~~C5.185~~ USCGS
~~C65~~ .40

U.S. COAST & GEODETIC SURVEY
LIBRARY & ARCHIVES

21 1956
ACC. No.

SEISMOLOGICAL BULLETIN

January, 1956

MSI - 181

CONTENTS

List of stations 1
Station instrumental constants 2
Provisional epicenters 5
Seismogram interpretations 9
Local and minor earthquakes 27

U. S. DEPARTMENT OF COMMERCE

Sinclair Weeks, 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

SEISMOLOGICAL BULLETIN
1956

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

**Balboa Heights, C. Z. (BH)
The Panama Canal
*Boulder City, Nev. (BC)
Bureau of Reclamation
*Bozeman, Mont. (BOZ)
Montana State College
**Burlington, Vt. (BUR)
University of Vermont
*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
Honolulu, T. H. (HONO)
*Hungry Horse, Mont. (HH)
Bureau of Reclamation
*Lincoln, Nebr. (LIN)
Nebraska Wesleyan University
**Philadelphia, Pa. (PHIL)
The Franklin Institute
**Rapid City, S. Dak. (RC)
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (S -
Sitka, Alaska (SIT)
Tucson, Ariz. (TUC)
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.
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 locations 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 and Burlington, which may be obtained on loan by addressing the Seismograph Station Director: - Meteorological and Hydrographic Office, Panama Canal Company, Balboa Heights, Canal Zone; University of Vermont, Burlington, Vermont.

STATION AND INSTRUMENTAL CONSTANTS FOR 1956

Station	Position	Instruments	Foundation and elevation	T_o	T_g	T_s	V	ϵ	Paper Speed	Time Break Reference Point	Ground Motion Trace "UP"
Balboa Heights, C. Z.	Log cos 9.99467	W-A, N & E	Basalt	N 1.0			1370	14:1	60mm/min.	Beginning	N
W. H. Esslinger	Lat. 8°57'39"N.	Mass 1.3g	36m.	E 1.0			1370	18:1			E
In Chg.	Long. 79°33'29"W.										
Boulder City, Nev.	Log cos 9.90806	B, film,	Fractured	Z 1.4	0.45		12000	Near crit.	15mm/min.	Beginning	Up
L. Hudlow, In Chg.	Lat. 35°58'51"N.	ZNE, Mass	monzonite.	N 1.4	0.45		5000	crit.			N
	Long. 114°50'02"W.	100 lb	776m.	E 1.4	0.45		5000	crit.			E
Bozeman, Mont.	Log cos 9.84437	McC-R, N&E	Alluvium,	N 11.1			270	9:1	15mm/min.	Beginning	N
A. J. M. Johnson,	Lat. 45°40'01"N.	Mass 10kg	glacial drift,	E 10.9			270	11:1			E
In Chg.	Long. 111°02'43"W.	W-L, Z	and lake de-	Z 1.1	1.7			Near crit.	60mm/min.	Beginning	Up
			posits 500' thick over gneiss and schist. 1490m.								
*Burlington, Vt.	Log cos 9.85339	M-S, NE&NW	Glacial hard-	NE 12			250	20:1	8mm/min.	End	SW
E. C. Jacobs,	Lat. 44°28.8' N.	Mass 1 lb	pan. 100m.	NW 12			250	20:1			NW
In Chg.	Long. 73°11.8' W.										
Butte, Mont.	Log cos 9.84167	W-A, N	Rhyolite 30m.	N 8.02			516	50:1	15mm/min.	Beginning	S
S. W. Nile, In	Lat. 46°00.8' N.	Mass 2g	thick resting								
Chg.	Long. 112°33.8' W.	W-L, NE	on granite.	N 8.0	3.9			Near crit.	30mm/min.	Beginning	N
			1758m.	E 8.0	4.0			Near crit.			W
		B,paper,Z		Z 1.15	0.48			Near crit.	60mm/min.		Up
		Mass 100 lb									
Chicago, Ill.	Log cos 9.87251	McC-R, N&E	Limestone	N 10			335	15:1	15mm/min.	End	N
W. F. Schmidt,	Lat. 41°47.3' N.	Mass 2.5	180m.	E 10			335	15:1			W
In Chg.	Long. 87°36.0' W.	kg.									
*College, Alaska	Log cos 9.62825	B,film,ZNE	Granitic	Z 1.5	0.45		12000	Near crit.	15mm/min.	Beginning	Up
C. J. Beers,	Lat. 64°51.6' N.	Mass 100	schist.	N 1.5	0.45			Near crit.			N
In Chg.	Long. 147°50.4' W.	lb.	159m.	E 1.5	0.45			Near crit.			E
		W, N		N 9.3	16			Near crit.			N
College Outpost	Log cos 9.62773	B, paper,Z		Z 1.5	0.53		60000	Near crit.	60mm/min.		Up
	Lat. 64°53'25"N.										
	Long. 147°47'43"W.										
Columbia, S. C.	Log cos 9.91857	W-L, ZNE	Consolidated	Z 1.1	1.6		15000	Near crit.	60mm/min.	Beginning	Up
C. F. Mercer,	Lat. 34°00' N.		sand 150'	N 8.0	4.1		2000	Near crit.	30mm/min.		N
In Chg.	Long. 81°02' W.		thick over	E 8.0	4.1		2000	Near crit.			E
			granite. 94m.								

Station	Position	Instruments	Foundation and elevation	T_o	T_g	T_s	V	ϵ	Paper Speed	Time Break Reference Point	Ground Motion Trace "Up"
Eureka, Nev. G. W. Mitchell, In Chg.	Log cos 9.88739 Lat. 39°30'09"N. Long. 115°59'42"W.	B, paper, Z Mass 100 lb	Dolomite bedrock. 6870 ft.	Z 1.2	0.51			Near crit.	60mm/min.	Beginning	Up
*Honolulu, T. H. M. L. Cleven, In Chg.	Log cos 9.96926 Lat. 21°18'13"N. Long. 158°05'44"W.	M-S, N&E Mass 1 lb. N-L, E Spg. Z	Coral. 3m.	N 12 E 12 E 1.2 Z 1.65	 1.6		124 142 4800	20:1 20:1 8:1 crit.	30mm/min. 60mm/min.	Beginning	N W W Up
Hungry Horse, Mont. C. H. Spencer, In Chg.	Log cos 9.82255 Lat. 48°20'58"N. Long. 114°01'39"W.	B, film, ZNE Mass 100 lb	Argillaceous limestone (Belt Series) 1100m.	Z 1.4 N 1.4 E 1.4	0.45 0.45 0.45		13000 5000 5000	Near crit. Near crit. Near crit.	15mm/min.	Beginning	Up N E
Lincoln, Nebr. W. French Jr., In Chg.	Log cos 9.87884 Lat. 40°50.3' N. Long. 96°39.2' W.	McC-R, E Mass 2.5kg	Dakota sandstone. 366m.	E 8			200	10:1	15mm/min.	Beginning	E
*Philadelphia, Pa. I. M. Levitt, In Chg.	Log cos 9.88452 Lat. 39°57'32"N. Long. 75°10'30"W.	W, N&E Mass 500g	Cape May sand and gravel. 5m.	N 9.0 E 9.2	5.6 4.2	7.8 7.4	1400 1400	15:1 15:1	20mm/min.	End	S E
Rapid City, S. Dak. E. L. Tullis, In Chg.	Log cos 9.85637 Lat. 44°04.6' N. Long. 103°12.0' W.	W-A, E (dbl. refl.) Mass 2g.	Shale. 1045m.	E 6.2			590	20:1	15mm/min.	Beginning	E
Salt Lake City, Utah A. M. Anderson, In Chg.	Log cos 9.87932 Lat. 40°45'55"N. Long. 111°50'54"W.	McC-R, N&E Mass 2.5kg W-L, Z	Bonneville Lake beds. 1425m.	N 9.9 E 10.0 Z 1.2	 1.8		335 335	15:1 15:1 Near crit.	15mm/min. 60mm/min.	Beginning	N W Up
San Juan, P. R. Paul Ledig, In Chg.	Log cos 9.97726 Lat. 18°22.9' N. Long. 66°07.1' W.	W, N&E Mass 500g B, Z	Limestone 80m.	N 9.9 E 10.1 Z 1.04	25.5 16.8 0.5	11.0 10.8 1.05	1000 1000 5000	20:1 20:1 crit.	30mm/min. 60mm/min.	Beginning	N W Up
Sitka, Alaska J. Bottum, In Chg.	Log cos 9.73544 Lat. 57°03'25"N. Long. 135°19'28"W.	W, N&E Mass 500g	Graywacke 19m.	N 7.5 E 7.7	16.3 12.6	8.0 8.1	1000 1000	13:1 14:1	15mm/min.	Beginning	S E
Tucson, Ariz. R. L. White, In Chg.	Log cos 9.92725 Lat. 32°14.8' N. Long. 110°50.1' W.	W-A, N&E Mass 2.3g B, Z B, E	Caliche or gravels 100-300m thick. 770m.	N 8.0 E 8.0 Z 1.0 E 1.6	 77.0 0.236 0.5		466 457	crit. crit. Near crit. Near crit.	30mm/min. 30mm/min. 60mm/min. 30mm/min.	Beginning	S E Up Up E

Station	Position	Instruments	Foundation and elevation	T_o	T_g	T_s	V	ϵ	Paper Speed	Time Break Reference Point	Ground Motion Trace "Up"
Ukiah, Calif. L. F. Caouette In Chg.	Log cos 9.88968 Lat. 39°08' N. Long. 123°13' W.	McC-R, N&E Mass 10kg	Alluvium 180m. deep. 199m.	N 11.9 E 11.6			75 75	Near crit.	30mm/min.	Beginning	N E
*Washington, D. C.	Log cos 9.89117 Lat. 38°53'33"N. Long. 77°01'59"W.	W-L, Z Visible recorder	Recent alluvium on schistose granite. 0m.	Z 1.5	1.7 Pen 0.5	1.5			30mm/min.	Beginning	Up

*These stations operate visible recording seismographs of Coast and Geodetic Survey design similar to the one at Washington.

B - Benioff, W - Wenner, McC-R - McComb-Romberg, W-A - Wood-Anderson, M-S - Milne-Shaw, N-L - Neumann-Labarre, Spg - Sprengnether, W-L - Wilson-Lamison

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Jan.	h m s	° ′	° ′	
1	09 03 50**			Sinkiang Province, China.
1	23 08 28*	7 S.	129 E.	Timor Island region. Felt in Northern Territory, Australia. h about 150 km. Mag. 6.
2	01 30 15*	8 N.	95 E.	Nicobar Islands region.
2	09 28 06*	19 S.	180	Fiji Islands. h about 600 km.
3	00 25 48	33-3/4 N.	117-1/2 W.	Santa Ana Mountains, California. Slight damage at Santa Ana. Mag. 4.7.
3	10 41 08*	43-1/2 N.	147 E.	Southern Kurile Islands.
3	13 03 41*	51 N.	180	Andreanof Islands, Aleutian Islands.
3	14 24 05*	32-1/2 N.	116 W.	California-Mexico border. Felt at San Diego, California. Mag. 4.7.
3	15 40 55*	48-1/2 N.	155 E.	Kurile Islands.
3	21 33 35**			Near east coast of Kamchatka.
3	23 24 52*	54-1/2 N.	163 W.	Unimak Island, Alaska.
4	05 07 53*	42-1/2 N.	143 E.	Southern Hokkaido, Japan.
4	06 42 37*	52-1/2 N.	171 W.	Fox Islands, Aleutian Islands.
4	11 56 38*	9-1/2 N.	126 E.	Mindanao Islands, Philippine Islands. Felt at Surigao.
4	14 15 39*	6-1/2 S.	153 E.	New Britain region.
5	20 27 04*	72 N.	1-1/2 E.	Arctic Ocean.
5	22 31 37**			Southern Kurile Islands aftershock.
6	05 43 38*	36-1/2 N.	11 W.	Off coast of Portugal.
6	06 59 17*	51-1/2 N.	179-1/2 W.	Andreanof Islands, Aleutian Islands.
6	12 15 40*	40-1/2 N.	26 E.	Greece-Turkey border. Slight damage in the Dardanelles region.
6	14 53 03**			Near north coast of Turkey.
6	17-51-32*	51 N.	179-1/2 W.	Andreanof Islands, Aleutian Islands.
6	22 25 02*	39 N.	142 E.	Near east coast of Honshu, Japan. Felt.
6	23 32 50**			Guerrero, Mexico.
7	09 16 53*	52-1/2 N.	160-1/2 E.	Off east coast of Kamchatka.
7	10 15 59*	51 N.	179-1/2 W.	Andreanof Islands, Aleutian Islands.
7	10 25 08*	5 S.	148 E.	Bismarck Sea.
7	10 32 15*	51-1/2 N.	179-1/2 W.	Andreanof Islands aftershock.
7	10 51 40*	51-1/2 N.	179-1/2 W.	Do.
7	11 11 30**			Do.
7	16 41 04*	65-1/2 N.	133-1/2 W.	Yukon, Canada.
7	19 29 00*	1-1/2 N.	122-1/2 E.	Near north coast of Celebes.
8	03 26 12**			New Hebrides Islands region.
8	07 11 26*	17 N.	99-1/2 W.	Guerrero, Mexico. Many injured and heavy damage at Acapulco. Mag. 6-1/2.
8	18 46 29*	4-1/2 S.	153 E.	New Britain region.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Jan.	h m s	° ′	° ′	
8	20 54 13*	19 S.	70 W.	Northern Chile. Slight damage at Arica. Mag. 7-1/4.
8	22 58 22**			Northern Chile aftershock.
9	03 15 40**			Do.
9	07 52 48**			Do.
9	08 01 21**			Near north coast of Hokkaido, Japan.
9	12 05 53*	23 S.	179 E.	Fiji Islands region. h about 650 km. Mag. 6-1/2.
9	17 01 23*	16 N.	92 W.	Chiapas, Mexico. h about 200 km.
10	08 52 36*	25 S.	176 W.	Tonga Islands region. Mag. 7-1/2.
10	10 18 25*	25 S.	176 W.	Tonga Islands region aftershock.
10	12 32 15*	43-1/2 N.	127 W.	Off coast of Oregon.
10	21 54 05*	25 S.	175-1/2 W.	Tonga Islands region aftershock.
11	06 10 03*	7-1/2 N.	94 E.	Nicobar Islands.
11	06 38 05*	33 N.	139 E.	Off south coast of Honshu, Japan. h about 200 km.
11	07 10 49**			Nicobar Islands aftershock.
11	10 45 30**			Kermadec Islands region.
11	11 54 59**			Solomon Islands. h about 100 km.
11	12 43 10**			Chile-Mendoza Province, Argentina. Felt in Chile.
11	20 31 16*	16-1/2 S.	168 E.	New Hebrides Islands.
11	21 11 04*	8-1/2 S.	157-1/2 E.	Solomon Islands.
11	22 16 18**			Central Pakistan.
12	04 38 00*	19 S.	70 W.	Northern Chile.
12	05 46 05*	47-1/2 N.	20 E.	Northern Hungary. Heavy casualties and extensive property damage.
12	06 10 25*	22-1/2 S.	177-1/2 W.	Tonga Islands region.
12	07 45 27*	5 N.	75-1/2 W.	Western Colombia. h about 200 km.
13	03 02 50**			Tonga Islands region.
13	03 04 50**			Do.
13	03 27 13*	57-1/2 N.	163 E.	Near east coast of Kamchatka.
13	03 27 43**			Do.
13	06 16 14*	29 S.	167-1/2 E.	Norfolk Island region.
13	12 12 41*	24 S.	177 W.	Tonga Islands region.
14	14 08 41*	51-1/2 N.	173 W.	Fox Islands, Aleutian Islands. Mag. 6.
14	14 24 40*	43 N.	145 E.	Near east coast of Hokkaido, Japan.
14	18 32 54*	8 N.	38-1/2 W.	Mid-Atlantic Ocean.
14	22 10 42*	18 S.	173 W.	Tonga Islands region. h about 200 km.
15	01 23 10**			About 50 miles south of Guam.
15	10 16 45*	25 S.	176 W.	Tonga Islands region.
15	13 49 39**			Queen Charlotte Islands region.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Jan.	h m s	° ′	° ′	
15	18 42 03**			Tonga Islands.
15	21 04 20*	44 N.	147-1/2 E.	Kurile Islands.
16	02 00 17*	5 S.	153 E.	New Ireland region. h about 150 km.
16	12 40 00*	54 N.	163 W.	South of Unimak Island, Alaska.
16	23 37 37*	1/2 S.	80-1/2 W.	Near coast of Ecuador. Heavy property damage at Portoviejo and Bahia de Caraquez. Felt on board M/S Equateur at 1.06S, 81.08W. Mag. 7-1/4 - 7-1/2.
17	08 00 45**			Pacific Ocean, about 1000 miles southwest of Galapagos Islands.
17	19 00 08**			Solomon Islands region.
18	05 45 06**			Mendoza Province, Argentina.
18	08 07 17*	24 S.	70 W.	Northern Chile. Felt in Atacama and Antofagasta Provinces.
18	09 34 52*	14-1/2 S.	167 E.	New Hebrides Islands.
19	03 51 56**			Off west coast of Colombia.
19	08 38 52*	29 N.	139 E.	South of Honshu, Japan. h about 500 km.
19	18 07 05*	6 S.	155 E.	Solomon Islands.
19	19 50 34*	30 N.	81 E.	Nepal-Tibet border.
20	04 33 30*	47 N.	154 E.	Kurile Islands.
20	05 03 10*	52-1/2 N.	170 W.	Fox Islands, Aleutian Islands.
20	23 23 40*	5 S.	155 E.	Solomon Islands. h about 150 km.
21	08 09 33*	15 N.	93 W.	Near coast of Guatemala. h about 150 km.
21	12 22 42*	23 S.	176 W.	Tonga Islands region.
21	13 38 44*	1-1/2 S.	129-1/2 E.	Ceram Sea. h about 700 km.
21	17 35 34*	23 N.	94 E.	Burma.
21	17 54 15*	21 S.	67-1/2 W.	Southern Bolivia. h about 100 km.
21	18 47 33**			Ecuador aftershock.
22	00 50 46**			Kodiak Island foreshock.
22	00 57 50**			Do.
23	00 46 35*	58 N.	154-1/2 W.	Kodiak Island region, Alaska.
23	03 47 27*	55-1/2 N.	162 E.	Near east coast of Kamchatka. h about 60 km. Mag. 6-1/2 - 6-3/4.
23	07 36 14*	7 N.	123-1/2 E.	Mindanao, Philippine Islands. h about 650 km.
24	08 49 07*	16-1/2 S.	167 E.	New Hebrides Islands.
24	12 15 04*	45 N.	150 E.	Kurile Islands.
25	06 29 58**			About 300 miles off coast of Ecuador.
25	10 47 53**			Tonga Islands region.
26	15 33 30**			Near north coast of Mindanao, Philippine Islands. Felt at Mambajao.
27	01 13 22*	37 N.	24 E.	Aegean Sea.
27	10 06 53*	41-1/2 N.	83-1/2 E.	Sinkiang Province, China.
27	13 38 45*	26 S.	176 W.	Tonga Islands region.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Jan.	h m s	° ′	° ′	
28	04 52 29*	1 N.	27 W.	Mid-Atlantic Ocean.
28	07 42 52*	4-1/2 S.	151-1/2 E.	New Britain. h about 100 km. Mag. 6-1/2.
28	22 55 30*	39 N.	118 W.	Western Nevada. Mag. 4-1/2 (Berk).
29	03 29 12**			Near south coast of Arabia.
29	04 44 14*	36 N.	90 W.	Tennessee-Arkansas border. Felt at Memphis and Covington, Tennessee.
29	16 32 53**			Off southeast coast of Kamchatka.
29	18 49 12**			Northeastern New Guinea.
29	22 20 53*	21 N.	121 E.	South of Formosa.
30	08 34 32**			Fiji Islands. h about 600 km.
30	08 43 01*	38-1/2 S.	177-1/2 E.	Near north coast of North Island, New Zealand. Mag. 6-1/4.
30	10 01 49**			New Zealand aftershock.
30	14 55 51**			Andreanof Islands, Aleutian Islands.
30	19 09 12**			About 400 miles south of Fiji Islands. h about 500 km.
31	00 39 05*	14-1/2 S.	167 E.	New Hebrides Islands. h about 150 km.
31	05 24 14**			Volcano Islands region.
31	09 17 11*	4 S.	152 E.	New Ireland. h about 400 km. Mag. 7 - 7-1/4.

Date and Station		Phase (GCT)
		h m s
Jan. 1		
EUR	eP	06 12 46
Jan. 1		
COL	eP	07 29 19
	e	29 38
Jan. 1		
COL	e(P)	07 36 49
HH	e(P)	08 33 12
COL	iP	09 14 17
	i	14 26
HH	eP	09 16 31
Jan. 1		
EUR	e(P)	10 04 31
	e	04 38
Jan. 1		
COL	iP	12 06 36
	e	07 01
Jan. 1		
EUR	eP	12 44 35
Jan. 1		
BUT	e(P)	14 18 58
EUR	eP	14 18 46
HH	iP	14 18 31
Jan. 1		
HH	e(P)	14 24 23
Jan. 1		
EUR	eP	15 01 43
Jan. 1		
BC	eP	21 10 32
	i	10 52
	e	11 44
EUR	eP	21 11 18
Jan. 1		
BOZ	eP	21 23 21
Jan. 1		
COL	iP	22 12 05
EUR	eP	22 12 32
Jan. 1		
BC	eP'	23 27 02
	i	27 14
	iPP	28 01
BOZ	eP'	23 27 02
	epP'	27 53
	iPP	28 13
BUT	eP'	23 27 00
COL	iP	23 21 31

Date and Station		Phase (GCT)
		h m s
COLU	eP'	23 27 44
	i	27 50
	ePP	31 27
EUR	eP	23 23 06
	eP'	26 56
	iPP	27 44
	iPPP	30 15
	iPKKP	37 42
HH	e(P)	23 22 59
	iP'	26 55
	ePP	27 44
	iPPP	30 13
	iSKS	33 23
	ePKKP	37 43
	iSKKP	41 09
SJ	iP'	23 28 18
	i(pP')	29 03
SLC	eP'	23 27 03
	iPP	28 08
	epPP	28 48
	ePKKP	37 28
TUC	eP'	23 27 08
	iPP	28 25
	e	32 10
WASH	iP'	23 27 48
	i(pP)	28 36
	ePP	30 40
	ePKS	31 50
Jan. 2		
HH	e(P)	00 01 36
SJ	iP	23 53 20
	iL	54 06
Jan. 2		
HH	e(P)	01 49 23
Jan. 2		
COL	eP	03 31 25
EUR	iP	03 35 24
Jan. 2		
EUR	eP	05 35 57
Jan. 2		
HH	e(P)	07 34 28
Jan. 2		
EUR	eP	07 45 57
Jan. 2		
EUR	eP	09 31 08
Jan. 2		
BC	eP	09 39 30
COL	iP	09 39 54
	e	42 12
EUR	eP	09 39 34

Date and Station		Phase (GCT)
		h m s
HH	iP	09 40 03
TUC	eP	09 39 35
Jan. 2		
COL	eP	13 03 02
EUR	eP	13 03 26
Jan. 2		
HH	e(P)	14 33 00
Jan. 2		
HH	e(P)	19 32 01
Jan. 2		
COL	eP	21 58 59
Jan. 2		
BC	eP	22 42 05
BOZ	eP	22 41 27
COL	iP	22 37 43
HH	e(P)	22 41 00
	e	42 23
SLC	eP	22 42 54
Jan. 3		
BC	iP	00 26 39
	i	26 48
	i(S)	27 05
BOZ	eP	00 29 04
BUT	eP	00 28 59
	eL	32 36
HH	eP	00 29 23
	eL	33 12
SLC	eP	00 27 58
	i	28 57
	eS	29 42
	eL	30 07
TUC	eP	00 27 16
	i	27 44
	iL	28 56
Jan. 3		
BC	eP	02 42 50
COL	iP	02 43 20
HH	e(P)	02 43 25
TUC	eP	02 42 55
Jan. 3		
BOZ	eP	05 50 12
HH	iP	05 49 36
Jan. 3		
BC	eP	10 52 33

Date and Station		Phase (GCT)
		h m s
BOZ	eP	10 52 08
BUT	eP	10 52 01
COL	iP	10 48 56
	i	49 03
HH	iP	10 51 46
SLC	eP	10 52 24
TUC	eP	10 52 30
Jan. 3		
BC	eP	13 12 27
BOZ	eP	13 11 59
BUT	eP	13 12 02
COL	eP	13 08 35
HH	eP	13 11 33
	i	11 46
SLC	eP	13 12 18
TUC	eP	13 13 04
Jan. 3		
BC	eP	14 24 59
	i	25 02
	i	25 16
	eL	26 10
BOZ	eP	14 27 27
BUT	eP	14 27 29
HH	eP	14 27 51
	eL	32 32
SLC	eP	14 26 18
	eL	28 53
TUC	eP	14 25 11
	i	25 19
	iL	26 07
Jan. 3		
COL	eP	15 44 42
Jan. 3		
BC	iP	15 52 05
BOZ	iP	15 51 06
BUT	eP	15 50 59
COL	iP	15 47 39
	e(PP)	48 18
	ePcP	49 27
	eS	53 19
	eL	54 18
COLU	eP	15 53 29
HH	iP	15 50 42

Date and Station		Phase (GCT)
		h m s
RC	eP	15 51 41
	eS	16 00 10
	e	00 40
SLC	eP	15 51 25
TUC	eP	15 52 06
WASH	eP	15 53 15
Jan. 3		
COL	eP	16 44 25
Jan. 3		
COL	eP	20 32 39
	i	32 48
Jan. 3		
BC	eP	21 43 47
COL	iP	21 39 40
EUR	iP	21 43 25
	e	43 35
HH	eP	21 42 50
	e	44 07
Jan. 3		
EUR	eP	22 40 36
Jan. 3		
BOZ	eP	23 14 05
Jan. 3		
BC	eP	23 32 10
	i	32 20
BOZ	e(P)	23 31 38
	eP	31 46
BUT	eP	23 31 44
COL	iP	23 27 47
	ePcP	28 04
	iPcP	28 08
	eS	30 04
	iS	30 12
	iL	31 55
EUR	iP	23 31 43
	iScP	37 59
HH	eP	23 31 07
	e	32 59
	iPcP	34 04
	eScP	37 44
TUC	eP	23 32 51
Jan. 3		
BOZ	eP	23 54 21
Jan. 4		
EUR	e(P)	01 13 15
Jan. 4		
EUR	e(P)	03 56 58
	i	57 02

Date and Station		Phase (GCT)
		h m s
Jan. 4		
COL	eP	04 35 48
Jan. 4		
COL	eP	04 44 59
Jan. 4		
COL	eP	05 16 03
EUR	eP	05 19 18
	e	19 38
HH	eP	05 18 50
Jan. 4		
COL	e(P)	05 59 22
Jan. 4		
EUR	eP	06 32 39
	i	32 41
	i(S)	33 02
	eL	33 25
HH	iP	06 31 31
	e	31 59
Jan. 4		
BC	eP	06 50 35
COL	eP	06 46 39
EUR	eP	06 50 11
HH	eP	06 49 39
	i	49 54
	ePcP	52 05
SLC	e(S)	06 57 28
TUC	eP	06 51 15
Jan. 4		
EUR	iP	09 13 37
SLC	eP	09 15 01
	eL	16 00
Jan. 4		
COL	eP	11 00 16
Jan. 4		
HH	eP	12 07 26
	i	07 39
Jan. 4		
COL	iP	12 08 48
Jan. 4		
HH	eP	12 32 57
Jan. 4		
COL	iP	14 28 06
EUR	eP	14 29 04
Jan. 4		
COL	e(P)	16 50 27

Date and Station		Phase (GCT)
		h m s
EUR	eP	16 54 37
	i	54 43
Jan. 4		
EUR	eP	17 01 36
Jan. 4		
EUR	eP	17 28 21
Jan. 4		
BOZ	eP	19 10 17
Jan. 4		
COL	eP	20 38 40
	e	38 51
Jan. 4		
BC	eP	22 50 25
EUR	eP	22 50 02
HH	eP	22 48 55
Jan. 5		
BC	iP	01 07 04
	e	07 34
BOZ	eP	01 07 36
BUT	eP	01 07 40
COL	eP	01 13 09
EUR	eP	01 06 06
	i	07 20
HH	eP	01 07 49
SLC	eP	01 06 16
TUC	eP	01 06 38
Jan. 5		
HH	e(P)	01 37 39
	eL	38 27
Jan. 5		
SLC	eP	03 20 31
Jan. 5		
COL	iP	05 14 44
EUR	eP	05 17 31
HH	iP	05 17 10
Jan. 5		
EUR	eP	06 26 22
HH	iP	06 26 04
	i	26 08
Jan. 5		
COL	eP	09 15 02
	i	15 23
	eS	16 21
	e	16 37
	iL	16 47

Date and Station		Phase (GCT)
		h m s
HH	eP	09 18 04
Jan. 5		
BOZ	eP	09 55 24
Jan. 5		
BC	eP	12 46 44
EUR	eP	12 47 01
	i	47 07
HH	iP	12 47 15
TUC	eP	12 46 34
Jan. 5		
HH	e(P)	14 16 14
Jan. 5		
EUR	eP	15 40 36
Jan. 5		
HH	e(P)	17 55 04
Jan. 5		
EUR	i(P)	19 57 59
Jan. 5		
COL	iP	20 34 54
EUR	eP	20 37 15
	e	37 19
HH	eP	20 36 12
Jan. 5		
HH	e(P)	22 10 20
Jan. 5		
BC	eP	22 43 05
COL	iP	22 39 29
	i	39 41
EUR	iP	22 43 44
	e	43 58
HH	iP	22 42 18
	i	42 32
Jan. 6		
COL	iP	04 36 09
HH	eP	04 39 04
Jan. 6		
HH	e(P)	05 05 39
Jan. 6		
BC	eP	05 54 44
COL	eP	05 55 12
EUR	eP	05 55 41
HH	eP	05 55 00

Date and Station		Phase	(GCT) h m s
TUC	e(P)		05 55 42
	e		55 45
Jan. 6			
COL	eP		06 00 38
EUR	iP		06 04 36
SLC	eP		06 04 46
Jan. 6			
BC	eP		07 07 54
BOZ	eP		07 07 27
COL	iP		07 04 04
	i		04 17
	iPP		04 27
	i		04 36
	eS		07 51
	iS		08 18
	iL		09 24
EUR	iP		07 07 31
	e		07 52
	i		34 33
HH	iP		07 07 01
	ePcP		09 02
	eS		12 52
SLC	eP		07 07 44
SJ	iP		07 12 15
TUC	iP		07 08 31
	e		08 53
Jan. 6			
COL	eP		07 11 45
Jan. 6			
SLC	e(P)		07 21 26
	eP		21 28
Jan. 6			
EUR	eP		07 42 53
HH	e(P)		07 35 06
Jan. 6			
HH	e(P)		11 24 27
Jan. 6			
EUR	eP		11 45 39
Jan. 6			
BC	e(P)		12 02 06
	e		04 47
	i		05 07
BOZ	eP		12 01 50
	e		04 28
EUR	e(P)		12 01 22
HH	e(P)		12 01 35
	eL		06 13

Date and Station		Phase	(GCT) h m s
TUC	e(P)		12 00 50
Jan. 6			
EUR	eP		12 17 47
Jan. 6			
BC	e(P)		12 29 12
	i		29 17
BOZ	eP		12 28 26
BUT	eP		12 28 27
COL	iP		12 27 24
	ePP		30 14
EUR	iP		12 28 58
	i		29 03
	ePP		32 21
HH	iP		12 28 18
SLC	eP		12 28 47
TUC	eP		12 29 18
Jan. 6			
BOZ	eP		15 05 42
COL	eP		15 04 32
HH	iP		15 05 33
Jan. 6			
COL	eP		15 43 08
HH	e(P)		15 46 03
Jan. 6			
BH	eP		16 11 29
	eS		11 52
Jan. 6			
EUR	eP		16 36 09
	e		36 44
Jan. 6			
COL	eP		16 51 28
EUR	e(P)		16 54 54
Jan. 6			
EUR	e(P)		17 03 59
	e		03 34
Jan. 6			
BC	eP		18 00 14
	i		00 15
BOZ	iP		17 59 44
COL	iP		17 56 21
	iS		18 00 25
	eL		01 19
COLU	eP		18 02 40
EUR	iP		17 59 48
	e		18 12 45

Date and Station		Phase	(GCT) h m s
HH	iP		17 59 18
SLC	eP		18 00 02
SJ	iP		18 04 32
TUC	eP		18 00 53
Jan. 6			
COL	iP		18 09 19
HH	eP		18 12 15
Jan. 6			
HH	e(P)		18 31 04
Jan. 6			
COL	e(P)		19 04 05
	e		04 12
EUR	eP		19 08 10
Jan. 6			
COL	iP		19 27 32
Jan. 6			
BC	eP		22 36 58
	i		37 10
	e		37 31
BOZ	eP		22 36 37
	i		36 50
BUT	eP		22 36 31
COL	iP		22 33 37
	i		33 49
	i		34 07
EUR	iP		22 36 42
	i		36 54
	e		42 33
HH	iP		22 36 16
	i		36 29
SLC	eP		22 31 48
	i		32 26
Jan. 6			
BC	iP		23 38 09
	eL		45 04
BOZ	eP		23 39 10
	e(S)		44 23
	eL		49 11
BUT	eP		23 39 17
COL	iP		23 42 45
	iPcP		43 40
	eL		00 02 25
COLU	iP		23 37 58
	iL		42 23
EUR	iP		23 38 39
	eL		47 28

Date and Station		Phase	(GCT) h m s
HH	eP		23 39 36
RC	e(PP)		23 39 44
	eL		48 19
SLC	eP		23 38 32
	eL		44 10
TUC	iP		23 37 18
	eL		42 47
Jan. 7			
COL	iP		00 29 51
Jan. 7			
EUR	eP		02 21 33
Jan. 7			
BOZ	e(P)		04 34 00
HH	eP		04 31 03
	e(S)		32 10
	iL		32 41
Jan. 7			
HH	e(P)		09 14 38
Jan. 7			
BC	eP		09 26 10
COL	eP		09 22 52
EUR	eP		09 26 37
	e		26 48
HH	e(P)		09 26 38
Jan. 7			
BC	eP		10 24 39
	i		24 41
BOZ	eP		10 24 11
	iP		24 14
	i		24 44
BUT	eP		10 24 05
COL	iP		10 20 48
	eS		24 36
	iL		25 03
COLU	eP		10 27 08
EUR	eP		10 24 15
HH	iP		10 23 45
	eS		29 51
SLC	eP		10 24 30
SJ	iP		10 29 00
TUC	eP		10 25 15
Jan. 7			
BC	eP		10 34 08
	e		34 44
	i		34 54

B-4297-4

Date and Station		Phase (GCT)
		h m s
BOZ	e(P)	10 34 23
EUR	eP	10 33 01
	e	36 18
TUC	eP	10 31 12
	i	31 28
	i(S)	32 24
	iL	32 38
Jan. 7		
COL	iP	10 37 42
EUR	eP	10 38 49
	e	40 34
	e	47 20
HH	iP	10 38 54
Jan. 7		
BOZ	eP	10 40 29
BC	eP	10 41 00
COL	iP	10 37 06
HH	iP	10 40 02
SJ	iP	10 44 45
TUC	eP	10 41 33
Jan. 7		
BC	e(P)	10 47 50
BOZ	e(P)	10 46 56
COL	iP	10 42 19
HH	iP	10 46 25
Jan. 7		
BC	eP	11 00 19
BOZ	eP	10 59 53
COL	iP	10 56 31
EUR	eP	10 59 57
HH	iP	10 59 26
TUC	eP	11 00 57
Jan. 7		
COL	eP	11 10 27
Jan. 7		
BC	eP	11 20 09
	i	20 24
BOZ	eP	11 19 41
COL	iP	11 15 39
	iS	16 20
	eL	16 32
EUR	eP	11 19 46

Date and Station		Phase (GCT)
		h m s
HH	iP	11 19 15
SLC	eP	11 20 00
TUC	eP	11 20 46
Jan. 7		
HH	e(P)	11 35 58
Jan. 7		
COL	eP	12 03 42
Jan. 7		
COL	eP	12 10 45
	i	11 02
	epP	11 54
EUR	e(P)	12 07 08
HH	e(P)	12 06 38
Jan. 7		
HH	e(P)	13 06 18
Jan. 7		
EUR	e(P)	16 08 46
	e	08 51
Jan. 7		
COL	eP	16 15 01
Jan. 7		
BOZ	eP	16 46 14
	i	46 41
	i	46 56
	iS	50 01
	eL	51 24
BUT	eP	16 46 06
	e	46 17
	iPcP	48 53
	iS	50 13
	iL	51 07
BC	eP	16 47 29
	e	56 56
COL	iP	16 42 34
	i	42 51
	iS	43 42
	iL	44 13
COLU	eP	16 49 14
EUR	iP	16 46 57
	e	47 11
	e	56 07
	i	56 48
HH	iP	16 45 39
	e(S)	49 24
	eL	50 09
RC	eP	16 47 00
	eS	51 30
	eL	53 20
SLC	eP	16 46 54
	eL	52 02

Date and Station		Phase (GCT)
		h m s
SIT	eP	16 43 02
	eS	44 42
	eL	44 59
	iL	45 15
TUC	iP	16 48 09
	i	17 00 52
Jan. 7		
COL	iP	17 07 34
HH	eP	17 08 44
Jan. 7		
COL	e(P)	17 42 56
Jan. 7		
HH	eP	18 01 04
Jan. 7		
COL	iP	18 20 55
	i	21 16
	iS	22 04
	i	22 20
	iL	22 32
HH	eP	18 24 00
	eL	29 59
Jan. 7		
COL	eP	18 40 37
EUR	eP	18 44 07
HH	e(P)	18 43 45
Jan. 7		
COL	eP	19 41 56
Jan. 7		
HH	e(P)	20 15 30
Jan. 7		
SLC	eP	22 14 03
Jan. 7		
TUC	eP	22 37 37
Jan. 7		
COL	iP	23 48 20
EUR	iP	23 52 17
SLC	eP	23 52 26
TUC	e(P)	23 53 14
Jan. 8		
BC	e(P)	01 22 03
Jan. 8		
BC	eP	03 39 13
COL	iP	03 39 09
EUR	eP	03 39 15
Jan. 8		
BH	eP	07 16 13

Date and Station		Phase (GCT)
		h m s
BC	iP	07 16 39
	i	16 40
	eL	23 20
	iScP	23 49
BOZ	eP	07 17 41
	i	19 30
	eS	22 33
	eL	23 05
BUT	eP	07 17 47
	iPP	19 02
	i	21 35
	iS	22 54
	iL	24 06
CHI	eP	07 17 07
	ePP	17 46
	eS	21 56
	iS	22 09
	eL	26 42
COL	iP	07 21 20
	i	22 12
	i	22 19
	eS	29 20
	eSS	33 26
	eSSS	36 16
	eL	38 22
COLU	iP	07 16 40
	eS	20 56
	iS	21 02
	eL	23 16
EUR	iP	07 17 10
	e	18 10
	eL	24 38
HONO	eP	07 21 09
	eL	36 06
HH	iP	07 18 09
	eS	23 31
	eL	25 29
PHIL	eP	07 17 47
	eS	23 03
	eL	27 24
RC	eP	07 17 13
	ePP	18 13
	e	19 55
	e	21 16
	eS	21 58
	iL	26 01
SLC	iP	07 17 03
	i	18 18
	e	19 48
	eS	21 48
	eL	22 55
SJ	eP	07 17 54
	i	18 36
SIT	eP	07 20 07
	eS	27 12

B-4297-4

Date and Station		Phase	(GCT) h m s
SIT		eL	07 33 48
TUC		iP	07 15 46
		i	15 53
		eS	19 20
		iL	20 54
WASH		eP	07 17 35
		eL	25 33
Jan. 8			
BUT		eP	07 26 10
COL		iP	07 29 42
		ipP	30 35
EUR		iP	07 25 32
HH		iP	07 26 32
Jan. 8			
EUR		eP	09 14 42
		e	15 06
HH		e(P)	09 15 10
Jan. 8			
COL		eP	12 50 07
		i	50 27
		iS	51 26
		iL	51 46
Jan. 8			
COL		eP	14 35 18
Jan. 8			
COL		iP	14 50 00
		i	50 23
		i(S)	51 08
		iL	51 19
HH		eP	14 54 03
		eL	15 00 23
Jan. 8			
EUR		e(P)	16 10 56
Jan. 8			
EUR		e(P)	16 42 11
		e	42 17
Jan. 8			
EUR		e(P)	16 56 18
Jan. 8			
BC		eP	16 58 54
COL		eP	16 55 34
		i	55 53
EUR		eP	16 59 01
		e	17 05 33
		i	05 39
HH		iP	16 58 30
		e	17 00 38

Date and Station		Phase	(GCT) h m s
Jan. 8			
BC		eP	18 59 52
COL		iP	18 58 47
		i	59 07
EUR		eP	18 59 48
HH		e(P)	18 59 54
Jan. 8			
BOZ		eP	20 04 07
Jan. 8			
BC		eP	20 56 25
COL		iP	20 50 20
EUR		iP	20 55 54
HH		iP	20 54 57
		i	55 00
Jan. 8			
HH		e(P)	21 01 54
Jan. 8			
BH		eP	21 00 23
BC		iP	21 05 23C
		i	05 25
		i	05 36
		eS	14 18
		eSS	18 52
		eP'P'	33 30
BOZ		eP	21 05 54D
		iP	05 56C
		i	06 08
		i	06 48
		iS	15 25
		i	15 45
		eSS	20 16
		eL	24 07
BUT		iP	21 05 59C
		i	06 13
		i	06 29
		iPP	08 53
		iS	15 34
		iScS	16 28
		eSS	20 41
		i	24 41
		eL	25 05
CHI		eP	21 04 38
		e	06 36
		eS	12 54
		iS	12 55
		iScS	14 24
		i	14 44
		e(SS)	18 16
		eL	20 01
COL		iP	21 08 10C
		e	11 31
		iSKS	18 48

Date and Station		Phase	(GCT) h m s
COL		i(S)	21 19 37
		ePPS	22 12
		eSS	26 41
		eL	35 32
COLU		iP	21 03 39D
		i(PP)	05 59
		iS	11 03
		i	11 26
		i(SS)	15 18
		eL	19 04
EUR		iP	21 05 42C
		i	05 44
		ePP	08 11
		eS	15 01
		iS	15 05
		e(PKKP)	24 51
		ePKKP	25 12
		iP'P'	33 26
		eSKPP	37 20
HH		iP	21 06 14C
		ePP	09 08
		eS	16 01
		e	16 16
		ePPS	17 00
		e	18 47
		eP'P'	33 26
		eP'P'P'	53 13
PHIL		eP	21 04 15
		eS	12 08
		iS	12 16
		i	12 43
		iScS	14 03
		eSS	16 38
		eL	18 25
RC		iP	21 05 28
		iPcP	05 37
		e(PP)	08 22
		ePPP	09 50
		iS	14 28
		e	16 32
		eSS	18 38
		eL	22 26
SLC		iP	21 05 33D
		i	05 47
		i	06 15
		i	06 30
		ePP	08 33
		iS	14 45
		i	15 06
		i	16 26
		eSS	20 06
		i	22 11
		eSSS	23 26
		eL	27 18
		eP'P'	33 30
SJ		iP	21 01 27D
		i	01 59
		e(PP)	02 40
		iS	07 03
		eL	09 25
		iScS	11 43

Date and Station		Phase	(GCT) h m s
SIT		e(P)	21 08 25
		ePP	11 03
		ePPP	13 07
		e	15 09
		iSKS	17 59
		iS	18 28
		ePS	19 43
		eSS	24 25
		eSSS	28 24
		eL	32 06
TUC		iP	21 04 50C
		iPP	07 13
		i	08 28
		iS	13 14
		iScS	14 36
		iSS	17 40
		iL	25 08
		eP'P'	33 37
		iP'P'	33 50
WASH		iP	21 04 09D
Jan. 8			
BUT		eP	21 26 45
Jan. 8			
BC		eP	23 09 30
		i	09 44
		e	09 59
BUT		eP	23 10 20
EUR		eP	23 09 25
HH		iP	23 10 20
		i	10 34
SJ		e(P)	23 05 32
TUC		eP	23 08 57
Jan. 9			
BC		eP	00 42 18
EUR		e(P)	00 41 14
		e	42 48
HH		eP	00 43 48
TUC		eP	00 41 11
		i	41 28
		e	46 58
		i	47 03
Jan. 9			
BC		iP	00 53 04
BUT		eP	00 54 14
EUR		eP	00 53 35
HH		e(P)	00 54 36
		i	56 09
TUC		eP	00 52 10
		e	57 39
		i	59 48

B-4297-4

Date and Station		Phase (GCT)
		h m s
Jan. 9		
COL	e(P)	00 57 01
	e	57 43
	eL	58 07
Jan. 9		
BC	eP	01 16 24
COL	iP	01 12 52
HH	iP	01 15 33
	i	17 50
TUC	eP	01 17 03
Jan. 9		
COL	eP	02 30 48
Jan. 9		
BC	eP	03 26 48
	i	26 59
BOZ	eP	03 27 19
BUT	eP	03 27 24
	i	27 35
EUR	eP	03 27 07
	e	27 35
HH	eP	03 27 38
	i	27 48
	ePP	30 53
SJ	iP	03 22 51
	i	23 05
TUC	eP	03 26 16
	i	26 32
Jan. 9		
EUR	eP	04 23 27
HH	e(P)	04 25 49
Jan. 9		
EUR	eP	05 40 25
	i	40 35
	i(S)	40 58
	eL	41 23
Jan. 9		
BC	eP	08 03 56
EUR	eP	08 04 15
	i	04 32
HH	e(P)	08 04 57
SJ	eP	07 59 59
TUC	e(P)	08 03 24
Jan. 9		
BC	e(P)	08 08 47
	i	09 01
	e	09 16

Date and Station		Phase (GCT)
		h m s
EUR	eP	08 09 08
TUC	iP	08 09 03
	i	09 18
BC	iP	08 12 53
BOZ	eP	08 12 26
BUT	eP	08 12 19
COL	iP	08 09 18
EUR	iP	08 12 34
HH	iP	08 12 06
TUC	iP	08 13 21
Jan. 9		
COL	eP	10 36 23
Jan. 9		
TUC	e(P)	11 41 54
Jan. 9		
BC	iP	12 17 32
	i	17 33
	ipP	19 46
	iSKS	27 03
	ePKKP	35 34
	e	36 28
	iP'P'	43 38
	eSKPP'	45 57
BOZ	eP	12 18 07
	ipP	20 22
	iPP	22 01
	epPP	23 51
	epPPP	25 56
	eSKS	27 47
	iS	28 31
	isS	32 27
	esPS	33 29
	eSS	34 43
	eL	43 23
BUT	eP	12 18 03
	ipP	20 18
	iPP	21 54
	ipPP	23 56
	iSKS	27 41
	iS	28 23
	i	28 53
	iSP	29 38
	isS	32 31
	isPS	33 19
	esSS	38 09
COL	iP	12 17 57
	ipP	20 12
	i	20 25
	i	20 42
	iSKS	27 17
	iS	28 00
	esP	29 12
	esS	31 50
	ePKKP	35 13

Date and Station		Phase (GCT)
		h m s
EUR	ipP	12 19 52
	ePKKP	35 30
	i	36 23
	eP'P'	43 26
	iP'P'	43 36
	i	48 53
HONO	iP	12 13 52
	iPcP	15 06
	epP	15 57
	eScP	18 05
	iS	20 00
	eScS	22 44
	esS	23 50
	eL	27 26
HH	iP	12 18 04
	epP	20 19
	ePP	21 58
	eSKS	27 39
	eS	28 22
	ePKKP	35 13
	iPKKP	35 15
	eP'P'	43 22
	eSKPP'	45 53
SLC	eP	12 17 53
	iP	17 54
	ipP	20 08
	iPP	21 38
	eSKS	27 29
	iSKS	27 31
	iS	28 07
	eSP	29 11
	isS	32 01
	eSS	34 43
	i(PKKP)	36 07
	iP'P'	43 34
	eL	44 42
SJ	epP'	12 26 09
	e	29 42
TUC	iP	12 17 36
	iPcP	17 38
	ipP	19 41
	isP	20 51
	eSKS	27 07
	iS	27 33
	iSP	28 33
	ePKKP	35 31
	eP'P'	43 31
	iP'P'	43 37
Jan. 9		
BOZ	eP	12 49 57
Jan. 9		
BC	eP	13 17 33
BOZ	eP	13 18 23
BUT	eP	13 18 29
	e	19 58
	e	25 04
	e(S)	26 26
	eSS	31 27
	eL	32 58

Date and Station		Phase (GCT)
		h m s
COL	iP	13 21 55
COLU	iP	13 16 38
	e	18 45
HH	eP	13 18 50
	e	21 06
SLC	eP	13 17 47
TUC	iP	13 16 47
	i	17 29
	e	21 09
	e	24 28
Jan. 9		
EUR	iP	13 58 04
TUC	e(P)	13 58 16
Jan. 9		
COL	iP	15 45 09
Jan. 9		
COL	iP	15 47 55
	e	48 12
EUR	eP	15 49 04
	i	50 29
HH	e(P)	15 50 11
Jan. 9		
BC	iP	17 07 05
	epP	07 43
	i	07 50
	esP	08 03
	eScP	13 35
BOZ	eP	17 07 51
	epP	08 30
BUT	ipP	17 08 37
	i	08 45
	isP	09 04
	ePcP	10 26
COL	iP	17 11 23
	epP	12 06
COLU	iP	17 05 54
	eS	09 36
EUR	iP	17 07 31
	ipP	08 17
	i	08 29
HH	eP	17 08 18
	ipP	08 59
SLC	eP	17 07 19
	ipP	07 58
SJ	iP	17 06 32
	i	06 47
TUC	iP	17 06 20
	ipP	06 56

B 4797-4

Date and Station		Phase	(GCT) h m s
TUC	isP		17 07 18
	e		08 33
Jan. 9			
COL	iP		20 38 11
EUR	eP		20 37 50
Jan. 9			
BC	eP		20 56 59
EUR	eP		20 56 40
TUC	eP		20 56 03
Jan. 10			
TUC	e(P)		02 15 18
Jan. 10			
BUT	e(P)		07 40 44
COL	eP		07 41 21
Jan. 10			
COL	iP		07 57 46
Jan. 10			
BOZ	e(P)		08 40 21
BUT	eP		08 40 48
HH	e(P)		08 39 52
	e		41 27
	iL		41 38
SLC	e(P)		08 39 04
Jan. 10			
BC	eP		09 05 08
	i		05 18
	i		05 52
	eP'P'		31 33
BOZ	eP		09 05 48C
	ePP		09 32
	eSKS		16 17
	iS		17 07
	ePS		18 01
	e(PPS)		19 17
	eSS		22 29
	i		23 41
	eSSS		26 19
	eL		30 09
BUT	eP		09 05 44C
	i		05 54
	ePP		09 53
	iPP		10 01
	eSKS		16 17
	iS		17 02
	iPS		17 59
	e(PPS)		18 33
	eSS		22 54
	i		23 31
	eSSS		27 05
	eL		30 11
COL	iP		09 05 49C
COL	iPP		09 09 46
	e(PPP)		12 14
	eSKS		16 12
	eS		16 48
	i		17 22
	iPS		18 05
	iPPS		18 50
	iSS		22 48
	eSSS		27 30
	eL		30 32
COLU	eSKS		09 17 48
	e(S)		19 46
	e		23 26
	iSS		26 49
	iL		37 12
HONO	e(P)		09 01 57D
	iPP		03 37
	e		04 08
	iS		09 06
	iScS		11 35
	eL		13 24
TS = 7 sec. A = 6.5mm.			
TL = 13 sec. Amax.= 24mm.			
HH	eP		09 05 46C
	ePP		09 48
	e		10 19
	e		11 10
	eSKS		16 30
	eP'P'		31 39
PHIL	eS		09 19 41
	ePS		22 13
	iPS		22 17
	i(PPS)		23 58
	eSS		28 27
	e		30 55
	eL		38 54
SLC	eP		09 05 32D
	e		06 10
	i		06 45
	e		08 36
	ePP		09 37
	eSKS		15 47
	eS		16 08
	iScS		16 32
	i		16 44
	iPS		17 12
	iPPS		18 00
	eSS		22 12
	i		22 38
	eSSS		26 00
	eL		29 04
SIT	e(P)		09 05 46
	ePP		09 26
	e		11 50
	eS		16 04
	iScS		16 42
	ePPS		17 54
	e(SS)		22 37
	eSSS		26 01
	eL		28 54
TUC	eP		09 05 11
	i		05 21D
	ePP		08 35
	i		09 03
	i		12 25
	eSKS		15 47
	iScS		16 02
	e		16 30
	iPPS		17 03
	eSS		21 12
	eL		27 18
	eP'P'		31 33
Jan. 10			
BC	eP		09 39 14
	i		41 54
BOZ	eP		09 39 52
BUT	eP		09 39 48
COL	iP		09 39 55
HH	eP		09 39 50
	e		42 24
	e		43 26
SLC	eP		09 39 37
TUC	eP		09 39 17
	e		41 52
Jan. 10			
BUT	eP		09 42 24
COL	iP		09 42 29
Jan. 10			
BUT	eP		10 19 31
COL	eP		10 19 30
HH	e(P)		10 19 43
TUC	e(P)		10 18 54
Jan. 10			
BC	eP		10 30 58
	e		31 08
BOZ	iP		10 31 38
BUT	eP		10 31 34
COL	iP		10 31 39
HH	eP		10 31 35
SLC	eP		10 31 22
TUC	eP		10 31 03
Jan. 10			
BC	eP		12 35 12
	iP		35 13
BOZ	iP		12 35 05
	i(S)		36 53
BOZ	eL		12 38 05
BUT	iP		12 34 49
	iS		36 35
	iL		37 07
COL	iP		12 37 37
COLU	eP		12 39 32
HH	iP		12 34 45
	e(S)		36 59
	eL		37 35
SLC	eP		12 35 04
	eL		37 53
SJ	iP		12 42 00
TUC	iP		12 36 17
	eL		39 47
Jan. 10			
COL	eP		14 10 20
	e		10 47
HH	e(P)		14 11 51
SJ	i(P')		14 18 01
Jan. 10			
BC	e(P)		14 30 06
Jan. 10			
BC	e(P)		15 27 36
EUR	e(P)		15 26 58
HH	iP		15 27 07
Jan. 10			
COL	eP		15 34 06
EUR	e(P)		15 33 32
Jan. 10			
COL	eP		15 36 11
Jan. 10			
BC	iP		15 35 25
BOZ	eP		15 36 15
BUT	eP		15 36 24
COL	iP		15 39 46
EUR	iP		15 35 52
HH	eP		15 36 42
SLC	eP		15 35 51
TUC	iP		15 34 41
	i		42 36
	eL		45 04

B 4297-4

Date and Station		Phase (GCT)
		h m s
Jan. 10		
BC	eP	17 40 08
COL	eP	17 45 29
	e	45 45
EUR	eP	17 40 36
HH	eP	17 41 26
SJ	e(P)	17 30 02
Jan. 10		
SJ	eP	18 00 37
Jan. 10		
BC	eP	18 29 54
COL	iP	18 30 17
EUR	e(P)	18 29 59
HH	eP	18 30 26
TUC	e(P)	18 30 01
Jan. 10		
TUC	eP	19 06 52
Jan. 10		
HH	e(P)	21 03 07
Jan. 10		
COL	iP	21 31 19
EUR	eP	21 30 45
HH	e(P)	21 31 14
Jan. 10		
BC	eP	21 44 55
COL	iP	21 40 37
EUR	iP	21 44 34
SLC	eP	21 44 44
Jan. 10		
BC	eP	22 05 49
COL	iP	22 07 19
	i	07 34
EUR	eP	22 06 44
HH	e(P)	22 07 15
Jan. 10		
COL	eP	22 15 54
EUR	e(P)	22 21 39
Jan. 10		
COL	eP	22 28 37
Jan. 10		
EUR	eP	22 54 20

Date and Station		Phase (GCT)
		h m s
Jan. 10		
HH	e(P)	23 56 45
Jan. 11		
HH	eP	03 41 02
Jan. 11		
BC	eP'	06 29 21
BOZ	eP'	06 29 08
	ePP	30 33
BUT	ePP	06 30 31
COL	eP	06 23 28
	e	26 10
	ePP	27 11
	iPP	27 21
	ePS	36 11
	e(SS)	42 22
	eSSS	45 51
	eL	52 14
COLU	eP'	06 29 36
EUR	eP'	06 29 12
	ePP	31 03
HH	eP'	06 28 58
	ePP	30 15
	ePKKP	39 14
SLC	eP'	06 29 16
SJ	iP'	06 29 51
	i	29 58
TUC	eP'	06 29 31
	iPP	32 02
	ePKS	33 06
	eL	07 05 12
Jan. 11		
EUR	i(P)	06 42 49
SJ	e(P)	06 36 05
Jan. 11		
EUR	e(P)	06 49 53
SJ	e(P)	06 50 40
Jan. 11		
BC	eP	06 51 11
BOZ	eP	06 50 54
BUT	eP	06 50 48
	e(S)	07 00 59
	eL	10 23
COL	iP	06 48 11
EUR	iP	06 50 56
HH	iP	06 50 36
SLC	eP	06 51 08

Date and Station		Phase (GCT)
		h m s
TUC	e(P)	06 50 13
	e	51 31
Jan. 11		
COL	eP	07 24 18
	e	25 10
EUR	eP'	07 30 00
HH	e(P')	07 29 49
	ePP	31 11
TUC	eP'	07 30 22
Jan. 11		
BC	eP	08 04 44
BOZ	eP	08 05 35
BUT	eP	08 05 40
EUR	eP	08 05 11
HH	e(P)	08 06 01
SLC	eP	08 05 01
TUC	eP	08 03 59
Jan. 11		
BUT	eP	09 49 35
	eS	49 50
	eL	49 54
HH	iP	09 48 32
	iS	49 18
	iL	49 24
Jan. 11		
COL	eP	10 36 56
EUR	eP	10 40 51
Jan. 11		
BC	eP	10 58 06
BOZ	eP	10 58 46
BUT	eP	10 58 41
COL	iP	10 58 48
EUR	iP	10 58 14
HH	e(P)	10 58 49
TUC	eP	10 58 10
Jan. 11		
BC	eP	12 08 36
BOZ	eP	12 08 48
COL	iP	12 07 12
	ipP	07 35
EUR	eP	12 08 09
	ipP	08 33

Date and Station		Phase (GCT)
		h m s
HH	eP	12 08 41
	eP'	12 27
Jan. 11		
EUR	e(P)	12 25 43
Jan. 11		
BC	eP	12 55 31
BUT	eP	12 56 08
EUR	iP	12 55 49
	e	56 13
HH	eP	12 56 19
TUC	eP	12 55 04
Jan. 11		
SLC	eP	13 02 13
Jan. 11		
COL	eP	13 14 50
EUR	eP	13 14 17
Jan. 11		
EUR	iP	15 59 26
Jan. 11		
COL	iP	20 23 36
	e	24 14
Jan. 11		
BC	e(P)	20 44 35
COL	iP	20 44 07
	e	45 08
EUR	eP	20 44 17
	e	44 41
Jan. 11		
EUR	eP	21 20 38
Jan. 11		
BC	e(P)	21 24 21
	i	24 26
COL	iP	21 23 36
EUR	iP	21 24 21
Jan. 11		
COL	iP	22 28 33
EUR	i(P)	22 31 45
Jan. 11		
HH	i(P)	23 03 57
Jan. 11		
BC	eP	23 53 05
	i	53 19
EUR	iP	23 53 31
	i	53 45

Date and Station		Phase	(GCT)
			h m s
TUC		eP	23 52 23
		e	52 36
Jan. 12			
HH		eP	00 09 20
Jan. 12			
COL		iP	00 35 26
Jan. 12			
BC		iP	00 45 30
		i	45 32
		e	48 28
BOZ		eP	00 46 51
COL		iP	00 46 08
EUR		iP	00 46 08
HH		eP	00 47 15
SLC		eP	00 46 10
TUC		eP	00 44 31
		i	44 34
		i	45 39
		e	49 07
Jan. 12			
EUR		eP	01 12 24
Jan. 12			
COL		eP	02 29 32
EUR		eP	02 27 18
		e	28 58
HH		e(P)	02 29 53
Jan. 12			
COL		eP	02 33 17
EUR		eP	02 32 44
Jan. 12			
EUR		eP	02 59 39
Jan. 12			
EUR		eP	03 07 12
Jan. 12			
COL		iP	04 06 59
Jan. 12			
EUR		iP	04 39 01
Jan. 12			
BC		iP	04 49 10
		e	49 33
BOZ		eP	04 49 41
BUT		eP	04 49 46
EUR		iP	04 49 29
HH		iP	04 49 59

Date and Station		Phase	(GCT)
			h m s
SLC		eP	04 49 21
		i	49 42
SJ		eP	04 45 16
TUC		eP	04 48 38
Jan. 12			
BC		eP	05 59 02
BOZ		eP	05 58 09
BUT		eP	05 58 13
COL		iP	05 57 08
EUR		iP	05 58 48
HH		iP	05 58 00
		i	58 03
SLC		eP	05 58 33
TUC		eP	05 59 07
Jan. 12			
BC		i(P)	06 14 00
COL		eP	06 14 30
HH		e(P)	06 14 27
TUC		e(P)	06 13 54
Jan. 12			
BC		eP	06 22 52
		e	23 00
BOZ		eP	06 23 26
COL		eP	06 23 29
		i	23 43
EUR		eP	06 22 58
		i	23 08
HH		e(P)	06 23 25
TUC		e(P)	06 23 06
Jan. 12			
EUR		iP	06 28 59
		i	28 08
Jan. 12			
BH		iP	07 46 51
		iS	47 59
BC		eP	07 53 45
		epP	54 26
BOZ		epP	07 54 52
BUT		epP	07 55 02
COL		iP	07 57 06
		ipP	57 54

Date and Station		Phase	(GCT)
			h m s
EUR		eP	07 54 06
		e	54 37
		epP	54 46
		i	55 04
HH		e(P)	07 54 35
		epP	55 21
SJ		iP	07 49 13
		eS	52 07
TUC		eP	07 53 09
		epP	53 46
Jan. 12			
COL		iP	09 02 05
Jan. 12			
SLC		eP	10 58 31
Jan. 12			
COL		eP	11 54 06
HH		e(P)	11 56 26
		e	56 34
Jan. 12			
EUR		iP	12 07 25
Jan. 12			
BC		eP	12 22 16
TUC		eP	12 22 20
Jan. 12			
EUR		e(P)	12 27 31
Jan. 12			
COL		eP	12 29 45
		iP	29 50
		i(S)	30 22
		iL	30 27
Jan. 12			
EUR		eP	12 58 26
Jan. 12			
EUR		eP	15 54 22
Jan. 12			
BH		eP	16 19 27
		eS	19 51
Jan. 12			
EUR		e(P)	16 46 59
		e	47 07
Jan. 12			
EUR		eP	17 16 05
		i	16 13
Jan. 12			
EUR		eP	17 24 10
Jan. 12			
COL		iP	18 44 05
Jan. 12			
COL		eP	21 14 06

Date and Station		Phase	(GCT)
			h m s
Jan. 12			
COL		iP	22 00 31
Jan. 12			
BC		e(P)	22 35 33
COL		eP	22 36 11
HH		e(P)	22 36 08
		e	36 52
Jan. 12			
EUR		iP	22 50 39
HH		e(P)	22 49 09
		e	50 09
Jan. 12			
EUR		iP	23 14 57
Jan. 13			
BC		e(P)	00 57 29
COL		eP	00 58 10
EUR		iP	00 57 36
		i	57 57
HH		eP	00 58 06
TUC		e(P)	00 57 32
Jan. 13			
BC		eP	02 18 01
COL		iP	02 18 27
		ipP	19 29
EUR		iP	02 18 06
		e	19 11
HH		iP	02 18 34
TUC		eP	02 18 07
		e	19 09
Jan. 13			
COL		iP	02 34 46
Jan. 13			
BC		e(P)	03 16 13
		i	16 20
COL		iP	03 15 52
EUR		iP	03 15 17
HH		eP	03 15 48
TUC		eP	03 15 14
Jan. 13			
BOZ		eP	03 17 58
BUT		eP	03 17 57
COL		eP	03 18 01

Date and Station		Phase (GCT)
		h m s
EUR	iP	03 17 25
HH	eP	03 17 58
TUC	eP	03 17 24
Jan. 13		
BC	iP	03 36 56
	e	37 05
BOZ	eP	03 36 17
BUT	eP	03 36 11
	i	36 58
	i	39 01
COL	iP	03 32 30
EUR	iP	03 36 32
	e	39 52
HH	eP	03 35 51
SLC	eP	03 36 41
TUC	eP	03 37 30
Jan. 13		
BC	iP	03 37 25
BOZ	eP	03 36 47
	eS	44 17
	eSS	48 05
	eL	50 51
BUT	iP	03 36 40
	i	37 38
	i	40 12
	eS	43 44
	eScS	46 44
	eSS	48 04
	eL	49 47
COL	iP	03 33 01
	e	34 18
	eS	37 02
COLU	e	03 39 20
	eL	04 05 44
EUR	iP	03 37 02
HH	iP	03 36 20
	ePcP	37 51
SLC	eP	03 37 10
	eS	44 59
	eSS	48 51
	eL	50 59
SJ	eP	03 41 03
TUC	eP	03 38 01
	i	39 34
	eL	56 47
Jan. 13		
COL	eP	04 28 30

Date and Station		Phase (GCT)
		h m s
EUR	eP	04 27 57
Jan. 13		
COL	iP	04 37 27
EUR	iP	04 41 28
Jan. 13		
BH	eP	05 28 53
Jan. 13		
EUR	iP	06 02 21
Jan. 13		
BC	eP	06 29 54
	ePP	33 49
BOZ	ePP	06 34 46
COL	iP	06 30 02
EUR	eP	06 29 58
	ePP	33 57
HH	e(PP)	06 34 32
TUC	e(P)	06 30 05
Jan. 13		
COL	eP	09 56 37
EUR	eP	09 56 03
Jan. 13		
TUC	e(P)	11 21 54
Jan. 13		
COL	eP	12 02 21
Jan. 13		
BC	eP	12 25 14
	i	25 24
BOZ	eP	12 25 52
COL	iP	12 25 52
EUR	iP	12 25 21
HH	eP	12 25 49
TUC	eP	12 25 17
Jan. 13		
EUR	eP	13 43 14
Jan. 13		
SLC	eP	14 25 46
Jan. 13		
BC	iP	15 16 05
EUR	iP	15 16 20
HH	iP	15 16 49
	e	17 50
TUC	eP	15 15 35

Date and Station		Phase (GCT)
		h m s
Jan. 13		
COL	iP	15 41 24
Jan. 13		
BC	e(P)	19 04 41
Jan. 13		
EUR	iP	19 56 05
Jan. 13		
HH	eP	20 13 16
Jan. 13		
EUR	e(P)	21 56 48
	i	57 22
Jan. 13		
SLC	eP	22 23 37
Jan. 13		
EUR	iP	23 01 39
Jan. 13		
BC	eP	23 34 37
	i	35 05
EUR	iP	23 34 55
	ipP	35 23
	isP	35 35
HH	iP	23 35 24
	i	37 52
SJ	e(P)	23 31 00
	e	31 16
TUC	eP	23 34 07
	i	34 34
Jan. 14		
EUR	eP	02 58 34
Jan. 14		
SLC	eP	03 45 08
Jan. 14		
BC	eP	03 54 40
COL	iP	03 55 03
EUR	e(P)	03 54 34
HH	e(P)	03 55 03
TUC	e(P)	03 54 32
Jan. 14		
COL	eP	06 25 42
Jan. 14		
EUR	eP	06 44 05
Jan. 14		
COL	eP	07 10 01
EUR	eP	07 13 51

Date and Station		Phase (GCT)
		h m s
Jan. 14		
COL	eP	07 42 10
Jan. 14		
BC	e(P)	07 59 31
EUR	iP	07 59 26
TUC	eP	07 59 38
Jan. 14		
HH	e(P)	08 27 39
Jan. 14		
EUR	eP	11 38 26
Jan. 14		
EUR	eP	12 26 26
Jan. 14		
COL	iP	12 37 57
	iL	38 10
Jan. 14		
BC	iP	14 16 42
	i	17 15
BOZ	eP	14 16 23
	iP	16 24
	eS	22 32
	eL	25 40
BUT	eP	14 16 16
	i	16 31
	iS	22 13
	eL	25 19
COL	iP	14 13 01
	i	13 06
	e	16 16
	iL	16 30
COLU	eP	14 19 28
	i	19 44
	e	28 10
	eL	39 16
EUR	iP	14 16 27
HH	iP	14 15 56
	i	16 14
	e	17 52
	iPcP	18 22
	eS	21 47
	eScS	26 05
PHIL	eS	14 28 00
	eL	35 30
RC	eP	14 17 21
	eS	23 33
	eL	27 23
SLC	eP	14 16 43
	i	16 59
	eS	23 04
	eL	26 20

Date and Station		Phase (GCT) h m s
SJ	eP	14 21 25
	eS	32 01
	eSS	38 11
	eL	50 13
SIT	iP	14 13 49
	e	14 31
	iS	17 50
	eL	18 34
TUC	iP	14 17 30
	iPcP	18 42
	e(PP)	19 11
	eS	24 31
	i	24 46
	e	28 18
	eSS	28 40
	eL	31 06
WASH	e(P)	14 19 17
	eL	43 45
Jan. 14		
BC	eP	14 36 14
	i	36 24
	e	41 18
BOZ	eP	14 35 48
BUT	eP	14 35 42
COL	iP	14 32 40
	i	33 09
EUR	iP	14 35 57
HH	eP	14 35 25
	iP	35 28
SLC	e(P)	14 36 07
	eP	36 14
TUC	eP	14 36 43
	i	36 52
Jan. 14		
BOZ	eP	18 44 24
COL	eP	18 46 03
EUR	eP	18 44 40
	e	45 12
HH	eP	18 44 35
SLC	eP	18 44 23
TUC	eP	18 44 15
Jan. 14		
EUR	iP	18 59 41
Jan. 14		
COL	eP	20 08 43
	e	09 12
Jan. 14		
HH	e(P)	20 51 17

Date and Station		Phase (GCT) h m s
Jan. 14		
HH	e(P)	21 07 02
Jan. 14		
COL	iP	22 03 33
Jan. 14		
BC	iP	22 22 20
	e	24 09
COL	iP	22 22 58
EUR	iP	22 22 25
HH	eP	22 22 56
SLC	eP	22 23 43
TUC	eP	22 22 23
Jan. 14		
COL	eP	23 03 31
EUR	iP	23 07 30
Jan. 14		
BC	eP	23 13 00
TUC	e(P)	23 13 04
Jan. 15		
COL	iP	01 34 18
EUR	eP	01 36 10
HH	e(P)	01 36 03
	i	36 12
Jan. 15		
COL	e(P)	01 40 26
EUR	eP	01 42 25
HH	eP	01 42 22
SLC	eP	01 42 42
Jan. 15		
EUR	eP	02 14 22
Jan. 15		
COL	eP	08 41 46
EUR	eP	08 41 11
Jan. 15		
EUR	eP	09 14 42
TUC	eP	09 14 42
Jan. 15		
HH	e(P)	09 30 23
Jan. 15		
HH	e(P)	10 13 47
Jan. 15		
BC	e(P)	10 29 19

Date and Station		Phase (GCT) h m s
BUT	eP	10 29 56
COL	eP	10 30 00
EUR	iP	10 29 23
HH	eP	10 29 58
	e	30 06
SLC	eP	10 29 42
TUC	eP	10 29 20
Jan. 15		
COL	iP	10 42 13
	eS	42 49
	iS	42 53
EUR	eP	10 48 02
HH	eP	10 47 06
	i	47 11
Jan. 15		
COL	eP	11 48 52
Jan. 15		
COL	iP	12 35 28
Jan. 15		
COL	iP	12 57 44
	i	58 10
Jan. 15		
BC	eP	13 54 19
COL	e(P)	13 49 59
	eP	53 12
EUR	iP	13 53 56
HH	e(P)	13 53 09
SLC	eP	13 54 05
Jan. 15		
EUR	eP	18 22 46
Jan. 15		
BC	eP	18 54 15
	e	54 35
COL	eP	18 54 53
EUR	iP	18 54 20
SLC	eP	18 54 39
TUC	eP	18 54 17
Jan. 15		
SLC	eP	19 47 15
Jan. 15		
TUC	iP	20 49 10
Jan. 15		
BC	eP	21 15 41

Date and Station		Phase (GCT) h m s
COL	iP	21 12 06
EUR	iP	21 15 23
HH	eP	21 14 55
Jan. 15		
EUR	eP	22 07 35
Jan. 15		
TUC	eP	22 38 04
Jan. 16		
COL	iP	00 12 24
Jan. 16		
EUR	eP	00 26 50
Jan. 16		
COL	eP	00 33 35
Jan. 16		
EUR	iP	00 52 33
Jan. 16		
EUR	iP	01 20 28
Jan. 16		
HH	e(P)	02 08 38
Jan. 16		
BC	e(P)	02 13 39
	epP	14 07
COL	iP	02 12 24
	esP	13 21
EUR	eP	02 13 24
	ipP	14 03
	i(sP)	14 11
HH	e(P)	02 14 10
TUC	eP	02 12 36
Jan. 16		
BC	eP	02 59 50
BOZ	eP	03 00 41
COL	eP	03 03 54
EUR	eP	03 00 15
HH	eP	03 01 07
TUC	eP	02 59 04
Jan. 16		
COL	eP	04 19 27
Jan. 16		
COL	eP	07 51 32
Jan. 16		
COL	iP	08 16 10
EUR	iP	08 16 34

B.4297-4.

Date and Station		Phase (GCT)
		h m s
Jan. 16		
SLC	eP	09 03 15
Jan. 16		
COL	eP	09 57 23
SLC	eP	09 56 24
Jan. 16		
EUR	iP	10 01 20
SLC	eP	10 01 31
Jan. 16		
BC	eP	11 59 40
COL	iP	11 55 37
EUR	iP	11 59 19
	i	59 33
HH	e(P)	11 58 40
TUC	eP	12 00 12
Jan. 16		
BC	eP	12 47 19
EUR	iP	12 46 52
TUC	eP	12 47 59
Jan. 16		
HH	e(P)	14 43 36
Jan. 16		
HH	i(P)	16 20 58
Jan. 16		
COL	iP	18 47 31
HH	e(P)	18 46 43
Jan. 16		
COL	iP	19 20 30
Jan. 16		
BH	iP	23 40 03
	eS	41 55
BC	eP	23 46 26D
	i	46 30
	ePP	48 42
	iS	53 37
	e(ScS)	56 09
	eL	58 29
BOZ	iP	23 47 05C
	i	47 16
	e(PP)	49 33
	iS	54 33
	i	55 03
	iScS	56 35
	iSS	58 18
	eL	59 13
BUT	iP	23 47 11D
	iPcP	48 00
	iS	54 47
	i	55 05
	iScS	57 01
	iSS	58 55

Date and Station		Phase (GCT)
		h m s
BUT	eL	00 00 41
	e(P'P')	17 21
COL	eP	23 49 52C
	iP	49 57C
	iPP	53 14
	iPPP	55 04
	iS	00 00 00
	iSS	05 20
	i	07 00
	iSSS	09 00
	iL	11 11
COLU	eP	23 44 27
	i	44 30D
	iPP	45 57
	iS	49 56
	i	50 06
	eL	52 14
HONO	eP	23 49 56C
	eS	59 52
	iScS	00 00 21
	i	02 08
	eSS	05 38
	eL	11 37
T_S=8 sec. A=6 mm.		
T_L=20 sec. $A_{max.}$=9mm.		
HH	eP	23 47 24C
	i	47 29
	ePP	49 54
	ePPP	50 57
	eS	55 19
	e(ScS)	57 12
	e(P'P')	00 16 53
RC	iP	23 46 30D
	ePP	48 26
	iS	53 32
	eL	58 34
SLC	iP	23 46 38C
	i	46 50
	i	47 17
	iPP	48 44
	i	49 57
	i	50 55
	iS	53 49
	i	54 17
	iScS	56 30
	iSS	57 39
	eL	59 07
	e(P'P')	00 17 20
SJ	iP	23 42 50C
	iS	46 53
	iL	47 20
SIT	eP	23 49 11
	iP	49 19
	e	50 15
	e	50 32
	ePP	51 59
	ePPP	53 56
	iS	58 28
	i	59 02
	eScS	59 29

Date and Station		Phase (GCT)
		h m s
SIT	eSS	00 02 56
	eL	06 24
TUC	eP	23 45 46
	i	45 52C
	ePP	47 36
	iS	52 16
	iScS	55 50
	eL	56 20
UK	e(P)	23 47 32
	iS	55 12
	eSS	59 07
	eL	00 01 36
WASH	iP	23 45 10C
	i	45 35
	iPP	46 29
	iPPP	47 25
	e(S)	50 57
Jan. 17		
HH	e(P)	03 46 39
Jan. 17		
BC	eP	08 08 39
BOZ	eP	08 09 48
BUT	eP	08 10 07
COL	eP	08 12 44
COLU	eP	08 09 08
HH	eP	08 10 09
SLC	eP	08 09 12
	eS	15 59
	eSS	19 46
	eL	21 23
TUC	eP	08 08 02
	e(S)	14 18
	eL	16 21
Jan. 17		
HH	eP	10 42 39
Jan. 17		
COL	iP	14 22 52
Jan. 17		
EUR	eP	17 55 53
Jan. 17		
BC	eP	18 19 18
	e	19 24
	i(S)	20 14
	eL	20 26
EUR	iP	18 18 27
HH	e(P)	18 22 55
SLC	eP	18 19 37
	e(S)	20 37
	eL	20 46

Date and Station		Phase (GCT)
		h m s
Jan. 17		
COL	eP	18 28 10
Jan. 17		
COL	iP	19 12 44
EUR	eP	19 13 16
Jan. 17		
EUR	iP	20 39 49
Jan. 17		
EUR	eP	22 14 20
Jan. 17		
COL	iP	22 37 35
EUR	iP	22 36 59
Jan. 18		
EUR	eP	00 56 52
HH	e(P)	00 56 11
Jan. 18		
HH	e(P)	01 05 59
Jan. 18		
HH	eP	03 24 23
Jan. 18		
EUR	eP	04 05 30
	i	06 27
Jan. 18		
HH	eP	05 19 02
Jan. 18		
BC	e(P)	05 57 13
HH	eP	05 58 07
SJ	iP	05 54 07
TUC	eP	05 56 53
Jan. 18		
BC	iP	08 18 52
	e	19 00
BOZ	iP	08 19 24
	i	19 33
BUT	iP	08 19 30
	e(PP)	22 24
COL	eP	08 25 33
	i	25 56
COLU	eP	08 17 18
EUR	iP	08 19 09
HH	iP	08 19 40
SJ	iP	08 15 14
	iPcP	16 41

B 4797-4.

Date and Station		Phase	(GCT) h m s
TUC		iP	08 18 22
		e	18 28
		eS	27 22
		e	29 44
		eL	35 31
		eP'P'	46 39
Jan. 18			
HH		e(P)	08 50 03
Jan. 18			
SLC		eP	09 19 04
Jan. 18			
COL		eP	09 24 22
Jan. 18			
COL		iP	09 47 35
EUR		eP	09 47 52
Jan. 18			
COL		iP	09 58 32
EUR		eP	09 51 25
Jan. 18			
BC		eP	11 56 46
COL		iP	11 52 26
EUR		iP	11 56 22
HH		eP	11 55 43
SLC		eP	11 56 31
TUC		eP	11 57 20
Jan. 18			
COL		eP	12 31 33
Jan. 18			
COL		eP	15 32 18
Jan. 18			
COL		eP	16 16 40
Jan. 18			
EUR		iP	17 06 11
Jan. 18			
EUR		iP	19 13 34
Jan. 18			
EUR		iP	19 58 22
Jan. 18			
BH		eP	21 02 57
		eS	03 58
SJ		eP	21 05 17
Jan. 18			
HH		i(P)	21 18 18
Jan. 19			
COL		iP	00 20 39
EUR		eP	00 27 26

Date and Station		Phase	(GCT) h m s
HH		e(P)	00 24 25
Jan. 19			
EUR		eP	04 00 50
HH		eP	04 01 23
SJ		eP	03 56 18
TUC		eP	03 59 52
Jan. 19			
EUR		iP	04 17 36
Jan. 19			
BC		eP	07 29 49
COL		iP	07 26 34
		e	27 56
EUR		iP	07 29 32
HH		eP	07 29 06
Jan. 19			
BUT		eP	08 50 20
		epP	52 10
COL		iP	08 47 55
EUR		iP	08 50 26
		ipP	52 19
HH		iP	08 50 09
		i	50 23
		epP	52 01
Jan. 19			
TUC		eP	10 37 14
Jan. 19			
COL		iP	12 42 13
Jan. 19			
COL		eP	16 13 46
		iP	13 47
EUR		eP	16 13 28
TUC		e(P)	16 16 21
Jan. 19			
COL		eP	16 22 35
		epP	23 12
Jan. 19			
EUR		eP	17 14 28
Jan. 19			
BC		eP	18 20 26
		e	20 44
COL		iP	18 19 29
EUR		iP	18 20 23
		ipP	20 42
HH		e(P)	18 20 32

Date and Station		Phase	(GCT) h m s
Jan. 19			
BC		eP	19 22 58
HH		e(P)	19 22 19
Jan. 19			
EUR		iP	19 37 44
Jan. 19			
COL		iP	20 02 35
HH		e(P')	20 08 36
Jan. 19			
EUR		iP	22 16 08
Jan. 20			
EUR		eP	00 00 53
Jan. 20			
COL		iP	00 25 42
HH		e(P)	00 27 52
Jan. 20			
COL		iP	01 27 33
SJ		iP	01 34 40
Jan. 20			
SJ		e(P)	02 14 45
Jan. 20			
BC		eP	04 44 15
		e	44 21
BOZ		eP	04 43 48
COL		iP	04 40 27
EUR		iP	04 43 55
		i	44 00
		i	44 14
HH		eP	04 43 25
SLC		eP	04 44 05
TUC		eP	04 44 46
Jan. 20			
BC		eP	05 11 06
BOZ		eP	05 10 33
EUR		eP	05 10 36
		i	10 43
		i	10 52
		i	11 05
HH		eP	05 10 05
TUC		eP	05 11 41
		eL	29 46
Jan. 20			
COL		iP	10 07 08

Date and Station		Phase	(GCT) h m s
Jan. 20			
COL		eP	11 02 31
EUR		eP	11 02 11
TUC		eP	11 02 13
Jan. 20			
BC		eP	11 18 31
COL		eP	11 14 09
EUR		iP	11 18 18
HH		e(P)	11 17 28
		e	18 50
SLC		eP	11 18 15
TUC		eP	11 19 05
Jan. 20			
EUR		iP	11 57 57
Jan. 20			
HH		e(P)	20 24 57
Jan. 20			
HH		e(P)	21 56 40
Jan. 20			
EUR		iP	22 48 12
HH		e(P)	22 48 03
Jan. 20			
COL		iP	23 35 47
		ipP	36 27
		isP	36 40
		i	36 54
EUR		iP	23 36 44
		ipP	37 24
HH		e(P)	23 36 53
		e	39 49
Jan. 21			
TUC		eP	00 17 34
Jan. 21			
COL		eP	01 59 25
Jan. 21			
COL		eP	03 26 48
Jan. 21			
EUR		iP	03 36 44
Jan. 21			
EUR		iP	04 08 53
Jan. 21			
HH		e(P)	04 44 19
Jan. 21			
COL		eP	07 15 33
		i	15 42

Date and Station		Phase (GCT)
		h m s
EUR	iP	07 16 07
Jan. 21		
BC	iP	08 15 20
	i	15 37
	e(PcP)	19 24
BOZ	eP	08 16 22
COL	iP	08 19 37
	i	20 15
COLU	eP	08 14 16
EUR	iP	08 16 05
	i	16 21
HH	eP	08 16 35
	e	17 12
SLC	eP	08 15 32
	i	15 49
TUC	eP	08 14 34
	i	14 51
	e(PcP)	18 12
Jan. 21		
HH	e(P)	08 22 33
Jan. 21		
BOZ	eP	10 03 34
COL	eP	10 02 42
HH	iP	10 03 29
Jan. 21		
COL	iP	11 08 41
Jan. 21		
COL	iP	12 16 26
Jan. 21		
COL	iP	12 22 11
Jan. 21		
BC	eP	12 35 09
	i	35 20
BOZ	eP	12 35 47
COL	iP	12 35 47
	i	36 02
EUR	iP	12 35 17
	i	35 26
HH	eP	12 35 48
SLC	eP	12 35 32
TUC	eP	12 35 12
Jan. 21		
COL	eP	13 50 29
EUR	ePP	13 56 45

Date and Station		Phase (GCT)
		h m s
Jan. 21		
EUR	iP	13 59 16
Jan. 21		
COL	eP	17 17 21
Jan. 21		
COL	iP	17 47 46
	i	47 52
EUR	eP	17 44 44
HH	e(P')	17 53 53
Jan. 21		
BC	iP	18 05 34
	epP	06 04
BOZ	eP	18 06 05
	ipP	06 34
BUT	eP	18 06 10
	ipP	06 34
COLU	eP	18 03 50
	ipP	04 19
EUR	iP	18 05 53
	ipP	06 22
HH	iP	18 06 22
	ipP	06 52
	e	08 53
SLC	eP	18 05 46
SJ	iP	18 01 39
	ipP	02 05
TUC	eP	18 05 03
	ipP	05 32
Jan. 21		
BC	eP	18 50 54
COL	eP	18 51 35
HH	eP	18 51 32
Jan. 21		
BOZ	eP	18 56 59
BC	eP	18 56 18
BUT	eP	18 57 12
EUR	eP	18 56 41
HH	eP	18 57 21
SLC	eP	18 56 31
SJ	eP	18 52 51
TUC	eP	18 55 38
Jan. 21		
COL	iP	19 34 57

Date and Station		Phase (GCT)
		h m s
Jan. 21		
EUR	iP	19 50 01
Jan. 21		
EUR	iP	20 20 45
Jan. 21		
HH	eP	20 41 16
Jan. 21		
HH	e(P)	23 13 08
Jan. 21		
EUR	eP	23 35 07
	i	35 42
Jan. 22		
BC	e(P)	00 17 30
BOZ	eP	00 18 11
BUT	e(P)	00 13 07
COL	iP	00 18 06
HH	eP	00 18 06
SLC	eP	00 18 54
Jan. 22		
BC	eP	00 57 50
BOZ	eP	00 57 01
BUT	e(P)	00 56 55
COL	iP	00 52 45
	i	52 50
	i	52 57
	i	53 11
	i(S)	54 21
	iL	54 28
EUR	eP	00 57 03
	e	57 19
	ePcP	59 59
HH	eP	00 56 19
	iP	56 21
Jan. 22		
BC	eP	01 04 52
BUT	eP	01 03 59
COL	eP	00 59 49
EUR	iP	01 04 06
	i	04 23
	iPcP	07 04
HH	eP	01 03 22
	i	03 34
	ePcP	06 52
TUC	eP	01 05 20
Jan. 22		
EUR	iP	01 34 48

Date and Station		Phase (GCT)
		h m s
Jan. 22		
EUR	iP	04 14 20
Jan. 22		
COL	eP	07 19 26
EUR	eP	07 20 04
Jan. 22		
EUR	iP	08 55 53
Jan. 22		
HH	e(P)	10 48 49
Jan. 22		
HH	e(P)	12 16 00
Jan. 22		
TUC	eP	13 03 43
Jan. 22		
EUR	eP	14 28 47
TUC	eP	14 28 42
Jan. 22		
HH	eP	15 12 40
Jan. 22		
EUR	eP	17 00 16
Jan. 22		
EUR	iP	20 00 29
	epP	00 59
HH	eP	20 01 01
Jan. 22		
HH	e(P)	20 34 30
Jan. 22		
COL	iP	20 44 32
Jan. 23		
EUR	eP	00 28 14
Jan. 23		
TUC	e(P)	00 33 04
	e	34 16
Jan. 23		
BC	eP	00 53 19
	e	53 30
	i	53 36
BOZ	eP	00 52 35
BUT	eP	00 52 34
COL	iP	00 48 31
	e	48 59
	eL	50 32
	iL	50 49
EUR	iP	00 51 50
	ipP	51 59
	i	55 48

Date and Station		Phase	(GCT)
			h m s
HH		iP	00 52 06
		ipP	52 17
SLC		eP	00 52 41
TUC		eP	00 54 05
		ipP	54 17
Jan. 23			
EUR		eP	02 28 05
		iP	28 06
SLC		eP	02 29 52
Jan. 23			
EUR		eP	03 17 53
Jan. 23			
BC		iP	03 57 13
		e	57 32
		e(S)	04 05 13
		eScS	07 21
BOZ		eP	03 56 36
		eS	04 04 04
		eSS	07 52
		eL	09 06
BUT		eP	03 56 28
		iP	56 31
		iPcP	57 45
		iPP	58 27
		eS	04 03 49
		e	05 27
		e(ScS)	06 47
		e(SS)	08 04
		eL	09 46
COL		iP	03 52 53
		ePP	53 28
		iS	57 17
		eL	58 28
COLU		iP	03 59 09
		eS	04 08 38
		eL	23 08
EUR		iP	03 56 51
		iPP	59 00
		iScP	04 01 49
HONO		eP	03 55 46
HH		eP	03 56 11
		ipP	56 27
		iPcP	57 37
		ePP	58 20
		iScP	04 01 27
		eP'P'	26 54
SLC		eP	03 56 56
		iP	57 00
		ipP	57 38
		iPcP	58 03
SJ		iP	04 00 50
TUC		iP	03 57 48
		ePP	04 00 27
		eS	06 48
		eSS	11 34
		eL	17 19

Date and Station		Phase	(GCT)
			h m s
Jan. 23			
COL		eP	04 03 01
EUR		iP	04 06 59
Jan. 23			
HH		e(P)	04 26 54
Jan. 23			
COL		eP	06 59 27
EUR		eP	06 50 35
		e	51 08
TUC		eP	06 50 33
Jan. 23			
BOZ		eP'	07 56 15
COL		iP	07 47 39
EUR		iP'	07 56 15
HONO		eP	07 47 09
HH		eP	07 50 09
TUC		eP'	07 56 29
Jan. 23			
EUR		iP	08 05 04
TUC		eP	08 04 27
Jan. 23			
HH		e(P)	08 15 02
TUC		iP	08 18 49
Jan. 23			
COL		iP	11 40 46
Jan. 23			
BOZ		eP	12 02 01
BUT		eP	12 02 05
EUR		eP	12 01 57
HH		eP	12 02 06
SLC		eP	12 01 54
		i	02 03
Jan. 23			
EUR		eP	13 16 40
Jan. 23			
SLC		e(P)	13 45 01
Jan. 23			
EUR		eP	14 09 52
HH		eP	14 08 46
		e	12 29
Jan. 23			
COL		eP	14 36 41

Date and Station		Phase	(GCT)
			h m s
Jan. 23			
EUR		eP	15 15 00
Jan. 23			
SLC		eP	17 44 59
Jan. 23			
COL		iP	18 45 51
Jan. 23			
COL		eP	20 12 34
Jan. 23			
EUR		e(P)	21 41 53
Jan. 23			
BC		eP	22 26 42
		e	27 44
COL		eP	22 30 44
		e	31 41
EUR		eP	22 26 53
		e	27 22
HH		e(P)	22 27 23
TUC		eP	22 25 07
		e	29 52
		e	30 10
Jan. 24			
BUT		eP	00 46 43
COL		eP	00 43 05
EUR		iP	00 47 02
HH		eP	00 46 21
		e	47 46
SLC		eP	00 47 12
Jan. 24			
EUR		eP	00 59 10
TUC		eP	00 57 26
		e	01 01 15
Jan. 24			
EUR		iP	02 23 08
Jan. 24			
EUR		eP	03 42 27
Jan. 24			
EUR		iP	03 50 05
HH		e(P)	03 50 36
Jan. 24			
EUR		eP	04 43 40
Jan. 24			
HH		e(P)	05 03 48
Jan. 24			
COL		eP	07 02 19

Date and Station		Phase	(GCT)
			h m s
Jan. 24			
BC		eP	08 18 47
BUT		eP	08 19 22
COL		eP	08 19 29
EUR		iP	08 19 54
HH		eP	08 19 25
SLC		eP	08 19 09
Jan. 24			
EUR		iP	08 49 16
Jan. 24			
COL		eP	08 56 37
EUR		iP	08 52 51
Jan. 24			
COL		eP	09 02 00
EUR		eP	09 05 35
		e	06 17
Jan. 24			
COL		iP	09 34 44
Jan. 24			
BC		eP	12 26 11
BOZ		eP	12 26 01
COL		iP	12 22 33
EUR		eP	12 25(57)
		i	26(14)
HH		eP	12 25 26
Jan. 24			
EUR		iP	13 35(12)
HH		eP	13 34 01
Jan. 24			
HH		e(P)	14 21 18
Jan. 24			
EUR		iP	18 29(29)
Jan. 24			
COL		iP	18 53 03
Jan. 24			
TUC		e(P)	20 41 14
Jan. 24			
EUR		iP	21 30 25
Jan. 24			
COL		eP	21 41 49
Jan. 24			
BOZ		eP	23 13 59

Date and Station		Phase (GCT)
		h m s
Jan. 25		
EUR	iP	00 06 49
Jan. 25		
EUR	eP	00 41 09
Jan. 25		
EUR	eP	00 53 08
Jan. 25		
TUC	e(P)	02 42 26
Jan. 25		
EUR	iP	03 03 05
	i	03 27
Jan. 25		
BC	iP	06 38 14
	i	41 21
BOZ	eP	06 38 56
BUT	eP	06 39 03
COL	iP	06 41 57
EUR	iP	06 38 38
	i	38 55
HH	iP	06 39 23
	iPPP	42 31
SLC	eP	06 38 30
SJ	iP	06 35 31
	ePcP	38 42
TUC	iP	06 37 33
	ePcP	40 41
Jan. 25		
EUR	eP	06 41 46
Jan. 25		
BC	e(P)	07 43 52
COL	eP	07 44 31
EUR	eP	07 43 58
	e	49 56
TUC	e(P)	07 43 54
Jan. 25		
EUR	eP	08 03 34
Jan. 25		
BC	eP	11 00 26
BOZ	eP	11 01 06
BUT	eP	11 01 01
COL	iP	11 01 03
EUR	iP	11 00 32
HH	eP	11 01 04
	e	01 13

Date and Station		Phase (GCT)
		h m s
SLC	eP	11 00 50
TUC	eP	11 00 28
Jan. 25		
EUR	iP	11 41 06
Jan. 25		
EUR	iP	15 46 18
Jan. 25		
EUR	eP	17 18 44
Jan. 25		
EUR	iP	22 47 55
Jan. 25		
COL	iP	23 22 22
Jan. 25		
COL	iP	23 42 22
Jan. 25		
HH	e(P)	23 58 49
	i	59 22
Jan. 26		
COL	iP	01 17 14
Jan. 26		
COL	eP	01 30 45
Jan. 26		
EUR	iP	02 12 30
Jan. 26		
COL	iP	03 58 15
HH	eP	04 00 23
Jan. 26		
EUR	eP	04 35 38
Jan. 26		
EUR	eP	06 31 37
Jan. 26		
BOZ	e(P)	08 44 11
EUR	eP	08 42 59
	i	43 18
HH	e(P)	08 44 37
TUC	eP	08 40 13
	e	41 30
Jan. 26		
TUC	eP	09 14 33
Jan. 26		
BUT	eP	10 41 15
COL	iP	10 41 19
EUR	iP	10 40 45
HH	eP	10 41 16

Date and Station		Phase (GCT)
		h m s
TUC	eP	10 40 42
Jan. 26		
BOZ	eP	10 51 09
BUT	eP	10 51 05
COL	iP	10 51 01
	i	51 39
	i	52 07
EUR	iP	10 50 37
HH	eP	10 51 06
TUC	eP	10 50 37
Jan. 26		
COL	eP	11 01 19
Jan. 26		
EUR	eP	12 08 30
Jan. 26		
HH	e(P)	12 43 16
Jan. 26		
COL	eP	15 45 47
Jan. 26		
COL	eP	16 14 40
Jan. 26		
COL	eP	16 22 05
Jan. 26		
EUR	iP	16 41 03
Jan. 26		
HH	e(P)	19 25 37
Jan. 26		
COL	iP	23 10 47
	i	10 58
EUR	iP	23 14 25
Jan. 26		
COL	iP	23 31 29
Jan. 26		
COL	iP	23 49 36
Jan. 27		
COL	iP	01 04 53
Jan. 27		
BOZ	eP	01 26 18
COL	iP	01 25 25
EUR	iP	01 26 50
HH	iP	01 26 12
Jan. 27		
COL	iP	10 01 02
EUR	iP	10 04 58

Date and Station		Phase (GCT)
		h m s
Jan. 27		
COL	iP	10 17 40
HH	eP	10 19 47
	e	22 54
Jan. 27		
HH	e(P)	10 48 57
Jan. 27		
COLU	eP	11 06 58
Jan. 27		
COL	eP	11 56 13
Jan. 27		
EUR	iP	13 10 52
Jan. 27		
BC	eP	13 51 22
	i	51 25
BOZ	eP	13 52 03
	ePP	55 35
BUT	eP	13 51 59
	eSKKS	14 02 49
	iS	03 08
	eSS	09 03
	eSSS	13 15
	eL	17 24
COL	iP	13 52 02
	ePP	56 13
EUR	iP	13 51 54
HH	eP	13 51 58
	ePP	55 51
SLC	eP	13 51 47
	eS	14 02 44
	e(PPS)	04 28
	eL	17 32
TUC	eP	13 51 25
	i	51 27
	e	52 36
	iS	14 02 02
	eL	18 50
Jan. 27		
COL	eP	14 19 18
Jan. 27		
BC	eP	17 49 59
	e	51 31
BUT	eP	17 50 59
	i	51 31
EUR	eP	17 50 45
	i	51 25
HH	iP	17 50 58
	i	51 36
SLC	eP	17 50 53

B 4297-4

Date and Station		Phase	(GCT) h m s
Jan. 27			
SJ		eP	18 00 12
Jan. 27			
COL		e(P)	18 45 04
Jan. 27			
HH		i(P)	21 16 00
Jan. 27			
HH		e(P)	22 00 49
Jan. 27			
EUR		iP	23 35 27
HH		e(P)	23 42 53
Jan. 28			
BC		eP	05 05 22
BOZ		eP	05 05 10
BUT		eP	05 05 15
COLU		eP	05 02 38
HH		iP	05 05 20
SLC		eP	05 05 11
SJ		eP	05 00 36
TUC		eP	05 05 03
		e	05 11
Jan. 28			
COL		eP	06 52 47
		epP	53 09
HH		iP	06 51 48
SLC		eP	06 51 42
Jan. 28			
HH		eP	07 49 36
SLC		eP	07 49 32
Jan. 28			
BC		eP	07 56 15
BUT		eP	07 56 27
COL		iP	07 55 07
		ipP	55 37
COLU		eP	08 01 44
		eL	36 26
HH		iP	07 56 16
		epP	56 37
		ePKKP	08 13 02
		eP'P'	21 14
SLC		eP	07 56 26
SJ		eP'	08 02 17

Date and Station		Phase	(GCT) h m s
Jan. 28			
COL		iP	14 26 53
HH		eP	14 29 46
Jan. 28			
EUR		e(P)	16 06 57
SLC		e(P)	16 01 24
Jan. 28			
EUR		eP	16 57 16
Jan. 28			
EUR		iP	18 11 39
Jan. 28			
EUR		iP	20 07 47
Jan. 28			
EUR		eP	20 32 29
Jan. 28			
BC		eP	21 28 35
COL		iP	21 28 43
EUR		iP	21 28 39
Jan. 28			
BC		eP	22 56 29
		i	56 40
		iS	57 32
		eL	57 57
BOZ		eP	22 58 05
		eS	59 56
EUR		iP	22 55 57
HH		eS	23 00 37
Jan. 29			
EUR		i(P)	03 25 03
Jan. 29			
BC		eP	03 41 21
COL		iP	03 37 00
EUR		eP	03 40 57
HH		e(P)	03 40 28
Jan. 29			
COL		iP	03 52 39
Jan. 29			
COL		iP	04 49 34
Jan. 29			
BOZ		eS	04 52 17
		eL	53 22
EUR		eP	04 49 03
COLU		eP	04 46 05
		eS	47 19
		eL	47 37

Date and Station		Phase	(GCT) h m s
Jan. 30			
BC		eP	09 00 32
EUR		iP	09 01 52
		iS	02 16
		iL	02 24
Jan. 29			
COL		eP	09 23 35
EUR		eP	09 28 17
Jan. 29			
COL		iP	09 28 52
Jan. 29			
EUR		eP	10 59 07
Jan. 29			
COL		eP	14 28 36
Jan. 30			
TUC		e(P)	15 04 55
		e	05 08
Jan. 29			
EUR		eP	15 45 06
Jan. 29			
BOZ		eP	15 57 42
Jan. 29			
BC		eP	16 43 14
COL		iP	16 39 13
		ipP	39 24
EUR		iP	16 42 52
HH		eP	16 42 18
TUC		eP	16 43 46
		e(pP)	43 56
Jan. 29			
EUR		iP	17 02 27
Jan. 29			
EUR		eP	17 12 58
Jan. 29			
EUR		eP	17 51 07
Jan. 29			
COL		iP	19 01 56
HH		e(P)	19 03 23
Jan. 29			
COLU		e(P)	20 04 05
Jan. 29			
COL		eP	22 15 04
Jan. 29			
BC		ePP	22 39 06
		e	39 36
BOZ		ePP	22 38 32

Date and Station		Phase	(GCT) h m s
BUT		eP	22 34 44
COL		iP	22 32 18
EUR		eP	22 34 47
		e	37 49
		ePP	38 38
HH		iP	22 34 22
		ePP	38 03
		e	39 06
SLC		e(PP)	22 38 51
TUC		ePP	22 39 39
Jan. 29			
EUR		eP	22 50 25
Jan. 29			
BC		eP	23 59 32
EUR		iP	23 59 18
TUC		eP	00 00 17
Jan. 30			
HH		e(P)	01 34 04
Jan. 30			
COL		iP	02 04 19
EUR		iP	02 04 54
TUC		e(P)	02 04 55
Jan. 30			
COL		iP	03 53 51
Jan. 30			
HH		eP	05 09 01
Jan. 30			
EUR		iP	05 28 10
Jan. 30			
BUT		eP	05 57 19
COL		iP	05 54 39
EUR		iP	05 57 31
HH		iP	05 57 07
		e	58 58
Jan. 30			
TUC		e(P)	07 26 24
Jan. 30			
COL		iP	08 46 23
		epP	48 41
EUR		iP	08 46 03
HH		eP	08 46 30
Jan. 30			
BOZ		ePP	09 01 24

Date and Station		Phase (GCT)
		h m s
BUT	ePP	09 01 26
COL	eSKKS	09 08 32
	ePPS	11 40
	eSS	15 53
	eSSS	21 30
	eL	25 32
COLU	eP'	09 01 35
	e3	10 21
	eSS	19 55
	eSSS	26 13
	eL	43 44
EUR	eP	08 56 40
HH	e(P')	09 00 52
	ePP	01 37
	e	03 54
SIC	eP	08 56 58
	ePP	09 01 12
	eSKS	07 36
	ePS	09 29
	eL	29 23
SJ	eP'	09 01 57
TUC	eP	08 56 35
	eL	09 27 33
Jan. 30		
HH	e(P)	09 47 01
Jan. 30		
EUR	iP	10 04 23
HH	eP	10 03 44
Jan. 30		
EUR	eP	10 15 30
TUC	eP	10 15 24
Jan. 30		
EUR	eP	12 51 50
	iP	51 53
	iS	52 18
	iL	52 28
Jan. 30		
EUR	e(P)	13 44 58
Jan. 30		
BUT	eP	14 12 10
EUR	iP	14 12 30
HH	e(P)	14 12 18
	e	12 33
Jan. 30		
BOZ	eP	15 03 48
COL	iP	15 00 27
EUR	iP	15 03 54

Date and Station		Phase (GCT)
		h m s
HH	eP	15 03 24
Jan. 30		
EUR	eP	16 35 17
Jan. 30		
EUR	eP	16 54 18
Jan. 30		
EUR	eP	16 59 57
Jan. 30		
HH	e(P)	17 12 51
Jan. 30		
EUR	eP	17 30 34
Jan. 30		
HH	e(P)	18 40 23
Jan. 30		
HH	e(P)	18 45 24
Jan. 30		
BC	iP	19 21 09
	esP	24 36
BOZ	ePP	19 25 36
COL	iP	19 21 36
	epP	23 30
EUR	iP	19 21 14
	epP	23 12
	ePP	24 48
HH	eP	19 21 43
	ePP	25 34
TUC	iP	19 21 13
Jan. 31		
HH	e(P)	00 42 37
Jan. 31		
BC	e(P)	00 52 18
COL	iP	00 51 35
	ipP	52 13
EUR	iP	00 51 50
	ipP	52 24
Jan. 31		
COL	iP	01 10 51
Jan. 31		
BC	eP	01 38 56
	iL	39 47
EUR	iP	01 38 25
	iS	39 01
	iL	39 14
Jan. 31		
EUR	iP	03 50 48
Jan. 31		
BOZ	eP	05 36 46

Date and Station		Phase (GCT)
		h m s
BUT	eP	05 36 36
COL	iP	05 34 25
EUR	iP	05 36 38
	e	38 50
	ePP	39 47
HH	iP	05 36 27
	ePP	39 33
SLC	eP	05 36 42
TUC	e(P)	05 37 12
Jan. 31		
BC	iP	09 29 53D
	iPP	33 45
	e(P'P')	56 05
BOZ	eP	09 30 06C
	ePP	34 05
	eP'P'	54 57
BUT	eP	09 30 01D
	ipP	31 29
	esP	32 08
	eP'P'	54 59
COL	iP	09 28 46D
	ipP	30 06
	eS	38 22
	iP'P'	55 24
COLU	iP'	09 35 27
	epP'	36 56
EUR	iP	09 29 48D
	i	30 25
	ipP	31 11
	esP	31 55
	iPP	33 37
	iPKKP	46 54
	eP'P'	54 45
	iP'P'	55 04
HH	iP	09 29 55D
	ipP	31 22
	e	33 38
	ePP	33 53
	e	46 19
	iPKKP	46 48
	epPKKP	48 08
	e	54 42
	iP'P'	54 59
	epP'P'	56 17
SLC	iP	09 30 03C
	e	30 22
	ePP	34 03
SJ	eP'	09 35 50
	iP'	35 59
TUC	iP	09 30 10D
	ePP	34 10
	ePKKP	46 43

Date and Station		Phase (GCT)
		h m s
Jan. 31		
EUR	iP	16 05 46
Jan. 31		
EUR	iP	16 23 11
Jan. 31		
HH	e(P)	18 45 14
Jan. 31		
HH	eP	19 16 12
Jan. 31		
HH	e(P)	19 30 34
Jan. 31		
SLC	eP	19 39 59

Local and Minor Earthquakes		Local and Minor Earthquakes		Local and Minor Earthquakes		Local and Minor Earthquakes
day	hour	day	hour	day	hour	hour
BUT		EUR		TUC		
Jan.		Jan.		Jan.		
16	03.2	17	19.6	20	06.2	
			21.5	21	04.1	
COL		18	12.6		06.4	
Jan.		19	05.8	22	20.2	
1	01.7	20	02.9	23	11.9	
	04.0	21	11.5		12.4	
	11.2	22	10.8	24	04.2	
3	09.6		19.0		06.2	
5	12.6	23	00.5		11.3	
	22.6		09.7	27	05.3	
7	11.3	24	05.5	28	13.2	
	16.0		07.5			
	17.8		23.0			
8	09.4	25	22.6			
9	03.2	26	17.5			
10	02.4		21.1			
	17.3	27	09.3			
12	12.7	29	02.3			
	15.8		07.8			
14	02.6		09.0			
	13.4		18.7			
	14.4	30	12.9			
16	23.3		15.0			
17	03.6		22.3			
18	06.9					
19	08.2	SLC				
20	02.9	Jan.				
	09.0	12	16.5			
	09.9					
	15.1	SJ				
	15.4	Jan.				
21	17.3	4	07.6			
	23.2	6	09.5			
22	04.0	9	01.3			
	06.2		20.2			
24	18.9	11	16.0			
	18.9		20.5			
25	10.0	14	08.6			
26	19.2	15	01.9			
27	01.8	16	16.3			
28	21.3	18	03.3			
29	04.1		20.9			
	08.7	19	05.2			
30	03.4	21	15.4			
		25	08.9			
EUR			20.2			
Jan.		26	18.6			
1	05.8		23.5			
	11.2	31	10.0			
2	01.0		18.4			
	07.0					
3	17.4	TUC				
4	03.1	Jan.				
5	02.7	1	21.2			
	11.3	4	03.9			
6	04.3	5	11.3			
	06.7	7	05.4			
7	05.3		09.4			
	22.1	8	01.3			
8	05.6	14	02.9			
	15.3		16.8			
10	23.9	17	08.5			
13	07.3	18	20.0			
	10.7	19	10.7			
15	17.3	20	01.0			
16	02.8		05.7			