USCGS
.40

COAST & GEODETIC SURVEY
LIBRARY & ARCHIVES

JUL 22 1963

SEISMOLOGICAL BULLETIN

March, 1962

MSI - 255

CONTENTS

List of stations 1
Provisional epicenters 2
Seismogram interpretations 9
Local and minor earthquakes 27

U. S. DEPARTMENT OF COMMERCE

Luther H. Hodges, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

FOR OFFICIAL DISTRIBUTION

National Oceanic and Atmospheric Administration

ERRATA NOTICE

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

Discolored pages
Faded or light ink
Binding intrudes into the text

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

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

1962

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

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

*Indicates a station maintained by a local institution in cooperation with the Coast and Geodetic Survey.
**Indicates a station operating on an independent basis.
Other stations are observatories of the Coast and Geodetic Survey.

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

All magnitude determinations are by Pasadena, unless otherwise stated. Minor earthquakes are listed at the end of the bulletin.

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

All seismograms are on file in the Coast and Geodetic Survey, except those from Balboa Heights, which may be obtained on loan by addressing the Seismograph Station Director, Meteorological and Hydrographic Office, Panama Canal Company, Balboa Heights, Canal Zone.

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
1	02 12 37.3	15.7 S.	74.3 W.	Near coast of southern Peru. h about 64 km.
1	04 51 59.3	26.1 N.	125.0 E.	Ryukyu Islands region. h about 33 km.
1	07 20 13.1	51.2 N.	179.2 W.	Andreanof Islands, Aleutian Islands. h about 33 km.
1	12 21 16.6	49.4 N.	155.3 E.	Kurile Islands region. h about 86 km.
1	18 35 12.9	43.0 N.	146.2 E.	Near east coast of Hokkaido, Japan. h about 48 km.
1	19 10 00.091			37°02'54" N., 116°01'45" W. Nevada Test Site. PAMPAS. Shot elevation = 862.2 meters (AEC).
1	19 29.0			PAMPAS Collapse.
1	20 38 31.1	38.0 S.	74.0 W.	Near coast of central Chile. h about 25 km.
1	22 20 03.5	37.3 N.	4.9 W.	Near south coast of Spain. h about 25 km.
1	23 41 11.5	14.0 S.	172.1 E.	Santa Cruz Islands region. h about 33 km. Mag. 6.
2	00 28 11.3	6.1 N.	125.6 E.	Near southeast coast of Mindanao, Philippine Islands. h about 92 km.
2	02 15 05.9	51.7 N.	173.5 W.	Andreanof Islands, Aleutian Islands. h about 25 km.
2	04 17 55.2	0.4 S.	122.4 E.	Celebes. h about 33 km.
2	08 57 19.3	51.4 N.	178.1 W.	Andreanof Islands, Aleutian Islands. h about 34 km.
2	13 03 09.6	5.6 N.	126.7 E.	Off south coast of Mindanao, Philippine Islands. h about 96 km.
3	00 54 24.4	27.6 N.	100.9 E.	Sinkiang Province, China. h about 63 km.
3	04 53 55.7	0.1 S.	122.0 E.	Celebes region. h about 33 km.
3	10 01 21.7	0.1 S.	126.6 E.	Molucca Passage. h about 52 km.
3	10 40 18.2	55.0 N.	162.7 E.	Near east coast of Kamchatka. h about 42 km.
3	12 14 55.3	7.4 N.	126.6 E.	Near east coast of Mindanao, Philippine Islands. Felt: Surigao, Dumaguete, Mambajao. h about 87 km. Mag. 5¾ (Brk).
3	16 01 55.0	21.5 S.	179.1 W.	Fiji Islands region. h about 613 km.
3	16 13 56.9	16.1 S.	174.2 W.	Tonga Islands. h about 129 km.
4	00 41 42.0	10.6 S.	75.2 W.	Central Peru. h about 33 km.
4	08 26 14.4	1.4 S.	120.2 E.	Celebes. h about 144 km.
4	11 40 27.9	67.5 N.	171.6 W.	Near northeast coast of Chukotsky Peninsula, USSR. h about 33 km.
4	12 49 56.9	27.1 N.	129.2 E.	Ryukyu Islands. h about 33 km.
4	14 14 14.2	0.9 S.	121.4 E.	Celebes. h about 140 km.
4	16 20 32.7	38.1 S.	72.8 W.	Near coast of central Chile. h about 40 km.
5	00 48 08.7	38.1 S.	73.4 W.	Near coast of central Chile.. h about 51 km.
5	01 50 58.8	16.8 N.	105.0 W.	Off coast of Jalisco, Mexico. h about 33 km.
5	03 42 35.1	4.3 S.	103.1 E.	Near south coast of Sumatra. h about 72 km.
5	04 23 06.7	39.2 N.	106.8 W.	Central Colorado. h about 25 km.
5	06 45 49.7	55.6 S.	27.0 W.	Sandwich Islands. h about 33 km.
5	07 43 57.9	34.4 N.	121.7 W.	Off coast of California. Felt. h about 33 km. Mag. 4¼.
5	08 45 56.1	55.7 S.	28.2 W.	Sandwich Islands. h about 33 km.

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
5	10 15 22.1	55.9 S.	27.9 W.	Sandwich Islands. h about 25 km.
5	14 59 55.8	11.3 N.	126.4 E.	Off east coast of Leyte, Philippine Islands. h about 70 km.
5	16 46 27.2	19.3 N.	121.2 E.	Near north coast of Luzon, Philippine Islands. h about 33 km.
5	18 00 00.118			37°06'40" N., 116°21'54" W. Nevada Test Site. DANNYBOY. Shot elevation = 1635.8 meters (AEC).
5	20 57 54.0	40.4 N.	124.9 W.	Near coast of northern California. h about 33 km. Mag. 4½ (Brk). Felt.
6	05 55 44.8	13.6 N.	93.4 E.	Andaman Islands. h about 33 km.
6	13 12 59.2	41.7 N.	127.0 W.	Off coast of northern California. h about 33 km.
6	15 32 33.0	12.5 N.	143.9 E.	Mariana Islands. h about 33 km.
6	16 30 00.128			37°02'54" N., 116°02'01" W. Nevada Test Site. ERMINE. Shot elevation = 1151.2 meters (AEC).
6	18 49 22.0	12.1 S.	167.8 E.	Santa Cruz Islands. h about 60 km.
7	01 42 48.6	61.9 N.	26.6 W.	Southwest of Iceland. h about 33 km.
7	02 07 10.6	62.1 N.	26.5 W.	Southwest of Iceland. h about 35 km.
7	08 16 37.7	40.2 N.	77.2 E.	Kirghiz SSR. h about 25 km.
7	10 36 47.7	5.3 S.	153.9 E.	Solomon Islands. h about 25 km.
7	11 01 04.6	19.2 N.	145.1 E.	Mariana Islands. h about 685 km. Mag. 7.
7	13 58 32.4	17.2 N.	147.1 E.	Mariana Islands. h about 41 km.
7	15 15 56.1	51.3 N.	160.6 E.	Off southeast coast of Kamchatka. h about 29 km.
7	17 34 22.6	2.1 S.	133.8 E.	New Guinea. h about 33 km.
7	19 08 46.9	52.4 N.	174.5 W.	Andreanof Islands, Aleutian Islands. h about 25 km.
7	19 20 01.1	36.4 N.	71.6 E.	Hindu Kush. h about 100 km.
7	21 08 03.1	26.9 N.	57.2 E.	Near coast of southern Iran. h about 33 km.
7	21 57 18.6	0.1 N.	124.5 E.	Molucca Sea. h about 102 km.
8	01 54 41.9	22.3 S.	39.2 E.	Mozambique Channel. h about 33 km.
8	08 11 12.9	17.9 N.	146.5 E.	Mariana Islands. h about 131 km.
8	10 33 47.6	34.6 S.	180.0	Off northeast coast of North Island, New Zealand. h about 33 km.
8	10 47 07.8	46.1 N.	152.7 E.	Kurile Islands. h about 56 km.
8	18 00 00.206			37°07'20" N., 116°02'56" W. Nevada Test Site. BRAZOS. Shot elevation = 1026.2 meters (AEC).
8	18 00 07.7	6.7 S.	154.5 E.	Solomon Islands region. h about 89 km.
8	18 38.0			BRAZOS Collapse.
8	20 48 38.1	44.9 S.	79.4 W.	Off coast of southern Chile. h about 25 km.
8	20 52 38.1	1.2 N.	126.1 E.	Molucca Passage. h about 43 km.
8	21 38 35.8	3.6 S.	29.2 E.	Republic of the Congo. h about 35 km.
9	06 57 10.6	18.6 S.	177.9 W.	Fiji Islands region. h about 443 km.
9	07 41 40.5	52.5 N.	169.3 W.	Fox Islands, Aleutian Islands. h about 72 km.
9	08 31 27.6	6.4 S.	154.7 E.	Solomon Islands. h about 117 km.
9	17 29 44.3	24.2 S.	179.1 W.	Fiji Islands region. h about 385 km.
9	22 07 35.6	5.8 S.	146.4 E.	Near east coast of New Guinea. Felt. h about 76 km.
9	22 40 45.7	18.7 N.	145.4 E.	Mariana Islands. h about 196 km.

USCOMM-DC 6407-P59

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
10	00 57 22.3	6.5 S.	129.4 E.	Banda Sea. h about 202 km.
10	01 12 44.2	64.8 S.	171.2 W.	Antarctic Ocean, east of Balleny Islands. h about 33 km.
10	03 01 21.2	3.9 N.	97.8 E.	Sumatra. h about 50 km.
10	04 59 27.5	31.2 S.	178.3 W.	Kermadec Islands. h about 69 km.
10	07 04 52.2	23.3 S.	66.8 W.	Jujuy Province, Argentina. h about 236 km.
10	08 07 22.5	34.8 N.	121.4 W.	Near coast of southern California. h about 33 km.
10	08 44 00.1	23.2 N.	120.6 E.	Formosa. Felt. h about 31 km.
10	12 08 07.1	11.0 S.	165.6 E.	Santa Cruz Islands. h about 25 km.
10	12 25 35.8	23.1 N.	120.5 E.	Formosa. Felt: Alishan and Yushan. h about 70 km.
11	02 25 52.8	14.2 N.	91.1 W.	Near west coast of Guatemala. h about 94 km.
11	05 59 03.0	13.9 S.	172.2 W.	Samoa Islands. h about 33 km.
11	07 18 56.7	13.9 S.	172.1 E.	New Hebrides Islands region. h about 133 km.
11	15 23 40.7	52.3 N.	178.0 E.	Rat Islands, Aleutian Islands. h about 135 km.
11	16 16 23.3	19.3 N.	144.7 E.	Mariana Islands region. h about 383 km.
11	19 19 09.4	9.0 N.	126.5 E.	Near east coast of Mindanao, Philippine Islands. Felt. h about 51 km.
11	19 58 38.5	9.0 N.	126.5 E.	Near east coast of Mindanao, Philippine Islands. h about 32 km.
11	21 23 10.5	8.7 N.	126.2 E.	Near east coast of Mindanao, Philippine Islands. h about 157 km.
12	01 07 41.1	4.8 N.	126.0 E.	Celebes Sea. h about 33 km.
12	01 52 37.0	13.9 S.	72.6 W.	Near coast of southern Peru. h about 91 km.
12	02 11 09.6	24.1 N.	70.9 E.	Afghanistan-Pakistan border. h about 34 km.
12	09 41 33.9	8.2 N.	82.8 W.	Near south coast of Panama and Costa Rica. Felt: Balboa Heights, Panama. h about 25 km.
12	11 40 12.2	8.1 N.	82.9 W.	Near south coast of Panama and Costa Rica. Felt: Balboa Heights, Panama. h about 30 km. Mag. 6¾.
12	12 10 49.8	50.8 N.	152.5 E.	Sea of Okhotsk. h about 360 km.
12	13 23 35.8	22.9 S.	68.9 W.	Chile-Bolivia border. h about 100 km.
12	13 42 40.9	9.0 N.	82.7 W.	Near south coast of Panama. h about 56 km.
12	16 57 46.8	2.9 S.	80.2 W.	Near coast of Peru. h about 25 km.
12	17 20 10.0	16.2 S.	167.9 E.	New Hebrides Islands. h about 177 km.
12	19 29 23.9	10.7 S.	161.6 E.	Solomon Islands region. h about 100 km.
13	05 35 12.4	21.9 S.	170.9 E.	Loyalty Islands region. h about 53 km.
13	06 07 47.4	37.3 N.	138.3 E.	Honshu, Japan. h about 42 km.
13	11 29 58.0	2.9 N.	128.6 E.	Molucca Sea. h about 213 km.
13	21 45 24.9	9.1 N.	126.4 E.	Near east coast of Mindanao, Philippine Islands. h about 80 km.
14	03 04 19.3	7.6 N.	83.6 W.	Near south coast of Panama. h about 33 km.
14	08 27 22.4	8.7 N.	126.8 E.	Mindanao, Philippine Islands. h about 18 km.
14	12 24 16.5	8.2 S.	75.0 W.	Central Peru. h about 140 km.
14	15 17 32.7	4.9 S.	152.4 E.	New Britain region. Felt: Rabaul. h about 57 km.

USCOMM-DC 8497-P69

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
14	15 23 12.0	30.8 N.	113.7 W.	Gulf of California. Felt: Imperial Valley. h about 33 km.
14	18 25 34.1	11.5 S.	165.2 E.	Santa Cruz Islands region. h about 33 km.
14	20 20 16.6	8.6 N.	82.9 W.	Near south coast of Panama. h about 33 km.
15	00 35 03.3	53.5 N.	163.5 W.	Fox Islands, Aleutian Islands. h about 15 km.
15	01 51 22.9	45.8 N.	151.3 E.	Kurile Islands region. h about 52 km.
15	04 36 43.9	53.7 N.	163.3 W.	Fox Islands, Aleutian Islands. h about 33 km.
15	13 07 06.9	20.6 S.	178.8 W.	Fiji Islands region. h about 623 km.
15	14 37 10.2	9.5 S.	67.1 E.	700 km. west of Maldive Islands. h about 33 km.
15	15 01 40.1	28.4 N.	51.6 E.	Near coast of southern Iran. h about 20 km.
15	16 30 00.128			37°07'38" N., 116°01'52" W. Nevada Test Site. HOGNOSE. Shot elevation = 985.4 meters (AEC).
15	16 45.0			HOGNOSE Collapse.
15	21 13 04.1	7.1 S.	106.1 E.	Near south coast of Java. h about 83 km.
15	22 47 13.8	51.1 N.	177.9 E.	Rat Islands, Aleutian Islands. h about 33 km.
15	22 58 05.4	10.5 S.	162.5 E.	Solomon Islands. h about 71 km.
16	05 17 36.1	61.4 N.	152.5 W.	Central Alaska. h about 33 km.
16	05 23 14.7	16.2 S.	168.4 E.	New Hebrides Islands. Felt: Norsup. h about 62 km.
16	09 42 30.3	27.3 N.	127.2 E.	Ryukyu Islands region. h about 177 km.
16	15 25 48.6	21.8 S.	173.3 E.	Loyalty Islands region. h about 83 km.
16	19 42 39.2	10.8 S.	165.7 E.	Santa Cruz Islands region. h about 25 km.
17	03 45 50.1	21.2 S.	173.3 E.	Loyalty Islands region. h about 35 km.
17	09 14 04.4	38.3 N.	108.1 W.	Western Colorado. h about 33 km.
17	11 26 33.1	26.0 N.	96.6 E.	Burma-India border region. h about 39 km.
17	17 57 04.2	17.9 S.	178.0 W.	Fiji Islands region. h about 539 km.
17	17 58 42.5	51.4 N.	159.1 E.	Near coast of southern Kamchatka. h about 59 km.
17	18 56 40.8	9.7 N.	122.0 E.	Near west coast of Negros Island, Philippine Islands. h about 33 km.
17	20 47 32.3	10.9 N.	43.2 W.	North Atlantic Ocean. h about 33 km. Mag. 7.
17	21 28 58.7	22.6 S.	170.9 E.	Loyalty Islands region. h about 28 km.
17	21 38 43.8	37.7 N.	122.3 W.	Contra Costa County, California. Felt: San Francisco Bay area. h about 33 km. Mag. 4¾ (Brk).
18	00 40 28.6	30.0 S.	177.8 W.	Kermadec Islands region. h about 35 km.
18	01 26 51.0	27.7 S.	177.3 W.	Kermadec Islands region. h about 89 km.
18	03 06 18.8	16.5 S.	168.2 E.	New Hebrides Islands. Felt. h about 14 km.
18	05 28 21.3	40.6 N.	142.4 E.	Off coast of northern Honshu, Japan. h about 33 km.
18	13 38 38.1	22.2 S.	173.8 E.	Loyalty Islands region. h about 76 km.
18	14 55 03.4	9.1 N.	126.3 E.	Mindanao, Philippine Islands. h about 50 km.
18	15 30 35.5	40.9 N.	19.5 E.	Near coast of southern Albania. 15 dead, 154 injured, moderate damage in Tepolene region. Felt: Italy, Yugoslavia, and Greece. h about 33 km.

USCOMM-DC 6497-P68

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
18	20 18 54.6	23.8 N.	114.6 E.	Kwangtung Province, China. 1 killed, 2 injured in Canton. Felt: Hong Kong and Macao with minor damage. h about 25 km.
19	02 33 30.8	14.9 S.	173.3 W.	Samoa Islands region. Felt. h about 33 km.
19	04 49 33.7	57.4 S.	147.8 E.	700 km. southwest of Macquarie Islands. h about 33 km.
19	05 54 36.9	0.2 N.	123.6 E.	Near south coast of Minahoosa Peninsula, Celebes. h about 150 km.
19	08 42 27.5	23.4 S.	179.6 E.	Fiji Islands region. h about 626 km.
19	14 00 08.9	2.3 S.	77.1 W.	Central Ecuador. h about 119 km.
19	15 34 50.2	31.6 S.	179.5 E.	Kermadec Islands region. h about 490 km.
19	20 57 21.3	4.2 S.	103.1 E.	Near east coast of Sumatra. h about 74 km.
19	21 04 16.6	16.8 S.	73.5 W.	Near coast of southern Peru. h about 33 km.
19	23 05 14.8	37.5 N.	54.2 E.	Northern Iran. h about 48 km.
20	01 00 25.7	25.3 N.	117.9 W.	Off coast of Baja California, Mexico. h about 33 km.
20	01 36 59.4	17.1 N.	94.8 W.	Vera Cruz, Mexico. h about 218 km.
20	10 03 59.9	28.0 N.	111.3 W.	Near coast of Sonora, Mexico. h about 33 km.
20	10 59 24.5	44.4 S.	82.8 W.	South Pacific Ocean. h about 30 km.
20	15 39 33.8	33.4 N.	137.3 E.	Near southeast coast of Honshu, Japan. h about 83 km.
20	16 31 46.3	50.6 N.	130.3 W.	Queen Charlotte Sound area. h about 33 km.
20	18 52 55.8	22.8 N.	143.2 E.	Mariana Islands region. h about 98 km.
20	20 56 39.4	31.2 S.	70.1 W.	Argentine-Chile border region. h about 110 km.
20	23 10 39.5	31.9 N.	94.5 E.	Tibet. h about 31 km.
21	01 53 13.3	62.1 N.	152.7 W.	Near Cook Inlet, Alaska. h about 122 km.
21	02 30 18.5	22.2 S.	170.4 E.	Loyalty Islands region. h about 25 km.
21	03 18 29.1	6.6 S.	150.1 E.	New Britain region. h about 25 km.
21	05 55 46.3	8.4 N.	103.4 W.	1750 km. northwest of Galapagos Islands. h about 33 km.
21	06 11 24.0	4.4 S.	80.7 W.	Near coast of northern Peru. h about 58 km.
21	21 04 29.3	48.2 N.	153.2 E.	Kurile Islands. h about 166 km.
21	22 57 53.9	6.1 S.	112.9 E.	Java Sea. h about 630 km.
21	23 10 19.7	5.9 S.	112.9 E.	Java Sea. h about 596 km.
22	00 19 43.2	6.0 S.	113.0 E.	Java Sea. h about 575 km.
22	00 37 36.0	5.9 S.	112.9 E.	Java Sea. h about 590 km.
22	01 50 52.4	18.9 S.	173.1 W.	Tonga Islands region. h about 60 km.
22	06 21 08.1	15.8 S.	167.6 E.	New Hebrides Islands. Felt: Norsup. h about 15 km.
22	06 35 03.6	84.8 N.	4.2 E.	Svalbard region. h about 36 km.
22	07 14 25.0	6.6 S.	147.1 E.	Near northern coast of New Guinea. Felt: Lae. h about 33 km.
22	10 33 12.0	36.3 N.	69.3 E.	Hindu Kush. h about 144 km.
22	12 05 03.2	16.3 S.	167.5 E.	New Hebrides Islands. Felt. h about 45 km.
22	12 07 07.3	29.8 S.	71.5 W.	Near coast of central Chile. h about 48 km.
22	15 13 13.5	3.3 S.	142.7 E.	Near north coast of New Guinea. Felt: Aitape and Lumi. h about 100 km. Mag. 5¾ (Brk).

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
22	16 16 26.0	1.9 S.	139.2 E.	Near north coast of New Guinea (Irian). h about 33 km.
22	17 46 09.0	2.0 S.	139.4 E.	Near north coast of New Guinea (Irian). h about 32 km.
22	18 58 50.4	28.3 S.	68.9 W.	LaRioja Province, Argentina. h about 101 km.
22	19 47 20.4	2.1 S.	139.0 E.	Near north coast of New Guinea (Irian). h about 57 km.
22	20 50 36.9	14.9 S.	70.7 W.	Southern Peru. h about 119 km.
23	00 15 34.4	17.4 S.	178.9 W.	Fiji Islands region. h about 576 km.
23	01 51 40.8	3.1 S.	142.8 E.	Near north coast of New Guinea. h about 33 km.
23	05 34 40.5	38.0 S.	72.8 W.	Near coast of southern Chile. h about 67 km.
23	11 16 47.2	48.5 S.	76.1 W.	Off coast of southern Chile. h about 33 km.
23	14 45 27.6	28.5 S.	167.6 E.	Norfolk Island region. h about 23 km.
23	15 08 45.5	22.8 S.	179.4 E.	Fiji Islands region. h about 608 km.
23	23 36 45.6	8.0 N.	82.6 W.	Near south coast of Panama. h about 33 km.
24	01 34 07.9	17.8 S.	173.0 W.	Tonga Islands region. h about 25 km.
24	12 59 32.3	5.7 S.	145.2 E.	Near north coast of New Guinea. Felt. h about 98 km.
24	15 25 16.1	2.1 S.	138.8 E.	Near north coast of New Guinea (Irian). h about 84 km.
24	20 42 47.3	6.7 S.	155.3 E.	Solomon Islands. h about 53 km.
25	05 28 38.5	5.9 S.	130.7 E.	Banda Sea. h about 99 km.
25	08 12 38.0	51.2 N.	169.8 W.	Fox Islands, Aleutian Islands. h about 45 km.
25	11 00 14.6	11.3 S.	165.3 E.	Santa Cruz Islands. h about 33 km.
25	11 44 28.3	49.3 S.	8.7 W.	About 750 km. northwest of Bouvet Island. h about 33 km.
25	13 38 56.3	28.2 N.	96.1 E.	Eastern India-Tibet border region. h about 25 km.
25	15 28 54.1	8.5 N.	73.3 W.	Northern Colombia. h about 92 km.
25	20 49 10.1	27.6 N.	99.5 E.	Sinkiang Province, China. h about 33 km.
25	21 38 26.7	39.1 N.	14.7 E.	Tyrrenian Sea, northeast of Sicily. h about 343 km.
25	21 44 40.2	1.7 N.	126.7 E.	Molucca Passage. h about 33 km.
26	03 10 53.5	0.6 S.	127.5 E.	Molucca Sea. h about 33 km.
26	09 22 07.2	38.5 N.	20.7 E.	Ionian Islands. Felt. h about 33 km.
26	12 04 58.3	0.3 S.	19.5 W.	Mid-Atlantic Ocean. h about 33 km.
26	15 20 46.5	5.6 S.	147.7 E.	Near northeast coast of New Guinea. Felt: Lae. h about 122 km.
26	16 32 43.6	40.6 S.	73.3 W.	Near coast of southern Chile. Felt. h about 32 km.
26	21 13 20.2	37.2 N.	36.5 E.	Southern Turkey. h about 25 km.
27	05 2[illegible] 30.7	3.8 S.	129.1 E.	Ceram. h about 84 km.
27	06 14 59.0	39.7 N.	77.9 E.	Sinkiang Province, China. h about 33 km.
27	10 10 26.1	44.1 N.	147.3 E.	Kurile Islands. h about 31 km.
27	14 50 16.3	20.2 S.	177.6 W.	Fiji Islands region. h about 500 km.
27	19 20 35.6	17.1 N.	100.0 W.	Near coast of Guerrero, Mexico. h about 78 km.
27	21 19 30.7	17.0 N.	99.8 W.	Near coast of Guerrero, Mexico. h about 30 km.
28	00 51 54.7	36.6 N.	71.6 E.	Hindu Kush. h about 108 km.

USCOMM-DC 8497-P68

Date	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
March	h m s	°	°	
28	04 05 19.3	1.3 N.	97.3 E.	Near west coast of Sumatra. h about 33 km.
28	06 17 10.2	28.7 S.	179.9 W.	Kermadec Islands. h about 375 km.
28	10 53 59.3	17.6 N.	99.0 W.	Near coast of Guerrero, Mexico. h about 33 km.
28	13 26 21.1	45.7 N.	83.2 E.	Kazakh SSR. h about 33 km.
28	14 12 45.8	32.7 S.	178.0 W.	Kermadec Islands. h about 104 km.
28	14 14 58.4	19.9 N.	108.6 W.	Off coast of Jalisco, Mexico. h about 122 km.
28	18 00 00.163			37°07'28" N., 116°02'02" W. Nevada Test Site. HOOSIC. Shot elevation = 1098.1 meters (AEC).
28	18 41.0			HOOSIC Collapse.
29	01 52 22.7	5.7 N.	157.3 E.	Near south coast of Kamchatka. h about 123 km.
29	03 07 02.0	58.4 N.	137.9 W.	Off coast of Sitka Island, Alaska. h about 33 km.
29	13 32 30.8	5.4 N.	81.9 W.	South of Panama. h about 69 km.
29	19 31 09.3	79.0 N.	2.9 E.	Svalbard region. h about 33 km.
29	20 09 03.3	0.5 S.	127.5 E.	Molucca Sea. h about 33 km.
29	21 15 13.3	20.7 N.	120.7 E.	North of Luzon, Philippine Islands. h about 34 km.
29	22 38 27.8	20.1 S.	169.0 E.	Loyalty Islands region. h about 51 km.
30	00 05 56.1	12.9 N.	143.0 E.	Mariana Islands region. h about 134 km.
30	05 04 27.6	52.8 N.	157.5 E.	Near south coast of Kamchatka. h about 66 km.
30	07 59 01.6	22.3 S.	173.0 E.	Loyalty Islands region. h about 33 km.
30	14 23 41.6	28.6 S.	179.3 W.	Kermadec Islands region. h about 370 km.
31	01 16 42.9	15.9 S.	173.9 W.	Tonga Islands region. h about 107 km.
31	07 44 35.8	9.8 N.	121.4 E.	Off west coast of Negros, Philippine Islands. h about 140 km.
31	12 02 07.5	57.1 S.	25.6 W.	Sandwich Islands. h about 16 km.
31	16 35 46.4	7.6 S.	130.7 E.	Banda Sea. h about 33 km.
31	18 00 00.130			37°02'49" N., 116°02'13" W. Nevada Test Site. CHINCHILLA II. Shot elevation = 1090.5 meters (AEC).
31	18 02.0			CHINCHILLA II Collapse.
31	23 36 44.3	34.0 N.	48.0 E.	Western Iran. h about 25 km.

USCOMM-DC 8497-P88

Date and Station		Phase (GCT)
		h m s
March 1		
COL	eP	00 49 40
March 1		
ALQ	eP	02 22 30
	ipP	22 49
BCN	iP	02 23 07
COL	iP	02 26 04
	ipP	26 18
	ePP	29 57
CSC	eP	02 21 25
EUR	iP	02 23 28
	ipP	23 42
	i	23 55
	i	24 12
FGU	eP	02 23 03
	e	23 26
GCA	e(P)	02 22 54
HHM	iP	02 24 01
SLC	iP	02 23 20
SJP	iP	02 19 23
March 1		
EUR	eP	02 51 51
March 1		
EUR	iP	03 05 14
	i	05 22
	ePP	08 48
March 1		
ALQ	eP	05 05 52
	ePP	10 03
BOZ	i(P)	05 05 09
	e(P')	08 18
	i	08 36
COL	iP	05 02 41
EUR	iP	05 05 13
FGU	eP	05 05 26
GUA	eP	04 57 56
	eS	01 06
HHM	iP	05 04 53
SLC	i(P)	05 05 21
March 1		
COL	iP	05 58 28
	e	06 04 36
March 1		
BOZ	eP	07 28 20
COL	iP	07 24 29
EUR	iP	07 28 25
FGU	eP	07 28 49
HHM	iP	07 27 54
March 1		
COL	e(P)	10 01 25
March 1		
ALQ	eP	12 32 16
BCN	i(P)	12 31 40
COL	iP	12 27 45
	i	27 59
EUR	iP	12 31 20
FGU	e(P)	12 31 37
March 1		
COL	eP	15 08 20
EUR	eP	15 07 31
March 1		
COL	eP	17 04 29
March 1		
EUR	e(P)	17 48 43
March 1		
ALQ	eP	18 27 30
FGU	eP	18 26 30
	eS	27 02
March 1		
ALQ	iP	18 47 13
BCN	iP	18 46 40
BOZ	e(P)	18 46 15
COL	iP	18 43 05
	ipP	43 20
EUR	eP	18 46 20
GCA	eP	18 46 45
HHM	iP	18 45 53
THU	iP	18 45 09
March 1		
ALQ	eP	19 11 59
	i	12 29
	iS	14 10
BCN	iP	19 10 27
COL	eP	19 16 44
	e	18 07
EUR	eP	19 10 42
FGU	eP	19 11 40
	i	12 02
GCA	eP	19 10 57
	i	10 58
	i(S)	11 46
HHM	e	19 12 50
SLC	e(P)	19 11 20
TUC	e(P)	19 11 42
	e	13 28
March 1		
BCN	iP	19 29 29
EUR	eP	19 29 45
GCA	eP	19 30 01
March 1		
COL	eP	19 38 05
EUR	eP	19 37 49
March 1		
COL	iP	19 56 02
March 1		
ALQ	eP	20 50 32
EUR	eP	20 51 12
FGU	eP	20 51 06
GCA	e(P)	20 50 46
SJP	e(P)	20 49 07
THU	e(P')	20 59 09
March 1		
COL	e(P)	21 12 45
March 1		
ALQ	eP	21 55 48
	i	58 05
EUR	eP	21 56 39
GCA	e(P)	21 57 53
TUC	eP	21 57 03
	eS	58 16
TUT	eP	21 57 02
	i	57 46
March 1		
BCN	i(P)	22 13 27
COL	eP	22 21 09
March 1		
EUR	eP	22 34 25
March 1		
ALQ	iP	23 54 14
	ePP	57 47
BCN	iP	23 53 45
	i	53 55
BOZ	iP	23 54 14
BUT	i(P)	23 54 10
COL	iP	23 53 39
	i	53 50
	e	55 24
	eS	00 04 04
EUR	eP	23 53 46
	e	24 06 45
FGU	eP	23 54 12
GCA	eP	23 53 58
HON	e(P)	23 50 07
HHM	iP	23 54 08
KIP	e(P)	23 50 02
TUC	iP	23 53 54
	ePP	57 19
	eLg	00 20 36
THU	eP'	00 00 04
March 2		
COL	eP	00 21 02
	e	23 53
March 2		
COL	iP	00 40 28
March 2		
ALQ	eP	02 23 57
COL	eP	02 19 23
EUR	eP	02 22 49
FGU	e(P)	02 23 14
THU	e(P)	02 23 13
March 2		
COL	eP	05 01 25
March 2		
ALQ	eP	09 06 35
BOZ	e	09 05 25
COL	eP	09 02 01
	iPP	02 15
EUR	eP	09 05 28
FGU	eP	09 05 53
HHM	iP	09 04 57
SJP	eP	09 10 13

Date and Station		Phase (GCT)
		h m s
THU	eP	09 05 31
March 2		
THU	e(P)	10 43 08
March 2		
BHP	eP'	13 22 48
COL	iP	13 15 26
	ipP	15 47
	isP	16 04
	i	16 30
	e	19 19
EUR	eP	13 17 04
	iPP	21 31
	ePKKP	32 59
GUA	eP	13 07 31
HON	eP	13 14 40
	e	15 16
KIP	iP	13 14 41
SJP	eP'	13 23 10
THU	eP	13 16 35
	e	16 51
	ePP	20 46
March 2		
EUR	eP	15 36 50
March 2		
COL	iP	16 24 25
March 2		
COL	iP	16 26 11
March 2		
COL	iP	16 59 45
EUR	iP	17 03 20
March 2		
COL	e(P)	18 16 18
March 2		
EUR	eP	19 15 59
March 2		
COL	eP	21 13 25
March 2		
FGU	eP	22 59 02
	eS	59 25
TUC	eP	23 03 27
March 3		
COL	iP	01 05 54
THU	eP	01 06 06
March 3		
COL	eP	03 10 36

Date and Station		Phase (GCT)
		h m s
EUR	eP	03 11 17
	epP	11 26
March 3		
COL	eP	05 06 54
March 3		
COL	iP	06 29 02
March 3		
EUR	eP'	07 19 52
March 3		
ALQ	eP'	10 20 06
COL	iP	10 14 07
FGU	e(P')	10 19 58
SJP	eP'	10 21 47
March 3		
ALQ	eP	10 50 40
BCN	e(P)	10 50 05
COL	iP	10 45 48
	ipP	45 59
EUR	iP	10 49 43
RCD	eP	10 50 05
THU	iP	10 48 29
March 3		
THU	e(P)	11 59 21
March 3		
ALQ	eP	12 29 40
	iP'	33 28
	ePKKP	44 04
BHP	iP'	12 34 33
	i	34 38
BCN	eP'	12 32 26
COL	iP	12 27 03
	ipP	27 31
	isP	27 42
	iPP	30 16
	ePKKP	45 30
EUR	iP	12 29 00
	iP'	33 12
	ePP	33 27
	ePKKP	44 36
	i	44 52
FGU	eP	12 29 17
	eP'	33 18
	ePKKP	44 23
GUA	e(P)	12 19 08
	eS	22 39
	eT	38 17
HHM	iP	12 28 46
KIP	iP	12 26 23

Date and Station		Phase (GCT)
		h m s
RCD	eP'	12 33 23
	ePKKP	44 24
SJP	eP'	12 34 35
	i	34 42
	i(pP')	34 50
THU	eP	12 28 12
	epP	32 03
TUC	eP'	12 33 25
	ePP	34 33
	ePKKP	44 15
	e	44 28
TUT	eP'	12 33 25
	ePKKP	44 22
March 3		
OOL	i(P)	16 13 48
	epP	16 03
March 3		
ALQ	iP	16 26 06
BCN	iP	16 25 40
BOZ	eP	16 26 18
COL	iP	16 26 16
	ipP	26 40
EUR	iP	16 25 43
	ipP	27 57
GCA	eP	16 25 51
HHM	i(P)	16 26 14
March 3		
EUR	e(P)	16 30 41
	i	31 16
March 3		
COL	eP	17 09 35
March 3		
ALQ	eP	17 16 15
TUC	iP	17 15 46
	i	16 08
TUT	iP	17 15 44
	i	16 03
March 3		
COL	iP	20 52 04
March 3		
BUT	e	22 53 57
TUC	iP	22 57 01
TUT	eP	22 57 03
March 4		
ALQ	eP	00 51 06
COL	iP	00 54 50
EUR	iP	00 52 05

Date and Station		Phase (GCT)
		h m s
FGU	eP	00 51 48
RCD	eP	00 51 49
SJP	eP	00 47 52
THU	eP	00 54 22
March 4		
COL	eP	01 46 19
March 4		
COL	eP	02 28 34
March 4		
COL	iP	03 41 06
March 4		
EUR	eP'	04 31 18
March 4		
FGU	iP	09 39 36
	i	39 41
GCA	e(P)	09 40 38
	e	40 50
March 4		
EUR	eP	11 44 04
March 4		
ALQ	iP	11 49 10
BCN	iP	11 48 39
BOZ	iP	11 47 43
BUT	iP	11 47 34
COL	iP	11 42 48
	i	44 09
	iS	44 40
	iL	45 53
	eScS	55 20
EUR	iP	11 48 10
	iPcP	50 08
	iScP	54 17
FGU	eP	11 48 19
	ePcP	50 11
HHM	iP	11 47 13
	i	47 33
RCD	iP	11 48 17
SLC	iP	11 48 15
THU	e(P)	11 46 14
TUC	iP	11 49 15
	e	50 22
	ePcP	50 37
TUT	iP	11 49 16
March 4		
COL	eP	13 00 21

8 4297-4

Date and Station		Phase (GCT)
		h m s
EUR	e(P)	13 02 56
HHM	iP	13 02 36
THU	eP	13 01 42
March 4		
EUR	eP	15 28 12
March 4		
ALQ	eP	16 32 35
	e	32 49
	e	36 35
BCN	iP	16 33 08
EUR	eP	16 33 15
	ipP	33 24
FGU	eP	16 33 08
	epP	33 17
GCA	e(P)	16 32 55
RCD	iP	16 33 21
TUC	iP	16 32 41
TUT	iP	16 32 41
March 4		
COL	e(P)	19 09 06
March 4		
ALQ	eP	19 12 05
BCN	e(P)	19 10 41
GCA	eP	19 11 02
	e	11 18
TUC	eP	19 11 01
	eS	11 36
	e	12 51
TUT	eP	19 11 02
March 4		
COL	eP	19 33 17
THU	e(P)	19 36 16
	e	37 20
March 4		
ALQ	eP	20 42 08
BCN	e(P)	20 40 38
	i	41 21
	i(S)	42 21
EUR	e(P)	20 41 19
	eL	43 15
FGU	e(P)	20 42 28
GCA	eP	20 41 00
	i	41 16
TUC	eP	20 40 45
	i	41 05
	i	42 50
TUT	iP	20 40 48
March 4		
ALQ	eP	21 35 10
BCN	i(P)	21 33 40
	iS	34 25
EUR	e(P)	21 34 21
	eL	36 12
GCA	eP	21 34 01
	i	34 17
TUC	iP	21 33 52
	i	35 51
	i	36 35
March 4		
COL	eP	22 03 49
March 4		
COL	eP	22 12 58
March 4		
COL	eP	22 19 07
March 4		
BCN	i(P)	23 25 52
	i	26 55
GCA	eP	23 26 28
TUC	eP	23 26 11
	i	27 06
March 5		
ALQ	eP	01 01 08
	epP	01 16
EUR	eP	01 00 47
FGU	eP	01 00 41
March 5		
ALQ	iP	01 55 13
BCN	iP	01 55 42
BUT	eP	01 57 05
COL	eP	02 00 33
EUR	iP	01 56 18
FGU	eP	01 56 14
GCA	eP	01 55 41
HHM	eP	01 57 28
RCD	eP	01 56 42
SLC	eP	01 56 18
THU	eP	02 01 15
TUC	iP	01 54 48
	e	55 15
	eS	58 14
TUT	iP	01 54 48
	eS	58 10
March 5		
COL	eP	02 18 26
	e	20 23
HHM	e(P)	02 17 38
March 5		
COL	eP	02 48 13
March 5		
COL	iP	02 55 40
	i	55 50
March 5		
COL	iP	03 18 33
	i	18 43
EUR	eP	03 22 28
March 5		
ALQ	e(P')	04 02 49
	iPP	05 26
COL	eP	03 54 58
	e(PPP)	04 00 29
EUR	eP'	04 01 40
FGU	e(P')	04 01 30
	e	01 44
	ePKS	05 07
GUA	iP	03 50 45
HHM	iP'	04 01 30
SJP	e(P')	04 02 20
March 5		
EUR	eP	04 04 57
March 5		
ALQ	iP	04 24 21
	iS	25 14
BCN	e(P)	04 25 15
	e(S)	26 50
EUR	e(P)	04 24 53
	eL	26 51
FGU	eP	04 23 49
	i	23 51
	i(S)	24 25
GCA	eP	04 24 17
	i	24 25
	eS	25 21
RCD	e(P)	04 24 48
	eS	25 58
	iL	26 28
TUC	eP	04 25 27
March 5		
COL	iP	04 36 59
March 5		
COL	eP	05 49 04
March 5		
COL	iP	06 13 51
March 5		
COL	iP'	07 05 38
March 5		
COL	eP	07 36 47
March 5		
ALQ	iP	07 46 58
	e	50 10
BCN	iP	07 44 23
	i	44 39
	i	48 19
BOZ	eP	07 47 19
	e	47 55
BUT	eP	07 47 12
COL	iP	07 50 48
	i	51 23
EUR	iP	07 45 37
GCA	eP	07 46 03
HHM	iP	07 47 33
	i	47 46
RCD	iP	07 47 58
	e	48 11
SLC	eP	07 46 24
SJP	eP	07 53 07
THU	eP	07 52 42
TUC	eP	07 46 14
	eS	47 53
	eL	48 12
TUT	iP	07 46 15
	eS	47 53
	eL	48 04
UKI	eP	07 45 08
March 5		
COL	e(P)	07 47 25
	e	48 02
March 5		
COL	eP	08 31 47
	e	32 36
March 5		
COL	iP	09 05 38
	i	05 42
March 5		
COL	eP'	10 35 03
	i	35 09
	i	35 24
HHM	iP'	10 34 21

B-4297-4

Date and Station		Phase (GCT)	
		h m s	
THU	eP'	10 34 34	
March 5			
COL	eP	11 18 39	
March 5			
COL	eP	15 11 50	
SJP	eP'	15 19 44	
March 5			
COL	eP	16 18 53	
March 5			
COL	eP	16 57 56	
March 5			
COL	iP	17 36 32	
	e	39 31	
March 5			
ALQ	e(P)	18 17 03	
BCN	iP	18 15 33	
EUR	iP	18 15 42	
FGU	e(P)	18 16 43	
GCA	eP	18 16 01	
	iS	16 58	
March 5			
COL	eP	19 32 34	
March 5			
ALQ	iP	21 01 35	
BCN	iP	21 00 09	
BOZ	iP	21 00 38	
	e	00 57	
FGU	eP	21 00 44	
GCA	eP	21 00 35	
HHM	iP	21 00 33	
RCD	iP	21 01 43	
SLC	eP	21 00 20	
UKI	e	20 58 24	
March 5			
BHP	iP	23 30 25	
	iS	30 57	
March 6			
COL	eP	00 46 57	
March 6			
COL	iP	01 11 16	
March 6			
COL	iP	01 26 17	
March 6			
COL	iP	01 44 58	
March 6			
COL	iP	01 46 26	
	e	49 13	
HHM	iP	01 45 38	
March 6			
COL	eP	02 21 44	
	e	22 24	
March 6			
COL	eP'	03 53 25	
	i	53 40	
March 6			
COL	eP	04 38 23	
March 6			
ALQ	iP'	06 14 51	
	i	15 10	
	iPKS	18 10	
COL	iP	06 08 40	
	i	08 58	
	ePKKP	26 16	
EUR	iP'	06 14 36	
FGU	iP'	06 14 38	
GCA	eP'	06 14 44	
HHM	i(P')	06 12 53	
RCD	iP'	06 14 31	
SJP	eP'	06 15 20	
THU	iP	06 08 39	
	i	08 47	
	i	08 58	
March 6			
COL	iP	06 13 39	
March 6			
GUA	iP	07 27 51	
	iS	28 10	
March 6			
EUR	iP	08 34 25	
GCA	e(P)	08 35 24	
March 6			
BCN	e(P)	09 04 27	
COL	iP	09 00 37	
March 6			
COL	eP	11 11 33	
March 6			
COL	eP	12 26 12	
EUR	iP	12 26 27	
GCA	e(P)	12 26 59	
March 6			
COL	eP	12 31 18	
EUR	eP	12 32 50	
March 6			
COL	eP	12 43 06	
March 6			
COL	eP	13 10 36	
March 6			
BCN	eP	13 15 44	
BOZ	e(P)	13 15 53	
	i	16 09	
COL	eP	13 18 30	
EUR	iP	13 15 06	
FGU	e(P)	13 16 09	
GCA	e(P)	13 16 03	
HHM	e(P)	13 15 40	
RCD	e(P)	13 17 05	
SLC	e(P)	13 15 46	
March 6			
COL	eP	13 36 13	
March 6			
COL	eP	15 42 46	
EUR	iP	15 45 31	
GUA	iP	15 32 58	
	iS	33 17	
March 6			
COL	iP	19 01 46	
March 6			
COL	iP	19 09 13	
	e	09 26	
HHM	e(P)	19 11 21	
March 6			
COL	iP	20 14 55	
March 6			
COL	eP	20 33 53	
March 6			
EUR	iP	22 24 07	
March 6			
ALQ	eP'	22 49 08	
March 6			
BHP	iP	23 29 30	
	iS	40 12	
March 6			
COL	iP	23 50 02	
March 7			
EUR	iP	00 16 06	
March 7			
COL	eP	01 51 12	
March 7			
COL	iP	02 15 32	
	iPcP	17 07	
HHM	eP	02 15 46	
THU	iP	02 11 40	
March 7			
EUR	eP	03 44 21	
March 7			
COL	iP	05 15 27	
	iS	15 47	
	i	18 04	
FGU	eP	05 17 38	
HHM	e(P)	05 17 03	
March 7			
COL	e(P)	08 27 45	
	e(PP)	30 31	
March 7			
COL	eP	10 49 05	
	e	49 35	
March 7			
ALQ	iP	11 13 12	D
BHP	eP'	11 18 40	
	i	18 57	
BCN	iP	11 12 42	D
BOZ	iP	11 12 36	D
	iS	21 57	
BUT	iP	11 12 31	D
	iPP	15 53	
	iS	21 50	
	iSKS	22 03	
	eL	24 33	
COL	iP	11 10 28	D
	eS	18 07	
	iScS	19 25	
	i	20 11	
	e	32 30	
	i	38 35	
	iP'P'	39 23	
CSC	eP'	11 18 25	
	e	19 17	
EUR	iP	11 12 31	
FGU	iP	11 12 49	D
	ipP	15 14	
	iS	22 18	

Date and Station		Phase	h m s	
GCA		iP	11 12 50	D
		ipP	15 14	
		eS	22 16	
GUA		iP	11 02 43	C
		iS	04 02	
		eScP	11 14	
		e	14 19	
HON		iP	11 09 25	D
		i	09 32	
		iPcP	10 03	
		ipP	11 34	
		e	12 40	
		eS	16 08	
		e	20 00	
		eL	22 57	
HHM		iP	11 12 22	D
		iS	21 38	
KIP		iP	11 09 24	D
		ipP	11 34	
RCD		iP	11 13 02	D
		ipP	15 23	
		i	16 07	
		iSKS	22 32	
		i(S)	22 40	
		e(PKKP)	30 18	
SLC		eP	11 12 43	D
		e	13 23	
		epP	15 05	
		eS	22 08	
SJP		eP'	11 18 46	C
		i	18 56	
		i	19 04	
		ipP'	21 27	
		ePKKP	30 47	
SIT		iP	11 11 03	D
		e	11 12	
		iS	19 15	
		e	23 12	
THU		iP	11 12 19	C
		eS	21 40	
TUC		iP	11 13 08	D
		epP	15 26	
		ePP	17 01	
		eS	23 36	
UKI		iP	11 12 06	D
March 7				
COL		eP	11 47 21	
EUR		eP	11 48 59	
March 7				
COL		e(P)	13 46 07	
EUR		eP	13 49 39	
March 7				
COL		eP	14 07 28	

Date and Station		Phase	h m s
EUR		iP	14 11 02
FGU		eP	14 11 22
GUA		eP	13 59 33
		eS	14 00 23
March 7			
EUR		eP	14 21 03
HHM		e	14 22 01
COL		eP	14 24 58
March 7			
EUR		eP	14 28 54
March 7			
COL		iP	15 21 59
		i	22 12
EUR		iP	15 25 40
		i	25 52
RCD		eP	15 26 07
		i	26 20
THU		eP	15 24 40
March 7			
COL		eP	17 47 07
		e	47 25
March 7			
COL		eP	18 41 56
March 7			
COL		iP	19 13 05
		i	13 18
		i	13 30
		iL	20 52
EUR		iP	19 16 34
FGU		e(P)	19 16 57
HHM		e	19 16 03
		iPcP	18 17
SJP		eP	19 21 26
March 7			
COL		iP	19 31 30
March 7			
COL		eP	21 20 43
March 8			
ALQ		eP	00 14 24
GCA		eP	00 13 14
		eS	13 42
March 8			
EUR		eP	00 48 54
March 8			
COL		iP	01 52 11

Date and Station		Phase	h m s
March 8			
EUR		eP'	02 14 32
		i	14 39
		i	14 51
FGU		eP'	02 14 22
GCA		eP'	02 14 28
		e	14 34
HHM		iP'	02 14 22
SLC		eP'	02 14 26
TUC		iP'	02 14 37
TUT		iP'	02 14 37
March 8			
ALQ		e(P)	08 24 20
BOZ		eP	08 23 45
BUT		eP	08 23 41
COL		eP	08 21 39
EUR		eP	08 23 36
FGU		eP	08 23 56
GCA		e(P)	08 23 58
GUA		eP	08 12 08
		e(S)	12 35
HHM		iP	08 23 32
THU		e(P)	08 22 38
March 8			
COL		eP	10 47 45
EUR		e(P)	10 47 06
SJP		iP'	10 53 48
TUC		iP	10 47 03
TUT		eP	10 47 03
March 8			
ALQ		eP	10 58 30
BOZ		e(P)	10 57 38
COL		iP	10 54 12
EUR		iP	10 57 35
GCA		e(P)	10 57 59
HHM		e(P)	10 57 06
RCD		eP	10 58 04
THU		eP	10 56 35
		e	56 56
		e	57 12
TUC		iP	10 58 26

Date and Station		Phase	h m s
TUT		iP	10 58 24
March 8			
COL		eP	10 52 12
March 8			
EUR		eP	11 57 42
March 8			
EUR		eP	13 29 18
March 8			
BCN		iP	18 00 29
COL		iP	18 06 43
EUR		iP	18 00 40
FGU		eP	18 01 39
		i	02 34
GCA		eP	18 00 56
		i	01 07
		i(S)	01 51
SLC		eP	18 01 18
TUT		eP	18 01 37
March 8			
COL		eP	18 12 25
EUR		iP	18 13 15
March 8			
BCN		eP	18 38 34
COL		e	18 46 22
EUR		eP	18 38 46
FGU		e(P)	18 39 53
GCA		eP	18 39 06
March 8			
EUR		e(P)	21 01 39
March 8			
COL		e(P')	21 58 37
EUR		eP'	21 57 51
FGU		eP'	21 57 39
March 9			
COL		i(P)	04 12 33
March 9			
BOZ		iP	07 09 14
		epP	10 59
BUT		iP	07 09 10
COL		iP	07 09 04
		ipP	10 51

B-42974

Date and Station		Phase (GCT)
		h m s
EUR	iP	07 08 43
FGU	eP	07 09 08
	epP	10 53
GCA	eP	07 08 52
GUA	iP	07 05 14
HON	iP	07 04 41
KIP	iP	07 04 42
HHM	iP	07 09 11
	iPP	12 42
TUC	iP	07 08 44
TUT	iP	07 08 45
March 9		
COL	iP	07 45 30
EUR	eP	07 49 00
HHM	e(P)	07 48 26
RCD	eP	07 49 41
March 9		
COL	iP	08 43 42
EUR	e(P)	08 44 37
March 9		
COL	iP	12 46 18
	e	48 01
March 9		
COL	eP	15 06 12
March 9		
EUR	eP	16 28 51
March 9		
COL	iP	16 53 03
March 9		
COL	iP	17 42 12
	e	42 27
EUR	iP	17 41 47
FGU	eP	17 42 10
GCA	eP	17 41 54
TUC	iP	17 41 46
March 9		
SJP	iP	21 25 23
	iS	26 19
March 9		
EUR	iP	21 52 59
March 9		
COL	iP	22 20 05
	ipP	20 23

Date and Station		Phase (GCT)
		h m s
EUR	iP	22 21 14
	ePPP	24 40
FGU	eP	22 21 36
GUA	iP	22 11 59
	eS	15 28
HHM	iP	22 21 20
	i	21 31
SJP	iP'	22 27 10
March 9		
COL	iP	22 50 55
FGU	eP	22 53 19
	epP	54 01
GCA	eP	22 53 19
GUA	iP	22 42 02
	eS	43 00
HHM	iP	22 52 51
March 10		
COL	iP	01 00 26
EUR	iP	01 03 55
FGU	eP	01 04 20
March 10		
COL	e(P)	01 09 50
March 10		
COL	eP'	01 31 51
	e	35 03
March 10		
COL	eP'	03 18 47
EUR	eP'	03 20 22
FGU	e(P')	03 20 26
March 10		
COL	eP	04 05 55
March 10		
COL	eP	05 12 58
EUR	iP	05 12 26
GCA	eP	05 12 32
TUC	iP	05 12 22
TUT	iP	05 12 22
March 10		
EUR	iP	07 16 25
March 10		
ALQ	eP	08 10 17
	eL	13 46
BCN	eP	08 08 55
BOZ	eP	08 10 38

Date and Station		Phase (GCT)
		h m s
COL	eP	08 14 11
EUR	iP	08 08 58
FGU	eP	08 10 08
GCA	eP	08 09 23
HHM	iP	08 10 53
	i	11 07
RCD	e(P)	08 11 19
TUC	eP	08 09 35
	eL	12 47
March 10		
COL	eP	08 07 25
	e	07 46
March 10		
COL	iP	08 55 13
	e	09 01 07
EUR	e(P)	08 57 40
HHM	iP	08 57 19
THU	e(P)	08 56 09
March 10		
COL	iP	12 03 11
March 10		
BOZ	eP	12 20 44
COL	iP	12 20 35
EUR	eP	12 21 00
HHM	e	12 21 16
March 10		
COL	eP	12 36 43
HHM	iP	12 38 48
March 10		
BCN	eP	13 42 40
COL	eP	13 47 04
	e	48 26
EUR	eP	13 42 26
	eL	44 02
March 10		
COL	eP	15 24 28
March 10		
COL	iP	16 43 05
March 10		
COL	iP	17 55 53
March 10		
COL	eP	19 04 01
	e	04 39

Date and Station		Phase (GCT)
		h m s
March 10		
COL	eP	19 08 50
March 10		
COL	eP	19 53 33
March 10		
COL	iP	23 08 42
March 10		
COL	iP	23 16 14
March 11		
ALQ	iP	02 31 10
	epP	31 25
	eS	35 00
BCN	eP	02 31 57
COL	iP	02 36 14
	i	36 50
CSC	iP	02 30 40
	epP	30 52
EUR	eP	02 32 25
	ipP	32 40
	iPcP	35 03
	eScP	38 47
FGU	eP	02 32 04
GCA	eP	02 31 45
HHM	iP	02 33 12
	iPcP	35 20
THU	e(P)	02 36 07
TUC	iP	02 31 13
	ePP	31 53
TUT	iP	02 31 13
	ePP	31 54
	iPcP	34 43
March 11		
SIT	eP	02 52 27
March 11		
ALQ	eP	06 11 05
COL	iP	06 11 14
	i	11 33
	i	11 43
EUR	eP	06 10 41
March 11		
ALQ	eP	07 31 46
BCN	eP	07 32 23
COL	iP	07 31 18
EUR	iP	07 31 26
	i	31 34
FGU	e(P)	07 31 49

B-4297-4

Date and Station		Phase (GCT) h m s
GCA	e(P)	07 31 35
March 11		
COL	eP	08 04 08
EUR	eP	08 09 55
March 11		
COL	eP	08 39 25
HHM	iP	08 40 09
March 11		
COL	eP	09 24 21
	e	24 30
March 11		
COL	eP	12 10 36
	e	11 58
March 11		
ALQ	eP	15 32 59
BCN	iP	15 32 18
	e	32 40
	eScP	37 22
BOZ	eP	15 31 48
	e	32 14
	eScP	37 07
BUT	iP	15 31 39
	iScP	37 01
COL	iP	15 28 14
	iS	32 12
	iPcP	32 20
	iScP	35 43
	iPcS	36 04
	iScS	39 25
CSC	iP	15 34 42
	epP	35 13
EUR	iP	15 31 55
	iScP	37 10
	eScS	41 35
FGU	eP	15 32 18
	iScP	37 22
GCA	eP	15 32 27
GUA	eP	15 32 00
HON	iP	15 30 35
HHM	iP	15 31 22
	iScP	36 53
KIP	iP	15 30 34
	i	31 06
RCD	iP	15 32 30
	i(ScP)	37 29
SLC	eP	15 32 09
	eScP	37 17

Date and Station		Phase (GCT) h m s
SJP	eP	15 36 31
	ipP	37 05
SIT	eP	15 29 15
THU	iP	15 31 39
	i	31 51
	ipP	32 12
	iScP	36 57
TUC	iP	15 32 55
	ipP	33 29
	ePcP	34 03
TUT	iP	15 32 56
	epP	33 33
UKI	iP	15 31 24
March 11		
COL	iP	16 26 13
	ipP	27 46
EUR	iP	16 28 18
	ipP	29 50
FGU	eP	16 28 36
GUA	eP	16 17 52
	eS	18 27
HHM	iP	16 28 08
SLC	eP	16 28 30
March 11		
COL	iP	18 37 24
March 11		
BHP	iP'	19 38 48
BCN	eP	19 33 35
	ePP	38 01
BOZ	e(P)	19 33 26
BUT	eP	19 33 11
COL	eP	19 31 15
	i	31 28
	e	31 38
	eS	41 16
EUR	eP	19 33 14
	e	36 31
	iPP	37 36
	iPKKP	49 14
	eL	51 42
FGU	e(P)	19 33 31
GCA	e(P)	19 33 28
GUA	eP	19 23 23
	e(S)	26 29
	eT	42 25
HON	eP	19 30 44
	i	30 56
	eS	40 10
	eSS	45 11
	eL	52 53

Date and Station		Phase (GCT) h m s
HHM	e(P)	19 33 02
KIP	eP	19 30 44
RCD	eP'	19 37 54
	eP'P'	48 47
SLC	eP	19 33 23
SJP	eP'	19 38 56
	i	39 04
THU	eP	19 32 17
	e	32 41
	e	36 14
TUC	e(P')	19 37 45
	iPP	38 23
	e	39 11
March 11		
EUR	iP	19 56 14
March 11		
COL	eP	20 10 46
	e	11 23
	e	19 25
SJP	eP'	20 18 33
March 11		
COL	eP	21 35 09
	epP	35 43
March 11		
COL	iP	22 24 42
March 12		
COL	iP	01 20 10
SJP	e	01 29 36
March 12		
COL	eP	02 05 57
EUR	e(P)	02 03 26
	i(pP)	03 50
FGU	eP	02 03 05
March 12		
COL	iP	02 22 57
	i	23 09
THU	e(P)	02 21 58
March 12		
COL	iP	02 49 03
March 12		
COL	eP	04 38 32
March 12		
COL	iP	05 13 11
March 12		
ALQ	eP	09 48 20
BHP	iP	09 42 26

Date and Station		Phase (GCT) h m s
BCN	eP	09 49 08
BOZ	iP	09 49 46
	e	50 05
BUT	iP	09 49 54
	iPP	51 41
COL	iP	09 52 58
CSC	eP	09 47 06
	iS	52 00
EUR	iP	09 49 34
FGU	eP	09 49 10
GCA	e(P)	09 48 59
HON	eP	09 53 08
	i	53 13
HHM	iP	09 50 12
	ePP	51 48
KIP	eP	09 53 08
RCD	eP	09 49 09
	i	49 15
SJP	iP	09 45 58
	eS	49 37
SLC	eP	09 49 21
	e(PcP)	51 26
THU	eP	09 51 50
TUC	iP	09 48 30
	i	49 07
	ePP	49 54
TUT	iP	09 48 32
	e	49 15
	ePP	49 55
March 12		
ALQ	eP	11 46 56 C
	iS	54 36
BHP	iP	11 41 05 D
BCN	eP	11 47 44 C
BOZ	eP	11 48 23 C
	i	48 30
	i	48 42
	e(S)	54 04
BUT	eP	11 48 31 C
	i	48 38
	iPP	50 17
	eL	58 44
COL	eP	11 51 36
	eS	12 01 08

B-42997-4

Date and Station		Phase (GCT)
		h m s
CSC	eP	11 45 43 C
	i	45 50
	iS	50 20
EUR	iP	11 48 13 C
FGU	eP	11 47 48 C
	i	47 55
	ePcP	49 40
	eS	53 50
GCA	eP	11 47 37 C
	i	47 45
GUA	eP'	11 59 24
HON	eP	11 51 49 D
	iS	12 01 29
	i	02 05
	e(SS)	06 06
	eSSS	10 16
	eL	12 11
HHM	iP	11 48 50 C
	i(PP)	50 26
	eS	55 47
	eL	59 51
KIP	eP	11 51 46 D
RCD	eP	11 47 45 C
	ePP	49 04
	e(PcP)	50 01
SLC	eP	11 47 59
	iPcP	50 04
	eS	54 23
SJP	iP	11 44 38 C
	iS	48 13
SIT	e(P)	11 50 51
THU	eP	11 50 44 C
	eP'P'	12 19 03
	eL	22 21
TUC	eP	11 47 08 C
	i	47 16
	ePP	48 31
	eS	53 01
TUT	iP	11 47 08
WAS	eP	11 46 38
	i	47 46
	e	50 10
	i	51 10
March 12		
COL	iP	12 16 56
EUR	i(P)	12 20 31
RCD	i(P)	12 20 53
	epP	22 24
March 12		
COL	eP	12 22 42

Date and Station		Phase (GCT)
March 12		h m s
ALQ	eP	13 34 23
EUR	iP	13 35 15
FGU	eP	13 35 01
	epP	35 28
	e(PP)	37 33
HHM	iP	13 35 44
	epP	36 11
RCD	eP	13 35 26
TUC	iP	13 34 27
	ipP	34 52
TUT	iP	13 34 27
THU	eP'	13 43 29
March 12		
ALQ	eP	13 49 20
BCN	eP	13 50 09
COL	eP	13 53 56
	ePP	56 36
EUR	eP	13 50 33
FGU	e(P)	13 50 07
HHM	eP	13 51 10
SJP	eP	13 46 59
	eS	50 39
TUC	iP	13 49 29
TUT	eP	13 49 29
March 12		
EUR	eP	13 53 55
March 12		
BHP	iP	14 01 24
March 12		
BHP	iP	14 06 45
March 12		
BHP	iP	14 40 34
March 12		
BHP	iP	14 46 37
March 12		
COL	iP	15 10 15
	i	10 20
March 12		
BHP	iP	16 19 10
March 12		
BHP	iP	16 24 06

Date and Station		Phase (GCT)
March 12		h m s
BHP	iP	16 40 23
March 12		
BHP	iP	17 00 37
EUR	eP	17 07 09
SJP	eP	17 03 13
March 12		
BHP	iP	17 25 49
March 12		
EUR	iP	17 33 34
March 12		
BHP	iP	17 41 47
March 12		
BHP	iP	18 54 34
March 12		
BHP	iP	19 00 34
March 12		
BHP	iP'	19 47 57
COL	eP	19 41 46
	ipP	42 09
	isP	42 22
EUR	iP	19 42 21
	ipP	42 43
March 12		
BHP	iP	19 52 37
March 12		
BHP	iP	20 06 11
March 12		
BHP	iP	20 14 22
March 12		
BHP	iP	20 32 26
March 12		
BHP	iP	20 57 51
March 12		
EUR	eP	21 34 47
March 12		
BHP	iP	22 39 43
March 13		
ALQ	iP	02 08 16
SJP	eP	02 05 24
March 13		
COL	iP	02 31 35
March 13		
ALQ	iP	03 03 19
FGU	eP	03 04 05
SJP	eP	03 00 25

Date and Station		Phase (GCT)
March 13		h m s
BHP	iP	04 14 53
March 13		
BHP	iP	04 27 25
March 13		
EUR	eP	05 40 05
March 13		
BHP	iP	05 41 05
EUR	e(P)	05 47 42
March 13		
ALQ	e(P)	06 20 13
COL	eP	06 16 41
EUR	eP	06 19 41
FGU	e(P)	06 19 59
HHM	iP	06 19 17
March 13		
BHP	iP	06 13 10
March 13		
COL	eP	08 09 42
March 13		
ALQ	e(P)	08 21 20
BCN	eP	08 22 21
EUR	eP	08 21 34
	eL	24 19
FGU	e(P)	08 21 58
GCA	e(P)	08 20 45
TUC	e(P)	08 20 16
	eS	21 05
	e	22 23
TUT	e(P)	08 20 20
	e	21 13
March 13		
BHP	iP	09 14 45
TUC	e(P)	09 15 06
	e	16 32
TUT	e(P)	09 15 12
March 13		
COL	iP	09 34 37
March 13		
COL	iP	10 08 12
EUR	iP	10 09 28
March 13		
COL	eP	11 42 10

Date and Station		Phase	(GCT) h m s
GUA		eP	11 34 09
March 13			
COL		iP	13 12 25
EUR		iP	13 15 52
March 13			
BHP		iP	13 54 42
		iS	55 26
March 13			
EUR		eP	15 23 17
March 13			
EUR		eP	16 34 17
March 13			
COL		iP	18 42 17
		i	42 38
GUA		iP	18 30 00
March 13			
COL		eP	19 51 13
EUR		eP	19 54 30
March 13			
COL		iP	20 24 04
		e	24 13
EUR		iP	20 22 59
March 13			
COL		iP	20 47 37
March 13			
COL		eP	21 57 29
March 13			
COL		eP	23 58 35
March 14			
THU		eP	02 00 57
March 14			
GCA		e(P)	02 09 45
TUC		eP	02 09 32
TUT		e(P)	02 09 29
		e	10 43
March 14			
BHP		iP	03 05 22
		iS	06 12
COL		iP	03 15 44
EUR		iP	03 12 20
FGU		e(P)	03 11 56
HHM		e(P)	03 12 57
		i	13 06
SJP		eP	03 08 57
March 14			
COL		eP	05 42 06
EUR		eP	05 41 46
March 14			
COL		eP	07 20 24
March 14			
EUR		eP	08 06 34
March 14			
COL		eP	08 13 55
EUR		eP	08 15 11
March 14			
EUR		iP	08 32 47
FGU		e(P)	08 32 33
March 14			
COL		iP	08 39 34
SJP		eP'	08 47 22
March 14			
EUR		eP	08 57 31
March 14			
COL		iP	12 00 49
March 14			
ALQ		e(P)	12 33 50
COL		iP	12 37 02
		ipP	37 40
EUR		eP	12 34 16
		epP	34 51
FGU		e(P)	12 33 57
		epP	34 32
HHM		eP	12 34 51
		ipP	35 27
SJP		eP	12 29 54
March 14			
COL		iP	13 51 56
March 14			
COL		eP	14 02 07
EUR		iP	14 04 54
FGU		e(P)	14 05 10
March 14			
BHP		iP	14 57 24
March 14			
BCN		e(P)	15 09 29
March 14			
ALQ		e(P)	15 24 51
BOZ		e(P)	15 26 47
EUR		eP	15 25 18
		eL	27 58
FGU		eP	15 25 48
GCA		eP	15 24 45
TUC		eP	15 24 07
		eS	25 01
TUT		eP	15 24 06
		e	24 20
		eS	25 01
March 14			
COL		iP	15 29 46
March 14			
COL		iP	18 37 38
HHM		iP	18 39 50
March 14			
EUR		iP	18 40 00
March 14			
BHP		iP	19 53 36
		i	20 21 58
March 14			
EUR		iP	20 00 45
March 14			
COL		iP	20 31 38
		e	31 53
EUR		e(P)	20 28 12
HHM		eP	20 28 52
SJP		e(P)	20 24 39
March 15			
COL		eP	00 38 25
		i	38 32
BCN		e(P)	00 42 34
EUR		iP	00 41 58
		i	42 12
		iPcP	44 38
FGU		e(P)	00 42 23
March 15			
COL		eP	01 06 07
EUR		eP	01 09 40
March 15			
ALQ		eP	02 02 51
BCN		e(P)	02 02 23
COL		iP	01 58 36
		ipP	58 47
EUR		iP	02 01 57
		ipP	02 07
FGU		e(P)	02 02 22
GCA		eP	02 01 36
HHM		e	02 01 29
March 15			
COL		eP	02 58 00
March 15			
ALQ		eP	04 44 46
		iPP	46 33
BCN		e(P)	04 44 13
COL		eP	04 39 58
		i	40 09
		i	40 21
		eL	44 16
FGU		eP	04 43 59
TUC		eP	04 44 41
March 15			
COL		iP	09 04 56
		iL	05 46
March 15			
EUR		iP	09 10 10
		i	10 18
March 15			
BHP		iP	09 52 20
March 15			
ALQ		eP	13 18 57
COL		iP	13 18 58
		epP	21 12
EUR		iP	13 18 37
		ipP	20 57
GCA		eP	13 18 45
HHM		iP	13 19 03
GUA		iP	13 15 06
TUC		iP	13 18 37
TUT		iP	13 18 38
March 15			
EUR		eP'	14 56 59
March 15			
COL		e(P)	15 14 19
March 15			
BHP		iP	15 40 55
		iS	41 42
March 15			
ALQ		eP	16 32 05
COL		eP	16 36 44
EUR		iP	16 30 41
FGU		eP	16 31 40
SLC		eP	16 31 19

Date and Station		Phase (GCT)	
March 15		h m s	
EUR	iP	16 45 32	
GCA	eP	16 45 55	
March 15			
EUR	eP'	21 32 09	
March 15			
FGU	eP	21 59 19	
	i	22 00 45	
GCA	eP	22 02 18	
	e	03 02	
March 15			
THU	e(P)	22 21 56	
	e	24 58	
March 15			
COL	iP	22 52 11	
	ipP	52 23	
	e	59 28	
EUR	iP	22 55 42	
FGU	eP	22 56 04	
March 15			
COL	iP	23 10 28	
	e	10 58	
EUR	iP	23 11 00	
March 16			
BOZ	iP	03 08 41	
	i	08 51	
EUR	eP	03 10 15	
FGU	e(P)	03 09 45	
HHM	e(P)	03 09 26	
	iS	10 22	
March 16			
FGU	eP	03 54 36	
	i	54 38	
	eS	54 56	
GCA	eP	03 54 53	
	eS	55 29	
March 16			
COL	iP	04 27 31	
March 16			
COL	eP	04 54 06	
March 16			
COL	iP	05 18 38	
	i	18 52	
	iS	19 50	
EUR	eP	05 23 56	
FGU	e(P)	05 24 10	
HHM	e	05 23 00	
March 16			
COL	iP	06 34 31	
March 16		h m s	
COL	iP	09 52 43	
	i	52 53	
EUR	eP	09 55 16	
FGU	eP	09 55 30	
HHM	iP	09 54 56	
March 16			
COL	eP	10 19 46	
March 16			
COL	iP	14 39 34	
March 16			
BCN	eP	15 38 36	
COL	iP	15 38 45	
EUR	iP	15 38 39	
	i	38 46	
	ePP	42 14	
March 16			
COL	iP	16 58 51	
March 16			
ALQ	e(P)	17 18 18	
BCN	eP	17 17 42	
EUR	e(P)	17 18 35	
	eL	21 14	
GCA	e(P)	17 17 52	
TUC	e(P)	17 17 17	
	eS	18 11	
TUT	e(P)	17 17 16	
	e(S)	18 11	
March 16			
COL	iP	19 03 49	
March 16			
ALQ	eP	19 55 59	
BCN	eP	19 55 30	
BOZ	iP	19 55 54	
COL	iP	19 55 03	
	i	55 17	
	i	55 34	
	iPP	58 13	
EUR	iP	19 55 29	
	i	55 40	
	ePP	58 55	
FGU	e(P)	19 55 53	
GCA	eP	19 55 42	
HHM	iP	19 55 47	
	i	56 07	
KIP	iP	19 51 20	
		h m s	
SLC	eP	19 55 44	
SJP	iP'	20 01 47	
TUC	i(P)	19 55 41	
TUT	i(P)	19 55 41	
UKI	eP	19 55 04	
March 16			
COL	iP	21 38 54	
March 17			
FGU	eP	00 20 20	
	eS	20 52	
GCA	eP	00 20 22	
	e(S)	20 52	
March 17			
COL	iP	03 05 02	
	iS	05 18	
HHM	e(P)	03 09 39	
March 17			
COL	iP	03 58 51	
EUR	iP	03 58 44	
March 17			
COL	iP	04 35 08	
EUR	e(P)	04 31 54	
March 17			
EUR	eP	04 38 40	
March 17			
COL	eP	08 56 06	
EUR	iP	08 56 59	
March 17			
ALQ	eP	09 15 00	
	iS	15 46	
EUR	eP	09 15 39	
	eL	17 27	
FGU	eP	09 14 47	
	i	14 50	
	iS	15 25	
GCA	e(P)	09 14 51	
	e	15 02	
	eS	15 40	
March 17			
BHP	iP	10 39 40	
	iS	40 19	
March 17			
COL	eP	11 38 22	
March 17			
BCN	eP	18 08 49	
		h m s	
COL	iP	18 04 47	
	i	04 57	
	i	05 06	
EUR	iP	18 08 28	
GCA	e(P)	18 08 25	
THU	eP	18 07 23	
March 17			
COL	iP	19 08 55	
March 17			
FGU	eP	20 15 26	
	eS	15 56	
GCA	eP	20 15 16	
	eS	15 55	
March 17			
ALQ	eP	20 57 48	C
	i	57 54	
	iS	21 06 16	
BHP	iP	20 54 30	C
	iS	21 00 36	
BCN	eP	20 58 39	D
	eP'P'	21 26 54	
	eL	40 39	
BOZ	iP	20 58 28	D
BUT	iP	20 58 33	D
	iS	21 07 17	
COL	iP	21 00 11	D
	iS	10 48	
	i	20 00	
CSC	eP	20 55 18	
	eS	21 01 32	
	eL	04 40	
EUR	iP	20 58 41	C
	i	58 44	
FGU	eP	20 58 08	
	e	58 12	
GCA	eP	20 58 18	
	e	58 23	
HON	ePP	21 06 26	
	ePS	15 58	
	eSS	22 04	
	eL	32 04	
HHM	e(P)	20 58 35	
	i	58 39	
	iS	21 07 48	
RCD	eP	20 57 48	
SLC	eP	20 58 26	D
	eS	21 07 14	

B-4297-4

Date and Station		Phase	(GCT) h m s	
SJP		iP	20 52 42	
		iS	56 56	
THU		iP	20 58 25	D
		iPcP	58 58	
		ePP	21 00 41	
		ePPP	42 13	
TUC		eP	20 58 11	C
		eS	21 06 50	
TUT		eP	20 58 11	C
		e(S)	21 07 03	
UKI		eP	20 59 21	
WAS		iP	20 55 17	
		epP	56 54	
		i(S)	21 00 50	
March 17				
COL		eP	21 42 18	
March 17				
EUR		eP	21 39 57	
FGU		e(P)	21 39 10	
GCA		e(P)	21 40 39	
UKI		eP	21 39 23	
March 17				
EUR		eP	23 35 16	
March 18				
COL		iP	00 18 52	
March 18				
COL		iP	00 28 55	
		i	29 17	
EUR		iP	00 32 29	
		i	32 53	
March 18				
ALQ		eP	00 53 40	
BCN		eP	00 53 19	
COL		iP	00 54 01	
EUR		iP	00 53 25	
		ipP	53 40	
GCA		eP	00 53 30	
TUC		iP	00 53 20	
TUT		iP	00 53 20	
March 18				
COL		iP	01 40 07	
EUR		iP	01 39 35	
March 18				
COL		eP	02 36 21	
EUR		eP	02 36 12	
GCA		e(P)	02 36 22	
March 18				
COL		iP	02 58 36	
March 18				
ALQ		eP	03 19 46	
BCN		eP	03 19 13	
COL		iP	03 19 08	
EUR		iP	03 19 20	
FGU		eP	03 20 43	
GCA		e(P)	03 19 30	
HON		eS	03 22 36	
		eL	29 30	
SJP		eP'	03 25 36	
TUC		eP	03 19 26	
TUT		iP	03 19 27	
		e	20 12	
March 18				
ALQ		eP	05 40 41	
BCN		eP	05 40 09	
BOZ		eP	05 39 46	
COL		iP	05 36 44	
EUR		iP	05 39 50	
		ipP	40 05	
FGU		eP	05 40 08	
GCA		e(P)	05 40 15	
HHM		iP	05 39 25	
		i	40 13	
RCD		iP	05 40 16	
THU		eP	05 38 43	
		e	56 00	
		e(PKKP)	56 09	
TUC		iP	05 40 36	
TUT		iP	05 40 35	
March 18				
COL		iP	07 35 40	
EUR		eP	07 36 00	
March 18				
EUR		iP	11 41 54	
March 18				
COL		eP	12 42 45	
March 18				
COL		eP	13 09 34	
March 18				
COL		iP	13 51 37	
EUR		iP	13 51 30	
		i	51 38	
GCA		eP	13 51 38	
March 18				
COL		e(P)	15 07 09	
		epP	07 19	
March 18				
SJP		eP'	15 14 51	
March 18				
BCN		eP	15 43 47	
BOZ		eP	15 43 01	
		e	43 31	
COL		iP	15 42 09	
		i	42 22	
CSC		eP	15 42 19	
		e	42 28	
EUR		iP	15 43 35	
		i	43 50	
		e(PP)	47 19	
FGU		eP	15 43 14	
HHM		iP	15 42 53	
RCD		iP	15 42 49	
		e	42 59	
		i	43 20	
SLC		eP	15 43 22	
SJP		iP	15 42 15	
		ipP	42 23	
TUC		eP	15 43 52	
		ePP	47 36	
TUT		eP	15 43 51	
		ePP	47 35	
March 18				
COL		iP	16 45 58	
		iS	46 26	
March 18				
COL		eP	20 30 18	
EUR		eP'	20 36 57	
HHM		e(P)	20 32 21	
March 18				
SJP		e(P)	21 04 47	
March 18				
FGU		eP	21 09 02	
		eS	09 44	
March 18				
COL		iP	22 14 25	
		i	14 33	
March 19				
COL		eP	02 45 50	
GCA		e(P)	02 45 26	
March 19				
BHP		iP	03 39 22	
		iS	40 10	
March 19				
EUR		eP'	05 08 35	
FGU		e(P')	05 08 41	
March 19				
CSC		iP	05 58 36	
		i	58 48	
		i	06 02 11	
March 19				
ALQ		eP	06 09 35	
		iP'	13 17	
		iPP	13 54	
BHP		iP'	06 14 12	
BCN		eP'	06 12 59	
BOZ		iP'	06 13 01	
		ePKKP	23 50	
BUT		iP'	06 12 57	
		i	13 21	
		iPKKP	23 55	
COL		iP	06 07 17	
		i	07 32	
		i	07 48	
		i	08 22	
		iPP	10 47	
		ePKKP	24 47	
EUR		eP	06 09 06	
		iP'	12 59	
		iPP	13 40	
		iPKKP	23 47	
		eSS	26 28	
		eP'P'	31 43	
FGU		eP	06 09 24	
		iP'	13 07	
GCA		eP'	06 13 08	
		ePKKP	23 32	
GUA		iP	05 59 47	
HON		iP	06 06 28	
HHM		iP	06 08 56	
		e(pP)	09 20	
		iP'	12 54	
		i	13 10	
		ipP'	13 32	
		i	13 42	
KIP		iP	06 06 28	

B-4297-4.

Date and Station		Phase (GCT) h m s
RCD	i(P')	06 13 11
	e	16 30
	iPKKP	23 25
SLC	eP	06 13 04
SJP	iP'	06 14 19
	ipP'	14 57
	iPP	18 36
TUC	iP'	06 13 12
	iPP	14 33
TUT	iP'	06 13 13
	iPP	14 34
March 19		
COL	eP	08 54 30
EUR	eP	08 54 09
March 19		
COL	iP	14 12 30
	ePcP	12 39
EUR	eP	14 09 38
FGU	e(P)	14 09 11
	ePcP	09 16
GCA	e(P)	14 09 06
HHM	e(P)	14 10 05
SJP	eP	14 05 10
	i	05 40
March 19		
COL	iP	15 34 43
March 19		
COL	eP	15 47 42
EUR	iP	15 47 11
March 19		
BOZ	e(P)	19 06 35
COL	iP	19 06 42
EUR	eP	19 07 03
March 19		
COL	iP	20 19 49
	iS	20 10
March 19		
ALQ	iP'	21 16 36
COL	e(P)	21 13 15
EUR	iP'	21 16 26
GUA	iP	21 05 32
HHM	iP'	21 16 16
March 19		
ALQ	eP	21 14 24
COL	e(P)	21 17 46

Date and Station		Phase (GCT) h m s
EUR	eP	21 15 20
FGU	eP	21 15 05
	e	15 30
HHM	eP	21 15 53
March 19		
EUR	eP	21 19 44
FGU	eP	21 19 54
March 19		
COL	iP	23 17 01
	i	17 11
March 19		
EUR	eP	23 45 35
FGU	iP	23 45 23
	e(S)	45 51
March 20		
ALQ	eP	01 03 39
BCN	eP	01 03 03
EUR	e(P)	01 03 44
	eL	06 19
FGU	e(P)	01 04 23
GCA	e(P)	01 03 14
	e	03 17
TUC	eP	01 02 34
	eS	03 28
TUT	e(P)	01 02 31
	eS	03 28
March 20		
ALQ	eP	01 41 24
BCN	eP	01 42 12
BOZ	e(P)	01 43 05
COL	eP	01 46 40
EUR	iP	01 42 41
FGU	eP	01 42 23
GCA	e(P)	01 41 39
HHM	iP	01 43 33
TUC	iP	01 41 26
TUT	iP	01 41 27
March 20		
EUR	e(P)	02 32 57
March 20		
COL	eP	02 45 05
March 20		
BOZ		04 43 04

Date and Station		Phase (GCT) h m s
HHM	iP	04 42 06
	iS	42 28
March 20		
BHP	iP	04 58 02
	iS	58 48
March 20		
COL	eP	05 48 48
March 20		
COL	eP	07 59 40
March 20		
ALQ	eP	10 06 00
	i(S)	06 40
	iPcP	12 20
BCN	eP	10 08 12
BUT	e(P)	10 08 22
	eScP	15 32
COL	eP	10 12 06
EUR	eP	10 06 53
	e(S)	09 54
	iL	10 33
FGU	eP	10 07 08
	eL	10 44
GCA	e(P)	10 06 10
	eS	08 35
HHM	eP	10 08 40
	i	09 06
RCD	eP	10 08 04
SLC	eP	10 07 07
TUC	iP	10 05 04
	e	05 23
	eS	06 27
TUT	eP	10 05 05
	eS	05 24
March 20		
BHP	iP	11 01 27
	iS	02 11
March 20		
ALQ	eP	11 11 42
COL	eP'	11 18 11
EUR	iP	11 12 17
	i	12 23
	i	12 45
FGU	e(P)	11 12 14
RCD	eP	11 12 23
March 20		
EUR	iP	11 24 07
	iS	24 37
FGU	e(P)	11 25 14

Date and Station		Phase (GCT) h m s
GCA	e(P)	11 25 18
March 20		
COL	eP	11 24 48
March 20		
COL	eP	14 25 32
March 20		
FGU	eP	14 51 40
	eS	52 01
GCA	eP	14 50 59
	eS	51 27
	eL	51 34
March 20		
COL	iP	15 48 52
EUR	iP	15 51 42
HHM	iP	15 51 20
	i	51 32
March 20		
BCN	eP	16 35 59
BOZ	eP	16 34 59
	eS	37 14
	e	38 59
	eL	39 38
BUT	e(P)	16 34 54
	eL	38 33
COL	eP	16 35 47
	i	35 51
	e(S)	37 41
	eL	40 47
EUR	iP	16 35 18
FGU	eP	16 35 48
GCA	eP	16 36 11
HHM	eP	16 34 21
	eS	37 10
	e	37 33
	eL	38 10
RCD	iP	16 36 13
SLC	eP	16 35 34
SIT	eP	16 33 25
TUC	iP	16 36 55
	e	37 20
TUT	iP	16 36 55
UKI	eP	16 34 47
March 20		
COL	iP	19 03 00
EUR	iP	19 05 18

B 42917-4

Date and Station	Phase	(GCT) h m s
FGU	iP	19 05 37
GCA	eP	19 05 38
GUA	eP	18 55 08
HHM	iP	19 05 07
SLC	eP	19 05 30
TUC	iP	19 05 52
March 20		
EUR	iP	21 08 50
	ipP	09 19
FGU	eP	21 08 40
	epP	09 10
GCA	eP	21 08 29
March 20		
COL	e(P)	22 10 36
March 20		
COL	iP	23 21 58
March 20		
BUT	e(P)	23 53 35
FGU	eP	23 53 13
March 21		
COL	iP	01 17 24
March 21		
COL	iP	01 54 08
	iS	54 41
EUR	iP	01 59 29
	ipP	59 56
	iPcP	02 02 17
	iScP	05 47
FGU	eP	01 59 43
	epP	02 00 11
RCD	iP	01 59 45
March 21		
ALQ	eP	02 03 13
FGU	eP	02 05 52
March 21		
COL	iP	02 43 28
EUR	e(P)	02 43 44
March 21		
COL	iP	04 05 50
March 21		
EUR	eP	06 02 21
TUC	eP	06 01 05
TUT	eP	06 01 07
March 21		
EUR	iP	06 20 48
FGU	eP	06 20 30
GCA	eP	06 20 18
HHM	iP	06 21 27
SLC	eP	06 20 39
SJP	eP	06 17 12
	i	17 18
TUC	iP	06 19 46
TUT	eP	06 19 46
March 21		
COL	eP	08 05 04
March 21		
EUR	eP	09 18 13
March 21		
COL	eP	09 48 35
March 21		
COL	eP	10 03 11
EUR	e(P)	10 01 39
March 21		
COL	eP	12 35 12
EUR	eP	12 33 18
March 21		
COL	iP	21 11 07
	ipP	11 39
EUR	iP	21 14 36
	ipP	15 10
	isP	15 32
March 21		
ALQ	e(P')	23 15 50
	e	18 30
	eSKKP	28 32
	e(SPP)	31 05
BCN	eP'	23 15 52
BOZ	iP'	23 15 47
	e	16 01
	e(PP)	17 44
BUT	e(P')	23 15 46
COL	iP	23 10 31
	ipP	12 40
	isP	14 23
	iPP	14 46
	ePKKP	26 52
CSC	iP'	23 16 31
EUR	iP'	23 15 47
	iPP	17 43
	ipP'	17 59
FGU	iP'	23 15 54
	ePP	17 56
	eSKKP	28 22
	iP'P'	37 48
	e(SKPP')	40 03
	i	40 13
	iP'P'P'	55 39
GCA	iP'	23 15 55
	epP'	18 09
	eSKKP	37 58
	i(SKPP')	40 16
GUA	iP	23 04 14
	ipP	06 18
	eS	09 13
HHM	iP'	23 15 41
	e	17 07
	ePP	17 23
SJP	iP'	23 16 52
	i	18 02
	e	21 53
TUC	e(P')	23 15 45
	i	15 60
	iPP	17 22
TUT	eP'	23 15 44
	iPP	17 25
WAS	iP'	23 16 22
	e	17 10
	epP'	18 34
March 21		
COL	eP'	23 29 09
EUR	iP'	23 28 17
GUA	iP	23 16 43
HHM	iP'	23 28 10
March 22		
BCN	eP'	00 37 35
	ePP	39 50
BOZ	iP'	00 37 40
	ePP	39 58
COL	iP	00 32 28
	ipP	34 33
CSC	eP'	00 38 26
EUR	iP'	00 37 41
	iPP	39 36
	ipP'	40 01
	iPKKP	47 23
	eSKKP	50 14
	i	51 06
GUA	eP	00 26 04
	iS	31 11
HHM	iP'	00 37 34
	ePP	39 10
	iPKKP	47 35
	iSS	55 26
	iP'P'	56 22
RCD	iP'	00 37 52
	i(PP)	40 24
SLC	eP'	00 37 45
SJP	eP'	00 38 46
	i	39 56
	ePP	43 50
	epPP	46 00
	ePPP	48 21
TUC	eP'	00 37 54
	iPP	39 27
TUT	iP'	00 37 55
	iPP	39 27
WAS	eP'	00 38 16
	e	39 12
	epP'	40 28
March 22		
BCN	eP'	00 55 27
EUR	iP'	00 55 54
	iPP	57 24
	iPKKP	01 05 16
GUA	iP	00 43 59
	ipP	46 03
TUC	i(P')	00 55 05
TUT	eP'	00 55 06
	i	55 28
March 22		
SJP	iP	00 51 39
	i	52 08
March 22		
COL	eP	01 02 18
	e	06 38
March 22		
GUA	iP	01 03 53
March 22		
COL	iP	02 03 26
	ipP	03 39
EUR	iP	02 02 51
	ipP	03 04
FGU	e(P)	02 03 16
March 22		
COL	iP	06 33 54
	i	34 18
EUR	eP	06 34 09
	i	34 28
March 22		
COL	eP	06 41 15

B-4297-4

Date and Station		Phase (GCT)
		h m s
EUR	e(P)	06 44 31
March 22		
COL	eP	07 27 02
EUR	eP	07 28 11
March 22		
COL	iP	08 44 37
March 22		
COL	eP	08 51 07
March 22		
COL	iP	10 44 39
March 22		
COL	iP	12 17 46
EUR	eP	12 18 02
March 22		
EUR	iP	12 19 12
	i	20 12
FGU	eP	12 19 06
GCA	eP	12 18 54
HHM	iP	12 19 48
RCD	eP	12 19 08
SJP	eP	12 15 42
	iPcP	16 10
TUC	eP	12 18 29
TUT	eP	12 18 29
March 22		
ALQ	eP'	15 31 33
	e	42 56
BHP	iP'	15 32 28
BCN	eP'	15 31 08
COL	iP	15 25 36
	e	25 54
	i	25 38
	iPP	29 00
EUR	eP	15 26 56
	ePP	30 57
	ePKKP	44 32
GUA	eP	15 17 59
	e(S)	20 07
HON	eP	15 23 42
	e	24 15
	eS	32 06
	eSS	36 04
	eSSS	39 22
	eL	42 04
HHM	e(P)	15 27 05
KIP	eP	15 23 41

Date and Station		Phase (GCT)
		h m s
RCD	eP'	15 32 11
SJP	iP'	15 32 49
March 22		
COL	eP	16 28 58
GUA	eP	16 20 17
SJP	eP'	16 36 13
	i	36 17
March 22		
COL	eP	17 32 22
March 22		
SJP	eP'	18 06 00
March 22		
ALQ	iP	19 10 07
BOZ	iP	19 11 06
COL	iP'	19 17 11
EUR	iP	19 10 53
	ipP	11 24
FGU	eP	19 10 42
GCA	eP	19 10 31
GUA	iP'	19 18 18
	epP'	18 48
HHM	iP	19 11 22
RCD	iP	19 10 43
SJP	iP	19 07 07
	i	09 27
TUC	iP	19 10 07
TUT	iP	19 10 07
March 22		
EUR	iP	19 29 34
March 22		
ALQ	eP	21 00 34
EUR	iP	21 01 30
FGU	eP	21 01 14
HHM	e(P)	21 02 01
GUA	iP'	21 09 59
March 22		
COL	iP	23 17 56
GCA	e(P)	23 17 35
March 23		
ALQ	eP	00 27 21
COL	iP	00 27 15
	e	28 09

Date and Station		Phase (GCT)
		h m s
EUR	iP	00 26 58
GCA	eP	00 27 08
GUA	iP	00 23 20
March 23		
COL	eP	02 04 10
March 23		
EUR	iP	04 20 17
March 23		
COL	eP	04 36 19
EUR	eP	04 39 23
HHM	eP	04 38 45
March 23		
ALQ	eP	05 46 38
COL	eP	05 45 11
EUR	iP	05 47 19
FGU	eP	05 47 12
HHM	iP	05 47 50
RCD	iP	05 47 16
SJP	eP	05 44 16
TUC	iP	05 46 34
TUT	iP	05 46 34
March 23		
COL	iP	06 23 04
March 23		
BHP	iP	06 53 52
	iS	54 10
March 23		
EUR	eP	19 06 25
FGU	e(P)	19 06 22
GCA	e(P)	19 05 47
March 23		
EUR	eP	19 09 12
March 23		
COL	eP	19 18 50
March 23		
EUR	eP	19 53 40
March 23		
BHP	iP	23 37 30
	iS	38 20
COL	eP	23 48 11
SJP	eP	23 41 10

Date and Station		Phase (GCT)
March 24		h m s
COL	iP	00 37 33
March 24		
ALQ	eP	01 46 30
COL	iP	01 46 42
	i	46 55
EUR	eP	01 46 08
GCA	e(P)	01 46 16
HHM	eP	01 46 40
TUC	eP	01 46 07
TUT	eP	01 46 06
March 24		
EUR	iP	01 48 31
HHM	iP	01 49 01
RCD	e(P)	01 48 18
SJP	iP	01 44 32
March 24		
ALQ	eP	03 41 12
BCN	eP	03 39 08
EUR	eP	03 39 22
	i	39 33
	iL	40 25
GCA	e(P)	03 39 30
	e	39 52
TUC	e(P)	03 41 31
March 24		
COL	iP	04 33 21
March 24		
COL	eP	06 26 07
March 24		
COL	iP	11 02 49
	i	03 01
EUR	iP	11 06 22
March 24		
ALQ	eP	13 13 45
	ePP	18 19
	iPKKP	29 16
BCN	eP	13 13 11
BOZ	e(P)	13 13 33
COL	iP	13 11 59
	ipP	12 20
	e(PKPP)	30 03

B-4297-4

Date and Station		Phase	(GCT) h m s
CSC		eP'	13 18 31
EUR		eP	13 13 10
		i	13 41
		iPP	17 14
		i	17 59
		eSKS	21 22
		ePKKP	29 26
		eL	31 46
FGU		eP	13 13 30
GCA		e(P')	13 17 02
GUA		eP	13 03 48
		i(S)	07 23
HON		iP	13 09 45
HHM		eP	13 13 14
KIP		iP	13 09 45
SJP		iP'	13 19 03
WAS		e(P')	13 18 44
March 24			
BHP		iP	19 08 02
		iS	09 39
March 24			
COL		iP	19 58 08
		i	58 21
March 24			
COL		eP	20 32 31
March 24			
COL		iP	20 55 06
EUR		iP	20 55 59
March 25			
BHP		iP	04 33 21
		iS	34 12
March 25			
BHP		iP	05 32 24
		iS	33 03
March 25			
EUR		e(P)	08 15 04
March 25			
COL		iP	08 16 45
EUR		iP	08 20 02
FGU		eP	08 19 59
		ePcP	21 52
		eL	40 06
GCA		eP	08 20 36
HHM		iP	08 19 34
RCD		eP	08 20 45
SJP		eP	08 25 08
THU		eP	08 20 35
TUC		iP	08 21 05
TUT		iP	08 21 05
March 25			
ALQ		e(P)	08 30 49
EUR		e(P)	08 31 47
March 25			
EUR		iP	08 40 42
		ipP	40 53
March 25			
COL		eP	08 44 57
		i	45 22
March 25			
COL		iP	11 12 41
		i	12 55
EUR		eP	11 13 07
March 25			
COL		eP'	12 04 13
		e	04 23
EUR		eP'	12 03 35
		i	03 58
		e	05 41
FGU		eP'	12 02 57
HHM		iP'	12 03 41
RCD		iP'	12 03 24
SJP		i(P)	11 56 58
TUC		iP'	12 03 19
TUT		eP'	12 03 20
March 25			
COL		iP	13 50 36
March 25			
COL		iP	14 36 53
EUR		eP	14 36 02
March 25			
EUR		iP	14 45 53
March 25			
BHP		iP	15 30 25
		iS	31 39
COL		eP	15 40 31
EUR		iP	15 37 34
RCD		iP	15 36 56
SJP		eP	15 31 54
		eS	34 13
TUC		iP	15 36 40
TUT		iP	15 36 39
March 25			
EUR		e(P)	18 38 33
March 25			
COL		iP	20 34 04
March 25			
EUR		e(P)	20 54 09
March 25			
COL		iP	21 00 44
THU		eP	21 00 47
March 25			
COL		iP	21 49 35
EUR		eP	21 50 48
HHM		iP	21 50 10
SJP		eP	21 49 12
THU		e(P)	21 46 46
March 25			
ALQ		eP	21 59 09
COL		eP	21 57 23
March 25			
SJP		eP	21 49 12
March 25			
COL		iP	22 23 29
March 26			
COL		iP	01 04 13
		e	05 03
March 26			
BHP		eP	03 25 19
		i	25 59
COL		e(P)	03 23 41
March 26			
COL		eP	04 57 07
March 26			
COL		iP	05 39 44
March 26			
COL		eP	06 01 17
March 26			
EUR		eP	08 46 49
March 26			
ALQ		i(P')	09 38 10
		iPPP	40 12
BOZ		eP	09 34 45
COL		eP	09 33 55
EUR		eP	09 35 19
HHM		iP	09 34 39
RCD		eP	09 34 33
THU		eP	09 31 18
March 26			
EUR		eP	10 42 06
March 26			
COL		iP	10 58 08
March 26			
ALQ		iP	12 17 46
EUR		eP	12 18 23
FGU		eP	12 17 57
GCA		e(P)	12 18 04
HHM		eP	12 18 11
RCD		eP	12 17 37
SLC		eP	12 18 08
THU		eP	12 17 14
March 26			
EUR		eP	14 34 14
March 26			
EUR		eP	14 50 24
HHM		e(P)	14 50 16
March 26			
COL		iP	15 33 06
GUA		eP	15 25 06
March 26			
COL		eP	15 29 47
March 26			
BHP		iP	15 31 42
		i	32 09
March 26			
ALQ		iP	16 44 56
BHP		iP	16 41 33
BCN		eP	16 45 19
BOZ		eP	16 45 51
		ipP	46 01
BUT		e(P)	16 45 55
COL		iP	16 51 16
		ipP	51 31
		isP	51 41
EUR		eP	16 45 34
		ipP	45 45
		ePP	49 06
		ePKKP	17 03 17

B 4297-4

Date and Station		Phase (GCT)
		h m s
FGU	eP	16 45 28
GCA	eP	16 45 20
HHM	iP	16 46 05
	ipP	46 16
	ePKKP	17 03 31
SLC	eP	16 45 32
SJP	iP	16 42 41
	ipP	42 51
THU	e(P)	16 51 23
TUC	iP	16 44 52
TUT	iP	16 44 52
March 26 COL	eP	17 01 35
March 26 THU	e(P)	17 45 15
March 26 COL	iP	18 50 36
March 26 COL	eP	21 25 16
March 27 ALQ	eP'	05 41 15
COL	iP	05 35 26
EUR	eP'	05 40 58
GUA	eP	05 27 19
	i(PP)	28 20
SJP	e(P')	05 41 53
	e	42 59
March 27 COL	iP	06 26 07
March 27 BHP	iP	09 22 53
	iS	23 39
March 27 ALQ	eP	10 22 15
COL	iP	10 18 07
	i	18 23
EUR	iP	10 21 25
	ipP	21 38
HHM	eP	10 20 56
	ipP	21 08
RCD	eP	10 21 49
TUC	eP	10 22 12
March 27 COL	e(P)	11 24 06

Date and Station		Phase (GCT)
		h m s
March 27 SJP	iP	14 00 24
	iS	00 40
March 27 COL	eP	14 11 09
EUR	eP	14 08 41
March 27 EUR	iP	15 01 49
COL	iP	15 02 14
	epP	04 06
March 27 ALQ	eP	18 01 59
EUR	eP	18 03 32
SLC	e(P)	18 01 15
March 27 ALQ	eP	19 24 47
COL	eP	19 30 17
	epP	31 37
EUR	eP	19 26 05
	epP	27 27
FGU	eP	19 25 55
	epP	27 15
TUC	eP	19 24 42
TUT	eP	19 24 42
March 27 COL	iP	20 20 19
March 27 ALQ	iP	21 23 50
BCN	eP	21 24 34
BOZ	e(P)	21 25 39
COL	iP	21 29 19
	i	29 38
CSC	iP	21 24 44
EUR	iP	21 25 07
	iL	33 30
FGU	eP	21 24 56
	e	33 08
GCA	eP	21 24 30
HHM	eP	21 26 07
	eS	37 14
THU	iP	21 29 45
TUC	iP	21 23 43
	eS	26 42
	eL	29 03

Date and Station		Phase (GCT)
		h m s
TUT	iP	21 23 42
	iL	29 05
March 27 COL	iP	23 00 42
March 28 COL	iP	01 03 21
	i	03 34
THU	eP	01 02 16
March 28 ALQ	eP'	04 24 29
BOZ	eP'	04 24 22
COL	eP	04 19 02
	eP'	22 19
	ePP	22 60
EUR	iP'	04 24 27
	ePP	26 37
	i	27 46
FGU	eP'	04 24 30
	e	27 53
HHM	iP'	04 24 15
SJP	eP'	04 25 33
March 28 EUR	e(P)	06 29 29
March 28 ALQ	eP	10 58 17
COL	e(P)	11 03 47
FGU	eP	10 59 22
March 28 COL	i(P)	12 36 12
EUR	eP	12 36 32
March 28 COL	iP	13 36 45
	i	36 50
EUR	eP	13 39 36
THU	e(P)	13 36 01
March 28 ALQ	eP	14 18 26
BCN	eP	14 18 47
BOZ	eP	14 20 21
COL	eP	14 23 56
	e(pP)	24 15
	e(sP)	24 32
EUR	iP	14 19 29
	ipP	19 48
FGU	eP	14 19 33

Date and Station		Phase (GCT)
		h m s
GCA	eP	14 18 52
HHM	eP	14 20 46
TUC	iP	14 17 51
TUT	iP	14 17 52
March 28 COL	eP	14 26 35
EUR	eP	14 25 52
March 28 THU	e(P)	14 47 21
	e	48 50
March 28 COL	iP	15 28 44
March 28 EUR	e(P)	16 40 55
March 28 ALQ	eP	18 02 02
	e	02 20
	i	02 30
	e(S)	04 06
BCN	eP	18 00 28
EUR	iP	18 01 41
FGU	e(P)	18 01 34
GCA	eP	18 00 59
	i	01 04
	i(S)	01 51
TUT	e(P)	18 02 38
March 28 BCN	eP	18 41 35
EUR	eP	18 41 44
GCA	e(P)	18 42 01
March 28 COL	iP	21 59 25
March 28 COL	iP	22 26 41
	iS	27 32
HHM	eP	22 30 43
March 29 SIT	eP	00 16 44
March 29 SIT	eP	00 47 58
March 29 BCN	eP	02 02 28
COL	iP	01 58 27
	ipP	58 54

8.4297-4

Date and Station		Phase (GCT)
		h m s
EUR	iP	02 02 08
	ipP	02 34
FGU	eP	02 02 25
	i	03 03
HHM	iP	02 01 33
	iPcP	02 39
GCA	eP	02 02 36
KIP	eP	02 00 34
TUC	iP	02 03 02
TUT	iP	02 03 02
March 29		
COL	iP	02 14 55
March 29		
COL	iP	03 09 00
	i	09 34
	eL	12 10
EUR	eP	03 12 11
	i	12 17
HHM	e(P)	03 11 01
	i	11 18
	eS	16 01
RCD	eP	03 12 34
SIT	eP	03 07 27
March 29		
COL	iP	06 36 09
EUR	e(P)	06 35 36
March 29		
EUR	iP	08 53 32
March 29		
COL	e(P)	12 46 29
EUR	iP	12 49 57
March 29		
ALQ	iP	13 39 37
BHP	iP	13 33 40
	iS	34 37
EUR	eP	13 40 47
FGU	eP	13 40 27
HHM	iP	13 41 26
SJP	eP	13 37 10
March 29		
COL	eP	19 38 05
EUR	iP	19 40 53
THU	eP	19 34 27
	e	34 40
	eS	36 57

Date and Station		Phase (GCT)
March 29		h m s
ALQ	e(P)	20 24 20
	eP'	27 50
COL	iP	20 21 54
EUR	e(P)	20 23 59
	eP'	27 39
	ePP	28 06
	ePKKP	38 36
GUA	eP	20 13 59
HON	iP	20 20 50
KIP	eP	20 20 49
March 29		
EUR	eP	22 51 32
March 29		
COL	eP	22 47 37
	e	47 48
	e	51 25
March 30		
COL	eP	00 16 53
EUR	iP	00 18 45
March 30		
COL	iP'	01 44 54
EUR	e(P')	01 43 55
HHM	eP'	01 44 04
March 30		
EUR	eP	04 34 13
March 30		
COL	iP	05 10 29
EUR	iP	05 14 15
March 30		
COL	iP	06 02 11
EUR	iP	06 02 22
March 30		
GUA	iP	06 06 30
	iS	07 12
March 30		
COL	eP	08 12 01
EUR	e(P)	08 12 04
March 30		
COL	eP	10 12 47
March 30		
EUR	eP	12 10 51
March 30		
EUR	eP	13 16 56
March 30		
COL	iP	14 16 01

Date and Station		Phase (GCT)
March 30		h m s
COL	e(P)	14 37 56
	e	43 53
EUR	iP	14 36 00
	epP	37 26
March 30		
EUR	eP	15 33 00
March 30		
COL	eP	17 42 10
EUR	eP	17 42 19
March 30		
COL	iP	21 54 31
March 30		
BHP	iP	22 15 00
	iS	16 08
March 31		
COL	iP	01 09 55
March 31		
ALQ	eP	01 28 50
COL	iP	01 28 57
EUR	eP	01 28 27
March 31		
EUR	eP	04 23 24
HON	iP	04 16 40
	iS	17 13
	iL	17 16
KIP	iP	04 16 41
	iS	17 16
	iL	17 18
March 31		
COL	eP	07 56 41
	ipP	57 16
	eP'	01 38
EUR	eP	08 00 59
	i	01 14
March 31		
EUR	eP	10 50 43
	i	50 59
March 31		
COL	iP'	12 22 01
	i	22 11
EUR	eP'	12 21 02
HHM	iP'	12 21 12
March 31		
THU	e(P)	14 55 33
March 31		
EUR	eP	15 09 19
March 31		
EUR	eP'	16 54 23

Date and Station		Phase (GCT)
March 31		h m s
COL	eP	16 57 02
EUR	iP	17 00 22
March 31		
BCN	eP	18 00 28
EUR	iP	18 00 40
SLC	eP	18 01 38
March 31		
EUR	eP'	18 03 53
UKI	e(P')	18 03 29
March 31		
EUR	eP	20 03 50
March 31		
ALQ	e(P)	20 58 02
BCN	eP	20 57 48
EUR	eP	20 58 03
TUC	eP	20 56 55
	e	57 40
March 31		
BCN	eP	21 43 29
COL	eP	21 41 17
March 31		
EUR	eP	23 46 56
FGU	eP	23 46 43
	e	47 08
March 31		
COL	iP	23 48 57

B-4297-4

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
March	
ALQ	
2	09.6
	17.7
	20.0
	22.8
3	18.3
	22.8
4	20.2
5	17.3
	22.7
6	10.0
	13.3
7	02.1
	08.3
	12.0
	20.6
9	23.3
10	03.1
14	21.0
15	14.7
	18.7
	21.2
	22.7
18	14.1
	21.0
	21.4
21	01.8
	04.4
	12.3
	21.0
22	00.3
	00.9
	19.6
23	11.5
24	03.7
	08.4
	08.7
	18.0
	18.8
	22.8
25	08.9
	18.8
	19.4
	20.0
	21.1
	21.6
26	22.9
27	18.4
	22.8
28	06.2
	11.5
	20.5
29	01.1
	21.1
30	17.6
	18.5
31	18.0
	21.9
	22.7
	22.9
BCN	
3	16.9
	18.0
4	15.3

Date and Station	Phase (GCT)
	h m s
BCN (Con't.)	
5	08.9
6	03.7
15	15.5
16	21.4
21	08.3 (2)
	12.1
	15.8
	16.5
	17.0
	17.2
	18.4
22	00.2
26	12.4
BOZ	
7	11.6
13	08.6
14	17.8
20	06.7
26	21.4
30	19.3
BUT	
1	16.8
5	12.5
	13.3
7	06.1
COL	
1	10.8
	11.8
	18.3
	18.4
3	00.9
	16.0
11	17.7
12	11.6
13	15.3
	21.5
14	18.0
15	18.2
17	12.9
22	23.5
23	13.4
28	00.2
30	09.2
	09.3
EUR	
2	16.9
3	16.9
	18.5
4	05.2
	19.2
	23.4
6	03.7
9	15.1
10	20.2
12	18.3
	23.8
13	12.5
14	00.1
15	05.5
16	21.4
25	10.3
	22.4
28	15.5
	21.0
31	03.4

Date and Station	Phase (GCT)
	h m s
FGU	
1	23.2
2	00.1
	06.3
	17.3
	20.3
3	17.6
4	22.7
5	06.8
	07.5
	18.6
7	02.3
	11.9
8	08.2
	16.9
9	01.0
10	04.1
	24.0
11	10.6
12	08.3
	23.8
14	00.4
15	02.5
	23.1
	23.7
16	12.4
17	23.2
18	18.5
	22.6
19	06.5
	22.6
20	07.5
	23.4
22	21.4
	22.0
23	07.3 (2)
	09.7
	10.0 (3)
24	06.4
25	01.8
	05.9
26	02.5
27	02.5
	17.8
	19.8
	22.2
	23.8
28	10.3
	15.5
	23.8
29	09.5
30	23.8
GCA	
6	01.0
	09.3
8	23.5
9	00.0
11	20.5
15	17.5
	18.6
16	22.4
	23.3 (2)
17	21.4
	22.4
21	22.6
22	04.4
23	06.8
27	14.9
28	15.5
31	03.4

Date and Station	Phase (GCT)
	h m s
HHM	
10	20.2
13	17.6
	21.7
14	02.7
15	05.5
19	12.8
23	17.5
24	13.5
27	15.2
29	01.1
	22.6
30	08.9
	15.3
31	23.9
RCD	
1	09.1
8	08.4
	20.5
9	20.2
14	22.7
15	20.6
16	18.1
	22.8
21	22.5
31	05.2
SLC	
11	19.8
27	14.3
SJP	
2	09.5
4	14.3
5	03.5
13	04.9
	12.0
14	08.2
17	16.5
22	14.9
27	14.2
TUC	
1	17.5
3	19.2
4	15.5
5	10.8
7	23.0
8	23.1
10	17.1
	18.0
	22.9
11	18.7
13	08.6
14	05.3
	05.9
	06.9
15	02.0
	07.6
	09.3
17	23.0
19	06.4
20	22.9
23	05.9
24	09.1
	23.1
27	19.5
28	06.5
31	04.5

B-4297-4

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
Local and Minor Earthquakes (Con't)							
TUT							
1	17.5						
	19.2						
3	19.2						
7	23.0						
8	23.1						
10	17.1						
	18.0						
11	18.7						
14	05.3						
15	02.0						
	07.6						
	09.3						
17	23.0						
19	06.4						
20	22.9						
23	05.9						
24	09.1						
	23.1						
27	19.5						
28	06.5						
31	04.5						
UKI							
8	22.3						
12	11.3						