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SEISMOLOGICAL BULLETIN

COAST & GEODETIC SURVEY

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October, 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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1962

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

Albuquerque, New Mexico (ALQ) WWNSS
**Balboa Heights, C. Z. (BHP) WWNSS
The Panama Canal Co.
*Boulder City, Nev. (BCN)
Bureau of Reclamation
*Bozeman, Mont. (BOZ)
Montana State College
*Butte, Mont. (BUT)
Montana School of Mines
*Chicago, Ill. (CHI)
University of Chicago and
U. S. Weather Bureau
College, Alaska (COL)
*Columbia, S. C. (CSC)
University of South Carolina
*Eureka, Nev. (EUR)
Eureka Corporation Limited
*Flaming Gorge, Utah (FGU)
Bureau of Reclamation
*Glen Canyon, Ariz. (GCA)
Bureau of Reclamation
Guam, M. I. (GUA)
Honolulu, Hawaii (HON)
*Hungry Horse, Mont. (HHM)
Bureau of Reclamation
Kipapa, Hawaii (KIP)
**Philadelphia, Pa. (PHI)
The Franklin Institute
**Rapid City, S. D. (RCD) WWNSS
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJP)
Sitka, Alaska (SIT)
*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.
WWNSS indicates the observatories are part of the World-Wide Network of Standard Seismographs.

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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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

All 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. Requests for information on seismogram copies of the World-Wide Network observatories should be addressed to:

Director
U. S. Coast and Geodetic Survey
Washington, D. C. 20230
ATTN: Seismology Data Center

Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
1	03 56 52.0	17.5 S.	178.9 W.	Fiji Islands. h about 550 km.
1	07 50 56.4	6.9 N.	94.4 E.	Nicobar Islands region. h about 27 km.
1	09 53 32.9	47.3 N.	151.5 E.	Kurile Islands. h about 127 km.
1	09 57 02.2	17.5 S.	167.1 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
1	12 13 57.4	27.9 N.	54.9 E.	Southern Iran. h about 16 km.
1	12 49 55.1	49.0 N.	157.5 E.	Off south coast of Kamchatka. h about 80 km.
1	13 08 28.2	52.8 N.	167.2 W.	Fox Islands, Aleutian Islands. h about 33 km.
1	15 07 22.1	5.5 S.	151.9 E.	New Britain. Felt at Rabaul and Karlis. h about 49 km.
1	20 42 36.5	19.6 S.	174.5 W.	Tonga Islands. h about 143 km.
2	03 51 09.6	39.2 N.	119.6 W.	Nevada. Felt in western Nevada and northeastern California. h about 33 km.
2	08 35 49.1	17.6 S.	178.7 W.	Fiji Islands. h about 616 km.
2	12 35 47.7	0.6 S.	122.9 E.	Celebes region. h about 33 km.
2	19 30 34.6	10.4 N.	126.9 E.	Off east coast of Leyte, Philippine Islands. h about 125 km.
2	19 51 53.4	2.1 N.	126.2 E.	Molucca Passage. h about 35 km.
3	01 16 46.7	40.6 N.	29.7 W.	Azores region. h about 33 km.
3	01 19 22.5	40.7 N.	29.7 W.	Azores region. h about 33 km.
3	11 57 21.8	4.5 S.	144.6 E.	Near northeast coast of New Guinea. h about 108 km.
3	17 13 41.5	21.0 S.	168.4 E.	Loyalty Islands. h about 33 km.
3	18 48 55.1	57.7 S.	25.6 W.	Sandwich Islands. h about 38 km.
3	20 14 41.2	37.2 N.	138.5 E.	Near west coast of Honshu, Japan. h about 211 km.
3	20 59 49.4	21.3 S.	168.3 E.	Loyalty Islands. h about 41 km.
4	04 42 05.8	40.4 N.	29.5 W.	Azores region. h about 33 km.
4	07 24 43.4	42.0 N.	35.9 E.	Black Sea. Felt at Samsun. h about 30 km.
4	09 01 48.2	8.8 S.	160.4 E.	Solomon Islands. Felt at Honiara. h about 79 km.
4	09 37 53.0	23.3 S.	179.0 E.	Fiji Islands region. h about 611 km.
4	13 23 34.4	40.9 N.	29.7 W.	Azores region. h about 33 km.
4	19 46 10.1	38.3 N.	22.7 E.	Greece. Felt in southern Greece. h about 38 km.
4	20 34 39.6	5.2 S.	151.9 E.	New Britain. Felt. h about 41 km.
4	22 47 46.3	4.2 N.	75.8 W.	Colombia. h about 166 km.
5	04 14 39.1	40.2 N.	29.5 W.	Azores region. h about 33 km.
5	08 39 32.2	40.7 N.	29.8 W.	Azores region. h about 33 km.
5	10 24 27.5	39.0 N.	140.2 E.	Near west coast of Honshu, Japan. h about 200 km.
5	10 39 17.5	14.0 N.	145.2 E.	Mariana Islands. h about 131 km.
5	13 03 11.4	9.3 S.	161.0 E.	Solomon Islands. h about 147 km.
5	17 00 00.158			37°08'22" N., 116°03'01" W. Nevada Test Site. MISSISSIPPI. Shot elevation 795.2 meters (AEC).
5	17 44 54.7	37.0 N.	143.6 E.	Near east coast of Honshu, Japan. h about 70 km.
5	20 02 27.6	35.2 N.	58.8 E.	Northeastern Iran. Five killed and many injured. Risteh destroyed; damage at Ahmadabad. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
5	21 59 40.2	6.1 S.	130.8 E.	Banda Sea. h about 31 km.
6	03 17 07.2	40.8 N.	29.5 W.	Azores region. h about 33 km. Mag. 4¾-5 (Pal).
6	03 54 58.3	40.5 N.	29.5 W.	Azores region. h about 33 km.
6	04 23 24.1	17.4 S.	167.7 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km. Mag. 6½.
6	04 35 02.5	17.4 S.	167.8 E.	New Hebrides Islands. h about 33 km.
6	05 38 37.4	26.2 N.	126.9 E.	Ryukyu Islands. h about 92 km.
6	07 17 03.3	17.4 S.	167.8 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
6	07 56 20.4	17.4 S.	167.9 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
6	08 03 31.7	17.2 S.	168.0 E.	New Hebrides Islands. h about 33 km.
6	08 31 50.1	17.3 S.	167.8 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
6	09 28 17.4	43.6 N.	110.8 W.	Wyoming. Felt at Moose and Wilson. h about 33 km.
6	11 00 52.8	13.3 S.	167.3 E.	New Hebrides Islands. h about 209 km.
6	11 59 42.3	17.4 S.	167.8 E.	New Hebrides Islands. Felt at Port Vila. h about 17 km.
6	14 05 24.0	1.5 S.	77.4 W.	Ecuador. h about 149 km.
6	17 35 26.8	44.4 N.	148.0 E.	Kurile Islands. h about 51 km.
6	18 01 05.4	17.6 S.	168.0 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
6	21 37 57.4	5.3 S.	145.0 E.	Northeast New Guinea. h about 43 km.
6	23 31 27.7	17.5 S.	167.6 E.	New Hebrides Islands. Felt at Port Vila. h about 42 km.
7	00 46 55.4	17.7 S.	167.8 E.	New Hebrides Islands. h about 33 km.
7	05 47 33.0	17.5 S.	168.0 E.	New Hebrides Islands. h about 17 km.
7	06 45 15.3	40.5 N.	29.6 W.	Azores region. h about 33 km.
7	08 52 22.8	9.4 N.	81.8 W.	Near north coast of Panama. h about 59 km.
7	09 49 25.9	40.2 N.	29.2 W.	Azores region. h about 33 km.
7	10 20 24.8	20.1 S.	169.5 E.	New Hebrides Islands. h about 61 km.
7	12 35 30.9	4.9 S.	144.3 E.	North-East New Guinea. h about 75 km.
7	13 51 54.4	17.3 S.	167.3 E.	New Hebrides Islands. h about 17 km.
7	16 00 20.2	57.8 S.	25.5 W.	Sandwich Islands. h about 33 km.
7	16 47 22.7	17.7 S.	167.5 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
7	16 52 19.4	17.9 S.	167.4 E.	New Hebrides Islands. h about 39 km.
8	05 14 20.4	40.5 N.	29.5 W.	Azores region. h about 33 km.
8	13 20 32.7	17.8 S.	167.8 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
8	14 26 35.9	41.9 N.	24.3 E.	Bulgaria. h about 33 km.
8	15 11 11.9	41.9 N.	24.3 E.	Bulgaria. Felt in southern Bulgaria. h about 41 km.
8	17 53 28.6	18.7 S.	176.8 W.	Fiji Islands. h about 243 km.
8	18 54 36.9	10.3 S.	161.4 E.	Solomon Islands. h about 79 km.
8	21 56 22.2	24.3 N.	121.7 E.	Near east coast of Taiwan. h about 29 km. Mag. 6.
8	22 24 06.2	24.1 N.	121.7 E.	Near east coast of Taiwan. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
9	03 13 44.8	17.4 S.	167.6 E.	New Hebrides Islands. h about 33 km.
9	04 28 36.2	46.2 N.	143.0 E.	Near north coast of Hokkaido, Japan. h about 288 km.
9	15 59 14.3	36.4 N.	71.3 E.	Hindu Kush. Felt at Peshawar. h about 209 km.
9	20 14 37.2	3.2 S.	148.4 E.	Bismarck Sea. h about 33 km. Mag. 6¼.
9	21 19 19.0	17.6 S.	167.6 E.	New Hebrides Islands. h about 19 km.
10	04 41 46.9	1.6 S.	66.8 E.	Indian Ocean. h about 33 km.
10	07 50 18.1	31.2 N.	131.5 E.	Near south coast of Kyushu, Japan. h about 33 km.
10	09 20 40.8	22.2 S.	179.6 W.	Fiji Islands. h about 558 km.
10	11 12 37.4	10.1 S.	161.3 E.	Solomon Islands. h about 34 km.
10	11 42 35.1	3.1 S.	78.4 W.	Peru-Ecuador border. h about 33 km.
10	13 33 17.2	8.9 S.	110.4 E.	Off south coast of Java. h about 88 km.
10	14 32 57.3	17.9 S.	167.8 E.	New Hebrides Islands. h about 34 km.
10	17 16 07.0	18.0 S.	167.7 E.	New Hebrides Islands. h about 33 km.
10	20 43 37.3	27.9 N.	54.9 E.	Southern Iran. Felt at Fasa. h about 47 km.
10	20 53 34.5	34.9 S.	70.1 W.	Mendoza Province, Argentina. h about 137 km.
10	21 52 36.8	15.1 S.	173.3 W.	Samoa Islands region. Felt at Apia. h about 33 km.
11	00 52 23.4	52.0 N.	170.0 W.	Fox Islands, Aleutian Islands. h about 33 km.
11	03 40 05.5	52.0 N.	171.3 W.	Fox Islands, Aleutian Islands. h about 33 km.
11	05 41 10.1	6.5 S.	81.0 W.	Off coast of Peru. h about 33 km.
11	06 22 50.6	1.3 S.	80.4 W.	Near coast of Ecuador. h about 75 km.
11	16 02 33.5	24.0 N.	121.7 E.	Near east coast of Taiwan. h about 33 km.
12	00 09 49.0	4.2 S.	80.7 W.	Near coast of Ecuador. h about 33 km.
12	01 44 49.4	33.1 S.	178.2 W.	Kermadec Islands region. h about 37 km.
12	07 56 01.5	20.3 S.	68.8 W.	Northern Chile. h about 78 km.
12	09 08 15.9	27.4 N.	129.1 E.	Ryukyu Islands. h about 25 km.
12	10 48 42.2	18.0 S.	178.1 W.	Fiji Islands. h about 573 km.
12	11 43 38.2	19.4 S.	177.0 W.	Fiji Islands. h about 295 km.
12	15 00 00.155			37°07'22" N., 116°03'03" W. Nevada Test Site. ROANOKE. Shot elevation = 1122.6 meters (AEC).
12	16 53 33.6	28.0 S.	70.6 W.	Near coast of northern Chile. h about 25 km.
12	19 03 54.4	28.9 S.	177.1 W.	Kermadec Islands region. h about 134 km.
12	20 38 58.0	27.2 S.	178.0 W.	Kermadec Islands region. h about 152 km.
13	07 33 48.8	16.7 S.	167.9 E.	New Hebrides Islands. h about 33 km.
13	08 28 34.6	38.2 S.	175.9 E.	Near north coast of North Island, New Zealand. h about 184 km.
13	10 23 38.2	35.5 N.	49.8 E.	Northwestern Iran. Felt at Tehran. h about 33 km.
13	11 25 58.9	17.4 S.	167.5 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
13	11 41 54.6	17.3 S.	167.6 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
13	13 41 20.5	15.3 N.	92.8 W.	Near coast of Chiapas, Mexico. h about 122 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
13	18 47 44.5	12.6 S.	166.6 E.	Santa Cruz Islands region. h about 33 km.
13	21 49 38.6	44.0 N.	146.4 E.	Near north coast of Hokkaido, Japan. h about 103 km.
14	00 29 56.0	33.4 S.	179.3 W.	Kermadec Islands region. h about 33 km.
14	01 38 38.8	1.5 N.	99.0 E.	Near coast of Sumatra. h about 100 km.
14	02 00 57.6	54.4 N.	159.8 E.	Near east coast of Kamchatka. h about 120 km.
14	05 03 25.8	17.5 S.	167.7 E.	New Hebrides Islands. h about 33 km.
14	09 07 18.6	36.3 N.	70.4 E.	Hindu Kush. h about 217 km.
14	09 41 09.6	38.8 N.	123.5 W.	Off coast of northern California. h about 33 km.
14	10 14 32.4	38.7 N.	124.0 W.	Off coast of northern California. Felt at Albion and Elk. h about 33 km.
14	14 08 11.3	1.0 S.	127.2 E.	Halmahera region. h about 33 km.
14	15 08 59.5	31.8 N.	131.5 E.	Near south coast of Kyushu, Japan. h about 33 km.
14	19 32 17.3	75.5 N.	5.8 E.	Svalbard region. h about 42 km.
14	21 13 44.2	39.1 N.	141.1 E.	Honshu, Japan. h about 35 km.
15	00 25 21.3	22.1 S.	172.1 E.	Loyalty Islands region. h about 40 km.
15	02 56 11.5	74.8 N.	5.0 E.	Svalbard region. h about 33 km.
15	08 08 36.2	16.1 S.	173.4 W.	Samoa Islands region. h about 33 km.
15	13 59 54.9	33.1 S.	178.5 W.	Kermadec Islands region. h about 89 km.
15	17 30 20.8	28.8 S.	176.4 W.	Kermadec Islands. h about 40 km.
15	20 17 16.4	17.7 S.	168.3 E.	New Hebrides Islands. Felt at Port Vila. h about 65 km.
15	21 26 20.7	65.0 S.	178.2 E.	Balleny Islands. h about 33 km.
15	23 36 35.0	43.5 S.	169.8 E.	Near coast of South Island, New Zealand. h about 33 km.
16	01 08 47.1	17.0 S.	167.5 E.	New Hebrides Islands. h about 33 km.
16	02 46 44.6	17.0 S.	167.7 E.	New Hebrides Islands. h about 19 km.
16	02 49 37.0	17.1 S.	167.7 E.	New Hebrides Islands. h about 33 km.
16	04 58 50.4	39.3 N.	73.2 E.	Tadzhik S. S. R. h about 35 km.
16	05 21 26.5	17.1 S.	167.6 E.	New Hebrides Islands. h about 33 km.
16	07 15 32.2	28.4 S.	62.5 E.	About 1000 km. southeast of Mascarene Islands. h about 33 km.
16	09 50 47.3	18.9 S.	169.4 E.	New Hebrides Islands. h about 261 km.
16	11 58 51.0	31.4 N.	57.3 E.	Iran. h about 33 km.
16	18 02 32.9	51.6 N.	175.8 W.	Andreanof Islands, Aleutian Islands. h about 27 km. Mag. 5¼ (Pal).
17	09 44 05.5	17.2 S.	167.7 E.	New Hebrides Islands. h about 33 km.
17	12 39 12.0	33.3 N.	137.7 E.	South of Honshu, Japan. h about 335 km.
18	02 00 02.7	28.4 N.	97.3 E.	Burma-India border. h about 60 km.
18	04 06 00.2	8.9 S.	116.8 E.	Sumbawa. h about 33 km.
18	08 40 55.5	46.5 N.	149.6 E.	Kurile Islands. h about 140 km.
18	11 22 40.2	46.5 N.	149.5 E.	Kurile Islands. h about 128 km.
18	18 03 18.5	44.3 N.	115.3 W.	Idaho. Felt at Stanley. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
18	18 56 32.3	44.6 N.	116.0 W.	Idaho. Felt at Stanley. h about 33 km.
18	19 49 56.6	16.2 N.	93.8 W.	Chiapas, Mexico. h about 138 km.
18	20 31 07.1	44.3 N.	115.3 W.	Idaho. Felt at Stanley. h about 33 km.
18	21 26 02.7	39.3 N.	73.1 E.	Tadzhik S. S. R. h about 53 km.
19	01 34 14.1	3.4 S.	129.1 E.	Ceram. h about 58 km.
19	04 13 00.0	30.9 S.	69.2 W.	San Juan Province, Argentina. Felt at Santiago, Chile. h about 87 km.
19	09 17 12.4	30.6 N.	97.3 E.	Sikang Province, China. h about 29 km.
19	09 39 41.9	56.3 S.	26.2 W.	Sandwich Islands. h about 86 km.
19	10 43 25.0	44.6 N.	115.6 W.	Idaho. h about 33 km.
19	10 44 51.9	10.6 N.	125.2 E.	Leyte, Philippine Islands. h about 50 km.
19	11 47 24.1	30.8 N.	70.8 E.	West Pakistan. h about 41 km.
19	14 44 56.2	18.9 S.	66.0 W.	Bolivia. h about 211 km.
19	17 14 15.1	33.0 S.	179.7 E.	Kermadec Islands region. h about 274 km.
19	18 00 00.083			37°02'22" N., 116°01'16" W. Nevada Test Site. BANDICOOT. Shot elevation = 978.1 meters (AEC).
19	21 21 46.8	19.7 N.	108.4W.	Off coast of Jalisco, Mexico. h about 46 km.
19	23 42 35.2	5.7 S.	130.3 E.	Banda Sea. h about 181 km.
20	03 35 54.8	21.0 S.	178.8 W.	Fiji Islands. h about 580 km.
20	05 30 41.3	6.7 S.	129.9 E.	Banda Sea. h about 161 km.
20	06 33 29.2	17.2 S.	69.7 W.	Peru-Bolivia border. h about 153 km.
21	02 05 22.7	61.1 N.	149.7 W.	Vicinity of Anchorage, Alaska. Felt. h about 80 km.
21	08 17 13.0	20.8 S.	177.8 W.	Fiji Islands. h about 469 km.
21	12 32 25.2	1.8 N.	127.5 E.	Halmahera region. h about 102 km.
21	13 07 27.9	15.5 S.	172.3 W.	Samoa Islands region. h about 33 km.
21	15 25 11.5	10.3 S.	162.1 E.	Solomon Islands. h about 33 km.
21	23 10 52.2	55.9 S.	27.8 W.	Sandwich Islands. h about 33 km.
22	01 09 50.9	18.1 S.	177.9 W.	Fiji Islands. h about 612 km.
22	04 34 38.6	3.5 S.	145.8 E.	Near coast of North-East New Guinea. h about 33 km.
22	05 03 03.9	45.2 N.	111.3 W.	Southwestern Montana. h about 33 km.
22	05 55 44.0	5.1 S.	151.7 E.	New Britain. h about 59 km.
22	09 06 12.0	73.7 N.	54.2 E.	Novaya Zemlya. h about 0 km. Mag. 5-5½ (Pal).
22	15 23 32.9	49.8 N.	155.8 E.	Off south coast of Kamchatka. h about 19 km.
22	18 12 29.7	21.0 S.	168.5 E.	Loyalty Islands. h about 33 km.
22	22 18 50.3	37.9 N.	141.7 E.	Off east coast of Honshu, Japan. h about 38 km.
23	00 26 02.5	15.3 S.	173.0 W.	Samoa Islands region. h about 53 km.
23	00 47 27.2	46.2 N.	153.2 E.	Kurile Islands. h about 33 km.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
23	06 46 49.9	15.1 S.	173.4 W.	Samoa Islands region. h about 33 km.
23	09 02 02.2	9.5 N.	70.0 W.	Western Venezuela. h about 33 km.
23	09 57 41.0	18.4 N.	145.6 E.	Mariana Islands. h about 150 km.
23	16 15 58.6	16.9 S.	178.8 W.	Fiji Islands. h about 576 km.
23	20 10 57.6	36.7 N.	71.1 E.	Hindu Kush. h about 216 km.
24	01 50 07.0	19.1 N.	67.1 W.	Mona Passage. h about 45 km.
24	05 03 21.4	17.3 S.	167.6 E.	New Hebrides Islands. h about 33 km.
24	06 24 16.3	19.4 N.	108.2 W.	Off coast of Jalisco, Mexico. h about 33 km.
24	22 53 09.9	17.9 S.	168.4 E.	New Hebrides Islands. h about 41 km.
25	03 38 48.9	17.8 S.	167.7 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
25	09 34 14.6	3.0 N.	126.7 E.	Molucca Passage. h about 33 km.
25	12 36 54.4	15.4 S.	179.0 W.	Fiji Islands region. h about 392 km.
25	15 29 06.0	16.9 S.	167.5 E.	New Hebrides Islands. h about 33 km.
25	15 52 29.9	8.4 N.	82.6 W.	Panama. Felt at Balboa Heights. h about 51 km. Mag. 5¼-5½ (Pal).
25	20 06 10.0	61.4 S.	154.9 E.	About 700 km. southwest of Macquarie Islands. h about 33km.
25	21 49 34.4	33.4 N.	46.0 E.	Iraq-Iran border. h about 20 km.
26	07 20 25.8	17.7 S.	167.5 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
26	11 26 12.4	33.7 N.	27.9 E.	Eastern Mediterranean Sea. h about 33 km.
26	15 58 35.1	55.6 S.	26.6 W.	Sandwich Islands. h about 33 km.
26	20 22 58.6	.1 N.	124.1 E.	Celebes region. h about 112 km.
26	22 09 05.0	55.7 S.	26.5 W.	Sandwich Islands. h about 33 km.
27	08 10 23.4	14.0 N.	90.6 W.	Guatemala-El Salvador border. Felt in western El Salvador. h about 93 km.
27	13 33 03.6	18.0 S.	167.4 E.	New Hebrides Islands. Felt at Port Vila. h about 33 km.
27	13 52 51.2	11.5 N.	86.4 W.	Near west coast of Nicaragua. h about 80 km.
27	15 00 00.147			37°08'58" N., 116°03'13" W. Nevada Test Site. SANTEE. Shot elevation = 976.3 meters (AEC).
27	16 01 57.6	38.8 N.	70.6 E.	Tadzhik S. S. R. h about 57 km.
27	16 19 30.7	52.1 N.	171.1 W.	Fox Islands, Aleutian Islands. h about 60 km.
27	22 28 58.7	8.1 S.	156.6 E.	Solomon Islands. h about 45 km.
28	12 06 17.8	15.2 N.	119.9 E.	Off coast of Luzon, Philippine Islands. Felt. h about 56 km.
28	14 01 11.2	32.3 S.	178.8 W.	Kermadec Islands region. h about 33 km.
28	15 00 30.0	.1 N.	123.7 E.	Celebes region. h about 181 km.
28	17 49 31.4	37.3 N.	142.0 E.	Near east coast of Honshu, Japan. h about 33 km.
28	22 52 59.7	15.8 N.	93.8 W.	Chiapas, Mexico. h about 97 km.
29	00 19 41.9	0.9 N.	82.7 W.	Off south coast of Panama. h about 42 km.
29	02 42 55.5	34.1 N.	117.0 W.	San Bernardino County, California. Slight damage near Big Bear. h about 33 km. Mag. 4¾-5.

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Date 1962	Origin Time G. C. T.	Lat.	Long.	Region, Remarks and Focal Depth
October	h m s	°	°	
29	09 30 48.2	33.9 S.	70.7 W.	Central Chile. Felt at Santiago. h about 33 km.
29	10 53 29.9	13.0 N.	88.4 W.	Near coast of El Salvador. Felt. h about 43 km.
29	13 20 52.4	6.5 S.	156.3 E.	Solomon Islands. h about 64 km.
29	21 01 28.5	23.3 S.	111.5 W.	Easter Island region. h about 33 km.
30	01 46 33.1	53.8 S.	9.2 E.	Bouvet Island region. h about 33 km.
30	08 31 51.8	12.5	88.0 W.	Near coast of El Salvador. Felt. h about 80 km.
30	16 13 25.6	26.6 N.	93.3 E.	Eastern India. h about 33 km.
30	21 01 28.5	23.3 S.	111.5 W.	Easter Island region. h about 33 km.
31	05 22 54.7	5.3 S.	150.4 E.	New Britain region. h about 33 km.
31	11 32 28.2	5.4 N.	82.5 W.	South of Panama. h about 33 km. Mag. 6½.
31	13 27 25.0	51.6 N.	177.3 E.	Rat Islands, Aleutian Islands. h about 83 km.

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Date and Station		Phase (GCT) h m s
October 1		
EUR	eP	00 17 45
October 1		
BOZ	eP	01 06 46
BUT	eP	01 06 45
EUR	eP	01 07 01
FGU	eP	01 06 57
SJP	e(P)	01 05 32
October 1		
COL	eP	02 32 52
October 1		
TUC	i(P)	03 56 24
October 1		
ALQ	iP	04 08 38
	ipP	10 35
BOZ	eP	04 08 45
	epP	10 45
BUT	iP	04 08 41
	epP	10 40
COL	iP	04 08 32
	ipP	10 30
	e(S)	18 05
EUR	iP	04 08 14
	ipP	10 11
FGU	eP	04 08 39
GCA	e(P)	04 08 21
HHM	eP	04 08 42
KIP	iP	04 04 11
SLC	eP	04 08 31
	epP	10 33
October 1		
HHM	eP	04 26 30
TUC	iP	04 23 17
	i	23 30
	e	25 14
October 1		
GCA	e(P)	05 17 41
	e	17 02
October 1		
FGU	eP	05 45 28
	e(S)	45 50
October 1		
GUA	e(P)	06 00 10
October 1		
COL	eP	07 27 58
	e	28 14
SJP	eP	07 18 38

Date and Station		Phase (GCT) h m s
October 1		
EUR	iP'	08 09 58
October 1		
ALQ	iP	10 04 47
BOZ	eP	10 04 46
BUT	eP	10 03 38
COL	iP	10 00 26
	ipP	01 00
EUR	iP	10 03 54
FGU	eP	10 04 12
	e	10 31
HHM	eP	10 03 23
KIP	iP	10 02 01
RCD	eP	10 04 18
THU	iP	10 02 43
October 1		
COL	iP	10 09 53
EUR	iP	10 10 07
SJP	eP'	10 16 25
October 1		
BUT	e(P)	12 16 30
October 1		
ALQ	eP	12 25 28
	ePKKP	43 20
BUT	ePKKP	12 44 07
COL	eP	12 26 36
	ePP	29 59
	ePKKP	44 37
EUR	e(P)	12 27 38
	iP'	32 00
	i	32 35
	ePKKP	43 25
FGU	e(P)	12 28 45
	eP'	31 49
HHM	eP	12 27 13
KIP	eP'	12 32 52
TUC	iP'	12 32 48
THU	eP	12 25 08
October 1		
COL	iP	12 56 20
EUR	iP	12 59 53
October 1		
COL	iP	13 12 07

Date and Station		Phase (GCT) h m s
EUR	eP	13 15 38
October 1		
COL	eP	15 19 39
EUR	iP	15 20 43
October 1		
ALQ	eP	20 38 59
October 1		
ALQ	eP	20 54 55
BOZ	eP	20 55 02
	ePP	58 27
BUT	iP	20 55 03
COL	iP	20 55 05
	i	55 25
EUR	iP	20 54 32
FGU	iP	20 54 58
GCA	eP	20 55 04
HON	iP	20 50 29
HHM	eP	20 55 04
KIP	iP	20 50 29
	ipP	50 58
SLC	eP	20 54 50
TUC	iP	20 54 31
October 1		
COL	iP	22 21 32
October 1		
SLC	eP	23 16 28
October 2		
ALQ	e(P)	03 54 04
BCN	e(P)	03 52 08
	eL	53 25
BOZ	e(P)	03 53 54
	eS	56 01
BUT	iP	03 53 51
	i(S)	55 37
EUR	iP	03 51 51
	iL	52 31
FGU	eP	03 53 08
HHM	e(P)	03 53 32
	eL	56 20
SLC	e(P)	03 52 53
UKI	eP	03 51 54
	iL	52 47

Date and Station		Phase (GCT) h m s
October 2		
EUR	iP	18 00 13
October 2		
EUR	eP	08 22 18
	i	23 05
October 2		
EUR	eP	08 47 05
October 2		
FGU	eP	11 46 53
October 2		
BOZ	iP	14 20 25
BUT	iP	14 20 32
	i(S)	20 50
FGU	e(P)	14 21 16
	e(S)	22 17
HHM	eP	14 21 07
	e(S)	22 08
October 2		
ALQ	eP	17 19 08
October 2		
BOZ	iP	18 14 32
October 2		
COL	eP	19 42 29
	epP	42 52
October 2		
ALQ	eP	20 30 08
October 2		
ALQ	eP	23 35 42
EUR	i(P)	23 36 07
October 2		
EUR	eP	23 43 50
FGU	iP	23 43 35
	eS	44 04
SLC	iP	23 43 05
October 3		
TUC	e(P)	00 10 28
October 3		
RCD	iP	01 11 52
October 3		
ALQ	eP	01 26 47
EUR	iP	01 27 15
FGU	e(P)	01 26 15
HHM	e(P)	01 26 35
SJP	eP	01 24 42
TUC	e(P)	01 27 18

Date and Station		Phase (GCT)
October 3		h m s
ALQ	eP	01 29 22
BOZ	i(P)	01 29 09
BUT	i(P)	01 29 13
COL	eP	01 29 56
EUR	iP	01 29 51
HHM	eP	01 29 12
SLC	e(P)	01 29 26
SJP	eP	01 26 08
TUT	e(P')	01 29 51
October 3		
EUR	eP	02 48 20
TUC	e(P)	02 48 23
October 3		
COL	iP	03 52 00
EUR	eP	03 55 21
October 3		
COL	eP	05 35 57
EUR	eP	05 39 21
SJP	e(P)	05 44 34
October 3		
FGU	e(P)	07 30 53
October 3		
FGU	eP	07 40 24
	eS	40 47
October 3		
COL	iP	08 19 41
EUR	eP	08 19 19
October 3		
COL	iP	12 09 46
EUR	eP	12 10 57
October 3		
ALQ	iP	13 19 14
EUR	iP	13 19 57
October 3		
EUR	e(P)	14 15 50
October 3		
EUR	eP	16 33 11
FGU	eP	16 32 36
SLC	iP	16 32 36
	iL	33 04

Date and Station		Phase (GCT)
October 3		h m s
COL	eP	17 26 49
EUR	eP	17 26 53
October 3		
ALQ	iP	17 56 42
October 3		
ALQ	eP	18 02 37
TUT	eP	18 02 06
October 3		
COL	iP'	19 03 47
EUR	iP'	19 07 50
SJP	eP	19 01 18
October 3		
FGU	eP	19 51 26
GCA	eP	19 52 07
October 3		
ALQ	eP	20 12 48
EUR	eP	20 12 00
	iL	12 52
FGU	eP	20 12 02
	eL	12 50
October 3		
COL	eP	20 23 16
	epP	24 08
October 4		
ALQ	iP	00 16 18
October 4		
FGU	eP	01 22 20
October 4		
COL	e(P)	02 25 30
October 4		
BOZ	e(P)	02 39 12
	e	39 25
	e	40 15
BUT	iP	02 39 27
	i	39 51
FGU	e(P)	02 39 50
October 4		
BUT	iP	03 11 10
	i	11 37
October 4		
COL	eP	03 44 56
	i	46 17
October 4		
BOZ	eP	04 46 41

Date and Station		Phase (GCT)
		h m s
BUT	iP	04 46 56
	i	47 21
FGU	e(P)	04 47 24
HHM	e(P)	04 47 30
	e	48 25
October 4		
ALQ	eP	04 52 09
COL	eP	04 52 40
EUR	iP	04 52 35
GCA	e(P)	04 52 47
October 4		
BOZ	eP	05 07 00
	e	07 17
BUT	iP	05 07 19
	i	07 42
FGU	e(P)	05 07 40
	e	07 58
HHM	e(P)	05 07 53
SLC	eP	05 08 00
	e	08 52
October 4		
ALQ	eP	06 04 20
October 4		
COL	eP	07 36 14
October 4		
ALQ	eP	08 58 18
October 4		
COL	iP	09 14 05
EUR	i(P)	09 14 45
	ipP	15 12
October 4		
EUR	eP	12 35 45
October 4		
COL	eP	13 34 08
EUR	iP	13 34 01
GCA	eP	13 34 16
HHM	eP	13 38 23
October 4		
ALQ	iP	13 48 33
October 4		
COL	iP	14 45 37
October 4		
COL	iP	18 59 39
	e	19 01 39

Date and Station		Phase (GCT)
		h m s
GCA	e(P)	18 59 44
	e	19 01 48
October 4		
BOZ	e(P)	19 01 12
EUR	eP	19 01 34
October 4		
BOZ	eP	19 58 52
COL	iP	19 58 00
EUR	e(P)	19 59 25
HHM	eP	19 58 45
SJP	eP	19 58 04
October 4		
COL	iP	20 46 58
EUR	iP	20 48 00
October 4		
FGU	eP	20 59 06
October 4		
ALQ	eP	21 30 54
October 4		
COL	iP	22 49 23
October 4		
ALQ	eP	22 55 30
SJP	iP	22 51 34
	i	52 25
October 4		
EUR	eP	23 20 38
GCA	e(P)	23 20 53
October 4		
GUA	eP	23 31 29
October 5		
BUT	iP	00 26 47
October 5		
FGU	eP	03 55 26
October 5		
BOZ	e(P)	04 24 28
COL	eP	04 25 17
EUR	iP	04 25 11
FGU	eP	04 24 34
GCA	eP	04 25 26
HHM	eP	04 24 32
TUC	e(P)	04 25 14

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Date and Station		Phase (GCT)
		h m s
October 5		
COL	iP	07 18 35
	i	18 47
	e	22 41
EUR	eP	07 19 35
October 5		
COL	eP	08 49 10
EUR	eP	08 50 00
HHM	eP	08 49 21
October 5		
BUT	iP	09 12 45
COL	iP	09 08 18
	e(S)	08 48
EUR	eP	09 12 43
October 5		
ALQ	iP	09 58 31
	e	10 00 44
EUR	eP	09 59 37
TUT	eP	09 57 46
October 5		
ALQ	eP	10 24 30
October 5		
COL	iP	10 32 49
EUR	eP	10 35 54
October 5		
COL	iP	10 50 00
EUR	eP	10 51 55
FGU	eP	10 52 14
GUA	iP	10 39 38
HHM	eP	10 51 49
October 5		
COL	iP	10 56 27
EUR	iP	10 59 12
GUA	iP	10 46 55
October 5		
COL	iP	13 15 20
	ePP	19 21
EUR	eP	13 15 59
October 5		
COL	eP	15 36 42
EUR	iP	15 30 34
GCA	eP	15 30 20
	e(S)	31 10

Date and Station		Phase (GCT)
		h m s
October 5		
ALQ	iP	17 02 00
BOZ	e(P)	17 02 20
	iL	05 20
BUT	iP	17 02 20
	iL	04 58
COL	iP	17 06 42
EUR	iP	17 00 40
FGU	iP	17 01 40
	i	02 00
GCA	iP	17 00 58
	i	00 05
	iS	01 45
KIP	iP	17 07 35
SLC	eP	17 01 17
	i	01 34
	iS	02 36
SJP	iP	17 08 37
TUC	iP	17 01 37
	iS	03 28
	iL	03 44
UKI	e(P)	17 01 47
October 5		
COL	eP	17 53 30
October 5		
ALQ	eP	18 09 10
	i	09 46
FGU	iP	18 08 54
	eS	10 12
GCA	eP	18 08 16
	eS	09 12
SLC	eP	18 08 35
	i	08 48
October 5		
COL	iP	20 14 25
October 5		
BUT	iP	20 24 01
	iL	24 26
HHM	e(P)	20 24 37
October 5		
BOZ	e(P)	20 26 04
	eL	26 19
BUT	iP	20 26 24
	eL	26 47
HHM	e(P)	20 27 06

Date and Station		Phase (GCT)
		h m s
October 5		
BUT	iP	20 37 52
	iL	38 18
October 5		
BOZ	e(P)	21 28 12
BUT	iP	21 28 28
	iL	28 55
October 6		
ALQ	iP	03 27 08
BOZ	e(P)	03 26 53
BUT	e(P)	03 26 59
COL	eP	03 27 43
FGU	eP	03 27 01
GCA	eP	03 27 24
HHM	eP	03 26 56
RCD	e(P)	03 26 19
SLC	eP	03 27 13
SJP	eP	03 24 28
TUC	eP	03 27 39
	eL	47 57
October 6		
ALQ	eP	04 05 00
BOZ	e(P)	04 04 47
COL	eP	04 05 34
FGU	eP	04 04 54
HHM	eP	04 04 50
SLC	e(P)	04 05 07
SJP	eP	04 02 20
TUC	e(P)	04 05 32
October 6		
BUT	eP'	04 40 46
COL	iP	04 36 15
	i	36 27
GUA	eP	04 30 42
HON	eP	04 32 23
	ePP	34 40
	iS	39 50
	eScS	42 03
	eSS	44 00
	eL	46 35
KIP	eP	04 32 35
SLC	eP'	04 40 31
	eL	05 06 28

Date and Station		Phase (GCT)
		h m s
SJP	eP'	04 42 29
TUC	e(P)	04 36 30
	eL	05 04 16
UKI	e(P)	04 36 07
October 6		
COL	eP	04 47 57
FGU	e(P)	04 46 49
October 6		
BOZ	eP	05 51 34
	epP	51 54
BUT	iP	05 51 30
	epP	51 49
COL	iP	05 49 06
	ipP	49 24
FGU	eP	05 51 52
GUA	eP	05 43 13
HHM	iP	05 51 19
October 6		
ALQ	iP	07 04 10
October 6		
ALQ	iP	07 15 45
October 6		
COL	eP	07 29 56
October 6		
COL	eP	08 09 12
HON	eP	08 05 36
	eS	12 34
	eSS	17 08
	eL	19 50
SJP	eP'	08 15 29
October 6		
COL	eP	08 16 23
SJP	eP'	08 22 42
October 6		
FGU	e(P)	09 05 32
October 6		
COL	iP	09 20 49
October 6		
ALQ	eP	09 30 30
	eS	31 06
BOZ	iP	09 28 51
	iS	29 21
BUT	iP	09 29 01
FGU	iP	09 29 01
	i	29 02
	iS	29 42

Date and Station		Phase (GCT)
		h m s
GCA	e(P)	09 29 38
HHM	eP	09 29 36
	eS	30 36
SLC	eP	09 29 04
	i	29 11
	iS	29 33
	iL	29 44
October 6		
BOZ	e(P)	10 22 05
	eL	22 17
BUT	iP	10 22 18
	eL	22 46
October 6		
ALQ	eP	11 13 52
BOZ	e(P)	11 14 39
BUT	eP	11 14 33
COL	iP	11 13 05
	ipP	13 54
	ePP	16 35
	ePKKP	31 12
	eP'P'	39 08
FGU	eP	11 13 47
HHM	e(P)	11 13 46
KIP	iP	11 10 07
SLC	eP	11 14 17
SJP	eP'	11 19 36
	ePP	22 38
TUC	iP	11 13 34
UKI	eP	11 13 00
	epP	13 47
October 6		
ALQ	eP	11 30 50
FGU	e(P)	11 30 51
October 6		
COL	eP	12 12 37
October 6		
ALQ	eP	12 24 52
October 6		
ALQ	iP	13 40 36
COL	eP	13 45 31
FGU	eP	13 41 44
SLC	e(P)	13 42 28
SJP	eP	13 35 58
	eS	37 29

Date and Station		Phase (GCT)
		h m s
TUC	e(P)	13 41 54
October 6		
ALQ	iP	14 13 30
	i(pP)	14 10
COL	iP	14 17 34
SJP	e(P)	14 10 15
October 6		
BHP	iP	15 38 55
	iS	39 47
October 6		
COL	iP	17 43 01
	i	43 07
EUR	eP	17 46 19
October 6		
COL	iP	18 13 57
EUR	iP	18 14 07
TUT	e(P)	18 14 16
October 6		
FGU	eP	20 53 14
	i	53 18
October 6		
COL	iP	21 50 31
October 6		
COL	eP	22 54 29
October 6		
COL	iP	23 42 02
October 6		
ALQ	e(P)	23 44 56
COL	iP	23 44 15
EUR	eP	23 44 26
	epP	44 39
	ePKKP	00 01 57
	eP'P'	10 01
HON	eP	23 40 28
	ePP	42 47
	e	44 14
	eS	47 49
	eSS	52 00
	eL	54 40
SJP	eP'	23 50 40
TUT	eP	23 44 34
October 7		
COL	iP	00 09 10
HHM	eP	00 11 13
October 7		
COL	iP	01 01 55
EUR	eP	01 02 04
HON	eS	01 05 42
	eL	12 37

Date and Station		Phase (GCT)
October 7		h m s
EUR	eP	01 13 55
October 7		
EUR	iP	02 07 06
GCA	e(P)	02 06 34
October 7		
FGU	e(P)	03 28 26
	eS	29 10
October 7		
RCD	e(P)	05 23 34
October 7		
EUR	e(P)	06 00 43
October 7		
ALQ	eP	06 55 18
COL	e(P)	06 55 35
EUR	eP	06 55 45
FGU	e(P)	06 54 04
	e	54 11
October 7		
EUR	eP	07 18 14
October 7		
TUT	eP	07 59 13
October 7		
ALQ	iP	08 59 03
BHP	iP	08 52 58
	iS	53 45
EUR	eP	09 00 18
October 7		
RCD	eP	09 29 56
October 7		
ALQ	iP	09 59 30
EUR	eP	09 59 58
October 7		
ALQ	eP	11 21 13
EUR	eP	11 22 22
TUC	e(P)	11 21 28
October 7		
EUR	eP	11 26 54
October 7		
COL	iP	12 47 59
EUR	eP	12 49 12
October 7		
EUR	e(P)	14 05 12

Date and Station		Phase (GCT)
October 7		h m s
COL	eP'	16 20 03
	i	20 12
EUR	eP'	16 19 13
	ePKKP	29 09
HHM	iP'	16 19 24
SJP	iP	16 12 43
October 7		
EUR	eP	17 00 27
October 7		
COL	iP	18 47 43
EUR	eP	18 47 14
October 7		
ALQ	eP	20 10 55
October 8		
ALQ	iP	05 24 22
COL	eP	05 24 57
EUR	e(P)	05 24 51
FGU	eP	05 24 15
GCA	eP	05 24 39
HHM	eP	05 24 12
TUC	e(P)	05 24 53
October 8		
BOZ	e(P)	09 53 21
EUR	e(P)	09 55 08
FGU	eP	09 54 00
October 8		
BOZ	e(P)	12 01 12
October 8		
EUR	e(P)	13 33 44
FGU	eP	13 12 12
October 8		
COL	eP	14 38 04
EUR	eP	14 39 39
October 8		
ALQ	eP	15 06 48
	e	07 30
BCN	iP	15 04 43
	e	05 01
	e	05 25
EUR	eP	15 05 08
	i	05 48

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Date and Station		Phase (GCT) h m s
October 8		
COL	iP	15 22 41
EUR	eP	15 24 15
October 8		
COL	eP	15 49 25
EUR	iP	16 00 00
October 8		
COL	iP	16 23 02
EUR	iP	16 26 00
October 8		
ALQ	eP	16 42 34
	i(S)	43 42
FGU	eP	16 42 08
	eS	42 56
October 8		
ALQ	iP	17 34 44
	e	35 25
October 8		
ALQ	iP	18 05 40
COL	iP	18 05 44
EUR	eP	18 05 18
GCA	eP	18 05 28
KIP	eP	18 01 15
October 8		
ALQ	e(P)	18 41 59
October 8		
COL	iP	19 06 58
EUR	iP	19 07 34
October 8		
ALQ	eP	20 46 39
	eS	47 42
COL	iP	20 51 33
FGU	eP	20 46 10
	eS	46 56
October 8		
ALQ	e(P)	22 10 26
BOZ	e(P)	22 09 46
BUT	iP	22 09 41
	eS	20 08
COL	iP	22 07 22
	ePP	09 18
	eS	16 24
EUR	iP	22 09 52
	ePP	13 25
FGU	eP	22 10 04
GUA	iP	22 01 38
HON	eP	22 07 49
	i	08 30
	e	16 08
	iS	17 23
	i(ScS)	18 34
	e(SSS)	25 52
	iL	29 14
HHM	iP	22 09 31
	i	09 54
RCD	e(P)	22 10 07
SIT	eP	22 08 11
	e(S)	17 43
October 8		
COL	eP	22 35 07
EUR	iP	22 37 37
October 9		
FGU	eP	00 26 42
SLC	iP	00 26 12
	i	26 38
October 9		
COL	eP	03 26 45
EUR	eP	03 26 47
October 9		
ALQ	iP	04 40 05
COL	iP	04 35 52
	e	46 31
EUR	iP	04 39 15
FGU	eP	04 39 30
GCA	e(P)	04 39 39
October 9		
TUC	e(P)	05 01 36
October 9		
COL	eP	08 53 30
HHM	e(P)	08 55 33
October 9		
EUR	iP	09 17 09
October 9		
UKI	eP	16 01 56
October 9		
COL	iP	16 10 31
	ipP	11 28
EUR	e(P)	16 13 00
October 9		
BOZ	eP	16 28 00
FGU	eP	16 28 11
	eS	28 56
October 9		
ALQ	eP'	20 31 45
	ePP	32 50
	ePKKP	42 12
	i	21 02 12
COL	eP	20 26 56
	eS	37 08
EUR	iP	20 28 09
	ePP	32 09
GUA	iP	20 18 34
HON	eP	20 24 31
	ePP	26 49
	ePPP	28 17
	iS	32 27
	eScS	34 13
	eSS	36 17
	eSSS	38 23
	eL	40 34
HHM	eP	20 28 13
SJP	eP'	20 34 12
October 10		
FGU	eP	00 41 51
	eS	42 40
October 10		
HHM	iP	01 16 12
	iS	16 40
October 10		
BUT	eP	03 36 31
October 10		
ALQ	eP'	05 01 26
EUR	eP'	05 01 13
GCA	eP'	05 01 21
TUT	eP'	05 01 35
October 10		
COL	eP	08 00 12
EUR	eP	08 02 56
FGU	eP	08 03 12
SJP	e(P)	08 05 08
October 10		
ALQ	iP	08 36 42
COL	e(P)	08 45 35
EUR	eP	08 38 47
FGU	eP	08 38 29
SJP	eP	08 34 52
	i	35 28
October 10		
ALQ	eP	09 32 40
COL	iP	09 32 41
EUR	eP	09 32 20
FGU	eP	09 32 44
TUC	e(P)	09 32 21
TUT	eP	09 32 22
October 10		
BUT	iP	09 35 13
	eL	35 37
FGU	eP	09 35 37
October 10		
COL	iP	10 48 37
October 10		
COL	iP	11 25 05
EUR	eP	11 25 41
October 10		
ALQ	eP	11 50 59
COL	eP	11 55 04
EUR	e(P)	11 52 03
October 10		
ALQ	eP'	13 52 23
	i	56 04
COL	e(P)	13 47 08
	e(PP)	51 11
EUR	eP'	13 52 15
October 10		
COL	eP	14 45 49
October 10		
SIT	eP	15 55 36
October 10		
COL	eP	16 31 57
October 10		
FGU	eP	17 03 14
	eS	03 32
October 10		
COL	iP	19 26 11
October 10		
COL	iP	20 56 14
October 10		
ALQ	iP	21 05 16
	epP	05 38

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Date and Station		Phase (GCT)
		h m s
BOZ	eP	21 06 11
BUT	iP	21 06 17
EUR	iP	21 05 57
FGU	iP	21 05 49
GCA	iP	21 05 38
HHM	eP	21 06 27
RCD	eP	21 05 50
	epP	06 14
SJP	iP	21 02 39
TUC	eP	21 05 14
TUT	iP	21 05 14
	ipP	05 36
October 10		
ALQ	eP	22 04 49
	i	05 10
BOZ	eP	22 04 59
COL	iP	22 04 56
	i	05 07
	i	05 30
EUR	iP	22 04 24
FGU	iP	22 04 52
GCA	iP	22 04 35
HHM	eP	22 04 55
KIP	iP	22 00 06
	i	00 22
SLC	e(P)	22 04 43
TUC	eP	22 04 21
TUT	iP	22 04 25
October 10		
COL	iP	22 30 15
October 10		
BOZ	e(P)	22 52 15
October 10		
FGU	eP	23 35 51
October 11		
TUC	e(P)	00 33 11
October 11		
COL	eP	00 56 23
EUR	iP	00 59 50
	i	01 00 03
TUC	eP	01 00 49

Date and Station		Phase (GCT)
		h m s
TUT	eP	01 00 51
October 11		
COL	i(P)	02 59 17
EUR	eP	02 58 55
October 11		
EUR	iP	03 47 37
COL	eP	03 44 16
TUC	eP	03 48 39
TUT	eP	03 48 38
October 11		
ALQ	e(P)	05 49 46
EUR	e(P)	05 50 40
SJP	eP	05 47 07
October 11		
ALQ	iP	06 30 50
COL	eP	06 35 02
EUR	eP	06 31 56
FGU	e(P)	06 31 27
SJP	iP	06 28 01
TUT	e(P)	06 30 55
October 11		
EUR	e(P)	10 46 45
October 11		
BOZ	eP	11 45 55
October 11		
EUR	eP	13 15 35
October 11		
COL	eP	16 13 34
EUR	eP	16 16 05
HHM	iP	16 15 41
October 11		
ALQ	iP	19 26 33
October 11		
ALQ	eP	23 56 15
October 12		
ALQ	eP	00 18 10
SJP	iP	00 15 30
	i	15 40
October 12		
ALQ	e(P)	00 38 11
October 12		
GUA	eP	06 20 46

Date and Station		Phase (GCT)
		h m s
October 12		
FGU	eP	07 27 46
	eS	28 14
October 12		
ALQ	iP	08 06 40
BOZ	e(P)	08 07 43
BUT	iP	08 07 48
EUR	iP	08 07 32
	epP	07 47
FGU	eP	08 07 16
GCA	eP	08 07 37
RCD	eP	08 07 16
SJP	iP	08 03 17
	iPP	03 32
TUC	eP	08 06 41
TUT	iP	08 06 42
October 12		
COL	eP	09 18 42
FGU	e(P)	09 21 30
October 12		
COL	eP	11 01 02
October 12		
COL	iP	11 55 50
GCA	eP	11 56 05
October 12		
COL	iP	15 03 54
October 12		
ALQ	e(P)	15 01 28
	e(S)	02 33
BCN	iP	15 00 29
	eS	00 52
COL	eP	15 06 43
GCA	eP	15 01 29
	i	01 36
	i(S)	02 23
SLC	e(P)	15 01 48
October 12		
BCN	eP	15 13 34
October 12		
ALQ	e(P)	16 24 30
	e	26 00
October 12		
ALQ	eP	17 04 52
FGU	eP	17 05 02

Date and Station		Phase (GCT)
		h m s
October 12		
COL	e(P)	17 16 03
October 12		
EUR	e(P)	18 27 40
October 12		
SLC	eP	19 28 27
October 12		
GCA	e(P)	19 47 22
	iS	47 28
October 12		
COL	iP	19 59 45
October 12		
FGU	eP	20 22 30
October 12		
SIT	eP	21 09 31
	eS	19 50
October 12		
BUT	iP	21 23 29
October 12		
FGU	iP	22 56 10
	eS	56 42
October 13		
BCN	eP	00 06 45
	eS	07 25
GCA	eP	00 08 20
	e(S)	09 36
October 13		
GUA	e(P)	05 29 52
October 13		
TUC	e(P)	07 03 06
October 13		
COL	iP	10 35 39
October 13		
FGU	eP	11 54 58
	e(S)	55 20
October 13		
BOZ	e(P)	12 02 23
BUT	iP	12 02 33
FGU	e(P)	12 03 20
HHM	e(P)	12 03 07
October 13		
BOZ	iP	12 56 28
	iS	56 42
BUT	iP	12 56 39
	iS	57 02
HHM	iP	12 57 15
	iS	58 21

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Date and Station		Phase	(GCT) h m s
October 13			
ALQ	iP		13 46 16
COL	iP		13 51 27
FGU	eP		13 46 52
	i(pP)		47 16
TUC	eP		13 46 20
TUT	iP		13 46 20
October 13			
FGU	eP		14 46 15
	e(S)		46 38
October 13			
ALQ	e(P)		19 01 04
COL	iP		19 00 15
October 13			
COL	iP		20 15 20
	e		16 00
October 13			
FGU	iP		21 46 41
	i		46 47
October 13			
COL	iP		21 57 14
October 14			
ALQ	eP		00 43 22
COL	iP		00 43 43
GCA	e(P)		00 43 14
TUT	iP		00 43 04
October 14			
ALQ	eP		02 01 06
GCA	e(P)		02 00 50
TUC	e(P)		02 01 04
TUT	eP		02 01 05
October 14			
COL	iP		02 06 36
October 14			
BOZ	e(P)		03 38 17
BUT	eP		03 38 21
	iL		38 56
HHM	e(P)		03 39 05
October 14			
BOZ	e(P)		03 39 33
BUT	iP		03 39 46
	iL		40 11
October 14			
COL	iP		03 42 15

Date and Station		Phase	(GCT) h m s
October 14			
COL	eP		04 25 55
October 14			
COL	eP		05 16 26
October 14			
COL	iP		07 02 35
October 14			
ALQ	iP		07 37 01
COL	iP		07 37 05
GCA	e(P)		07 36 32
October 14			
COL	iP		09 13 36
October 14			
HHM	e(P)		09 43 56
UKI	iP		09 41 18
	iS		41 26
October 14			
ALQ	eP		10 18 02
BUT	e(P)		10 17 14
COL	eP		10 20 38
FGU	e(P)		10 17 22
HHM	eP		10 17 23
TUC	e(P)		10 17 31
UKI	iP		10 14 43
	iS		14 52
October 14			
UKI	iP		11 10 32
	iS		10 42
October 14			
UKI	iP		11 48 43
	iS		48 53
October 14			
COL	e(P)		14 20 51
October 14			
ALQ	iP		15 22 18
BOZ	eP		15 21 30
BUT	eP		15 21 25
COL	iP		15 18 50
FGU	iP		15 21 51
	e		22 01
HHM	iP		15 21 13
THU	e(P)		15 20 14
October 14			
BUT	eP		19 41 28

Date and Station		Phase	(GCT) h m s
COL	eP		19 39 39
	eS		46 17
October 14			
BOZ	eP		20 33 27
BUT	eP		20 33 38
	eL		34 04
October 14			
ALQ	e(P)		21 24 25
COL	iP		21 22 12
EUR	eP		21 25 17
October 15			
EUR	e(P)		00 18 27
FGU	eP		00 18 12
	e(S)		18 44
SLC	e(P)		00 17 42
October 15			
EUR	eP		00 27 57
SLC	e(P)		00 27 07
October 15			
COL	iP		00 38 27
EUR	eP		00 38 26
October 15			
FGU	iP		02 00 44
October 15			
BUT	eP		03 05 22
EUR	eP		03 06 20
October 15			
ALQ	eP		03 21 51
EUR	e(P)		03 23 07
FGU	iP		03 22 43
October 15			
EUR	eP		04 13 58
	e		16 04
October 15			
EUR	iP		04 47 30
	e		48 19
October 15			
SJP	e(P)		05 29 33
October 15			
COL	iP		06 56 39
October 15			
ALQ	eP		08 20 52
BUT	iP		08 20 58
COL	iP		08 21 01

Date and Station		Phase	(GCT) h m s
EUR	eP		08 20 29
GCA	e(P)		08 20 38
TUC	e(P)		08 20 28
October 15			
COL	eP		08 45 23
October 15			
EUR	e(P)		11 21 23
BOZ	eP		11 21 19
BUT	eP		11 21 29
	e(L)		21 54
FGU	e(P)		11 21 59
	e		22 26
October 15			
ALQ	e(P)		11 53 54
COL	iP		11 54 06
October 15			
COL	iP		12 42 21
October 15			
ALQ	eP		17 43 24
October 15			
EUR	eP		17 43 10
October 15			
EUR	e(P)		22 14 05
October 15			
GCA	eP		22 20 09
	iS		20 50
October 15			
ALQ	eP		22 49 50
October 15			
SIT	eP		22 58 25
	e		23 00 27
	eS		04 25
October 15			
EUR	eP		23 14 21
October 15			
ALQ	eP		23 55 04
EUR	e(P)		23 55 01
October 16			
ALQ	iP'		00 06 24
EUR	eP'		00 06 18
October 16			
EUR	iP		01 21 49
	e		22 22
	e		23 28
October 16			
COL	e(P)		03 02 32

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Date and Station		Phase (GCT)
		h m s
EUR	iP	03 02 38
	i	03 01
	i	03 14
	e	03 54
October 16		
EUR	iP	03 21 52
	e	22 12
	e	22 43
October 16		
COL	iP	05 10 07
October 16		
COL	iP	05 24 08
October 16		
COL	eP	05 34 15
EUR	iP	05 51 50
October 16		
COL	iP	06 33 04
TUC	iP	06 35 24
October 16		
ALQ	iP'	07 35 40
EUR	iP'	07 36 49
	e(PP)	40 15
October 16		
EUR	eP	08 29 34
	i	29 44
FGU	eP	08 29 13
	e(S)	29 44
October 16		
ALQ	eP	09 35 28
BOZ	e(P)	09 34 34
	e	36 08
BUT	eP	09 34 13
	i	34 28
	i	35 49
EUR	eP	09 34 56
FGU	eP	09 34 32
October 16		
GUA	eP	09 48 40
October 16		
COL	eP	10 03 16
EUR	iP	10 03 23
	ePP	06 51
October 16		
COL	iP	10 29 10
EUR	iP	10 32 51
October 16		
EUR	e(P)	11 40 39

Date and Station		Phase (GCT)
October 16		h m s
COL	eP	12 11 10
EUR	iP	12 13 50
October 16		
ALQ	e(P)	12 23 08
October 16		
ALQ	iP	18 11 35
BCN	e(P)	18 11 06
BOZ	eP	18 10 23
	e	10 39
	i	10 43
BUT	e(P)	18 10 19
	e	10 30
COL	iP	18 07 01
	eS	10 33
EUR	eP	18 10 30
FGU	eP	18 10 53
GCA	e(P)	18 10 0[illegible]
	e(PcP)	11 03
RCD	e(P)	18 11 07
SJP	iP	18 15 20
TUC	eP	18 11 31
TUT	eP	18 11 31
	i	11 43
October 16		
COL	iP	19 19 25
October 16		
COL	eP	21 21 34
EUR	iP	21 25 29
	i	25 34
	i	26 07
October 16		
BHP	iP	21 23 47
	iS	24 26
October 16		
ALQ	eP	21 57 15
October 16		
SLC	e(P)	23 06 40
RCD	iP	23 07 05
October 16		
EUR	eP	12 44 30
	eS	45 31
FGU	eP	23 44 14
	e(S)	44 42
SLC	i(P)	23 43 41
	iL	44 08

Date and Station		Phase (GCT)
October 17		h m s
ALQ	eP	00 35 33
October 17		
COL	eP	02 14 19
BOZ	iP	02 10 25
October 17		
EUR	iP	04 25 38
	e(S)	25 58
October 17		
BOZ	e(P)	05 49 49
BUT	iP	05 50 06
	iS	50 30
October 17		
BUT	eP	08 38 33
	e	38 48
October 17		
BUT	iP	09 10 49
October 17		
BUT	iP	09 34 39
October 17		
BUT	eP	12 20 00
October 17		
BUT	eP	12 50 40
	epP	52 16
EUR	iP	12 50 50
	i	50 55
	epP	52 03
	ePP	53 48
COL	iP	12 48 04
October 17		
BOZ	eP	16 37 07
	e(S)	37 23
October 17		
ALQ	eP	17 22 44
BCN	iP	17 20 39
October 17		
ALQ	eP	17 36 54
	e	37 23
October 17		
SIT	eP	18 07 24
October 17		
GCA	e(P)	21 30 31
	e	31 11
October 17		
EUR	iP	22 29 02
October 17		
GCA	eP	22 42 32
	e	42 34

Date and Station		Phase (GCT)
October 17		h m s
FGU	eP	23 06 03
SLC	e(P)	23 05 32
October 18		
SIT	eP	00 39 41
October 18		
COL	iP	02 11 35
October 18		
ALQ	eP'	04 25 01
	i	25 17
	i	28 39
BOZ	eP'	04 25 01
BUT	iP'	04 24 58
EUR	iP'	04 24 59
	e	25 06
	e(PKKP)	35 45
FGU	eP'	04 25 06
GCA	eP'	04 25 08
RCD	eP'	04 25 11
	iPP	28 31
SLC	iP'	04 25 04
SJP	eP'	04 26 07
	e	27 22
TUT	i(PP)	04 28 30
	e	28 42
October 18		
FGU	eP	06 13 11
	i	13 17
	eS	13 58
October 18		
BUT	iP	07 13 19
October 18		
GUA	eP	07 26 42
October 18		
FGU	e(P)	07 36 13
	e	36 16
October 18		
ALQ	iP	08 52 18
	epP	52 54
BOZ	eP	08 51 17
	epP	51 53
BUT	i(P)	08 51 01
	i(sP)	51 46
COL	iP	08 48 02
	ipP	48 39

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Date and Station		Phase (GCT)
		h m s
EUR	eP	08 51 22
	e	51 51
	epP	51 57
	ePP	53 52
	e	09 13 17
FGU	iP	08 51 43
GCA	eP	08 51 52
	epP	52 28
KIP	iP	08 49 29
RCD	iP	08 51 50
SLC	iP	08 51 35
	ipP	52 11
THU	e(P)	08 50 14
October 18		
UKI	iP	10 49 15
October 18		
ALQ	iP	11 34 05
	ipP	34 42
COL	iP	11 29 48
	ipP	30 26
EUR	iP	11 33 10
	i(PcP)	33 42
	i(pP)	33 44
	ePP	35 38
RCD	eP	11 33 36
SLC	eP	11 33 21
TUC	eP	11 32 00
October 18		
EUR	eP	12 16 28
October 18		
FGU	iP	12 33 29
October 18		
TUC	eP	14 27 30
October 18		
BOZ	eP	18 04 12
BUT	iP	18 03 58
	iS	04 30
EUR	iP	18 04 33
	eS	05 28
FGU	e(P)	18 04 48
HHM	eP	18 04 18
	eS	05 03
October 18		
EUR	iP	18 40 37
October 18		
EUR	eP	18 51 42

Date and Station		Phase (GCT)
October 18		h m s
BOZ	e(P)	18 57 29
	e(S)	58 03
BUT	eP	18 57 15
	eS	57 46
EUR	eP	18 57 50
	eS	58 47
FGU	eP	18 58 56
HHM	e(P)	18 57 34
	eS	58 24
SLC	eP	18 36 32
October 18		
BOZ	eP	18 58 19
BUT	iP	18 58 05
	iS	58 36
October 18		
BOZ	e(P)	19 10 14
	e	10 32
BUT	i(P)	19 10 35
October 18		
ALQ	eP	19 39 09
October 18		
ALQ	iP	19 54 41
	iPP	55 16
	eS	59 07
COL	iP	19 59 54
	ipP	20 00 22
	esP	00 34
EUR	iP	19 53 58
FGU	eP	19 55 38
GCA	e(P)	19 55 18
	e(pP)	55 34
SJP	e(P)	19 56 12
TUC	eP	19 54 45
TUT	eP	19 54 45
	iPP	55 22
October 18		
FGU	e(P)	20 15 57
	eS	16 16
October 18		
FGU	eP	20 21 30
	eS	22 00
October 18		
BOZ	i(P)	20 31 59
BUT	iP	20 31 47
	iS	32 18

Date and Station		Phase (GCT)
		h m s
FGU	e(P)	20 32 32
	e(S)	33 40
HHM	eP	20 32 07
	e(S)	32 59
	eL	33 13
October 18		
BOZ	e(P)	21 40 16
BUT	iP	21 40 02
COL	eP	21 37 19
EUR	eP	21 40 41
HHM	e(P)	21 40 21
October 18		
SLC	eP	23 04 38
October 19		
SIT	eP	01 27 35
October 19		
BOZ	e(P)	03 46 56
BUT	iP	03 46 41
FGU	e(P)	03 47 31
HHM	eP	03 47 20
	e(S)	48 07
	eL	48 26
October 19		
ALQ	iP	04 24 30
	ipP	25 00
BOZ	eP	04 25 28
	epP	25 59
BUT	iP	04 25 33
	ipP	26 04
	isP	26 20
COL	eP'	04 31 27
EUR	iP	04 25 15
	epP	25 46
	eS	34 53
FGU	iP	04 25 04
	ipP	25 34
GCA	iP	04 24 54
	epP	25 24
HHM	eP	04 25 44
	epP	26 15
RCD	eP	04 25 06
	epP	25 36
SLC	e(P)	04 25 08
SJP	iP	04 21 39
	ipP	22 07

Date and Station		Phase (GCT)
		h m s
TUC	eP	04 09 30
	ipP	10 00
TUT	iP	04 09 30
	ipP	10 01
October 19		
BUT	iP	07 09 22
October 19		
SLC	e(P)	07 13 58
October 19		
FGU	e(P)	08 29 22
	eS	29 50
October 19		
ALQ	eP	08 41 44
	i	41 57
	i	43 26
BCN	eP	08 40 54
FGU	eP	08 41 16
	eS	42 16
GCA	iP	08 40 02
	iS	41 02
SLC	e(P)	08 41 14
TUC	eP	08 46 59
TUT	eP	08 42 00
October 19		
COL	eP	09 28 37
	epP	28 45
October 19		
COL	eP'	09 59 17
	i	59 26
EUR	eP'	09 58 37
	ipP'	58 58
	isP'	59 23
HHM	eP'	09 58 37
SJP	iP	09 51 52
October 19		
EUR	eP	10 44 40
BOZ	e(P)	10 44 17
BUT	iP	10 44 05
	iS	44 36
FGU	e(P)	10 44 51
HHM	e(P)	10 44 23
	e(S)	45 16
October 19		
COL	eP	10 56 52
SJP	eP'	11 04 38

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Date and Station		Phase (GCT)
		h m s
October 19		
ALQ	eP	12 15 10
October 19		
COL	eP	12 19 09
October 19		
BUT	iP	15 14 45
	i	14 57
October 19		
HHM	eP	17 54 53
	eS	55 12
October 19		
ALQ	e(P)	18 01 00
BCN	iP	18 00 27
	i	05 39
COL	eP	18 06 44
EUR	iP	18 00 41
GCA	eP	18 01 00
	i	01 07
	iS	01 56
	i	06 20
HHM	e(P)	18 02 47
SLC	iP	18 01 19
October 19		
ALQ	eP	21 22 42
	e	25 18
October 19		
BOZ	eP	21 27 17
BUT	e(P)	21 27 24
COL	eP	21 30 51
FGU	eP	21 26 01
GCA	eP	21 25 53
HHM	e(P)	21 27 41
RCD	e(P)	21 27 06
SLC	eP	21 26 31
SJP	eP	21 29 16
TUC	eP	21 24 48
	eS	27 34
	eL	28 17
TUT	eP	21 24 48
	e(pP)	25 07
UKI	eP	21 26 51
October 19		
BCN	e(P)	22 25 47

Date and Station		Phase (GCT)
		h m s
October 20		
ALQ	eP'	00 01 08
	i(PP)	02 33
COL	iP	23 55 21
	epP	56 04
FGU	iP'	00 00 29
SJP	iP'	00 02 13
	ipP'	02 54
	e(SKS)	06 29
October 20		
BUT	e(P)	01 10 36
October 20		
BOZ	e(P)	02 23 23
BUT	iP	02 23 11
	iS	23 41
FGU	e(P)	02 23 31
HHM	e(P)	02 23 24
	eS	24 17
October 20		
BUT	iP	02 38 04
October 20		
SIT	eP	02 42 47
	iL	43 06
October 20		
BUT	iP	02 53 21
	i	53 33
October 20		
COL	iP	03 47 48
	epP	49 54
EUR	e(P)	03 47 27
FGU	eP	03 47 22
October 20		
ALQ	iP'	05 49 18
EUR	e(P)	05 45 09
SJP	iP'	05 50 23
	ipP	51 06
October 20		
ALQ	eP	06 43 40
October 20		
BUT	iP	07 00 47
October 20		
BUT	eP	10 25 13
October 20		
FGU	eP	10 57 38
	eS	57 54
October 20		
COL	eP	11 08 45

Date and Station		Phase (GCT)
		h m s
October 20		
GUA	e(P)	14 27 11
October 20		
COL	eP	16 24 40
EUR	eP	16 28 20
October 20		
COL	eP	19 24 16
October 21		
ALQ	iP	00 37 23
EUR	eP	00 37 06
October 21		
COL	iP	01 10 22
HHM	iP	01 10 24
	i	10 43
	e	12 49
	eS	17 47
October 21		
ALQ	iP	02 12 33
	ipP	12 47
BOZ	eP	02 11 00
	epP	11 14
BUT	iP	02 10 51
	ipP	11 05
	iPP	11 16
	eScS	19 17
COL	iP	02 06 21
EUR	iP	02 11 25
	epP	11 38
	ePP	12 35
	ePcP	14 12
	eS	16 24
FGU	iP	02 11 21
GCA	e(P)	02 11 57
RCD	eP	02 11 45
SLC	eP	02 11 32
	e	11 44
SJP	e(P)	02 16 29
SIT	eP	02 07 17
	i	07 28
	ipP	07 31
TUT	eP	02 12 37
	epP	12 50
	esP	12 57
THU	eP	02 11 27
UKI	e(P)	02 11 14

Date and Station		Phase (GCT)
		h m s
October 21		
HHM	eP	02 22 16
	i	23 11
	e(S)	24 05
October 21		
BOZ	e(P)	03 21 16
BUT	iP	03 21 32
	iS	21 57
EUR	iP	03 22 38
FGU	e(P)	03 21 35
	e	21 41
	e(S)	22 07
SLC	e(P)	03 22 14
	e	23 12
October 21		
EUR	eP	07 39 05
October 21		
COL	iP	08 29 15
October 21		
BUT	iP	10 44 14
	iS	44 32
October 21		
SLC	eP	12 13 51
October 21		
EUR	iP	12 37 06
October 21		
COL	iP	13 19 47
EUR	eP	13 19 13
October 21		
COL	iP	15 37 37
EUR	eP	15 38 12
October 21		
GUA	eP	16 20 36
	eS	21 00
October 21		
BOZ	e(P)	19 14 02
BUT	iP	19 14 14
	i(S)	14 37
	i	14 41
October 21		
ALQ	eP	20 07 39
EUR	eP	20 08 27
October 21		
BUT	iP	20 31 28
	iS	31 47
October 21		
COL	iP'	23 30 38

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

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

Date and Station		Phase (GCT) h m s
October 27		
COL	iP	10 23 07
October 27		
ALQ	iP	13 58 51
	iS	14 01 56
BOZ	eP	14 00 20
BUT	iP	14 00 28
	iPP	02 28
COL	iP	14 03 40
HHM	iP	14 00 30
	iPP	02 35
SLC	eP	13 59 53
	ePP	02 14
SJP	eP	13 57 29
TUC	e(P)	13 58 59
TUT	e(P)	13 58 59
October 27		
COL	iP	14 31 28
October 27		
GUA	eP	14 39 50
October 27		
BCN	eP	15 00 29
EUR	iP	15 00 40
SLC	eP	15 01 35
October 27		
BCN	eP	15 35 04
EUR	eP	15 35 12
GCA	eP	15 35 42
October 27		
COL	iP	16 13 19
October 27		
ALQ	eP	16 28 08
COL	eP	16 23 33
EUR	iP	16 27 02
October 27		
HHM	iP	17 33 39
	iS	33 43
October 27		
EUR	eP	20 21 18
GCA	e(P)	20 22 08
	e	23 02
October 27		
HHM	iP	20 31 05
	iS	31 10

Date and Station		Phase (GCT) h m s
October 27		
COL	eP	20 59 35
October 27		
ALQ	eP	21 26 16
October 27		
GUA	eP	21 37 20
October 27		
BUT	iP	22 07 58
	iS	08 34
EUR	eP	22 08 37
HHM	eP	22 08 06
	e(S)	08 45
October 27		
ALQ	eP	22 23 15
COL	eP	22 23 06
October 27		
COL	eP	22 41 22
October 28		
COL	iP	01 00 15
	i(L)	01 22
October 28		
ALQ	iP	01 16 06
GCA	e(P)	01 15 12
October 28		
HHM	iP	04 12 54
	iS	12 58
October 28		
HHM	iP	07 03 37
	iS	03 40
October 28		
COL	eP	12 18 07
October 28		
HHM	e(P)	12 42 06
	e(S)	43 10
October 28		
ALQ	eP	13 13 12
October 28		
COL	eP	15 13 07
SJP	iP'	15 20 48
October 28		
ALQ	iP	15 34 06
October 28		
COL	iP	17 58 14
EUR	eP	18 01 14
THU	eP	17 59 13

Date and Station		Phase (GCT) h m s
October 28		
ALQ	iP	22 57 50
	i	23 00 08
	iS	02 00
BCN	eP	22 58 38
BOZ	eP	22 59 30
	ePP	23 02 21
BUT	iP	22 59 37
COL	iP	23 03 03
	ipP	03 24
	e(S)	10 36
EUR	eP	22 59 06
GCA	eP	22 58 29
HHM	eP	22 59 27
	ipP	23 00 12
SLC	eP	22 58 57
SJP	e(P)	22 58 28
	i	23 01 54
TUC	eP	22 57 53
TUT	iP	22 57 54
October 29		
ALQ	iP	00 26 37
BHP	iP	00 20 37
	eS	21 29
BCN	eP	00 27 27
BOZ	eP	00 28 01
	e	28 12
	e(PcP)	29 40
BUT	iP	00 28 09
	i	28 18
	i	29 43
COL	iP	00 31 11
	ePP	33 53
EUR	eP	00 27 49
GCA	eP	00 27 16
HHM	iP	00 28 26
	i	28 45
SLC	iP	00 27 37
	i	27 45
	e	28 15
	i	29 28
SJP	iP	00 24 10
	i	24 12
TUC	eP	00 26 45
TUT	eP	00 26 45

Date and Station		Phase (GCT) h m s
October 29		
BCN	e(P)	02 02 21
October 29		
BCN	e(P)	02 07 58
October 29		
COL	iP	02 29 47
October 29		
ALQ	eP	02 45 05
	i	45 35
	eS	47 10
BCN	iP	02 43 32
BOZ	eP	02 45 54
BUT	eP	02 45 56
	e	46 03
	iL	49 21
COL	eP	02 49 57
GCA	iP	02 44 11
	i	44 24
	i(S)	45 26
HHM	eP	02 46 19
	eL	50 26
SLC	eP	02 44 49
	i	45 21
	i(S)	45 43
SJP	eP	02 51 35
TUC	eP	02 44 14
TUT	eP	02 44 15
UKI	e(P)	02 44 40
October 29		
GCA	e(P)	03 03 08
October 29		
GCA	e(P)	03 08 36
	e	09 38
October 29		
HHM	eP	04 24 40
	eS	25 32
October 29		
BOZ	e(P)	04 38 42
BUT	iP	04 38 56
	iS	39 18
October 29		
BCN	iP	05 35 44
	i(S)	36 18
EUR	eP	05 36 25
GCA	eP	05 36 24
	e(S)	37 44
TUT	e(P)	05 36 28

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Date and Station		Phase (GCT)
		h m s
October 29		
COL	eP	07 35 29
October 29		
ALQ	iP	09 42 36
BOZ	e(P)	09 43 33
BUT	eP	09 43 36
EUR	eP	09 43 18
GCA	e(P)	09 42 58
SLC	e(P)	09 43 14
TUT	eP	09 42 32
October 29		
SJP	iP	10 40 29
	iS	41 55
October 29		
ALQ	eP	10 59 14
BOZ	e(P)	11 00 46
	e(pP)	00 58
BUT	eP	11 00 53
COL	iP	11 04 10
	ipP	04 23
EUR	eP	11 00 30
HHM	eP	11 01 13
	ePP	03 10
SLC	e(P)	11 00 17
	e(pP)	00 29
TUC	e(P)	10 59 21
TUT	eP	10 59 21
	i	59 24
October 29		
COL	iP	12 19 07
October 29		
GUA	eP	12 39 21
	e(S)	40 00
October 29		
COL	iP	13 33 08
October 29		
EUR	eP	14 43 01
October 29		
COL	iP	15 11 06
	i	11 16
October 29		
COL	e(P)	16 24 41
HHM	eP	16 18 10
SLC	eP	16 17 22

Date and Station		Phase (GCT)
		h m s
October 29		
ALQ	eP	21 11 20
BOZ	eP	21 12 31
BUT	i(P)	21 12 34
COL	eP	21 14 35
GCA	eP	21 12 35
HHM	eP	21 12 46
SLC	eP	21 12 00
October 29		
ALQ	eP	22 48 22
October 30		
EUR	eP	00 10 48
October 30		
GUA	e(P)	00 20 54
October 30		
SLC	e(P)	00 43 47
October 30		
ALQ	eP'	02 05 28
	i	05 46
BOZ	eP'	02 05 54
COL	eP'	02 06 31
	e(PKS)	11 09
EUR	eP'	02 06 05
GCA	eP'	02 05 52
HHM	iP'	02 06 06
KIP	eP'	02 06 17
TUC	eP'	02 05 48
TUT	eP'	02 05 47
October 30		
GCA	eP	04 49 17
October 30		
COL	eP	05 13 49
October 30		
EUR	eP	06 13 04
GCA	e(P)	06 13 05
October 30		
ALQ	iP	08 37 36
	i(S)	43 16
BCN	e(P)	08 38 28
BOZ	eP	08 39 08
	e(pP)	40 42
BUT	iP	08 39 16
	i(pP)	39 51

Date and Station		Phase (GCT)
		h m s
COL	iP	08 42 31
GCA	eP	08 38 16
HON	eP	08 42 38
HHM	iP	08 39 35
	epP	39 54
	e	41 24
KIP	eP	08 42 41
SLC	iP	08 38 40
	i	41 11
SJP	eP	08 36 39
	iS	40 38
TUC	iP	08 37 45
TUT	iP	08 37 44
	i	37 48
October 30		
GUA	e(P)	14 13 59
October 30		
BOZ	eP	15 26 18
COL	iP	15 29 43
	e	33 17
HHM	eP	15 24 01
	iS	24 10
October 30		
COL	eP	15 52 56
GUA	eP	15 45 11
October 30		
ALQ	iP	16 12 27
COL	e(P)	16 12 31
October 30		
COL	iP	16 25 19
	ipP	25 31
GUA	e(P)	16 26 13
	e	26 20
October 30		
ALQ	eP	19 42 49
	i	42 57
October 30		
GCA	eP	21 07 30
October 30		
ALQ	iP	21 22 43
October 30		
ALQ	eP	21 55 46
	i	56 05
October 30		
GCA	e(P)	22 08 17

Date and Station		Phase (GCT)
		h m s
October 30		
HHM	eP	22 53 00
	eS	53 19
October 31		
SLC	eP	00 45 14
	eS	45 40
October 31		
COL	eP	05 35 20
October 31		
ALQ	iP	11 39 35
BHP	iP	11 33 36
	iS	34 51
BOZ	eP	11 40 59
BUT	iP	11 41 06
	iPP	43 06
	iL	12 00 25
COL	iP	11 44 06
	i	44 23
	ePP	46 53
GCA	eP	11 40 12
HON	eP	11 44 08
HHM	iP	11 41 25
KIP	eP	11 44 08
SLC	iP	11 40 33
	i	41 13
	i	41 33
	i(PP)	42 23
SJP	iP	11 37 07
TUC	iP	11 39 42
TUT	iP	11 39 42
October 31		
ALQ	eP	13 36 51
COL	iP	13 32 16
HHM	e(P)	13 35 05
October 31		
BUT	iP	17 15 53
	iS	16 18
October 31		
ALQ	iP	19 35 00
EUR	eP	19 36 16
October 31		
ALQ	iP	23 18 27
COL	iP	23 18 40
EUR	eP	23 18 07

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Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)
	h m s		h m s		h m s		h m s
Local and Minor Earthquakes		FGU					
		3	00.9				
			16.5				
October		4	19.2				
ALQ		9	13.8				
4	17.5	10	12.1				
15	21.1	12	16.7				
			21.4				
BCN		13	12.9				
6	11.4	14	07.6				
11	10.6	16	12.2				
13	11.3	17	22.2				
17	12.5	18	04.9				
	19.0		05.8				
29	09.4	23	01.8				
	14.7		02.0				
30	14.5						
		GCA					
BOZ		3	20.2				
5	12.6	12	22.4				
	12.8	16	08.5				
	14.0	17	17.3				
	20.6		21.6				
18	13.9	20	03.1				
		30	04.2				
BUT							
4	11.9	HHM					
5	12.6	5	14.0				
	12.8		16.0				
	14.0						
7	09.9	SLC					
15	00.7	17	23.7				
22	02.0	18	23.8				
	02.1	29	00.7				
COL		SJP					
2	07.7	1	02.7				
6	01.3	2	23.3				
13	18.2	6	13.6				
15	19.6	10	04.7				
	19.8	11	11.7				
20	03.6	21	23.2				
	15.5	22	05.6				
24	14.5	25	16.6				
27	09.3	31	01.4				
31	01.9						
	07.7	SIT					
		17	21.9				
EUR		20	08.6				
1	14.1						
	14.2	TUC					
6	17.3	5	15.5				
10	20.7		18.2				
18	22.5						
19	00.7	TUT					
	08.7	5	09.4				
20	18.7						
	19.1						
	22.4						
	23.2						
21	10.7						
	15.3						
	23.6						
22	13.4						