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U. S. DEPARTMENT OF COMMERCE

Frederick H. Mueller, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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1959

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

**Balboa Heights, C. Z. (BH)
The Panama Canal Co.
*Boulder City, Nev. (BC)
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. (COLU)
University of South Carolina
*Eureka, Nev. (EUR)
Eureka Corporation Limited
Guam, M. I. (GUAM)
Honolulu, T. H. (HONO)
*Hungry Horse, Mont. (HH)
Bureau of Reclamation
Kipapa, T. H. (KIP)
*Lincoln, Nebr. (LIN)
Nebraska Wesleyan University
**Philadelphia, Pa. (PHIL)
The Franklin Institute
**Rapid City, S. D. (RC)
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJ)
Sitka, Alaska (SIT)
*Thule, Greenland (THULE)
U. S. Army Ionosphere Station
Tucson, Ariz. (TUC)
Tucson, Ariz. Telemeter (TUC-T)
Ukiah, Calif. (UK)
International Latitude Observatory
Washington, D. C. (WASH)

*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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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.

One asterisk (*) following an origin time indicates probable error of one-tenth minute. Two asterisks (**) following an origin time indicates error of one-quarter minute. All origin times and location are determined from P data only. For Pasadena epicenters the time is given in one-tenth minute.

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 Height, Canal Zone.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Nov.	h m s	°	°	
1	12 13 10*	44½ N.	111 W.	Hebgen Lake.
1	23 03 25*	45 N.	111 W.	do.
2	08 44 01*	22½ N.	144½ E.	Mariana Islands region. h about 60 km.
2	09 02 20*	22 N.	144½ E.	Volcano-Mariana Islands region. h about 100 km.
2	12 02 46*	40½ N.	73½ E.	Kirghiz S.S.R. h about 100 km.
2	13 15 40*	22 N.	92½ E.	Pakistan-Burma border. h about 100 km.
2	13 30 44*	59 N.	152 W.	Kenai Peninsula, Alaska.
2	20 03 32*	5½ S.	151½ E.	New Britain. Felt at Pomio, Karlai, Rabaul, and Malindi. h about 60 km. Mag. 6-3/4.
2	21 53 05*	23½ S.	175½ W.	Tonga Islands region.
3	00 32 19*	3½ N.	126½ E.	Molucca Passage.
3	09 04 58*	23½ S.	175½ W.	Tonga Islands region.
3	09 40 05*	10½ S.	111 E.	South of Java.
4	17 13 50**			Tonga Islands region.
4	18 22 40**			do.
4	19 07 36*	20 S.	169½ E.	Loyalty Islands.
5	05 45 23*	4½ S.	153 E.	New Britain Islands region.
5	10 59 40*	5½ S.	68 E.	Chagos Archipelago.
5	11 50 17*	13 S.	166½ E.	New Hebrides Islands region. h about 100 km.
5	14 59 37*	30 N.	129 E.	Ryukyu Islands region. h about 250 km.
5	17 37 40*	9 S.	158 E.	Solomon Islands.
5	17 38 08*	8½ S.	157½ E.	Solomon Islands. Felt on Tetepari.
6	01 07 31*	8½ S.	157½ E.	do.
6	01 11 36*	9 S.	157½ E.	do.
6	07 36 57**			Albania.
6	11 32 50*	3 S.	146½ E.	Bismarck Sea.
6	11 43 06*	24 S.	174½ W.	Tonga Islands region.
6	12 25 06*	10 S.	161½ E.	Solomon Islands.
7	02 32 07*	36½ N.	2½ E.	Near coast of Algeria. Several injured. Light damage at Bou-medfa.
7	08 17 59*	11½ S.	166½ E.	Santa Cruz Islands.
7	22 16 14*	23½ S.	176 W.	Tonga Islands region. Mag. 6¼.
8	13 54 55*	44 N.	140½ E.	Near west coast of Hokkaido, Japan. Felt. Mag. 6½.
8	14 27 37*	13 S.	167 E.	New Hebrides Islands. h about 100 km.
8	16 36 16*	4½ S.	154 E.	New Ireland region. Felt at Rabaul.
9	00 05 36*	18½ N.	103 W.	Mexico.
9	13 35 40*	6½ S.	132 E.	Banda Sea.
10	08 08 18*	3½ S.	153½ E.	New Ireland region. h about 200 km.
10	16 40 45*	7 S.	156 E.	Solomon Islands.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Nov.	h m s	°	°	
10	20 56 10*	36 N.	88½ E.	Tibet.
12	20 30 12*	11 S.	166½ E.	Santa Cruz Islands.
13	10 06 14*	23 S.	179 E.	South of Fiji Islands. h about 600 km.
14	10 33 56*	3 S.	148½ E.	Bismarck Sea.
14	12 13 27**			Guatemala-El Salvador border. Felt in western El Salvador.
15	08 04 45**			Fiji Islands region. h about 500 km.
15	10 25 07*	38½ N.	75 E.	Tadzhik S.S.R.-China border.
15	17 08 41*	37½ N.	20½ E.	Near west coast of Greece. Felt in Greece and Italy. Several injured at Agrinion, Greece. Slight damage. Mag. 6-1/2 - 6-3/4.
15	17 31 25**			Greece aftershock. Felt.
16	00 59 22*	35 S.	70 W.	Chile-Argentina border. h about 100 km.
16	10 21 17*	1 N.	26½ W.	Mid-Atlantic Ocean. Mag. 6¼ - 6½.
16	23 43 40*	4 N.	126½ E.	Talaud Islands.
16	23 50 35*	18 N.	147 E.	Mariana Islands.
17	02 32 37*	11 S.	66½ E.	Indian Ocean.
17	15 16 59*	9 S.	119 E.	Sumbawa Island.
17	17 23 28*	5 S.	141 E.	New Guinea.
17	23 55 01*	30½ N.	94 E.	Sinkiang Province, China.
18	13 32 08**			Northern Mariana Islands region. h about 200 km.
19	04 34 57*	51½ N.	175½ W.	Andreanof Islands, Aleutian Islands.
19	05 25 53*	24½ S.	177 W.	Tonga Islands region.
19	07 57 24*	2 N.	80 W.	Off coast of Colombia.
19	11 08 41*	5½ S.	146 E.	Near north coast of New Guinea. Slight damage at Lae and Madang. h about 100 km. Mag. 7.
19	14 00 24*	38½ N.	26 E.	Off west coast of Turkey. Felt at Burhaniye, Edremit, Izmir, and Lesbos.
19	14 08 20*	12 N.	87 W.	Near coast of Nicaragua. h about 60 km.
19	23 53 49*	42½ N.	126½ W.	Off coast of Oregon.
20	10 56 59*	4½ S.	153 E.	New Britain region. h about 100 km.
20	15 16 45*	15½ S.	174 W.	Samoa Islands region.
20	16 30 45*	7 S.	129 E.	Banda Sea.
20	19 29 38*	1 N.	26½ W.	Mid-Atlantic Ocean.
22	12 47 56*	3 S.	140 E.	Near north coast of New Guinea.
22	16 26 34*	54 S.	136 W.	South Pacific Ocean.
22	19 34 35*	21½ S.	178½ W.	Fiji Islands region. h about 550 km.
22	22 42 49*	19½ S.	175 E.	Fiji Islands region.
23	14 41 42*	½ S.	128½ E.	Spice Islands.
23	16 14 47*	20 S.	174½ E.	Fiji Islands region.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Nov.	h m s	°	°	
23	21 05 18*	24½ N.	122 E.	Near coast of Formosa.
24	12 41 00*	25 S.	176 W.	Tonga Islands region.
24	14 04 17*	19 S.	178½ W.	Fiji Islands region. h about 500 km.
24	14 57 15*	17½ N.	120 E.	Off west coast of Luzon Island, Philippine Islands.
24	20 06 35*	7½ N.	37 W.	Atlantic Ocean.
25	19 04 20*	6 N.	127 E.	South of Mindanao Island, Philippine Islands.
26	00 41 35*	1½ N.	127½ E.	Halmahera.
26	07 06 19*	5½ S.	102½ E.	Near coast of Sumatra. Mag. 6½.
26	07 39 49*	15½ S.	175 W.	Samoa Islands region.
26	16 06 03**			Tonga Islands.
26	23 09 23*	5½ S.	103 E.	Near coast of Sumatra. Mag. 6-3/4.
27	00 22 30*	38½ N.	20½ E.	Greece.
27	10 42 10*	22 S.	177½ W.	Tonga Islands region. h about 250 km.
27	18 51 27*	5½ S.	103 E.	Off west coast of Sumatra.
28	02 45 45*	19½ S.	174½ E.	Fiji Islands region.
28	03 20 24*	26 N.	128½ E.	Ryukyu Islands.
28	11 06 17**			Gulf of California.
28	12 34 53*	28½ S.	71 W.	Chile. Mag. 6½.
28	21 18 32*	14½ S.	168 E.	New Hebrides Islands.
28	22 39 13*	13 S.	167½ E.	do.
29	01 30 52*	21 S.	177 W.	Tonga Islands.
29	05 46 56*	26½ S.	178 W.	Kermadec Islands region. h about 300 km.
29	19 17 40*	57 S.	147½ W.	South Pacific Ocean.
29	23 49 42*	36 N.	23½ E.	Near south coast of Greece. Felt on the Island of Crete. Region of Chania, Mourniae, and Nerokourus.
30	11 12 53*	44½ N.	80½ E.	Sinkiang Province, China.
30	15 18 37*	59½ N.	152 W.	Kenai Peninsula, Alaska.
30	21 06 30*	24½ S.	68½ W.	Chile-Argentina border. h about 100 km.

Date and Station		Phase (GCT) h m s
Nov. 1		
BUT	iP	02 51 51
	eL	52 02
HH	eP	02 52 27
	iL	53 32
Nov. 1		
COL	eP	04 28 15
EUR	eP	04 27 43
Nov. 1		
BUT	iP	05 07 32
	iL	08 29
Nov. 1		
COL	e(P)	06 02 17
Nov. 1		
THULE	eP	09 29 05
	eS	30 57
	eL	32 02
Nov. 1		
EUR	eP	10 51 00
TUC	e(P)	10 50 12
Nov. 1		
BOZ	iP	12 13 29
	eL	14 31
BUT	eP	12 13 40
	eL	14 41
EUR	eP	12 14 46
HH	eP	12 14 16
	iL	15 21
RC	e(P)	12 15 01
	e	15 09
	e	16 11
SLC	eP	12 14 13
	eL	15 14
Nov. 1		
THULE	e(P)	12 40 08
	e	46 21
Nov. 1		
EUR	eP	14 24 58
Nov. 1		
COL	e(P)	17 26 56
Nov. 1		
COL	eP	18 31 38
Nov. 1		
BOZ	iP	23 03 41
	iS	03 52
	iL	04 14
BUT	iP	23 03 54
	iS	04 16
	eL	04 44
COL	iP	23 09 24
EUR	eP	23 05 04
	eS	06 24
	iL	06 44
HH	iP	23 04 30
	iL	05 33
RC	eP	23 04 58
	i	05 13
	iL	06 10
SLC	eP	23 04 28
	eS	05 20
	eL	05 47
TUC	e(P)	23 07 20
	eL	09 56
TUC-T	e(P)	23 06 33
	e	06 54
	e	07 24
	eL	09 57
Nov. 1		
GUAM	iP	23 31 27
	iS	31 40
Nov. 1		
HH	eP	23 38 35
Nov. 2		
COL	e(P)	00 03 08
	i	04 15
Nov. 2		
COL	eP	05 02 41
Nov. 2		
RC	e(P)	06 21 31
EUR	eP	06 21 20
TUC	e(P)	06 20 23
	e	20 42
	eL	21 52
TUC-T	e(P)	06 20 25
	e	20 45
	e(S)	21 42
	eL	21 57
Nov. 2		
EUR	eP	08 37 06
Nov. 2		
RC	eP	08 56 15
BOZ	eP	08 56 29
	epP	56 42
BUT	eP	08 56 24
COL	iP	08 54 10
EUR	iP	08 56 24
	ipP	56 42
GUAM	iP	08 46 12
	iS	48 06
	eT	53 46
HH	iP	08 56 14
	ipP	56 33
	e	58 11
RC	e(P)	08 56 58
	epP	57 16
SLC	eP	08 56 37
	e(eP)	57 07
SJ	e(P')	09 03 06
	eSKP	06 24
	e	06 47
THULE	eP	08 56 06
TUC	iP	08 57 01
TUC-T	iP	08 57 01
	i	57 19
UK	eP	08 56 20
	e	56 32
Nov. 2		
BUT	iP	09 14 39
COL	iP	09 12 26
EUR	iP	09 14 42
	ipP	14 59
GUAM	iP	09 04 29
	eT	12 30
HH	iP	09 14 30
	ipP	14 48
TUC	iP	09 15 17
TUC-T	iP	09 15 17
Nov. 2		
COL	iP	12 13 57
	e	14 31
	i	14 58
Nov. 2		
EUR	eP	12 58 06
Nov. 2		
COL	iP	13 27 58
	i	28 14
	i	28 28
EUR	eP'	13 34 16
Nov. 2		
BOZ	eP	13 36 44
COL	iP	13 32 12
	iS	33 15
	iL	33 51
EUR	iP	13 36 52
HH	eP	13 36 02
SIT	eP	13 32 51
	iS	33 26
TUC	eP	13 38 07
TUC-T	iP	13 38 05
Nov. 2		
EUR	eP	15 49 37
Nov. 2		
COL	eP	18 16 13
EUR	iP	18 15 39
TUC-T	eP	18 15 39
Nov. 2		
EUR	iP	19 19 24
HH	iP	19 20 25
RC	eP	19 19 44
TUC	eP	19 18 13
TUC-T	iP	19 18 13
Nov. 2		
COL	e(P)	19 23 07
Nov. 2		
RC	eP	20 16 41C
COL	iP	20 15 54
	eS	26 23
	e	30 37
	eL	38 08
EUR	iP	20 16 56C
	ipP	17 14
	ePP	20 57
	ePKKP	33 46
HONO	eP	20 13 13
HH	iP	20 17 03C
KIP	eP	20 13 15
	i	13 32
SLC	e(P)	20 17 10
SJ	eP'	20 22 55
	iP'	23 02
	i	26 04
	e	26 41

Date and Station		Phase (GCT)
		h m s
TUC	eP	20 17 17
Nov. 2		
TUC	e(P)	20 21 18
	iP	21 20
	eL	49 13
Nov. 2		
COL	iP	22 06 11
	i	06 22
EUR	iP	22 05 40
HH	eP	22 06 20
TUC-T	eP	22 05 37
	iP	05 39
Nov. 2		
EUR	iP	22 22 04
	i	22 12
	eS	22 48
	eL	22 54
Nov. 3		
SLC	eP	00 32 08
	eS	32 37
	eL	33 25
Nov. 3		
COL	eP	00 45 01
Nov. 3		
COL	eP	02 02 34
EUR	eP	01 58 39
TUC	iP	01 57 27
	e	57 36
TUC-T	iP	01 57 28
	e	57 37
Nov. 3		
EUR	iP	04 03 06
TUC	eP	04 02 12
TUC-T	e(P)	04 01 57
	i	02 13
Nov. 3		
EUR	eP	04 32 01
TUC	eP	04 31 49
TUC-T	eP	04 31 49
Nov. 3		
TUC	eP	06 07 38
TUC-T	eP	06 07 38
Nov. 3		
COL	eP	08 36 51

Date and Station		Phase (GCT)
		h m s
Nov. 3		
COL	iP	09 18 06
EUR	eP	09 17 32
TUC	eP	09 17 31
	e	17 45
TUC-T	eP	09 17 31
Nov. 3		
BC	eP'	09 59 23
BOZ	eP'	09 59 19
	e	59 29
BUT	eP'	09 59 18
	e	59 27
COL	eP	09 54 13
	ePP	58 00
	iPP	58 35
	ePKKP	10 09 58
	i	10 17
	eP'P'	18 24
COLU	eP'	10 00 05
EUR	e(P)	09 56 47
	iP'	59 11
	ePP	10 01 18
HH	iP'	09 59 13
	ePP	10 01 10
RC	iP'	09 59 30
	ePP	10 02 12
SLC	eP'	09 59 23
SJ	iP'	10 00 17
	i	01 40
	i	05 30
	e	09 25
THULE	iP'	09 58 48
	iPKKP	10 09 32
TUC	iP'	09 59 19
	i	59 35
	iPP	10 02 10
TUC-T	iP'	09 59 19
	i	59 35
	iPP	10 02 10
	i	02 28
UK	iP'	09 59 10
	ePP	10 01 05
	eSKKP	12 46
Nov. 3		
TUC-T	e(P)	10 35 32
Nov. 3		
COL	iP	11 38 56

Date and Station		Phase (GCT)
		h m s
EUR	eP	11 38 32
TUC	eP	11 38 34
TUC-T	eP	11 38 35
Nov. 3		
COL	iP	12 56 40
EUR	eP	12 56 13
TUC-T	eP	12 56 06
Nov. 3		
EUR	iP	14 22 11
TUC	iP	14 20 33
	ipP	22 55
TUC-T	iP	14 20 34
	ipP	22 56
Nov. 3		
EUR	iP	14 24 34
Nov. 3		
TUC-T	eP	16 03 14
Nov. 3		
TUC-T	e(P)	16 09 13
	e	09 27
Nov. 3		
COL	iP	16 41 14
Nov. 3		
BOZ	iP	17 02 54
	i	03 36
	eL	03 57
BUT	iP	17 03 08
	eL	04 12
HH	iP	17 03 43
	iL	04 48
RC	eP	17 04 30
SLC	eP	17 03 42
	e	04 25
Nov. 3		
EUR	eP	18 55 37
Nov. 3		
COL	eP	19 06 51
Nov. 4		
TUC-T	eP	05 23 36
Nov. 4		
COL	e(P)	10 07 26
Nov. 4		
COL	iP	10 38 59

Date and Station		Phase (GCT)
		h m s
Nov. 4		
HH	eP	16 34 58
	iL	36 04
Nov. 4		
EUR	iP	17 04 19
Nov. 4		
COL	iP	17 26 45
Nov. 4		
TUC-T	iP	17 57 44
Nov. 4		
EUR	eP	19 02 38
SLC	eP	19 03 54
	eL	04 57
Nov. 4		
EUR	eP	19 20 43
TUC-T	eP	19 20 53
Nov. 4		
TUC-T	eP	20 58 26
Nov. 4		
COL	iP	22 06 42
EUR	iP	22 06 10
HH	eP	22 06 44
TUC-T	eP	22 06 09
	i	06 36
Nov. 5		
BC	eP	00 58 52
	e	01 02 34
EUR	iP	00 59 39
HH	iP	01 01 11
TUC	eP	00 57 47
	e	59 37
	iL	59 55
TUC-T	eP	00 57 46
	i	57 49
	e(S)	59 42
	eL	59 56
	iL	01 00 01
Nov. 5		
TUC-T	eP	03 37 13
Nov. 5		
HH	eP	04 42 30
	eL	43 41
Nov. 5		
COL	iP	05 57 34
	ipP	58 00

Date and Station		Phase	(GCT)
			h m s
GUAM		eP	05 49 50
Nov. 5			
HH		eP	10 56 03
		iL	57 07
Nov. 5			
BC		eP'	11 19 34
EUR		iP'	11 19 23
HH		iPP	11 21 50
TUC		eP'	11 19 43
TUC-T		iP'	11 19 43
		i	19 55
		ePP	23 27
Nov. 5			
BC		eP	12 03 07
COL		iP	12 02 46
		ipP	02 11
		eS	13 07
		ePS	14 11
		eL	32 30
HH		e(P)	12 03 35
EUR		iP	12 03 07
		i	03 18
		ipP	03 32
		ePKKP	20 45
KIP		eP	11 58 48
		ipP	59 04
TUC		eP	12 03 18
		i	04 05
		eL	31 54
TUC-T		iP	12 03 19
		ipP	03 44
		ePP	07 06
		ePKKP	20 44
		epPKKP	20 54
UK		iP	12 02 51
Nov. 5			
EUR		eP	12 28 50
Nov. 5			
EUR		eP	13 48 12
Nov. 5			
COL		iP	15 09 21
		ipP	10 20
HH		iP	15 11 41
		epP	12 42
Nov. 5			
BC		eP	17 51 29
COL		iP	17 49 35
Nov. 5			
COL		iP	17 50 12
Nov. 5			
COL		iP	17 50 41
Nov. 5			
COL		e(P)	18 12 52
Nov. 5			
COL		iP	18 14 47
Nov. 5			
COL		e(P)	22 00 16
Nov. 6			
BC		eP	01 20 51
COL		iP	01 20 02
		eS	30 18
		eL	46 26
Nov. 6			
BC		eP	01 24 54
COL		iP	01 24 08
HH		e(P)	01 24 07
Nov. 6			
COL		eP	02 21 50
Nov. 6			
BOZ		eP	02 44 07
Nov. 6			
COL		e(P)	05 07 16
HH		eP	05 10 11
Nov. 6			
BUTTE		eP	05 34 28
		eL	35 27
Nov. 6			
COL		eP	07 48 52
HH		eP	07 49 36
Nov. 6			
TUC		eP	08 01 07
		e	02 29
TUC-T		e(P)	08 01 04
		i	02 31
Nov. 6			
COL		eP	11 09 38
Nov. 6			
COL		e(P)	11 45 16
Nov. 6			
BC		eP	11 55 35
BOZ		eP	11 56 11
BUT		eP	11 56 10
COL		iP	11 56 15
		e(S)	12 07 16
		ePS	08 21
		eL	29 24
HH		iP	11 56 11
SLC		eP	11 55 58
THULE		eP'	12 01 54
TUC		iP	11 55 37
		e	56 10
TUC-T		iP	11 55 38
UK		iP	11 55 17
Nov. 6			
COL		iP	12 37 35
		i	38 01
HH		eP	12 38 25
Nov. 6			
HH		eP	14 15 27
Nov. 6			
SLC		eP	15 03 37
		eL	04 40
Nov. 7			
COL		iP	01 16 15
Nov. 7			
COL		iP	02 13 12
Nov. 7			
BUT		eP	02 44 16
COL		i(P)	02 44 01
EUR		iP	02 44 49
HH		iP	02 44 11
RC		eP	02 43 55
		i	43 58
SLC		eP	02 44 33
Nov. 7			
COL		e(P)	03 09 02
EUR		iP	03 12 10
Nov. 7			
EUR		eP	03 17 40
Nov. 7			
EUR		iP	04 23 27
TUC		e(P)	04 21 48
TUC-T		iP	04 21 49
Nov. 7			
EUR		eP	05 37 34
		i	37 44
		eS	38 32
		eL	38 36
Nov. 7			
EUR		eP	06 11 33
		e	12 00
Nov. 7			
COL		eP	08 30 27
EUR		eP	08 30 51
Nov. 7			
EUR		iP	12 12 17
		i	12 21
		eS	12 51
		eL	12 56
SLC		eP	12 14 31
Nov. 7			
EUR		eP	12 57 12
Nov. 7			
SJ		iP	13 35 47
		i	35 58
Nov. 7			
HH		e(P)	14 29 56
Nov. 7			
COL		eP	15 29 54
EUR		eP	15 37 38
HH		e(P)	15 40 07
TUC-T		eP	15 38 00
Nov. 7			
EUR		eP	15 53 00
TUC		eP	15 52 02
		eL	53 25
TUC-T		eP	15 52 02
		eL	53 18
Nov. 7			
BC		e(P)	17 24 34
Nov. 7			
COL		iP	18 03 21
		iS	03 48
		iL	03 54
Nov. 7			
COL		iP	21 30 32

Date and Station		Phase (GCT)
		h m s
Nov. 7		
BOZ	eP	21 51 27
BUT	iP	21 51 42
	eL	52 43
Nov. 7		
BOZ	eP	22 29 21
COL	eP	22 29 21
	e(SKS)	40 06
	iS	40 21
	iPS	41 47
	eL	23 01 22
EUR	iP	22 28 48
HONO	iS	22 32 14
	eL	35 08
HH	eP	22 29 21
KIP	eP	22 24 57
SLC	eP	22 29 07
TUC	eP	22 28 47
	i	29 11
	eL	55 14
UK	e(P)	22 28 27
	e	28 50
Nov. 8		
COL	eP	02 30 40
	i	30 54
EUR	iP	02 30 07
TUC	e(P)	02 30 09
	e	30 34
TUC-T	eP	02 30 07
	e	30 26
	e	30 34
Nov. 8		
EUR	e(P)	04 26 26
Nov. 8		
BC	e(P)	08 42 53
Nov. 8		
EUR	iP	10 18 43
	i	18 47
	eS	19 18
	eL	19 22
Nov. 8		
EUR	iP	11 17 16
HH	e(P)	11 17 41
TUC	eP	11 16 30
TUC-T	iP	11 16 29
Nov. 8		
TUC	e(P)	13 27 50
TUC-T	eP	13 27 50
Nov. 8		
BC	eP	14 06 43
BOZ	eP	14 06 13
	ePcP	06 46
	eP'P'	34 07
BUT	iP	14 06 10
	e	06 33
COL	iP	14 03 04
	e	04 46
	eS	09 24
	eL	12 56
	eP'P'	34 14
EUR	iP	14 06 25
	i	07 04
HONO	iP	14 04 31
HH	iP	14 05 54
	eP'P'	34 13
KIP	iP	14 04 32
RC	iP	14 06 45
	ePP	09 38
	eP'P'	34 32
SLC	eP	14 06 34
	e	07 08
SJ	eP'	14 14 16
	i	14 28
SIT	iP	14 04 08
THULE	iP	14 04 49
	eP'P'	34 22
TUC	iP	14 07 11
	iPP	10 16
	ePPP	11 27
	e(S)	17 48
	eL	33 18
TUC-T	iP	14 07 10
	iPP	10 17
	e	11 34
	ePKKP	25 55
	eP'P'	33 46
UK	iP	14 06 00
	ePP	08 30
	e	10 12
	eP'P'	34 26
Nov. 8		
COL	iP	14 40 05
	ipP	40 33
EUR	eP	14 40 24
	ipP	40 53
TUC-T	eP	14 40 37
Nov. 8		
SJ	iP	15 00 19
	i(S)	00 42
	iL	00 45
Nov. 8		
COL	iP	16 11 27
Nov. 8		
BUT	eP	16 36 04
	eL	37 06
Nov. 8		
COL	iP	16 33 32
EUR	eP	16 36 26
Nov. 8		
COL	eP	16 48 34
	e	48 52
	e	48 59
Nov. 8		
BUT	iP	18 10 31
	eL	11 34
HH	eP	18 11 07
	iL	12 10
Nov. 8		
COL	e(P)	18 25 57
EUR	eP	18 29 17
Nov. 8		
TUC	iP	18 57 03
	iS	57 11
	iL	57 12
TUC-T	iP	18 57 05
	iL	57 26
Nov. 8		
COL	eP	21 31 17
Nov. 8		
TUC	e(P)	22 51 02
	e	51 30
TUC-T	eP	22 51 02
	e	51 32
Nov. 9		
BC	eP	00 10 15
	eL	16 22
BUT	e(P)	00 11 32
COL	iP	00 15 09
	i	16 10
EUR	iP	00 10 50
	e	10 58
	i	11 34
HH	e(P)	00 12 04
RC	eP	00 11 15
SLC	eP	00 10 55
SJ	iP	00 12 35
TUC	eP	00 09 16
	i	09 24
	e(S)	12 46
	eL	13 44
TUC-T	iP	00 09 16
	i	09 35
	iL	13 53
UK	eP	00 11 27
	i	11 31
Nov. 9		
EUR	eP	01 58 22
Nov. 9		
COL	iP	02 25 51
EUR	eP	02 29 28
HH	eP	02 28 21
THULE	eP	02 24 00
TUC	eP	02 30 20
TUC-T	iP	02 30 19
Nov. 9		
COL	iP	02 54 09
EUR	iP	02 57 45
HH	iP	02 56 38
THULE	eP	02 52 19
TUC	eP	02 58 38
TUC-T	iP	02 58 37
Nov. 9		
EUR	eP	04 32 19

Date and Station		Phase (GCT)
		h m s
TUC	eP	04 31 53
	i	32 08
TUC-T	iP	04 31 53
Nov. 9		
SJ	iP	05 38 58
	i	39 29
	eL	41 07
Nov. 9		
RC	eP	07 06 22
Nov. 9		
EUR	eP	07 46 11
Nov. 9		
EUR	eP	07 49 30
Nov. 9		
EUR	eP	08 04 14
Nov. 9		
EUR	eP	09 15 43
Nov. 9		
COL	eP	12 28 48
Nov. 9		
COL	e(P)	13 49 09
Nov. 9		
TUC-T	e(P)	17 30 28
Nov. 9		
RC	eP	18 28 32
	i	28 54
Nov. 9		
EUR	eP	20 00 38
TUC	eP	20 00 33
TUC-T	iP	20 00 34
	e	01 16
Nov. 9		
EUR	iP	20 47 07
TUC-T	eP	20 46 22
Nov. 9		
RC	eP	21 29 23
	e	30 08
Nov. 10		
COL	e(P)	00 37 33
RC	eP	00 43 23
Nov. 10		
COL	e(P)	03 41 52
Nov. 10		
COL	i(P)	04 11 13

Date and Station		Phase (GCT)
		h m s
Nov. 10		
TUC-T	eP	06 26 35
Nov. 10		
TUC	e(P)	06 58 44
	i	58 57
	eL	59 58
TUC-T	e(P)	06 58 43
	i	58 56
	iL	59 58
Nov. 10		
COL	iP	08 20 11
	e	21 04
EUR	eP	08 21 12
	e	22 03
Nov. 10		
COL	eP	10 13 18
Nov. 10		
EUR	eP	16 00 43
Nov. 10		
SJ	e(P)	16 34 04
Nov. 10		
COL	iP	16 53 09
EUR	iP	16 54 02
	i	54 12
	i	54 33
	i	54 50
Nov. 10		
EUR	eP	17 19 00
Nov. 10		
EUR	eP	18 17 01
HH	eP	18 14 29
TUC-T	iP	18 15 50
Nov. 10		
COL	iP	21 07 27
HH	eP	21 09 32
Nov. 11		
TUC-T	eP	01 14 31
Nov. 11		
EUR	iP	01 45 14
HH	iP	01 45 38
SJ	eP	01 41 16
Nov. 11		
HH	e(P)	02 05 35
Nov. 11		
COL	e(P)	05 19 38

Date and Station		Phase (GCT)
		h m s
Nov. 11		
EUR	eP	07 39 12
Nov. 11		
SJ	eP	08 58 38
	i	58 43
Nov. 11		
HH	iP	09 12 20
Nov. 11		
TUC-T	eP	09 30 39
Nov. 11		
COL	eP	10 43 18
Nov. 11		
COL	e(P)	10 48 09
Nov. 11		
TUC	eP	15 33 24
	i	33 29
Nov. 11		
BOZ	eP	19 18 21
	eL	19 14
BUT	iP	19 18 30
	eL	19 31
EUR	eP	19 19 36
HH	eP	19 19 07
	iL	20 13
RC	e(P)	19 19 45
	e	19 52
	eL	20 59
SLC	eP	19 19 04
	eL	19 55
Nov. 11		
TUC-T	eP	19 36 02
Nov. 11		
EUR	eP	20 33 00
HH	eP	20 32 29
Nov. 12		
EUR	eP	02 53 41
Nov. 12		
EUR	eP	03 32 07
TUC	eP	03 32 10
TUC-T	eP	03 32 11
Nov. 12		
SJ	eP	05 51 48
Nov. 12		
EUR	eP	09 29 10
TUC-T	eP	09 28 23

Date and Station		Phase (GCT)
		h m s
Nov. 12		
EUR	eP	10 01 47
SJ	e(P)	10 02 51
	e	04 19
Nov. 12		
COL	iP	10 11 35
Nov. 12		
EUR	eP	10 14 16
	iL	15 49
Nov. 12		
EUR	eP	11 29 46
Nov. 12		
SLC	eP	13 34 06
	eL	35 09
Nov. 12		
COL	iP	13 36 17
EUR	eP	13 40 29
Nov. 12		
COL	eP	13 49 01
EUR	eP	13 53 15
Nov. 12		
TUC-T	eP	14 54 45
Nov. 12		
COL	iP	15 24 34
Nov. 12		
EUR	eP	17 07 30
Nov. 12		
TUC-T	eP	17 29 30
Nov. 12		
TUC-T	eP	18 15 50
Nov. 12		
RC	eP	20 00 42
Nov. 12		
COL	iP	20 42 39
EUR	iP	20 43 05
	i	43 24
HH	e(P)	20 43 19
TUC-T	eP	20 43 17
	e	43 31
Nov. 12		
EUR	eP	21 11 44
TUC-T	iP	21 10 45
Nov. 13		
EUR	eP	03 11 58

Date and Station		Phase (GCT)
		h m s
Nov. 13		
COL	iP	04 19 30
	iL	20 26
Nov. 13		
COL	eP	09 01 35
Nov. 13		
COL	eP	09 33 02
Nov. 13		
HH	e(P)	09 47 57
Nov. 13		
COL	eP	10 18 22
	epP	20 30
EUR	iP	10 18 03
TUC	iP	10 18 04
TUC-T	iP	10 18 04
Nov. 13		
RC	e(P)	11 15 15
Nov. 13		
SJ	e(P)	12 45 37
Nov. 13		
SLC	eP	14 12 01
	eL	13 03
Nov. 13		
SJ	iP	15 52 48
Nov. 13		
COL	iP	16 54 30
	eS	57 50
	iL	58 15
EUR	iP	16 58 41
	i	59 23
HH	iP	16 58 03
RC	eP	16 59 23
Nov. 13		
SJ	eP	21 19 06
Nov. 13		
GUAM	iP	22 28 01
	iS	28 39
Nov. 13		
EUR	e(P)	22 30 28
	eL	32 50
TUC	eP	22 29 04
	i	29 12
	i(S)	29 55
	iL	30 04

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	22 28 58
	i	29 13
	iL	29 55
Nov. 14		
EUR	eP	00 40 59
Nov. 14		
EUR	eP	00 57 33
Nov. 14		
COL	eP	02 22 23
Nov. 14		
COL	iP	02 35 51
	iL	36 43
Nov. 14		
COL	e(P)	04 50 56
EUR	eP	04 50 18
Nov. 14		
COL	eP	06 29 38
	i	29 51
EUR	iP	06 32 57
	i	33 10
Nov. 14		
COL	eP	10 46 21
Nov. 14		
EUR	iP	12 02 09
TUC	eP	12 02 05
TUC-T	iP	12 02 05
Nov. 14		
TUC-T	eP	12 10 35
Nov. 14		
BUT	iP	12 16 24
	eL	17 25
Nov. 14		
EUR	eP	12 20 15
	i	20 29
TUC	eP	12 19 12
TUC-T	eP	12 19 08
	e	19 12
Nov. 14		
BUT	iP	17 59 50
	eL	18 00 50
EUR	iP	18 00 57
HH	e(P)	18 00 32
	eL	01 33
TUC	eP	18 03 48

Date and Station		Phase (GCT)
		h m s
Nov. 14		
EUR	eP	20 01 38
Nov. 14		
EUR	iP	20 33 59
Nov. 14		
EUR	eP	21 44 26
Nov . 14		
TUC	eP	21 54 11
	eL	59 54
	eL	59 58
TUC-T	iP	21 54 07
	iL	59 52
Nov. 14		
EUR	eP	22 23 35
Nov. 14		
EUR	eP	23 05 53
Nov. 14		
EUR	eP	23 21 44
Nov. 15		
EUR	iP	00 37 45
HH	iP	00 39 37
Nov. 15		
EUR	iP	01 14 02
Nov. 15		
EUR	eP	02 33 33
Nov. 15		
EUR	eP	03 35 04
HH	iP	03 32 54
	iS	33 04
	iL	33 08
Nov. 15		
HH	eP	04 20 38
Nov. 15		
EUR	eP	05 05 31
HH	e(P)	05 05 04
	iL	06 10
Nov. 15		
EUR	iP	05 12 14
HH	eP	05 11 33
	iL	12 37
Nov. 15		
EUR	iP	07 07 16
Nov. 15		
COL	iP	08 16 29
TUC	eP	08 16 17

Date and Station		Phase (GCT)
		h m s
TUC-T	iP	08 16 18
Nov. 15		
BC	ePP	10 43 33
BUT	eP	10 38 36
COL	iP	10 36 32
	eS	45 48
	eScS	47 08
	eSS	50 30
	eL	54 12
	eP'P'	11 04 24
EUR	iP	10 39 05
GUAM	iP	10 35 58
	iPP	38 21
HH	iP	10 38 25
	ePP	42 12
RC	iP	10 38 46
SLC	eP	10 39 02
SIT	eP	10 37 28
THULE	iP	10 35 36
	eP'P'	11 04 41
TUC	eP'	10 43 45
	ePP	44 16
TUC-T	eP'	10 43 44
	iPP	44 14
Nov. 15		
EUR	iP	10 55 05
TUC	eP	10 54 50
	e	55 03
	eL	11 21 34
TUC-T	iP	10 54 51
	e	55 03
	e	11 03 15
Nov. 15		
SLC	iP	16 17 38
	eL	18 29
Nov. 15		
HH	iP	16 56 58
	iS	57 08
	iL	57 12
Nov. 15		
HH	iP	17 21 58
BC	eP	17 22 10
BOZ	eP	17 21 32
	e	21 59
	eS	31 54

Date and Station		Phase	(GCT)
			h m s
BUT	eP		17 21 30
	eS		31 54
	eL		42 44
COL	iP		17 20 40
	iS		30 30
	iSS		36 22
	eL		46 18
	eP'P'		47 48
COLU	eP		17 20 47
EUR	iP		17 22 01
	ePKKP		38 33
	eP'P'		47 35
HONO	eP'		17 28 40
	ePP		29 16
	iSKS		34 44
	i		39 04
	i		40 24
	iSS		46 00
	eSSS		50 25
	eL		59 20
HH	iP		17 21 22
	eS		31 45
KIP	e(P')		17 27 41
RC	eP		17 21 15
	iP		21 17
SLC	e(P)		17 22 49
	eS		32 22
	eL		43 02
SJ	iP		17 20 35
	i		20 42
	ePP		23 36
	e		24 51
SIT	eP		17 21 16
THULE	iP		17 18 04
	i		18 14
	i		18 41
	eS		25 43
TUC	eP		17 22 20
	i		22 28
	iPP		26 28
	e		28 44
	eSKS		33 06
	iSP		35 07
	e		40 14
	e		40 48
	eP'P'		47 27
	eL		50 34
TUC-T	eP		17 22 19
	i		22 27
	iPP		26 26
	e(PKKP)		39 43
	eP'P'		47 27

Date and Station		Phase	(GCT)
			h m s
UK	iP		17 22 25
	ePP		26 20
	eL		18 05 23
WASH	iP		17 20 06
Nov. 15			
HH	eP		17 44 08
THULE	eP		17 40 49
Nov. 15			
EUR	iP		19 06 18
Nov. 15			
COL	eP		20 14 22
Nov. 16			
COL	iP		00 00 47
EUR	iP		00 01 12
HH	eP		00 01 29
TUC	eP		00 01 25
TUC-T	eP		00 01 25
Nov. 16			
BC	eP		01 11 34
BUT	iP		01 12 19
COL	iP'		01 17 57
EUR	iP		01 11 54
	ipP		12 22
	isP		12 35
HH	iP		01 12 23
SLC	eP		01 12 50
SJ	iP		01 08 35
	e		09 13
TUC	iP		01 11 10
	e(PKKP)		27 42
TUC-T	iP		01 11 10
	ipP		11 38
	isP		11 50
	ePKKP		27 41
Nov. 16			
EUR	iP		01 26 52
Nov. 16			
EUR	eP		07 41 37
Nov. 16			
RC	eP		10 21 06
Nov. 16			
BH	iP		10 30 42

Date and Station		Phase	(GCT)
			h m s
BC	eP		10 34 10
BOZ	eP		10 34 03
BUT	iP		10 34 06
COLU	eP		10 31 34
EUR	iP		10 34 16
HH	iP		10 34 09
RC	iP		10 33 29
	i		33 38
SLC	eP		10 34 02
SJ	iP		10 29 18
THULE	eP		10 33 25
TUC	iP		10 33 56
	eL		11 00 44
TUC-T	iP		10 33 56
WASH	eP		10 31 25
Nov. 16			
COL	eP		11 02 34
EUR	eP		11 02 06
TUC-T	e(P)		11 02 04
	e		02 13
Nov. 16			
THULE	e(P)		11 50 22
	e		50 38
	e(S)		51 23
	iL		51 49
Nov. 16			
HH	eP		12 04 03
Nov. 16			
BC	iP		12 06 17
	eL		07 15
EUR	iP		12 06 38
Nov. 16			
EUR	iP		12 56 10
TUC	eP		12 56 17
TUC-T	eP		12 56 17
Nov. 16			
COL	iP		13 25 21
	i		25 30
	iL		26 20
Nov. 16			
EUR	eP		14 10 54

Date and Station		Phase	(GCT)
			h m s
TUC	eP		14 10 00
	i		10 19
	eL		11 08
TUC-T	e(P)		14 10 01
	i		10 21
	iL		11 08
Nov. 16			
BOZ	eP		20 31 52
	eL		32 52
HH	eP		20 32 34
	iL		33 43
Nov. 16			
EUR	eP		21 24 55
Nov. 16			
BOZ	iP		22 34 11
	eL		35 26
EUR	iP		22 35 22
HH	eP		22 34 52
	iL		36 00
RC	eP		22 35 34
	e		36 50
Nov. 16			
COL	iP		23 56 15
Nov. 17			
BUT	eP		00 03 12
COL	eP		00 01 08
EUR	iP		00 03 09
GUAM	iP		23 51 55
	iS		52 51
HH	eP		00 03 03
THULE	eP		00 03 04
TUC	eP		00 03 42
TUC-T	iP		00 03 43
Nov. 17			
EUR	eP		00 23 30
Nov. 17			
EUR	iP		02 03 58
	i		06 46
HH	eP		02 04 56
RC	iP		02 06 06
TUC-T	eP		02 05 40
UK	eP		02 02 45
	i		03 07
	eL		03 28

Date and Station		Phase (GCT)
		h m s
Nov. 17		
BOZ	eP'	02 52 24
BUT	eP'	02 52 17
EUR	iP'	02 52 28
	iPP	56 14
RC	iP'	02 52 20
	ePP	53 58
TUC	iP'	02 53 17
	ePP	56 56
TUC-T	iP'	02 53 16
	ePP	56 56
UK	eP'	02 52 33
Nov. 17		
HH	eP	03 49 22
	iL	50 27
RC	eP	03 50 04
	e	51 00
	e	51 58
Nov. 17		
COL	e(P)	06 57 24
Nov. 17		
EUR	eP	07 24 21
TUC	eP	07 23 01
TUC-T	eP	07 22 50
	i	23 04
Nov. 17		
EUR	eP	10 57 47
HH	eP	10 57 09
	iL	58 13
RC	eP	10 57 56
	e	59 00
Nov. 17		
EUR	iP	11 39 07
	i	39 27
TUC	eP	11 38 24
TUC-T	eP	11 38 23
Nov. 17		
BOZ	iP	12 21 59
	eL	23 00
EUR	eP	12 23 50
	eL	25 20
HH	iP	12 22 34
	iL	23 16
RC	e(P)	12 23 19
	i	23 40
	eL	24 36

Date and Station		Phase (GCT)
		h m s
Nov. 17		
TUC-T	iP	13 45 03
Nov. 17		
EUR	eP	15 06 05
Nov. 17		
EUR	eP	16 35 56
HH	eP	16 35 25
	iL	36 34
RC	eP	16 36 05
	e	37 15
Nov. 17		
COL	eP	17 36 12
Nov. 17		
COL	eP	20 09 42
Nov. 17		
TUC-T	iP	21 55 42
Nov. 17		
EUR	eP	23 24 22
TUC-T	iP	23 24 19
	e	24 32
Nov. 17		
EUR	eP	23 27 37
HH	eP	23 27 07
	iL	28 14
Nov. 18		
COL	eP	00 06 35
Nov. 18		
EUR	eP	04 21 07
Nov. 18		
BOZ	iP	04 48 21
	eL	49 24
EUR	eP	04 49 41
HH	eP	04 48 58
	iL	49 58
RC	eP	04 49 54
	e	51 04
SLC	eP	04 49 12
Nov. 18		
COL	e(P)	05 40 20
EUR	eP	05 39 34
Nov. 18		
EUR	eP	07 43 31
Nov. 18		
BOZ	eP	08 16 27
	eL	17 24

Date and Station		Phase (GCT)
		h m s
COL	e(P)	08 22 00
EUR	iP	08 17 37
HH	eP	08 17 05
	iL	18 13
RC	eP	08 17 45
	e	18 01
SLC	eP	08 17 03
	eL	18 02
Nov. 18		
EUR	iP	11 59 25
	eS	59 47
	iL	59 49
Nov. 18		
COL	eP	13 42 15
	ipP	43 11
EUR	iP	13 44 28
	ipP	45 36
HH	iP	13 44 17
	epP	45 27
RC	eP	13 44 59
Nov. 18		
COL	eP	14 23 09
Nov. 18		
SLC	eP	14 28 02
	eS	28 30
	eL	29 05
Nov. 18		
EUR	eP	16 26 47
HH	eP	16 26 03
	iL	27 03
Nov. 18		
EUR	e(P)	18 02 22
Nov. 18		
COL	iP	18 30 10
EUR	eP	18 34 21
	iP	34 25
HH	e(P)	18 33 45
RC	eP	18 34 57
Nov. 18		
EUR	eP	18 38 35
Nov. 18		
EUR	eP	19 45 22
Nov. 18		
EUR	eP	21 02 42
RC	iP	21 02 22
	e	02 29

Date and Station		Phase (GCT)
		h m s
Nov. 19		
HH	e(P)	04 40 46
Nov. 19		
BC	eP	04 43 19
BOZ	eP	04 42 52
COL	iP	04 39 30
EUR	iP	04 42 56
	i	43 11
	iScP	48 33
HH	iP	04 42 27
RC	iP	04 43 35
SLC	eP	04 43 10
SJ	eP	04 47 48
	e	48 00
TUC	iP	04 43 58
TUC-T	iP	04 43 58
Nov. 19		
BC	eP	05 38 29
BUT	eP	05 39 02
COL	iP	05 39 05
EUR	iP	05 38 33
TUC	eP	05 38 31
	e	38 45
TUC-T	iP	05 38 32
	e	38 45
Nov. 19		
COL	e(P)	05 52 34
	eL	54 28
Nov. 19		
BOZ	eP	08 08 14
EUR	eP	08 06 23
	iPcP	07 34
HH	eP	08 07 03
RC	e(P)	08 06 00
	e	06 57
SJ	iP	08 02 13
TUC-T	eP	08 05 22
	e	09 23
Nov. 19		
EUR	eP	11 07 58

Date and Station		Phase (GCT) h m s
Nov. 19		
COL	iP	11 09 56
	i	13 48
EUR	iP	11 14 05
HH	eP	11 13 27
RC	eP	11 14 39
TUC	eP	11 15 14
TUC-T	eP	11 15 14
Nov. 19		
EUR	iP	11 17 13
TUC	iP	11 18 15
TUC-T	eP	11 18 14
Nov. 19		
BC	eP	11 22 24D
	e	22 48
	ePP	26 20
BOZ	eP	11 22 34C
	e	23 32
BUT	eP	11 22 28C
	ePP	26 36
COL	iP	11 21 11D
	iS	31 21
	i	33 06
	iPKKP	39 20
	eL	44 02
	eP'P'	47 27
	eSKPP'	50 35
COLU	eP'	11 27 40
	e	31 20
EUR	iP	11 22 18C
	eP'P'	47 00
GUAM	iP	11 13 05C
HONO	iP	11 18 48C
	iS	27 01
	iL	33 47
HH	iP	11 22 24C
	iPP	26 21
	ePKKP	38 36
	eP'P'	46 52
KIP	iP	11 18 48C
	i	19 22
SLC	eP	11 22 33D
	ePP	26 43
SJ	iP'	11 28 14C
	i	28 46
SIT	iP	11 20 30D
TUC	eP	11 22 41D
	e	25 46
	iP'	26 57
	eSKS	33 13
	ePKKP	38 31
	e	38 53
	iP'P'	49 29
	eL	51 22
TUC-T	iP	11 22 40C
	iP'	26 51D
	ePP	27 20
	ePKKP	38 26
	i	38 52
	eP'P'	46 44
UK	iP	11 21 54D
	iPP	25 39
WASH	iP'	11 27 17D
	i	28 11
	iPP	29 21
	iSKP	30 29
	i	31 33
	i	32 14
Nov. 19		
COL	iP	11 51 23
Nov. 19		
BOZ	eP	14 13 20
BUT	eP	14 13 20
COL	iP	14 12 20
EUR	iP	14 13 52
HH	iP	14 13 13
RC	iP	14 13 09
SJ	eP	14 12 44
Nov. 19		
BOZ	eP	14 15 51
COL	iP	14 19 13
COLU	eP	14 13 26
EUR	iP	14 15 35
	i	15 45
HH	e(P)	14 16 10
	i	18 09
RC	iP	14 15 15
SLC	eP	14 15 23
SJ	eP	14 13 08
TUC	eP	14 14 12
	e	14 37
TUC-T	eP	14 14 11
	i	14 36
Nov. 19		
COL	e(P)	14 21 32
Nov. 19		
EUR	e(P)	20 30 08
Nov. 19		
RC	eP	21 42 31
Nov. 19		
TUC-T	iP	22 32 25
Nov. 19		
BC	eP	23 56 34
	e	56 44
	eL	00 00 16
BUT	eP	23 56 23
	eL	59 21
COL	eP	23 59 20
	eS	00 04 02
	eL	05 26
COLU	eP	00 00 54
	eS	06 20
EUR	iP	23 55 53
HH	iP	23 56 21
	eL	59 09
RC	iP	23 57 45
	eL	00 02 41
SJ	eP	00 03 31
SLC	eP	23 56 30
THULE	eP	00 01 40
TUC	iP	23 57 40
	eL	00 02 20
TUC-T	iP	23 57 38
	eL	00 02 12
UK	iP	23 54 51
	iL	56 03
Nov. 20		
EUR	iP	00 33 46
	ipP	34 03
TUC	iP	00 33 43
TUC-T	iP	00 33 43
	i	34 00
Nov. 20		
EUR	eP	04 21 14
Nov. 20		
EUR	eP	04 57 30
Nov. 20		
EUR	eP	05 03 14
HH	eP	05 03 40
RC	eP	05 05 11
TUC	eP	05 05 03
TUC-T	e(P)	05 04 58
	e	05 03
Nov. 20		
COL	e(P)	06 07 01
Nov. 20		
HH	eP	07 44 15
TUC-T	eP	07 45 02
	e	45 10
Nov. 20		
EUR	eP	09 18 50
HH	eP	09 19 18
TUC	eP	09 20 38
TUC-T	eP	09 20 38
Nov. 20		
EUR	eP	10 46 09
Nov. 20		
COL	iP	11 09 11
	epP	09 40
EUR	iP	11 10 13
GUAM	iP	11 01 27
HH	iP	11 10 20
RC	eP	11 10 56
TUC-T	eP	11 10 35
Nov. 20		
EUR	iP	12 12 09
	i	12 36
RC	eP	12 14 07
TUC	eP	12 13 57
Nov. 20		
BC	eP	15 28 33
COL	iP	15 29 09
EUR	iP	15 28 39
HH	eP	15 29 11
RC	eP	15 29 36

Date and Station		Phase (GCT)
		h m s
TUC-T	iP	15 28 41
	i	29 15
COL	eP	16 44 02
Nov. 20		
COL	e(P)	17 45 00
Nov. 20		
COL	eP	18 02 21
EUR	eP	18 01 51
Nov. 20		
HH	eP	19 02 09
Nov. 20		
BC	eP	19 42 33
EUR	iP	19 42 38
HH	iP	19 42 30
RC	iP	19 41 52
	ePP	45 04
SLC	eP	19 42 23
SJ	eP	19 37 39
THULE	iP	19 41 46
TUC-T	iP	19 42 17
Nov. 21		
COL	e(P)	00 22 14
Nov. 21		
HH	e(P)	02 02 38
Nov. 21		
COL	eP	03 56 53
	iL	58 14
Nov. 21		
COL	eP	04 22 28
	iL	23 28
Nov. 21		
RC	iP	06 20 30
Nov. 21		
TUC	eP	08 37 20
Nov. 21		
EUR	iP	08 45 06
Nov. 21		
COL	iP	09 23 12
EUR	iP	09 26 43
TUC	eP	09 27 44
Nov. 21		
TUC	e(P)	10 06 56

Date and Station		Phase (GCT)
Nov. 21		h m s
SJ	iP	11 21 33
	iS	21 43
	iL	21 45
Nov. 21		
RC	e(P)	12 25 15
Nov. 21		
COL	iP	14 24 58
Nov. 21		
SJ	eP	14 47 22
Nov. 21		
COL	iP	16 23 31
	iL	24 15
Nov. 21		
EUR	eP	16 50 21
RC	eP	16 50 01
Nov. 21		
HH	e(P)	18 17 30
Nov. 21		
BOZ	eP	19 42 19
HH	e(P)	19 45 40
Nov. 22		
COL	iP	02 28 50
EUR	iP	02 32 14
HH	iP	02 31 43
RC	iP	02 32 34
TUC	iP	02 33 02
TUC-T	iP	02 33 02
Nov. 22		
EUR	iP	07 14 00
HH	iP	07 19 55
Nov. 22		
COL	iP	13 00 34
EUR	eP	13 01 56
HONO	eP	12 58 40
KIP	eP	12 58 42
SJ	eP'	13 07 50
	i	08 03
Nov. 22		
SJ	iP	13 21 56
	iL	22 13
Nov. 22		
COL	i(P)	14 06 52

Date and Station		Phase (GCT)
Nov. 22		h m s
COL	eP	14 38 11
Nov. 22		
COL	eP	16 45 33
EUR	eP	16 40 02
TUC	eP	16 39 36
	e	41 06
TUC-T	iP	16 39 36
Nov. 22		
EUR	e(P)	17 26 24
HH	eP	17 25 45
	iL	26 48
RC	eP	17 26 29
	e	27 33
Nov. 22		
COL	e(P)	17 59 56
Nov. 22		
EUR	iP	1 8 56 48
TUC-T	eP	18 57 18
Nov. 22		
BC	eP	19 46 11
	epP	48 04
BOZ	eP	19 46 45
	epP	48 44
BUT	iP	19 46 42
COL	iP	19 46 37
	ipP	48 41
	eSKS	56 38
	iPKKP	20 04 10
EUR	iP	19 46 15
	ipP	48 10
	iS	55 51
HH	iP	19 46 43
	epP	48 43
	ePP	50 23
	eS	56 27
	iPKKP	20 04 10
KIP	eP	19 42 23
RC	iP	19 47 04
	ipP	49 05
SLC	eP	19 46 32
	epP	48 28
SJ	iP'	19 52 23
THULE	iP'	19 52 18

Date and Station		Phase (GCT)
		h m s
TUC	eP	19 46 16
	iP	46 17
	ipP	48 11
	iS	55 52
	ePKKP	20 04 26
	eP'P'	12 30
	iP'P'	12 37
TUC-T	iP	19 46 17
	ipP	48 11
	eS	55 52
	ePKKP	20 04 25
	iP'P'	12 30
	eL	14 38
Nov. 22		
COL	eP	22 55 49
EUR	e(P)	22 55 48
TUC-T	eP	22 55 49
Nov. 23		
TUC	e(P)	05 46 18
Nov. 23		
EUR	eP	13 43 18
Nov. 23		
COL	eP	14 55 06
HH	iP	14 57 14
Nov. 23		
COL	iP	15 31 12
Nov. 23		
COL	iP	16 27 46
EUR	iP	16 27 42
SLC	e(P)	16 28 00
Nov. 23		
EUR	e(P)	17 35 49
TUC-T	eP	17 36 06
	e	36 10
Nov. 23		
COL	eP	18 18 39
EUR	eP	18 18 08
TUC-T	eP	18 18 07
Nov. 23		
COL	iP	19 24 03
EUR	iP	19 29 40
Nov. 23		
BC	eP	20 00 00
	e	00 15

Date and Station	Phase	Phase (GCT) h m s
Nov. 23		
COL	iP	21 05 04
EUR	iP	21 08 07
THULE	eP	21 06 53
Nov. 23		
BC	eP	21 19 03
COL	iP	21 16 19
EUR	iP	21 18 49
HH	iP	21 18 29
THULE	eP	21 17 22
Nov. 23		
COL	e(P)	23 14 46
	i	15 04
Nov. 24		
TUC-T	e(P)	01 23 32
	e	23 38
Nov. 24		
COL	eP	02 47 16
Nov. 24		
EUR	eP	03 14 01
SJ	iP	03 05 46
	i(S)	06 16
	iL	06 21
Nov. 24		
SJ	iP	03 12 17
	i	12 29
	eL	12 56
Nov. 24		
BUT	eP	09 16 33
	eL	17 36
Nov. 24		
COL	e(P)	12 54 20
EUR	eP	12 53 40
TUC	eP	12 53 39
Nov. 24		
COL	iP	13 35 02
Nov. 24		
COL	iP	14 16 11
EUR	eP	14 15 47
TUC	eP	14 15 49
Nov. 24		
COL	eP	15 09 02
THULE	iP	15 09 59
Nov. 24		
COL	iP	15 47 18
RC	eP	15 51 22
Nov. 24		
COL	iP	17 23 30
EUR	iP	17 26 57
Nov. 24		
THULE	eP	19 37 58
	e(S)	38 57
Nov. 24		
COL	eP	19 56 40
Nov. 24		
BOZ	e(P)	20 18 11
EUR	iP	20 18 31
HH	eP	20 18 20
RC	e(P)	20 17 36
	e	17 44
THULE	eP	20 17 54
TUC-T	eP	20 18 07
Nov. 24		
COL	iP	21 52 28
TUC-T	iP	21 52 07
Nov. 25		
EUR	eP	09 29 50
Nov. 25		
EUR	eP	10 40 59
Nov. 25		
BC	eP	15 43 22
COL	eP	15 46 41
EUR	eP	15 42 23
	eL	45 48
TUC	e(P)	15 40 57
	iL	41 48
TUC-T	eP	15 40 38
	e	40 57
	eL	41 47
Nov. 25		
BC	eP	17 40 31
COL	eP	17 44 15
EUR	eP	17 40 53
HH	iP	17 41 35
TUC-T	iP	17 39 49
Nov. 25		
COL	iP	19 16 45
Nov. 25		
COL	e(P)	20 24 24
Nov. 25		
COL	iP	22 32 23
EUR	eP	22 31 50
TUC-T	eP	22 31 49
Nov. 26		
COL	iP	00 54 06
EUR	iP	00 54 43
GUAM	iP	00 46 26
	i	46 33
TUC-T	iP	00 53 45
Nov. 26		
RC	eP	05 32 12
Nov. 26		
COL	iP	06 19 36
	i	20 08
	i	20 22
HH	eP	06 18 48
THULE	eP	06 19 36
Nov. 26		
BC	eP'	07 25 44
	ePP	29 11
BOZ	eP'	07 25 33
BUT	eP'	07 25 30
	ePP	27 39
COL	eP	07 20 26
	iPP	24 35
	eL	08 02 05
COLU	eP'	07 26 15
	ePP	29 24
EUR	iP'	07 25 30
	i	25 35
	ePP	27 53
	i	28 57
	eSKSP	38 24
	e	51 52
GUAM	iP	07 14 40
	iS	21 07
HH	iP'	07 25 26
RC	eP'	07 25 46
	ePKS	29 14
SLC	eP'	07 25 36
	ePKS	29 02
THULE	eP	07 20 49
	eP'	24 09
	ePP	25 19
TUC	eP'	07 25 46
	e	26 22
	ePP	28 38
	eL	08 12 13
TUC-T	iP'	07 25 46
	e	26 31
	iPP	28 37
	e	28 40
UK	eP'	07 25 25
	e	25 39
WASH	iP'	07 26 03
Nov. 26		
COL	e(P)	07 35 04
Nov. 26		
BUT	eP	07 52 20
COL	iP	07 52 15
HH	e(P)	07 52 23
TUC	eP	07 51 54
	e	52 06
Nov. 26		
COL	e(P)	08 18 24
	iL	20 01
Nov. 26		
COL	iP	09 30 20
	i	30 32
EUR	iP	09 33 12
	i	33 24
Nov. 26		
COL	iP	16 19 04
	i	19 15
EUR	eP	16 18 29
TUC	eP	16 18 27
	e	18 37
TUC-T	iP	16 18 27
Nov. 26		
TUC-T	eP	17 51 52
	i	51 56

Date and Station		Phase (GCT)
		h m s
Nov. 26		
BUT	iP	22 05 48
	eL	06 50
EUR	eP	22 07 01
HH	eP	22 06 23
	iL	07 27
Nov. 26		
COL	e(P)	22 32 49
	i	33 04
Nov. 26		
BC	eP'	23 28 31D
	e	28 47
	ePKS	33 12
BUT	eP'	23 28 41D
COL	eP	23 23 27
	iP'	27 29
	i	27 47
	eSKS	34 14
	i	38 00
	ePKKP	39 51
	eL	00 02 55
COLU	eP'	23 29 16C
	e	32 30
	ePP	32 45
EUR	eP'	23 28 34
	i	28 42
	iPKS	32 03
GUAM	eP	23 17 47
HH	eP'	23 28 30C
	iPKS	31 55
RC	eP'	23 28 51
	ePP	31 37
SLC	eP'	23 28 44C
	ePKS	32 12
SJ	eP'	23 29 32
	i	29 42
	e	30 20
	ePP	34 24
THULE	eP	23 23 49D
	e(P')	27 02
	ePP	28 22
TUC	eP'	23 28 48C
	e	29 11
	ePP	31 41
	ePKS	32 35
	iL	00 14 34
TUC-T	eP'	23 28 47C
	i	28 52
	i	30 25
UK	eP'	23 28 16
	i	28 31
	ePP	31 55

Date and Station		Phase (GCT)
		h m s
WASH	eP'	23 29 07D
	eSKP	32 32
Nov. 27		
EUR	eP	00 14 49
Nov. 27		
BUT	eP	00 35 08
COL	iP	00 34 19
EUR	iP	00 35 46
HH	iP	00 35 02
RC	iP	00 34 56
	i	35 03
	ePP	38 50
THULE	iP	00 31 43
TUC	eP	00 35 58
	e	36 05
TUC-T	eP	00 35 57
Nov. 27		
COL	iP	02 38 21
Nov. 27		
HH	e(P)	06 51 17
Nov. 27		
COL	eP	07 50 27
EUR	iP	07 50 04
TUC	eP	07 50 05
TUC-T	eP	07 50 05
Nov. 27		
COL	eP	07 56 06
	iL	57 12
Nov. 27		
COL	iP	10 54 43
EUR	iP	10 54 17
HH	e(P)	10 54 46
TUC	iP	10 54 18
TUC-T	iP	10 54 19
Nov. 27		
COL	eP	13 47 25
EUR	iP	13 48 23
Nov. 27		
EUR	iP	14 08 56
HH	i(P)	14 10 48

Date and Station		Phase (GCT)
		h m s
TUC	eP	14 10 10
Nov. 27		
THULE	eP	17 15 32
Nov. 27		
RC	eP	18 40 34
Nov. 27		
EUR	iP	19 10 44
HH	iP	19 10 34
Nov. 27		
EUR	eP	19 14 08
RC	eP	19 14 39
Nov. 27		
HH	eP	21 04 54
	iL	05 58
Nov. 27		
BOZ	eP	23 28 38
Nov. 28		
BC	eP	02 58 37
COL	eP	02 58 46
EUR	iP	02 58 41
GUAM	eP	02 54 00
	e	55 03
SJ	iP	02 52 03
TUC	eP	02 58 46
	e	59 02
	eL	03 27 06
TUC-T	iP	02 58 47
Nov. 28		
COL	iP	03 19 44
Nov. 28		
BC	eP	03 33 50
BUT	eP	03 33 25
COL	eP	03 31 03
EUR	iP	03 33 34
GUAM	iP	03 24 59
HH	eP	03 33 15
THULE	eP	03 32 20
Nov. 28		
THULE	eP	07 04 44
	eL	06 29

Date and Station		Phase (GCT)
		h m s
Nov. 28		
COL	eP	08 32 32
Nov. 28		
COL	e(P)	09 52 19
Nov. 28		
COL	eP	10 06 16
EUR	eP	10 10 26
Nov. 28		
COL	eP	10 46 08
EUR	iP	10 48 45
Nov. 28		
BC	eP	11 07 43
	e	08 12
	e(S)	08 48
	eL	09 21
EUR	iP	11 08 33
HH	eP	11 10 32
SLC	e(P)	11 08 55
	e	09 41
	e	12 04
TUC	eP	11 07 17
	iP	07 27
	iL	08 24
TUC-T	eP	11 07 19
	i	07 30
Nov. 28		
BC	iP	12 46 47C
BOZ	eP	12 47 20
BUT	eP	12 47 24C
	e	47 29
COL	iP	12 49 27
COL	eP	12 53 25
	i	53 58
COLU	eP	12 45 23
EUR	iP	12 47 05
	ePKKP	13 05 53
	eP'P'	13 43
GUAM	eP'	12 54 29
HH	iP	12 47 36
RC	iP	12 46 56
	ePKKP	13 14 06
SLC	eP	12 46 59
	e	47 31

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Date and Station		Phase (GCT)
		h m s
SJ	iP	12 43 26
	iPP	45 21
TUC	iP	12 46 19
	i	46 27
TUC-T	iP	12 46 19
UK	eP	12 47 24
	i	47 32
WASH	iP	12 45 53
Nov. 28		
COL	eP	13 04 29
Nov. 28		
EUR	eP	14 28 56
HH	eP	14 29 09
Nov. 28		
EUR	eP	19 56 41
Nov. 28		
COL	eP	21 31 17
	e	32 00
EUR	eP	21 31 33
Nov. 28		
COL	eP	21 54 49
Nov. 28		
BC	eP	22 52 08
	e	52 14
	e	52 45
BUT	eP	22 52 27
	e	53 05
COL	iP	22 51 50
	i	52 26
EUR	iP	22 52 10
	i	52 47
HH	iP	22 52 27
	i	53 04
	eP'P'	23 17 52
SLC	eP	22 52 24
THULE	eP'	22 57 46
TUC	eP	22 52 19
	i	52 56
TUC-T	iP	22 52 20
	i	52 57
UK	iP	22 51 44
	i	52 21

Date and Station		Phase (GCT)
		h m s
Nov. 29		
COL	iP	01 43 49
EUR	iP	01 43 27
TUC	iP	01 43 28
TUC-T	iP	01 43 28
Nov. 29		
COL	eP	02 45 56
Nov. 29		
COL	eP	04 03 35
EUR	iP	04 04 09
Nov. 29		
BC	eP	04 56 56
EUR	iP	04 57 32
TUC	eP	04 55 57
TUC-T	eP	04 55 58
Nov. 29		
COL	eP	05 34 28
Nov. 29		
COL	eP	05 59 48
EUR	iP	05 59 18
THULE	eP'	06 05 16
TUC-T	iP	05 59 18
	ipP	06 00 09
TUC	iP	05 59 17
	epP	06 00 08
Nov. 29		
COL	e(P)	09 35 30
Nov. 29		
EUR	iP	10 32 32
HH	eP	10 33 26
UK	e(P)	10 31 20
	eL	31 56
Nov. 29		
EUR	iP	14 38 22
	ipP	38 48
Nov. 29		
EUR	eP	15 41 28
TUC	e(P)	15 42 32
	e	45 54
	i	46 09

Date and Station		Phase (GCT)
		h m s
TUC-T	iP	15 45 53
Nov. 29		
EUR	eP	21 53 45
TUC-T	eP	21 52 51
Nov. 29		
HH	eP	22 33 39
	iL	34 38
Nov. 30		
HH	e(P)	00 02 36
Nov. 30		
COL	eP	02 25 30
Nov. 30		
COL	iP	07 44 20
EUR	iP	07 44 57
Nov. 30		
HH	eP	08 33 40
Nov. 30		
SLC	eP	08 54 16
	e	55 09
Nov. 30		
EUR	eP	09 09 47
HH	eP	09 09 13
	iL	10 18
Nov. 30		
HH	eP	10 54 31
	iL	55 37
Nov. 30		
BUT	eP	11 25 00
COL	iP	11 23 36
EUR	iP	11 26 22
HH	e(P)	11 25 48
Nov. 30		
COL	eP	13 03 41
Nov. 30		
BOZ	eP	14 48 23
	eL	49 21
COL	iP	14 49 08
HH	iP	14 48 19
HH	eP	14 49 14
	iL	50 09
Nov. 30		
BC	eP	15 25 19
	e	25 24
BOZ	eP	15 24 27

Date and Station		Phase (GCT)
		h m s
BUT	iP	15 24 18
COL	iP	15 20 03
	iS	21 09
	iL	21 18
EUR	iP	15 24 48
	iPcP	27 50
	eS	31 31
HH	iP	15 23 57
	iS	27 36
	eL	32 34
SLC	eP	15 24 56
SJ	iP	15 30 01
COL	iP	15 20 03
	iS	21 09
	iL	21 18
SIT	iP	15 20 44
	eS	22 25
THULE	iP	15 25 02
TUC	iP	15 26 03
TUC-T	iP	15 26 02
	i	26 09
	iS	32 10
WASH	eP	15 27 31
Nov. 30		
EUR	iP	21 18 20
TUC-T	iP	21 17 34

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
Nov.	
BOZ	
1	02.9
	04.1
2	11.1
	11.6
6	05.5
8	18.2
14	18.0
15	05.2
16	19.8
	21.0
	21.1
	22.4
17	03.8
	10.9
	12.0
	13.5
	16.6
	23.4
18	16.4
	19.8
	22.4
19	12.2
	12.5
22	17.4
24	09.3
26	22.1
27	21.1
29	01.7
	02.1
	07.7
	09.3
	11.0
	22.4
30	22.5
	08.7
	09.1
	10.9
Nov.	
BUT	
1	18.6
2	06.6
	15.9
	19.8
	23.8
3	01.6
	11.6
4	16.6
	04.7
6	09.2
7	21.6
9	06.3
11	09.2
12	10.2
14	09.4
	20.5
	21.8
15	05.1
	05.2
16	20.5
	22.6
17	00.3
	03.8

Date and Station	Phase (GCT)
	h m s
BUT	
17	10.7
	12.4
	16.6
	23.5
18	04.8
	08.3
	16.4
22	05.2
	17.4
23	05.9
24	11.3
	14.0
25	01.6
	05.4
	09.2
26	02.2
	08.8
	15.9
27	09.0
	15.3
	21.1
29	07.7
	11.1
	21.3
	22.5
30	08.7
	09.1
	10.9
	14.8
Nov.	
COL	
3	00.4
8	13.6
10	15.1
11	17.2
12	10.1
13	14.8
14	20.0
16	11.2
18	05.4
	19.7
	22.1
19	09.7
21	03.6
22	19.2
	10.3
25	01.2
29	19.1
Nov.	
EUR	
10	07.0
	12.0
13	17.1
21	17.4
	17.9
27	16.0
Nov.	
HH	
15	09.9
Nov.	
HONO	
11	17.4

Date and Station	Phase (GCT)
	h m s
HONO	
15	01.9
17	01.2
24	04.0
25	01.2
Nov.	
KIP	
11	17.4
15	01.9
17	01.2
24	04.0
25	01.2
Nov.	
SJ	
2	22.7
3	01.6
4	01.8
	09.3
5	08.3
	21.9
7	05.0
9	09.4
11	02.8
	05.8
	17.8
	22.0
13	10.5
18	21.7
19	15.4
21	18.4
	23.3
23	04.7
	05.5
	23.6
24	00.2
	03.3
	03.4
	03.8
28	02.6
30	10.7
Nov.	
SIT	
5	00.5
26	08.3
Nov.	
TUC	
1	07.3
	08.0
	22.2
5	12.9
7	17.4
8	00.9
	08.7
9	20.5
10	03.6
11	13.7
14	01.5
	02.6
	21.3
	23.1
16	05.3
	12.1
17	03.2
	04.5

Date and Station	Phase (GCT)
	h m s
TUC	
21	10.9
	21.0
26	02.7
	08.8
Nov.	
UK	
1	13.3
11	00.2
	00.6
17	13.4
29	01.1

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