USCGS
.40

SEISMOLOGICAL BULLETIN

February, 1961

MSI - 242

COAST & GEODETIC SURVEY
NOV 14 1962
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U. S. DEPARTMENT OF COMMERCE

Luther H. Hodges, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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1961

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

**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)
*Lincoln, Nebr. (LIN)
Nebraska Wesleyan University
**Philadelphia, Pa. (PHI)
The Franklin Institute
**Rapid City, S. D. (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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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 earthquake 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 on the Preliminary Determination of epicenter 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 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
1	00 35 57.2	50.3 N.	129.9 W.	Vancouver Island region. Mag. 5½ (Pal). h about 23 km.
1	02 46 31.6	11.9 N.	144.2 E.	Mariana Islands region. h about 60 km.
1	04 53 41.1	11.9 N.	143.9 E.	Mariana Islands region. h about 58 km.
1	06 27 18.9	13.6 S.	173.4 E.	East of New Hebrides Islands region. h about 50 km.
1	18 39 02.7	37.6 N.	138.4 E.	Near west coast of Honshu, Japan. 5 killed, 7 injured, and extensive property damage at Nagaoka. h about 34 km.
1	20 09 14.1	18.1 S.	178.4 W.	Fiji Islands. h about 601 km.
2	00 04 16.5	37.4 N.	118.5 W.	Inyo County, California. Felt. Mag. 4¾ - 5. h about 23 km.
2	00 41 58.2	7.7 N.	126.8 E.	Off coast of Mindanao, Philippine Islands. h about 40 km.
2	05 50 18.4	47.0 N.	121.5 W.	Washington. h about 40 km.
2	08 00 45.3	12.1 S.	166.0 E.	Santa Cruz Islands. h about 25 km.
2	09 42 15.4	2.8 S.	77.8 W.	Ecuador. h about 25 km.
2	11 13 31.3	13.7 N.	144.9 E.	Mariana Islands region. Felt on Guam. h about 139 km.
3	02 25 53.0	3.7 N.	97.4 E.	Near coast of Sumatra. h about 29 km.
3	11 02 51.7	33.5 S.	72.3 W.	Near coast of Chile. Felt in Aconcagua, Santiago and Valparaiso Provinces. h about 27 km.
3	12 00 25.3	33.4 S.	72.2 W.	Near coast of Chile. Felt in Aconcagua, Santiago and Valparaiso Provinces. h about 22 km.
3	12 33 25.3	37.3 S.	176.5 E.	Off coast of North Island, New Zealand. h about 286 km.
3	13 31 44.7	36.6 N.	141.0 E.	Near east coast of Honshu, Japan. Felt. h about 103 km.
3	14 07 08.9	33.4 S.	72.1 W.	Near coast of Chile. h about 40 km.
3	14 35 18.1	44.1 S.	75.6 W.	Near coast of southern Chile. h about 40 km.
4	01 13 07.0	18.3 S.	69.5 W.	Northern Chile. Felt at Arequipa, Peru. h about 158 km.
4	08 51 48.6	24.8 N.	95.3 E.	Northern Burma. h about 135 km.
4	12 49 33.8	49.9 N.	156.3 E.	Kamchatka. h about 145 km.
4	15 29 11.7	17.1 S.	176.8 W.	Fiji Islands region. h about 57 km.
4	19 09 14.1	24.2 N.	122.6 E.	Off coast of Formosa. Mag. 5¾ (Pal). h about 31 km.
4	23 58 58.9	45.7 N.	148.6 E.	Kurile Islands. h about 50 km.
5	07 39 55.4	18.5 S.	177.9 W.	Fiji Islands. h about 580 km.
5	07 55 43.3	50.9 N.	176.9 W.	Andreanof Islands, Aleutian Islands. Felts on Adak. h about 44 km.
5	15 38 34.0	8.1 N.	82.8 W.	South of Panama. Felt at Balboa Heights. Mag. 5¼-5½ (Berk.) h about 49 km.
5	17 50 51.1	38.6 S.	78.2 E.	South Indian Ocean. Mag. 5¾-6 (Pal). h about 25 km.
5	19 08 10.1	7.0 N.	72.8 W.	Colombia. h about 154 km.
6	04 06 08.9	14.2 N.	145.5 E.	Mariana Islands. h about 22 km.
6	06 27 49.6	21.1 S.	174.6 W.	Tonga Islands region. h about 25 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
6	10 30 03.5	19.4 S.	69.2 W.	Northern Chile. Felt at Arequipa, Peru. h about 120 km.
6	11 25 38.9	55.4 S.	130.6 W.	South of Australia. h about 25 km.
6	12 12 21.8	51.7 N.	174.5 W.	Andreanof Islands, Aleutian Islands. Felt on Adak. Mag. $5\frac{1}{4}$-$5\frac{1}{2}$ (Pal). h about 34 km.
6	18 15 23.4	44.9 N.	149.3 E.	Kurile Islands. h about 33 km.
6	19 29 30.1	4.7 S.	154.3 E.	Solomon Islands region. h about 400 km.
6	20 11 51.0	10.8 S.	161.8 E.	Solomon Islands region. h about 80 km.
6	20 18 35.1	38.6 S.	78.2 E.	South Indian Ocean. h about 31 km.
6	21 45 13.5	6.8 S.	155.3 E.	Solomon Islands. Felt. Mag $6\frac{3}{4}$. h about 59 km.
6	21 57 40.8	6.9 S.	155.6 E.	Solomon Islands. h about 60 km.
7	01 43 42.6	11.7 S.	166.0 E.	Santa Cruz Islands. h about 55 km.
7	02 57 51.2	11.8 S.	166.2 E.	Santa Cruz Islands. h about 55 km.
7	02 57 56.0	14.8 N.	54.3 E.	Gulf of Aden. h about 25 km.
7	03 21 15.1	13.6 N.	89.9 W.	Near coast of Guatemala. Felt. h about 128 km.
7	03 47 34.1	24.4 S.	179.3 W.	South of Fiji Islands. h about 425 km.
7	03 59 49.4	11.9 S.	166.2 E.	Santa Cruz Islands. h about 55 km.
7	05 11 40.9	4.7 S.	103.0 E.	Near coast of Sumatra. Felt at Palembang. h about 40 km.
7	06 02 08.3	11.8 S.	166.2 E.	Santa Cruz Islands. h about 33 km.
7	06 08 30.6	49.1 N.	129.0 W.	Vancouver Island region. h about 25 km.
7	14 24 35.1	33.5 S.	72.3 W.	Near coast of Chile. Felt in Santiago and Valparaiso Provinces. h about 40 km.
7	15 28 33.3	23.6 N.	121.0 E.	Near coast of Formosa. h about 38 km.
7	21 01 37.3	44.1 N.	147.1 E.	Kurile Islands. h about 36 km.
7	22 09 44.0	49.8 N.	156.0 E.	Kamchatka. h about 55 km.
7	23 27 18.9	51.7 N.	177.1 W.	Andreanof Islands, Aleutian Islands. Felt on Adak. h about 60 km.
8	02 36 40.5	15.4 S.	167.5 E.	New Hebrides Islands region. h about 162 km.
8	04 34 33.8	26.3 S.	179.0 W.	Kermadec Islands region. h about 412 km.
8	08 04 13.4	10.4 S.	71.0 W.	Brazil-Peru border. Mag. $5\frac{3}{4}$. h about 600 km.
8	11 59 52.3	18.9 S.	174.9 W.	Tonga Islands. h about 76 km.
8	15 53 33.6	21.8 S.	169.3 E.	Loyalty Islands region. h about 35 km.
8	16 57 23.3	20.5 S.	178.1 W.	Fiji Islands region. h about 543 km.
8	17 50 45.2	20.5 S.	178.1 W.	Fiji Islands region. h about 543 km.
8	19 25 59.9	5.9 S.	151.8 E.	New Britain region. Felt at Rabaul. h about 51 km.
8	23 59 17.3	7.2 S.	155.0 E.	Solomon Islands region. h about 77 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
9	02 08 15.9	28.4 S.	177.4 W.	Kermadec Islands region. Mag. 6¾. h about 37 km.
9	09 04 05.0	10.1 S.	165.5 E.	Santa Cruz Islands. h about 83 km.
9	13 14 50.0	39.1 S.	74.6 W.	Near coast of Chile. h about 40 km.
9	17 50 41.0	31.0 N.	115.6 W.	Baja California. Mag. 4¾ - 5. h about 25 km.
9	20 21 20.1	10.0 S.	111.3 E.	Off south coast of Java. h about 73 km.
10	00 37 28.0	30.3 S.	177.2 W.	Kermadec Islands. h about 25 km.
10	07 22 50.4	33.6 S.	72.1 W.	Near coast of Chile. h about 40 km.
10	08 49 14.1	11.6 S.	73.1 W.	Peru. h about 35 km.
10	13 19 22.6	3.1 S.	127.4 E.	Ceram Sea. h about 54 km.
10	16 58 29.4	3.6 N.	126.5 E.	Molucca Passage. h about 99 km.
11	01 02 20.9	16.2 S.	172.3 W.	Samoa Islands region. h about 21 km.
11	02 34 31.9	22.7 N.	143.9 E.	Mariana Islands region. h about 26 km.
11	03 53 33.4	59.6 N.	155.0 W.	Alaska. h about 56 km.
11	06 12 29.8	28.9 N.	139.5 E.	South of Honshu, Japan. h about 400 km.
11	11 28 07.0	23.5 S.	66.8 W.	Juyjuy Province, Argentina. h about 220 km.
11	12 23 53.5	5.2 N.	126.3 E.	Near coast of Mindanao, Philippine Islands. h about 178 km.
11	16 46 24.6	19.8 S.	176.2 W.	Fiji Islands. h about 261 km.
11	21 01 08.7	28.5 S.	177.5 W.	Kermadec Islands. Mag. 6¾. h about 67 km.
11	22 44 07.2	24.4 S.	66.9 W.	Salta Province, Argentina. h about 169 km.
12	01 19 16.5	35.0 S.	106.9 W.	Easter Islands region. Mag. 5 (Pal). h about 25 km.
12	03 51 14.0	31.3 N.	109.2 W.	Mexico-Arizona, U.S.A. border. h about 25 km.
12	06 04 07.5	11.2 S.	166.1 E.	Santa Cruz Islands region. h about 93 km.
12	10 31 36.8	36.9 N.	44.4 E.	Turkey-Iran border. h about 60 km.
12	12 09 21.8	15.1 S.	175.2 W.	Samoa Islands region. h about 287 km.
12	12 57 15.3	13.2 S.	171.8 E.	East of New Hebrides Islands region. h about 598 km.
12	13 54 30.6	59.5 N.	150.1 W.	Kenai Peninsula, Alaska. h about 79 km.
12	15 21 04.1	2.8 S.	129.5 E.	Ceram Sea. h about 25 km.
12	21 53 43.5	43.9 N.	147.6 E.	Kurile Islands. Mag. 6¾-7. h about 45 km.
12	22 51 35.0	44.1 N.	147.9 E.	Kurile Islands. h about 50 km.
12	22 54 24.2	44.3 N.	147.7 E.	Kurile Islands. h about 50 km.
12	23 13 09.6	44.6 N.	147.7 E.	Kurile Islands. h about 46 km.
12	23 26 37.4	44.1 N.	147.7 E.	Kurile Islands. h about 50 km.
13	00 31 59.2	44.2 N.	147.8 E.	Kurile Islands. h about 50 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
13	01 28 01.4	44.7 N.	147.5 E.	Kurile Islands. h about 50 km.
13	02 30 10.7	44.4 N.	147.8 E.	Kurile Islands. h about 50 km.
13	02 31 23.7	44.7 N.	147.9 E.	Kurile Islands. h about 50 km.
13	03 52 48.7	10.6 S.	161.5 E.	Solomon Islands region. h about 61 km.
13	04 43 32.9	44.9 N.	147.4 E.	Kurile Islands. h about 50 km.
13	06 45 25.0	17.1 S.	173.7 W.	Tonga Islands region. Mag. 5¾-6. h about 43 km.
13	09 07 01.3	43.9 N.	147.9 E.	Kurile Islands. h about 50 km.
13	13 46 08.4	7.2 S.	155.7 E.	Solomon Islands. h about 100 km.
13	16 10 19.8	29.9 N.	81.0 E.	Nepal-Tibet border. h about 35 km.
13	16 17 20.1	5.1 S.	128.7 E.	Banda Sea. h about 66 km.
13	16 27 24.2	43.5 N.	147.9 E.	Kurile Islands. Mag. 6-6¼. h about 64 km.
13	17 50 14.1	43.9 N.	147.7 E.	Kurile Islands. h about 45 km.
13	21 11 40.9	43.8 N.	147.8 E.	Kurile Islands. h about 51 km.
13	22 37 13.8	44.0 N.	147.8 E.	Kurile Islands. h about 50 km.
14	00 15 37.6	43.7 N.	147.6 E.	Kurile Islands. h about 50 km.
14	01 57 02.6	6.2 S.	154.2 E.	Solomon Islands. h about 75 km.
14	02 51 09.7	43.8 N.	147.8 E.	Kurile Islands. h about 50 km.
14	03 15 30.3	43.8 N.	147.7 E.	Kurile Islands. h about 50 km.
14	03 22 06.6	43.8 N.	147.6 E.	Kurile Islands. Mag. 6-6¼. h about 50 km.
14	03 46 46.6	43.9 N.	148.1 E.	Kurile Islands. h about 50 km.
14	05 44 25.5	42.3 S.	74.2 W.	Near coast of southern Chile. Felt at Puerto Montt and Ancud. h about 40 km.
14	10 02 45.6	15.0 S.	167.7 E.	New Hebrides Islands. Felt at Santo. h about 134 km.
14	15 50 52.2	15.5 S.	175.1 W.	Samoa Islands region. h about 25 km.
15	01 34 13.8	4.6 S.	104.6 W.	West of Galapagos Islands region. h about 25 km.
15	02 09 26.4	22.3 S.	171.3 E.	Loyalty Islands region. h about 128 km.
15	06 27 14.0	26.2 S.	177.5 W.	Tonga Islands region. h about 150 km.
15	09 10 49.4	43.3 N.	111.4 W.	Idaho. h about 25 km.
15	10 45 14.0	43.8 N.	147.4 E.	Kurile Islands. Mag. 6-6¼. h about 51 km.
15	11 28 51.0	30.8 N.	84.4 E.	Tibet. h about 25 km.
15	11 57 04.1	43.7 N.	147.9 E.	Kurile Islands. h about 50 km.
16	03 23 53.0	9.3 S.	106.2 W.	West of Galapagos Islands region. h about 25 km.
16	03 44 45.7	40.6 N.	19.8 E.	Near coast of Albania. h about 25 km.
16	05 21 51.9	12.9 N.	86.5 W.	Nicaragua. Felt at Chinandega. h about 40 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region Remarks and Focal Depth
Feb.	h m s	°	°	
16	08 55 11.7	34.4 N.	137.2 E.	Near south coast of Honshu, Japan. h about 341 km.
16	13 25 55.1	24.3 S.	175.8 W.	Tonga Islands region. h about 25 km.
16	13 54 52.9	43.8 N.	147.4 E.	Kurile Islands. Mag. 6-6¼. h about 50 km.
16	14 00 09.2	6.9 S.	155.4 E.	Solomon Islands region. h about 92 km.
16	14 33 15.1	13.0 N.	57.6 E.	North Indian Ocean. h about 25 km.
16	14 54 27.7	43.6 N.	147.6 E.	Kurile Islands. h about 50 km.
16	15 55 42.6	23.8 S.	177.5 W.	Tonga Islands region. h about 189 km.
16	16 09 17.3	8.9 S.	110.6 E.	Off coast of Java. Felt. h about 25 km.
16	20 29 16.1	33.8 S.	57.7 E.	South Indian Ocean. h about 25 km.
17	00 22 30.8	18.8 S.	173.5 W.	Tonga Islands. h about 25 km.
17	06 11 52.7	6.9 N.	73.1 W.	Colombia. h about 159 km.
17	06 49 04.9	43.6 N.	147.9 E.	Kurile Islands. h about 50 km.
17	12 40 56.3	33.8 S.	57.2 E.	South Indian Ocean. h about 28 km.
17	13 08 26.9	36.5 N.	70.6 E.	Hindu Kush. h about 195 km.
17	15 37 52.1	5.0 S.	129.7 E.	Banda Sea. h about 300 km.
17	18 55 04.3	4.4 S.	153.0 E.	New Ireland region. h about 108 km.
18	01 04 07.2	44.4 N.	147.5 E.	Kurile Islands. h about 50 km.
18	08 13 04.0	44.2 N.	147.5 E.	Kurile Islands. h about 50 km.
18	08 22 33.5	43.6 N.	147.6 E.	Kurile Islands. h about 50 km.
18	12 05 36.3	22.7 S.	171.3 E.	Loyalty Islands region. h about 38 km.
18	15 54 00.0	43.6 N.	148.0 E.	Kurile Islands. h about 38 km.
18	17 02 10.0	1.3 S.	15.7 W.	North of Ascension Islands. Mag. 5 (Pal). h about 25 km.
18	20 00 28.8	4.2 N.	126.4 E.	Off coast of Mindanao, Philippine Islands. h about 72 km.
19	07 11 22.5	23.2 S.	171.5 E.	East of Loyalty Islands region. h about 25 km.
19	07 55 26.6	56.2 N.	153.5 W.	Kodiak Island, Alaska. h about 40 km.
19	12 11 15.7	56.3 N.	153.5 W.	Kodiak Island, Alaska. h about 39 km.
19	12 33 35.7	14.2 S.	14.1 W.	South Atlantic Ocean. h about 25 km.
19	13 07 45.5	56.3 N.	153.4 W.	Kodiak Island, Alaska. h about 44 km.
20	13 03 38.6	3.3 N.	96.5 W.	Galapagos Islands region. h about 25 km.
20	13 05 10.8	56.2 N.	153.7 W.	Kodiak Island, Alaska. h about 30 km.
20	14 17 26.9	5.1 S.	153.5 E.	New Ireland region. Felt at Rabaul. h about 101 km.
20	18 08 26.7	49.2 N.	155.3 E.	Kamchatka. h about 60 km.
20	18 25 45.0	32.0 S.	68.1 W.	San Juan Province, Argentina. Felt at Mendoza. h about 120 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
20	18 47 02.2	5.5 N.	96.4 E.	Near north coast of Sumatra. h about 171 km.
20	18 54 17.5	15.1 N.	60.6 W.	Windward Islands. h about 55 km.
20	22 26 59.1	2.4 S.	77.6 W.	Ecuador. h about 25 km.
21	00 03 37.1	6.1 S.	153.7 E.	Solomon Islands. h about 126 km.
21	01 07 15.4	37.3 S.	74.6 W.	Near coast of Chile. Felt in Santiago and Valparaiso Provinces. h about 40 km.
21	03 01 52.6	36.3 N.	22.9 E.	Near south coast of Greece. Felt. h about 25 km.
21	03 50 18.6	6.9 S.	155.7 E.	Solomon Islands region. h about 83 km.
21	05 39 51.0	38.9 N.	111.5 W.	Central Utah. h about 25 km.
21	19 10 55.4	48.9 S.	106.5 E.	Indian Ocean, southwest of Australia. h about 25 km.
21	23 28 32.5	0.1 N.	123.1 E.	Celebes. h about 140 km.
22	02 49 14.4	51.4 N.	179.9 E.	Andreanof Islands, Aleutian Islands. h about 50 km.
22	15 42 50.9	0.3 S.	98.9 E.	Near coast of Sumatra. h about 28 km.
22	21 53 33.8	28.6 S.	177.3 W.	Kermadec Islands region. Mag. 5¾ (Berk). h about 66 km.
23	01 02 59.5	28.1 N.	92.4 E.	Eastern Tibet. h about 54 km.
23	01 46 36.9	45.0 N.	111.6 W.	Yellowstone National Park, Montana. h about 25 km.
23	03 00 05.8	4.4 S.	133.9 E.	Off coast of New Guinea. h about 64 km.
23	03 12 54.5	45.0 N.	111.7 W.	Yellowstone National Park, Montana. h about 25 km.
23	03 19 07.1	35.2 N.	27.3 E.	Crete. h about 25 km.
23	03 23 18.5	35.1 N.	27.2 E.	Crete. h about 25 km.
23	04 16 24.3	38.4 N.	142.8 E.	Off north coast of Honshu, Japan. Felt. Mag. 5¾ (Pal). h about 116 km.
23	04 49 38.4	2.0 S.	120.2 E.	Celebes. h about 84 km.
23	05 34 42.2	22.4 S.	171.4 E.	Loyalty Islands region. h about 82 km.
23	14 31 54.7	15.5 N.	92.2 W.	Mexico - Guatemala border. h about 53 km.
23	21 45 50.5	36.9 N.	27.3 E.	Dodecanese Islands. Felt. h about 25 km.
23	21 56 40.2	35.7 N.	25.9 E.	Dodecanese Islands. Felt. h about 25 km.
24	01 27 56.6	12.7 S.	163.9 E.	Solomon Islands region. h about 33 km.
24	02 38 17.4	49.3 N.	156.3 E.	Kamchatka. h about 39 km.
24	03 04 16.1	26.2 N.	125.7 E.	Ryukyu Islands. h about 50 km.
24	08 16 11.3	18.2 S.	69.7 W.	Near Chile-Peru border. Felt at Arequipa. h about 121 km.
25	00 50 12.4	19.3 S.	177.4 W.	Fiji Islands region. h about 611 km.
25	01 18 53.1	14.1 S.	165.9 E.	New Hebrides Islands region. h about 48 km.
25	04 55 25.1	21.8 S.	179.6 W.	Fiji Islands region. h about 608 km.
25	08 24 32.0	23.6 S.	179.9 W.	South of Fiji Islands region. h about 563 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
Feb.	h m s	°	°	
25	15 02 04.8	15.5 S.	175.8 W.	Samoa Islands region. h about 62 km.
25	15 23 06.4	36.5 N.	139.6 E.	Honshu, Japan. Felt. h about 44 km.
26	00 33 43.7	10.4 S.	161.5 E.	Solomon Islands region. h about 89 km.
26	05 48 46.3	32.9 S.	111.2 W.	Easter Island region. Mag. 6½-6¾. h about 29 km.
26	17 49 26.5	41.1 N.	142.3 E.	Near coast of Hokkaido, Japan. h about 57 km.
26	18 10 48.7	31.6 N.	131.2 E.	Near coast of Kyushu, Japan. 1 killed, several injured, and extensive property damage at Miyazaki. 3 ft. tsunami observed in southwest Shikoku. Mag. 7-7¼. h about 54 km.
26	21 01 04.8	16.1 N.	121.6 E.	Luzon, Philippine Islands. Felt. h about 32 km.
27	01 07 51.3	6.7 N.	73.0 W.	Colombia. Felt at Bogota. h about 200 km.
27	09 12 39.3	26.0 N.	108.8 W.	Near coast of Mexico. h about 25 km.
27	10 29 48.3	38.9 S.	72.4 W.	Southern Chile. Felt. h about 57 km.
27	11 56 26.5	13.4 S.	175.2 W.	Samoa Islands region. h about 25 km.
27	12 23 18.5	71.9 N.	10.6 W.	Jan Mayen Island region. h about 30 km.
27	13 06 35.8	52.7 N.	168.8 W.	Fox Islands, Aleutian Islands. h about 56 km.
27	15 44 21.6	9.7 N.	84.0 W.	Near coast of Costa Rica. Minor damage at San Jose. h about 85 km.
27	16 48 18.2	4.2 S.	134.9 E.	Near coast of New Guinea. h about 25 km.
27	17 53 47.3	38.2 N.	74.4 E.	Tadzhik, S.S.R. h about 180 km.
27	21 40 02.6	36.6 N.	26.9 E.	Dodecanese Islands. Felt. h about 40 km.
27	21 54 33.6	36.5 N.	27.1 E.	Dodecanese Islands. Felt. h about 40 km.
28	12 33 36.5	46.7 N.	152.2 E.	Kurile Islands. h about 29 km.
28	18 29 17.1	15.6 N.	91.5 W.	Guatemala. h about 215 km.
28	21 18 28.7	24.2 S.	68.1 W.	Northern Chile-Argentina border. h about 130 km.
28	22 59 14.1	3.9 S.	135.3 E.	Western New Guinea. h about 73 km.

Date and Station	Phase	Phase (GCT) h m s
Feb. 1		
COL	iP	00 23 49
EUR	eP	00 23 10
	i	27 24
FGU	eP	00 23 43
GGA	e(P)	00 23 56
	e	24 00
TUT	eP	00 24 46
Feb. 1		
BOZ	eP	00 39 09
	eL	43 06
BUT	eP	00 38 57
	eL	42 23
COL	iP	00 40 04
	eS	43 33
EUR	iP	00 39 25
	i	39 33
FGU	eP	00 39 56
	i	42 50
	eL	45 54
GGA	eP	00 40 16
	e	40 59
	e	41 54
HBM	iP	00 38 30
	i	38 48
	eL	41 22
RCD	iP	00 40 21
SIC	eP	00 39 32
TUC	iP	00 41 02
TUT	eP	00 41 01
Feb. 1		
EUR	iP	00 43 31
	i	43 40
Feb. 1		
EUR	iP	01 33 01
FGU	eP	01 33 29
Feb. 1		
EUR	iP	02 59 27
GUA	iP	02 46 55
	iS	47 15
Feb. 1		
EUR	iP	04 04 00
TUT	eP	04 02 49
Feb. 1		
TUC	eP	04 45 03
TUT	eP	04 45 05
Feb. 1		
COL	eP	05 04 48
EUR	iP	05 06 40
FGU	eP	05 07 00
GUA	iP	04 54 10
	e	54 18
	iS	54 32
HBM	eP	05 06 34
	ipP	06 50
TUT	eP	05 07 09
Feb. 1		
COL	iP	06 39 47
	ipP	39 56
EUR	eP	06 39 49
FGU	eP	06 40 14
	i	40 17
GGA	e(P)	06 40 03
	e	40 04
HBM	e(P)	06 40 12
TUC	eP	06 39 57
TUT	eP	06 39 59
Feb. 1		
COL	eP	06 51 27
Feb. 1		
FGU	eP	07 49 42
	i	49 45
	i	50 05
	e	51 10
GGA	e(P)	07 50 32
Feb. 1		
COL	e	07 51 48
EUR	iP	07 51 09
GGA	e(P)	07 52 01
HBM	iP	07 50 12
	i	50 39
TUC	iP	07 52 46
	e	53 04
	e	53 15
	e	53 33
TUT	eP	07 52 45
Feb. 1		
EUR	iP	09 01 36
Feb. 1		
EUR	eP	11 08 18
HBM	iP	16 20 19
Feb. 1		
COL	eP	18 47 52
EUR	iP	18 51 00
HBM	eP	18 50 34
Feb. 1		
COL	iP	20 20 54
	epP	23 03
EUR	iP	20 20 36
FGU	eP	20 21 01
HBM	iP	20 21 03
TUT	eP	20 20 38
Feb. 1		
HBM	eP	22 04 02
Feb. 2		
BOZ	e(P)	00 06 38
	eL	10 19
BUT	eP	00 06 39
	e	07 14
	e	08 00
	eL	09 14
EUR	iP	00 05 03
FGU	eP	00 06 16
	i	06 44
	iL	05 27
	i	11 53
HBM	eP	00 07 03
	eL	10 10
	i	13 50
SIC	eP	00 06 13
	e	07 05
	eL	10 56
TUC	iP	00 06 17
	iL	07 06
	i	08 30
	i	12 04
TUT	eP	00 06 18
	iL	03 33
UKI	eP	00 05 20
Feb. 2		
COL	eP	00 54 10
SJP	eP'	01 01 49
Feb. 2		
FGU	eP	01 34 59
	i	35 05
	i	36 55
SJP	iP	02 03 13
FGU	eP	02 07 03
Feb. 2		
FGU	eP	02 23 40
Feb. [illegible]		
BOZ	eP	05 52 06
BUT	eP	05 51 50
	eS	53 23
COL	iP	05 55 22
FGU	eP	05 52 55
	e	53 06
	eL	55 49
HBM	iP	05 51 35
	i	51 56
	iL	53 04
SIC	e(P)	05 55 26
TUC	eP	05 54 15
TUT	eP	05 54 15
	eL	59 03
Feb. 2		
COL	eP	08 13 18
Feb. 2		
SJP	iP	08 45 11
	iL	49 05
Feb. 2		
FGU	iP	09 51 28
	i	52 04
	e	55 47
	e	57 47
TUT	eP	09 50 46
Feb. 2		
BUT	eP	11 26 15
COL	iP	11 24 20
FGU	iP	11 26 34
GGA	eP	11 26 33
GUA	iP	11 13 51
HBM	iP	11 26 09
	iPP	29 29
SIC	eP	11 [illegible] 26
SJP	e(P')	11 32 30
TUC	eP	11 26 44
	e	27 12
	e	[illegible] 33
TUT	eP	11 26 44

Date and Station		Phase (GCT)
		h m s
Feb. 2		
FGU	eP	12 05 04
Feb. 2		
TUT	e(P)	12 24 04
Feb. 2		
FGU	eP	13 53 01
	e	53 11
Feb. 2		
TUT	e(P)	20 46 14
Feb. 2		
COL	eP	22 19 55
	e	21 46
Feb. 3		
EUR	iP	02 37 20
Feb. 3		
EUR	eP'	02 45 00
Feb. 3		
TUT	eP	02 48 40
Feb. 3		
COL	iP	03 42 47
TUT	e(P)	03 48 12
Feb. 3		
EUR	iP	07 00 13
FGU	iP	07 00 03
HHM	e(P)	07 00 42
Feb. 3		
COL	iP	09 26 13
Feb. 3		
BUT	eP	11 15 38
EUR	eP	11 15 18
	ipP	15 28
FGU	eP	11 15 10
GCA	e(P)	11 14 14
	e	14 58
TUC	eP	11 14 42
	epP	14 52
TUT	eP	11 14 43
Feb. 3		
COL	eP	11 59 33
Feb. 3		
EUR	eP	12 12 51
FGU	e(P)	12 11 56
	e	43
GCA	e(P)	12 11 44
RCD	e(P)	12 12 43

Date and Station		Phase (GCT)
		h m s
TUC	eP	12 12 10
	epP	12 22
TUT	eP	12 12 10
Feb. 3		
EUR	e(P)	12 46 27
	ePP	50 31
GCA	ePP	12 50 41
Feb. 3		
FGU	eP	13 01 30
Feb. 3		
COL	iP	13 40 32
	epP	40 58
EUR	iP	13 43 29
FGU	eP	13 43 46
HHM	eP	13 43 06
RCD	eP	13 43 55
TUC	eP	13 44 10
	e	44 24
	epP	44 39
TUT	eP	13 44 10
Feb. 3		
EUR	eP	14 19 34
FGU	eP	14 19 25
TUT	e(P)	14 18 50
Feb. 3		
EUR	iP	14 37 22
FGU	iP	14 37 09
HHM	iP	14 37 51
TUT	eP	14 36 34
Feb. 3		
EUR	iP	14 48 19
TUT	eP	14 47 38
Feb. 3		
COL	eP	15 07 24
Feb. 3		
EUR	iP	18 28 40
Feb. 3		
EUR	iP	20 54 02
Feb. 3		
EUR	eP	23 54 02
FGU	eP	23 53 25
Feb. 4		
BOZ	eP	01 24 28

Date and Station		Phase (GCT)
		h m s
BUT	eP	01 24 32
EUR	iP	01 24 16
	ipP	24 51
FGU	iP	01 24 02
	i	24 31
	e	26 24
GCA	iP	01 23 51
	e	24 20
	e	25 45
GUA	iP'	01 32 26
HHM	iP	01 24 46
	i	25 33
	ePP	27 49
RCD	iP	01 23 59
	epP	24 38
	e	25 49
	e(S)	33 15
SLC	eP	01 24 08
SJP	iP	01 19 57
	ipP	20 25
	eScP	25 31
TUC	iP	01 23 26
	epP	24 01
	ePP	26 01
TUT	iP	01 23 25
	ipP	23 58
Feb. 4		
FGU	eP	02 50 26
	i	50 59
Feb. 4		
COL	iP	03 07 16
	ipP	07 24
EUR	eP	03 06 46
GCA	eP	03 06 56
TUC	eP	03 06 47
TUT	eP	03 06 46
Feb. 4		
COL	i(P)	05 18 33
EUR	iP	05 22 18
	i	23 19
Feb. 4		
COL	iP	06 05 27
	i	06 56
Feb. 4		
COL	iP	06 13 11
TUC	eP	06 12 57
	e	13 11

Date and Station		Phase (GCT)
		h m s
TUT	eP	06 12 58
Feb. 4		
BHP	iP	06 51 15
	iS	54 05
BOZ	eP	06 56 11
COL	eP	06 59 30
CSC	eP	06 53 53
EUR	eP	06 55 50
	i	56 06
	e	07 02 07
FGU	eP	06 55 27
	e	58 15
GCA	eP	06 55 09
	e	55 16
	e	58 26
HHM	eP	06 56 36
RCD	eP	06 55 32
SLC	eP	06 55 37
TUC	eP	06 54 42
	e	54 55
	e	55 37
	e	56 02
	e	56 55
TUT	eP	06 54 43
Feb. 4		
BUT	eP'	09 10 25
COL	iP	09 03 35
	ipP	04 08
	esP	04 38
	ePP	06 44
	eP'P'	30 21
EUR	iP	09 06 45
	eP'	10 28
	iPP	11 09
	eSKKS	17 36
	ePKKP	21 12
	i	21 22
FGU	e(P)	09 06 42
	e	08 53
	iP'	10 45
GCA	eP'	09 10 11
	ePP	10 47
	e	15 02
	ePKKP	20 57
HHM	eP	09 06 05
	eP'	10 06
	ePKKP	21 30
RCD	eP'	09 10 33

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Date and Station		Phase (GCT) h m s
SJP	eP'	09 11 28
TUC	ePP	09 12 10
	ePKKP	20 41
	e	20 53
TUT	e(P')	09 11 01
	ePKKP	20 41
Feb. 4		
EUR	iP	10 26 33
Feb. 4		
EUR	eP	11 21 07
TUC	eP	11 21 51
TUT	e(P)	11 21 45
Feb. 4		
BOZ	eP	12 59 19
BUT	eP	12 59 10
COL	iP	12 55 52
	i	56 26
EUR	iP	12 59 27
	ipP	13 00 01
	e	01 37
FGU	iP	12 59 45
	ipP	13 00 19
GCA	iP	12 59 55
HHM	iP	12 58 54
	i	59 56
RCD	iP	12 59 54
SIC	eP	12 59 37
TUC	iP	13 00 19
	e	00 32
	epP	00 59
TUT	iP	13 00 19
Feb. 4		
EUR	iP	15 30 15
	i	30 34
FGU	eP	15 30 06
	e	30 09
TUT	eP	15 29 32
Feb. 4		
BCH	eP	15 36 41
BUT	eP	15 37 15
EUR	iP	15 36 56
	i	37 05
FGU	iP	15 36 48
	i	33 16

Date and Station		Phase (GCT) h m s
Feb. 4		
GCA	eP	15 36 36
	e	36 52
HHM	iP	15 37 27
RCD	eP	15 36 51
SIC	eP	15 36 51
SJP	iP	15 33 36
TUC	iP	15 36 11
TUT	iP	15 36 11
Feb. 4		
COL	iP	15 41 43
FGU	eP	15 41 46
TUC	eP	15 41 36
Feb. 4		
FGU	iP	16 18 11
TUC	e(P)	16 17 46
Feb. 4		
TUC	eP	16 59 29
Feb. 4		
COL	iP	19 20 15
EUR	iP	19 22 45
	ePP	26 31
	ePKKP	40 07
FGU	e(P)	19 22 57
GUA	iP	19 14 26
	S	18 38
HHM	iP	19 22 25
TUC	eP'	19 27 35
Feb. 4		
TUT	e(P)	19 49 48
Feb. 4		
EUR	eP	22 28 16
SJP	eP	22 24 31
Feb. 5		
COL	iP	00 06 23
EUR	iP	00 09 45
FGU	eP	00 10 03
HHM	iP	00 09 16
RCD	e(P)	00 10 10
Feb. 5		
EUR	eP	06 17 45

Date and Station		Phase (GCT) h m s
TUC	eP	06 16 27
TUT	eP	06 16 29
Feb. 5		
COL	iP	07 51 40
	ipP	53 45
EUR	iP	07 51 18
	i	51 44
FGU	iP	07 51 44
GCA	iP	07 51 30
HHM	iP	07 51 46
TUC	iP	07 51 19
TUT	iP	07 51 21
Feb. 5		
COL	eP	08 00 24
EUR	iP	08 03 46
	i	04 07
HHM	eP	08 03 16
TUC	eP	08 04 47
TUT	eP	08 04 47
Feb. 5		
EUR	eP	10 32 20
	i	32 57
FGU	eP	10 31 47
GCA	eP	10 31 18
	e	32 10
Feb. 5		
FGU	eP	11 05 49
Feb. 5		
EUR	eP	11 30 32
Feb. 5		
EUR	iP	12 08 47
Feb. 5		
EUR	e(P)	12 54 32
Feb. 5		
COL	iP	13 43 56
Feb. 5		
DUP	iP	15 39 25
	iS	40 11
BCH	eP	15 46 13
BOZ	eP	15 46 46
	ePP	48 30
BUT	eP	15 46 53
	ePP	48 32

Date and Station		Phase (GCT) h m s
COL	iP	15 49 57
CSC	eP	15 44 05
	eS	48 50
	eL	53 54
EUR	iP	15 46 34
	iPcP	48 25
	iScP	52 17
	eS	52 57
FGU	iP	15 46 12
	i	46 31
	iPP	47 55
	eS	52 07
HHM	iP	15 47 13
	iPcP	48 39
RCD	iP	15 46 09
	e	49 47
SIC	eP	15 46 22
	ePP	48 20
	eS	52 11
SJP	eP	15 42 56
TUC	iP	15 45 31
	e	46 17
	e(L)	58 30
TUT	eP	15 45 31
	i	46 10
Feb. 5		
EUR	eP'	18 11 05
	e	12 12
HHM	e(P')	18 12 05
RCD	e(P')	18 11 07
TUT	eP'	18 11 06
Feb. 5		
EUR	iP	19 16 55
Feb. 6		
COL	eP	04 17 07
EUR	eP	04 18 58
GUA	iP	04 06 25
	eS	06 35
HHM	e(P)	04 18 56
Feb. 6		
COL	eP	06 40 43
Feb. 6		
EUR	eP	06 55 33
FGU	eP	06 55 11
Feb. 6		
COL	e(P)	08 52 30

Date and Station		Phase (GCT)	
		h m s	
EUR	eP	08 54 21	
GUA	iP	08 42 26	
Feb. 6			
BCN	eP	10 41 03	
BOZ	eP	10 41 35	
BUT	eP	10 41 39	
	epP	42 11	
COL	eP	10 43 49	
EUR	iP	10 41 24	
	i	41 41	
	ipP	41 55	
	i	42 16	
FGU	iP	10 41 08	
	ipP	41 38	
	ePP	43 39	
	eS	50 15	
GUA	iP'	10 49 35	
	i	50 08	
HHM	iP	10 41 53	
	ipP	42 22	
	i	42 36	
RCD	iP	10 41 07	
	e	42 00	
	e(S)	50 23	
SLC	eP	10 41 16	
SJP	iP	10 37 04	
	i	37 32	
	i	37 47	
	ePP	38 34	
	iPcP	39 24	
	eScP	42 44	
TUC	eP	10 40 34	
	epP	41 04	
TUT	eP	10 40 33	
Feb. 6			
EUR	eP	10 53 08	
Feb. 6			
FGU	eP	11 16 22	
Feb. 6			
COL	eP'	11 44 27	
EUR	eP	11 39 02	
TUT	eP	11 38 33	
Feb. 6			
BCN	eP	12 20 48	
BOZ	eP	12 20 09	
BUT	eP	12 20 00	

Date and Station		Phase (GCT)	
		h m s	
COL	eP	12 16 46	
	ePcP	20 35	
EUR	iP	12 20 13	
	i	20 42	
FGU	iP	12 20 37	
	i	20 52	
	eScP	26 07	
	eL	30 30	
HHM	iP	12 19 42	
	iPcP	21 57	
	eScP	25 40	
RCD	eP	12 20 53	
SLC	eP	12 20 27	
SJP	eP	12 25 08	
	ipP	25 19	
THU	iP	12 20 32	
TUC	eP	12 21 13	
	i	21 32	
TUT	eP	12 21 15	
Feb. 6			
COL	eP	12 28 23	
FGU	eP	12 32 12	
Feb. 6			
BCN	eP	14 28 27	
EUR	iP	14 29 14	
FGU	e(P)	14 28 36	
	e	30 26	
TUT	eP	14 25 54	
	iS	26 24	
Feb. 6			
COL	iP	14 26 44	
	e	27 10	
Feb. 6			
COL	eP	15 47 50	
Feb. 6			
COL	e(P)	16 43 23	
Feb. 6			
BCN	eP	18 26 29	
BOZ	eP	18 26 05	
BUT	eP	18 25 57	
COL	iP	18 22 52	
	e	23 02	
	e	23 10	
CSC	eP	18 28 19	

Date and Station		Phase (GCT)	
		h m s	
EUR	iP	18 26 12	
	ipP	26 23	
	iaP	26 40	
FGU	iP	18 26 29	
	i	26 53	
HHM	iP	18 25 43	
	i	25 59	
RCD	iP	18 26 38	
SLC	eP	18 26 21	
THU	iP	18 25 03	
	ipP	25 14	
	i	25 20	
TUC	eP	18 27 00	
TUT	eP	18 27 01	
Feb. 6			
COL	iP	19 03 08	
Feb. 6			
COL	iP	19 41 02	
	ePP	44 05	
EUR	iP	19 42 01	
	epP	43 35	
	iPP	45 47	
FGU	iP	19 42 29	
HHM	iP	19 42 08	
SJP	iP'	19 48 11	
	iPP	51 09	
TUT	eP	19 42 20	
Feb. 6			
COL	iP	20 24 14	
	ipP	24 34	
EUR	iP	20 24 48	
	ipP	25 09	
Feb. 6			
EUR	eP'	20 38 48	
	e	39 56	
TUT	eP'	20 38 54	
Feb. 6			
COL	eP	20 57 26	
	e	21 07 45	
EUR	eP	21 00 29	
Feb. 6			
BCN	eP	21 58 33	
BOZ	eP	21 58 43	C
BUT	eP	21 58 40	
	ePP	22 02 13	

Date and Station		Phase (GCT)	
		h m s	
COL	iP	21 57 33	D
	epP	57 46	
	ePKKP	22 15 43	
CSC	eP'	22 04 16	
	ePKKP	14 10	
EUR	iP	21 58 26	C
	iPP	22 02 36	
	iPKKP	15 36	
	eP'P'	23 38	
	i	24 13	
FGU	iP	21 58 47	C
	e	22 00 31	
	e	01 55	
	eS	09 56	
	ePKKP	15 07	
GCA	e(P)	21 58 46	
	e	59 38	
	e	22 00 36	
	ePP	02 39	
GUA	eP	21 50 16	
	i	50 36	
	i	50 48	
	i	50 51	
	iS	54 20	
	iScS	22 02 44	
HON	eP	21 54 32	C
	eS	22 02 06	
	eL	08 18	
HHM	iP	21 58 33	C
	ePP	22 02 33	
	ePKKP	15 27	
	eP'P'	23 41	
KIP	eP	21 54 32	C
RCD	eP	21 59 09	
	ePP	22 03 38	
SLC	eP	21 58 38	
SJP	iP'	22 04 24	
	i	04 35	
	ePP	07 18	
	eSKP	08 05	
	eSKKP	17 00	
STT	eP	21 57 47	
THU	e(P)	21 59 23	
	iPP	22 04 11	
TUC	eP	21 58 45	
	e	59 14	
	eS	22 07 55	
	eL	20 23	
	eP'P'	23 41	
TUT	eP	21 58 43	C
	ePKKP	22 13 31	
	eP'P'	23 40	
UNI	eP	21 57 53	

Date and Station	Phase	Phase (GCT) h m s
WAS	e(P')	22 04 04
	e	05 15
Feb. 6		
COL	iP	22 09 58
EUR	iP	22 10 50
Feb. 7		
FGU	eP	00 30 20
	i	30 21
SLC	eP	00 29 51
	eL	31 11
Feb. 7		
EUR	iP	01 04 18
Feb. 7		
COL	eP	01 56 09
EUR	eP	01 56 35
TUT	e(P)	01 56 49
Feb. 7		
TUC	eL	02 27 53
Feb. 7		
CSC	eP	02 54 25
Feb. 7		
COL	eP	03 10 19
EUR	eP	03 10 38
Feb. 7		
COL	eP	03 15 38
EUR	eP	03 16 57
TUT	e(P)	03 17 09
Feb. 7		
COL	i(P)	03 31 39
CSC	eP	03 26 07
EUR	iP	03 27 54
	i	28 47
FGU	eP	03 27 21
HHM	eP	03 28 45
TUC	eP	03 26 43
	e	27 18
TUT	eP	03 26 43
Feb. 7		
EUR	eP	03 59 33
TUC	iP	03 59 33
Feb. 7		
COL	eP	04 12 16
EUR	eP	04 12 41
Feb. 7		
COL	iP	04 17 13
Feb. 7		
COL	iP	04 27 16
	e	27 33
HHM	eP	04 29 58
Feb. 7		
COL	eP'	05 29 44
EUR	eP'	05 30 49
	i	31 09
	iPP	34 09
FGU	e(P')	05 30 39
	e	30 54
	iPP	34 18
	i	34 32
HHM	iP'	05 30 40
RCD	ePP	05 34 22
TUT	eP'	05 30 56
	ePP	34 34
Feb. 7		
COL	eP	06 12 50
EUR	eP	06 11 42
FGU	eP	06 12 25
RCD	eP	06 13 46
TUC	eP	06 13 20
	e	13 48
TUT	eP	06 13 21
Feb. 7		
COL	eP	06 14 38
Feb. 7		
COL	e(P)	06 30 40
Feb. 7		
TUT	eP	06 46 07
Feb. 7		
COL	iP	08 54 12
Feb. 7		
FGU	eP	09 52 55
	e	53 17
Feb. 7		
COL	eP	10 29 18
Feb. 7		
COL	iP	12 35 10
Feb. 7		
EUR	iP	14 36 59
FGU	eP	14 36 49
HHM	eP	14 37 29
RCD	e(P)	14 36 53
TUT	eP	14 36 13
Feb. 7		
COL	iP	14 46 08
	ipP	46 18
EUR	eP	14 49 02
FGU	eP	14 49 18
	ipP	49 28
HHM	eP	14 48 39
	ipP	48 49
TUT	eP	14 49 42
Feb. 7		
EUR	iP	15 06 57
FGU	eP	15 06 48
TUT	eP	15 06 05
Feb. 7		
COL	eP	15 39 42
Feb. 7		
COL	eP	19 31 08
Feb. 7		
COL	iP	21 09 22
	epP	09 31
	ePcP	11 22
EUR	iP	21 12 39
FGU	eP	21 12 55
	i	13 15
HHM	iP	21 12 11
	ipP	12 24
RCD	eP	21 13 03
THU	eP	21 11 26
TUT	eP	21 13 26
Feb. 7		
COL	e(P)	21 52 29
BCN	eP	21 53 59
FGU	iP	21 54 36
	e	56 02
GCA	eP	21 54 12
	i	55 13
Feb. 7		
COL	iP	22 16 12
EUR	iP	22 19 46
THU	eP	22 18 40
Feb. 7		
GCA	iP	23 15 16
Feb. 7		
BCN	eP	23 35 37
BOZ	eP	23 35 12
BUT	eP	23 35 03
COL	eP	23 31 48
EUR	iP	23 35 17
FGU	iP	23 35 40
	iPcP	37 14
HHM	iP	23 34 46
	i	35 06
	i	35 23
	iPcP	36 53
RCD	iP	23 35 55
SJP	iP	23 40 06
	i	40 23
TUC	iP	23 36 18
	e	36 30
TUT	iP	23 36 18
Feb. 7		
BCN	eP	23 43 51
FGU	eP	23 44 23
	i	44 42
	i	47 31
SLC	eP	23 44 10
Feb. 8		
GCA	iP	00 30 52
Feb. 8		
FGU	eP	02 46 35
Feb. 8		
BCN	eP	02 49 24
COL	iP	02 49 09
	iPKKP	03 07 02
EUR	iP	02 49 25
	ipP	50 01
	iPP	52 57
	ePKKP	03 06 42
	eP'P'	14 59
FGU	eP	02 49 47
	e	50 17
	ePKKP	03 06 43
HHM	e(P)	02 49 45
	ePKKP	03 06 47
SJP	iP'	02 55 06

Date and Station		Phase (GCT) h m s
TUC	eP	02 49 33
	epP	50 11
	ePP	53 06
TUT	eP	02 49 33
	ePP	53 13
Feb. 8		
COL	eP	04 47 09
	epP	48 37
EUR	iP	04 46 43
	epP	48 13
TUC	eP	04 46 40
	epP	48 09
TUT	eP	04 46 41
	epP	48 10
Feb. 8		
SJP	eP	04 57 10
Feb. 8		
EUR	iP	06 27 25
FGU	iP	06 27 18
	i	27 25
TUT	eP	06 26 42
Feb. 8		
BHP	iP	08 08 23
	iS	10 50
BOZ	eP	08 14 07
	epP	16 08
BUT	eP	08 14 13
	e	15 01
	epP	16 15
COL	iP	08 16 27
	ipP	18 39
	isP	19 35
	iPP	20 23
	epPP	22 15
	ePPP	22 46
	e	26 06
EUR	iP	08 13 57
	iPcP	14 24
	ipP	15 56
	eS	21 55
	eP'P'	42 15
	eSKPP'	44 47
FGU	iP	08 13 38
	ipP	15 39
	iS	21 20
	eP'P'	42 25
GCA	eP	08 13 32
	ipP	15 33
	eS	21 06
GUA	iP'	08 22 44
	epP'	25 02

Date and Station		Phase (GCT) h m s
HHM	iP	08 14 27
	ipP	16 28
	eS	22 49
	eP'P'	42 13
	eSKPP'	44 42
RCD	iP	08 13 37
	epP	15 36
	ePP	15 59
	eScP	17 03
	eS	21 15
SIC	eP	08 13 48
	ePcP	14 34
	epP	15 48
SJP	iP	08 09 28
	iPcP	12 20
	iS	13 37
	iScP	15 00
	eScS	19 10
THU	iP	08 15 56
TUC	iP	08 13 05 D
	iPcP	13 52
	ipP	15 04
	eS	20 19
TUT	iP	08 13 05
	ipP	15 04
	eS	20 15
	eP'P'	42 26
UKI	eP	08 14 25
Feb. 8		
EUR	iP	08 50 44
Feb. 8		
COL	eP	09 58 41
Feb. 8		
FGU	eP	10 06 58
	i	07 01
	iS	10 07 24
Feb. 8		
FGU	eP	11 54 44
	e	56 35
RCD	eP	11 55 45
Feb. 8		
COL	iP	12 12 29
	epP	12 47
EUR	iP	12 11 58
FGU	iP	12 12 23
GCA	iP	12 12 09
HHM	iP	12 12 30
TUC	iP	12 11 56
	e	12 20

Date and Station		Phase (GCT) h m s
TUT	iP	12 11 57
Feb. 8		
BHP	eP	15 58 57
	iS	59 47
Feb. 8		
COL	iP	17 09 19
	epP	11 19
EUR	iP	17 08 57
HHM	e(P)	17 09 26
Feb. 8		
COL	iP	17 45 54
Feb. 8		
BOZ	eP	18 02 49
BUT	eP	18 02 45
COL	iP	18 02 41
	epP	04 40
EUR	iP	18 02 19
	i	03 02
FGU	iP	18 02 42
	epP	04 46
	e(S)	12 47
GCA	iP	18 02 30
	i	02 44
GUA	iP	17 58 51
	iPcP	18 00 04
HON	eP	17 58 24
HHM	iP	18 02 47
SIC	eP	18 02 35
TUC	eP	18 02 19
	epP	04 16
	e	05 10
TUT	iP	18 02 20
	e(pP)	04 31
Feb. 8		
EUR	iP	18 46 04
Feb. 8		
COL	iP	19 38 17
EUR	eP	19 39 18
Feb. 8		
TUT	eP	23 25 14
Feb. 8		
SIC	eP	23 48 10
Feb. 9		
COL	iP	00 11 34
	e	12 07

Date and Station		Phase (GCT) h m s
EUR	iP	00 12 27
Feb. 9		
BOZ	eP	02 21 39 C
	ePP	25 29
BUT	eP	02 21 35 C
COL	eP	02 21 40 D
	ePKKP	38 17
	eP'P'	46 40
EUR	iP	02 21 08 C
	ipP	21 26
	i	22 24
	ePP	24 53
	epPP	25 10
	eSKS	31 28
	ePKKP	38 13
	eP'P'	46 32
FGU	iP	02 21 30 C
	ipP	21 48
	ePP	25 02
	eS	32 04
	ePKKP	38 36
GCA	iP	02 21 17 C
	ePP	25 44
	eS	32 14
GUA	iP	02 17 51
	i	18 06
HON	iP	02 17 32 C
HHM	eP	02 21 37 C
	ipP	21 55
	ePP	25 20
	iPKKP	38 32
	eP'P'	46 43
KIP	iP	02 17 34 C
RCD	eP	02 22 55 C
	ePP	27 14
SIC	eP	02 21 23
SJP	iP'	02 26 59
THU	iP'	02 28 07
TUC	iP	02 21 04 C
	i	21 22
	ePP	24 25
	e(S)	31 29
	eL	47 55
TUT	iP	02 21 04 C
	i	21 15
	e	26 32
	e(S)	31 42
	eP'P'	46 57
UKI	eP	02 20 48
Feb. 9		
BHP	eP	07 24 12

Date and Station		Phase	(GCT) h m s
Feb. 9			
EUR		eP	08 53 38
Feb. 9			
EUR		eP	08 58 26
Feb. 9			
BCN		eP	09 16 47
COL		iP	09 16 21
		ipP	16 56
		esP	17 20
EUR		iP	09 16 47
		epP	17 08
FGU		eP	09 17 11
		epP	17 45
HHM		iP	09 17 03
TUC		eP	09 16 58
TUT		eP	09 16 59
Feb. 9			
RCD		e(P)	09 42 52
Feb. 9			
COL		eP	10 04 22
Feb. 9			
EUR		iP	13 27 32
		ipP	27 41
FGU		iP	13 27 26
TUC		eP	13 26 49
TUT		eP	13 26 49
Feb. 9			
BCN		eP	17 51 55
EUR		iP	17 52 46
		iL	55 06
FGU		e(P)	17 53 16
		e	53 23
		e	55 11
		e	56 01
GCA		eP	17 53 10
		i	53 20
		i	55 00
HHM		e(P)	17 54 45
TUC		iP	17 51 46
		i	52 06
		iL	53 07
TUT		iP	17 51 46
Feb. 9			
COL		e(P)	21 56 20
Feb. 9			
SLC		eP	23 43 56

Date and Station		Phase	(GCT) h m s
Feb. 10			
EUR		eP	00 50 28
TUT		eP	00 50 23
Feb. 10			
COL		iP	01 24 12
EUR		iP	01 27 53
		i	28 12
Feb. 10			
COL		eP	03 48 46
EUR		iP	03 52 28
Feb. 10			
COL		iP	04 50 02
EUR		iP	04 54 07
Feb. 10			
EUR		eP	07 35 14
FGU		eP	07 35 17
HHM		e(P)	07 35 45
RCD		e(P)	07 35 09
TUT		eP	07 34 30
Feb. 10			
EUR		iP	08 59 51
		ipP	09 00 16
FGU		iP	08 59 34
TUT		eP	08 58 56
Feb. 10			
COL		eP	09 55 00
Feb. 10			
COL		eP	10 52 45
EUR		eP	10 56 15
FGU		eP	10 56 50
Feb. 10			
TUT		eP	12 17 27
Feb. 10			
COL		eP	13 32 26
EUR		e(P')	13 37 46
		iPP	38 42
FGU		eP'	13 38 07
TUT		eP'	13 38 11
Feb. 10			
FGU		eP	14 38 24
Feb. 10			
HHM		eP	17 31 50

Date and Station		Phase	(GCT) h m s
Feb. 10			
FGU		eP	20 47 41
Feb. 10			
SLC		eP	23 45 48
Feb. 11			
COL		iP	00 25 31
		iS	25 46
Feb. 11			
COL		iP	01 14 47
		ipP	14 55
EUR		iP	01 14 12
FGU		eP	01 14 40
GCA		eP	01 14 22
HHM		e(P)	01 14 45
TUC		eP	01 14 10
		epP	14 18
		e	14 27
TUT		iP	01 14 12
Feb. 11			
COL		eP	02 44 41
EUR		iP	02 47 00
FGU		iP	02 47 20
HHM		iP	02 46 48
TUC		eP	02 47 34
TUT		eP	02 47 35
Feb. 11			
COL		iP	03 55 04
EUR		iP	03 59 56
FGU		iP	04 00 11
HHM		iP	03 59 03
TUT		eP	04 01 07
Feb. 11			
SJP		eP	06 25 28
Mar. 11			
BOZ		eP	06 24 09
BUT		iP	06 24 03
COL		iP	06 21 35
		ePcP	22 21
EUR		iP	06 24 10
FGU		iP	06 24 26
		ipP	26 02
		ePP	28 54
		eS	34 24

Date and Station		Phase	(GCT) h m s
GCA		eP	06 24 33
HHM		iP	06 23 53
RCD		iP	06 24 35
		ePP	29 09
SLC		eP	06 24 20
SJP		eP'	06 32 06
THU		e(P)	06 23 20
TUC		iP	06 24 46
		ePP	28 24
TUT		eP	06 24 47
		ePP	28 24
Feb. 11			
COL		eP	09 24 58
HHM		iP	09 26 26
Feb. 11			
COL		iP	09 45 00
Feb. 11			
EUR		eP	09 46 00
FGU		eP	09 45 43
SJP		eP	09 42 17
TUT		eP	09 45 12
Feb. 11			
BCN		eP	11 39 21
BOZ		eP	11 39 52
BUT		iP	11 39 58
EUR		iP	11 39 41
		iPcP	39 54
		ipP	40 33
FGU		eP	11 39 27
		iPcP	39 43
		iPP	42 10
GCA		iP	11 39 24
		e	40 06
		ePP	42 27
HHM		iP	11 40 09
		ipP	41 04
RCD		iP	11 39 26
		epP	40 15
		ePP	42 01
SLC		eP	11 39 35
SJP		e(P)	11 35 16
		ePcP	37 18

Date and Station		Phase (GCT) h m s
TUC	iP	11 38 54
	e	39 03
	epP	39 45
TUT	iP	11 38 54
Feb. 11		
GCA	eP	12 21 03
	e	22 03
	eL	30 45
Feb. 11		
COL	iP	12 36 05
Feb. 11		
FGU	eP	12 42 13
Feb. 11		
COL	iP	16 58 45
	iPcP	58 55
	epP	59 41
	ePP	17 02 10
EUR	eP	16 58 18
	ipP	59 16
FGU	eP	16 58 43
	ipP	59 41
GCA	iP	16 58 27
	i	59 05
	epP	59 30
GUA	i(P)	16 55 03
HHM	iP	16 58 48
	epP	59 48
TUC	iP	16 58 17
	ePcP	58 26
	epP	59 15
TUT	iP	16 58 18
Feb. 11		
HHM	e(P)	20 21 20
Feb. 11		
BCZ	eP	21 14 29 C
	ePP	18 19
BUT	eP	21 14 25 C
COL	iP	21 14 30 D
	epP	14 49
	iPP	18 16
	epPP	18 31
	ePKKP	31 17
	eP'P'	39 28
CSC	ePKKP	21 30 37
EUR	iP	21 13 58 C
	ipP	14 19
	e(S)	24 26
	ePKKP	31 45
	i	32 26
	eP'P'	39 21

Date and Station		Phase (GCT) h m s
FGU	iP	21 14 20
	i	15 21
	iPP	18 05
	e(S)	24 47
	ePKKP	31 27
	eP'P'	39 30
GCA	iP	21 14 05
	e	15 45
	i	16 33
	e(S)	25 00
	e	30 47
	e	32 30
GUA	iP	21 10 40 D
	ipP	10 55
	i	11 00
	i	11 04
	iPcP	11 40
	i	11 56
HON	iP	21 10 23
HHM	iP	21 14 27 C
	ePP	18 04
	ePKKP	31 21
	eP'P'	39 28
KIP	iP	21 10 22 C
RCD	iP	21 14 46 C
	ePKKP	31 04
SLC	eP	21 14 13
SJP	iP'	21 19 49
	ePKKP	30 15
THU	iP'	21 19 56
	i	20 01
	e	21 26
TUC	iP	21 13 54 C
	epP	14 01
	e	14 53
	ePP	17 23
	ePPP	19 23
	e(S)	24 28
	eSS	30 26
	eL	40 43
TUT	eP	21 13 54 C
	ePKKP	31 42
Feb. 11		
EUR	iP	22 55 51
	i	55 59
FGU	iP	22 55 38
GCA	eP	22 55 29
HHM	iP	22 56 19
RCD	eP	22 55 38
SJP	iP	22 51 45

Date and Station		Phase (GCT) h m s
TUC	iP	22 55 04
	e	55 23
	e	55 45
TUT	iP	22 55 04
Feb. 12		
CSC	e(P)	01 30 45
EUR	iP	01 30 55
	i	31 18
FGU	eP	01 31 00
GCA	eP	01 30 39
HHM	eP	01 31 44
RCD	eP	01 31 19
TUC	eP	01 30 09
Feb. 12		
FGU	eP	02 53 42
	i	53 51
	i	54 46
GCA	eP	02 52 42
	i	52 52
	i	53 20
	i	54 33
	i	55 26
Feb. 12		
TUC	eP	03 43 52
	eL	44 15
Feb. 12		
BCN	eP	03 53 54
	e	54 53
	e	55 44
COL	iP	03 58 58
	epP	59 12
EUR	eP	03 53 38
	iL	56 32
FGU	eP	03 53 32
	i	53 51
	iL	56 10
HHM	eP	03 55 20
RCD	eP	03 54 42
SLC	eP	03 54 17
TUC	iP	03 51 40
	eL	52 04
TUT	iP	03 51 40
	i	51 50
Feb. 12		
TUC	eP	03 57 21
	eL	57 45

Date and Station		Phase (GCT) h m s
Feb. 12		
TUC	eP	04 01 37
	eL	02 02
Feb. 12		
TUC	iP	04 03 09
	eL	03 33
Feb. 12		
TUC	eP	04 15 19
	eL	15 43
Feb. 12		
TUC	eP	04 20 02
	eL	20 25
Feb. 12		
TUC	eP	04 44 37
	eL	45 01
Feb. 12		
TUC	eP	04 48 55
	eL	49 19
Feb. 12		
TUC	eP	05 51 55
	eL	52 19
Feb. 12		
COL	iP	06 16 26
	ePcP	16 31
	epP	16 51
EUR	eP	06 16 51
	epP	17 13
TUC	eP	06 17 03
Feb. 12		
COL	iP	06 33 01
EUR	eP	06 33 39
Feb. 12		
BCN	eP	06 48 24
TUC	eP	06 44 55
	eL	45 19
Feb. 12		
TUC	eP	06 57 04
	eL	57 28
Feb. 12		
TUC	eP	08 34 41
	eL	35 05
Feb. 12		
TUC	iP	08 56 20
	eL	56 44
Feb. 12		
EUR	e(P)	10 02 36
FGU	eP	10 03 10
Feb. 12		
COL	iP	10 43 31
	ipP	43 47

Date and Station		Phase	(GCT) h m s
Feb. 12			
FGU	eP		10 49 56
	iS		18
Feb. 12			
COL	e(P)		12 10 05
Feb. 12			
COL	iP		12 21 16
	ipP		22 16
EUR	eP		12 20 51
	i		21 27
	epP		21 55
	ePP		23 47
FGU	iP		12 21 17
HHM	e(P)		12 21 21
TUC	iP		12 20 51
	e		21 09
	epP		21 56
Feb. 12			
BCN	eP		13 08 52
BOZ	e(P)		13 09 20
BUT	eP		13 09 15
COL	iP		13 08 44
	iPcP		08 54
	ipP		10 54
	ePP		11 31
	ipPP		14 04
	ePPP		14 23
EUR	iP		13 08 54
	iPcP		09 05
	iPP		11 49
	iPPP		14 25
	ePKKP		26 57
	eP'P'		34 56
	eSKPP'		37 26
	i		37 39
FGU	iP		13 09 19
	epP		11 31
	eS		18 52
GCA	iP		13 09 07
	e		10 33
	e		12 43
HHM	iP		13 09 14
	iPcP		09 25
RCD	eP		13 09 42
SLC	eP		13 09 10
SJP	iP'		13 15 11
TUC	iP		13 09 02
	iPcP		09 13
	epP		11 04
Feb. 12			
COL	eP		13 18 10

Date and Station		Phase	(GCT) h m s
Feb. 12			
COL	iP		13 55 47
	iS		56 58
EUR	iP		14 00 30
FGU	eP		14 00 46
HHM	eP		13 59 38
RCD	i(P)		14 01 01
Feb. 12			
COL	eP		15 34 03
EUR	e(P')		15 40 37
Feb. 12			
COL	eP		16 31 50
EUR	e(P)		16 34 46
	e		35 04
Feb. 12			
COL	eP		16 35 19
Feb. 12			
TUC	eP		17 09 10
	eL		09 34
Feb. 12			
EUR	e(P)		17 14 27
Feb. 12			
EUR	e(P)		17 24 36
Feb. 12			
EUR	eP		17 49 16
Feb. 12			
EUR	eP		18 37 15
Feb. 12			
COL	eP		21 02 45
Feb. 12			
GCA	eP		21 51 11
	e		51 36
Feb. 12			
BCN	eP		22 05 00 C
	eL		14 15
BOZ	eP		22 04 35 C
	eP'P'		33 07
BUT	eP		22 04 28
	eS		13 17
	eL		23 13
COL	iP		22 01 24 D
	iS		07 32
	eL		08 04
CSC	eP		22 06 46
	eS		17 10
	e		23 44

Date and Station		Phase	(GCT) h m s
EUR	iP		22 04 42 C
	iP'P'		33 01
FGU	iP		22 05 00
	i		05 18
	i		09 14
	e		11 00
	iS		14 12
GCA	iP		22 05 08 C
	i		05 38
	e		09 58
	eS		14 28
HON	iP		22 02 38
	iS		09 52
	e		16 10
HHM	iP		22 04 14 C
	iS		12 46
	eP'P'		33 11
KIP	iP		22 02 40
RCD	iP		22 05 06 C
	e		07 32
	e		09 13
	eS		14 14
SLC	eP		22 04 53 D
	e		05 42
	eS		14 02
	eL		22 02
	eP'P'		32 58
SJP	eP'		22 12 47
SIT	eP		22 02 26 D
	eS		09 07
	e		09 44
	eL		13 00
THU	iP		22 03 32
	eL		26 00
TUC	iP		22 05 30 C
	ePP		08 24
	ePPP		10 11
	eS		15 15
	eL		23 56
TUT	iP		22 05 30 C
	i		05 58
	ePP		08 17
	e		11 20
	e(S)		15 05
	e(P'P')		32 41
UKI	eP		22 04 16 C
WAS	iP		22 06 32
	i		07 23
	ePP		10 00
	eSKS		16 55
	eSKPP'		35 08
	eL		39 00

Date and Station		Phase	(GCT) h m s
Feb. 12			
COL	iP		22 27 03
Feb. 12			
COL	iP		22 35 16
Feb. 12			
BCN	eP		22 50 31
EUR	eP		22 50 46
Feb. 12			
EUR	iP		22 50 58
Feb. 12			
EUR	iP		22 51 58
Feb. 12			
TUT	eP		22 53 49
Feb. 12			
COL	iP		22 59 12
	i		59 22
EUR	iP		23 02 29
Feb. 12			
COL	iP		23 02 00
	e		02 13
Feb. 12			
COL	iP		23 20 47
EUR	eP		23 24 05
Feb. 12			
BCN	iP		23 37 51
BOZ	eP		23 37 27
BUT	eP		23 37 19
COL	iP		23 34 15
EUR	iP		23 37 33
	eP'P'		24 05 29
FGU	eP		23 37 51
	i		37 53
	ePP		40 58
GCA	eP		23 37 58
	i		38 11
	e		38 36
HHM	iP		23 37 05
	eP'P'		24 06 04
RCD	iP		23 37 57
	ePP		40 36
SLC	eP		23 37 43
SIT	eP		23 35 17
THU	iP		23 36 23
	i		36 36

Date and Station		Phase (GCT)
		h m s
TUC	eP	23 38 20
	ePP	41 14
	e(S)	47 56
	eL	56 43
TUT	eP	23 38 20
	e	38 51
	ePP	41 15
WAS	e(P)	23 39 24
Feb. 12		
COL	i(P)	23 47 25
Feb. 13		
COL	iP	00 39 35
	e	39 42
EUR	eP	00 42 53
	i	43 04
HHM	e(P)	00 42 36
Feb. 13		
COL	iP	01 35 35
	i	35 52
	i	36 15
Feb. 13		
EUR	eP	02 32 18
Feb. 13		
COL	iP	02 37 45
	i(pP)	37 56
EUR	iP	02 41 04
FGU	eP	02 41 21
	e	42 34
HHM	eP	02 40 35
Feb. 13		
COL	iP	02 38 58
	ipP	39 06
	ePP	40 59
EUR	iP	02 42 15
HHM	e(P)	02 41 47
RCD	eP	02 42 39
THU	e(P)	02 41 01
TUT	e(P)	02 43 02
Feb. 13		
COL	iP	04 05 16
	ePcP	05 24
	epP	05 34
	esP	05 45
EUR	iP	04 05 51
	i	06 01

Date and Station		Phase (GCT)
		h m s
Feb. 13		
RCD	eP	04 18 21
Feb. 13		
COL	iP	04 51 06
	ipP	51 16
EUR	eP	04 54 23
	ipP	54 34
HHM	e(P)	04 53 55
Feb. 13		
COL	eP	05 20 46
EUR	iP	05 24 26
Feb. 13		
COL	iP	05 42 43
	ipP	42 57
EUR	iP	05 46 00
Feb. 13		
COL	eP	06 20 13
EUR	iP	06 23 30
	i	23 42
Feb. 13		
BOZ	eP	06 57 56
BUT	eP	06 57 53
COL	iP	06 57 50
	ePP	07 00 59
EUR	iP	06 57 25
	iPP	07 00 17
FGU	eP	06 57 50
	e	58 34
	ePP	07 01 39
GCA	eP	06 57 34
	ePP	07 00 32
HON	eL	07 02 40
HHM	eP	06 57 53
	ePP	07 01 10
KIP	eP	06 53 05
RCD	eP	06 58 23
SLC	eP	06 57 42
TUC	eP	06 57 24
	ipP	57 32
	e	58 04
	ePP	07 00 30
	eL	20 13
TUT	eP	06 57 25
Feb. 13		
COL	iP	09 14 38
	i(pP)	14 46
	e(sP)	14 55

Date and Station		Phase (GCT)
		h m s
EUR	iP	09 17 57
	ipP	18 08
FGU	eP	09 18 14
HHM	iP	09 17 28
	ipP	17 41
THU	eP	09 16 46
TUC	eP	09 18 44
	epP	18 55
TUT	eP	09 18 44
Feb. 13		
HHM	eP	10 03 56
Feb. 13		
COL	iP	12 16 28
Feb. 13		
COL	iP	13 58 23
	epP	58 49
EUR	eP	13 59 15
Feb. 13		
COL	iP	15 13 02
EUR	eP	15 13 46
	ipP	13 56
Feb. 13		
UKI	eP	15 22 52
Feb. 13		
COL	iP	16 22 21
	ePP	25 17
THU	eP	16 21 45
Feb. 13		
EUR	eP	16 31 59
	i	32 19
HHM	e(P)	16 32 35
Feb. 13		
COL	iP	16 30 21
EUR	iP'	16 35 50
	i	36 39
FGU	eP'	16 35 59
GUA	e(P)	16 22 39
HHM	iP'	16 35 48
SJP	iP'	16 37 54
SIT	eP'	16 36 06
TUT	iP'	16 36 02

Date and Station		Phase (GCT)
		h m s
Feb. 13		
BCN	eP	16 38 39
BOZ	eP	16 38 15
BUT	eP	16 39 08
COL	iP	16 35 04
	eS	41 13
EUR	iP	16 38 22
	ipP	38 34
	iPP	40 54
FGU	iP	16 38 39
	i	38 13
	i	40 21
	e	41 50
	eScS	48 32
GCA	iP	16 38 48
	ipP	39 00
	i	40 44
HHM	iP	16 37 53
	eP'P'	17 06 50
RCD	iP	16 38 47
	ipP	39 00
SLC	eP	16 38 32
THU	iP	16 37 13
	ipP	37 25
TUC	iP	16 39 09
	i	39 34
	ePP	42 15
TUT	iP	16 39 09
	e	41 47
Feb. 13		
COL	iP	17 56 52
EUR	iP	18 01 13
HHM	eP	18 00 45
Feb. 13		
COL	iP	18 01 00
Feb. 13		
GCA	eP	20 46 52
	i	47 49
Feb. 13		
COL	iP	21 19 21
	ipP	19 32
EUR	iP	21 22 38
	ipP	22 52
FGU	eP	21 22 57
HHM	eP	21 22 10

Date and Station		Phase	(GCT)
			h m s
Feb. 13			
COL		iP	21 49 59
Feb. 13			
BCH		iP	22 48 31
BOZ		eP	22 48 05
COL		iP	22 44 54
EUR		iP	22 48 12
		i	48 28
GGA		eP	22 48 00
		i	48 38
HBM		iP	22 47 43
RCD		eP	22 48 37
TUT		eP	22 48 58
Feb. 13			
EUR		e(P)	23 07 13
Feb. 13			
CSC		eP	23 39 37
WAS		eP	23 39 14
Feb. 13			
SIG		eP	23 57 54
Feb. 14			
BCH		eP	00 26 53
BOZ		eP	00 26 26
COL		eP	00 23 17
		i	23 59
EUR		iP	00 26 34
		ipP	26 46
FGU		eP	00 26 52
		i	27 28
HBM		iP	00 26 06
		ipP	26 20
RCD		eP	00 26 59
THU		eP	00 25 25
TUC		iP	00 27 22
		e	27 48
TUT		eP	00 27 21
Feb. 14			
COL		iP	02 09 17
EUR		iP	02 10 14
Feb. 14			
BCH		eP	03 02 34

Date and Station		Phase	(GCT)
			h m s
COL		iP	02 58 46
		i	59 15
		ePP	03 00 09
		e	00 33
EUR		iP	03 02 05
		ipP	02 18
FGU		eP	03 02 23
		ipP	02 35
HBM		iP	03 01 37
THU		eP	03 00 56
TUC		eP	03 02 53
		e	03 28
Feb. 14			
COL		iP	03 23 09
EUR		iP	03 26 26
FGU		eP	03 26 44
HBM		eP	03 25 59
THU		eP	03 25 17
TUC		eP	03 27 25
Feb. 14			
BCH		eP	03 33 20
BUT		iP	03 32 48
COL		iP	03 29 44
CSC		eP	03 35 06
EUR		iP	03 33 02
		i	33 16
		i	33 44
		iPP	35 19
FGU		eP	03 33 20
		iPP	35 21
		e	37 47
		eL	42 31
GGA		iP	03 33 28
		iPP	35 46
HGI		eL	03 45 02
HBM		iP	03 32 34
		eP'P'	04 01 31
RCD		iP	03 33 28
		ePP	36 11
		e	37 56
SIG		eP	03 33 23
STT		eP	03 30 46

Date and Station		Phase	(GCT)
			h m s
THU		iP	03 31 52
		i	32 34
TUC		iP	03 33 49
		epP	34 02
		eS	44 13
TUT		eP	03 33 49
Feb. 14			
COL		iP	03 54 23
		i	57 12
EUR		eP	03 57 40
HBM		e(P)	03 57 13
Feb. 14			
EUR		eP	04 00 27
Feb. 14			
BCH		iP	05 57 05
BUT		eP	05 57 42
COL		iP'	06 03 13
		i	03 21
		i	03 26
CSC		eP	05 56 10
EUR		iP	05 57 22
		ipP	57 34
FGU		eP	05 57 16
		ePP	59 10
GGA		iP	05 56 40
HBM		eP	05 57 54
RCD		eP	05 57 21
SIG		eP	05 57 20
STP		eP	05 54 32
TUC		iP	05 56 41
TUT		eP	05 56 41
Feb. 14			
GGA		e(P)	06 03 02
Feb. 14			
COL		iP	06 52 16
		ipP	52 27
EUR		eP	06 55 33
Feb. 14			
COL		iP	06 54 39
		ipP	55 39
EUR		eP	06 53 17
		ipP	53 29

Date and Station		Phase	(GCT)
			h m s
Feb. 14			
COL		eP	08 47 01
		i	47 13
Feb. 14			
COL		eP	10 15 15
EUR		e(P)	10 15 31
		e	16 06
Feb. 14			
EUR		eP	11 14 41
Feb. 14			
COL		eP	15 35 03
Feb. 14			
COL		iP	16 03 15
EUR		eP	16 02 52
FGU		eP	16 03 19
HBM		eP	16 03 28
THU		eP	16 02 57
TUT		eP	16 02 53
Feb. 14			
COL		iP	16 43 51
		ipP	44 04
EUR		eP	16 47 09
		ipP	47 23
HBM		e(P)	16 46 42
Feb. 14			
THU		eP	17 55 21
Feb. 14			
HBM		eP	19 54 12
Feb. 14			
COL		eP	20 18 21
		epP	18 31
EUR		eP	20 21 45
Feb. 14			
GUA		iP	21 46 30
		iS	46 42
Feb. 14			
COL		eP	23 29 44
Feb. 14			
EUR		eP	23 51 11
FGU		eP	23 50 52
TUT		eP	23 50 00
Feb. 15			
EUR		eP	01 22 36

Date and Station		Phase (GCT) h m s
SJP	eP	01 18 24
	i	18 42
Feb. 15		
COL	eP	01 46 02
EUR	eP	01 42 30
FGU	eP	01 43 04
HHM	eP	01 43 33
Feb. 15		
COL	iP	02 19 04
	e	19 15
Feb. 15		
COL	iP	02 22 24
	ipP	22 52
EUR	iP	02 22 24
SJP	eP'	02 28 18
TUC	eP	02 22 27
TUT	eP	02 22 27
Feb. 15		
COL	iP	04 06 45
EUR	iP	04 01 52
FGU	iP	04 01 33
HHM	eP	04 02 42
TUC	eP	04 00 41
	e	00 53
TUT	eP	04 00 41
Feb. 15		
COL	iP	06 40 17
EUR	iP	06 39 48
	ipP	40 23
SJP	eP'	06 46 27
TUC	iP	06 39 44
	epP	40 19
TUT	eP	06 39 45
Feb. 15		
EUR	e(P)	07 44 43
Feb. 15		
COL	eP	08 16 51
Feb. 15		
BOZ	e(P)	09 11 26
SLC	eP	09 11 25
Feb. 15		
COL	iP	10 17 01

Date and Station		Phase (GCT) h m s
EUR	eP	10 20 13
Feb. 15		
BCN	eP	10 56 30
BOZ	eP	10 56 08
BUT	eP	10 55 59
COL	iP	10 52 55
	eS	59 05
	eScP	59 55
	e	11 14 20
CSC	eP	10 58 17
	ePP	11 02 00
EUR	iP	10 56 13
	i	56 26
	iPcP	56 46
	eP'P'	11 24 25
FGU	iP	10 56 31
	iPP	58 58
	e	11 01 45
	e(S)	06 09
GCA	iP	10 56 39
	iPP	59 23
HON	eP	10 54 32
	e(S)	11 01 34
HHM	iP	10 55 44
	eP'P'	11 24 33
	i	24 43
KIP	eP	10 54 10
SLC	eP	10 56 24
SIT	eP	10 53 57
THU	eP	10 54 02
	ipP	54 10
	i	54 26
TUC	iP	10 57 01
	ePP	11 00 04
	ePPP	01 42
	eS	06 34
	eL	17 39
TUT	iP	10 57 01
WAS	eP	10 58 05
	ePP	11 01 19
Feb. 15		
EUR	iP	11 03 11
Feb. 15		
FGU	eP	11 36 31
Feb. 15		
COL	iP	11 40 39
	e	40 54

Date and Station		Phase (GCT) h m s
EUR	iP	11 42 33
HHM	eP	11 42 05
THU	eP	11 40 12
Feb. 15		
COL	iP	12 04 43
	ipP	04 54
	i	05 34
EUR	iP	12 08 00
	ipP	08 12
FGU	eP	12 08 17
HHM	e(P)	12 07 32
Feb. 15		
EUR	iP	12 08 50
	i	09 05
HHM	eP	12 08 22
Feb. 15		
COL	iP	12 15 51
Feb. 15		
BHP	iP	13 12 03
	iS	12 46
Feb. 15		
COL	eP	13 24 01
EUR	iP	13 19 14
FGU	iP	13 19 42
HHM	iP	13 19 53
SJP	eP	13 15 37
TUT	eP	13 18 10
Feb. 15		
FGU	eP	17 19 53
Feb. 15		
COL	iP	18 04 48
	ipP	04 57
EUR	iP	18 05 10
Feb. 15		
COL	iP	18 42 03
	i	42 12
Feb. 15		
COL	eP	20 45 50
Feb. 15		
SLC	eP	23 44 57
Feb. 16		
COL	eP	02 32 32
EUR	eP	02 31 15

Date and Station		Phase (GCT) h m s
Feb. 16		
EUR	e(P)	02 35 49
Feb. 16		
EUR	iP	03 32 43
	i	33 04
HHM	eP	03 33 45
Feb. 16		
COL	iP	03 56 22
EUR	iP	03 57 48
HHM	iP	03 57 07
Feb. 16		
COL	iP	05 32 41
	i	33 03
EUR	iP	05 29 03
HHM	e(P)	05 30 05
Feb. 16		
BCN	eP	09 07 00
COL	iP	09 03 58
	e	05 00
EUR	iP	09 06 46
	e	08 18
GUA	i(P)	08 59 31
HHM	iP	09 06 24
	e	08 12
Feb. 16		
BCN	eP	10 07 59
Feb. 16		
COL	iP	11 59 48
	i	59 59
EUR	iP	12 03 06
	i	03 17
Feb. 16		
BCN	eP	13 38 25
COL	iP	13 39 04
	e	39 20
EUR	iP	13 38 32
Feb. 16		
COL	iP	13 42 12
Feb. 16		
BCN	eP	14 06 07
BOZ	eP	14 05 43
BUT	eP	14 05 36

Date and Station		Phase	(GCT)
			h m s
COL		iP	14 02 33
		ePP	03 44
		ePcP	04 22
		eS	08 45
EUR		iP	14 05 50
		ipP	06 05
GCA		iP	14 04 15
		iScP	09 09
HHM		iP	14 05 21
		eP'P'	34 19
SLC		eP	14 06 00
THU		eP	14 04 39
		i	04 48
TUC		iP	14 06 37
		ipP	06 49
		ePP	09 34
TUT		iP	14 06 37
Feb. 16			
COL		iP	14 12 23
EUR		iP	14 13 16
Feb. 16			
TUT		eP	14 38 30
Feb. 16			
EUR		eP'	14 52 20
Feb. 16			
COL		iP	15 02 08
		ipP	02 17
EUR		iP	15 05 25
		ipP	05 37
HHM		eP	15 04 57
Feb. 16			
EUR		eP	15 45 39
Feb. 16			
COL		iP	16 08 28
Feb. 16			
EUR		eP'	16 28 25
		i	28 49
Feb. 16			
FGU		eP	16 31 50
Feb. 16			
EUR		eP	17 23 04
FGU		eP	17 23 26
		i	23 43
HHM		eP	17 22 31

Date and Station		Phase	(GCT)
			h m s
Feb. 16			
COL		eP	20 10 21
Feb. 16			
COL		iP'	20 48 52
Feb. 16			
EUR		iP	22 30 05
Feb. 16			
FGU		eP	23 01 15
Feb. 16			
COL		eP	23 47 20
Feb. 17			
COL		iP	00 35 10
		e	35 30
		i	35 52
EUR		iP	00 34 35
FGU		eP	00 35 02
Feb. 17			
GCA		eP	01 15 29
Feb. 17			
GCA		eP	04 34 51
Feb. 17			
COL		iP	06 23 31
		i	23 41
EUR		iP	06 20 36
		i	20 54
		iPcP	21 50
FGU		iP	06 20 09
GCA		iP	06 20 04
		ipP	20 44
HHM		iP	06 21 02
SJP		iP	06 14 55
		eS	17 14
TUC		iP	06 19 41
		ePP	21 27
TUT		eP	06 19 40
Feb. 17			
COL		iP	06 56 44
EUR		e(P)	07 00 00
TUC		eP	07 00 50
Feb. 17			
GCA		e(P)	08 28 28
		i	29 33
TUC		eP	08 25 22
		e	25 38
		e(S)	26 08
		e(L)	26 38
		eL	26 49

Date and Station		Phase	(GCT)
			h m s
TUT		e(P)	08 25 23
		eL	26 43
Feb. 17			
COL		iP	09 25 43
		ipP	26 02
		isP	26 15
Feb. 17			
GCA		eP	12 18 56
Feb. 17			
COL		eP	12 34 20
EUR		iP	12 34 27
Feb. 17			
COL		eP'	13 00 36
Feb. 17			
COL		iP	13 19 46
		ipP	20 33
Feb. 17			
COL		iP	13 40 39
EUR		iP	13 43 36
HHM		eP	13 43 12
Feb. 17			
COL		eP	13 43 09
		e	44 49
Feb. 17			
COL		eP	14 00 49
EUR		iP	13 58 01
Feb. 17			
FGU		eP	14 43 51
Feb. 17			
COL		eP	15 13 47
EUR		eP	15 16 20
HHM		e(P)	15 16 04
Feb. 17			
COL		iP	15 50 25
		ipP	51 36
EUR		iP'	15 55 58
GUA		i(P)	15 42 33
Feb. 17			
COL		eP	16 48 57
Feb. 17			
COL		eP	17 12 32
Feb. 17			
EUR		eP	17 58 37
HHM		e(P)	17 58 03

Date and Station		Phase	(GCT)
			h m s
Feb. 17			
COL		eP	18 48 06
Feb. 17			
COL		iP	19 07 13
		ipP	07 36
EUR		e(P)	19 08 13
Feb. 17			
GCA		eP	23 02 42
		i	04 07
Feb. 18			
BGN		eP	01 15 20
COL		iP	01 11 43
		ipP	11 53
EUR		iP	01 15 02
		ipP	15 18
		i	15 58
FGU		eP	01 14 42
		e	15 19
HHM		eP	01 14 33
		ipP	14 45
RCD		eP	01 15 26
THU		iP	01 13 51
TUC		eP	01 15 59
		epP	16 17
TUT		e(P)	01 15 48
Feb. 18			
COL		eP	01 59 14
EUR		eP	02 02 09
FGU		eP	02 02 26
Feb. 18			
FGU		eP	04 04 25
		e	04 53
		i	04 57
Feb. 18			
COL		eP	07 25 15
Feb. 18			
COL		iP	08 20 41
		ipP	20 51
EUR		iP	08 23 59
		ipP	24 10
HHM		eP	08 23 31
Feb. 18			
COL		iP	08 30 13
		ipP	30 22
		e	30 50

Date and Station		Phase (GCT)
		h m s
EUR	iP	08 33 30
	ipP	33 42
FGU	eP	08 33 48
HHM	iP	08 33 02
RCD	e(P)	08 34 03
Feb. 18		
EUR	eP	10 49 46
HHM	e(P)	10 49 23
Feb. 18		
BCN	eP	12 18 40
COL	iP	12 18 46
	opP	18 58
	i	23 15
EUR	iP	12 18 45
	i	19 58
FGU	eP	12 18 54
	opP	19 09
TUC	iP	12 18 47
	opP	18 59
	e	19 22
TUT	eP	12 18 48
Feb. 18		
COL	eP	12 22 58
EUR	iP	12 23 22
Feb. 18		
BCN	eP	13 51 15
EUR	iP	13 51 32
	i	51 45
	iL	52 37
Feb. 18		
EUR	iP	14 19 40
Feb. 18		
COL	iP	16 01 43
EUR	iP	16 05 01
HHM	iP	16 04 32
Feb. 18		
HHM	i(P)	16 11 14
Feb. 18		
EUR	iP	16 41 23
Feb. 18		
FGU	eP	17 15 27
SJP	i(P)	17 12 04
TUT	e(P)	17 15 34

Date and Station		Phase (GCT)
		h m s
Feb. 18		
FGU	iP	18 08 09
	i	09 18
Feb. 18		
COL	eP	20 12 55
	epP	13 10
SJP	e(P')	20 19 31
Feb. 18		
FGU	eP	21 01 18
Feb. 18		
FGU	eP	22 45 52
	iS	46 29
Feb. 19		
FGU	eP	01 22 27
Feb. 19		
TUT	eP	03 18 45
Feb. 19		
EUR	eP	03 34 28
FGU	eP	03 34 23
Feb. 19		
COL	iP	07 24 34
EUR	iP	07 24 31
Feb. 19		
COL	eP	07 57 37
	e	57 51
	e	58 02
	e(S)	59 53
EUR	eP	08 01 31
	ePcP	04 20
FGU	eP	08 01 55
HHM	iP	08 00 50
	i	01 29
	ePcP	03 38
RCD	eP	08 02 06
TUC	eP	08 02 41
Feb. 19		
GUA	iP	08 12 44
	iS	13 27
Feb. 19		
GCA	eP	10 55 55
	i	56 14
Feb. 19		
COL	iP	11 04 46
EUR	iP	11 04 13
TUT	e(P)	11 04 13
Feb. 19		
COL	iP	12 13 27
	eL	16 13

Date and Station		Phase (GCT)
		h m s
EUR	iP	12 17 23
	iPcP	20 26
FGU	eP	12 17 37
	ePcP	20 29
HHM	e(P)	12 16 38
	ePcP	20 13
RCD	e(P)	12 17 15
Feb. 19		
EUR	eP	12 21 44
Feb. 19		
COL	iP	13 09 56
	i	10 05
	eL	12 43
EUR	iP	13 13 51
	iPcP	16 54
FGU	eP	13 14 14
	iPcP	17 02
HHM	iP	13 13 10
	iPcP	16 43
RCD	eP	13 14 27
SJP	e(P)	13 19 22
TUC	eP	13 15 00
TUT	eP	13 15 03
Feb. 19		
EUR	iP	13 47 34
Feb. 19		
COL	eP	16 47 44
	e	48 33
	i	48 50
Feb. 19		
COL	iP	18 44 46
	i	45 49
Feb. 19		
HHM	eP	21 21 01
Feb. 19		
COL	iP	21 39 57
	ipP	40 33
EUR	iP	21 40 41
	ipP	41 16
Feb. 19		
EUR	iP	21 44 42
HHM	e(P)	21 44 37
Feb. 19		
SJG	eP	22 43 39

Date and Station		Phase (GCT)
		h m s
Feb. 19		
EUR	iP	22 56 05
	i	56 13
	iL	56 54
Feb. 19		
FGU	eP	23 02 10
	eS	02 45
Feb. 20		
EUR	eP	00 11 05
TUC	eP	00 09 26
TUT	eP	00 09 26
Feb. 20		
COL	eP	01 34 30
Feb. 20		
EUR	e(P)	05 36 31
TUT	eP	05 36 23
Feb. 20		
EUR	iP	06 54 29
Feb. 20		
FGU	eP	07 27 20
	eS	27 25
Feb. 20		
COL	i(P)	08 11 28
Feb. 20		
COL	eP	09 06 14
	i	06 24
EUR	iP	09 09 32
Feb. 20		
GCA	e(P)	09 24 15
	e	31 53
	i	32 45
Feb. 20		
FGU	eP	09 31 33
	i	32 37
Feb. 20		
COL	iP	10 01 19
	i	01 26
Feb. 20		
BUT	eP	13 10 55
COL	iP	13 07 23
	eS	09 56
EUR	iP	13 11 15
	i	13 18
	i	14 19
HHM	eP	13 10 35
TUU	eP	13 12 04
TUC	i(P)	13 12 29

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

Date and Station		Phase (GCT) h m s
Feb. 21		
EUR	e(P)	21 25 05
HHM	e(P)	21 24 45
Feb. 21		
COL	iP	23 41 16
	i	41 55
EUR	eP'	23 46 56
Feb. 22		
TUT	eP	00 42 55
	eS	43 45
Feb. 22		
TUT	iP	00 45 11
	iS	46 03
Feb. 22		
COL	eP	02 54 01
	i	54 19
	e	54 26
EUR	iP	02 57 29
HHM	iP	02 56 58
TUC	eP	02 58 27
	e	58 40
	e	58 50
Feb. 22		
HHM	eP	06 54 33
Feb. 22		
TUC	eP	06 59 06
	e	59 14
	eL	59 48
Feb. 22		
BCN	iP	07 03 49
Feb. 22		
COL	eP	07 17 35
Feb. 22		
EUR	e(P)	07 46 14
	eL	48 52
GCA	eP	07 45 13
	e	46 03
	eL	47 20
TUC	eP	07 43 01
	e	43 09
	eL	43 43
Feb. 22		
TUC	eP	07 45 02
	e	45 10
	eL	45 44
Feb. 22		
EUR	e(P)	09 18 45
Feb. 22		
TUT	eP	12 30 39

Date and Station		Phase (GCT) h m s
Feb. 22		
EUR	e(P)	15 55 54
Feb. 22		
EUR	iP'	16 02 02
HHM	e(P')	16 01 51
Feb. 22		
COL	iP	18 19 59
Feb. 22		
COL	iP	18 42 01
Feb. 22		
FGU	iP	19 53 23
Feb. 22		
BHP	iP	21 17 54
	iS	18 04
FGU	iP	21 23 52
Feb. 22		
BCN	eP	22 06 15
BUT	eP	22 06 49
COL	iP	22 06 55
	i	07 02
	ipP	07 10
	iPKKP	24 38
EUR	iP	22 06 24
	ipP	06 41
	i	07 30
	ePKKP	24 03
	eP'P'	32 13
FGU	iP	22 06 45
	ipP	06 59
	ePKKP	23 45
	e	23 52
GCA	iP	22 06 31
	ipP	06 47
HON	eP	22 02 48
HHM	eP	22 06 53
	iPKKP	23 48
KIP	iP	22 02 49
SLC	eP	22 06 38
TUC	iP	22 06 19
	ipP	06 34
	ePP	09 57
	eS	16 55
	eL	30 10
TUT	iP	22 06 20
	i	06 42
	ePP	09 51
Feb. 23		
COL	eP	01 14 46

Date and Station		Phase (GCT) h m s
Feb. 23		
BOZ	iP	01 46 48
BUT	iP	01 47 00
	iS	47 19
	eL	47 36
EUR	e(P)	01 48 10
	eL	49 50
HHM	eP	01 47 36
	i	47 48
	iL	48 38
Feb. 23		
COL	eP	03 12 59
Feb. 23		
BOZ	iP	03 13 06
	iS	13 14
	eL	13 35
BUT	iP	03 13 17
	iS	13 38
	iL	13 40
EUR	eP	03 14 27
	eL	16 07
HHM	iP	03 13 53
	i	14 03
	iL	14 57
SLC	eP	03 13 59
Feb. 23		
COL	iP	03 31 14
Feb. 23		
EUR	eP	04 19 45
TUT	eP	04 19 10
Feb. 23		
BOZ	eP	04 27 50
BUT	eP	04 27 42
COL	iP	04 24 51
	epP	25 15
	ePP	26 40
	eS	31 44
EUR	iP	04 27 54
	i	28 51
GCA	eP	04 28 19
GUA	eP	04 21 42
	i(S)	26 54
HHM	iP	04 27 29
	i	28 25
RCD	eP	04 28 19
SLC	eP	04 28 07

Date and Station		Phase (GCT) h m s
TIU	iP	04 26 48
TUC	eP	04 28 37
	epP	29 08
	ePP	32 02
	e(S)	38 37
TUT	eP	04 28 37
Feb. 23		
EUR	iP	04 32 57
Feb. 23		
EUR	eP'	05 08 11
Feb. 23		
COL	eP	05 47 44
EUR	iP	05 47 42
Feb. 23		
COL	iP	06 57 19
	ipP	57 28
Feb. 23		
COL	eP	07 56 27
	i	56 38
Feb. 23		
COL	iP	12 37 12
	iS	37 14
Feb. 23		
COL	iP	13 51 53
EUR	eP	13 51 31
Feb. 23		
COL	iP	14 42 09
	i	42 48
EUR	iP	14 38 15
TUT	eP	14 37 04
Feb. 23		
COL	iP	19 53 55
	i	54 05
Feb. 23		
COL	eP	21 58 30
Feb. 23		
TUT	e(P)	23 39 50
Feb. 24		
FGU	eP	00 04 26
Feb. 24		
TUT	e(P)	01 19 50
Feb. 24		
TUT	eP	01 32 01
Feb. 24		
COL	iP	01 40 33
	i	40 38

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

Date and Station		Phase (GCT) h m s
Feb. 26		
UKI	eP	10 00 16
Feb. 26		
BHP	iP	12 13 24
	iS	13 47
Feb. 26		
COL	e(P)	17 50 38
Feb. 26		
COL	iP	17 57 43
	i	58 01
	i	58 15
EUR	eP	18 00 54
Feb. 26		
BHP	iP'	18 29 58
BCN	eP	18 23 14 C
BOZ	eP	18 23 20 C
	e	23 54
BUT	iP	18 23 15 C
	e	24 35
	eS	33 38
	e	39 03
	eL	47 03
COL	iP	18 20 39
	iS	28 41
CSC	eP'	18 29 29
	eS	37 10
EUR	iP	18 23 26 C
	iPP	26 42
	e(S)	33 41
	ePKKP	41 11
	eP'P'	49 12
	eP'P'P'	19 10 11
GCA	eP	18 23 46 C
	i	23 51
	ePP	27 27
	eS	34 08
GUA	iP	18 15 41 D
	i	15 46
	i	15 51
	i	15 53
	i	16 43
	e	16 54
	i	17 05
	i	17 46
	eS	19 31
	eT	37 23
HON	iP	18 21 16 C
	eS	29 48
HHM	iP	18 23 04 C
	i	23 28
	iPP	26 17
	iS	33 15
	ePKKP	41 38
	eP'P'	49 35
	eSKPP'	53 01
	eP'P'P'	19 10 20

Date and Station		Phase (GCT) h m s
KIP	iP	18 21 17
SLC	iP	18 23 34 C
	eS	34 07
SJP	eP'	18 29 52
	i	30 41
	ePP	31 51
	eSKKP	43 12
SIT	eP	18 21 32
THU	iP	18 22 06
	ePcP	22 22
	eL	50 20
TUC	iP	18 24 03 C
	ePP	27 45
	ePPP	29 45
	e(S)	34 58
	eL	48 48
TUT	iP	18 24 03 C
	ipP	24 13
	e	26 57
	e	28 51
	eS	33 44
	e	35 11
	eeS	38 04
	e	39 44
	e	40 37
	eL	41 51
UKI	eP	18 23 04 C
	eS	33 16
WAS	e(P')	18 29 17
Feb. 26		
COL	iP	18 56 40
Feb. 26		
EUR	i(P)	19 55 55
HHM	eP	19 55 23
	i	55 33
Feb. 26		
COL	eP	21 12 50
	ePP	15 57
EUR	e(P)	21 15 19
	ePP	19 16
HHM	eP	21 14 59
SJP	eP'	21 20 45
TUT	ePP	21 19 26
Feb. 26		
EUR	eP	21 31 22
Feb. 27		
BHP	iP	01 09 27
	iS	10 37
BOZ	eP	01 16 37

Date and Station		Phase (GCT) h m s
BUT	eP	01 16 45
COL	iP	01 19 30
	ePcP	19 39
	epP	20 12
	ePP	22 25
CSC	eP	01 13 30
EUR	iP	01 16 35
	i	16 54
	i	17 09
	iScP	21 32
GCA	iP	01 16 03
	i	16 53
	i	17 36
HHM	iP	01 17 01
RCD	iP	01 16 56
SLC	eP	01 16 19
SJP	eP	01 10 55
	i	11 16
	i	11 46
	i(S)	13 11
TUC	iP	01 15 40
	i	15 48
	e	17 01
	i(S)	21 03
TUT	iP	01 15 39
	e	16 11
	e	16 21
	ePP	17 24
	e	17 34
	e(S)	21 03
Feb. 27		
EUR	iP	01 23 53
HHM	iP	01 23 29
RCD	e(P)	01 24 18
Feb. 27		
EUR	eP	03 38 28
TUT	eP	03 37 29
Feb. 27		
EUR	eP	05 54 49
Feb. 27		
COL	iP	09 22 04
EUR	eP	09 16 09
FGU	eP	09 16 12
	eS	20 25
HHM	e(P)	09 17 40
RCD	e(P)	09 15 44

Date and Station		Phase (GCT) h m s
TUC	eP	09 14 15
	e	16 54
	e	17 54
	e	18 43
TUT	eP	09 14 17
	e(S)	16 42
Feb. 27		
BOZ	eP	10 42 49
BUT	eP	10 42 53
COL	eP'	10 48 31
CSC	eP	10 41 15
EUR	iP	10 42 32
	ipP	42 42
FGU	eP	10 42 27
	epP	42 34
GCA	eP	10 42 13
	epP	42 21
HHM	eP	10 43 03
	ipP	43 12
RCD	eP	10 42 39
SLC	eP	10 42 37
SJP	eP	10 39 31
	ipP	39 41
TUC	iP	10 41 50
	e	42 11
	eL	11 08 01
TUT	eP	10 41 50
Feb. 27		
EUR	iP	11 43 59
FGU	eP	11 43 54
	ipP	44 04
HHM	eP	11 44 30
TUC	eP	11 43 15
	ipP	43 26
TUT	eP	11 43 16
Feb. 27		
COL	iP	12 08 45
	ipP	09 21
EUR	iP	12 08 15
	ipP	08 48
FGU	eP	12 08 41
	epP	09 15
HHM	eP	12 08 46

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Date and Station		Phase	(GCT) h m s
Feb. 27			
BOZ		eP	13 13 48
BUT		eP	13 13 38
COL		iP	13 10 22
		e	10 36
		i	11 18
EUR		iP	13 13 53
		ipP	14 08
GCA		eP	13 14 27
FGU		eP	13 14 17
		epP	14 30
		ePcP	16 33
		eL	28 46
HHM		eP	13 13 20
		iPcP	15 59
RCD		eP	13 14 33
SLC		eP	13 14 07
SJP		i(P)	13 19 10
SIT		eP	13 11 05
TUC		eP	13 14 57
		e	15 08
		ePP	16 42
		e(S)	21 45
TUT		eP	13 14 57
Feb. 27			
BHP		iP	15 45 28
		iS	46 19
COL		iP	15 55 26
		epP	55 47
EUR		eP	15 51 59
FGU		eP	15 51 35
SJP		e(P)	15 48 43
		i	49 02
TUT		e(P)	15 50 54
Feb. 27			
COL		iP	17 01 11
Feb. 27			
COL		iP	18 04 58
		epP	05 50
Feb. 27			
BOZ		eP	20 32 43
Feb. 27			
COL		iP	21 25 44
Feb. 27			
HHM		eP	21 52 52

Date and Station		Phase	(GCT) h m s
Feb. 27			
HHM		eP	22 07 24
Feb. 27			
TUT		eP	23 00 34
		eS	01 31
Feb. 28			
COL		eP	02 00 52
FGU		eP	01 55 51
		e	56 10
Feb. 28			
EUR		e(P)	05 17 51
FGU		eP	05 17 44
Feb. 28			
COL		iP	12 40 39
		i	44 02
		i	44 39
EUR		iP	12 44 05
		ipP	44 20
FGU		eP	12 44 21
HHM		iP	12 43 35
		ipP	43 49
		i	44 23
RCD		eP	12 44 31
TUC		eP	12 44 53
		ipP	45 10
TUT		eP	12 44 55
Feb. 28			
COL		eP	14 26 39
Feb. 28			
EUR		e(P)	17 15 11
Feb. 28			
COL		eP	18 39 17
EUR		iP	18 35 25
FGU		iP	18 35 05
TUT		eP	18 34 14
Feb. 28			
RCD		iP	21 15 00
Feb. 28			
BCN		eP	21 23 12
GCA		eP	21 24 22
		i	24 23
		e	25 59
TUC		eP	21 24 13
TUT		e(P)	21 23 59
		eS	25 13

Date and Station		Phase	(GCT) h m s
Feb. 28			
BCN		eP	21 28 55
BOZ		eP	21 30 25
CSC		eP	21 28 17
EUR		iP	21 30 13
FGU		iP	21 30 00
GCA		eP	21 29 50
GUA		iP'	21 37 59
HHM		iP	21 30 41
		ipP	31 14
		i	31 29
SJP		eP	21 26 19
		ePP	27 52
TUC		iP	21 29 25
		e	29 31
TUT		iP	21 29 26

Date and Station	Phase	(GCT) h m s

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
February	
ROZ	
12	02.9
BUT	
2	01.6
	13.9
27	03.2
COL	
1	10.2
2	18.7
3	01.2
4	01.3
7	23.8
9	02.9
	19.3
11	11.7
13	12.5
	17.7
14	04.7
	14.6
15	02.2
17	20.7
18	01.8
21	16.6
22	17.9
27	01.5
28	01.1
EUR	
3	19.0
	19.3
7	12.9
	21.9
	23.7
12	02.9
14	00.0
	20.8
15	09.2
16	18.5
	18.6
	20.2
20	01.6
27	05.0
28	08.6
	21.4
FGU	
1	17.6
2	21.9
3	05.5
	20.1
4	06.3
8	14.4
	17.8
9	11.3
10	19.6
	23.0
11	13.0
	20.4
	21.4
12	05.4
15	09.2

Date and Station	Phase (GCT)
	h m s
15	15.8
	18.4
16	15.5
	22.3
21	05.7
23	20.9
24	04.4
GCA	
2	00.1
8	14.2
12	17.2
15	19.4
17	08.4
21	05.7
23	20.4
24	07.2
27	17.5
28	00.6
	12.3
	17.5
	21.0
HHM	
2	01.6
3	12.8
12	02.9
16	04.1
SJP	
1	09.0
4	18.3
5	10.3
	10.8
8	23.3
	23.4
9	01.5
	08.8
	16.0
17	11.4
	19.5
18	12.9
19	01.9
20	12.1
21	22.1
24	00.5
25	20.2
28	04.0
TUC	
1	00.4
	11.2
2	08.5
3	12.8
4	9.2
4	10.3
5	06.0
6	03.6
7	05.2
	05.5
	05.6
	09.8
	14.6
8	6.4
	11.9
9	02.8
	09.0

Date and Station	Phase (GCT)
	h m s
10	02.4
	05.9
	13.6
11	03.1
	09.5
12	03.8
	06.6
	11.2
	14.2
13	02.7
	09.4
14	09.9
	10.7
	11.0
15	12.2
	13.3
	13.4
16	10.1
	10.9
17	07.3
18	03.2
	11.2
	13.7
	13.9
19	03.6
	09.8
	10.0
	11.1
	12.5
	12.8
20	00.8
	05.6
	12.1
21	03.6
	05.0
	08.7
	09.4
22	01.3
	03.7
	08.1
	11.3
23	11.7
	13.9
24	01.3
	08.0
	08.4
25	02.1
	11.4
26	10.2
27	03.6
	12.1
28	02.0
	12.0
TUT	
1	18.7
2	19.0
	22.9
3	18.6
6	10.3
	14.4
8	22.9
10	16.3
12	04.1
13	20.8
15	17.0
20	22.5

Date and Station	Phase (GCT)
	h m s
24	16.6
25	15.9
26	21.6
27	22.0
UKI	
12	14.2