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SEISMOLOGICAL BULLETIN

June, 1961

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U.S. C. & G. SURVEY
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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. 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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
1	03 27 39.3	55.5 N.	161.7 E.	Near east coast of Kamchatka. h about 25 km.
1	07 58 21.5	44.3 N.	148.2 E.	Kurile Islands. h about 67 km.
1	09 35 35.2	38.6 S.	144.2 E.	Bass Strait. h about 28 km.
1	10 02 42.0	19.3 N.	69.3 W.	Near coast of Dominican Republic. h about 21 km. Mag. 4¼-4½ (Pal).
1	11 19 46.4	3.8 S.	129.4 E.	Ceram Island. h about 220 km.
1	13 19 50.8	38.5 S.	144.2 E.	Bass Strait. h about 29 km.
1	13 32 45.8	0.2 N.	123.3 E.	Northern Celebes. h about 228 km.
1	16 31 43.8	37.9 N.	36.8 E.	Southern Turkey. Felt at Maras and Urfa. h about 60 km.
1	17 49 33.8	55.0 N.	161.5 E.	Kamchatka. h about 33 km.
1	18 46 26.4	7.1 N.	123.5 E.	Celebes Sea. h about 33 km.
1	23 29 21.2	10.4 N.	39.9 E.	Ethiopia. Considerable damage at Kara-Kore. Felt at Addis Ababa. h about 33 km. Mag. 6½-6¾.
1	23 56 48.6	10.1 N.	39.6 E.	Ethiopia. h about 60 km.
2	00 01 46.9	10.4 N.	39.8 E.	Ethiopia. h about 33 km.
2	00 08 57.9	10.4 N.	40.0 E.	Ethiopia. h about 33 km.
2	00 57 48.8	9.0 N.	40.2 E.	Ethiopia. h about 33 km.
2	01 16 07.1	9.4 N.	40.2 E.	Ethiopia. h about 33 km.
2	02 35 24.4	9.0 N.	40.0 E.	Ethiopia. h about 33 km.
2	04 36 52.3	5.5 S.	146.4 E.	Near coast of New Guinea. h about 32 km.
2	04 51 14.8	10.3 N.	39.8 E.	Ethiopia. Felt at Addis Ababa. h about 33 km. Mag. 6¼-6½.
2	05 22 29.1	10.4 N.	39.6 E.	Ethiopia. h about 26 km.
2	05 44 52.4	10.4 N.	39.8 E.	Ethiopia. h about 31 km.
2	06 17 13.3	10.5 N.	39.7 E.	Ethiopia. h about 36 km.
2	07 02 49.9	10.0 N.	40.0 E.	Ethiopia. h about 33 km.
2	07 21 45.3	10.1 N.	39.6 E.	Ethiopia. h about 33 km.
2	11 06 41.3	79.4 N.	4.9 E.	Svalbard region. h about 25 km.
2	12 48 06.6	40.2 S.	73.4 W.	Southern Chile. h about 33 km.
2	18 09 27.2	21.4 N.	145.9 E.	Mariana Islands region. h about 43 km.
2	18 26 12.6	3.0 S.	80.4 W.	Near coast of Ecuador. h about 37 km.
2	23 32 32.1	9.5 N.	39.8 E.	Ethiopia. h about 33 km.
3	01 13 25.4	56.3 N.	164.8 E.	Off east coast of Kamchatka. h about 29 km. Mag. 5¼-5½ (Pal).
3	03 18 30.2	17.8 S.	167.6 E.	New Hebrides Islands. Felt at Port Vila. h about 31 km.
3	03 40 20.2	18.0 S.	167.9 E.	New Hebrides Islands. Felt at Port Vila. h about 39 km.
3	04 21 56.2	18.1 S.	70.3 W.	Chile-Peru border. h about 60 km.
3	05 55 15.5	4.3 S.	151.2 E.	New Britain region. h about 33 km.
3	06 16 17.1	39.0 N.	32.2 E.	Turkey. h about 45 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
3	09 14 36.0	4.2 S.	151.2 E.	New Britain region. Felt at Rabaul and Rangarere. h about 33 km.
3	15 20 30.9	10.6 N.	39.8 E.	Ethiopia. h about 33 km.
3	15 23 15.8	9.8 N.	39.6 E.	Ethiopia. h about 33 km.
3	16 25 46.9	9.5 N.	39.8 E.	Ethiopia. h about 33 km.
3	17 43 22.6	0.3 N.	123.8 E.	Northern Celebes. h about 70 km.
3	20 33 13.4	16.2 S.	172.9 W.	Samoa Islands region. h about 60 km.
3	21 51 05.9	17.7 S.	167.6 E.	New Hebrides Islands. Felt at Port Vila. h about 25 km.
3	22 54 17.8	72.8 N.	8.7 E.	Svalbard region. h about 33 km.
4	07 33 06.0	34.1 N.	82.0 E.	Tibet. h about 32 km. Mag. 6½.
4	07 43 43.6	34.4 N.	82.2 E.	Tibet. h about 30 km.
4	08 45 22.0	8.8 S.	124.2 E.	Flores Island. h about 18 km.
4	10 39 13.7	41.1 N.	126.3 W.	Off coast of northern California. h about 36 km.
4	11 18 33.1	37.1 N.	71.9 E.	Hindu Kush. h about 190 km.
4	13 51 29.9	33.9 N.	82.1 E.	Tibet. h about 32 km.
4	13 58 16.1	17.5 S.	177.9 E.	Fiji Islands. h about 600 km.
4	15 13 43.8	4.5 N.	125.6 E.	South of Mindanao, Philippine Islands. h about 125 km.
4	22 54 50.9	14.1 S.	167.7 E.	New Hebrides Islands. h about 216 km.
4	23 35 26.9	33.5 N.	75.4 E.	Northern India. h about 25 km.
5	03 30 56.0	27.9 N.	55.1 E.	Southern Iran. h about 30 km.
5	03 45 25.1	20.1 S.	178.6 W.	Fiji Islands region. h about 631 km.
5	05 35 25.4	18.0 S.	167.6 E.	New Hebrides Islands. h about 33 km.
5	06 11 32.9	28.5 N.	54.9 E.	Southern Iran. h about 36 km.
5	06 32 18.2	5.5 S.	153.0 E.	New Britain. h about 25 km.
5	17 29 54.5	5.0 S.	153.5 E.	New Britain. h about 43 km.
6	00 33 38.2	17.7 N.	60.9 W.	Leeward Islands. h about 50 km.
6	03 46 08.6	43.6 N.	127.7 W.	Off coast of Oregon. h about 25 km.
6	08 11 54.7	15.6 S.	173.6 W.	Tonga Islands region. h about 117 km.
6	09 46 18.6	30.1 N.	52.4 E.	Iran. h about 25 km.
6	20 56 20.1	39.4 N.	77.9 E.	Sinkiang Province, China. h about 102 km.
6	23 40 57.6	11.5 S.	166.2 E.	Santa Cruz Islands. h about 72 km.
7	05 03 10.7	45.5 N.	150.8 E.	Kurile Islands. h about 61 km.
7	13 05 51.2	43.0 N.	130.5 E.	Korea-China border. h about 300 km.
7	14 15 18.9	5.4 S.	11.6 W.	Ascension Island region. h about 17 km. Mag. 5¼-5½ (Pal).
7	15 38 13.1	10.8 S.	166.3 E.	Santa Cruz Islands. h about 209 km.
7	19 18 28.5	1.0 S.	134.1 E.	Western New Guinea. h about 59 km.
7	22 54 46.2	16.0 S.	172.7 W.	Samoa Islands region. h about 33 km.
8	03 59 21.3	36.4 N.	71.0 E.	Hindu Kush. h about 264 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
8	08 54 38.6	15.5 S.	172.6 W.	Samoa Islands region. h about 88 km.
8	09 34 26.7	10.1 S.	161.5 E.	Solomon Islands. h about 71 km.
8	15 44 02.4	8.3 S.	122.0 E.	Flores Sea. h about 18 km.
8	16 47 14.6	8.1 S.	122.1 E.	Flores Sea. h about 33 km.
9	03 55 51.4	34.7 N.	73.8 E.	Northern India. h about 110 km.
9	05 53 54.8	1.5 N.	76.7 W.	Southwestern Colombia. h about 33 km.
9	09 36 49.2	41.0 N.	50.7 E.	Caspian Sea. h about 17 km.
9	14 23 20.6	28.0 N.	139.9 E.	South of Honshu, Japan. h about 451 km.
9	15 17 46.1	4.8 N.	95.2 E.	Near coast of Sumatra. h about 33 km.
9	15 43 02.8	30.3 N.	139. 9 E.	South of Honshu, Japan. h about 154 km.
9	18 52 37.9	10.9 S.	165.7 E.	Santa Cruz Islands. h about 50 km.
9	22 05 54.7	8.4 S.	121.9 E.	Flores Sea. h about 33 km.
10	00 39 05.1	10.8 S.	162.0 E.	Solomon Islands. h about 170 km.
10	05 52 58.5	48.9 N.	157.7 E.	Near south coast of Kamchatka. h about 37 km.
10	08 47 48.0	5.2 S.	129.1 E.	Banda Sea. h about 78 km.
10	08 52 05.4	8.5 N.	103.3 W.	South of Mexico. h about 33 km. Mag. 4¾-5 (Pal).
10	09 11 51.8	24.1 S.	111.4 W.	Easter Island region. h about 25 km.
10	11 32 13.5	51.4 N.	179.0 W.	Andreanof Islands, Aleutian Islands. h about 28 km.
10	11 44 50.7	32.6 S.	71.9 W.	Near coast of southern Chile. Felt at Santiago. h about 49 km.
10	16 03 25.5	54.9 N.	161.6 E.	Kamchatka. h about 33 km.
10	20 31 50.9	24.2 S.	112.1 W.	Easter Island region. h about 47 km. Mag. 6.
11	04 02 44.4	51.6 N.	159.3 E.	Kamchatka. h about 33 km.
11	05 10 26.3	27.9 N.	54.6 E.	Southern Iran. Major property damage; many casualties in Lar area. h about 37 km. Mag. 6½-6¾ (Pas).
11	05 30 14.5	27.8 N.	55.0 E.	Southern Iran. h about 62 km.
11	05 52 51.7	51.6 N.	159.3 E.	Near south coast of Kamchatka. h about 18 km.
11	06 10 42.3	27.8 N.	54.9 E.	Southern Iran. h about 46 km.
11	06 46 57.9	27.7 N.	55.1 E.	Southern Iran. h about 41 km.
11	06 51 29.6	27.8 N.	54.9 E.	Southern Iran. h about 49 km.
11	08 04 10.0	27.6 N.	55.3 E.	Southern Iran. h about 70 km.
11	09 21 39.4	27.8 N.	55.0 E.	Southern Iran. h about 48 km.
11	10 03 06.3	27.7 N.	55.0 E.	Southern Iran. h about 42 km.
11	10 19 23.6	46.8 N.	27.4 W.	North Atlantic Ocean. h about 22 km.
11	11 24 09.4	28.1 N.	54.7 E.	Southern Iran. h about 33 km.
11	12 30 23.5	27.8 N.	54.4 E.	Southern Iran. h about 35 km.
11	12 31 26.8	28.2 N.	54.6 E.	Southern Iran. h about 36 km.
11	12 42 58.7	30.4 N.	55.3 E.	Southern Iran. h about 61 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
11	13 57 58.3	27.8 N.	54.6 E.	Southern Iran. h about 34 km.
11	14 48 13.6	24.4 S.	178.9 E.	Kermadec Islands region. h about 603 km.
11	15 06 16.7	27.8 N.	54.5 E.	Southern Iran. h about 39 km.
11	17 13 45.5	44.7 N.	114.8 W.	Central Idaho. h about 25 km.
11	17 15 34.5	25.2 N.	98.6 E.	Burma-China border region. h about 33 km.
11	20 42 56.0	51.6 N.	159.4 E.	Near coast of Kamchatka. h about 58 km.
11	22 00 28.1	22.2 N.	141.8 E.	Volcano Islands region. h about 100 km.
11	22 22 40.2	17.9 S.	178.6 W.	Fiji Islands. h about 640 km.
11	23 13 07.8	27.8 N.	54.9 E.	Southern Iran. h about 42 km.
12	00 14 28.7	18.9 N.	107.4 W.	Pacific Ocean off Jalisco, Mexico. h about 33 km.
12	06 54 39.5	9.3 S.	110.4 E.	Off south coast of Java. h about 44 km.
12	07 35 24.4	49.8 S.	163.8 E.	Southwest of South Island, New Zealand. h about 34 km.
12	09 58 17.1	21.6 N.	106.0 E.	North Viet-Nam. h about 33 km.
12	10 39 54.8	52.3 N.	159.9 E.	Kamchatka. h about 60 km.
12	17 04 56.0	27.1 N.	54.9 E.	Southern Iran. h about 49 km.
12	17 53 27.4	6.9 S.	155.0 E.	Solomon Islands. h about 110 km.
12	21 02 38.5	27.5 N.	54.3 E.	Southern Iran. h about 33 km.
12	21 48 30.1	27.5 N.	55.1 E.	Southern Iran. h about 35 km.
13	02 24 25.9	52.1 N.	176.5 W.	Andreanof Islands, Aleutian Islands. h about 56 km.
13	07 15 59.4	22.9 S.	12.7 W.	South Atlantic Ocean. h about 33 km.
13	11 55 44.1	0.0	121.5 E.	Celebes. h about 20 km.
13	13 16 38.5	33.1 S.	180.0	Kermadec Islands. h about 239 km.
13	13 36 29.4	8.7 N.	83.2 E.	Panama-Costa Rica border. h about 43 km.
13	15 16 09.9	44.2 N.	148.4 E.	Kurile Islands. h about 44 km.
13	17 12 12.7	22.7 S.	12.9 W.	Tristan Da Cunha region, South Pacific Ocean. h about 33 km.
13	18 23 17.7	45.1 N.	111.8 W.	Southwestern Montana. h about 23 km.
13	21 37 55.0	21.5 S.	176.4 W.	Tonga Islands region. h about 146 km.
13	22 12 17.0	9.8 S.	164.7 E.	Solomon Islands region. h about 25 km.
14	00 16 22.1	13.9 S.	165.9 E.	New Hebrides Islands. h about 33 km.
14	00 24 27.3	27.9 N.	55.0 E.	Southern Iran. h about 36 km.
14	00 41 13.0	24.5 N.	94.8 E.	Northern Burma. h about 62 km.
14	02 59 49.3	5.5 S.	151.9 E.	New Britain. Felt at Rabaul and Rangarere. h about 98 km.
14	08 15 34.9	34.8 N.	23.6 E.	Mediterranean Sea, southwest of Crete. h about 58 km.
14	09 03 37.0	28.0 N.	55.0 E.	Southern Iran. h about 34 km.
14	09 07 34.7	20.2 N.	121.5 E.	Off north coast of Luzon, Philippine Islands. h about 25 km.
14	17 31 45.7	36.6 N.	68.1 E.	Hindu Kush. h about 220 km.
14	18 44 31.3	26.1 N.	110.0 W.	Gulf of California. h about 39 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
14	20 32 21.6	10.5 N.	39.9 E.	Ethiopia. h about 33 km.
14	23 50 26.6	51.8 N.	175.0 W.	Fox Islands, Aleutian Islands. h about 33 km.
15	00 51 30.6	6.9 N.	73.1 W.	Colombia. Felt at Bogota. h about 146 km.
15	06 21 35.6	27.8 N.	54.8 E.	Southern Iran. h about 35 km.
15	06 54 52.2	2.4 S.	138.9 E.	Near coast of New Guinea. h about 52 km.
15	13 41 25.1	44.9 N.	111.8 W.	Southwestern Montana. h about 23 km.
15	20 49 42.3	39.1 N.	70.0 E.	Tadzhik S.S.R. h about 45 km.
15	22 25 50.6	51.9 N.	158.8 E.	Near south coast of Kamchatka. h about 25 km.
15	22 38 54.7	40.1 N.	146.2 E.	Off east coast of Honshu, Japan. h about 78 km.
15	23 24 43.8	45.9 N.	151.2 E.	Kurile Islands. h about 36 km.
16	03 18 01.4	45.1 N.	151.8 E.	Kurile Islands. h about 64 km.
16	06 31 29.8	51.3 N.	176.8 W.	Andreanof Islands, Aleutian Islands. h about 33 km.
16	07 08 16.5	41.3 S.	74.5 W.	Off coast of southern Chile. h about 17 km.
16	08 45 29.7	27.2 N.	54.5 E.	Southern Iran. h about 37 km.
16	10 31 56.2	8.9 N.	73.4 W.	Northern Colombia. Felt. h about 120 km. Mag. 6.
16	12 12 04.4	43.3 N.	103.9 E.	Southern Outer Mongolia. h about 23 km.
16	14 59 48.3	35.1 N.	27.5 E.	Dodecanese Islands region. h about 38 km.
16	15 46 03.0	21.9 S.	68.4 W.	Chile-Bolivia border. h about 89 km.
16	16 01 02.2	5.4 S.	150.8 E.	New Britain. h about 78 km.
16	18 10 06.3	11.2 N.	125.0 E.	Near north coast of Mindanao, Philippine Islands. h about 63 km.
16	18 38 30.4	45.2 N.	111.5 W.	Hebgen Lake, Montana area. h about 33 km.
16	21 28 00.0	6.9 S.	156.3 E.	Solomon Islands. h about 124 km.
16	22 54 07.2	16.1 S.	167.4 E.	New Hebrides Islands. h about 25 km.
17	04 58 58.5	20.6 S.	175.3 W.	Tonga Islands. h about 31 km.
17	08 05 53.0	27.9 N.	55.0 E.	Southern Iran. h about 38 km.
17	09 29 02.3	10.1 S.	161.0 E.	Solomon Islands. h about 49 km.
17	09 34 18.7	28.7 S.	178.9 W.	Kermadec Islands. h about 292 km.
17	10 56 30.3	12.0 S.	75.3 W.	Peru. h about 29 km. Mag. 5 (Pal).
17	14 32 51.6	9.9 N.	125.8 E.	Mindanao, Philippine Islands. h about 190 km.
17	15 07 33.7	14.2 N.	92.0 W.	Mexico-Guatemala border. h about 85 km. Mag. 6.
17	15 24 17.8	3.7 S.	138.2 E.	Central New Guinea. h about 139 km.
17	18 39 51.4	14.6 N.	92.1 W.	Near coast of Guatemala. h about 105 km.
17	21 49 25.8	20.9 S.	178.9 W.	Fiji Islands region. h about 627 km.
18	03 12 35.7	5.9 S.	113.0 E.	Java Sea. h about 641 km.
18	06 26 06.1	33.7 N.	81.8 E.	Tibet. h about 33 km.
18	08 12 07.1	32.4 N.	112.5 W.	Southern Arizona. h about 25 km.
18	08 16 55.9	1.7 S.	136.9 E.	Near north coast of New Guinea. h about 22 km.
18	10 10 08.8	27.8 N.	55.2 E.	Southern Iran. h about 33 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
18	10 52 03.0	27.3 N.	54.7 E.	Southern Iran. h about 33 km.
18	12 36 56.0	19.2 S.	178.0 W.	Fiji Islands region. h about 561 km.
18	13 21 55.9	0.2 N.	123.9 E.	Celebes. h about 91 km.
18	13 55 16.6	31.5 S.	179.8 E.	Kermadec Islands region. h about 434 km.
18	14 51 32.1	28.0 N.	54.9 E.	Southern Iran. h about 27 km.
18	16 13 58.0	20.1 S.	119.3 E.	Near coast of western Australia. h about 13 km.
18	16 47 03.9	21.3 S.	176.1 W.	Tonga Islands. h about 360 km.
18	17 33 19.1	39.1 S.	74.8 W.	Off coast of central Chile. h about 44 km.
18	21 42 43.7	44.9 N.	112.0 W.	Western Montana. h about 25 km.
18	22 13 25.1	56.6 S.	142.2 W.	South Pacific Ocean. h about 33 km.
19	00 47 29.1	22.4 S.	179.0 W.	Tonga Islands region. h about 410 km.
19	01 45 25.5	12.7 N.	122.1 E.	Near south coast of Luzon, Philippine Islands. Felt. h about 48 km.
19	02 22 53.1	12.6 N.	121.9 E.	Near south coast of Luzon, Philippine Islands. Felt. h about 44 km.
19	02 45 59.6	39.3 N.	143.1 E.	Off east coast of Honshu, Japan. h about 42 km.
19	04 34 15.1	10.3 N.	40.1 E.	Ethiopia. h about 33 km.
19	06 29 07.1	24.2 S.	179.6 E.	South of Fiji Islands. h about 591 km.
19	07 38 25.0	39.3 N.	143.0 E.	Off east coast of Honshu, Japan. h about 29 km.
19	07 59 41.1	39.6 N.	142.9 E.	Near east coast of Honshu, Japan. h about 39 km.
19	17 04 37.0	36.5 N.	70.9 E.	Hindu Kush. Felt. h about 200 km.
19	22 17 19.7	53.8 N.	161.1 E.	Kamchatka. h about 59 km.
20	03 21 34.3	12.2 N.	44.2 E.	Gulf of Aden. h about 33 km.
20	04 22 05.5	38.3 S.	73.4 W.	Near coast of southern Chile. h about 26 km.
20	06 38 47.1	14.8 S.	167.3 E.	New Hebrides Islands. h about 172 km.
20	09 49 02.5	15.6 N.	87.2 W.	Honduras. h about 35 km.
20	10 15 58.5	28.9 N.	54.7 E.	Southern Iran. h about 45 km.
20	14 27 02.6	21.9 S.	169.8 E.	Loyalty Islands. h about 64 km.
20	16 32 14.3	10.6 S.	164.9 E.	Santa Cruz Islands. h about 50 km.
20	21 21 47.1	15.4 N.	87.2 W.	Near north coast of Honduras. h about 67 km.
21	02 41 56.2	11.7 N.	144.6 E.	Mariana Islands region. h about 77 km.
21	03 57 41.1	15.5 N.	87.2 W.	Honduras. h about 58 km.
21	06 07 04.1	21.7 S.	177.0 W.	Tonga Islands region. h about 269 km.
21	06 39 23.0	27.8 N.	54.8 E.	Southern Iran. h about 40 km.
21	07 33 34.4	7.8 S.	146.7 E.	Eastern New Guinea. Felt at Wau. h about 25 km.
21	09 04 23.0	8.0 N.	123.9 E.	Near north coast of Mindanao, Philippine Islands. h about 610 km.
21	15 10 32.1	13.6 N.	90.1 W.	Near coast of Guatemala. Felt at San Salvador, El Salvador. h about 100 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
21	15 40 46.6	34.1 N.	48.3 E.	Western Iran. h about 33 km.
21	16 04 47.2	37.9 N.	28.7 E.	Western Turkey. Slight damage at Sarakoy. h about 31 km.
21	16 37 37.1	5.9 S.	128.5 E.	Banda Sea. h about 389 km.
21	18 13 59.4	18.9 S.	173.3 W.	Tonga Islands. h about 25 km.
21	19 14 34.9	27.5 N.	54.8 E.	Southern Iran. h about 45 km.
21	20 25 00.9	7.6 S.	110.0 E.	Near north coast of Java. Felt. h about 163 km.
21	23 04 00.2	15.4 N.	86.4 W.	Near north coast of Honduras. h about 75 km.
22	00 56 03.7	42.4 N.	19.3 E.	Northern Albania - Yugoslavia border. Slight damage at Titograd. h about 30 km.
22	03 22 55.8	18.0 S.	168.9 E.	New Hebrides Islands. h about 67 km.
22	05 33 35.4	21.3 S.	170.3 E.	Loyalty Islands. h about 55 km.
22	07 43 51.6	19.1 S.	70.8 W.	Near coast of northern Chile. h about 76 km.
22	09 05 15.1	28.0 N.	54.9 E.	Southern Iran. h about 43 km.
22	20 00 13.8	12.9 N.	90.0 W.	Off coast of El Salvador. h about 64 km.
23	01 08 33.1	15.2 N.	86.4 W.	Honduras. h about 67 km.
23	01 11 12.8	15.5 N.	87.2 W.	Honduras. h about 60 km.
23	08 55 55.2	44.1 N.	128.9 W.	Off coast of Oregon. h about 56 km. Mag. 5¼-5½ (Brk), 5¾-6 (Pal).
23	09 22 49.8	44.1 N.	128.8 W.	Off coast of Oregon. h about 53 km.
23	10 05 35.4	18.6 N.	145.2 E.	Mariana Islands. h about 256 km.
23	11 05 00.1	35.8 N.	139.9 E.	Honshu, Japan. Felt at Tokyo. h about 94 km.
23	13 20 13.9	47.1 N.	153.9 E.	Kurile Islands. h about 35 km.
23	16 36 22.8	27.6 N.	55.1 E.	Southern Iran. h about 32 km.
24	03 01 10.5	20.2 S.	177.4 W.	Tonga Islands region. h about 542 km.
24	05 07 55.6	13.4 N.	89.9 W.	Near coast of El Salvador. h about 81 km. Mag. 4¾-5 (Pal).
24	09 36 05.6	4.0 N.	97.5 E.	Sumatra. h about 135 km.
24	12 11 02.3	40.1 S.	70.7 W.	Near coast of southern Chile. h about 33 km.
24	16 01 17.7	1.9 N.	127.3 E.	Molucca Passage. h about 33 km.
24	16 19 23.7	4.6 S.	144.9 E.	Near north coast of New Guinea. Felt. h about 212 km.
24	16 57 11.5	10.6 S.	162.5 E.	Solomon Islands. h about 32 km.
24	17 11 13.7	6.5 S.	154.7 E.	Solomon Islands. h about 90 km.
24	19 34 32.6	2.9 S.	130.4 E.	Ceram Sea. h about 19 km.
25	02 29 28.2	40.9 N.	144.2 E.	Near north coast of Honshu, Japan. h about 26 km.
25	09 10 04.2	19.5 S.	177.9 W.	Fiji Islands. h about 489 km.
25	10 58 18.5	11.3 N.	74.7 W.	Near north coast of Colombia. Felt at Barranquilla. h about 33 km.
25	12 18 53.3	40.7 N.	144.6 E.	Off northeast coast of Honshu, Japan. h about 24 km.
25	12 40 23.7	27.9 N.	53.7 E.	Southern Iran. h about 54 km.
25	16 21 53.3	18.8 N.	121.2 E.	Near north coast of Luzon, Philippine Islands. h about 128 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
25	16 46 38.6	21.8 N.	143.5 E.	North of Mariana Islands. h about 33 km. Mag. 5¾ (Brk).
25	19 14 02.3	36.8 N.	141.6 E.	Near east coast of Honshu, Japan. h about 25 km.
25	19 32 14.4	37.9 S.	73.3 W.	Near coast of southern Chile. h about 124 km.
26	02 41 55.5	35.6 S.	178.7 W.	Kermadec Islands region. h about 33 km.
26	07 02 52.9	21.5 S.	170.1 E.	Loyalty Islands. h about 33 km.
26	12 56 56.6	27.3 N.	112.9 W.	Baja California. h about 60 km.
26	13 49 00.6	20.7 S.	174.6 W.	Tonga Islands. h about 33 km.
26	14 4 27.3	52.2 N.	174.7 E.	Near Islands, Aleutian Islands. h about 40 km. Mag. 5½-5¾ (Pal).
26	16 43 39.4	11.3 N.	74.2 W.	Near north coast of Colombia. Felt at Barranquilla, Cartagena and Santa Maria. h about 59 km.
27	03 07 47.8	8.6 S.	74.4 W.	Peru-Brazil border. h about 170 km.
27	03 22 09.2	53.8 N.	163.4 W.	Unimak Island region. h about 93 km.
27	05 39 57.7	8.6 S.	76.1 W.	Central Peru. h about 33 km.
27	07 03 42.2	28.0 N.	99.4 E.	Yunan Province, China. h about 33 km. Mag. 6.
27	07 52 53.5	54.6 N.	158.6 E.	Kamchatka. h about 273 km.
27	10 40 31.6	28.7 S.	176.1 W.	Kermadec Islands. h about 25 km.
27	10 45 54.7	28.0 N.	99.9 E.	Yunan Province, China. h about 33 km.
27	14 35 39.9	29.4 S.	176.9 W.	Kermadec Islands. h about 33 km.
27	15 22 11.9	38.3 S.	73.8 W.	Off coast of southern Chile. h about 33 km.
27	19 15 13.1	17.0 N.	94.3 W.	Oaxaca, Mexico. Felt at Salina Cruz. h about 33 km.
27	21 56 01.8	27.7 N.	99.6 E.	Yunan Province, China. h about 38 km.
28	01 17 15.6	12.0 N.	89.0 W.	Off coast of El Salvador. Felt at San Salvador. h about 33 km.
28	02 06 10.2	11.5 S.	74.0 W.	Central Peru. h about 25 km.
28	04 21 53.8	31.4 N.	104.0 E.	Szechwan Province, China. h about 34 km.
28	06 17 44.5	29.9 S.	177.6 W.	Kermadec Islands. h about 33 km.
28	13 15 28.5	4.5 S.	102.8 E.	Near south coast of Sumatra.. h about 90 km.
28	18 02 47.2	7.1 N.	73.2 W.	Northern Colombia. h about 137 km.
28	20 36 13.5	29.7 S.	177.5 W.	Kermadec Islands. h about 33 km.
29	01 12 24.9	1.3 S.	134.0 E.	Near north coast of western New Guinea. h about 33 km.
29	01 48 51.5	14.8 S.	166.3 E.	New Hebrides Islands. h about 146 km.
29	03 14 45.6	6.5 N.	125.7 E.	Mindanao, Philippine Islands. h about 229 km.
29	09 22 55.8	13.9 S.	166.0 E.	New Hebrides Islands. h about 37 km. Mag. 6¼-6½ (Brk), 5½-5¾ (Pal).
29	10 24 07.3	22.7 S.	179.1 E.	Fiji Islands region. h about 654 km.
29	11 34 55.7	45.5 N.	151.3 E.	Kurile Islands. h about 68 km.
29	14 02 42.5	52.4 N.	173.4 W.	Andreanof Islands, Aleutian Islands. h about 76 km.
29	15 11 11.1	13.6 S.	165.5 E.	New Hebrides Islands. h about 92 km.

Date 1961	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
June	h m s	°	°	
29	15 39 32.5	13.8 S.	165.9 E.	New Hebrides Islands. h about 74 km.
29	22 01 24.1	85.0 N.	97.8 E.	Severnaya Zemlya region. h about 33 km.
30	04 18 11.1	20.5 S.	175.8 W.	Tonga Islands. h about 148 km.
30	05 05 24.8	34.8 N.	26.3 E.	Mediterranean Sea, south of Crete. h about 40 km.
30	06 22 51.9	3.8 S.	102.5 E.	Sumatra. h about 71 km.
30	18 51 12.7	6.7 S.	129.3 E.	Banda Sea. h about 134 km.
30	19 44 07.3	2.8 S.	128.0 E.	Ceram Sea. h about 81 km.

Date and Station		Phase (GCT)
		h m s
June 1		
TUT	eP	00 40 27
	eS	41 26
June 1		
FGU	eP	01 00 52
	i	00 53
June 1		
COL	eP	03 33 16
	e	33 48
June 1		
COL	iP	06 06 17
	i	06 27
June 1		
COL	eP	07 01 51
June 1		
COL	iP	08 05 55
	i	06 04
	isP	06 39
TUC	eP	08 10 02
June 1		
FGU	eP	08 54 22
	e	54 42
June 1		
FGU	e(P)	09 57 03
June 1		
BUT	eP	10 10 52
COL	iP	10 13 38
	i	13 53
	i	14 12
CSC	eP	10 06 29
	e	07 58
FGU	eP	10 10 22
RCD	eP	10 09 56
SLC	eP	10 10 35
SJP	iP	10 03 33
	i(S)	04 10
TUC	iP	10 10 11
TUT	eP	10 10 11
WAS	e(P)	10 07 07
June 1		
COL	eP	12 07 18
	i	07 25
HHM	eP	12 10 12
June 1		
COL	eP	13 45 18
June 1		
COL	e(P)	16 30 25
EUR	eP	16 29 13

Date and Station		Phase (GCT)
		h m s
June 1		
BOZ	eP	16 36 48
June 1		
COL	iP	17 26 33
June 1		
COL	eP	17 55 10
EUR	eP	17 59 03
HHM	eP	17 58 52
June 1		
EUR	eP	18 56 08
June 1		
EUR	e(P)	23 10 01
June 1		
BUT	eP'	23 49 32
COL	e(P)	23 43 42
	e(PP)	46 42
CSC	eP'	23 48 16
EUR	eP'	23 48 30
FGU	eP'	23 48 12
	e	48 22
HHM	eP'	23 48 09
KIP	eP'	23 49 05
RCD	eP'	23 48 12
	e	49 17
SJP	e(P)	23 43 05
TUC	eP'	23 48 30
	e	48 38
	ePP	50 44
	e(SKS)	55 12
	eL	24 17 30
TUT	eP'	23 48 29
WAS	eP'	23 47 40
June 2		
TUC	eP'	00 20 54
June 2		
TUC	eP'	00 23 07
	ePP	30 20
TUT	eP'	00 28 06
June 2		
EUR	eP	02 32 52
FGU	eP	02 32 45
June 2		
COL	iP	04 49 27
	i	49 31
	i	49 57
EUR	eP	04 50 35

Date and Station		Phase (GCT)
		h m s
June 2		
EUR	eP	04 54 36
June 2		
EUR	eP	04 57 54
SJP	iP	04 57 04
	i	57 25
	e	59 33
June 2		
RCD	eP'	05 03 56
June 2		
BUT	eP'	05 11 16
COL	eP	05 05 22
	iPP	09 36
EUR	eP'	05 10 15
FGU	eP'	05 10 06
	e	10 55
	ePP	11 38
HON	eP'	05 10 47
	e	14 00
	eL	50 56
HHM	eP'	05 09 57
	e	10 10
KIP	iP'	05 10 52
RCD	eP'	05 09 56
SLC	eP'	05 09 45
	e	10 22
SJP	eP'	05 09 09
	e	09 22
TUC	eP'	05 10 24
	ePP	12 35
	e(SKS)	17 18
	eL	54 33
TUT	eP'	05 10 24
UKI	eP'	05 10 06
WAS	eP	05 05 18
	eP'	09 28
June 2		
COL	i(P)	05 16 04
	e	21 06
EUR	eP	05 19 55
June 2		
COL	eP'	05 40 45
EUR	eP'	05 41 33
HHM	eP'	05 41 21
	e(PP)	42 30
SJP	eP'	05 40 30

Date and Station		Phase (GCT)
		h m s
TUC	eP'	05 41 40
	ePP	44 12
	eSKS	49 22
TUT	eP'	05 41 41
June 2		
BCN	eP'	06 04 03
COL	eP'	06 03 17
FGU	eP'	06 03 48
	e	05 18
HHM	eP'	06 04 48
TUC	eP'	06 04 03
TUT	eP'	06 04 03
June 2		
COL	eP	06 11 26
June 2		
COL	iP	06 30 58
TUC	eP'	06 36 22
June 2		
BCN	eP	06 44 00
FGU	eP	06 41 24
	e	43 00
June 2		
BCN	eP'	07 21 58
COL	iP'	07 21 17
EUR	eP'	07 21 52
TUC	eP'	07 22 01
TUT	eP'	07 22 00
June 2		
EUR	eP	10 27 08
June 2		
COL	eP	11 13 41
EUR	eP	11 16 26
TUC	e(P)	11 17 10
June 2		
FGU	eP	12 14 08
June 2		
FGU	eP	13 00 50
TUC	e(P)	13 00 13
June 2		
EUR	e(P)	15 11 00
June 2		
BCN	eP	18 21 57

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Date and Station		Phase (GCT) h m s
BUT	eP	18 21 48
COL	iP	18 19 37
EUR	eP	18 21 49
FGU	eP	18 22 08
HHM	iP	18 21 40
TUT	eP	18 22 23
June 2		
BCN	eP	18 35 15
COL	eP	18 38 35
CSC	eP	18 33 30
EUR	eP	18 35 31
FGU	eP	18 35 14
HHM	iP	18 36 10
SJP	eP	18 31 40
	i	31 56
TUT	eP	18 34 31
June 2		
SLC	eP	19 40 30
June 2		
BCN	eP	19 49 53
June 2		
FGU	eP	23 56 36
June 3		
BCN	eP	01 23 05
BOZ	eP	01 22 29
BUT	eP	01 22 20
	eS	29 30
COL	iP	01 18 44
	eS	23 03
EUR	iP	01 22 42
FGU	eP	01 22 59
HON	e(S)	01 35 34
HHM	iP	01 22 02
	eS	29 08
KIP	iP	01 21 36
RCD	iP	01 23 06
TUC	eP	01 23 39
	ePP	26 02
	e(S)	32 04
	eL	42 54
TUT	eP	01 23 40
UKI	eP	01 22 08

Date and Station		Phase (GCT) h m s
June 3		
BCN	eP	03 31 34
COL	iP	03 31 26
	i	31 34
EUR	eP	03 31 35
TUC	eP	03 31 42
TUT	eP	03 31 43
June 3		
BCN	eP	03 53 23
COL	iP	03 53 14
EUR	eP	03 53 24
TUC	eP	03 53 32
TUT	eP	03 53 32
June 3		
EUR	eP	04 02 00
June 3		
EUR	eP	04 33 14
FGU	eP	04 33 00
SJP	eP	04 29 00
June 3		
COL	iP	04 55 09
June 3		
COL	iP	06 07 34
	i	07 55
EUR	eP	06 08 37
June 3		
EUR	eP	06 17 24
June 3		
COL	eP	06 27 43
June 3		
FGU	eP	08 22 10
	e	22 32
June 3		
COL	iP	09 26 54
	i	27 29
EUR	eP	09 27 58
June 3		
EUR	e(P)	11 06 20
June 3		
EUR	e(P)	12 43 04
June 3		
SLC	eP	14 10 02
	eS	10 27
June 3		
COL	eP'	15 38 53

Date and Station		Phase (GCT) h m s
June 3		
COL	eP'	15 41 37
BCN	eP'	15 42 28
HHM	e(P')	15 42 53
TUT	eP'	15 42 30
June 3		
COL	e(P)	17 19 25
EUR	eP	17 20 03
June 3		
COL	iP	17 56 12
EUR	eP'	18 01 53
June 3		
EUR	e(P)	19 40 28
June 3		
EUR	e(P)	20 02 19
June 3		
EUR	e(P)	20 14 32
June 3		
COL	iP	20 45 35
EUR	eP	20 45 02
June 3		
EUR	eP	21 13 08
June 3		
EUR	eP	21 37 06
SJP	iP	21 31 25
	e	33 44
June 3		
COL	eP	22 04 01
EUR	eP	22 04 12
TUC	eP	22 04 19
TUT	eP	22 04 20
June 3		
COL	e(P)	22 46 13
June 4		
BCN	eP	02 31 52
June 4		
EUR	e(P)	03 22 54
June 4		
EUR	e(P)	03 37 43
June 4		
FGU	e(P)	04 11 42
June 4		
FGU	e(P)	04 25 38
June 4		
COL	eP	04 38 55

Date and Station		Phase (GCT) h m s
EUR	eP	04 42 13
June 4		
FGU	e(P)	04 49 27
BCN	eP'	07 51 39
June 4		
BOZ	eP	07 46 48
	ePP	50 53
BUT	eP	07 46 46
COL	iP	07 44 39
	i	45 39
	e(S)	54 05
EUR	eP	07 47 13
	i	52 19
FGU	e(P)	07 44 47
	e	45 02
HHM	iP	07 46 34
	iPP	50 28
	eSKS	57 16
	eS	57 54
	ePS	59 20
RCD	eP	07 47 00
SJP	eP'	07 53 11
SIT	e(P)	07 45 34
TUC	eP'	07 51 45
June 4		
BCN	eP'	08 01 52
	e	02 40
COL	iP	07 55 19
EUR	eP'	08 01 04
TUT	eP'	08 02 34
June 4		
EUR	eP	08 13 33
SJP	e(P)	08 09 32
June 4		
COL	iP	08 58 56
EUR	eP'	09 04 12
June 4		
EUR	eP	09 14 29
June 4		
FGU	e(P)	09 50 03
June 4		
BCN	eP	10 41 41

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Date and Station		Phase	(GCT) h m s
BUT		eP	10 41 59
COL		eP	10 44 52
EUR		eP	10 41 13
HHM		eP	10 42 01
RCD		e(P)	10 43 18
TUC		eP	10 42 50
TUT		eP	10 42 50
June 4			
EUR		eP	11 09 02
HHM		eP	11 09 51
TUT		e(P)	11 08 17
June 4			
COL		iP	11 29 47
		epP	30 32
June 4			
COL		eP	13 29 53
EUR		eP	13 28 13
June 4			
COL		iP	14 03 05
		ePP	05 46
EUR		eP'	14 09 48
TUC		eP'	14 09 50
June 4			
COL		iP	14 09 59
June 4			
BHP		iP	16 20 46
		iS	21 27
BCN		eP	16 26 37
COL		eP	16 30 19
EUR		eP	16 26 59
HHM		eP	16 27 36
June 4			
COL		eP	16 52 13
EUR		eP	16 55 32
June 4			
EUR		eP	17 34 45
June 4			
EUR		eP	18 28 39
June 4			
EUR		eP	20 19 25
June 4			
EUR		e(P)	21 08 21
June 4			
COL		eP	23 07 08
		esP	08 24
EUR		eP	23 07 26
June 4			
EUR		e(P)	23 14 39
June 4			
COL		eP	23 47 19
June 5			
EUR		eP	00 16 32
June 5			
COL		iP	00 41 17
June 5			
COL		iP	02 21 11
HHM		iP	02 23 26
June 5			
EUR		eP	03 16 58
June 5			
COL		eP	03 43 34
EUR		eP'	03 49 59
June 5			
COL		eP	03 57 13
		epP	59 23
EUR		e(P)	03 56 52
TUC		eP	03 56 52
June 5			
BOZ		eP	04 24 49
EUR		e(P)	04 26 29
June 5			
EUR		eP	04 48 55
HHM		eP	04 48 25
June 5			
EUR		e(P)	06 13 48
June 5			
COL		eP	06 24 06
June 5			
COL		eP	06 44 39
June 5			
EUR		e(P)	08 19 11
June 5			
EUR		e(P)	09 50 30
June 5			
COL		iP	17 42 09
		ipP	42 29
		isP	42 43
EUR		eP	17 43 07
June 5			
BUT		eP	22 59 58
EUR		eP	22 59 55
HHM		eP	22 59 39
		iS	23 00 27
June 5			
EUR		eP	23 50 55
June 6			
COL		iP	00 45 04
EUR		eP	00 42 48
FGU		eP	00 42 11
HHM		eP	00 42 51
SJP		iP	00 34 52
		i(S)	35 48
TUC		eP	00 42 11
June 6			
COL		eP	02 19 41
June 6			
EUR		e(P)	03 41 27
June 6			
BUT		eP	03 48 49
		e(S)	50 14
COL		eP	03 51 28
		e	51 41
EUR		eP	03 48 30
FGU		eP	03 49 23
HHM		iP	03 48 46
		e(S)	50 20
RCD		e(P)	03 50 15
TUC		eP	03 50 14
TUT		eP	03 50 15
June 6			
EUR		eP	07 06 29
FGU		eP	07 06 33
HHM		eP	07 07 18
TUC		eP	07 05 42
TUT		e(P)	07 05 44
June 6			
EUR		e(P)	07 50 23
June 6			
BCN		eP	08 23 33
BOZ		e(P)	08 24 17
COL		iP	08 24 08
		i	24 34
		isP	24 45
EUR		eP	08 23 38
FGU		e(P)	08 24 06
HHM		eP	08 24 09
TUC		eP	08 23 38
TUT		eP	08 23 39
June 6			
EUR		e(P)	09 31 09
June 6			
BCN		eP	09 38 09
FGU		e(P)	09 41 06
June 6			
EUR		e(P)	09 51 06
June 6			
COL		e(P)	09 58 50
June 6			
EUR		eP	10 42 10
June 6			
COL		iP	12 36 54
EUR		eP	12 36 51
FGU		e(P)	12 37 08
		e	37 16
June 6			
EUR		eP	20 38 56
June 6			
COL		eP	21 07 22
June 6			
COL		eP	23 53 17
		e	53 32
EUR		eP	23 53 45
June 7			
BOZ		eP	00 00 15
June 7			
HHM		e(P)	00 46 06
June 7			
EUR		eP	01 39 32
June 7			
FGU		e(P)	03 16 22
		e	16 42
June 7			
EUR		e(P)	05 04 49

Date and Station		Phase (GCT)
		h m s
June 7		
COL	iP	05 10 32
EUR	eP	05 13 52
TUC	e(P)	05 14 53
TUT	eP	05 14 54
June 7		
EUR	eP	10 23 41
June 7		
FGU	eP	12 39 09
	eS	39 46
June 7		
COL	iP	13 14 11
EUR	eP	13 17 18
HHM	e(P)	13 16 50
June 7		
SLC	e(P)	14 17 37
TUT	e(P)	14 18 18
June 7		
BHP	iP	14 26 30
COL	eP'	14 35 40
CSC	eP	14 27 12
EUR-	eP'	14 33 45
SJP	eP	14 25 20
TUC	e(P')	14 33 16
	eL	15 18 50
WAS	eP	14 26 59
June 7		
TUT	e(P)	14 44 11
June 7		
BCN	eP	15 50 42
COL	eP	15 50 18
	i	50 27
	e	50 58
EUR	iP	15 50 43
TUT	eP	15 50 55
June 7		
HHM	iP	15 56 00
June 7		
COL	eP	19 31 04
June 7		
COL	iP	23 07 10
	i	07 16
	i	07 25
	e	07 47
EUR	e(P)	23 06 35
SLC	eP	23 07 03
TUT	e(P)	23 06 35
June 7		
SLC	eP	23 44 03
June 8		
TUT	e(P)	01 04 38
June 8		
EUR	eP	02 16 33
June 8		
EUR	e(P)	02 54 19
June 8		
EUR	eP	03 19 29
June 8		
EUR	eP	04 04 50
June 8		
COL	eP	04 10 36
June 8		
EUR	e(P)	05 02 49
June 8		
EUR	eP	05 22 48
June 8		
COL	iP	08 33 03
EUR	eP	08 36 26
June 8		
COL	eP	08 35 59
EUR	eP	08 39 29
June 8		
COL	eP	09 06 54
	ipP	07 16
	isP	07 22
June 8		
THU	e(P)	09 27 34
June 8		
BCN	eP	09 47 27
COL	iP	09 46 49
	i	46 59
	ipP	47 04
EUR	iP	09 47 24
June 8		
EUR	e(P)	10 43 06
June 8		
EUR	eP	10 58 50
June 8		
EUR	eP	11 04 55
June 8		
COL	e(P)	11 47 36
EUR	eP	11 50 57
June 8		
COL	e(P)	12 18 15
EUR	eP	12 21 38
June 8		
EUR	eP	13 16 47
June 8		
FGU	eP	15 51 06
June 8		
COL	eP	15 57 04
	e	57 34
CSC	eP'	16 03 45
EUR	eP'	16 02 53
HHM	eP'	16 02 50
RCD	e(P')	16 03 06
TUT	eP'	16 03 05
WAS	eP'	16 03 38
June 8		
SJP	iP	19 12 28
June 8		
EUR	eP	20 45 53
June 8		
EUR	eP	23 04 20
June 9		
COL	iP	04 07 29
THU	iP	04 06 35
June 9		
EUR	eP	04 36 39
June 9		
BCN	eP	05 40 22
	e	41 59
EUR	eP	05 41 41
FGU	e(P)	05 45 32
TUC	e(P)	05 46 59
June 9		
COL	eP	06 06 10
EUR	eP	06 03 00
FGU	eP	06 02 40
	e	06 22
HHM	eP	06 03 39
RCD	eP	06 02 39
SJP	iP	05 59 02
	i	59 13
TUC	eP	06 01 59
June 9		
EUR	eP	08 42 47
June 9		
BOZ	eP	09 50 01
COL	iP	09 48 23
	i	48 32
	i	48 39
	i	48 59
EUR	iP	09 50 31
FGU	e(P)	09 50 20
HHM	iP	09 49 49
RCD	eP	09 51 59
THU	eP	09 46 33
June 9		
COL	iP	14 32 26
EUR	iP	14 34 58
HHM	iP	14 34 40
June 9		
COL	e(P)	15 31 17
EUR	eP'	15 36 50
HHM	eP'	15 36 38
June 9		
COL	eP	15 52 23
	e	52 47
EUR	iP	15 55 02
FGU	eP	15 55 20
GUA	eP	15 46 56
	epP	47 00
	iS	50 09
	esS	50 53
HHM	iP	15 54 44
June 9		
UKI	e(P)	16 43 34
June 9		
EUR	eP	17 14 38
June 9		
BUT	eP	18 12 02
June 9		
BCN	eP	19 05 24
	e	09 10

Date and Station		Phase	(GCT) h m s
COL		iP	19 04 59
		i	05 06
		ipP	05 22
		isP	05 41
EUR		eP	19 05 25
FGU		eP	19 05 48
		e	11 52
HHM		eP	19 05 40
June 9			
EUR		eP	21 00 09
June 9			
BOZ		eP	21 49 36
June 9			
EUR		eP	21 57 16
June 9			
GUA		eP	22 12 14
CSC		eP'	22 25 38
EUR		eP'	22 24 43
FGU		eP'	22 24 50
SJP		eP'	22 25 28
June 9			
FGU		eP	22 03 57
June 10			
BOZ		eP	00 04 38
June 10			
EUR		eP	00 13 47
June 10			
EUR		eP	00 33 54
FGU		e(P)	00 33 45
June 10			
COL		eP	00 51 21
		i	51 26
EUR		iP	00 51 53
June 10			
BCN		eP	02 18 26
EUR		eP	02 19 14
FGU		e(P)	02 19 42
		e	22 31
TUT		eP	02 18 32
		eS	19 46
June 10			
EUR		i(P)	02 21 30
June 10			
EUR		eP	03 36 38
June 10			
FGU		e(P)	04 07 30
		e	07 37
June 10			
BOZ		iP	05 42 50
BUT		eP	05 43 03
EUR		eP	05 44 54
HHM		eP	05 43 44
		iS	44 26
June 10			
COL		eP	05 59 28
		e	59 34
EUR		iP	06 03 00
HHM		eP	06 02 29
June 10			
FGU		eP	06 11 43
HHM		e(P)	06 12 27
TUT		e(P)	06 11 08
June 10			
EUR		e(P)	06 24 15
June 10			
COL		eP	08 19 55
EUR		eP	08 23 31
HHM		eP	08 23 05
June 10			
BCN		eP	08 39 03
		e	40 11
EUR		eP	08 39 44
June 10			
BHP		iP	08 57 15
		i(S)	09 01 42
BCN		eP	08 58 07
BOZ		eP	08 59 20
		e	09 05 16
BUT		eP	08 59 24
COL		eP	09 02 39
EUR		eP	08 58 38
FGU		iP	08 58 36
		e	09 01 04
		e	06 06
HHM		iP	08 59 44
RCD		eP	08 59 00
SLC		eP	08 58 41
TUC		eP	08 57 25
TUT		eP	08 57 25
		e	57 53
WAS		eP	08 59 22
		e	09 05 30
		e	15 02
June 10			
EUR		eP	09 10 23
June 10			
COL		eP	09 25 07
EUR		eP	09 22 24
HHM		eP	09 23 19
RCD		eP	09 22 56
TUC		eP	09 21 33
TUT		eP	09 21 35
June 10			
THU		e(P)	10 22 30
June 10			
EUR		e(P)	11 37 48
June 10			
COL		iP	11 37 03
		e	37 33
		i	37 48
EUR		eP	11 40 28
FGU		e(P)	11 40 51
HHM		eP	11 39 57
RCD		eP	11 41 06
THU		eP	11 40 33
TUC		eP	11 41 27
June 10			
BCN		eP	11 56 52
BUT		eP	11 57 29
COL		eP'	12 03 22
FGU		eP	11 57 00
		i	57 14
HHM		iP	11 57 40
RCD		eP	11 57 04
TUC		eP	11 56 24
TUT		eP	11 56 25
June 10			
EUR		eP	15 26 48
June 10			
EUR		eP	16 02 45
THU		eP	16 01 23
June 10			
COL		eP	16 09 01
EUR		eP	16 12 54
June 10			
THU		eP	16 31 38
June 10			
THU		e(P)	17 29 00
June 10			
EUR		eP	17 45 14
June 10			
THU		eP	19 01 40
June 10			
EUR		eP	19 17 54
June 10			
CSC		eP	20 22 30
June 10			
BHP		iP	20 40 11
		i(S)	46 59
BCN		eP	20 41 57
BUT		eP	20 43 03
		e(S)	52 13
		eL	21 02 13
COL		iP	20 45 04
		i	45 11
		e	45 46
EUR		iP	20 42 21
FGU		eP	20 42 28
HON		e(P)	20 42 25
		eS	51 08
		eL	58 35
HHM		iP	20 43 15
KIP		eP	20 42 33
RCD		eP	20 42 53
SLC		eP	20 42 20
SJP		i(P)	20 41 56
TUC		eP	20 41 29
		e(S)	49 21
		eL	58 59
TUT		eP	20 41 31
		i	41 43
WAS		iP	20 43 07
		eL	21 04 42
June 10			
EUR		eP	22 08 06
June 10			
EUR		eP	23 07 56

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Date and Station		Phase (GCT) h m s
June 10		
SLC	eP	23 49 24
June 11		
EUR	eP	02 05 50
June 11		
COL	eP	03 41 54
EUR	eP	03 41 35
TUC	e(P)	03 41 36
June 11		
COL	eP	04 08 50
	i	09 19
	ipP	09 49
EUR	eP	04 12 30
FGU	e(P)	04 13 07
HHM	e(P)	04 12 18
RCD	eP	04 12 58
June 11		
BCN	eP'	05 29 08
BOZ	eP	05 24 41
	eP'	29 07
	e	31 13
	eSKS	35 27
BUT	eP'	05 28 46
	e	31 13
COL	iP	05 23 04
	iS	33 38
CSC	eP'	05 28 09
EUR	eP	05 25 13
	iP'	28 34
FGU	e(P)	05 25 05
	eP'	28 16
	i	28 58
	i	39 59
GUA	iP	05 23 04
	e	23 28
	ePP	27 56
	PPP	29 59
	iS	33 28
	ePS	37 04
	eSP	37 39
	eL	53 17
HON	ePP	05 31 04
	e	38 06
	e	40 36
	e	52 31
	eL	06 02 18
HHM	iP	05 24 28
	iP'	28 37
	eSKS	35 09
	eS	36 17
	ePKKP	40 19

Date and Station		Phase (GCT) h m s
KIP	eP'	05 29 22
RCD	eP	05 24 41
	eP'	28 50
SLC	eP	05 24 59
	eP'	28 15
SJP	iP'	05 29 06
	i	29 42
THU	iP	05 21 37
	ePP	24 13
	e(S)	31 01
TUC	eP'	05 29 12
	ePP	30 43
TUT	eP'	05 29 13
WAS	eP	05 24 14
June 11		
EUR	i(P)	05 39 51
June 11		
HHM	e(P)	05 44 13
THU	eP	05 41 20
TUC	eP'	05 48 59
June 11		
EUR	eP	05 59 32
FGU	eP	05 59 42
	e	59 53
	e	03 05
June 11		
BCN	eP	06 03 04
COL	iP	05 59 07
EUR	eP	06 02 42
HHM	e(P)	06 02 05
RCD	eP	06 03 09
THU	eP	06 01 38
TUC	e(P)	06 03 37
June 11		
COL	e(P)	06 23 18
June 11		
COL	iP	06 32 05
	i	32 54
June 11		
COL	iP	06 37 30
	e	37 42
EUR	eP	06 37 02
June 11		
COL	eP	06 59 25

Date and Station		Phase (GCT) h m s
EUR	eP'	07 05 00
THU	e(P)	06 58 01
June 11		
COL	iP	07 04 06
	i	04 26
EUR	eP'	07 09 49
June 11		
EUR	eP	07 16 16
June 11		
EUR	eP	07 20 53
June 11		
COL	eP	08 16 47
June 11		
COL	iP	09 34 16
June 11		
COL	iP	10 15 44
June 11		
COL	eP	10 29 30
EUR	eP	10 29 44
FGU	eP	10 29 09
HHM	eP	10 28 59
June 11		
EUR	e(P)	11 12 31
June 11		
COL	eP	11 36 47
	i	36 53
June 11		
COL	iP	12 43 02
THU	eP	12 41 33
June 11		
BCN	eP'	12 50 02
BUT	eP'	12 49 44
COL	iP	12 44 06
	i	44 21
	i	45 02
EUR	e(P')	12 49 43
FGU	eP'	12 49 19
HHM	e(P)	12 45 32
	eP'	49 44
THU	eP	12 42 38
TUC	eP'	12 50 15
TUT	eP'	12 50 14
June 11		
COL	iP	12 55 22
	e	55 36

Date and Station		Phase (GCT) h m s
EUR	eP'	13 00 48
June 11		
EUR	eP	14 00 16
June 11		
COL	iP	14 10 37
	i	10 46
	ePP	13 59
	ePKKP	28 39
BUT	eP'	14 16 11
EUR	eP'	14 15 49
FGU	eP'	14 15 52
	e	16 42
HHM	e(P)	14 12 00
	eP'	16 15
THU	eP	14 09 09
June 11		
EUR	eP	14 27 22
June 11		
COL	eP	15 00 26
June 11		
COL	iP	15 18 54
THU	eP	15 17 24
June 11		
SLC	eP	17 00 04
	e	01 01
June 11		
COL	iP	17 12 04
EUR	eP	17 08 08
TUT	eP	17 06 51
June 11		
BOZ	eP	17 14 35
BUT	eP	17 14 20
	eS	14 43
FGU	eP	17 15 08
	e	15 16
	iL	16 33
HHM	iP	17 14 43
	iS	15 38
June 11		
COL	iP	17 27 24
THU	eP	17 27 31
June 11		
COL	e(P)	17 44 43
June 11		
EUR	eP	18 22 49

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Date and Station		Phase	(GCT) h m s
June 11			
COL	iP		20 48 59
	e		49 16
EUR	eP		20 52 37
June 11			
BUT	eP		22 12 55
COL	iP		22 10 41
	i		10 49
	i		11 18
	i		14 07
EUR	iP		22 12 56
FGU	eP		22 13 16
	e		13 38
GUA	iP		22 02 38
	e		02 54
	e		03 14
HHM	iP		22 12 45
TUC	eP		22 13 29
TUT	eP		22 13 30
June 11			
COL	eP		22 34 09
	epP		36 23
EUR	eP		22 33 55
HHM	e(P)		22 34 22
TUC	eP		22 33 56
	e(pP)		35 54
June 11			
EUR	eP		22 59 33
June 11			
COL	iP		23 15 27
June 11			
COL	iP		23 25 45
June 12			
BCN	eP		00 18 40
BOZ	e(P)		00 20 18
	eL		30 01
BUT	e(P)		00 20 21
COL	e(P)		00 23 53
CSC	e(P)		00 20 40
EUR	eP		00 19 22
FGU	eP		00 19 23
HHM	eP		00 20 34
RCD	e(P)		00 20 01
TUC	eP		00 17 43
	iP		17 45
	e(S)		20 24
	eL		21 24

Date and Station		Phase	(GCT) h m s
TUT	eP		00 17 44
June 12			
TUT	eP		02 33 24
June 12			
BUT	eP		03 15 47
June 12			
COL	eP		04 04 37
June 12			
RCD	eP		04 50 31
June 12			
EUR	eP		05 16 29
GUA	eP		05 20 28
June 12			
COL	e(P)		05 29 25
GUA	eP		05 31 00
June 12			
COL	eP		06 31 40
HHM	e(P)		06 34 29
June 12			
EUR	eP'		07 13 43
FGU	eP'		07 13 49
	e		14 10
HHM	e(P')		07 13 36
June 12			
COL	iP'		07 54 14
EUR	eP'		07 54 02
HHM	ePP		07 56 16
RCD	eP'		07 54 21
THU	eP'		07 55 02
June 12			
COL	iP		10 10 10
	i		10 23
	i		10 40
	i		10 53
EUR	eP		10 12 40
HHM	e(P)		10 12 14
THU	iP		10 10 35
June 12			
EUR	eP		10 16 33
FGU	e(P)		10 16 46
June 12			
COL	eP		10 45 54
June 12			
EUR	eP		11 31 53
June 12			
COL	eP		11 51 52
	i		51 56
	i		52 05

Date and Station		Phase	(GCT) h m s
EUR	eP		11 55 23
HHM	eP		11 54 51
June 12			
COL	e(P)		14 33 41
June 12			
EUR	eP		16 34 58
June 12			
GUA	iP		17 02 19
June 12			
COL	e(P)		17 17 34
	e		17 37
June 12			
COL	e(P)		17 43 48
EUR	eP		17 37 16
HHM	eP		17 36 58
June 12			
COL	iP		18 05 42
EUR	iP		18 06 36
GUA	eP		17 58 14
	e		58 28
June 12			
FGU	eP		21 11 49
June 12			
COL	eP		22 01 09
THU	eP		21 59 43
June 12			
TUC	eP		22 56 27
June 12			
TUC	e(P)		22 59 39
June 13			
FGU	e(P)		01 04 46
	eS		05 38
June 13			
BCN	eP		02 32 46
BOZ	eP		02 32 18
COL	iP		02 28 54
	i		29 12
	i		29 22
CSC	eP		02 35 18
EUR	iP		02 32 22
FGU	eP		02 33 00
	i		34 38
HHM	iP		02 31 52
	i		32 18
	iPcP		34 01
RCD	eP		02 33 00

Date and Station		Phase	(GCT) h m s
SJP	iP		02 37 13
THU	eP		02 32 34
TUC	eP		02 33 23
	ePP		35 10
	eS		40 10
June 13			
COL	iP		02 37 05
EUR	eP		02 37 58
June 13			
EUR	eP		04 43 09
FGU	eP		04 43 10
June 13			
SJP	e(P)		07 25 54
June 13			
EUR	eP		07 41 25
June 13			
EUR	eP		08 18 28
June 13			
COL	eP		12 08 45
EUR	eP'		12 14 26
GUA	eP		12 01 26
June 13			
EUR	eP		13 28 23
TUC	eP		13 29 13
June 13			
COL	eP		13 47 57
EUR	eP		13 44 25
FGU	eP		13 44 14
HHM	eP		13 45 07
SJP	eP		13 40 55
TUT	e(P)		13 43 17
June 13			
EUR	iP		14 22 51
June 13			
COL	eP		14 32 17
EUR	eP		14 34 12
June 13			
COL	iP		15 23 48
	i		23 54
	i		24 10
EUR	eP		15 27 05
HHM	e(P)		15 26 37

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Date and Station		Phase (GCT) h m s
TUC	e(P)	15 27 27
June 13		
BUT	iP	18 23 38
	e(S)	23 57
FGU	eP	18 24 26
	i	24 31
HHM	eP	18 24 15
	iL	25 16
June 14		
FGU	eP	18 44 24
	e	48 00
June 13		
COL	eP	20 54 55
June 13		
EUR	eP	21 45 20
June 13		
BCN	eP	21 50 01
	epP	50 41
BOZ	eP	21 50 39
	epP	51 18
BUT	eP	21 50 35
	epP	51 15
	eS	22 01 11
COL	iP	21 50 36
	ipP	51 17
	iS	22 01 10
EUR	iP	21 50 07
	i(pP)	50 39
FGU	eP	21 50 46
	ipP	51 25
	eS	22 01 02
GCA	eP	21 50 16
	ipP	50 55
GUA	iP	21 46 51
	epP	47 33
	ePcP	48 06
	eScP	51 47
HON	eP	21 46 10
	iS	52 50
HHM	iP	21 50 38
KIP	iP	21 46 10
	i	46 53
RCD	eP	21 50 56
SLC	eP	21 50 25
	epP	51 03
TUC	eP	21 50 06
	ipP	50 44
TUT	eP	21 50 07
	ipP	50 45

Date and Station		Phase (GCT) h m s
June 13		
EUR	eP	22 16 32
TUT	e(P)	22 16 34
June 13		
EUR	eP	22 22 08
June 13		
COL	eP	22 24 41
EUR	eP	22 25 10
June 13		
FGU	eP	22 35 49
June 14		
COL	iP	00 29 00
	i	29 08
EUR	eP	00 29 19
June 14		
COL	eP	00 37 04
June 14		
COL	iP	00 53 10
EUR	eP'	00 59 39
HHM	eP'	00 59 19
SJP	eP'	01 00 25
TUC	eP'	00 59 57
June 14		
EUR	eP	01 10 41
HHM	e(P)	01 11 18
June 14		
COL	eP	03 12 08
	e	12 18
EUR	eP	03 13 06
June 14		
COL	eP	04 12 49
EUR	e(P)	04 13 50
June 14		
FGU	eP	05 44 19
	e	44 51
June 14		
CSC	eP	05 56 35
FGU	eP	06 00 19
	e	00 44
June 14		
COL	eP	09 16 15
	e	16 22
EUR	eP'	09 21 20
HHM	eP'	09 21 06

Date and Station		Phase (GCT) h m s
June 14		
COL	eP	09 18 59
	i	19 35
June 14		
EUR	eP	10 55 19
June 14		
EUR	eP	11 12 17
June 14		
EUR	eP	11 25 16
June 14		
EUR	eP	11 41 14
June 14		
COL	e(P)	12 28 51
EUR	eP	12 32 21
HHM	eP	12 31 50
June 14		
EUR	eP	12 56 03
June 14		
EUR	eP	13 11 54
June 14		
FGU	eP	13 42 50
	eS	43 51
June 14		
GUA	iP	13 46 47
	iS	47 28
June 14		
EUR	eP	14 19 21
June 14		
TUT	eP	16 24 03
	iS	25 59
June 14		
BCN	eP	16 27 57
June 14		
COL	e(P)	17 43 04
June 14		
BCN	eP	18 49 54
EUR	iP	18 47 56
HHM	iP	18 49 27
TUC	iP	18 46 01
	iL	47 45
TUT	eP	18 46 03
June 14		
EUR	eP	19 08 16
June 14		
TUT	e(P)	20 18 33
June 14		
COL	eP'	20 50 42

Date and Station		Phase (GCT) h m s
EUR	eP'	20 51 22
HHM	e(P')	20 51 08
TUC	eP'	20 51 32
TUT	eP'	20 51 30
June 14		
EUR	eP	22 57 34
	eS	58 53
June 14		
BCN	eP	23 58 34
BOZ	eP	23 58 11
COL	iP	23 54 50
EUR	eP	23 58 16
FGU	iP	23 58 40
HHM	iP	23 57 46
RCD	eP	23 58 55
SJP	eP	24 03 08
TUC	eP	23 59 18
TUT	eP	23 59 18
June 15		
FGU	eP	00 21 38
	eS	22 06
June 15		
COL	eP	01 03 10
EUR	e(P)	01 00 15
HHM	eP	01 00 42
SJP	eP	00 54 34
TUC	eP	00 59 20
June 15		
HHM	iP	01 11 40
June 15		
EUR	eP	03 42 46
FGU	eP	03 42 31
HHM	e(P)	03 43 13
SJP	i(P)	03 38 39
	e	39 10
June 15		
EUR	eP	05 00 34
TUC	e(P)	05 00 52
June 15		
COL	e(P)	05 53 03

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

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

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

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Date and Station		Phase (GCT)
		h m s
SJP	eP'	02 05 07
TUT	eP'	02 04 43
June 19		
COL	eP	02 34 52
	i	35 24
June 19		
BCN	eP	02 57 50
BOZ	eP	02 57 28
BUT	eP	02 57 21
COL	eP	02 54 24
	ipP	54 49
	isP	55 03
	e(S)	03 01 12
EUR	eP	02 57 29
FGU	eP	02 57 47
	e	57 49
HHM	e(P)	02 57 33
RCD	eP	02 57 57
THU	eP	02 56 22
June 19		
COL	eP	06 41 21
	epP	43 17
June 19		
COL	e(P)	07 05 47
EUR	eP	07 01 58
FGU	eP	07 01 41
TUT	eP	07 00 54
June 19		
BCN	eP	07 50 14
BUT	eP	07 49 47
COL	iP	07 46 51
	ipP	47 21
	iPcP	48 22
	iS	53 39
EUR	eP	07 49 57
FGU	eP	07 50 14
GUA	eP	07 44 34
HON	e	07 55 29
	eL	08 03 10
SLC	eP	07 50 08
THU	eP	07 48 50
TUC	eP	07 50 43
TUT	eP	07 50 42

Date and Station		Phase (GCT)
		h m s
June 19		
COL	eP	08 08 04
	i	08 28
EUR	eP	08 11 11
FGU	eP	08 11 32
THU	eP	08 10 02
June 19		
FGU	e(P)	09 34 32
	e	36 13
June 19		
COL	iP	10 18 36
June 19		
COL	eP	10 31 47
June 19		
EUR	eP	11 12 41
	eS	13 31
FGU	eP	11 12 09
	iS	12 39
June 19		
THU	e(P)	12 55 27
June 19		
THU	e(P)	14 55 22
June 19		
BUT	eP	17 17 51
	epP	18 38
COL	eP	17 15 54
	ipP	16 42
	eS	25 13
EUR	eP	17 18 19
FGU	eP	17 18 14
	e	22 17
RCD	eP	17 18 00
THU	iP	17 14 53
June 19		
EUR	eP	17 34 12
June 19		
FGU	e(P)	18 54 16
	eS	54 36
June 19		
EUR	e(P)	21 56 08
June 19		
BCN	eP	22 27 16
COL	eP	22 22 54
FGU	eP	22 27 09
RCD	eP	22 27 16
THU	eP	22 25 40

Date and Station		Phase (GCT)
		h m s
June 19		
GUA	iP	22 46 55
	eS	47 13
June 20		
COL	e(P')	03 39 43
June 20		
COL	i(P)	03 51 28
	i	51 32
June 20		
EUR	eP	04 27 50
June 20		
COL	eP	04 35 33
EUR	eP	04 34 48
FGU	eP	04 33 18
TUT	eP	04 34 05
June 20		
COL	eP	05 18 24
EUR	eP	05 17 37
June 20		
EUR	eP	07 56 05
June 20		
BCN	eP	08 39 22
June 20		
SJP	e(P)	09 05 53
June 20		
BCN	eP	09 55 28
BOZ	eP	09 56 04
BUT	eP	09 56 12
COL	iP	09 59 31
	i	10 00 06
CSC	eP	09 53 25
EUR	eP	09 55 50
FGU	eP	09 55 25
HHM	i(P)	09 56 18
RCD	eP	09 55 22
SJP	eP	09 53 37
	i	53 59
THU	eP	09 59 19
TUC	eP	09 54 43
TUT	eP	09 54 44
June 20		
COL	eP	10 28 29
	e	32 20
June 20		
COL	iP	11 17 31
	e	17 39

Date and Station		Phase (GCT)
		h m s
EUR	eP	11 18 14
June 20		
EUR	e(P)	11 38 08
June 20		
EUR	eP	12 22 57
June 20		
BCN	eP	14 40 09
COL	iP	14 40 09
	ipP	40 24
EUR	eP	14 40 12
June 20		
COL	iP	16 44 37
	i	44 59
EUR	eP	16 45 21
June 20		
BCN	eP	21 28 10
BOZ	eP	21 28 47
BUT	eP	21 28 54
COL	eP	21 32 13
EUR	eP	21 28 33
FGU	eP	21 28 08
HHM	e(P)	21 28 53
RCD	e(P)	21 28 05
TUT	eP	21 27 26
June 21		
THU	e(P)	00 39 32
June 21		
BCN	eP	02 55 02
COL	iP	02 53 04
EUR	eP	02 54 53
GUA	eP	02 42 26
	eS	42 49
June 21		
BHP	iP	03 59 51
BCN	eP	04 04 05
BOZ	eP	04 04 41
BUT	eP	04 04 48
COL	eP	04 08 06
	ipP	08 42
CSC	eP	04 02 03
	eS	05 40

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

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Date and Station		Phase (GCT)
		h m s
FGU	eP	01 17 34
TUC	eP	01 16 53
TUT	eP	01 16 53
June 23		
EUR	e(P)	03 05 45
SJP	iP	02 57 42
	i(S)	58 02
June 23		
FGU	e(P)	03 10 50
SJP	eP	03 03 44
	i(S)	04 04
June 23		
EUR	eP	06 00 31
June 23		
SJP	eP	06 10 31
	i(S)	11 30
June 23		
BCN	eP	08 59 08
BOZ	eP	08 58 57
	eL	09 03 21
BUT	eP	08 58 41
	eL	09 01 37
COL	iP	09 01 03
	e(S)	05 17
CSC	eP	09 03 12
	eS	09 06
EUR	iP	08 58 30
	i	58 41
FGU	eP	08 59 22
	e	09 00 08
	i	01 51
GCA	eP	08 59 30
HON	eP	09 02 34
	e	03 31
	eS	07 56
	eL	10 03
HHM	iP	08 58 35
	i(S)	09 00 47
KIP	e(P)	09 02 39
	eT	36 39
RCD	iP	09 00 10
SJP	eP	09 05 46
SIT	eP	08 59 10
TUC	eP	09 00 11
TUT	iP	09 00 12
UKI	eP	08 57 30

Date and Station		Phase (GCT)
		h m s
WAS	iP	09 03 18
	iPP	04 43
	iS	09 07
June 23		
BOZ	eP	09 25 51
BUT	eP	09 25 37
COL	eP	09 27 55
FGU	eP	09 26 11
GCA	iP	09 26 22
HHM	e(P)	09 25 28
RCD	iP	09 27 02
SJP	iP	09 32 38
TUC	eP	09 27 02
	eS	30 14
TUT	eP	09 27 03
June 23		
COL	eP	09 31 40
June 23		
COL	eP	09 40 39
RCD	eP	09 39 43
June 23		
COL	eP	09 48 08
June 23		
BCN	eP	10 17 45
BUT	eP	10 17 45
COL	iP	10 15 41
	i	16 19
	ipP	16 39
FGU	iP	10 18 06
	i	18 13
	e	18 56
GUA	eP	10 06 54
HHM	e(P)	10 17 38
RCD	eP	10 18 19
THU	e(P)	10 17 33
TUC	eP	10 18 17
TUT	eP	10 18 18
June 23		
SJP	eP	10 27 26
June 23		
BCN	eP	10 51 21
RCD	eP	10 52 22
TUT	eP	10 52 24

Date and Station		Phase (GCT)
June 23		h m s
BCN	eP	11 16 54
COL	eP	11 13 52
	ipP	14 27
	i	14 34
FGU	eP	11 17 05
HHM	e(P)	11 16 28
THU	eP	11 15 42
June 23		
COL	iP	13 27 11
	i	27 15
	i	27 32
June 23		
THU	e(P)	14 50 22
June 23		
COL	iP	16 49 02
	i	49 18
	i	49 28
EUR	eP'	16 55 00
THU	eP	16 47 36
June 23		
EUR	e(P)	17 05 48
June 23		
TUT	eP	17 17 30
June 23		
EUR	e(P)	19 16 45
June 23		
EUR	e(P)	19 25 28
June 23		
FGU	e(P)	23 39 37
June 23		
EUR	e(P)	23 54 26
June 24		
BCN	eP	00 59 36
EUR	eP	00 59 21
FGU	e(P)	00 59 36
TUT	eP	00 59 37
June 24		
COL	iP	02 01 01
June 24		
EUR	eP	02 24 04
June 24		
COL	eP	03 13 06
June 24		
BHP	iS	05 13 35
BCN	eP	05 14 14

Date and Station		Phase (GCT)
		h m s
BUT	eP	05 15 04
COL	eP	05 18 24
	epP	18 48
CSC	eP	05 12 47
	e(S)	16 50
EUR	iP	05 14 38
FGU	eP	05 14 17
HHM	eP	05 15 28
RCD	eP	05 14 21
THU	eP	05 18 21
TUC	eP	05 13 30
	e	15 12
	eL	24 16
June 24		
COL	e(P)	07 22 47
EUR	e(P)	07 21 11
June 24		
BCN	eP'	09 54 59
	e	58 26
COL	eP'	09 52 52
EUR	eP'	09 54 56
FGU	e(P')	09 54 60
	e	58 22
RCD	e(P')	09 54 59
TUT	e(P')	09 55 00
June 24		
TUC	eP	09 58 42
TUT	eP	09 58 43
June 24		
EUR	e(P)	10 12 49
TUT	e(P)	10 12 42
June 24		
GUA	eP	10 25 30
	eS	25 42
June 24		
EUR	eP	12 23 58
FGU	eP	12 23 52
HHM	i(P)	12 24 21
TUC	eP	12 23 14
June 24		
COL	eP	13 40 28

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

Date and Station		Phase (GCT)
		h m s
BUT	eP	13 06 37
	pS	06 53
EUR	iP	13 08 03
FGU	eP	13 07 19
	i	07 26
	iS	08 23
HHM	e(P)	13 06 36
RCD	eP	13 08 04
June 26		
COL	iP	14 01 49
	i	02 09
	e	02 38
EUR	eP	14 01 16
FGU	eP	14 01 41
June 26		
BCN	eP	14 56 28
BOZ	eP	14 55 58
BUT	eP	14 55 49
COL	iP	14 52 29
	i(S)	56 42
CSC	eP	14 58 47
EUR	iP	14 56 04
	ePP	57 44
FGU	eP	14 56 26
	e	15 01 54
	e	06 14
HHM	eP	14 55 32
	i(S)	15 02 02
KIP	iP	14 54 40
	eT	15 33 15
	eT	34 34
RCD	eP	14 56 38
SJP	iP	15 00 34
SIT	eP	14 53 28
	eS	58 16
THU	iP	14 55 46
TUC	eP	14 57 04
	ePP	59 05
TUT	eP	14 57 05
WAS	eP	14 58 35
	e	59 29
June 26		
BCN	eP	16 51 44
COL	iP	16 55 04

Date and Station		Phase (GCT)
		h m s
CSC	eP	16 48 48
EUR	iP	16 52 03
FGU	eP	16 51 33
SJP	eP	16 46 07
	i(S)	48 06
TUT	eP	16 51 06
June 26		
THU	eP	18 08 27
June 26		
CSC	eP	20 01 41
June 26		
COL	e(P)	21 19 35
June 27		
TUT	e(P)	00 29 20
June 27		
FGU	e(P)	00 53 51
June 27		
HHM	e(P)	02 17 35
June 27		
COL	eP	03 20 35
	e	20 52
EUR	eP	03 17 50
FGU	eP	03 17 33
HHM	e(P)	03 18 35
SJP	eP	03 13 27
THU	eP	03 20 08
TUC	eP	03 16 54
TUT	eP	03 16 54
June 27		
COL	eP	03 25 21
	e	25 40
	e	25 53
EUR	eP	03 28 56
FGU	e(P)	03 28 20
	e	29 21
HHM	e(P)	03 28 53
THU	eP	03 29 36
June 27		
COL	eP	05 52 56
EUR	eP	05 50 07
FGU	eP	05 49 50
SJP	eP	05 45 53
TUC	eP	05 48 05

Date and Station		Phase (GCT)
		h m s
TUT	eP	05 48 10
June 27		
BCN	eP'	07 21 01
BUT	eP'	07 21 39
COL	iP	07 15 16
	i	15 30
	i	15 46
	i	16 01
	e(S)	24 56
EUR	eP	07 17 56
	e(PP)	22 30
	ePKKP	33 36
FGU	e(P')	07 23 10
GUA	iP	07 11 55
	e	12 03
HON	e	07 20 18
	e	27 25
	e	28 48
	eL	41 24
HHM	e(P)	07 17 38
RCD	e(P')	07 21 39
SJP	iP'	07 22 58
THU	eP	07 15 26
	i	15 28
TUC	eP'	07 22 25
TUT	eP'	07 22 23
June 27		
BCN	eP	08 02 34
BUT	eP	08 01 51
COL	iP	07 58 22
	i	58 45
	i	59 09
CSC	eP	08 04 24
EUR	iP	08 02 12
	ipP	03 06
FGU	iP	08 02 28
	i	03 15
GCA	iP	08 02 40
HHM	eP	08 01 34
RCD	iP	08 02 35
THU	iP	08 00 50
TUC	eP	08 03 06
	epP	04 05
	ePP	05 23
TUT	eP	08 03 07

Date and Station		Phase (GCT)
		h m s
June 27		
COL	iP	08 30 37
EUR	eP	08 31 35
June 27		
COL	eP	08 58 42
June 27		
COL	e(P)	09 26 17
June 27		
COL	eP	09 36 45
	e	37 21
June 27		
FGU	eP	10 32 03
COL	e(P)	10 54 10
June 27		
COL	iP	10 57 29
	i	57 48
	i	58 17
June 27		
COL	eP	11 43 25
June 27		
COL	eP	11 49 39
	i	50 20
June 27		
COL	eP	12 05 00
	e	07 03
June 27		
COL	eP	12 28 04
June 27		
EUR	eP	13 42 14
June 27		
EUR	eP	14 48 42
June 27		
COL	eP	15 14 52
June 27		
EUR	eP	15 34 54
June 27		
COL	e(P)	16 58 53
June 27		
EUR	eP	18 28 19
June 27		
COL	iP	19 25 13
	i	25 57
EUR	eP	19 21 13
FGU	eP	19 20 55
GCA	e(P)	19 20 50
THU	eP	19 25 23

Date and Station		Phase (GCT) h m s
TUC	eP	19 20 01
	i	20 20
	eL	27 05
TUT	eP	19 19 59
June 27 COL	eP	20 31 33
EUR	eP	20 35 23
THU	e(P)	20 30 30
June 27 EUR	eP	21 07 20
June 27 COL	iP	22 07 38
	i	07 41
THU	eP	22 07 46
June 27 EUR	e(P)	23 00 59
FGU	e(P)	22 59 58
	iS	23 00 57
June 27 GCA	eP	23 21 41
	iS	22 00
June 28 EUR	e(P)	01 24 19
FGU	eP	01 23 59
June 28 COL	eP	02 19 28
EUR	eP	02 16 46
FGU	eP	02 16 30
TUC	eP	02 15 50
TUT	eP	02 15 51
June 28 GCA	eP	02 27 11
	e	27 34
June 28 HHM	e(P')	03 34 31
June 28 COL	iP	04 33 00
	e	33 36
	e	34 52
THU	eP	04 33 14
June 28 EUR	e(P)	06 30 38
June 28 COL	iP	07 40 05
EUR	eP	07 41 07
June 28 EUR	e(P)	09 26 58

Date and Station		Phase (GCT) h m s
June 28 GCA	eP	09 36 06
June 28 EUR	eP	10 25 13
June 28 EUR	eP	11 10 22
June 28 COL	iP	11 25 48
	e	26 40
EUR	e(P)	11 25 17
June 28 TUT	eP	11 36 48
June 28 COL	iP	11 59 58
June 28 COL	iP	12 24 22
June 28 FGU	eP	13 24 38
	e	38 07
June 28 COL	eP'	13 33 20
EUR	eP'	13 34 33
June 28 EUR	eP	13 37 56
TUT	e(P)	13 37 59
June 28 GUA	eP	13 54 11
	eS	54 21
June 28 GCA	eP	14 10 53
	i	11 12
June 28 COL	iP	15 38 20
	e	40 43
EUR	eP	15 41 47
RCD	eP	15 41 37
June 28 BUT	eP	15 46 17
June 28 COL	eP	16 09 51
EUR	eP	16 07 14
June 28 BOZ	eP	16 40 59
June 28 EUR	eP	16 46 28
June 28 EUR	eP	18 11 31
FGU	eP	18 11 04

Date and Station		Phase (GCT) h m s
TUT	eP	18 10 35
June 28 EUR	e(P)	18 53 47
June 28 COL	iP	19 20 08
EUR	eP	19 23 31
FGU	eP	19 23 34
	e	24 14
HHM	e(P)	19 22 21
RCD	eP	19 22 23
SIT	eP	19 19 52
TUT	e(P)	19 24 45
June 28 EUR	eP	20 14 24
June 28 EUR	e(P)	20 19 58
June 28 BOZ	eP	20 29 04
June 29 GCA	eP	22 11 12
June 28 COL	iP	22 54 42
	i	57 05
SIT	e(P)	22 56 00
	e	56 35
June 29 COL	eP	01 25 03
	i	25 10
June 29 EUR	eP	02 28 21
TUC	e(P)	02 26 15
	i	26 22
	iS	27 06
	iL	27 09
June 29 COL	eP	03 26 48
June 29 EUR	eP	06 49 14
FGU	eP	06 49 06
June 29 EUR	eP	09 19 21
June 29 BGN	eP	09 35 54
BUT	eP	09 36 13
COL	iP	09 35 34
	e(PP)	39 09
	eS	46 01

Date and Station		Phase (GCT) h m s
EUR	iP	09 35 54
FGU	eP	09 36 18
HON	eP	09 31 49
	eS	38 38
	eL	42 40
HHM	eP	09 36 12
SJP	iP'	09 42 05
	i	42 21
	i	45 28
TUC	eP	09 36 05
	eSKS	46 26
	eS	47 08
	eL	10 04 13
TUT	eP	09 36 04
June 29 COL	iP	09 48 35
EUR	eP	09 48 54
June 29 COL	iP	09 55 38
EUR	e(P)	09 53 28
FGU	eP	09 53 13
June 29 COL	iP	10 01 49
	i	01 56
	e	02 39
EUR	e(P)	10 01 32
June 29 COL	eP	10 11 27
June 29 COL	eP	10 30 29
	e	30 37
June 29 COL	iP	10 34 52
	i	35 00
	e	36 46
EUR	eP	10 35 10
FGU	eP	10 36 12
TUC	e(P)	10 35 49
June 29 COL	iP	10 46 46
	e	46 54
June 29 COL	eP	11 02 29
	e	02 36
June 29 COL	iP	11 11 12

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Date and Station		Phase (GCT) h m s
EUR	eP	11 11 32
June 29		
BUT	eP	11 42 34
	eS	42 57
June 29		
BCN	eP	11 45 48
COL	iP	11 42 08
	i	42 23
EUR	e(P)	11 44 01
	e	45 30
FGU	eP	11 43 13
HHM	i(P)	11 44 13
RCD	eP	11 44 48
June 29		
COL	iP	11 49 42
	i	49 49
June 29		
EUR	eP	12 19 13
June 29		
BOZ	eP	12 49 26
June 29		
BOZ	eP	13 10 17
	e	10 35
June 29		
BCN	eP	14 10 45
BUT	eP	14 10 24
COL	iP	14 06 52
	i	09 06
	eS	10 18
	iPcP	11 21
	i	11 42
	iScP	14 47
EUR	iP	14 10 22
FGU	iP	14 10 46
	e	11 05
HON	eP	14 10 16
HHM	iP	14 09 50
	i	10 08
	iPcP	12 09
	eS	15 46
KIP	iP	14 10 16
	eT	43 26
RCD	eP	14 10 58
SJF	iP	14 15 17
	ipP	15 37
SIT	eP	14 07 38
THU	eP	14 10 39

Date and Station		Phase (GCT) h m s
TUC	iP	14 11 24
	i	11 41
TUT	eP	14 11 24
June 29		
EUR	eP	14 16 03
TUT	e(P)	14 17 09
June 29		
COL	iP	15 23 41
	i	24 14
EUR	eP	15 24 01
June 29		
COL	iP	15 52 08
	i	52 13
EUR	eP	15 52 28
June 29		
COL	iP	16 51 50
EUR	eP	16 52 11
June 29		
COL	iP	16 55 17
	i	55 46
EUR	eP	16 55 35
June 29		
EUR	eP	17 18 58
TUT	eP	17 18 55
June 29		
COL	eP	17 35 26
June 29		
EUR	eP	18 14 38
June 29		
COL	iP	20 51 42
	i	51 54
June 29		
BUT	eP	22 10 07
COL	eP	22 07 11
	i	07 42
	i	07 58
EUR	iP	22 10 54
FGU	eP	22 11 15
HHM	iP	22 09 48
RCD	e(P)	22 10 12
THU	eP	22 05 37
TUC	eP	22 11 45
TUT	eP	22 11 45
June 29		
FGU	iP	23 07 43
	iS	08 18

Date and Station		Phase (GCT) h m s
June 30		
GUA	eP	01 25 56
	e(S)	26 33
June 30		
COL	iP	04 30 44
	i	31 15
	ipP	31 32
EUR	eP	04 30 15
TUC	e(P)	04 30 14
	i	30 33
TUT	eP	04 30 15
June 30		
COL	iP	05 17 35
HHM	iP	05 18 22
RCD	e(P)	05 18 17
June 30		
GCA	eP	05 30 25
	e	31 15
June 30		
EUR	e(P)	06 41 59
June 30		
EUR	eP	06 45 17
FGU	eP	06 45 38
TUT	eP	06 45 44
June 30		
COL	iP	07 58 28
	i	58 39
EUR	eP	07 58 47
June 30		
TUT	eP	08 18 43
June 30		
TUT	e(P)	08 37 37
June 30		
EUR	eP	08 49 25
FGU	eP	08 49 19
June 30		
BCN	eP	10 47 10
COL	eP	10 49 09
June 30		
COL	iP	14 39 25
June 30		
COL	iP	16 55 28
June 30		
COL	eP	17 36 32
June 30		
GUA	eP	18 02 46
	eS	03 26

Date and Station		Phase (GCT) h m s
June 30		
EUR	eP	18 22 34
June 30		
EUR	e(P)	19 02 06
June 30		
EUR	e(P)	19 07 31
June 30		
COL	iP	20 20 12
	i	20 25
June 30		
FGU	eP	22 10 43
	eS	11 28
June 30		
FGU	eP	22 55 23
	e	55 48
June 30		
FGU	e(P)	23 04 52

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Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
June	
BOZ	
15	13.7
16	12.1
	14.4
	18.6
25	08.3
	08.8
	09.6
26	03.6
June	
BUT	
4	16.8
5	04.4
	09.8
11	17.3
13	12.4
	17.8
16	12.1
25	08.2
	08.8
	09.6
26	03.6
	03.8
June	
COL	
2	15.1
	16.4
	18.1
3	02.2
	07.8
4	17.4
5	05.9
	12.0
	14.1
7	14.9
8	07.8
	18.9
11	18.8
13	19.6
	21.2
15	17.5
18	00.8
19	21.8
22	04.4
25	01.4
27	06.7
	10.6
28	19.9
June	
EUR	
1	06.0
6	18.6
8	00.1
11	17.2
12	22.4
14	22.3
15	15.8
	22.6
19	22.5

Date and Station	Phase (GCT)
	h m s
June	
EUR (Con't).	
20	08.6
23	04.6
24	22.4
26	22.4
30	10.8
June	
FGU	
1	16.1
	23.3
2	16.4
9	19.8
10	23.1
11	21.7
16	04.8
	21.7
19	11.2
	22.8
21	20.3
25	23.8
27	14.2
30	23.7
June	
GCA	
5	06.7
6	16.4
14	09.0
16	04.8
28	19.9
June	
HHM	
3	09.1
4	16.7
13	13.7
June	
SJP	
5	06.3
6	04.5
	17.6
17	08.6
23	02.4
24	11.2
26	17.5
June	
TUC	
1	00.7
	09.2
	09.9
	12.6
	15.3
	20.7
2	03.0
	06.7
	19.8
5	03.4
6	09.6
7	18.2
8	23.0
9	05.7
	23.0
10	08.7

Date and Station	Phase (GCT)
	h m s
June	
TUC (Con't.)	
14	23.0
17	09.9
	22.9
18	05.2
	07.2
	09.4
20	02.3
	05.2
25	13.1
June	
UKI	
13	05.2

Date and Station	Phase (GCT)
	h m s