179.8W	
h ABOUT 555KM	
ALQ FP	24 03 27.0
MAY 10	
COL EP	01 03 06.0
MAY 10	
COL FP	01 07 15.0
MAY 10	
COL EP	04 40 30.0
MAY 10	
EUR EP	05 56 17.6
MAY 10	
H-08 35 21.1	
17.3S 070.9W	
h ABOUT 121KM	
EUR IP	08 46 25.5
BOZ FP	08 46 38.0
MAY 10	
COL IP	09 11 00.2
MAY 10	
H-10 51 22.8	
52.7S 022.6E	
h ABOUT 33KM	

Date and Station	Phase (GCT)
	h m s
SLC EP'	11 10 58.7
BUT EP'	11 11 03.0
EUR IP'	11 11 03.9
BOZ EP'	11 11 05.0
HHM EP'	11 11 13.0
MAY 10	
GUA IP	17 25 40.6
ES	25 52.6
MAY 10	
EUR IP	18 40 38.7
MAY 11	
H-01 12 03.9	
45.4N 150.2E	
h ABOUT 69KM	
COL EP	01 19 20.0
BOZ FP	01 22 34.0
EUR IP	01 22 42.8
MAY 11	
H-01 50 25.3	
41.0N 111.5W	
h ABOUT 15KM	
SLC E(P)	01 50 32.0
FGU EP	01 50 53.3
E(S)	51 17.4
EUR EP	01 51 25.0
TUC E(P)	01 52 34.2
MAY 11	
H-03 04 57.7	
44.0N 147.8E	
h ABOUT 34KM	
BRW EP	03 12 14.2
COL EP	03 12 36.0
MAY 11	
H-05 44 30.0	
39.9N 050.9E	
h ABOUT 33KM	
BRW EP	05 55 22.8
E	55 43.5
COL EP	05 56 06.0
MAY 11	
H-06 39 57.8	
49.8N 077.9E	
h ABOUT 0KM	
BRW IP	06 49 18.4
E	50 26.6
COL EP	06 50 09.8
EUR IP	06 53 03.4

Date and Station	Phase (GCT)
	h m s
MAY 11	
H-08 06 44.2	
19.1N 065.2W	
h ABOUT 68KM	
SJG IP	08 07 07.0
ALQ E(P)	08 14 12.5
TUC EP	08 14 39.0
EUR EP	08 15 19.0
COL EP	08 17 47.0
MAY 11	
COL FP	08 10 04.0
BRW FP	08 11 43.7
MAY 11	
H-08 36 35.7	
50.5N 176.3E	
h ABOUT 27KM	
COL FP	08 41 44.0
EUR FP	08 45 11.7
TUC F(P)	08 46 09.1
MAY 11	
BRW E(P)	11 40 53.7
BOZ EP	11 45 23.4
BCN IP	11 45 50.5
TUC F(P)	11 46 08.0
ALQ FP	11 46 25.0
MAY 11	
H-12 04 35.9	
51.7N 174.9E	
h ABOUT 30KM	
COL EP	12 09 42.0
BRW EP	12 09 43.9
EUR IP	12 13 15.5
TUC E(P)	12 14 14.0
ALQ E(P)	12 14 20.4
MAY 11	
BRW EP	12 51 10.9
COL IP	12 51 34.1
MAY 11	
H-17 37 38.3	
61.4N 149.6W	
h ABOUT 58KM	
COL IP	17 38 34.8
SIT IP	17 39 37.0
BRW IP	17 40 05.7
I	40 15.9

Date and Station	Phase (GCT)
	h m s
HHM EP	17 42 48.7
EpP	43 01.9
EsP	43 09.7
ES	47 06.7
BUT EP	17 43 10.0
IpP	43 22.0
ES	48 23.0
BOZ E(P)	17 43 18.5
EpP	43 32.0
EUR IP	17 43 44.4
SLC EP	17 43 50.7
IpP	44 04.6
FGU FP	17 43 58.8
BCN EP	17 44 15.5
IpP	44 29.0
IsP	44 36.0
ALQ IP	17 44 52.0
IpP	45 07.0
TUC IP D	17 44 56.1
IpP	45 11.0
KIP IP	17 45 12.1
HON EP	17 45 13.1
WAS EP	17 46 15.0
EsP	46 37.0
ES	52 49.0
WSC EP	17 46 15.7
EpP	46 31.1
EsP	46 39.0
SJG E(P)	17 49 07.0
E	51 17.5
MAY 11	
H-18 17 24.0	
44.7N 111.0W	
h ABOUT 33KM	
BOZ IP	18 17 38.7
BUT IP	18 17 51.4
IS	18 13.0
FGU IP	18 18 24.8
HHM IP	18 18 26.0
IL	19 28.8
SLC EP	18 18 26.0
I	18 34.3
IL	19 27.7
EUR EP	18 18 59.8
BCN I(P)	18 19 41.5
EL	22 21.5
ALQ IP	18 19 53.0
TUC E(P)	18 20 29.0
EL	24 03.6
COL EP	18 23 21.0

Date and Station	Phase	(GCT)
		h m s
MAY 11		
H-18 32 43.8		
44.8N 110.5W		
h ABOUT 33KM		
BOZ	IP	18 33 02.7
	IS	33 14.0
BUT	E(P)	18 33 14.0
HHM	E(P)	18 33 50.0
MAY 11		
H-20 29 43.6		
45.0N 110.7W		
h ABOUT 33KM		
BOZ	IP	20 29 59.0
	ES	30 10.0
BUT	EP	20 30 12.0
	IL	30 32.5
HHM	E(P)	20 30 46.0
FUR	E(P)	20 31 24.3
MAY 11		
COL	IP	20 38 32.8
MAY 11		
TUC	EP	21 08 03.1
	E	08 15.0
	E(L)	08 53.0
BCN	E(P)	21 08 33.0
	E	08 50.0
	IL	10 08.2
EUR	EP	21 08 44.3
	I	11 49.4
ALQ	E(P)	21 09 13.0
MAY 11		
H-21 40 34.1		
44.9N 111.2W		
h ABOUT 35KM		
BOZ	IP	21 40 48.0
	ES	40 59.0
BUT	EP	21 41 00.5
	IL	41 21.0
HHM	E(P)	21 41 34.0
	E	41 43.8
	EL	42 38.8
MAY 11		
SLC	EP	21 59 46.9
FGU	EP	22 00 19.4
	E(S)	00 48.6
EUR	IP	22 00 36.8
	I	02 03.6
MAY 11		
EUR	IP	22 12 07.8
MAY 11		
H-22 35 59.3		
45.9N 026.9E		
h ABOUT 84KM		
BRW	EP	22 46 20.6
MAY 11		
EUR	EP	22 44 20.8
MAY 11		
SJG	EP	23 18 28.8
	EL	19 32.5
MAY 12		
EUR	EP	00 01 14.4
MAY 12		
BOZ	EP	00 16 40.0
MAY 12		
H-00 28 19.0		
38.0N 138.8E		
h ABOUT 168KM		
BOZ	EP	00 39 46.5
EUR	EP	00 39 54.1
MAY 12		
BOZ	IP	01 20 01.0
	IL	20 11.6
BUT	EP	01 20 09.0
	IL	20 33.0
MAY 12		
COL	EP	02 52 55.0
MAY 12		
COL	EP	05 10 54.0
MAY 12		
COL	EP	06 02 47.0
MAY 12		
H-06 10 53.1		
50.5N 176.0E		
h ABOUT 33KM		
COL	EP	06 16 03.0
BRW	EP	06 16 07.0
EUR	E(P)	06 19 28.5
MAY 12		
H-06 45 12.2		
18.4S 178.0W		
h ABOUT 534KM		
COL	EP	06 56 56.0
MAY 12		
H-08 05 57.2		
03.5S 137.9E		
h ABOUT 78KM		
GUA	EP	08 10 08.0
BRW	EP	08 18 29.0
COL	EP	08 18 32.0
EUR	IP	08 19 58.2
ALQ	EP'	08 24 29.0
SJG	EP'	08 25 46.3
MAY 12		
H-08 50 56.9		
04.7S 034.8E		
h ABOUT 33KM		
BRW	EP'	09 09 54.5
MAY 12		
COL	EP	09 12 04.0
MAY 12		
H-09 42 37.4		
13.9S 077.1W		
h ABOUT 20KM		
ALQ	IP	09 52 18.4
TUC	E(P)	09 52 19.0
BOZ	EP	09 53 31.4
MAY 12		
H-10 16 06.9		
45.3N 111.2W		
h ABOUT 15KM		
BOZ	EP	10 16 16.8
	IL	16 29.0
BZM	E(P)	10 16 17.0
BUT	EP	10 16 30.2
	IL	16 52.0
HHM	E(P)	10 17 04.0
MAY 12		
H-10 33 43.5		
6.2S 130.3E		
h ABOUT 125KM		
GUA	IP	10 38 51.8
	E(S)	42 59.0
KIP	IP	10 45 16.1
BRW	IP	10 46 31.3
	IpP	47 34.9
	(PKKP)	11 03 59.0
COL	EP	10 46 37.0
	IpP	47 23.0
	(PKKP)	11 03 26.0
HHM	E(P)	10 47 26.0
EUR	EP	10 48 16.0
	EP'	51 26.0
	EPP	52 50.7
	EPKKP	11 02 58.3
BOZ	EP	10 48 19.0
BCN	EP'	10 51 46.5
	EPP	52 52.4
RCD	EP'	10 52 20.0
	EPKS	55 42.0
TUC	EPP	10 52 16.6
	E	55 38.0
	E	11 00 19.6
ALQ	IPP	10 52 22.5
WAS	E	10 52 55.0
	E	56 18.0
WSC	E	10 52 58.2
	E	56 16.1
BHP	IP'	10 53 21.5
SJG	EP'	10 53 26.0
	I	54 10.0
	I	54 21.5
MAY 12		
H-11 42 38.4		
27.8N 142.8E		
h ABOUT 33KM		
COL	EP	11 52 18.5
BOZ	EP	11 54 49.0
EUR	EP	11 54 53.0
MAY 12		
H-11 44 26.1		
34.3N 047.4E		
h ABOUT 33KM		
BRW	EP	11 55 56.9
COL	EP	11 56 36.0
MAY 12		
H-17 12 37.3		
26.2S 178.4E		
h ABOUT 560KM		
TUC	IP C	17 24 35.6
	EpP	26 38.0
EUR	IP	17 24 35.9
MAY 12		
COL	EP	17 27 01.0
BOZ	EP	17 27 09.0
MAY 12		
H-18 15 00.1		
37.2N 116.4W		
h ABOUT 000KM		
BCN	IP C	18 15 33.0
EUR	IP	18 15 39.2
GCA	E(P)	18 16 02.5
SLC	E(P)	18 16 36.5
TUC	EP	18 16 42.0
	E	18 31.0
ALQ	EP	18 17 08.8

Date and Station	Phase (GCT)
	h m s
MAY 12	
H-19 35 41.6	
21.9S 065.9W	
h ABOUT 283KM	
SJG EP	19 42 46.7
E▸P	43 46.0
IS	48 28.0
ESS	51 43.0
ALQ IP	19 46 15.2
I▸P	47 19.2
TUC EP D	19 46 18.0
E▸P	47 22.0
BCN FP	19 46 48.5
E▸P	47 53.0
FGU IP	19 46 52.0
SLC EP	19 46 58.5
EUR IP	19 47 05.6
BOZ IP	19 47 16.9
BUT IP	19 47 20.5
E▸P	48 27.9
HHM EP	19 47 31.8
COL IP	19 49 24.4
MAY 12	
TUC E(P)	20 57 42.0
E	57 52.0
E(S)	58 33.0
ALQ IP	20 58 01.8
BCN EP	20 58 08.5
EL	59 38.5
GCA E(P)	20 58 31.0
EUR EP	20 59 04.8
I	21 01 28.0
BOZ E(P)	21 00 30.0
COL IP	21 01 00.4
MAY 13	
H-00 08 16.6	
19.6N 065.4W	
h ABOUT 30KM	
SJG IP C	00 08 42.5
IS	09 02.0
WSC E(P)	00 13 05.6
E	13 11.8
E	13 25.3
E(S)	17 10.9
WAS EP	00 13 11.0
ALQ E(P)	00 14 48.5
TUC E(P)	00 16 16.6
SLC EP	00 16 30.4
EUR EP	00 16 52.0
COL EP	00 19 22.0
MAY 13	
H-01 36 33.0	
25.9S 070.7W	
h ABOUT 25KM	
BOZ EP	01 48 43.8
MAY 13	
H-02 23 23.4	
19.3S 063.8W	
h ABOUT 589KM	
ALQ IP	02 33 22.8
I▸P	35 20.8
TUC IP C	02 33 27.5
BCN EP	02 33 57.5
FGU EP	02 33 58.0
EUR IP	02 34 13.6
BOZ FP	02 34 22.0
FPCP	34 40.1
I▸P	36 27.0
HHM EP	02 34 37.9
E▸P	36 43.0
MAY 13	
H-02 56 03.1	
53.9N 159.8E	
h ABOUT 100KM	
BRW FP	03 01 25.2
F	01 53.4
COL IP	03 01 45.8
BOZ IP	03 05 20.9
EUR IP	03 05 35.1
MAY 13	
H-04 13 08.6	
4.8N 076.3W	
h ABOUT 126KM	
BHP IP	04 14 25.5
IS	15 25.0
ALQ IP	04 20 41.8
TUC IP D	04 20 53.3
E▸P	22 35.4
FGU IP	04 21 27.3
RCD I(P)	04 21 29.0
E(▸P)	21 54.0
EUR IP	04 21 50.9
BOZ IP	04 22 00.0
EPCP	22 07.5
I▸P	22 31.0
E▸P	22 43.5
HHM EP	04 22 21.8
COL EP	04 24 52.0
BRW IP	04 25 17.6
EPCP	25 23.0
EPP	28 28.5
MAY 13	
H-04 30 40.9	
37.0N 071.4E	
h ABOUT 90KM	
COL EP	04 42 07.2
MAY 13	
H-06 47 38.5	
44.8N 111.2W	
h ABOUT 33KM	
BOZ IP	06 47 52.4
IS	48 04.0
BUT IP	06 48 05.7
HHM EP	06 48 39.8
E	48 49.8
IL	49 43.8
FGU E(P)	06 48 42.5
EUR E(P)	06 49 20.5
MAY 13	
H-06 58 24.8	
36.7N 140.5E	
h ABOUT 132KM	
BRW EP	07 06 44.5
E	06 55.0
COL FP	07 07 05.2
BOZ FP	07 09 56.5
E	10 08.5
EUR FP	07 10 03.0
MAY 13	
H-10 51 15.5	
29.8N 080.5E	
h ABOUT 33KM	
BRW FP	11 02 35.2
COL IP	11 03 15.0
MAY 13	
H-15 08 48.0	
53.0N 171.6E	
h ABOUT 33KM	
BRW IP	15 13 51.5
I	14 06.1
COL FP	15 13 56.0
BOZ FP	15 17 28.0
E▸P	17 36.0
EUR IP	15 17 39.7
MAY 13	
H-16 37 25.2	
46.1N 151.2E	
h ABOUT 68KM	
BRW IP	16 44 13.4
COL IP	16 44 33.3
HHM EP	16 47 28.8
BOZ IP	16 47 49.0
EUR IP	16 47 58.4
ALQ IP	16 48 51.0
MAY 13	
TUC FP	16 40 08.0
ES	40 16.0
MAY 13	
H-17 30 04.9	
26.4N 109.0W	
h ABOUT 33KM	
TUC E(P)	17 31 26.4
EUR EP	17 33 28.2
BOZ E(P)	17 34 24.0
MAY 13	
BOZ IP	18 00 07.9
MAY 13	
H-19 14 23.0	
40.3N 126.7W	
h ABOUT 33KM	
UKI E(P)	19 15 09.9
EUR EP	19 16 24.7
BOZ EP	19 17 19.0
MAY 13	
H-19 23 16.6	
33.2N 138.0E	
h ABOUT 324KM	
BRW IP	19 31 49.3
COL IP	19 32 08.5
HHM EP	19 34 33.1
BUT IP	19 34 45.8
BOZ IP	19 34 49.2
EUR IP	19 34 54.4
E	35 05.0
FGU EP	19 35 10.3
MAY 13	
TUC E(P)	19 27 55.5
EUR E(P)	19 28 46.2
MAY 13	
H-20 37 59.9	
31.1N 116.0W	
h ABOUT 33KM	
TUC E(P)	20 39 10.0
E	39 28.8

Date and Station	Phase (GCT)
	h m s
BCN IP	20 39 14.7
I	39 33.7
EL	40 34.7
EUR IP	20 40 02.4
IL	42 14.0
MAY 13	
H-20 50 55.9	
23.3S 175.4W	
h ABOUT 60KM	
EUR IP	21 03 20.1
BOZ EP	21 03 49.6
EpP	04 03.0
COL E(P)	21 03 51.8
MAY 13	
EUR IP	20 53 03.7
BOZ EP	20 54 06.0
E	55 17.0
MAY 13	
GUA IP	21 19 09.3
E(S)	19 19.3
MAY 13	
BOZ EP	21 41 40.0
MAY 13	
BOZ EP	21 54 06.0
MAY 13	
H-22 46 33.0	
36.0S 018.1W	
h ABOUT 33KM	
SJG EP	22 57 45.5
MAY 13	
BOZ EP	23 17 51.0
E	18 08.0
MAY 14	
ALQ IP	00 10 07.4
MAY 14	
BOZ IP	01 14 50.0
MAY 14	
H-01 48 42.4	
27.6S 177.1W	
h ABOUT 77KM	
TUC EP	02 01 19.8
BOZ FP	02 01 53.5
MAY 14	
H-02 27 00.2	
19.0S 169.5E	
h ABOUT 259KM	
COL IP	02 39 28.3
EUR IP	02 39 34.5
TUC EP	02 39 40.1
SJG EP'	02 45 34.3

Date and Station	Phase (GCT)
	h m s
MAY 14	
TUC E(P)	04 38 40.6
MAY 14	
COL EP	05 41 50.0
MAY 14	
SJG IP	06 30 50.0
IS	31 07.0
MAY 14	
COL IP	07 24 45.2
MAY 14	
BOZ IP	07 58 03.0
MAY 14	
BOZ EP	08 13 31.0
MAY 14	
SJG EP	08 54 31.8
EL	54 55.8
MAY 14	
SJG IP	09 09 02.8
IS	09 28.2
MAY 14	
H-09 46 08.6	
50.4N 178.0E	
h ABOUT 46KM	
COL EP	09 51 09.0
BRW IP	09 51 19.2
HHM EP	09 54 04.7
BOZ EP	09 54 27.2
EUR IP	09 54 34.0
BCN EP	09 54 53.5
TUC EP	09 55 31.2
E	55 40.8
ALQ IP	09 55 39.5
MAY 14	
BOZ EP	16 15 22.3
MAY 14	
H-16 50 15.6	
50.3N 177.7E	
h ABOUT 33KM	
COL EP	16 55 19.0
BRW IP	16 55 30.1
BOZ EP	16 58 37.0
E	58 58.0
EUR IP	16 58 44.4
BCN EP	16 59 05.7
RCD EP	16 59 22.0
TUC EP	16 59 41.6
EpP	59 50.3
SJG EP	17 03 20.0

Date and Station	Phase (GCT)
	h m s
MAY 14	
H-17 30 24.4	
43.7N 151.9E	
h ABOUT 33KM	
COL EP	17 37 50.0
EUR EP	17 41 10.1
MAY 14	
H-17 32 36.2	
37.0N 116.0W	
h ABOUT 000KM	
BCN IP C	17 33 03.5
EUR IP	17 33 17.4
GCA IP	17 33 34.7
I	33 47.0
I	34 26.5
SLC EP	17 33 53.2
E	34 10.5
I	35 43.2
TUC E(P)	17 33 57.0
E	34 13.1
E(L)	36 00.5
FGU EP	17 34 16.5
ALQ IP	17 34 35.0
I	35 05.5
BUT EP	17 34 55.0
E	37 37.1
COL E(P)	17 39 19.6
SJG FP	17 41 14.8
MAY 14	
H-18 46 24.7	
37.0N 116.0W	
h ABOUT 000KM	
BCN IP	18 46 52.2
EUR E(P)	18 47 05.5
GCA FP	18 47 31.0
SLC EP	18 47 44.0
FGU E(P)	18 48 03.0
TUC E(P)	18 48 03.1
F(L)	49 57.0
BOZ F(P)	18 48 34.0
ALQ IP	18 48 54.5
MAY 14	
FGU EP	18 51 22.7
IS	51 42.0
MAY 14	
COL IP	19 34 02.0
MAY 14	
EUR EP	20 32 39.4

Date and Station	Phase (GCT)
	h m s
MAY 14	
H-21 03 51.2	
51.2N 175.1E	
h ABOUT 30KM	
COL F(P)	21 09 00.0
BOZ E(P)	21 12 21.0
EUR EP	21 12 30.5
MAY 14	
TUC EP	21 19 29.2
E(S)	20 12.4
MAY 14	
EUR IP	21 57 03.6
MAY 14	
H-23 05 05.4	
15.1N 146.0E	
h ABOUT 33KM	
GUA IP	23 05 35.8
E(S)	05 58.0
COL E(P)	23 15 53.0
BOZ E(P)	23 17 52.0
F	18 08.5
FGU I(P)	23 18 18.0
MAY 14	
H-23 28 13.7	
20.7S 177.7W	
h ABOUT 467KM	
TUC FP	23 39 51.3
EUR IP	23 39 51.7
COL FP	23 40 14.0
BOZ EP	23 40 21.0
MAY 14	
GUA IP	23 45 01.5
E(S)	45 28.8
MAY 15	
TUC E(P)	02 00 37.7
E(S)	01 27.0
MAY 15	
EUR EP	02 14 41.2
MAY 15	
SJG IP	02 28 14.6
IS	29 28.3
MAY 15	
H-03 58 23.5	
34.2N 135.8E	
h ABOUT 344KM	
BRW IP	04 06 51.3
COL EP	04 07 13.6
BOZ EP	04 09 56.0
EUR EP	04 10 02.0

Date and Station	Phase (GCT)
	h m s
MAY 15	
GUA IP	05 04 06.0
IS	05 23.0
MAY 15	
GUA EP	05 04 57.3
E(S)	05 22.7
MAY 15	
H-06 25 01.5	
35.9N 114.8W	
h ABOUT 5KM	
BCN I(P)	06 25 04.3
EUR IP	06 25 59.4
TUC EP	06 26 17.0
E	26 34.6
EL	27 40.5
MAY 15	
SJG EP	07 35 48.0
ES	36 08.5
MAY 15	
H-10 41 08.2	
44.9N 111.0W	
h ABOUT 33KM	
BOZ IP	10 41 23.5
IS	41 35.0
BUT EP	10 41 35.1
IL	42 57.1
HHM EP	10 42 10.0
E	42 22.0
EL	43 17.5
EUR E(P)	10 42 46.0
MAY 15	
SJG EP	11 04 09.0
I	04 15.8
ES	04 57.5
IL	05 13.0
MAY 15	
H-12 27 25.9	
42.3N 141.8E	
h ABOUT 78KM	
GUA E(P)	12 33 09.5
COL EP	12 35 30.8
MAY 15	
H-12 30 45.0	
19.5N 146.0E	
h ABOUT 159KM	
BRW EP	12 40 46.9
COL EP	12 40 53.1
BOZ EP	12 43 03.0
MAY 15	
COL EP	12 58 18.9
BRW EP	12 58 21.0
EUR IP	13 01 21.0

Date and Station	Phase (GCT)
	h m s
MAY 15	
H-13 04 11.3	
44.3N 110.0W	
h ABOUT 33KM	
BOZ IP	13 04 41.0
I	04 51.0
IL	05 03.5
BUT EP	13 04 51.0
IL	05 26.1
HHM E(P)	13 05 24.0
EL	06 26.0
RCD EP	13 05 26.0
E	05 46.0
E(L)	06 40.0
EUR E(P)	13 05 49.5
MAY 15	
BOZ EP	14 00 43.2
EL	01 07.0
MAY 15	
TUC E(P)	14 21 35.2
MAY 15	
EUR IP	14 42 42.7
MAY 15	
BOZ EP	16 27 27.0
EL	27 49.5
MAY 15	
H-16 39 01.5	
48.0S 165.6E	
h ABOUT 15KM	
BRW EP'	16 58 05.2
MAY 15	
BOZ EP	16 41 14.0
MAY 15	
GUA E(P)	16 55 48.0
E(S)	58 18.0
MAY 15	
BRW EP	17 42 54.2
COL EP	17 42 55.0
MAY 15	
H-19 53 46.5	
51.1N 178.0E	
h ABOUT 24KM	
COL EP	19 58 43.0
BOZ EP	20 02 05.0
EUR IP	20 02 13.1
MAY 15	
H-19 55 56.0	
51.1N 178.4E	
h ABOUT 23KM	
COL EP	20 00 52.0
BRW E(P)	20 01 02.7

Date and Station	Phase (GCT)
	h m s
BOZ IP	20 04 13.0
EUR IP	20 04 20.6
BCN E(P)	20 04 50.0
MAY 15	
COL EP	20 06 29.0
BOZ FP	20 09 41.0
E	09 50.0
MAY 15	
TUC EP	20 55 27.7
E(S)	55 52.0
MAY 15	
H-21 01 17.7	
52.3N 173.2E	
h ABOUT 10KM	
COL EP	21 06 29.0
BRW IP	21 06 29.2
HHM FP	21 09 34.4
BOZ EP	21 09 57.0
E	10 00.0
BCN FP	21 10 29.5
E	11 57.0
RCD EP	21 10 38.0
TUC EP	21 11 05.4
EpP	11 14.8
MAY 15	
HHM FP	21 03 36.4
I	04 04.4
BOZ E(P)	21 04 21.0
MAY 15	
EUR IP	21 54 44.3
MAY 15	
TUC E(P)	22 27 14.2
ES	27 40.4
MAY 15	
H-22 42 48.5	
51.2N 178.5E	
h ABOUT 20KM	
COL EP	22 47 43.0
BRW IP	22 47 54.2
BOZ EP	22 51 04.0
E	51 16.0
EUR IP	22 51 12.2
MAY 15	
H-23 33 12.4	
16.1S 174.7W	
h ABOUT 253KM	
BCN EP	23 44 38.5
TUC EP	23 44 44.2
EpP	45 46.2

Date and Station	Phase (GCT)
	h m s
ALQ IP	23 45 08.0
FGU EP	23 45 11.0
COL IP	23 45 11.4
MAY 15	
H-23 58 34.4	
4.1S 135.1E	
h ABOUT 33KM	
GUA EP	24 03 08.6
E(S)	06 59.0
KIP EP	24 09 50.1
COL IP	24 11 23.8
TUC FP'	24 17 11.0
ALQ IP'	24 17 17.0
BHP IP'	24 18 12.0
SJG EP'	24 18 27.0
MAY 16	
H-01 35 54.5	
35.4N 028.0E	
h ABOUT 34KM	
HHM FP	01 48 52.4
BOZ EP	01 49 00.0
MAY 16	
BOZ EP	01 44 41.0
E	46 23.5
MAY 16	
H-01 59 27.7	
51.3N 178.6E	
h ABOUT 46KM	
BOZ FP	02 07 40.0
MAY 16	
COL EP	02 36 13.8
MAY 16	
TUC E(P)	03 06 02.5
MAY 16	
TUC E(P)	03 44 05.8
E	44 44.7
MAY 16	
EUR IP	04 01 45.7
MAY 16	
EUR IP	04 23 21.7
MAY 16	
EUR IP	04 52 08.3
MAY 16	
BOZ IP	04 56 40.9
IS	56 43.2
MAY 16	
H-05 15 10.0	
4.6S 105.5W	
h ABOUT 16KM	

Date and Station	Phase	Phase (GCT) h m s
TUC	E(P)	05 22 21.3
BCN	EP	05 22 58.4
SJG	E(P)	05 23 24.0
RCD	EP	05 23 56.0
BOZ	EP	05 24 03.5
	EPCP	25 32.5
HHM	EP	05 24 29.4
COL	E(P)	05 27 03.0
MAY 16		
SJG	EP	05 17 51.0
	IL	18 23.5
MAY 16		
H-05 40 30.4		
38.6N 140.8E		
h ABOUT 76KM		
COL	IP	05 49 03.7
BOZ	E(P)	05 51 00.0
BCN	EP	05 52 25.2
MAY 16		
H-05 56 05.6		
12.7S 166.4E		
h ABOUT 172KM		
COL	IP	06 08 20.0
MAY 16		
SJG	IP	07 26 49.5
MAY 16		
BCN	IP	07 27 49.2
	IS	27 50.8
MAY 16		
BOZ	EP	07 34 35.1
MAY 16		
BOZ	EP	08 05 24.8
	E	05 36.0
MAY 16		
FGU	IP	08 50 47.6
	IS	51 20.5
BOZ	EP	08 50 55.0
	E	51 32.0
MAY 16		
COL	EP	09 13 05.7
MAY 16		
H-09 15 18.6		
60.5N 146.1W		
h ABOUT 29KM		
COL	IP	09 16 25.5
BRW	E(P)	09 18 07.3
HHM	EP	09 20 12.4
TUC	EP	09 22 22.2
MAY 16		
H-11 29 41.5		
38.2N 038.9E		
h ABOUT 28KM		
COL	EP	11 41 33.0
HHM	E(P)	11 42 43.0
	E	49 55.2
	E(S)	54 06.4
MAY 16		
H-11 34 37.2		
45.6N 151.4E		
h ABOUT 11KM		
BRW	EP	11 41 36.1
COL	EP	11 41 56.0
	EPP	42 05.0
BOZ	EP	11 45 09.9
	E	50 11.0
	E(S)	54 13.9
BCN	E(P)	11 45 37.0
	I	45 50.5
RCD	E(P)	11 45 40.0
ALQ	E(P)	11 46 11.0
TUC	E(P)	11 46 19.5
MAY 16		
H-11 35 46.0		
5.3N 125.7E		
h ABOUT 36KM		
GUA	IP	11 40 26.0
	IS	44 15.0
KIP	IP	11 47 31.0
BRW	IP	11 48 03.0
	F	49 21.6
COL	IP	11 48 12.8
RCD	EP'	11 54 08.0
BCN	EP'	11 54 18.0
TUC	EP'	11 54 25.5
	EPP	55 21.9
ALQ	IP'	11 54 29.0
WSC	EP'	11 54 56.1
CSC	EP'	11 55 01.0
BHP	IP'	11 55 31.5
SJG	EP'	11 55 34.5
	E	55 42.0
	I	55 56.5
WAS	I(PKS)	11 58 15.0
	E	58 39.0
MAY 16		
BOZ	EP	15 21 21.7
MAY 16		
H-15 51 16.1		
05.2N 082.4W		
h ABOUT 33KM		
BHP	IP	15 52 28.0
	IS	55 00.0
ALQ	IP	15 58 25.6
TUC	EP	15 58 30.8
BCN	EP	15 59 13.0
COL	EP	16 02 55.8
MAY 16		
COL	EP	16 27 19.2
	I	28 08.1
TUC	E(P)	16 32 03.2
MAY 16		
COL	EP	16 49 13.0
MAY 16		
BUT	E(P)	16 52 04.0
	IL	52 24.8
MAY 16		
H-17 36 14.7		
44.8N 111.4W		
h ABOUT 15KM		
BOZ	IP	17 36 31.5
	IS	36 45.0
BZM	IP	17 36 33.0
	F	36 41.0
BUT	IP	17 36 41.6
	IS	36 58.8
HHM	EP	17 37 16.3
	I	37 29.3
	IS	38 01.3
	E	38 17.8
EUR	E(P)	17 37 55.8
MAY 16		
FGU	EP	17 37 32.5
MAY 16		
EUR	E(P)	17 39 30.3
MAY 16		
BOZ	EP	18 18 29.0
MAY 16		
BUT	EP	18 29 01.1
	EL	29 26.1
MAY 16		
EUR	EP	19 04 49.8
BCN	E(P)	19 04 51.0
	EL	05 25.0
MAY 16		
BOZ	EP	20 30 28.0
MAY 16		
H-20 55 05.8		
52.1N 175.2W		
h ABOUT 33KM		
COL	E(P)	20 59 27.0
MAY 16		
H-21 06 07.9		
51.5N 174.7E		
h ABOUT 31KM		
COL	EP	21 11 16.0
EUR	IP	21 14 47.9
TUC	E(P)	21 15 44.6
MAY 16		
BOZ	E(P)	21 34 25.0
	E	35 24.0
MAY 16		
BOZ	EP	22 11 36.0
	E	11 44.0
	IL	12 15.0
MAY 17		
BOZ	EP	01 23 56.0
	E	27 27.0
MAY 17		
H-01 36 22.8		
51.1N 177.8E		
h ABOUT 33KM		
COL	EP	01 41 20.0
EUR	IP	01 44 49.9
MAY 17		
H-01 38 05.0		
51.1N 177.4E		
h ABOUT 33KM		
COL	IP	01 43 04.6
EUR	IP	01 46 34.1
MAY 17		
H-02 58 34.8		
04.8N 125.8E		
h ABOUT 103KM		
COL	EP	03 10 57.1
MAY 17		
COL	EP	03 50 03.2
MAY 17		
H-04 28 40.9		
05.8S 151.7E		
h ABOUT 45KM		
COL	IP	04 41 03.0
EUR	EP	04 42 05.1
MAY 17		
H-07 03 53.8		
45.5N 151.2E		
h ABOUT 33KM		
COL	E(P)	07 11 09.4

Date and Station	Phase (GCT)
	h m s
MAY 17	
H-07 26 21.3	
18.2N 067.8W	
h ABOUT 69KM	
SJG IP D	07 26 48.6
IS	27 08.4
ALQ EP	07 33 36.0
E▸P	33 53.0
BCN EP	07 34 33.8
E▸P	34 51.0
MAY 17	
COL IP	07 41 34.0
MAY 17	
COL IP	07 58 02.0
MAY 17	
BOZ EP	08 16 49.8
MAY 17	
COL EP	08 27 13.5
BOZ EP	08 32 57.7
MAY 17	
H-13 24 03.7	
46.8N 153.7E	
h ABOUT 35KM	
COL IP	13 31 01.8
BRW E(P)	13 31 43.1
E	31 56.6
EUR IP	13 34 28.2
BCN EP	13 34 47.5
ALQ IP	13 35 22.8
MAY 17	
TUC EP	16 58 32.5
E(S)	58 50.2
MAY 17	
SJG EP	17 22 00.6
E	22 53.2
MAY 17	
H-17 19 25.9	
22.5N 171.3E	
h ABOUT 21KM	
GUA IP	17 24 43.4
E(S)	28 56.0
E(T)	48 04.0
BRW IP	17 30 14.7
EPP	32 47.1
E	34 41.7
EP'P'	58 41.0
COL IP	17 30 37.5
EP'P'	58 28.0
HON IP	17 31 02.1
IS	40 36.0
ISS	45 00.0
EL	48 46.0
KIP IP	17 31 02.7
EPP	33 53.9
ES	40 36.3
EL	45 03.0
SIT E(P)	17 31 25.0
HHM IP C	17 32 44.4
E	35 36.2
ESKS	43 12.2
EL	18 04 40.2
BUT EP	17 32 54.5
EPP	36 56.5
ESKS	43 22.5
EUR IP	17 33 04.1
SLC EP	17 33 12.0
BCN EP	17 33 17.0
EP'	36 27.5
EPP	37 19.5
RCD E(P)	17 33 25.0
EPP	37 31.0
ESKS	43 54.0
TUC EP	17 33 43.4
EPP	38 01.2
ESKS	44 19.0
E	47 20.0
ALQ IP	17 33 43.5
WAS EP'	17 38 08.0
EPP	39 17.0
EPKKP	49 38.3
SJG EP'	17 38 45.0
E	39 48.0
EPP	41 39.5
ESKP	42 25.0
EPKS	42 30.0
ESKS	45 29.0
ESPP	53 43.0
ESS	59 46.0
ESSS	18 05 06.0
EL	17 40.0
BHP IP'	17 38 55.0
MAY 17	
H-18 05 45.4	
21.1S 175.2W	
h ABOUT 75KM	
BCN EP	18 17 50.5
E▸P	18 09.0
TUC E(P)	18 17 55.6
E(▸P)	18 13.5
EUR IP	18 17 58.0
ALQ IP	18 18 18.6
COL IP	18 18 28.0
MAY 17	
H-20 10 10.3	
54.7N 175.8E	
h ABOUT 18KM	
BRW E(P)	20 14 49.6
COL E(P)	20 15 04.0
EUR E(P)	20 18 42.0
MAY 17	
H-20 21 34.5	
55.1N 165.8E	
h ABOUT 68KM	
COL IP	20 26 49.4
EUR IP	20 30 43.0
BCN E(P)	20 30 58.2
E	31 06.0
ALQ IP	20 31 43.0
MAY 17	
H-21 24 42.7	
45.7N 151.0E	
h ABOUT 33KM	
COL IP	21 31 58.0
EUR EP	21 35 23.1
MAY 18	
GUA IP	00 42 45.1
E(S)	42 55.3
MAY 18	
H-01 04 14.6	
17.6S 049.9E	
h ABOUT 33KM	
RCD IP'D	01 23 50.5
HHM EP'	01 23 54.3
BUT EP'	01 23 56.0
SLC EP'	01 24 02.5
ALQ IP'	01 24 04.0
EUR EP'	01 24 05.5
TUC EP'	01 24 09.5
E	24 19.5
MAY 18	
EUR IP	01 24 31.7
TUC EP	01 24 41.2
BCN IP	01 24 42.0
MAY 18	
H-04 36 54.9	
51.2N 176.0E	
h ABOUT 33KM	
COL EP	04 41 59.0
EUR IP	04 45 29.6
MAY 18	
COL EP	05 23 04.5
MAY 18	
COL EP	06 25 19.2
MAY 18	
H-08 04 23.3	
25.2N 142.8E	
h ABOUT 10KM	
COL EP	08 14 24.0
HHM EP	08 16 33.3
EUR IP	08 16 47.5
BCN EP	08 17 00.4
TUC EP	08 17 22.7
ALQ IP	08 17 31.4
MAY 18	
H-08 14 36.2	
.1N 123.8E	
h ABOUT 178KM	
TUC EP'	08 33 08.2
ALQ IP'	08 33 13.6
MAY 18	
H-08 52 01.5	
18.0S 168.5E	
h ABOUT 143KM	
BCN EP	09 04 46.5
E▸P	05 21.2
F▸P	04 36.0
EUR IP	09 04 48.5
TUC EP	09 04 55.0
MAY 18	
H-10 48 58.6	
44.4N 149.0E	
h ABOUT 15KM	
BRW EP	10 56 11.8
COL IP	10 56 33.1
BOZ EP	10 59 43.5
EUR IP	10 59 52.3
BCN E(P)	10 59 57.0
F	11 00 11.0
MAY 18	
H-12 08 51.4	
29.3N 128.3E	
h ABOUT 34KM	
COL EP	12 19 08.0
BOZ EP	12 21 37.0
BCN EP	12 22 01.5
MAY 18	
H-15 26 37.2	
32.6S 070.4W	
h ABOUT 117KM	
EUR I(P)	15 39 52.6

Date and Station	Phase (GCT)
	h m s
MAY 18	
BOZ EP	15 33 58.9
MAY 18	
EUR IP	15 48 08.2
MAY 18	
H-16 36 25.9	
22.6S 070.1W	
h ABOUT 35KM	
ALQ EP	16 47 16.6
TUC EP	16 47 17.6
E(pP)	47 29.0
EUR EP	16 48 08.2
BOZ EP	16 48 22.0
EpP	48 32.5
EsP	48 41.0
HHM EP	16 48 38.4
EpP	48 48.4
MAY 18	
H-16 37 41.7	
20.0S 177.3W	
h ABOUT 516KM	
COL IP	16 49 36.5
MAY 18	
BCN E(P)	16 47 21.0
E	48 00.0
MAY 18	
BOZ EP	17 59 58.0
MAY 18	
BOZ EP	18 29 48.0
MAY 18	
EUR IP	18 34 26.6
I	35 44.0
MAY 18	
EUR IP	18 50 14.3
MAY 18	
EUR IP	19 12 14.3
MAY 18	
HHM E(P)	19 12 26.0
EL	13 04.4
MAY 18	
EUR EP	19 30 22.9
MAY 18	
H-19 36 31.9	
8.9N 083.5W	
h ABOUT 33KM	
BHP IP	19 37 31.0
IS	38 17.0
BOZ E(P)	19 44 36.0
MAY 18	
BOZ E(P)	21 01 35.0
E	02 23.0

Date and Station	Phase (GCT)
	h m s
MAY 18	
EUR IP	21 05 24.6
MAY 18	
EUR IP	21 05 57.5
MAY 18	
H-21 29 29.8	
17.9S 167.2E	
h ABOUT 29KM	
COL IP	21 42 22.5
EUR IP	21 42 35.2
TUC EP	21 42 41.2
MAY 18	
H-22 46 31.7	
43.7N 146.5E	
h ABOUT 45KM	
GUA E(P)	22 51 37.1
BRW EP	22 53 51.9
EPCP	56 03.7
COL IP	22 54 15.4
SIT E(P)	22 55 14.3
HHM IP	22 57 04.4
IpP	57 17.4
BUT EP	22 57 18.5
EpP	57 30.5
BOZ IP C	22 57 24.5
IpP	57 37.0
EsP	57 45.0
EUR IP	22 57 33.1
IpP	57 46.3
SLC E(P)	22 57 33.6
I	57 42.9
FGU EP	22 57 50.5
BCN EP	22 57 51.2
IpP	58 04.8
RCD IP D	22 57 57.0
EpP	58 11.0
TUC EP	22 58 18.8
EpP	58 33.5
ALQ IP	22 58 24.2
MAY 19	
H-02 00 47.4	
23.5S 176.0W	
h ABOUT 113KM	
BOZ EP	02 13 36.5
MAY 19	
H-02 13 46.8	
25.0S 112.1E	
h ABOUT 33KM	
TUC EP'	02 33 15.1

Date and Station	Phase (GCT)
	h m s
RCD EP'	02 33 24.0
E	33 36.0
ALQ EP'	02 33 25.0
I	33 35.0
MAY 19	
H-03 00 59.0	
09.2S 159.0E	
h ABOUT 50KM	
GUA E(P)	03 06 47.0
KIP IP	03 10 05.1
COL IP	03 13 22.3
BRW IP	03 13 32.2
I	13 50.7
EUR IP	03 14 04.4
BCN EP	03 14 06.0
EPP	17 41.0
HHM EP	03 14 16.4
E	19 22.9
TUC EP	03 14 18.8
BUT E(P)	03 14 19.0
BOZ IP D	03 14 23.0
FGU EP	03 14 28.5
ALQ EP	03 14 36.2
SJG EP'	03 20 15.0
MAY 19	
H-03 11 12.5	
52.4N 173.4E	
h ABOUT 49KM	
BRW IP	03 16 16.2
I	16 25.4
COL EP	03 16 17.0
BOZ IP	03 19 45.5
I	19 53.0
EUR IP	03 19 54.3
TUC E(P)	03 20 53.0
MAY 19	
H-04 21 32.7	
22.7S 176.1W	
h ABOUT 81KM	
KIP IP	04 29 58.4
BCN EP	04 33 47.4
EpP	34 08.0
TUC EP	04 33 50.6
EpP	34 13.0
EUR IP	04 33 53.4
ALQ EP	04 34 12.5
IpP	34 34.2

Date and Station	Phase (GCT)
	h m s
FGU EP	04 34 17.2
BUT EP	04 34 21.9
EpP	34 43.8
COL EP	04 34 22.0
HHM EP	04 34 22.4
EpP	34 44.4
BOZ EP	04 34 23.0
BRW E(P)	04 34 35.5
RCD EP	04 34 43.0
EpP	35 05.0
MAY 19	
H-04 38 29.9	
22.3S 176.4W	
h ABOUT 98KM	
TUC EP	04 50 46.3
EUR IP	04 50 48.3
ALQ IP	04 51 07.5
COL EP	04 51 17.0
BOZ EP	04 51 18.5
MAY 19	
BRW EP	05 17 13.4
MAY 19	
H-05 24 47.6	
60.9N 155.7W	
h ABOUT 33KM	
COL EP	05 26 07.0
HHM EP	05 30 24.6
BOZ E(P)	05 30 52.0
MAY 19	
TUC E(P)	05 52 07.0
E(L)	53 39.5
MAY 19	
H-06 03 58.9	
06.5S 105.4E	
h ABOUT 74KM	
EUR IP'	06 23 03.3
MAY 19	
H-06 17 12.0	
27.6N 110.9W	
h ABOUT 33KM	
TUC EP	06 18 20.0
E(L)	19 48.0
ALQ IP	06 19 13.5
IL	21 55.5
BCN EP	06 19 20.5
E	21 48.5
EL	22 22.0
EUR IP	06 20 10.3

Date and Station	Phase (GCT)
	h m s
SLC EP	06 20 19.9
FGU E(P)	06 20 23.0
RCD EP	06 21 17.0
ES	24 48.0
BOZ EP	06 21 22.0
ES	25 08.0
EL	26 50.0
BUT E(P)	06 21 25.0
WAS EP	06 23 21.0
E	23 36.0
EL	33 10.0
WSC E(P)	06 23 34.0
EL	33 15.6
MAY 19	
EUR IP	06 26 12.0
BCN E(P)	06 26 35.2
MAY 19	
H-08 05 14.5	
1.8S 079.5W	
h ABOUT 71KM	
BOZ EP	08 14 41.5
E	15 12.2
MAY 19	
COL EP	09 38 30.0
MAY 19	
H-10 58 26.6	
4.9N 076.2W	
h ABOUT 98KM	
BHP IP	10 59 44.0
IS	11 00 45.0
SJG EP	11 02 09.7
ALQ IP	11 06 02.2
TUC EP	11 06 13.0
E	07 55.0
RCD IP	11 06 38.5
FGU EP	11 06 47.7
BCN EP	11 06 51.7
BOZ IP	11 07 20.4
E	07 55.7
COL EP	11 10 14.0
MAY 19	
H-11 50 37.6	
38.3N 116.1W	
h ABOUT 20KM	
EUR IP	11 50 58.9
BCN E(P)	11 51 19.2
E	51 21.8
IL	51 53.0
TUC E(P)	11 52 28.3

Date and Station	Phase (GCT)
	h m s
ALQ IP	11 53 03.5
MAY 19	
EUR IP	12 14 51.3
MAY 19	
H-13 07 40.7	
05.9N 082.5W	
h ABOUT 22KM	
BHP IP	13 08 45.5
IS	09 32.0
SJG EP	13 12 16.0
ALQ IP	13 14 47.0
BOZ IP	13 16 13.5
EpP	16 20.5
HHM EP	13 16 37.4
MAY 19	
H-13 59 55.2	
4.8S 152.3E	
h ABOUT 70KM	
GUA IP	14 04 24.0
ES	08 04.0
COL IP	14 12 08.4
BRW EP	14 12 13.6
EUR IP	14 13 09.5
BCN EP	14 13 13.5
E	13 49.2
EPP	17 02.2
HHM EP	14 13 16.4
BOZ EP C	14 13 24.5
EPP	17 21.5
SJG EP'	14 19 20.0
E	19 39.0
HON EL	14 25 24.0
MAY 19	
TUC EP	14 01 09.0
E(S)	01 28.5
MAY 19	
BOZ EP	14 43 56.0
E	44 07.0
MAY 19	
HON EP	15 26 55.3
KIP IP	15 26 55.5
MAY 19	
H-15 59 29.0	
16.1S 174.0W	
h ABOUT 140KM	
BCN EP	16 11 04.2
TUC EP	16 11 10.0
EUR IP	16 11 10.2

Date and Station	Phase (GCT)
	h m s
BOZ EP	16 11 41.5
EPCP	11 48.0
EpP	12 23.0
MAY 19	
H-17 09 33.7	
51.5N 176.1E	
h ABOUT 33KM	
EUR IP	17 18 07.5
MAY 19	
H-17 50 04.3	
06.8S 154.7E	
h ABOUT 73KM	
EUR IP	18 03 14.9
MAY 19	
H-17 56 04.0	
45.1N 151.5E	
h ABOUT 33KM	
BOZ EP	18 06 33.4
EUR IP	18 06 44.2
BCN E(P)	18 07 15.1
MAY 19	
H-22 07 14.1	
51.6N 175.2E	
h ABOUT 35KM	
COL EP	22 12 18.0
BRW E(P)	22 12 22.3
KIP IP	22 14 18.7
HHM E(P)	22 15 17.0
BOZ EP	22 15 42.0
BCN EP	22 16 14.5
TUC EP	22 16 50.0
ALQ EP	22 16 56.8
MAY 19	
H-22 17 51.2	
45.4N 151.7E	
h ABOUT 12KM	
COL IP	22 25 09.5
BOZ EP	22 28 23.0
MAY 19	
H-23 32 14.0	
20.8S 178.5W	
h ABOUT 552KM	
KIP IP	23 39 54.0
I	41 16.3
GUA IP	23 40 17.0
BCN EP	23 43 42.2
EpP	45 41.0
EUR IP	23 43 47.0

Date and Station	Phase (GCT)
	h m s
TUC IP D	23 43 47.0
EpP	45 40.7
E	46 33.5
SLC EP	23 44 03.2
COL IP	23 44 08.9
BUT IP	23 44 13.1
EpP	46 08.1
HHM IP	23 44 14.5
EPP	47 52.5
E	00 01 43.5
BOZ IP	23 44 16.0
ESKS	54 28.0
SJG EP'	23 49 56.2
HON ES	23 46 02.7
MAY 19	
COL EP	23 54 13.0
MAY 20	
H-00 40 10.9	
14.7S 167.4E	
h ABOUT 16KM	
GUA E(P)	00 47 07.2
I	47 12.8
ET	01 24 44.0
HON IP	00 49 02.5
EPP	51 04.0
ES	56 13.0
EL	59 46.0
KIP IP	00 49 02.8
EPP	51 05.0
IS	56 12.0
F	59 46.0
UKI E(P)	00 52 40.6
SIT E(P)	00 52 46.6
COL EP	00 52 51.7
BCN EP	00 53 06.4
I	53 13.2
EPP	56 41.2
EUR IP	00 53 07.4
BRW EP	00 53 10.5
I	53 30.1
TUC EP	00 53 15.5
E	53 23.0
E(S)	01 04 00.0
HHM EP	00 53 25.5
EPP	57 14.5
ESKS	01 03 58.5
EPKKP	10 34.5
SLC EP	00 53 25.6
I	53 29.5
BUT EP	00 53 28.1
EPP	56 58.1
ESKS	01 04 37.1

Date and Station	Phase	(GCT) h m s
BOZ	EP	00 53 29.0
	EPP	57 09.0
ALQ	IP	00 53 35.0
	EPP	57 32.0
RCD	E(PP)	00 57 56.0
CSC	EP'	00 59 05.0
	EPP	01 00 00.0
	EPKKP	09 46.0
WSC	EP'	00 59 12.3
	E(PP)	01 00 09.9
	E	00 27.5
WAS	EP'	00 59 15.0
	EPP	01 00 29.0
	E	03 01.0
SJG	IP'	00 59 22.0
	E	01 01 40.0
BHP	E	01 00 00.0
PHI	E(PP)	01 00 33.9
	I	10 34.2
MAY 20		
H-01 04 51.7		
14.4S 167.4E		
h ABOUT 027KM		
EUR	IP	01 17 47.3
KIP	E(P)	01 13 46.0
	E	24 03.0
COL	EP	01 17 30.0
BCN	EP	01 17 46.5
TUC	E(P)	01 17 55.5
MAY 20		
KIP	E(P)	01 41 10.5
MAY 20		
H-02 03 33.5		
40.8S 175.9E		
h ABOUT 49KM		
COL	I(P)	02 18 49.7
MAY 20		
EUR	IP	02 07 24.3
MAY 20		
H-02 13 38.9		
51.2N 173.7E		
h ABOUT 41KM		
BRW	EP	02 18 51.2
HHM	EP	02 21 51.7
	E	23 32.5
BOZ	IP	02 22 15.0
	E*P	22 26.5
BCN	EP	02 22 46.0
	E*P	22 57.4
RCD	E(P)	02 22 57.5
TUC	IP	02 23 21.8
MAY 20		
H-02 42 12.5		
50.2N 178.2E		
h ABOUT 33KM		
BOZ	EP	02 50 31.0
MAY 20		
KIP	E(P)	03 41 40.0
MAY 20		
BOZ	E(P)	04 42 35.0
	E	43 35.0
MAY 20		
BOZ	IP	05 01 10.0
	ES	01 36.5
BUT	EP	05 01 19.6
	IL	02 01.1
EUR	EP	05 02 51.3
MAY 20		
HHM	E(P)	05 02 08.0
	EL	03 18.5
MAY 20		
SLC	EP	05 16 11.4
	I	16 46.2
MAY 20		
H-05 29 43.3		
14.5S 167.3E		
h ABOUT 21KM		
COL	E(P)	05 42 31.5
MAY 20		
BOZ	IP	07 10 40.0
	IL	10 57.0
MAY 20		
RCD	E(P)	09 21 52.0
MAY 20		
H-09 55 13.8		
03.9S 080.8W		
h ABOUT 38KM		
SJG	EP	10 00 48.0
	E	01 11.5
ALQ	IP	10 03 32.5
TUC	E(P)	10 03 34.4
EUR	EP	10 04 36.3
BOZ	EP	10 04 53.5
MAY 20		
H-12 01 49.2		
61.0N 150.2W		
h ABOUT 166KM		
COL	IP	12 02 51.4
BRW	EP	12 04 18.0
MAY 20		
COL	EP	13 11 08.0
MAY 20		
COL	IP	13 30 33.0
MAY 20		
COL	EP	13 33 55.0
MAY 20		
H-13 37 21.8		
3.3S 135.7E		
h ABOUT 49KM		
COL	IP	13 50 02.5
EUR	EP	13 51 31.8
MAY 20		
H-14 00 49.6		
02.2N 099.6E		
h ABOUT 75KM		
BOZ	EP'	14 19 45.0
ALQ	EP'	14 19 52.2
MAY 20		
H-14 06 55.6		
01.8N 099.1E		
h ABOUT 73KM		
BRW	EP	14 20 05.0
BOZ	EP'	14 25 51.5
	E	26 52.5
EUR	EP'	14 25 56.9
MAY 20		
ALQ	E(P)	14 23 30.0
MAY 20		
H-14 25 18.2		
51.6N 172.6E		
h ABOUT 33KM		
COL	IP	14 30 33.0
BOZ	EP	14 33 58.0
MAY 20		
BOZ	EP	15 15 29.0
MAY 20		
FGU	EP	16 18 15.0
MAY 20		
FGU	EP	16 19 36.8
MAY 20		
EUR	IP	16 31 09.6
MAY 20		
BOZ	IP	16 46 10.5
	IS	46 26.0
BUT	IP	16 46 12.1
	IL	46 27.1
HHM	E(P)	16 46 44.0
	E	47 30.6
MAY 20		
H-17 52 26.4		
06.8N 073.0W		
h ABOUT 159KM		
SJG	EP	17 55 27.5
	E	56 11.5
	IS	57 42.8
MAY 20		
TUC	EP	18 10 37.8
MAY 20		
EUR	EP	19 31 43.7
MAY 20		
EUR	IP	20 09 17.7
MAY 20		
H-20 37 41.4		
45.1S 167.6E		
h ABOUT 105KM		
EUR	EP'	20 56 00.2
SJG	EP'	20 56 36.0
MAY 20		
TUC	E(P)	21 01 00.8
MAY 20		
TUC	E(P)	21 07 30.0
MAY 20		
EUR	IP	21 37 53.6
MAY 20		
SLC	EP	21 59 23.4
	EL	59 42.0
EUR	EP	22 00 06.6
MAY 20		
EUR	EP	22 35 37.8
MAY 20		
H-22 51 45.1		
59.8N 152.6W		
h ABOUT 96KM		
COL	IP	22 53 06.7
MAY 20		
SLC	EP	23 05 17.4
MAY 20		
GUA	EP	23 16 06.2
	ES	16 25.0
MAY 20		
GUA	IP	23 40 16.9
MAY 21		
FGU	EP	02 14 58.6
	ES	15 30.6
EUR	EP	02 15 16.7
MAY 21		
BOZ	EP	03 16 05.5
	IL	16 24.0
MAY 21		
H-04 13 51.3		
32.5N 142.6E		
h ABOUT 33KM		
COL	E(P)	04 23 03.4

Date and Station	Phase (GCT)
	h m s
BOZ EP	04 25 44.7
MAY 21	
BOZ EP	04 45 15.0
MAY 21	
COL EP	05 50 15.2
E	50 22.9
MAY 21	
COL EP	06 12 24.1
MAY 21	
H-06 41 10.3	
59.4N 153.4W	
h ABOUT 73KM	
COL IP	06 42 40.4
I	43 50.7
MAY 21	
EUR IP	06 52 05.9
MAY 21	
BCN EP	06 53 52.2
BOZ EP	06 55 41.0
COL E(P)	07 00 28.6
MAY 21	
EUR EP	07 20 15.9
MAY 21	
H-07 23 29.3	
19.7N 071.6W	
h ABOUT 33KM	
SJG FP	07 24 49.0
I	24 56.7
IS	25 48.5
FL	26 03.5
MAY 21	
COL EP	08 48 53.0
MAY 21	
BOZ E(P)	09 11 47.0
COL EP	09 15 43.3
MAY 21	
COL EP	09 58 48.4
MAY 21	
H-09 58 54.1	
14.8S 166.8E	
h ABOUT 9KM	
COL EP	10 11 39.3
MAY 21	
BOZ E(P)	11 07 12.0
E	07 23.5
MAY 21	
H-11 24 24.6	
50.6N 160.0E	
h ABOUT 76KM	
COL IP	11 30 29.5
BOZ EP	11 33 56.5

Date and Station	Phase (GCT)
	h m s
EUR IP	11 34 08.3
MAY 21	
BCN EP	12 01 20.5
BOZ EP	12 01 29.2
EUR EP	12 01 30.0
HHM FP	12 01 37.7
MAY 21	
EUR IP	12 08 47.8
MAY 21	
H-13 08 52.1	
37.2N 116.1W	
h ABOUT 000KM	
BCN IP C	13 09 19.5
EUR IP	13 09 32.8
SLC IP	13 10 10.1
I	10 18.3
I	11 33.9
I	13 57.9
TUC EP	13 10 29.0
FGU IP	13 10 32.0
ALQ IP	13 10 51.5
I	11 23.0
IL	13 06.5
BOZ EP	13 11 09.0
BUT E(P)	13 11 11.0
HHM EP	13 11 38.7
F	14 56.2
RCD EP	13 11 45.0
MAY 21	
BOZ EP	13 10 16.0
MAY 21	
SIT E(P)	13 17 06.0
MAY21	
H-13 51 51.8	
37.2N 116.1W	
h ABOUT 000KM	
EUR IP	13 52 30.4
SLC EP	13 53 08.9
BCN E	13 53 17.2
TUC E(P)	13 53 27.0
E	55 18.6
ALQ EP	13 53 49.0
I	54 21.5
BOZ E(P)	13 54 10.0
MAY 21	
EUR IP	17 49 35.3

Date and Station	Phase (GCT)
	h m s
MAY 21	
EUR IP	17 51 13.1
BCN E(P)	17 51 21.5
FL	51 58.5
MAY 21	
COL EP	20 43 21.0
MAY 21	
FGU E(P)	21 04 50.5
MAY 21	
KIP E(P)	21 27 03.3
MAY 21	
EUR IP	21 54 52.6
MAY 21	
SLC EP	22 05 48.7
MAY 21	
EUR IP	22 17 23.4
MAY 21	
H-22 58 01.5	
06.1N 073.4W	
h ABOUT 234KM	
TUC EP	23 05 44.0
MAY 21	
EUR EP	23 00 21.8
MAY 21	
TUC E(P)	23 13 29.1
MAY 21	
FGU E(P)	23 49 27.6
E(S)	49 47.5
MAY 21	
H-23 53 43.2	
51.9N 174.5E	
h ABOUT 33KM	
COL IP	23 58 49.0
EUR EP	24 02 23.8
MAY 22	
H-00 36 48.5	
20.4S 070.0W	
h ABOUT 33KM	
SJG EP	00 44 02.8
BOZ EP	00 48 36.0
MAY 22	
BOZ EP	01 32 55.0
E	33 13.6
MAY 22	
SJG EP	02 18 25.5
EL	19 03.0
MAY 22	
COL EP	02 48 30.0
EUR IP	02 49 53.2

Date and Station	Phase (GCT)
	h m s
MAY 22	
H-03 05 43.6	
1.3N 126.3E	
h ABOUT 25KM	
GUA EP	03 10 39.0
KIP EP	03 17 34.0
COL IP	03 18 27.8
EUR IP'	03 24 16.4
BOZ EP'	03 24 18.0
TUC EP'	03 24 28.8
ALQ IP'	03 24 39.2
SJG EP'	03 26 10.6
MAY 22	
EUR EP	03 20 15.8
MAY 22	
COL EP	03 27 09.0
MAY 22	
TUC E(P)	03 35 00.5
BOZ E(P)	03 35 25.0
MAY 22	
GUA EP	05 34 21.0
ES	34 45.7
MAY 22	
BOZ EP	06 03 19.6
F	03 42.0
COL FP	06 03 53.0
MAY 22	
BOZ EP	08 11 56.0
IL	12 15.0
MAY 22	
BOZ FP	08 47 57.7
FGU E(P)	08 48 26.7
MAY 22	
BOZ IP	08 49 10.2
FGU EP	08 49 38.5
MAY 22	
BOZ EP	09 02 25.5
MAY 22	
BOZ EP	09 33 20.5
MAY 22	
H-10 24 25.5	
51.8N 178.3W	
h ABOUT 89KM	
COL EP	10 28 57.0
BOZ FP	10 32 17.5
E	34 09.0
EUR IP	10 32 26.9

Date and Station	Phase (GCT) h m s
TUC E(P)	10 33 26.6
MAY 22	
H-10 31 39.5	
21.1S 178.7W	
h ABOUT 578KM	
KIP EP	10 39 19.0
I(PP)	41 02.0
HON EP	10 39 21.0
GUA IP	10 39 41.0
IS	46 13.0
BCN EP	10 43 06.2
EPP	45 09.5
P'P'	11 09 25.0
EUR IP	10 43 11.5
TUC EP	10 43 11.5
EPP	45 16.0
ES	52 45.0
EPKKP	11 01 25.5
EP'P'	09 33.0
SLC IP	10 43 28.3
ALQ IP	10 43 31.5
IPP	45 36.0
COL IP	10 43 32.9
FGU IP	10 43 35.7
BUT EP	10 43 37.5
EPP	45 40.4
HHM EP	10 43 38.8
E	45 32.0
EP'P'	11 01 09.3
BOZ IP D	10 43 39.5
IPCP	43 47.0
IPP	45 43.0
RCD EP	10 44 02.0
EPP	46 03.0
SJG IP'	10 49 20.0
IPP'	51 20.5
EPKKP	59 52.0
MAY 22	
BOZ EP	10 36 10.5
MAY 22	
BCN EP	10 48 34.0
MAY 22	
BOZ EP	10 58 24.0
MAY 22	
BOZ EP	11 09 00.0
E	09 15.0
EUR EP	11 09 19.0
MAY 22	
BOZ EP	11 18 37.0
MAY 22	
COL IP	11 42 07.9

Date and Station	Phase (GCT) h m s
MAY 22	
RCD E(P)	12 30 35.0
E(L)	31 10.0
MAY 22	
H-13 19 04.5	
14.5S 167.1E	
h ABOUT 27KM	
COL EP	13 31 44.0
EUR IP	13 32 00.1
BCN E(P)	13 32 05.5
E	32 11.0
MAY 22	
EUR IP	13 35 29.4
MAY 22	
BOZ EP	14 08 36.0
COL E(P)	14 12 03.6
MAY 22	
H-14 10 45.0	
14.7S 167.4E	
h ABOUT 17KM	
COL IP	14 23 27.8
BCN E(P)	14 23 38.5
E	23 45.0
E	23 57.6
EUR IP	14 23 41.5
BOZ EP	14 24 06.9
HON ES	14 26 55.0
EL	33 04.0
MAY 22	
BUT IP	14 57 05.2
IL	57 09.5
BOZ IP	14 57 13.0
IL	57 25.5
MAY 22	
EUR IP	15 40 07.8
MAY 22	
H-16 09 29.5	
14.1S 013.8W	
h ABOUT 33KM	
SJG E(P)	16 19 28.5
E	19 40.7
CSC EP	16 21 31.0
KIP EP'	16 29 09.0
E	29 12.4
MAY 22	
EUR IP	16 30 29.5
MAY 22	
TUC E(P)	17 41 25.0
MAY 22	
TUC E(P)	17 49 45.5

Date and Station	Phase (GCT) h m s
MAY 22	
TUC E(P)	17 56 02.5
BCN E(P)	17 56 28.5
E	56 44.0
EL	57 51.8
MAY 22	
EUR EP	17 59 53.9
MAY 22	
H-18 52 28.1	
40.0N 141.8E	
h ABOUT 38KM	
COL EP	19 00 52.0
BOZ EP	19 03 52.5
MAY 22	
SLC EP	19 05 26.4
E	05 42.1
MAY 22	
COL EP	19 26 27.0
MAY 22	
COL IP	19 47 20.0
MAY 22	
COL IP	19 47 28.6
MAY 22	
H-19 53 23.8	
14.7S 167.5E	
h ABOUT 24KM	
COL E(P)	20 06 10.5
BCN EP	20 06 19.5
E	06 36.8
EUR EP	20 06 20.4
MAY 22	
EUR IP	20 44 22.9
MAY 22	
EUR IP	20 52 49.4
MAY 22	
SLC EP	22 00 33.0
EL	01 01.2
EUR IP	22 01 00.6
FGU EP	22 01 04.8
I	01 06.5
MAY 22	
BOZ E(P)	22 01 50.0
MAY 22	
SLC EP	22 09 35.2
E	10 52.2
EUR IP	22 10 23.9
TUC E(P)	22 10 54.0
MAY 22	
BCN E(P)	22 11 45.9
EL	12 44.5

Date and Station	Phase (GCT) h m s
MAY 22	
ALQ EP	22 14 09.2
MAY 22	
EUR IP	22 20 22.8
MAY 22	
TUC E(P)	22 33 59.0
BCN E(P)	22 34 21.5
E	34 30.8
EL	35 50.0
MAY 22	
TUC E(P)	22 45 56.0
MAY 22	
TUC E(P)	22 57 12.8
MAY 22	
TUC E(P)	23 16 05.3
MAY 22	
TUC E(P)	23 25 18.5
BCN E(P)	23 25 40.0
I	25 49.5
EL	27 04.0
EUR E(P)	23 26 34.0
MAY 22	
ALQ E(P)	23 26 29.8
MAY 22	
COL EP	23 35 40.0
BCN E(P)	23 40 05.0
E	48 16.7
EL	49 21.5
MAY 22	
TUC E(P)	23 47 21.7
MAY 22	
EUR EP	23 51 13.8
MAY 22	
SIT E(P)	23 59 40.5
MAY 23	
COL EP	00 18 22.0
MAY 23	
COL EP	00 28 01.2
MAY 23	
COL EP	00 29 41.0
MAY 23	
TUC E(P)	00 59 08.3
MAY 23	
KIP E(P)	01 28 36.5
E	28 39.3
MAY 23	
H-01 37 00.2	
52.3N 172.8E	
h ABOUT 35KM	
BRW EP	01 42 07.5
E	42 16.7

Date and Station	Phase (GCT)
	h m s
COL IP	01 42 08.6
BOZ EP	01 45 36.9
MAY 23	
BUT EP	01 52 23.6
IL	52 45.6
MAY 23	
GUA IP	01 55 06.0
IS	55 38.0
MAY 23	
BOZ EP	02 06 27.5
MAY 23	
BOZ EP	02 07 02.0
I	07 12.0
MAY 23	
H-03 58 11.4	
39.9N 143.5E	
h ABOUT 33KM	
BRW EP	04 06 10.4
COL I(P)	04 06 42.5
BOZ EP	04 09 31.5
EUR EP	04 09 39.0
ALQ F(P)	04 10 25.5
MAY 23	
H-04 13 35.0	
13.9S 166.3E	
h ABOUT 56KM	
COL EP	04 26 10.0
MAY 23	
H-04 27 08.3	
51.1N 179.6E	
h ABOUT 47KM	
COL EP	04 31 57.0
BRW EP	04 32 08.7
F	32 19.4
BOZ IP	04 35 16.5
IpP	35 27.0
EUR IP	04 35 24.0
MAY 23	
GUA IP	05 50 48.0
IS	52 50.0
MAY 23	
GUA IP	05 50 48.2
MAY 23	
H-07 04 16.8	
28.6N 142.8E	
h ABOUT 33KM	
BRW EP	07 13 39.7
COL IP	07 13 52.9
HHM EP	07 16 10.0
BUT E(P)	07 16 15.6
BOZ EP	07 16 25.2
EUR IP	07 16 27.2
RCD E(P)	07 16 55.0
MAY 23	
H-07 46 33.7	
14.1S 013.9W	
h ABOUT 33KM	
SJG EP	07 56 45.5
CSC EP	07 58 36.0
COL EP'	08 05 22.0
MAY 23	
TUC E(P)	08 03 46.5
MAY 23	
EUR IP	09 00 11.0
MAY 23	
H-09 48 38.2	
17.5N 145.8E	
h ABOUT 129KM	
GUA IP	09 49 39.2
ES	50 23.2
BRW E(P)	09 58 55.3
EUR IP	10 01 02.4
BOZ EP	10 01 07.0
MAY 23	
H-14 45 51.5	
36.4N 140.9E	
h ABOUT 48KM	
BRW FP	14 54 21.5
COL IP	14 54 41.8
BOZ EP	14 57 33.0
EpP	57 45.8
EUR IP	14 57 39.8
MAY 23	
H-16 05 32.7	
24.0N 102.5E	
h ABOUT 33KM	
BRW EP	16 16 48.9
I	16 53.7
COL EP	16 17 25.0
MAY 23	
BUT EP	18 39 31.7
IL	39 48.7
BOZ EP	18 39 32.0
IL	39 49.5
MAY 23	
H-19 15 07.2	
45.0N 113.1W	
h ABOUT 33KM	
BUT IP	19 15 26.3
BOZ IP C	19 15 26.9
HHM E(P)	19 16 00.0
EUR EP	19 16 36.0
MAY 23	
EUR IP	19 35 07.6
MAY 23	
GUA IP	19 47 11.5
ES	47 36.5
MAY 23	
BUT EP	20 22 53.7
BOZ EP	20 22 54.0
IL	23 12.5
HHM E(P)	20 23 27.0
MAY 23	
BUT EP	20 22 55.3
IS	23 10.7
MAY 23	
BUT FP	20 23 53.7
IL	23 10.7
MAY 23	
BOZ FP	21 55 58.5
IL	56 17.0
BUT EP	21 55 58.8
IL	55 15.8
HHM E(P)	21 56 43.6
MAY 23	
H-23 11 02.0	
12.0N 070.3W	
h ABOUT 33KM	
SJG EP	23 12 49.0
I(S)	14 09.7
MAY 23	
H-23 46 12.0	
52.2N 175.0E	
h ABOUT 22KM	
COL IP	23 51 15.4
IS	55 24.0
BRW IP C	23 51 17.8
ISCP	58 32.2
SIT EP	23 52 10.3
KIP IP	23 53 25.5
ES	59 12.0
EL	00 02 00.0
ET	30 19.0
HON EP	23 53 25.5
IS	59 12.0
EL	02 08.0
ET	00 31 47.0
HHM IP C	23 54 19.1
IPCP	56 06.1
ISCP	59 52.1
IL	00 04 34.1
GUA E(P)	23 54 31.0
E(S)	24 01 04.0
BUT IP C	23 54 35.2
IPCP	55 12.8
ISCP	00 00 00.8
EL	04 25.8
EUR IP	23 54 51.1
ESCP	00 00 10.0
SLC IP	23 55 03.9
BCN EP	23 55 13.5
EPCP	56 25.5
ESCP	00 00 22.3
FGU IP	23 55 13.5
RCD IP C	23 55 25.0
E(pP)	55 34.0
ES	00 02 14.0
TUC IP C	23 55 50.0
ALQ IP	23 55 55.5
I	56 53.0
WSC IP	23 57 21.2
WAS IP	23 57 22.0
F	57 34.0
E(S)	00 06 26.0
CSC IP C	23 57 34.0
ES	00 06 46.0
SJG EP	23 59 22.5
EpP	59 34.0
EPP	00 03 00.0
MAY 24	
H-03 39 21.5	
74.3N 132.4E	
h ABOUT 15KM	
BRW FP	03 43 56.1
COL FP	03 45 04.0
HHM FP	03 48 16.1
I	48 21.1
BOZ EP	03 48 40.0
F	48 44.0
EUR IP	03 49 15.2
ALQ IP	03 49 57.0
MAY 24	
BOZ FP	03 42 27.5
MAY 24	
H-05 02 11.8	
9.5S 113.0E	
h ABOUT 67KM	
EUR EP'	05 21 13.4

Date and Station	Phase (GCT)
	h m s
BOZ EP'	05 21 14.1
E	21 28.0
MAY 24	
TUC E(P)	05 24 50.5
MAY 24	
SJG IP C	07 57 21.2
IS	57 36.0
MAY 24	
H-12 05 17.6	
42.8N 111.4W	
h ABOUT 33KM	
FGU EP	12 05 57.0
IS	06 29.3
BOZ EP	12 06 00.0
IL	06 35.0
EUR EP	12 06 29.7
I	07 56.7
RCD E(P)	12 06 56.0
E	07 24.0
MAY 24	
COL EP	12 50 51.0
MAY 24	
H-13 22 00.4	
19.0N 107.9W	
h ABOUT 33KM	
ALQ EP	13 25 47.8
BCN EP	13 26 11.0
E	26 18.5
EUR EP	13 26 50.9
MAY 24	
H-13 48 28.8	
38.0N 141.6E	
h ABOUT 29KM	
BRW IP	13 56 49.7
E	57 02.7
COL EP	13 57 09.0
HHM EP	13 59 45.6
BOZ IP	14 00 03.5
IpP	00 12.0
EUR IP	14 00 10.1
BCN EP	14 00 26.0
TUC EP	14 00 51.5
ALQ IP	14 00 55.5
RCD E(P)	14 01 36.0
MAY 24	
EUR IP	14 30 58.7

Date and Station	Phase (GCT)
	h m s
MAY 24	
H-15 03 15.4	
14.7S 167.4E	
h ABOUT 23KM	
COL EP	15 15 54.0
EUR E(P)	15 16 02.9
MAY 24	
H-16 40 14.4	
00.1S 124.3E	
h ABOUT 72KM	
COL EP	16 53 03.0
BOZ EP'	16 58 47.0
MAY 24	
BOZ EP	21 36 43.0
MAY 24	
EUR EP	22 27 45.6
MAY 24	
COL EP	22 37 21.0
BRW E(P)	22 37 41.9
MAY 24	
H-23 21 10.6	
13.0N 124.5E	
h ABOUT 33KM	
GUA EP	23 25 41.2
ES	29 27.0
ET	45 31.6
KIP EP	23 32 46.0
IpP	32 54.0
HON EP	23 32 47.2
IpP	32 55.0
COL IP	23 33 02.2
ES	42 44.0
SIT E(P)	23 33 43.8
IpP	33 52.0
BRW I(P)	23 33 46.2
IpP	33 54.8
HHM EP	23 34 55.6
EPP	38 24.1
EPKKP	51 13.1
BUT E(P)	23 34 59.0
BOZ EP	23 35 08.5
EpP	35 16.5
EUR IP	23 35 11.1
BCN EP'	23 39 42.0
EpP'	39 48.0
TUC EP'	23 39 43.0
ALQ IP'	23 39 45.5
WSC EP'	23 40 08.8
EpP'	40 18.0

Date and Station	Phase (GCT)
	h m s
WAS IP'	23 40 09.0
EpP'	40 20.0
EPP	41 31.0
CSC EP'	23 40 14.0
EpP'	40 24.0
SJG EP'	23 40 51.1
E	41 03.5
ESKP	44 20.0
BHP IP'	23 40 54.0
MAY 25	
H-00 48 13.3	
37.1N 117.2W	
h ABOUT 33KM	
BCN EP	00 48 49.2
I(S)	49 17.9
EUR IP	00 48 51.7
TUC E(P)	00 49 56.9
MAY 25	
H-01 30 11.9	
22.0N 144.2E	
h ABOUT 98KM	
COL EP	01 40 15.2
EUR EP	01 42 31.2
BOZ EP	01 42 33.0
MAY 25	
BUT E(P)	02 55 26.0
EL	56 00.0
BOZ EP	02 55 26.7
ES	56 06.0
MAY 25	
GUA EP	05 51 11.5
ES	51 28.8
MAY 25	
H-05 55 42.8	
10.7S 165.1E	
h ABOUT 33KM	
COL EP	06 08 06.7
MAY 25	
H-08 58 41.0	
52.0N 174.5W	
h ABOUT 29KM	
COL EP	09 03 02.0
BOZ EP	09 06 20.0
F	06 32.9
EUR EP	09 06 28.0
MAY 25	
COL EP	09 43 08.0
MAY 25	
BHP IP	11 54 25.4

Date and Station	Phase (GCT)
	h m s
MAY 25	
H-13 07 49.7	
51.3N 178.7E	
h ABOUT 40KM	
COL IP	13 12 40.6
ES	16 40.0
BRW IP	13 12 52.8
KIP EP	13 14 40.0
BUT EP	13 15 58.9
SLC E(P)	13 16 10.5
E(pP)	16 23.6
EUR IP	13 16 10.7
BCN EP	13 16 32.5
EpP	18 44.0
RCD EP	13 16 46.0
EpP	16 58.5
TUC EP	13 17 09.3
EpP	17 20.5
ES	24 45.0
ALQ IP	13 17 16.0
SJG EP	13 20 51.0
IpP	21 01.3
HON FS	13 20 15.0
EL	24 00.0
MAY 25	
H-13 36 36.7	
63.0S 158.6W	
h ABOUT 33KM	
KIP E(P)	13 50 32.5
E	51 04.5
COL EP'	13 55 39.0
MAY 25	
H-14 03 59.7	
52.3N 176.3E	
h ABOUT 33KM	
EUR IP	14 12 31.4
MAY 25	
GUA EP	16 10 38.2
ES	10 55.0
MAY 25	
H-16 22 52.0	
19.3S 069.6W	
h ABOUT 109KM	
SJG EP C	16 29 51.5
EpP	30 17.5
EsP	30 31.0
EPP	31 22.0
ES	35 27.0
EsS	36 12.5
TUC EP	16 33 21.1
RCD E(P)	16 33 55.0

Date and Station	Phase (GCT)
	h m s
EUR IP	16 34 12.7
BOZ IP	16 34 24.5
MAY 25	
ALQ EP	16 30 10.2
IS	33 55.2
MAY 25	
H-18 34 28.4	
17.0S 175.9E	
h ABOUT 16KM	
BCN EP	18 47 01.5
I	47 09.7
EUR IP	18 47 05.2
TUC E(P)	18 47 08.5
COL IP	18 47 09.8
BOZ EP	18 47 30.0
HON ES	18 49 50.0
EL	55 29.0
MAY 25	
FGU EP	18 59 22.3
IS	59 53.8
BOZ EP	18 59 25.5
EL	59 57.5
MAY 25	
H-20 13 18.7	
17.2S 175.9E	
h ABOUT 33KM	
COL EP	20 25 58.0
BOZ EP	20 26 17.0
MAY 26	
H-00 56 34.6	
47.5N 154.5E	
h ABOUT 13KM	
COL E(P)	01 03 28.5
BOZ IP	01 06 47.5
FUR IP	01 06 57.2
MAY 26	
COL EP	03 18 02.0
BOZ EP	03 21 20.0
EUR EP	03 21 30.2
MAY 26	
H-04 02 23.3	
16.3S 173.0E	
h ABOUT 33KM	
COL EP	04 15 02.0
MAY 26	
H-04 58 39.2	
13.7N 090.6W	
h ABOUT 39KM	

Date and Station	Phase (GCT)
	h m s
CSC EP	05 03 34.0
E	03 43.0
EL	07 40.0
SJG E(P)	05 03 50.0
ALQ IP	05 04 06.8
E	04 30.0
TUC IP C	05 04 12.0
E▸P	04 23.0
EPCP	07 37.2
WSC EP	05 04 28.1
EL	11 04.7
BCN EP	05 04 56.4
FPCP	07 50.7
▸PCP	07 58.8
FGU EP	05 05 01.5
RCD EP	05 05 08.0
E(PCP)	07 53.0
SLC IP	05 05 11.8
FUR IP	05 05 23.0
BOZ IP	05 05 42.5
HHM EP	05 06 09.1
BRW EP	05 09 44.3
MAY 26	
BHP EP	05 04 36.0
MAY 26	
HHM IP	05 08 15.1
MAY 26	
COL EP	05 21 44.0
MAY 26	
EUR IP	06 23 35.1
MAY 26	
BRW EP	06 42 45.1
MAY 26	
H-06 42 53.9	
35.7S 180.0E	
h ABOUT 63KM	
TUC E(P)	06 56 05.5
EUR E(P)	06 56 11.7
MAY 26	
H-08 47 22.0	
36.3N 070.5E	
h ABOUT 229KM	
COL IP	08 58 37.9
MAY 26	
COL EP	10 05 39.0
MAY 26	
EUR EP	10 52 35.7
BCN EP	10 52 42.5

Date and Station	Phase (GCT)
	h m s
MAY 26	
BCN E(P)	12 00 49.0
EL	01 22.8
EUR IP	12 01 13.2
MAY 26	
H-13 58 03.0	
35.3N 044.6E	
h ABOUT 54KM	
COL IP	14 10 04.0
MAY 26	
COL EP	14 42 27.5
BRW E(P)	14 43 51.6
MAY 26	
COL EP	14 44 10.0
MAY 26	
H-16 03 12.1	
45.5N 145.9E	
h ABOUT 172KM	
COL IP	16 10 33.8
BOZ IP	16 13 44.9
MAY 26	
BCN F(P)	16 59 22.0
EL	17 00 01.0
MAY 26	
EUR IP	18 12 06.2
MAY 26	
TUC EP	19 09 41.0
E(S)	09 53.0
MAY 26	
HHM EP	19 11 07.2
MAY 26	
H-19 15 52.6	
52.0N 175.0E	
h ABOUT 37KM	
COL IP	19 20 53.9
BRW IP	19 20 56.3
E	21 11.8
HHM FP	19 23 56.7
BOZ EP	19 24 20.0
EUR IP	19 24 29.2
MAY 26	
H-19 44 10.9	
56.1S 027.6W	
h ABOUT 120KM	
SJG IP	19 56 11.0
I▸P	56 51.0
ALQ IP'	20 02 33.3
EPKKP	13 24.0
TUC EP'	20 02 33.8
ESKP	05 56.0
EPKKP	13 24.0

Date and Station	Phase (GCT)
	h m s
BCN EP'	20 02 42.5
E▸P'	03 15.0
ISKP	06 06.3
EPKKP	13 07.0
EPKKP	13 11.0
SLC IP'	20 02 47.1
EUR IP'	20 02 50.0
EPKKP	12 55.2
BOZ IP'C	20 02 54.9
IP'	03 00.0
I▸P'	03 27.0
IPP	04 35.0
I	05 07.5
E(PKKP)	12 44.6
HHM IP'	20 02 59.6
F▸P'	03 31.2
COL IP'	20 03 38.5
BRW IP'	20 03 43.8
IP'	03 55.0
I	04 09.7
MAY 26	
H-22 00 11.2	
33.5S 179.8E	
h ABOUT 102KM	
TUC EP	22 13 12.9
F(▸P)	13 39.2
MAY 26	
H-23 19 11.2	
28.5S 178.1W	
h ABOUT 169KM	
TUC EP	23 31 44.0
COL EP	23 32 18.0
MAY 26	
BOZ EP	23 31 02.5
F	31 23.0
MAY 26	
H-23 32 03.9	
45.4N 151.3E	
h ABOUT 33KM	
COL IP	23 39 21.0
BOZ EP	23 42 34.5
FUR IP	23 42 43.0
MAY 26	
SJG IP	24 03 48.5
IS	03 59.7
MAY 27	
H-01 29 28.1	
15.1S 172.9W	
h ABOUT 33KM	
TUC EP	01 41 15.0
COL EP	01 41 46.0
BOZ EP	01 41 47.5

Date and Station	Phase (GCT)
	h m s
MAY 27	
BOZ EP	03 17 36.0
MAY 27	
COL IP	03 18 37.5
MAY 27	
H-03 32 32.9	
48.5N 154.9E	
h ABOUT 41KM	
BRW EP	03 38 55.5
E	39 22.1
COL IP	03 39 14.7
BOZ IP	03 42 36.5
IpP	42 48.0
FUR IP	03 42 46.8
MAY 27	
H-12 18 52.0	
24.2S 065.9W	
h ABOUT 190KM	
ALQ IP	12 29 46.0
TUC EP	12 29 48.5
BCN EP	12 30 17.8
FUR IP	12 30 35.6
BOZ IP	12 30 47.0
HHM EP	12 31 02.8
MAY 27	
H-12 29 45.6	
14.8N 094.2W	
h ABOUT 21KM	
ALQ FP	12 34 50.0
BCN EP	12 35 37.5
EUR EP	12 36 05.2
MAY 27	
H-12 56 51.4	
53.9N 164.9W	
h ABOUT 33KM	
COL EP	13 00 08.0
BRW EP	13 01 01.7
EUR IP	13 03 49.9
BCN EP	13 04 15.5
TUC E(P)	13 04 55.4
MAY 27	
H-13 05 55.1	
25.5S 179.9W	
h ABOUT 467KM	
BCN FP	13 17 50.0
TUC EP C	13 17 54.0
FUR IP	13 17 55.1
COL IP	13 18 18.6
BOZ FP	13 18 23.5
MAY 27	
H-13 56 47.5	
52.7N 171.8E	
h ABOUT 33KM	
BRW EP	14 01 52.4
COL IP	14 01 58.0
EUR IP	14 05 38.8
MAY 27	
EUR EP	14 15 40.9
MAY 27	
GUA EP	15 12 44.7
ES	12 58.0
MAY 27	
BRW EP	16 29 53.0
COL IP	16 29 55.5
MAY 27	
H-16 52 45.3	
18.8N 064.3W	
h ABOUT 42KM	
SJG IP D	16 53 15.5
IS	53 31.1
TUC E(P)	17 00 49.6
BOZ IP	17 01 17.5
MAY 27	
EUR EP	18 53 46.2
MAY 27	
H-19 29 24.8	
53.7N 156.7W	
h ABOUT 33KM	
COL E(P)	19 32 13.0
BRW EP	19 33 27.6
F	36 57.0
HHM EP	19 35 06.3
BOZ IP	19 35 31.5
IpP	35 41.0
EUR IP	19 35 40.3
BCN EP	19 36 08.4
ALQ IP	19 36 55.2
MAY 27	
COL IP	19 55 44.0
MAY 27	
BRW E(P)	19 59 41.5
MAY 27	
COL FP	21 26 24.0
MAY 27	
BOZ IP	21 36 35.5
I	36 40.5
MAY 27	
SLC EP	21 58 16.2
EUR EP	21 59 05.8
MAY 27	
BOZ EP	21 59 35.0
MAY 27	
BOZ FP	22 07 52.0
MAY 27	
H-22 29 52.7	
52.4N 173.5E	
h ABOUT 41KM	
BRW IP	22 34 56.7
E	35 07.4
F(S)	38 45.1
COL EP	22 34 57.0
HHM EP	22 38 02.9
EpP	38 14.4
EPCP	39 46.4
BOZ EP	22 38 25.0
EpP	38 37.5
EUR IP	22 38 36.1
TUC FP	22 39 33.8
EpP	39 46.2
MAY 27	
BOZ EP	22 59 04.0
MAY 27	
COL IP	23 53 27.8
MAY 27	
COL EP	23 57 06.0
MAY 28	
H-00 53 01.4	
18.1S 177.9W	
h ABOUT 571KM	
TUC EP	01 04 21.7
COL IP	01 04 41.1
ALQ E(P)	01 04 42.5
MAY 28	
H-03 09 27.4	
51.3N 179.1E	
h ABOUT 59KM	
COL EP	03 14 16.0
BRW IP	03 14 27.0
HHM EP	03 17 13.5
EpP	17 27.5
EUR IP	03 17 44.5
MAY 28	
COL FP	03 19 25.0
BOZ EP	03 22 53.0
MAY 28	
H-05 16 36.3	
21.0N 120.9E	
h ABOUT 38KM	
BRW IP	05 27 34.0
COL EP	05 27 56.0
HHM EP	05 30 02.5
MAY 28	
H-05 52 09.0	
27.0S 176.2W	
h ABOUT 33KM	
TUC EP	06 04 47.5
MAY 28	
H-05 53 15.1	
51.0N 178.6E	
h ABOUT 33KM	
COL EP	05 58 10.0
BRW IP	05 58 20.9
HHM EP	06 01 07.5
BOZ EP	06 01 30.0
EUR IP	06 01 38.3
MAY 28	
COL EP	06 18 58.0
MAY 28	
H-06 41 47.6	
50.8N 156.3E	
h ABOUT 33KM	
COL IP	06 48 09.7
BOZ FP	06 51 37.4
FUR IP	06 51 49.4
TUC EP	06 52 41.2
ALQ E(P)	06 52 46.0
MAY 28	
H-07 03 18.7	
47.5N 152.9E	
h ABOUT 33KM	
BRW IP	07 09 55.4
COL IP	07 10 15.8
BOZ EP	07 13 34.3
EUR IP	07 13 44.2
MAY 28	
H-08 18 51.1	
37.2N 117.3W	
h ABOUT 15KM	
BCN EP	08 19 30.9
ES	19 59.0

Date and Station	Phase (GCT)
	h m s
EUR EP	08 19 33.1
E	19 39.1
MAY 28	
H-08 34 51.3	
15.3S 173.2W	
h ABOUT 31KM	
TUC EP	08 46 39.0
EUR IP	08 46 39.3
SLC EP	08 46 57.7
ALQ IP	08 47 03.2
COL IP	08 47 10.4
HHM EP	08 47 10.5
BOZ IP	08 47 12.0
MAY 28	
H-09 31 19.1	
36.7N 070.1E	
h ABOUT 286KM	
BRW EP	09 41 44.3
COL EP	09 42 27.0
BRW E(P)	09 42 49.5
MAY 28	
COL EP	10 56 53.0
BRW EP	10 56 53.8
BOZ EP	11 01 04.5
MAY 28	
EUR EP	11 05 51.2
MAY 28	
BOZ EP	11 06 00.0
MAY 28	
EUR EP	11 17 33.8
MAY 28	
EUR EP	12 31 25.8
MAY 28	
TUC E(P)	15 38 45.0
MAY 28	
EUR EP	16 11 05.7
I	14 26.2
MAY 28	
COL IP	17 29 07.4
MAY 28	
BRW EP	17 38 37.5
COL EP	17 38 42.0
MAY 28	
EUR EP	18 02 01.8
MAY 28	
H-18 14 10.1	
51.6N 174.5E	
h ABOUT 67KM	

Date and Station	Phase (GCT)
	h m s
COL EP	18 19 14.0
BRW EP	18 19 14.8
HHM EP	18 22 15.5
EUR IP	18 22 48.2
BCN EP	18 23 10.8
EPP	23 29.0
TUC EP	18 23 46.4
MAY 28	
HHM IP	18 22 38.5
MAY 28	
TUC E(P)	18 42 28.4
MAY 28	
COL EP	18 56 10.0
MAY 28	
ALQ EP	19 36 55.0
MAY 28	
BHP IP	21 02 29.0
IS	03 01.0
MAY 28	
COL EP	21 35 10.0
MAY 28	
EUR IP	22 00 08.3
MAY 28	
BUT EP	22 54 25.5
MAY 28	
TUC E(P)	22 58 50.5
MAY 28	
EUR EP	23 13 44.2
MAY 29	
EUR EP	00 26 56.2
MAY 29	
BOZ EP	01 22 48.0
MAY 29	
H-01 28 59.0	
45.3S 095.9E	
h ABOUT 66KM	
COL EP'	01 48 20.0
EUR IP'	01 48 49.0
TUC EP'	01 48 49.0
E	49 14.5
BOZ EP'	01 49 03.5
E	49 37.0
MAY 29	
H-01 47 49.3	
35.2N 022.8E	
h ABOUT 68KM	
HHM EP	02 00 34.5
BOZ E(P)	02 00 40.0

Date and Station	Phase (GCT)
	h m s
MAY 29	
ALQ EP	01 49 34.0
MAY 29	
BOZ EP	02 46 03.5
MAY 29	
TUC E(P)	03 44 37.0
MAY 29	
H-03 57 46.8	
24.1S 179.7E	
h ABOUT 529KM	
TUC EP	04 09 37.0
EUR IP	04 09 37.8
MAY 29	
H-04 14 58.6	
35.4N 022.6E	
h ABOUT 59KM	
BRW E(P)	04 26 28.9
COL EP	04 27 03.0
HHM EP	04 27 45.5
BOZ EP	04 27 51.6
MAY 29	
BOZ IP	05 42 36.5
IL	42 44.0
MAY 29	
COL EP	06 23 55.0
E	23 59.0
MAY 29	
H-06 57 56.8	
29.7N 129.8E	
h ABOUT 60KM	
COL EP	07 08 02.0
HHM EP	07 10 20.5
BOZ EP	07 10 35.5
MAY 29	
TUC E(P)	08 08 30.5
EUR IP	08 09 47.3
BOZ EP	08 10 43.0
HHM EP	08 11 10.5
MAY 29	
BOZ EP	10 26 33.0
MAY 29	
H-11 44 32.3	
52.0N 175.1E	
h ABOUT 65KM	
COL EP	11 49 31.0
SJG E(P)	11 57 25.0
MAY 29	
EUR IP	11 51 57.3

Date and Station	Phase (GCT)
	h m s
MAY 29	
H-11 53 45.8	
07.0N 077.6W	
h ABOUT 33KM	
BHP IP D	11 54 25.4
ALQ EP	12 01 04.6
TUC EP	12 01 17.0
EUR EP	12 02 19.0
BOZ EP	12 02 26.5
COL EP	12 05 27.0
MAY 29	
H-12 03 29.2	
39.5N 110.0W	
h ABOUT 33KM	
EUR E(P)	12 04 38.3
BCN E(P)	12 04 47.0
E	04 57.5
E(L)	06 10.0
BOZ E(P)	12 05 02.0
TUC E(P)	12 05 12.5
MAY 29	
BOZ EP	12 38 08.0
MAY 29	
TUC E(P)	13 02 08.0
MAY 29	
COL EP	13 11 21.0
MAY 29	
EUR EP	13 18 32.7
MAY 29	
COL EP	13 51 38.0
MAY 29	
EUR EP	14 30 39.3
MAY 29	
EUR EP	15 33 34.5
MAY 29	
H-15 36 31.9	
57.8S 147.3W	
h ABOUT 33KM	
COL EP'	15 55 20.0
MAY 29	
FGU IP	15 59 54.5
SLC E(P)	16 00 19.7
EUR EP	16 00 45.0
TUC E(P)	16 01 15.5
MAY 29	
H-16 12 13.5	
17.1S 172.6W	
h ABOUT 33KM	

Date and Station	Phase	(GCT)
		h m s
TUC	E(P)	16 24 06.0
BOZ	FP	16 24 38.5
COL	EP	16 24 40.0
MAY 29		
BOZ	EP	17 32 53.0
	E	33 16.0
MAY 29		
H-19 14 25.6		
1.7S 126.7E		
h ABOUT 17KM		
ALQ	EP	19 33 19.8
MAY 29		
BOZ	EP	19 29 37.0
MAY 29		
BOZ	EP	19 36 45.0
MAY 29		
FGU	EP	20 15 32.5
	E(S)	15 53.0
EUR	E(P)	20 16 22.7
MAY 29		
BOZ	FP	20 24 50.0
MAY 29		
H-22 56 12.6		
63.1N 024.5W		
h ABOUT 33KM		
TUC	E(P)	23 06 19.3
MAY 29		
FGU	E(P)	22 56 32.5
	E(S)	56 55.5
MAY 29		
GUA	E(P)	23 04 44.0
	ES	05 04.0
MAY 29		
COL	IP	23 31 31.3
MAY 30		
H-00 19 13.9		
33.7N 117.6W		
h ABOUT 16KM		
BCN	EP	00 20 05.5
	I	20 14.5
	EL	20 55.5
EUR	EP	00 20 45.3
MAY 30		
TUC	E(P)	00 21 06.3
MAY 30		
H-01 14 18.6		
51.6N 174.7E		
h ABOUT 38KM		
COL	EP	01 19 25.0
EUR	IP	01 22 58.4
BCN	E(P)	01 23 31.0
	F	23 36.5
TUC	E(P)	01 23 56.0
MAY 30		
H-02 09 03.9		
17.0S 167.8E		
h ABOUT 38KM		
BCN	EP	02 22 01.0
	F	22 08.0
	E	22 13.5
EUR	IP	02 22 03.3
TUC	EP	02 22 10.3
MAY 30		
H-02 28 17.9		
23.7S 179.3E		
h ABOUT 566KM		
TUC	EP	02 40 04.4
MAY 30		
H-02 37 06.8		
17.8N 060.9W		
h ABOUT 33KM		
SJG	EP D	02 38 21.8
	I	39 32.0
	IS	39 19.4
TUC	EP	02 45 38.0
EUR	EP	02 46 17.0
COL	EP	02 48 34.0
MAY 30		
BCN	EP	02 58 41.9
	F	58 50.0
	IL	59 30.5
EUR	EP	02 58 57.8
	I	59 16.2
MAY 30		
EUR	IP	02 59 16.2
	I	03 00 28.9
MAY 30		
BOZ	E(P)	03 04 12.0
MAY 30		
BOZ	EP	03 23 29.0
MAY 30		
BOZ	EP	03 34 21.2
	F	35 07.0
MAY 30		
H-03 52 24.7		
00.5S 133.2E		
h ABOUT 33KM		
COL	EP	04 05 02.0
MAY 30		
BOZ	EP	05 10 40.0
MAY 30		
H-06 35 30.8		
14.1S 173.5W		
h ABOUT 8KM		
TUC	FP	06 47 18.5
COL	EP	06 47 48.0
MAY 30		
H-07 21 56.2		
37.7S 089.3W		
h ABOUT 27KM		
ALQ	EP	07 33 30.5
MAY 30		
TUC	E(P)	07 26 51.0
MAY 30		
H-08 28 43.0		
20.5S 177.9W		
h ABOUT 512KM		
COL	IP	08 40 39.2
MAY 30		
COL	EP	08 36 43.0
MAY 30		
H-08 48 17.9		
26.0N 095.8E		
h ABOUT 88KM		
COL	IP	09 00 02.8
MAY 30		
BOZ	IP D	08 49 47.0
MAY 30		
COL	EP	09 08 34.0
MAY 30		
H-09 12 46.0		
19.0N 121.1E		
h ABOUT 49KM		
COL	EP	09 24 14.0
MAY 30		
BOZ	EP	09 48 28.5
MAY 30		
TUC	E(P)	09 55 18.8
BOZ	EP	09 55 21.5
MAY 30		
SJG	IP D	10 22 26.0
	IS	22 38.0
MAY 30		
COL	EP	10 33 47.0
MAY 30		
COL	EP	10 54 23.0
MAY 30		
BOZ	EP	11 35 45.4
MAY 30		
H-11 38 41.4		
36.5N 070.1E		
h ABOUT 220KM		
COL	IP	11 49 57.0
MAY 30		
BOZ	EP	11 53 25.0
	E	57 10.0
MAY 30		
H-11 55 29.1		
17.8N 060.9W		
h ABOUT 18KM		
SJG	IP D	11 56 45.5
	I	56 55.5
	IS	57 42.5
ALQ	EP	12 03 35.0
TUC	E(P)	12 03 57.0
MAY 30		
H-13 54 33.5		
71.6N 007.4W		
h ABOUT 17KM		
COL	FP	14 02 21.0
MAY 30		
FUR	IP	16 20 38.4
MAY 30		
H-17 31 04.1		
39.4N 106.3W		
h ABOUT 33KM		
FGU	IP	17 31 49.0
	EL	32 23.2
ALQ	IP	17 32 11.6
SLC	E(P)	17 32 17.9
	E	32 23.3
BOZ	E(P)	17 32 52.5
EUR	IP	17 32 54.3
MAY 30		
SLC	EP	18 52 37.7
	I	52 55.3
EUR	IP	18 53 21.7
MAY 30		
H-19 21 20.2		
1.7N 097.9W		
h ABOUT 33KM		
EUR	IP	19 29 03.4
HHM	EP	19 29 59.7
	E(S)	37 10.7
MAY 30		
H-19 28 31.0		
01.8N 098.2W		
h ABOUT 33KM		
ALQ	EP	19 35 07.6
FGU	FP	19 36 06.0
SLC	E(P)	19 36 10.9
RCD	E(P)	19 36 11.0

Date and Station	Phase (GCT)
	h m s
EUR IP	19 36 12.5
MAY 30	
EUR IP	20 25 05.1
BOZ EP	20 25 41.5
MAY 30	
BOZ EP	20 54 35.0
MAY 30	
TUC IP D	21 57 07.7
IS	57 25.0
MAY 30	
COL EP	22 41 21.0
MAY 31	
COL EP	00 53 10.0
MAY 31	
H-02 04 42.9	
32.6N 078.2E	
h ABOUT 33KM	
COL IP	02 16 30.2
MAY 31	
H-03 20 42.0	
49.3N 127.8W	
h ABOUT 11KM	
HHM EP	03 22 54.7
EL	25 22.2
EUR IP	03 23 50.5
FGU E(P)	03 24 21.5
RCD EP	03 24 48.0
E	24 52.0
ES	28 10.0
COL EP	03 25 04.0
ALQ IP	03 25 30.0
TUC EP	03 25 30.1
MAY 31	
H-03 21 27.3	
23.2S 177.0W	
h ABOUT 94KM	
COL EP	03 34 19.0
MAY 31	
EUR IP	03 34 36.5
MAY 31	
TUC E(P)	03 41 01.2
MAY 31	
COL EP	04 55 48.0
MAY 31	
H-05 07 43.4	
44.1N 128.8W	
h ABOUT 33KM	
EUR IP	05 10 19.7
HHM EP	05 10 21.7
BUT E(P)	05 10 27.7
E	10 35.0
BCN EP	05 10 55.8
E	11 11.0
FGU F(P)	05 11 11.5
RCD E(P)	05 11 56.0
E	12 01.0
E(S)	15 30.0
TUC IP D	05 11 59.0
ALQ IP	05 12 10.8
COL EP	05 12 51.0
MAY 31	
H-06 48 03.9	
50.9N 178.0E	
h ABOUT 33KM	
COL EP	06 53 02.0
EUR IP	06 56 29.8
MAY 31	
H-08 38 07.5	
35.7N 139.6E	
h ABOUT 124KM	
GUA EP	08 42 58.2
COL IP	08 46 58.0
BUT E(P)	08 49 43.0
EUR IP	08 49 53.7
BCN EP	08 50 08.5
E(PP)	50 36.8
E	50 44.7
FGU EP	08 50 10.2
RCD IP C	08 50 17.0
TUC EP	08 50 31.5
I	50 33.9
ALQ IP	08 50 38.8
MAY 31	
H-09 36 06.9	
20.2S 175.9W	
h ABOUT 259KM	
BCN EP	09 47 51.0
TUC EP	09 47 56.8
ALQ EP	09 48 19.0
COL EP	09 48 26.0
MAY 31	
H-10 52 55.3	
56.9N 154.5W	
h ABOUT 33KM	
COL EP	10 55 01.0
EUR EP	10 59 06.7
RCD EP	10 59 40.0
E	59 47.0
MAY 31	
H-11 23 45.9	
31.4N 141.9E	
h ABOUT 40KM	
COL EP	11 33 06.0
HHM EP	11 35 29.7
EPP	35 41.7
EUR IP	11 35 48.6
BCN EP	11 36 02.0
EPP	36 14.0
E	36 30.8
FGU EP	11 36 06.8
RCD E(P)	11 36 15.0
TUC EP	11 36 27.2
MAY 31	
H-11 38 28.0	
07.5S 128.7E	
h ABOUT 37KM	
GUA EP	11 44 04.2
KIP EP	11 50 25.0
COL EP	11 51 43.0
HHM EP'	11 57 00.0
EUR IP'	11 57 07.5
BCN EP'	11 57 10.0
EPP	58 32.0
ESKP	12 00 41.5
EPKKP	07 44.0
FGU EP'	11 57 13.7
TUC EP'	11 57 17.6
RCD EP'	11 57 18.0
E	57 36.0
EPP	59 14.0
ALQ IP'	11 57 21.4
WSC EP'	11 57 51.3
E	57 56.4
ESKP	12 01 24.8
BHP EP'	11 58 16.0
MAY 31	
GUA EP	12 02 57.8
ES	03 12.5
MAY 31	
COL EP	12 04 21.0
EUR IP	12 07 46.1
MAY 31	
COL EP	12 08 45.0
MAY 31	
TUC E(P)	14 01 53.0
BCN E(P)	14 02 59.0
EL	03 07.3
MAY 31	
COL EP	14 41 21.0
MAY 31	
COL E(P)	14 42 11.8
MAY 31	
SLC E(P)	16 00 06.6
MAY 31	
H-17 27 28.2	
51.4N 176.7E	
h ABOUT 33KM	
COL EP	17 32 28.0
EUR IP	17 35 59.4
MAY 31	
EUR IP	19 38 36.0
MAY 31	
H-20 20 14.6	
60.4N 146.9W	
h ABOUT 33KM	
COL IP	20 21 20.3
MAY 31	
GUA EP	20 46 09.0
IS	46 37.0
MAY 31	
GUA FP	20 46 09.8
FS	46 36.4
MAY 31	
H-20 46 54.4	
11.1N 086.0W	
h ABOUT 28KM	
BHP IP	20 48 32.0
IS	51 00.0
SJG E(P)	20 51 34.5
CSC FP	20 52 04.0
WSC EP	20 52 54.8
E	53 00.9
WAS E(P)	20 52 58.2
ALQ EP	20 53 03.6
TUC E(P)	20 53 11.7
BCN EP	20 53 56.0
FGU EP	20 53 56.8
SLC EP	20 54 07.0
EUR IP	20 54 19.5
HHM E(P)	20 55 00.0

Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)
	h m s		h m s		h m s		h m s
MAY 31							
H-23 27 10.4							
57.4N 152.7W							
h ABOUT 33KM							
COL EP	23 29 04.0						
MAY 31							
TUC EP	23 56 31.0						