USCGS
40

SEISMOLOGICAL BULLETIN

COAST & GEODETIC SURVEY
LIBRARY & ARCHIVES
OCT 13 1960
ACC. NO.

October, 1959

MSI - 226

CONTENTS

List of stations 1
Provisional epicenters 2
Seismogram interpretations 5
Local and minor earthquakes 21

U. S. DEPARTMENT OF COMMERCE

Frederick H. Mueller, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

FOR OFFICIAL DISTRIBUTION

National Oceanic and Atmospheric Administration

ERRATA NOTICE

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

Discolored pages
Faded or light ink
Binding intrudes into the text

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

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

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
Oct.	h m s	°		°		
1	04 35 30*	34	N.	121	W.	Off coast of Southern California. Slight damage in Santa Barbara area. Mag. 4.8.
3	09 08 33*	14½	N.	142	E.	Mariana Islands region.
3	20 02 40*	42	N.	146	E.	Off east coast of Hokkaido, Japan.
4	10 53 27*	31	S.	70	W.	San Juan Province, Argentina. h about 150 km.
5	11 33 14*	45	N.	111½	W.	Hebgen Lake aftershock.
5	11 34 01*	52½	N.	171	W.	Fox Islands, Aleutian Islands. Depth slightly greater than normal.
5	17 56 25*	84	N.	113	E.	North Polar region.
5	18 11 18*	84	N.	113	E.	do.
5	18 27 47*	83½	N.	112½	E.	North Polar region. Mag. 5-3/4 - 6 (Berk).
5	20 34 04*	41	N.	20	E.	Albania.
6	05 44 37*	½	N.	122½	E.	Celebes. h about 200 km.
6	11 37 21*	45	N.	111½	W.	Hebgen Lake aftershock.
7	08 30 39*	41	N.	20	E.	Albania.
8	00 03 28*	19	S.	169	E.	New Hebrides Islands. Felt at Port Vila and Lenakel.
8	02 35 20*	52½	N.	171	W.	Fox Islands, Aleutian Islands.
8	10 55 12*	19½	N.	73½	W.	Haiti.
8	14 14 10*	52½	N.	107	E.	Lake Baikal, U.S.S.R.
9	11 09 27*	9	N.	126	E.	Near north coast of Mindanao, Philippine Islands.
11	09 33 44*	41½	N.	142	E.	Near coast of northern Honshu, Japan.
11	09 53 18*	3½	S.	152	E.	New Ireland. Felt at Rabaul.
11	17 50 22*	28½	S.	176½	W.	Kermadec Islands.
11	20 03 10*	5½	S.	147	E.	Near north coast of New Guinea.
11	20 03 25*	28½	S.	176½	W.	Kermadec Islands region.
12	03 21 52*	2	N.	98½	E.	Near coast of Sumatra.
12	03 43 44*	19	S.	68½	W.	Northern Chile-Bolivia border. h about 150 km.
12	10 15 17*	29	S.	176½	W.	Kermadec Islands region.
12	19 21 50*	7	S.	155½	E.	Solomon Islands.
13	07 30 29*	43	N.	119	W.	Nevada-Oregon border.
13	08 15 00*	35½	N.	111½	W.	Arizona. Felt at Flagstaff. Mag. 5.
13	20 52 25*	9	S.	79½	W.	Near coast of Peru. Depth slightly greater than normal.
14	07 20 27*	12½	S.	167	E.	Santa Cruz Islands.
14	08 01 04*	51½	N.	176	W.	Andreanof Islands, Aleutian Islands.
14	09 56 29**					Ryukyu Islands region.
14	20 33 59*	15	S.	177	W.	Fiji Islands region.
15	04 22 44*	5½	S.	146	E.	Near north coast of New Guinea.
15	04 22 49*	19	N.	104	W.	Jalisco, Mexico. h about 200 km.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Oct.	h m s	°	°	
15	06 15 32*	½ N.	120½ E.	Celebes. Mag. 6½.
15	07 31 47**			Tonga Islands region.
15	07 40 20*	44 N.	148 E.	Kurile Islands.
15	20 33 45**			Fox Islands, Aleutian Islands.
16	01 15 08*	30½ S.	69 W.	San Juan Province, Argentina. h about 100 km.
16	16 14 53*	6 N.	125 E.	Near south coast of Mindanao, Philippine Islands.
17	08 35 00*	57½ S.	161 W.	South Pacific Ocean.
17	20 27 35*	60 N.	138½ W.	Yukon-British Columbia border.
18	05 44 04**			South of Honshu, Japan.
18	12 17 02*	28 S.	175 W.	Kermadec Islands region.
18	17 06 13*	50½ N.	156 E.	Off south coast of Kamchatka.
18	23 25 13*	6 S.	105 E.	Sunda Strait. h about 150 km.
19	01 25 26*	30 S.	178 W.	Kermadec Islands. h about 60 km.
19	02 12 55*	25½ S.	177½ W.	South of Fiji Islands.
19	02 46 49*	44½ N.	148 E.	Kurile Islands.
19	04 33 24**			New Britain region.
19	04 34 59*	22 S.	176½ W.	Tonga Islands region.
19	08 27 21*	27½ S.	177 W.	Kermadec Islands. Mag. 6¼.
19	09 15 20*	28 S.	176½ W.	Kermadec Islands region.
19	13 52 40*	22 S.	179½ W.	Fiji Islands region. h about 600 km.
19	15 55 30*	54½ S.	29 W.	Sandwich Islands region.
20	08 00 46*	44½ N.	140 E.	Sea of Japan.
21	06 00 51*	10 S.	162 E.	Solomon Islands.
21	20 51 14*	4 S.	154 E.	New Ireland region. Felt at Rabaul.
22	19 27 08*	52½ N.	170½ W.	Fox Islands, Aleutian Islands.
23	03 43 32*	4 S.	154 E.	New Ireland region. h about 150 km.
23	06 17 54*	20½ S.	68½ W.	Chile-Bolivia border. h about 200 km.
23	16 54 23*	33½ N.	59 E.	Eastern Iran.
24	13 43 39*	50½ N.	130 W.	Vancouver Island region.
24	15 35 15*	36 N.	118 W.	Southern California. Mag. 4.0.
24	23 40 34*	41½ N.	70 E.	Kazakh S.S.R.
25	06 51 09**			Atlantic Ocean, north of Azores.
25	15 57 51*	39 N.	42 E.	Eastern Turkey. 12 killed, many injured and extensive property damage at Hinis and Varto. Felt at Ezurum.
25	17 07 41**			Talaud Island region.
26	07 35 12*	37½ N.	142½ E.	Near east coast of Honshu, Japan. h about 60 km. Mag. 6½.
26	10 29 09*	51½ N.	157½ E.	Near east coast of Kamchatka. h about 150 km.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Oct.	h m s	°	°	
27	02 07 28**			Northeastern South Carolina. Felt at Bishopville, Florence, Hartville, and McBee.
27	06 12 17*	42½ N.	127 W.	Off coast of Oregon. Mag. 5 - 5¼ (Berk).
27	06 52 50*	45½ N.	151 E.	Kurile Islands. h about 100 km. Mag. 6½.
27	13 18 51*	46 N.	151 E.	Kurile Islands.
28	09 21 51*	22 S.	178½ W.	Fiji Islands region.
29	10 35 20*	46 N.	151 E.	Kurile Islands.
29	14 19 51*	29½ S.	176½ W.	Kermadec Islands. Felt on Raoul. h about 60 km. Mag. 5-3/4 (Berk).
29	14 30 24*	43 N.	131 E.	China-Korea border. h about 550 km. Mag. 6¼.
29	19 49 45**			Off coast of southern Honshu, Japan. Felt at Tokyo.
30	00 32 29*	8½ N.	138 E.	Caroline Islands.
30	04 00 26*	66 N.	136½ E.	Yakutsk A.S.S.R.
30	05 20 36*	4 S.	80½ W.	Peru-Ecuador border.
30	06 24 38*	7 S.	123½ E.	Flores Sea.
30	07 04 48*	19 S.	177½ W.	Fiji Islands. h about 450 km.
30	11 10 16**			Solomon Islands.
30	11 27 33**			Sandwich Islands region.
30	13 58 25*	23½ S.	175½ W.	Tonga Islands region.
30	21 37 35*	19 S.	177½ W.	Fiji Islands. h about 600 km.
31	04 27 12*	16½ S.	178 W.	Fiji Islands. Felt at Apia. h about 450 km. Mag. 6-1/2 - 6-3/4.
31	18 31 18*	2 N.	77½ W.	Southern Colombia. h about 100 km.

ERRATA TO AUGUST 1959 BULLETIN

18 06 37 15.0 44 55 N., 111 05 W. Hebgen Lake, Montana. Many killed and injured. Major property damage. Mag. 7.1, should read 44 50 N.

Date and Station		Phase	(GCT)
			h m s
Oct. 1			
COL	iP		03 19 54
	i		20 07
EUR	eP		03 19 20
Oct. 1			
BUT	iP		03 51 05
	iL		52 09
EUR	eP		03 52 20
HH	eP		03 51 41
	iL		52 44
RC	eP		03 52 32
	e		52 57
	eL		54 00
SLC	eP		03 51 54
	e		52 51
Oct. 1			
BUT	e(P)		04 38 26
EUR	iP		04 37 10
HH	eP		04 39 10
RC	eP		04 39 30
SLC	eP		04 38 00
TUC	eP		04 37 38
	iL		40 10
TUC-T	eP		04 37 39
	eL		40 08
UK	e(P)		04 37 40
	e		38 23
Oct. 1			
HH	eP		04 50 29
Oct. 1			
EUR	eP		05 54 24
HH	eP		05 54 50
	iL		55 38
RC	eP		05 56 59
	e		57 13
Oct. 1			
COL	iP		07 23 10
EUR	iP		07 26 35
Oct. 1			
EUR	eP		09 06 10
Oct. 1			
COL	iP		10 46 37
Oct. 1			
COL	eP		12 08 17
Oct. 1			
COL	iP		13 16 30
COL	iS		13 17 05
	iL		17 10
Oct. 1			
COL	eP		16 15 50
HH	eP		16 16 51
Oct. 1			
COL	iP		18 03 35
	iS		04 13
	iL		04 26
Oct. 1			
COL	eP		18 58 24
Oct. 1			
HH	e(P)		19 09 10
Oct. 1			
EUR	eP		19 52 13
HH	eP		19 51 56
Oct. 2			
RC	eP		00 02 28
	e		02 47
Oct. 2			
SJ	e(P)		02 19 45
	e		19 49
	iS		22 03
Oct. 2			
BOZ	eP		10 40 19
	eL		40 46
BUT	iP		10 40 25
	iL		41 26
EUR	eP		10 42 07
HH	eP		10 40 57
	iL		41 54
RC	e(P)		10 42 06
	e		42 11
	e		43 13
Oct. 2			
COL	eP		10 42 07
Oct. 2			
COL	eP		12 23 01
Oct. 2			
COL	eP		14 42 10
EUR	eP		14 45 39
HH	eP		14 44 57
Oct. 2			
BOZ	eP		16 19 38
	eL		20 02
BUT	iP		16 19 44
	eL		20 47
EUR	e(P)		16 22 30
HH	eP		16 20 19
	iL		21 21
Oct. 2			
HH	iP		19 55 50
	i		57 30
Oct. 2			
EUR	eP		20 15 53
Oct. 3			
COL	eP		00 59 55
Oct. 3			
EUR	eP		01 50 44
	eS		51 27
	eL		51 32
Oct. 3			
HH	e(P)		03 24 23
Oct. 3			
BOZ	iP		06 24 22
	eL		24 44
BUT	iP		06 24 36
	eL		25 37
EUR	eP		06 25 48
HH	eP		06 25 11
	iL		26 18
RC	eP		06 25 52
	eL		27 06
Oct. 3			
COL	eP		08 00 20
EUR	iP		08 03 50
Oct. 3			
COL	eP		09 19 49
EUR	eP		09 21 36
GUAM	iP		09 09 18
HH	eP		09 21 32
Oct. 3			
EUR	eP		12 26 03
Oct. 3			
EUR	eP		15 34 00
Oct. 3			
COL	iP		20 10 41
	i		10 57
EUR	iP		20 13 56
	i		14 08
HH	eP		20 13 29
	i		13 41
TUC	eP		20 14 44
TUC-T	eP		20 14 44
	i		15 28
Oct. 4			
EUR	iP		00 51 13
Oct. 4			
EUR	eP		01 23 51
Oct. 4			
HH	e(P)		05 02 39
Oct. 4			
COL	eP		09 22 02
EUR	eP		09 21 42
TUC-T	iP		09 21 46
Oct. 4			
EUR	eP		10 59 53
	e		11 01 12
Oct. 4			
EUR	iP		11 05 37
	ipP		06 09
	isP		06 21
HH	eP		11 06 07
RC	eP		11 05 29
	epP		06 00
	esP		06 12
SJ	iP		11 02 05
TUC-T	eP		11 05 52
	epP		06 21
Oct. 4			
EUR	iP		15 34 55
	i		34 59
	iS		35 25
	iL		35 29
Oct. 4			
EUR	eP		15 44 49
Oct. 4			
COL	eP		16 33 03
EUR	eP		16 36 50
HH	iP		16 35 43
RC	eP		16 36 21
TUC-T	eP		16 37 42
Oct. 4			
COL	eP		17 25 44

Date and Station		Phase (GCT) h m s
Oct. 4		
COLU	eP	17 50 18
Oct. 4		
EUR	eP	19 39 09
Oct. 4		
COL	iP	20 10 07
Oct. 4		
COL	iP	21 51 19
EUR	eP	21 50 58
TUC-T	eP	21 51 01
	e	22 20 11
Oct. 4		
EUR	eP	22 33 22
TUC	e(P)	22 32 41
	e	32 47
TUC-T	eP	22 32 40
	e	32 47
Oct. 5		
EUR	eP	00 06 59
Oct. 5		
EUR	eP	01 13 34
UK	iP	01 12 18
Oct. 5		
COL	eP	04 18 33
	iL	19 49
Oct. 5		
EUR	eP	05 12 57
Oct. 5		
TUC	e(P)	08 13 15
	eL	14 23
TUC-T	e(P)	08 13 15
	eL	14 20
Oct. 5		
COL	eP	08 15 46
EUR	eP	08 19 35
RC	eP	08 19 15
Oct. 5		
BOZ	iP	09 24 52
	eL	25 21
BUT	eP	09 24 50
	eL	25 49
HH	iP	09 25 34
	iL	26 36
RC	e(P)	09 26 29
	eP	26 33
	eL	27 53

Date and Station		Phase (GCT) h m s
Oct. 5		
COL	iP	09 25 02
EUR	iP	09 25 24
SLC	eP	09 25 41
TUC	eP	09 25 34
TUC-T	eP	09 25 35
Oct. 5		
EUR	iP	10 09 56
Oct. 5		
COL	iP	10 31 42
	iS	32 08
	iL	32 16
Oct. 5		
COL	iP	10 55 41
	iL	56 41
Oct. 5		
BOZ	iP	11 33 33
	eS	33 42
	eL	33 46
BUT	iP	11 33 40
	iL	34 41
EUR	eP	11 34 49
	i	34 57
	eS	35 56
	eL	36 03
HH	iP	11 34 16
	i	34 52
	i(S)	35 15
	iL	35 21
RC	e(P)	11 34 48
	e	35 07
	i	35 15
	eL	36 29
SLC	eP	11 34 17
	eL	35 20
TUC	eP	11 37 10
	eL	40 09
Oct. 5		
COL	eP	11 38 08
	eS	41 38
	eL	43 19
COLU	eP	11 44 37
EUR	iP	11 41 36
	ipP	41 49
	iPcP	43 15
	e	44 43
	iScP	47 27
HH	i(P)	11 41 06
	iPcP	43 31

Date and Station		Phase (GCT) h m s
RC	iP	11 42 16
SJ	e(P)	11 46 37
TUC	iP	11 42 39
	epP	42 51
TUC-T	iP	11 42 39
	ipP	42 52
Oct. 5		
EUR	iP	13 59 57
	e	14 01 13
SJ	eP	13 54 17
	e	54 27
	e	56 36
TUC	iP	13 59 02
TUC-T	iP	13 59 02
Oct. 5		
COL	eP	15 28 37
EUR	eP	15 24 36
Oct. 5		
EUR	eP	15 26 10
	i	26 18
	eS	27 13
	eL	27 23
Oct. 5		
GUAM	eP	15 27 09
	iS	27 40
	eT	29 28
Oct. 5		
COL	iP	16 06 55
	i	07 07
HH	e(P)	16 05 53
Oct. 5		
HH	e(P)	16 34 32
Oct. 5		
BUT	eP	18 05 09
COL	eP	18 02 06
	eL	06 54
EUR	iP	18 05 56
HH	iP	18 04 51
RC	e(P)	18 06 04
THULE	eP	18 01 02
TUC-T	iP	18 06 50
Oct. 5		
COL	eP	18 10 28

Date and Station		Phase (GCT) h m s
Oct. 5		
COL	eP	18 17 04
EUR	eP	18 20 51
HH	iP	18 19 46
RC	iP	18 20 24
TUC-T	iP	18 21 44
Oct. 5		
BOZ	eP	18 36 36
BUT	eP	18 36 33
COL	eP	18 33 30
	iP	33 33
	eS	38 12
	eL	41 39
COLU	eP	18 38 10
EUR	iP	18 37 20
HH	iP	18 36 15
	iPP	38 13
RC	eP	18 36 52
	i	36 55
	eS	44 17
SLC	e(P)	18 37 15
THULE	eP	18 32 22
	i	32 25
TUC	iP	18 38 14
	eL	56 17
TUC-T	iP	18 38 12
	i	38 15
	ePP	40 25
	i	40 38
WASH	eP	18 37 37
	eL	54 03
Oct. 5		
COL	iP	18 48 40
Oct. 5		
COL	eP	20 33 43
	iP	33 46
EUR	iP	20 37 33
HH	iP	20 36 28
RC	eP	20 37 05
	e	46 22
TUC-T	iP	20 38 25
Oct. 5		
BOZ	eP	20 46 35

B 4297-4

Date and Station		Phase (GCT) h m s
Oct. 5		
BOZ	eP	20 46 35
COL	eP	20 45 43
EUR	iP	20 47 10
	i	48 30
HH	iP	20 46 29
SJ	eP	20 45 50
TUC-T	eP	20 47 27
Oct. 6		
TUC	e(P)	01 11 01
	i	11 06
	eL	12 11
TUC-T	eP	01 10 55
	e	11 07
	eL	12 11
Oct. 6		
BOZ	iP	01 27 42
	eL	28 11
BUT	iP	01 27 48
	eL	28 52
EUR	eP	01 29 00
HH	iP	01 28 24
	iL	29 27
RC	eP	01 29 18
	i	29 23
	eL	30 37
SLC	eP	01 28 34
	eL	29 34
Oct. 6		
BOZ	iP	01 41 36
	iL	42 06
BUT	eP	01 41 42
	eL	42 44
EUR	eP	01 42 53
	e(S)	43 53
	eL	44 03
HH	iP	01 42 18
	iL	43 19
RC	eP	01 42 51
	i	43 17
	eL	44 27
SLC	eP	01 42 20
	iP	42 28
	eL	43 20
TUC	e(P)	01 45 12
	e	48 15
TUC-T	eP	01 44 44

Date and Station		Phase (GCT) h m s
TUC-T	e	01 48 03
Oct. 6		
BOZ	eP	02 43 09
	eL	43 37
BUT	iP	02 43 15
	eL	44 16
EUR	eP	02 44 26
HH	eP	02 43 50
	iL	44 50
Oct. 6		
SJ	e(P)	06 01 27
	i	01 38
Oct. 6		
COL	iP	05 57 18
COLU	eP'	06 03 40
EUR	iP'	06 03 00
	i	03 32
	iPP	03 45
GUAM	eP	05 50 00
HONO	iP	05 56 35
HH	eP'	06 02 51
KIP	eP	05 56 35
RC	eP'	06 03 11
SJ	eP'	06 04 19
	e	04 25
TUC	iP'	06 03 14
	e	03 47
TUC-T	iP'	06 03 14
	i	03 47
	e	05 15
WASH	eP'	06 03 44
Oct. 6		
EUR	e(P)	06 54 37
	eP	55 14
TUC-T	eP	06 55 10
	e	55 23
Oct. 6		
BOZ	iP	09 47 24
	eL	47 55
BUT	iP	09 47 31
	eL	48 32
EUR	eP	09 48 43

Date and Station		Phase (GCT) h m s
HH	iP	09 48 08
	iL	49 07
RC	e(P)	09 48 59
	eL	50 09
SLC	eP	09 48 18
	eL	49 15
Oct. 6		
COL	eP	09 54 55
Oct. 6		
HH	iP	10 48 41
Oct. 6		
BC	eP	11 39 38
BOZ	iP	11 37 43
	iL	38 18
BUT	iP	11 37 48
	eL	38 49
COL	eP	11 43 21
	eL	52 26
EUR	iP	11 38 56
	i	39 04
	iL	40 06
HH	iP	11 38 24
	iL	39 24
RC	eP	11 38 56
	i	39 21
	eL	40 30
SLC	eP	11 38 26
	eL	39 30
TUC	e(P)	11 40 28
	i	41 15
	iL	44 06
TUC-T	eP	11 40 24
	e	41 17
	iL	45 29
UK	e(P)	11 40 41
	e	42 47
Oct. 6		
COL	e(P)	11 51 10
	i	52 01
Oct. 6		
BOZ	iP	12 30 27
	eL	30 58
BUT	iP	12 30 32
	eL	31 35
EUR	eP	12 31 44

Date and Station		Phase (GCT) h m s
HH	iP	12 31 09
	iL	32 10
BC	eP	12 32 03
SLC	eP	12 31 14
	eL	32 05
Oct. 6		
BOZ	iP	12 35 23
	eL	35 52
BUT	iP	12 35 28
	iL	36 33
EUR	eP	12 36 39
HH	iP	12 36 01
	iL	37 04
RC	eP	12 37 02
SLC	eP	12 36 12
	eL	37 13
Oct. 6		
COL	eP	12 51 53
	i	52 01
Oct. 6		
COL	iP	14 05 58
Oct. 6		
COL	eP	17 35 55
Oct. 6		
BUT	iP	18 01 43
	eL	02 44
HH	iP	18 02 18
	iL	03 19
Oct. 6		
RC	eP	18 22 03
Oct. 7		
TUC-T	eP	02 10 46
Oct. 7		
TUC	e(P)	02 44 38
TUC-T	eP	02 44 40
Oct. 7		
BOZ	iP	03 02 50
	eL	03 19
BUT	iP	03 02 56
	eL	04 26
EUR	eP	03 04 13
HH	eP	03 03 33
	iL	04 34

Date and Station		Phase (GCT)
		h m s
RC	e(P)	03 04 15
	e	04 32
	eL	05 38
SLC	eP	03 03 45
Oct. 7		
RC	eP	07 40 14
Oct. 7		
BC	eP	08 44 57
BOZ	iP	08 43 12
BUT	eP	08 43 12
COL	iP	08 42 19
	eS	51 53
	eL	09 07 50
COLU	eP	08 42 31
EUR	iP	08 43 45
	ePP	47 17
HH	iP	08 43 05
	e(PP)	46 10
RC	iP	08 42 59
	i	43 07
SJ	eP	08 42 26
SIT	eP	08 42 55
TUC	eP	08 44 04
	ePP	47 50
	eL	09 23 50
TUC-T	iP	08 44 03
	i	44 11
	ePP	47 49
WASH	iP	08 41 57
Oct. 7		
COL	iP	13 13 04
Oct. 7		
RC	eP	14 15 48
COL	iP	14 20 08
EUR	iP	14 16 15
RC	e(P)	14 15 06
TUC	iP	14 15 04
TUC-T	iP	14 15 04
Oct. 7		
COL	iP	17 00 57
Oct. 7		
TUC-T	iP	17 51 02

Date and Station		Phase (GCT)
		h m s
Oct. 7		
COLU	eP	19 29 20
Oct. 7		
COL	iP	21 00 22
	iS	00 45
	iL	00 48
Oct. 7		
UK	eP	22 16 30
Oct. 7		
SLC	iP	23 15 35
	iL	16 32
Oct. 8		
BC	eP	00 16 36
	e	19 10
COL	eP	00 16 31
EUR	iP	00 16 39
	i	16 53
GUAM	eP	00 11 09
TUC	iP	00 16 45
	e	17 35
TUC-T	iP	00 16 45
UK	eP	00 16 14
Oct. 8		
EUR	iP	00 19 51
Oct. 8		
COL	eP	00 46 20
Oct. 8		
BC	eP	02 43 17
BOZ	eP	02 42 49
COL	iP	02 39 24
	eS	42 52
	eL	44 26
COLU	eP	02 45 54
EUR	iP	02 42 52
	iScP	48 45
HH	iP	02 42 22
	iPcP	44 49
	iScP	48 32
SJ	eP	02 47 57
	i	48 05
TUC	iP	02 43 56
	i	44 08
TUC-T	iP	02 43 56
	i	44 08

Date and Station		Phase (GCT)
		h m s
Oct. 8		
EUR	iP	03 19 08
Oct. 8		
EUR	eP	05 48 41
Oct. 8		
BUT	eP	06 28 11
	eL	29 21
EUR	eP	06 29 26
HH	eP	06 28 54
	eL	29 52
SLC	eP	06 28 54
Oct. 8		
EUR	eP	08 02 22
SJ	eP	07 56 12
	e	56 30
	eL	57 53
Oct. 8		
UK	eP	08 44 02
Oct. 8		
BOZ	e(P)	11 03 04
BUT	eP	11 03 06
COL	iP	11 06 02
COLU	eP	10 59 10
EUR	iP	11 03 06
	iPP	04 55
HH	iP	11 03 21
	i	05 54
SLC	eP	11 02 44
SJ	e(P)	10 56 56
	i	57 12
	eS	58 32
	eL	58 47
TUC	eP	11 02 18
TUC-T	iP	11 02 17
WASH	iP	10 59 49
Oct. 8		
COL	eP	11 09 48
Oct. 8		
EUR	eP	11 46 12
Oct. 8		
EUR	iP	13 31 07
Oct. 8		
COL	iP	14 23 02
EUR	iP	14 26 26

Date and Station		Phase (GCT)
		h m s
HH	iP	14 25 44
TUC-T	eP	14 27 09
	i	27 18
Oct. 8		
COL	eP	15 34 23
Oct. 8		
COL	e(P)	16 29 02
Oct. 8		
BC	eP	18 34 47
Oct. 8		
COL	iP	20 11 28
Oct. 8		
BC	eP	20 45 59
TUC-T	eP	20 45 59
	e	46 07
	iL	46 45
Oct. 9		
SLC	eP	00 32 35
	iL	33 38
Oct. 9		
BC	eP	08 41 53
EUR	eP	08 41 45
TUC	eP	08 42 41
	i	44 19
Oct. 9		
COL	eP	11 21 41
Oct. 9		
SJ	e(P)	14 52 30
Oct. 9		
UK	iP	17 11 26
	i	11 29
	i(S)	11 34
	iL	11 35
Oct. 9		
SJ	iP	17 24 50
	i	25 05
	iS	25 21
	iL	25 23
Oct. 9		
COL	eP	17 25 08
Oct. 9		
BOZ	iP	18 10 50
	eL	11 26
EUR	iP	18 12 25
	i	13 50
HH	eP	18 11 37
	iL	12 36

Date and Station		Phase (GCT)
Oct. 9		h m s
GUAM	iP	19 01 34
	iS	02 43
Oct. 9		
BUT	eP	22 56 39
	eL	57 53
EUR	iP	22 56 05
	i(S)	57 05
HH	e(P)	22 57 15
	eL	58 54
SLC	eP	22 56 49
TUC-T	iP	22 58 04
	e	58 55
	eL	23 01 29
UK	eP	22 56 38
	i	56 46
	e	57 19
Oct. 10		
GUAM	iP	02 07 54
Oct. 10		
SJ	e(P)	06 07 52
	e	07 59
Oct. 10		
EUR	eP	09 01 44
HH	i(P)	09 01 13
Oct. 10		
BOZ	eP	13 30 30
	eL	31 01
BUT	iP	13 30 37
	eL	31 40
EUR	iP	13 31 49
HH	iP	13 31 13
	iL	32 14
RC	e(P)	13 31 49
	e	32 08
	eL	33 19
SLC	eP	13 31 18
	eL	32 21
Oct. 10		
COL	e(P)	13 51 13
Oct. 10		
EUR	eP	16 24 06
COL	e(P)	16 22 16
GUAM	iP	16 11 47
	iS	12 11
Oct. 10		
COL	iP	19 03 22
EUR	iP	19 06 49

Date and Station		Phase (GCT)
Oct. 10		h m s
EUR	eP	19 22 38
Oct. 11		
BC	eP	02 04 30
EUR	iP	02 04 26
	e(S)	05 27
	iL	05 39
TUC	e(P)	02 05 31
	e	08 20
TUC-T	e(P)	02 05 32
	e	08 15
UK	eP	02 04 13
	e	05 10
Oct. 11		
COL	iP	06 51 04
Oct. 11		
COL	iP	08 01 19
EUR	eP	08 00 36
TUC	eP	08 00 50
TUC-T	iP	08 00 51
Oct. 11		
BC	eP	09 45 35
	e	45 52
BUT	eP	09 45 02
COL	iP	09 42 05
EUR	iP	09 45 16
HH	iP	09 44 49
	e	45 08
RC	eP	09 45 39
THULE	eP	09 43 57
TUC	e(P)	09 46 08
	e	46 20
TUC-T	iP	09 46 02
	i	46 20
	ePPP	49 29
Oct. 11		
COL	iP	10 05 35
GUAM	eP	09 57 45
Oct. 11		
COL	iP	10 49 54
EUR	eP	10 49 21
TUC-T	eP	10 49 23

Date and Station		Phase (GCT)
Oct. 11		h m s
COL	e(P)	15 01 38
Oct. 11		
BC	eP	18 03 12
TUC	iP	18 03 14
	i	03 25
Oct. 11		
BOZ	eP	18 28 05
RC	eP	18 33 42
Oct. 11		
BC	eP	20 16 14
COL	eP	20 15 58
TUC	iP	20 16 16
	e	16 27
TUC-T	eP	20 16 17
	i	16 28
Oct. 11		
BC	eP	21 46 12
COL	iP	21 50 35
TUC	iP	21 45 27
	i	45 39
TUC-T	eP	21 45 27
	i	45 29
Oct. 11		
HH	eP	22 11 34
	iL	12 37
Oct. 11		
RC	e(P)	22 40 13
Oct. 12		
BOZ	eP	00 37 50
RC	e(P)	00 39 03
	iL	40 14
Oct. 12		
HH	eP	01 17 34
TUC	e(P)	01 17 21
TUC-T	eP	01 17 16
	e	17 21
Oct. 12		
COL	eP	01 50 36
Oct. 12		
BC	eP'	03 41 10
	e	41 26
BOZ	eP'	03 40 59
BUT	eP'	03 40 56
COL	e(P)	03 35 53
	e	38 57
	iPP	39 24

Date and Station		Phase (GCT)
		h m s
COLU	eP'	03 41 30
GUAM	eP	03 30 31
HH	iP'	03 40 51
	iPP	42 35
	ePKKP	50 55
RC	eP'	03 41 06
SLC	eP'	03 41 05
SJ	eP'	03 42 11
	i	42 21
TUC	eP'	03 41 20
	e	41 29
	ePP	44 17
TUC-T	e(P')	03 41 10
	iP'	41 21
	ePP	44 04
	i	45 19
WASH	eP'	03 41 23
	ePP	44 17
Oct. 12		
BC	eP	03 55 44
	e	56 27
BUT	iP	03 55 18
COLU	eP	03 52 55
GUAM	iP	04 03 16
HH	iP	03 55 32
RC	iP	03 54 48
SLC	eP	03 54 53
SJ	iP	03 50 41
	ePP	52 11
TUC	eP	03 54 12
	e	55 15
TUC-T	iP	03 54 12
	i	54 54
	ePP	57 05
WASH	iP	03 53 24
Oct. 12		
COL	iP	08 49 15
Oct. 12		
COL	eP	09 46 51
TUC	eP	09 41 16
	e	41 24
	eL	47 08

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	09 41 17
	i	41 23
	eL	47 08
Oct. 12		
COL	iP	10 07 42
Oct. 12		
TUC	eP	10 28 05
TUC-T	eP	10 28 05
Oct. 12		
HH	eP	12 58 11
	iL	59 02
Oct. 12		
COL	iP	19 34 17
EUR	iP	19 35 10
Oct. 12		
EUR	eP	21 33 26
Oct. 12		
COL	i(P)	22 43 10
	i	43 14
	iS	43 38
	iL	43 44
Oct. 13		
EUR	iP	02 33 06
Oct. 13		
BOZ	eP	03 55 13
Oct. 13		
SJ	iP	04 03 41
Oct. 13		
BOZ	eP	04 13 06
Oct. 13		
TUC-T	eP	05 28 33
	e	28 42
	e	30 32
Oct. 13		
EUR	eP	05 42 52
Oct. 13		
COL	e(P)	06 07 12
Oct. 13		
BOZ	eP	07 08 24
Oct. 13		
RC	e(P)	07 33 54
BOZ	e(P)	07 32 35
BUT	eP	07 32 12
	eL	33 38
EUR	eP	07 30 31
	eS	31 19
	iL	31 24

Date and Station		Phase (GCT)
		h m s
HH	eP	07 32 20
	eL	34 17
SLC	eP	07 32 04
Oct. 13		
BC	eP	08 15 45
	iP	15 50
	e(S)	16 24
	eL	16 33
RC	e(P)	08 18 38
	eL	20 47
SLC	eP	08 16 42
TUC	iP	08 15 50
	i	15 57
	iS	16 35
	iL	16 40
TUC-T	iP	08 15 49
	i	15 56
	iS	16 35
	eL	16 41
Oct. 13		
EUR	eP	11 22 34
Oct. 13		
GUAM	iP	12 13 11
	iS	14 16
	eT	18 58
Oct. 13		
COL	eP	12 23 22
Oct. 13		
TUC	eP	13 02 45
	eL	03 28
TUC-T	e(P)	13 02 39
	e	02 43
	eL	03 30
Oct. 13		
COL	eP	13 31 32
Oct. 13		
COL	iP	13 35 06
EUR	iP	13 38 25
Oct. 13		
COL	iP	17 09 35
Oct. 13		
COL	e(P)	20 40 57
Oct. 13		
COL	iP	21 05 25
	i	05 39
EUR	iP	21 02 32
	i	02 45

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	21 02 34
	e	02 48
Oct. 14		
SLC	iP	00 38 27
	eL	39 24
Oct. 14		
EUR	eP	03 52 02
Oct. 14		
COL	iP	07 33 02
EUR	iP	07 33 22
Oct. 14		
COL	eP	07 40 24
Oct. 14		
EUR	eP	07 58 24
Oct. 14		
BOZ	eP	08 08 59
COL	iP	08 05 35
EUR	iP	08 09 02
	i	09 15
	iPcP	10 53
HH	iP	08 08 32
	iPcP	10 42
RC	iP	08 09 42
	iPcP	10 00
SLC	eP	08 09 15
SJ	iP	08 13 53
TUC	iP	08 10 05
	e	10 24
TUC-T	iP	08 10 05
	i	10 25
Oct. 14		
HH	iP	08 55 59
Oct. 14		
COL	eP	10 07 12
EUR	eP	10 09 45
HH	eP	10 09 27
Oct. 14		
RC	eP	10 33 34
SLC	eP	10 30 44
Oct. 14		
EUR	eP	11 30 52
Oct. 14		
EUR	eP	11 42 48

Date and Station		Phase (GCT)
		h m s
Oct. 14		
EUR	iP	11 56 07
Oct. 14		
TUC-T	eP	12 54 02
Oct. 14		
EUR	iP	13 55 45
Oct. 14		
EUR	eP	14 32 33
Oct. 14		
EUR	iP	14 35 57
	i	36 01
	i	36 05
	eS	36 44
	eL	36 49
	i	36 57
Oct. 14		
BOZ	iP	15 02 14
	eL	03 13
BUT	iP	15 02 28
	iL	03 38
HH	iP	15 03 02
	iL	04 07
RC	e(P)	15 04 53
Oct. 14		
COL	e(P)	15 09 11
Oct. 14		
EUR	eP	16 46 29
Oct. 14		
BOZ	eP	20 46 39
COL	iP	20 46 24
EUR	eP	20 46 05
HH	eP	20 46 38
SLC	eP	20 46 24
TUC	e(P)	20 46 10
	e	46 15
TUC-T	eP	20 46 09
	i	46 15
Oct. 14		
COL	iP	21 40 34
EUR	eP	21 37 58
	i	40 44
HH	eP	21 37 04
	iL	38 26
Oct. 14		
RC	e(P)	22 24 49

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

Date and Station		Phase (GCT) h m s
Oct. 16		
COL	e(P)	02 17 02
EUR	eP	02 18 48
Oct. 16		
EUR	eP	03 05 59
Oct. 16		
EUR	iP	03 45 13
Oct. 16		
BOZ	eP	05 00 39
	eL	01 40
Oct. 16		
UK	e(P)	06 34 45
Oct. 16		
EUR	eP	08 06 31
Oct. 16		
BC	eP	08 20 30
COL	eP	08 16 20
EUR	eP	08 20 03
HH	iP	08 19 28
TUC	eP	08 21 12
TUC-T	eP	08 21 12
Oct. 16		
SJ	eP	08 56 27
	i	56 32
	e	58 46
TUC	eP	09 01 12
TUC-T	iP	09 01 12
	e	02 01
Oct. 16		
COL	eP	09 05 02
EUR	iP	09 02 07
	i	02 42
RC	eP	09 01 28
Oct. 16		
RC	e(P)	09 41 45
Oct. 16		
RC	eP	11 09 13
Oct. 16		
COL	eP	16 28 14
EUR	eP	16 33 55
Oct. 16		
SLC	iP	18 05 02
	eL	06 06

Date and Station		Phase (GCT) h m s
Oct. 17		
COL	iP	00 50 23
	iS	50 36
	iL	50 40
Oct. 17		
EUR	eP	02 18 36
Oct. 17		
COL	iP	02 36 45
EUR	iP	02 40 16
	i	40 40
HH	eP	02 39 46
RC	e(P)	02 41 02
TUC-T	eP	02 41 21
Oct. 17		
EUR	eP	06 00 02
Oct. 17		
BC	eP	07 24 46
TUC	e(P)	07 23 54
	e	23 59
	eL	24 56
TUC-T	e(P)	07 23 58
	eL	24 58
Oct. 17		
COL	iP	07 31 04
EUR	eP	07 34 13
HH	i(P)	07 33 44
Oct. 17		
BOZ	iP	08 33 53
	eL	35 07
BUT	iP	08 34 04
	iL	35 10
HH	eP	08 34 39
	iL	35 40
Oct. 17		
COL	iP'	08 53 55
THULE	iP'	08 54 38
Oct. 17		
THULE	eP	09 23 58
Oct. 17		
COL	iP	10 58 36
Oct. 17		
COL	eP	11 38 26
EUR	eP	11 41 51

Date and Station		Phase (GCT) h m s
Oct. 17		
COL	eP	13 22 16
EUR	iP	13 25 41
HH	iP	13 25 11
RC	eP	13 26 25
TUC	e(P)	13 26 43
	e	26 56
TUC-T	eP	13 26 48
	e	26 56
Oct. 17		
EUR	eP	13 54 57
TUC-T	eP	13 54 11
Oct. 17		
EUR	eP	15 14 02
Oct. 17		
COL	eP	15 48 30
Oct. 17		
BC	eP	17 59 25
TUC	eP	17 59 41
	e	18 00 37
TUC-T	e(P)	17 59 36
	e	59 40
	eL	18 00 36
Oct. 17		
BOZ	eP	20 32 29
	eL	39 09
BUT	eP	20 32 19
	eL	38 38
COL	eP	20 29 14
	i	29 31
	eS	30 56
	iL	31 12
EUR	iP	20 33 00
	i	33 45
HH	iP	20 31 51
	eL	36 54
RC	eP	20 33 17
	eL	41 42
SIT	eP	20 28 29
	i	28 33
	iL	29 16
TUC	iP	20 34 15
TUC-T	iP	20 34 15
UK	eP	20 32 43

Date and Station		Phase (GCT) h m s
Oct. 17		
EUR	iP	20 36 35
Oct. 17		
EUR	eP	21 48 12
HH	eP	21 47 39
	iL	48 42
Oct. 17		
COL	iP	23 24 16
EUR	eP	23 18 11
Oct. 18		
EUR	iP	01 38 37
	i	38 54
Oct. 18		
EUR	iP	05 56 13
HH	eP	05 55 54
Oct. 18		
EUR	eP	09 30 46
Oct. 18		
COL	iP	09 37 28
EUR	iP	09 37 06
TUC	eP	09 37 06
TUC-T	eP	09 37 06
Oct. 18		
EUR	eP	10 36 44
Oct. 18		
COL	eP	11 05 14
Oct. 18		
BOZ	eP	12 08 21
	eL	09 30
EUR	eP	12 09 40
	eS	10 54
	eL	11 03
HH	iP	12 09 10
	iL	10 13
RC	e(P)	12 09 51
	e	11 05
SLC	eP	12 09 13
Oct. 18		
BOZ	eP	12 12 52
	eL	13 50
EUR	eP	12 14 16
HH	eP	12 13 40
	iL	14 45
RC	eP	12 14 26

B 4297-4

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

B-4297-4

Date and Station		Phase (GCT)
		h m s
TUC	iP'	16 14 11
	eL	50 34
TUC-T	iP'	16 14 10
	iPKKP	25 03
UK	iP'	16 14 34
	i	16 15
Oct. 19		
GUAM	eP	16 28 43
HH	i(P)	16 31 29
Oct. 19		
COL	e(P)	17 00 12
EUR	eP	17 03 08
Oct. 19		
COL	iP	18 18 58
Oct. 19		
COL	eP	20 04 08
Oct. 19		
EUR	eP	22 50 45
Oct. 20		
EUR	eP	00 02 36
Oct. 20		
EUR	eP	00 07 23
Oct. 20		
HH	eP	01 01 58
	iL	03 01
Oct. 20		
SJ	e(P)	01 12 10
Oct. 20		
COL	iP	03 26 26
	iS	27 18
	iL	27 28
EUR	eP	03 32 25
Oct. 20		
COL	iP	04 08 38
Oct. 20		
COL	iP	08 09 01
EUR	iP	08 12 16
	i	12 34
HH	iP	08 11 47
RC	iP	08 12 36
	e	12 48
TUC	eP	08 13 02
TUC-T	iP	08 13 02

Date and Station		Phase (GCT)
		h m s
Oct. 20		
EUR	eP	10 47 23
Oct. 20		
GUAM	eP	11 43 10
	iS	43 31
Oct. 20		
RC	e(P)	11 59 38
	e	59 54
SJ	eP	11 55 07
Oct. 20		
EUR	eP	17 06 08
Oct. 20		
COL	iP	17 58 06
Oct. 20		
EUR	eP	18 14 57
Oct. 20		
TUC-T	eP	18 32 58
Oct. 20		
GUAM	iP	20 07 39
	iS	07 59
Oct. 20		
COL	iP	21 34 09
EUR	eP	21 33 48
TUC-T	iP	21 33 49
Oct. 20		
COL	iP	21 49 38
EUR	iP	21 50 31
Oct. 20		
BOZ	eP	22 19 37
EUR	eP	22 20 35
Oct. 21		
BC	eP	00 07 49
Oct. 21		
TUC	eP	05 11 39
TUC-T	eP	05 11 40
Oct. 21		
SJ	eP	05 46 59
TUC	eP	05 50 22
TUC-T	eP	05 50 22
Oct. 21		
COL	iP	06 13 43
EUR	iP	06 13 50
	i	14 08

Date and Station		Phase (GCT)
		h m s
Oct. 21		
COL	iP	06 27 02
HH	e(P)	06 26 13
THULE	eP	06 26 29
Oct. 21		
BUT	e(P)	07 58 08
HH	e(P)	07 54 55
	iL	57 22
RC	e(P)	07 56 06
	e	56 18
	eL	57 39
Oct. 21		
BC	eP	12 43 30
EUR	eP	12 43 45
Oct. 21		
TUC-T	eP	16 24 48
Oct. 21		
SLC	eP	19 04 37
	eL	05 41
Oct. 21		
EUR	iP	20 13 35
Oct. 21		
COL	eP	21 03 30
EUR	eP	21 07 14
Oct. 22		
COL	i(P)	01 43 01
TUC-T	eP	01 42 39
Oct. 22		
HH	e(P)	03 40 06
TUC-T	iP	03 44 05
Oct. 22		
COL	eP	03 56 21
	i(S)	57 37
	iL	57 49
Oct. 22		
COL	iP	09 30 24
EUR	iP	09 29 59
TUC	iP	09 29 58
TUC-T	iP	09 29 59
Oct. 22		
BC	eP	09 35 40
COL	iP	09 36 17
	i	36 27

Date and Station		Phase (GCT)
		h m s
EUR	eP	09 35 46
TUC	eP	09 35 47
TUC-T	iP	09 35 47
Oct. 22		
TUC	eP	10 13 43
TUC-T	iP	10 13 44
Oct. 22		
COL	eP	10 30 14
EUR	iP	10 32 06
GUAM	iP	10 19 51
	iS	20 41
Oct. 22		
HH	e(P)	16 09 13
Oct. 22		
COL	eP	17 17 05
Oct. 22		
HH	eP	18 02 35
	iL	03 32
Oct. 22		
COL	eP	19 31 11
EUR	eP	19 34 37
HH	eP	19 34 06
TUC-T	eP	19 35 40
	e	36 23
Oct. 22		
COL	iP	23 28 21
Oct. 23		
EUR	eP	00 04 49
Oct. 23		
TUC-T	e(P)	00 13 51
	e	14 45
Oct. 23		
EUR	eP	00 30 47
HH	eP	00 30 07
	iL	31 09
Oct. 23		
SLC	eP	00 36 37
	eL	37 44
Oct. 23		
EUR	iP	02 18 12
Oct. 23		
COL	iP	03 55 34
	ipP	56 15

B 4297-4

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

Date and Station		Phase (GCT) h m s
TUC-T	eP	05 05 24
	e	05 46
	e	05 56
Oct. 25		
TUC	e(P)	06 42 13
Oct. 25		
HH	iP	06 46 07
	iL	47 11
Oct. 25		
BC	eP	07 02 01
COL	e(P)	07 01 36
	i	01 40
EUR	iP	07 01 40
HH	eP	07 01 06
RC	e(P)	07 00 27
	e	00 45
SJ	eP	06 59 22
TUC	eP	07 01 51
	i	01 58
	eL	28 18
TUC-T	iP	07 01 57
	i	02 04
Oct. 25		
BUT	eP	07 12 52
	eL	13 54
HH	eP	07 13 20
	iL	14 32
Oct. 25		
EUR	eP	07 37 45
Oct. 25		
HH	e(P)	08 30 46
Oct. 25		
BC	e(P)	10 01 33
EUR	eP	10 01 11
Oct. 25		
HH	eP	13 56 59
	iL	58 03
SLC	eP	13 56 59
	e	57 59
Oct. 25		
COL	eP	16 09 40
	i	09 50
EUR	eP	16 11 36
HH	eP	16 10 55

Date and Station		Phase (GCT) h m s
Oct. 25		
EUR	eP	16 26 47
Oct. 25		
COL	e(P)	17 20 12
Oct. 25		
COL	e(P)	17 20 12
	e	20 30
Oct. 25		
GUAM	iP	17 41 28
Oct. 25		
TUC-T	eP	17 58 39
EUR	iP	18 44 48
TUC-T	iP	18 44 01
Oct. 26		
COL	eP	02 38 12
Oct. 26		
EUR	iP	04 48 19
Oct. 26		
BUT	eP	07 46 44
BOZ	eP	07 46 45
COL	iP	07 43 50
	iPcP	45 22
	ePP	46 06
	iS	50 51
	e	54 24
	eL	56 16
EUR	iP	07 46 50
GUAM	iP	07 40 22
	iS	44 38
	eT	08 05 11
HONO	eP	07 44 30
	eS	52 02
	eScS	54 20
	eL	57 16
	eSSS	58 26
HH	eP	07 46 27
KIP	eP	07 44 30
	ePcP	45 35
RC	iP	07 47 16
SLC	eP	07 46 59
	e	48 07
SJ	eP'	07 55 10
SIT	eP	07 45 46
THULE	eP	07 45 44
	ipP	46 12

Date and Station		Phase (GCT) h m s
TUC	eP	07 47 32
	iP	47 35
	ePP	51 06
	eS	57 49
	eP'P'	08 13 18
TUC-T	iP	07 47 33
	ipP	48 05
UK	iP	07 46 26
	e	08 11 38
Oct. 26		
COL	eP	07 52 34
EUR	iP	07 55 33
Oct. 26		
EUR	eP	08 32 09
Oct. 26		
BUT	eP	10 38 36
	ipP	39 09
BOZ	eP	10 38 44
COL	iP	10 35 14
	ipP	35 46
EUR	iP	10 38 55
	iPP	39 04
HH	iP	10 38 20
	epP	39 24
SJ	eP	10 42 12
THULE	iP	10 37 41
	epP	38 11
	eScP	42 46
	eS	44 26
TUC	iP	10 39 49
	epP	40 30
	ePP	42 09
TUC-T	iP	10 39 49
Oct. 26		
TUC	eP	11 43 45
TUC-T	eP	11 43 46
Oct. 26		
EUR	eP	12 19 35
TUC	e(P)	12 19 32
	e	19 44
TUC-T	eP	12 19 31
Oct. 26		
BOZ	iP	14 35 39
	eL	36 45
Oct. 26		
EUR	iP	16 53 01

Date and Station		Phase (GCT) h m s
Oct. 26		
TUC-T	eP	16 59 53
	i	59 59
GUAM	iP	18 23 40
Oct. 26		
EUR	eP	21 17 59
Oct. 26		
EUR	eP	21 56 07
COLU	iP	02 07 44
Oct. 27		
COL	e(P)	04 11 41
Oct. 27		
BUT	iP	06 08 31
	eL	09 32
Oct. 27		
BC	eP	06 15 04
	e	15 53
BOZ	e(P)	06 14 01
BUT	iP	06 14 52
	eS	17 43
	eL	20 25
COL	eP	06 17 48
	eS	22 39
	eL	23 39
COLU	eP	06 19 24
EUR	iP	06 14 23
	iP'P'	42 36
HH	iP	06 14 52
	eS	17 13
	iL	17 54
RC	iP	06 16 16
	i	16 24
	eL	21 04
	e	44 31
SLC	iP	06 14 59
	eS	17 59
	eL	20 51
SJ	eP	06 21 57
TUC	iP	06 16 07
	eS	19 30
	eL	22 20
TUC-T	iP	06 16 07
	eL	23 02
UK	eP	06 13 20
	i	13 28
	iS	14 12
	iL	14 45

B 4297-4

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

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

B 4797-4.

Date and Station		Phase (GCT) h m s
COL	iP	04 06 35
	e	11 52
	eL	17 06
COLU	eP	04 12 15
EUR	iP	04 10 44
HH	iP	04 09 51
	i	10 57
RC	eP	04 10 42
	e	11 27
SLC	eP	04 10 45
THULE	iP	04 07 37
TUC	eP	04 11 37
TUC-T	iP	04 11 38
Oct. 30		
COL	iP	05 33 10
	e	33 28
EUR	iP	05 30 06
HH	iP	05 30 44
SJ	eP	05 26 15
	i	26 35
THULE	iP	05 32 51
TUC	e(P)	05 29 06
	e	29 23
TUC-T	eP	05 29 06
	i	30 38
Oct. 30		
BC	eP	07 16 49
COL	iP	07 16 48
	e	18 24
EUR	iP	07 16 25
GUAM	iP	07 13 00
HONO	eP	07 12 23
HH	iP	07 16 52
KIP	eP	07 12 19
TUC	iP	07 16 26
TUC-T	iP	07 16 28
Oct. 30		
COL	eP	08 18 05
EUR	eP	08 21 32

Date and Station		Phase (GCT) h m s
Oct. 30		
COL	iP	09 00 22
Oct. 30		
COL	iP	11 22 43
	e	22 56
EUR	iP	11 23 37
	i	23 50
Oct. 30		
COL	iP	11 47 29
	i	47 40
	i	47 54
HH	e(P)	11 46 38
THULE	eP'	11 46 57
Oct. 30		
HH	eP	11 47 15
	iL	48 19
RC	eP	11 48 02
	eL	49 09
Oct. 30		
COL	iP	13 19 41
	i(S)	20 11
	iL	20 28
Oct. 30		
BC	eP	14 11 23
BOZ	eP	14 11 33
BUT	eP	14 11 28
COL	iP	14 11 32
	i	11 46
EUR	iP	14 11 00
HH	eP	14 11 30
RC	iP	14 11 50
TUC	eP	14 10 57
TUC-T	iP	14 10 58
Oct. 30		
HH	eP	16 18 21
	iL	19 25
Oct. 30		
SJ	iP	16 42 59
	iS	43 18
	iL	43 20
Oct. 30		
TUC	eP	19 04 05

Date and Station		Phase (GCT) h m s
Oct. 30		
COL	iP	21 49 23
	ipP	51 25
EUR	iP	21 49 00
Oct. 30		
TUC	iP	22 19 01
Oct. 31		
SLC	eP	00 27 36
	eL	28 40
Oct. 31		
COL	eP	03 16 46
COL	eP	03 58 14
EUR	eP	03 57 38
Oct. 31		
BC	eP	04 38 07
BOZ	eP	04 39 12
BUT	iP	04 39 07
COL	iP	04 38 59
	ipP	40 35
	eS	48 41
	iL	51 44
	eP'P'	05 05 11
	eSKPP'	08 04
EUR	iP	04 38 39
	i	38 58
	eSKPP'	05 08 00
GUAM	iP	04 35 09
	ipP	36 31
	iScP	39 47
	iScS	44 24
HONO	eP	04 34 30
HH	iP	04 39 08
	eS	48 56
	ePKKP	57 06
	eP'P'	05 05 11
	eSKPP'	08 10
KIP	iP	04 34 31
	ipP	35 52
RC	iP	04 39 32
	i	43 12
	ePKKP	56 54
SLC	iP	04 38 58
SJ	iP'	04 45 06
SIT	eP	04 38 46
THULE	iP'	04 44 57
	iPP	45 35

Date and Station		Phase (GCT) h m s
TUC	iP	04 38 42
	i	38 43
	ipP	40 17
	eSKPP'	05 08 18
TUC-T	iP	04 38 43
	ipP	40 16
	iSKPP'	05 08 19
UK	iP	04 38 14
	e	39 46
Oct. 31		
EUR	iP	05 10 37
SJ	iP	05 05 49
TUC	eP	05 09 40
TUC-T	eP	05 09 40
Oct. 31		
EUR	iP	06 17 03
Oct. 31		
COL	iP	13 13 08
EUR	eP	13 12 56
Oct. 31		
COL	iP	14 13 35
TUC	eP	14 13 13
TUC-T	iP	14 13 13
Oct. 31		
COL	iP	17 09 31
EUR	iP	17 12 45
Oct. 31		
EUR	eP	17 38 27
Oct. 31		
BH	iP	18 32 51
	iS	34 08
COL	iP	18 43 20
EUR	iP	18 40 14
	epP	40 35
HH	iP	18 40 49
	epP	41 12
RC	iP	18 39 49
	epP	40 12
SJ	iP	18 35 51
THULE	eP	18 42 52
TUC	iP	18 39 15

B 4297-4

Date and Station		Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)
		h m s		h m s		h m s		h m s
TUC-T	iP	18 39 15						
	i	39 38						
	epP	40 13						
Oct. 31								
EUR	eP	19 11 03						
Oct. 31								
EUR	eP	19 26 14						
HH	eP	19 28 12						
TUC	eP	19 27 51						
	e	28 10						
TUC-T	eP	19 27 50						
	i	28 10						
Oct. 31								
EUR	iP	19 44 04						
	ipP	45 57						
	e	20 02 05						
HH	e(P)	19 44 49						
RC	eP	19 46 08						
SLC	eP	19 44 45						
TUC-T	eP	19 45 54						
UK	eP	19 42 59						
	iS	43 30						
	iL	43 35						
Oct. 31								
HH	eP	20 30 50						
	iL	31 52						
Oct. 31								
TUC-T	iP	22 19 02						
Oct. 31								
SLC	eP	22 30 43						
	eL	31 45						

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
Oct.	
ROZ	
1	03.8
	05.9
2	02.3
3	06.9
6	18.0
	18.7
8	06.6
18	21.5
	23.0
19	09.0
	13.9
20	00.0
21	21.1
23	00.5
	23.5
25	06.7
	07.2
	13.9
27	10.9
28	05.1
	10.0
29	23.3
30	11.5
	11.8
31	20.5
Oct.	
BUT	
1	05.9
	10.7
	22.5
2	00.0
	03.0
3	01.2
	18.2
	19.3
5	04.3
6	18.6
9	18.2
11	22.2
	22.3
12	00.6
13	04.2
	07.1
	11.3
	17.7
16	21.8
17	07.0
	21.8
18	12.1
	12.2
	21.5
	23.0
19	09.0
20	00.0
	22.3
21	15.5
	17.1
	21.1
22	18.0
23	00.5
24	00.9

Date and Station	Phase (GCT)
	h m s
BUT	
25	06.7
	13.9
26	06.2
	14.6
27	10.9
	21.4
28	05.1
	10.0
30	11.8
31	20.5
Oct.	
COL	
2	09.9
3	23.6
4	01.2
6	06.2
10	05.3
15	01.5
17	18.8
20	02.8
21	23.5
25	04.6
	06.3
26	05.3
27	03.6
	05.1
28	15.6
29	22.9
Oct.	
EUR	
2	01.3
	05.3
	06.8
	09.4
3	05.3
5	05.6
6	13.9
7	01.3
	23.3
10	04.3
	09.5
13	15.5
21	00.5
	05.2
22	04.5
24	20.0
25	17.2
	18.0
	20.3
26	01.1
	07.3
	23.1
27	21.9
Oct.	
HONO	
4	15.6
Oct.	
KIP	
4	15.6
	23.9
Oct.	
RC	

Date and Station	Phase (GCT)
	h m s
Oct.	
RC	
30	20.4
	22.6
Oct.	
SJ	
2	03.0
	14.5
4	10.8
5	00.3
6	20.1
7	12.0
11	00.9
	10.1
17	17.3
19	07.2
20	17.7
21	15.1
23	21.0
24	07.8
	13.6
27	02.9
	22.5
	22.7
28	00.4
	00.8
	10.2
	22.3
29	09.0
31	21.6
Oct.	
TUC	
7	07.3
8	09.5
9	07.7
10	01.0
14	11.6
15	05.5
	10.4
18	14.0
23	11.9
24	16.2
25	14.5
26	09.5
	10.8
27	03.1
	09.1
28	07.1
	08.0
30	08.0
	17.4
Oct.	
UK	
5	01.3
9	00.6
	18.0
10	12.0
14	08.6
23	20.7
31	17.6