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DEC 7 1956

SEISMOLOGICAL BULLETIN

ACC. NO.

September, 1956

MSI - 189

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U. S. DEPARTMENT OF COMMERCE

Sinclair Weeks, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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March 4, 2011

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
**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 (SJ)
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.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Sept.	h m s	° ′	° ′	
1	00 21 36*	15-1/2 N.	147-1/2 E.	Marianas Islands aftershock.
1	11 01 22*	15-1/2 N.	147-1/2 E.	do.
1	17 56 36*	54 N.	163-1/2 W.	Unimak Island region, Alaska.
2	14 24 47*	22-1/2 S.	178-1/2 W.	Tonga Islands region. h about 300 km.
3	14 56 52*	23 N.	120-1/2 E.	Southern Formosa.
3	18 05 11*	17-1/2 S.	163-1/2 E.	New Hebrides Islands. Felt at Vila.
3	18 41 00**			Near south coast of Greece.
4	07 31 30**			Guatemala-El Salvador border. h about 100 km.
4	08 34 32**			Central Idaho.
4	11 55 31**			Fiji Islands. h about 100 km.
4	14 11 57**			Fiji Islands region.
6	01 33 43*	7-1/2 N.	77 W.	Northwestern Colombia.
6	08 47 10**			Tonga Islands region.
6	10 40 06*	52 N.	174 E.	Near Islands, Aleutian Islands.
6	11 46 35**			Dodecanese Islands region.
6	12 58 45*	37 N.	26-1/2 E.	Dodecanese Islands.
7	03 54 18*	18 S.	176-1/2 W.	Fiji Islands region. h about 250 km.
7	09 10 30**			Near coast of northern Chile.
7	13 35 57**			Eastern Tennessee. Felt in Kentucky-North Carolina-Tennessee-Virginia border region.
8	18 08 10*	76-1/2 N.	7 E.	Arctic Ocean, west of Spitsbergen.
9	15 19 44**			Fiji Islands region. h about 550 km.
9	17 35 13*	3 N.	129 E.	Halmahera. h about 150 km.
10	04 30 46**			Near coast of northern California. Mag. 4 (Berk).
10	11 25 28*	14-1/2 N.	89-1/2 W.	El Salvador. Felt at San Salvador.
10	12 31 54*	0	101-1/2 E.	Central Sumatra. h about 250 km.
10	14 04 45*	11-1/2 N.	103-1/2 W.	Pacific Ocean, south of Mexico.
10	23 51 44*	25-1/2 S.	175-1/2 W.	Tonga Islands region.
10	23 59 26*	8-1/2 N.	83 W.	Costa Rica-Panama border.
11	02 32 28*	16-1/2 S.	178 E.	Fiji Islands. Mag. 6.
11	08 36 57**			Fiji Islands aftershock.
11	09 54 40*	14 N.	91 W.	Guatemala. h about 100 km. Mag. 6 - 6-1/4.
11	15 44 04*	17 S.	169 E.	New Hebrides. Mag. 6.
11	21 03 56*	49-1/2 N.	155 E.	Northern Kurile Islands. Mag. 6-1/4.
12	13 25 45*	23 N.	146 E.	Marianas Islands region.
12	19 59 54*	49-1/2 N.	156 E.	Kurile Islands aftershock.
13	13 53 49*	3 N.	128-1/2 E.	Near Halmahera. h about 300 km.
13	14 30 20**			About 500 miles south of Tasmania.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Sept.	h m s	° '	° '	
13	18 43 49**			New Hebrides Islands.
14	06 16 54*	15 N.	94 W.	Off coast of Chiapas, Mexico.
14	09 22 17**			Near coast of northern California. Mag. 4 (Berk).
15	07 39 04*	20 S.	69 W.	Northern Chile. Felt at Antofagasta. h about 100 km. Mag. 6-3/4.
15	10 33 09*	4 S.	151 E.	New Britain. h about 400 km.
15	16 26 30**			New Hebrides Islands.
16	08 37 22*	34 N.	69-1/2 E.	Pakistan-Afghanistan border. Felt at Kohat, Parachinar, and Rawalpindi. Mag. 6-1/4 - 6-1/2.
16	13 26 30*	19 S.	174-1/2 W.	Tonga Islands. h about 200 km.
16	14 23 22*	34 N.	69-1/2 E.	Afghanistan aftershock.
16	18 07 38*	36-1/2 N.	26 E.	Aegean Sea.
16	20 25 47*	51 N.	157 E.	Near south coast of Kamchatka. h about 60 km.
17	20 19 07*	5-1/2 N.	95 E.	Near north coast of Sumatra. h about 150 km.
18	09 48 56*	37 N.	24 W.	Azores.
18	16 02 14*	30-1/2 N.	142 E.	Off south coast of Honshu, Japan.
19	23 47 44*	23-1/2 N.	94-1/2 E.	Western Burma. Felt at Chittagong and Dacca, East Pakistan. h about 150 km.
20	03 02 50**			Near coast of northern Chile. Felt at Antofagasta.
20	13 55 00*	57-1/2 N.	152 W.	Kodiak Island, Alaska.
20	20 06 09*	51 N.	159 E.	Kamchatka foreshock.
20	21 52 01*	51-1/2 N.	159-1/2 E.	Near south coast of Kamchatka. Mag. 6-1/4.
21	03 34 46**			Kamchatka aftershock.
21	09 16 20*	20 N.	100-1/2 W.	Central Mexico.
21	19 11 59*	26-1/2 S.	63 W.	Santiago del Estero Province, Argentina. h about 600 km.
21	22 55 46*	46 N.	151-1/2 E.	Kurile Islands.
22	06 53 20*	22-1/2 S.	179-1/2 W.	Fiji Islands region. h about 650 km.
22	14 02 24*	39 N.	71 E.	Tadzhik S. S. R.
22	15 54 21*	38 N.	69 E.	do.
22	18 18 19*	45-1/2 N.	151 E.	Kurile Islands.
23	03 02 10*	45-1/2 N.	151 E.	Kurile Islands aftershock.
23	08 51 55*	31 N.	116 W.	Lower California. Mag. 4.8.
24	06 04 37*	15-1/2 S.	173-1/2 W.	Samoa Islands. Mag. 6.
24	07 02 13*	22 S.	175 E.	Fiji Islands region.
24	10 20 38*	34 N.	69-1/2 E.	Pakistan-Afghanistan border aftershock. Felt at Parachinar, Pakistan.
24	11 23 54**			Near coast of central Chile. Felt at Santiago.
24	15 38 08**			Costa Rica-Panama foreshock.
25	06 56 55**			Costa Rica-Panama foreshock. Felt at Puerto Armuelles.

Date 1956	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Sept.	h m s	° '	° '	
25	18 27 25*	8 N.	83 W.	Near Costa Rica-Panama border.
25	21 31 15*	8 N.	83 W.	Costa Rica-Panama aftershock. Felt at Puerto Armuelles.
26	05 04 01*	30-1/2 N.	142 E.	Off south coast of Honshu, Japan.
26	13 46 52*	52 N.	176 E.	Rat Islands, Aleutian Islands. h about 100 km.
28	15 01 36*	77-1/2 N.	7 E.	Off west coast of Spitsbergen.
29	03 55 27*	0	123 E.	Northern Celebes. h about 300 km.
29	09 03 37*	7-1/2 N.	94-1/2 E.	Nicobar Islands.
29	11 31 40*	12 S.	78 W.	Off coast of Peru. Felt at Lima.
29	21 20 52*	37-1/2 N.	141 E.	Central Honshu, Japan.
29	22 22 48*	3 N.	128 E.	Off north coast of Halmahera. h about 60 km.
29	23 01 00*	70-1/2 N.	9 E.	Arctic Ocean, northwest of Norway.
29	23 20 52*	35-1/2 N.	140 E.	Central Honshu, Japan. One killed, several injured, and minor property damage in Tokyo. h about 60 km. Mag. 6-3/4 - 7.
30	14 41 44*	14 N.	144 E.	Marianas Islands. Felt at Guam. h about 100 km.

Date and Station		Phase	(GCT) h m s
Sept. 1			
BC	iP		00 34 26
BOZ	iP		00 34 24
	i		34 35
BUT	eP		00 34 18
	i		34 57
COL	eP		00 32 20
EUR	iP		00 34 15
HH	iP		00 34 09
RC	iP		00 34 51
SLC	eP		00 34 29
TUC	eP		00 34 46
Sept. 1			
COL	iP		00 37 30
	i		38 09
Sept. 1			
EUR	eP		01 46 49
Sept. 1			
EUR	eP		02 38 40
Sept. 1			
EUR	eP		05 52 46
Sept. 1			
COL	eP		05 57 19
Sept. 1			
BC	eP		05 58 33
	i		58 38
	iS		59 06
	iL		59 31
EUR	eP		05 59 21
	eS		06 00 32
	iL		00 47
Sept. 1			
BC	iP		08 46 12
	iS		46 57
	iL		47 08
EUR	eP		08 46 42
	eS		47 58
	eL		48 20
Sept. 1			
SJ	iP		09 41 18
Sept. 1			
BUT	eP		11 14 04
COL	eP		11 12 09
EUR	eP		11 14 59
HH	eP		11 13 54
RC	eP		11 14 36

Date and Station		Phase	(GCT) h m s
Sept. 1			
COL	eP		11 29 14
Sept. 1			
COL	eP		12 36 35
HH	e(P)		12 32 21
Sept. 1			
COL	iP		13 47 59
Sept. 1			
COL	eP		15 33 09
	i		33 33
	iS		34 11
	iL		34 23
Sept. 1			
COL	iP		16 06 46
Sept. 1			
RC	e(P)		16 28 08
Sept. 1			
BC	iP		18 04 11
COL	eP		17 59 55
	i		18 00 03
	i		00 20
	eL		03 55
EUR	eP		18 03 31
	i		03 43
HH	eP		18 02 59
	iPcP		05 57
RC	eP		18 04 18
SJ	e(P)		18 08 45
TUC	e(P)		18 04 38
Sept. 1			
EUR	iP		18 09 47
Sept. 1			
EUR	iP		18 33 18
Sept. 1			
BC	eP		19 37 13
EUR	iP		19 36 35
HH	eP		19 36 34
RC	eP		19 38 15
TUC	e(P)		19 38 16
Sept. 1			
HH	e(P)		20 46 53
Sept. 1			
COL	iP		20 46 48
EUR	eP		20 50 26
	i		52 38

Date and Station		Phase	(GCT) h m s
HH	e(P)		20 49 54
Sept. 1			
EUR	eP		21 35 14
	iP		35 17
Sept. 2			
EUR	eP		00 37 56
TUC	eP		00 36 47
Sept. 2			
EUR	eP		00 42 58
	e		43 24
Sept. 2			
BH	eP		02 02 17
Sept. 2			
BC	iP		02 47 17
	iS		47 55
	iL		48 15
EUR	iP		02 48 04
	iS		49 20
	iL		49 36
HH	e(P)		02 50 16
TUC	eP		02 47 46
	iP		48 04
	iS		48 46
	iL		49 00
Sept. 2			
COL	iP		04 58 03
Sept. 2			
EUR	eP		05 34 24
HH	e(P)		05 34 02
	e		35 03
Sept. 2			
COL	iP		09 25 25
Sept. 2			
COL	iP		09 27 37
HH	e(P)		09 30 35
	e		32 43
TUC	eP		09 32 06
Sept. 2			
BUT	eP		10 37 25
Sept. 2			
EUR	eP		11 31 21
Sept. 2			
COL	eP		11 47 22
Sept. 2			
COL	eP		13 50 43
EUR	eP		13 53 59

Date and Station		Phase	(GCT) h m s
Sept. 2			
COL	iP		14 37 17
EUR	iP		14 36 53
Sept. 2			
EUR	eP		16 19 17
Sept. 2			
BOZ	eP		17 40 48
BUT	eP		17 41 08
	e		41 40
Sept. 2			
COL	eP		19 42 07
EUR	eP		19 44 01
HH	e(P)		19 43 41
Sept. 2			
COL	eP		23 56 15
Sept. 3			
COL	iP		02 15 25
	iS		15 52
	iL		16 02
EUR	eP		02 21 16
HH	iP		02 20 16
	e		21 15
Sept. 3			
EUR	eP		02 24 06
Sept. 3			
COL	eP		03 11 46
EUR	eP		03 11 26
Sept. 3			
EUR	eP		03 27 23
TUC	eP		03 26 12
Sept. 3			
BUT	eP		08 10 28
Sept. 3			
COL	iP		08 19 28
EUR	eP		08 18 29
HH	iP		08 18 39
	i		18 54
SJ	eP		08 11 59
Sept. 3			
COL	eP		08 25 30
EUR	eP		08 28 43
Sept. 3			
COL	iP		09 36 09

Date and Station		Phase (GCT) h m s
Sept. 3		
EUR	eP	10 17 28
Sept. 3		
COL	iP	12 46 58
Sept. 3		
EUR	eP	13 32 23
Sept. 3		
COL	iP	15 08 07
HH	iP	15 10 13
Sept. 3		
BC	eP	18 18 14
COL	eP	18 18 07
EUR	iP	18 18 16
	i	18 47
TUC	eP	18 18 24
Sept. 3		
COL	eP	18 26 33
Sept. 3		
COL	eP	18 53 00
HH	eP	18 53 45
Sept. 3		
EUR	iP	19 20 43
Sept. 3		
EUR	eP	20 47 29
Sept. 3		
BH	eP	21 06 57
	iS	07 23
Sept. 3		
EUR	eP	21 55 33
	i	55 48
	e	59 26
HH	e(P)	21 55 48
SLC	eP	21 55 40
Sept. 4		
COL	eP	02 14 30
HH	e(P)	02 16 39
Sept. 4		
EUR	eP	05 52 57
SLC	eP	05 53 14
Sept. 4		
BC	eP	07 37 51
BUT	eP	07 38 41
COL	eP	07 42 00
	epP	42 33
COLU	iP	07 36 21
EUR	eP	07 38 18
	epP	38 45
HH	eP	07 39 00
RC	eP	07 37 57
SLC	eP	07 38 04
TUC	eP	07 37 08
	iP	37 12
	ipP	37 39
Sept. 4		
BC	eP	08 37 05
	eL	38 56
BOZ	iP	08 35 27
	i(S)	35 56
	iL	36 08
BUT	iP	08 35 11
	i	35 15
	iS	35 41
	iL	35 45
EUR	eP	08 35 46
	iP	35 52
	iS	36 49
	iL	37 00
HH	iP	08 35 34
	iS	36 25
	iL	36 37
Sept. 4		
EUR	eP	10 53 41
HH	eP	10 54 09
Sept. 4		
COL	iP	12 07 55
EUR	iP	12 07 37
	ipP	07 58
HH	eP	12 08 04
TUC	iP	12 07 40
Sept. 4		
BC	iP	14 23 57
BOZ	eP	14 24 37
BUT	eP	14 24 32
COL	iP	14 24 31
EUR	iP	14 24 03
	i	24 27
Sept. 4		
EUR	eP	19 13 21
HH	e(P)	19 13 00
Sept. 4		
HH	e(P)	20 49 36
Sept. 4		
COL	eP	21 43 54
Sept. 4		
HH	e(P)	23 59 09
Sept. 5		
BC	e(P)	01 49 22
	e(S)	51 34
	iL	52 00
EUR	iP	01 50 12
	i	53 45
HH	e(P)	01 52 00
SLC	eP	01 50 21
	e	54 28
TUC	eP	01 48 21
	i	48 39
	eL	49 31
Sept. 5		
BUT	eP	01 57 04
Sept. 5		
COL	eP	07 14 10
Sept. 5		
EUR	eP	09 01 56
Sept. 5		
EUR	eP	11 57 44
	e	57 59
TUC	eP	11 58 49
Sept. 5		
COL	iP	13 39 36
EUR	iP	13 39 03
Sept. 5		
COL	eP	15 49 48
EUR	eP	15 48 47
	i	49 02
Sept. 5		
COL	eP	15 55 48
EUR	eP	15 56 03
Sept. 5		
COL	iP	16 14 35
EUR	iP	16 13 33
HH	eP	16 13 09
Sept. 5		
HH	e(P)	17 57 12
Sept. 5		
BOZ	e(P)	18 31 13
HH	eP	18 31 06
Sept. 5		
EUR	eP	20 11 37
Sept. 5		
EUR	eP	20 55 19
Sept. 6		
BC	e(P)	00 10 17
	iP	10 24
EUR	eP	00 10 25
	i	10 40
TUC	eP	00 10 19
Sept. 6		
BH	eP	01 31 28
EUR	eP	01 39 20
	i	39 34
HH	eP	01 39 53
RC	eP	01 38 50
SJ	eP	01 34 26
	i	34 35
TUC	eP	01 38 21
Sept. 6		
COL	eP	05 53 25
	e	54 00
EUR	iP	05 57 22
HH	e(P)	05 56 28
	e	56 47
RC	eP	05 57 41
Sept. 6		
BC	iP	08 59 08
	ipP	59 42
BOZ	eP	08 59 47
COL	iP	08 59 44
	i	59 53
	ipP	09 00 21
EUR	iP	08 59 14
	ipP	59 49
HH	e(P)	08 59 52
TUC	eP	08 59 14
UK	eP	08 58 47
	epP	59 24
Sept. 6		
EUR	eP	09 17 47
TUC	eP	09 16 33

Date and Station		Phase	(GCT) h m s
Sept. 6			
BC		eP	10 49 16
		i	49 26
COL		iP	10 45 14
EUR		eP	10 48 53
HH		eP	10 48 25
RC		eP	10 49 26
		e	49 31
		e	54 31
TUC		eP	10 49 52
Sept. 6			
EUR		eP	10 53 54
HH		eP	10 53 46
Sept. 6			
BOZ		eP	11 59 42
BUT		eP	11 59 40
COL		eP	11 58 45
EUR		e(P)	12 00 09
HH		eP	11 59 31
RC		eP	11 59 27
SJ		eP	11 58 55
		i	59 15
Sept. 6			
HH		e(P)	12 47 43
Sept. 6			
COL		eP	13 03 26
Sept. 6			
COL		eP	13 10 46
		i	10 51
HH		eP	13 11 35
Sept. 6			
EUR		eP	13 26 59
Sept. 6			
COL		eP	14 50 32
Sept. 6			
EUR		eP	17 44 52
HH		eP	17 44 45
Sept. 6			
COL		iP	22 58 52
HH		e(P)	22 57 47
		i	58 03
SJ		i(P)	22 51 22

Date and Station		Phase	(GCT) h m s
Sept. 7			
HH		e(P)	00 11 15
Sept. 7			
BC		iP	04 05 57
		i	06 12
		ipP	06 57
BOZ		eP	04 06 36
BUT		eP	04 06 33
		epP	07 34
COL		iP	04 06 31
		e	06 47
		ipP	07 34
EUR		iP	04 06 03
		ipP	07 00
HH		iP	04 06 33
		ePP	09 57
RC		eP	04 06 56
SLC		iP	04 06 21
		epP	07 20
TUC		iP	04 06 03
		epP	07 02
Sept. 7			
HH		e(P)	06 00 04
Sept. 7			
BC		eP	09 22 18
EUR		iP	09 22 36
HH		eP	09 23 06
RC		eP	09 22 27
TUC		eP	09 21 47
Sept. 7			
EUR		eP	09 47 03
Sept. 7			
COL		eP	12 41 46
EUR		eP	12 42 36
Sept. 7			
EUR		eP	12 49 42
		epP	51 21
Sept. 7			
EUR		eP	13 34 07
Sept. 7			
COLU		eP	13 36 49
		eS	37 31
		iL	37 36
Sept. 7			
COLU		eP	13 50 22
		eS	51 04
		iL	51 07

Date and Station		Phase	(GCT) h m s
Sept. 7			
HH		eP	15 24 26
Sept. 7			
BC		e(P)	17 36 26
EUR		eP	17 37 02
		i	38 38
Sept. 7			
HH		e(P)	18 02 26
Sept. 7			
HH		e(P)	18 20 04
Sept. 7			
EUR		eP	19 50 50
Sept. 7			
EUR		eP	20 07 09
Sept. 7			
HH		e(P)	22 09 41
Sept. 8			
COL		eP	04 14 03
Sept. 8			
COL		iP	04 46 35
Sept. 8			
BC		eP	07 58 26
		i	58 43
		e(S)	59 19
		iL	59 52
EUR		eP	07 59 15
		i	08 00 14
		eS	01 21
		eL	01 39
Sept. 8			
COLU		eP	08 06 18
EUR		eP	08 08 25
HH		e(P)	08 09 14
Sept. 8			
EUR		eP	08 35 50
Sept. 8			
COL		e(P)	08 49 55
		eP	50 01
Sept. 8			
HH		e(P)	09 10 29
Sept. 8			
COL		eP	13 35 00
Sept. 8			
BUT		eP	13 54 06
Sept. 8			
COL		iP	14 06 53
Sept. 8			
COL		iP	15 51 15

Date and Station		Phase	(GCT) h m s
COL		i	15 51 48
		i	52 01
		i	52 20
Sept. 8			
COL		iP	16 10 06
EUR		iP	16 13 45
		i	14 01
Sept. 8			
HH		e(P)	16 59 42
Sept. 8			
COL		iP	17 50 07
Sept. 8			
BC		iP	18 18 34
BUT		eP	18 17 21
COL		iP	18 15 28
EUR		iP	18 18 11
		i	18 19
		i	19 01
HH		iP	18 17 05
		iPcP	18 26
TUC		iP	18 18 52
UK		e(P)	18 18 23
		e	18 30
Sept. 8			
COL		e(P)	19 25 31
Sept. 9			
COL		eP	00 44 21
Sept. 9			
EUR		eP	01 46 30
Sept. 9			
COL		iP	02 07 16
EUR		eP	02 10 42
		i	10 59
Sept. 9			
COL		eP	03 09 13
Sept. 9			
COL		iP	03 23 22
Sept. 9			
COL		iP	09 07 47
EUR		iP	09 11 04
		e	11 50
Sept. 9			
COL		eP	10 01 07
Sept. 9			
EUR		iP	11 43 04

Date and Station		Phase (GCT)
		h m s
Sept. 9		
COL	e(P)	11 53 56
	i	55 06
Sept. 9		
COL	eP	13 25 39
Sept. 9		
COL	eP	13 59 27
Sept. 9		
COL	iP	14 03 21
Sept. 9		
BC	iP	15 31 27
COL	iP	15 31 54
	ipP	33 55
EUR	iP	15 31 32
HH	eP	15 31 59
UK	eP	15 31 11
Sept. 9		
COL	eP	17 10 33
Sept. 9		
COL	e(P)	17 14 46
Sept. 9		
COL	eP	17 47 36
	e(S)	58 01
EUR	e(P)	17 49 39
HH	eP'	17 53 09
SJ	eP'	17 55 16
Sept. 9		
COL	eP	18 16 53
Sept. 9		
EUR	iP	18 32 11
HH	e(P)	18 32 45
SJ	eP	18 27 54
Sept. 10		
HH	e(P)	00 39 58
Sept. 10		
BUT	eP	01 28 48
Sept. 10		
BC	eP	02 19 55
COL	e	02 49 42
	eL	03 01 12
EUR	iP	02 20 10
TUC	eP	02 19 42
	e	19 45
	e	21 24
	iS	30 40

Date and Station		Phase (GCT)
		h m s
TUC	e	02 32 40
Sept. 10		
EUR	eP	03 29 46
	e	32 38
HH	eP	03 30 48
Sept. 10		
BC	e(P)	04 32 55
	i	33 11
EUR	e(P)	04 32 25
	eP	32 29
HH	e(P)	04 33 31
UK	eP	04 31 10
	e(S)	31 48
	eL	31 54
Sept. 10		
EUR	eP	06 29 00
Sept. 10		
BC	e(P)	07 13 18
	eP	13 23
BUT	eP	07 14 32
EUR	iP	07 13 48
	e	15 35
HH	eP	07 14 49
SLC	e(P)	07 13 53
	iP	13 56
TUC	eP	07 12 45
Sept. 10		
EUR	iP	08 14 23
	i	15 28
Sept. 10		
COL	e(S)	11 23 35
	e	34 02
	eL	37 31
EUR	eP	11 32 18
HH	eP	11 33 01
Sept. 10		
TUC	eP	12 16 35
Sept. 10		
BC	iPP	12 53 40
BUT	ePP	12 53 19
EUR	eP'	12 50 36
	iPP	53 10
HH	eP'	12 50 24
	ePP	52 18
	e	53 34
SLC	ePP	12 53 34

Date and Station		Phase (GCT)
		h m s
TUC	iPP	12 53 56
Sept. 10		
EUR	eP	13 03 37
HH	e(P)	13 00 15
Sept. 10		
BC	eP	14 09 37
EUR	eP	14 10 07
Sept. 10		
BC	eP	14 10 25
BOZ	eP	14 11 41
	e(S)	17 26
	eL	20 18
BUT	eP	14 11 46
	ePcP	14 10
CHI	eS	14 16 59
	eL	20 38
EUR	iP	14 10 59
	i	11 13
HH	iP	14 12 08
	ePcP	13 59
SLC	eP	14 11 02
	eS	16 17
	eL	18 15
SJ	eP	14 11 50
TUC	eP	14 09 45
	iP	09 50
	i	10 46
	e(PcP)	12 24
	iS	14 04
	i	14 06
	eL	17 16
UK	eP	14 11 22
Sept. 10		
EUR	eP	14 16 46
Sept. 10		
BC	eP	14 51 04
EUR	eP	14 51 37
Sept. 10		
EUR	eP	18 35 06
Sept. 10		
HH	e(P)	20 27 21
Sept. 11		
BH	eP	00 00 20
	iS	01 05
BC	eP	00 04 20
BUT	eP	00 05 00

Date and Station		Phase (GCT)
		h m s
COL	iP	00 05 00
	eS	15 38
	i	16 07
EUR	iP	00 04 26
HH	eP	00 04 57
TUC	eP	00 04 22
Sept. 11		
BC	iP	00 07 08
BOZ	eP	00 07 41
BUT	eP	00 07 50
COL	iP	00 10 53
	eS	19 52
COLU	iP	00 05 01
	eL	12 47
EUR	iP	00 07 35
HH	iP	00 08 08
	iPcP	09 36
SLC	eP	00 07 16
	e	09 14
SJ	eP	00 03 52
TUC	iP	00 06 27
Sept. 11		
BH	eP	00 09 30
	iS	09 48
Sept. 11		
EUR	eP	00 30 35
Sept. 11		
EUR	iP	01 06 55
Sept. 11		
EUR	eP	01 11 47
Sept. 11		
BC	iP	02 44 52
	i	44 57
	i	45 24
BOZ	eP	02 45 27
	iP	45 33
BUT	eP	02 45 23
COL	iP	02 45 06
	iS	45 34
	ePS	56 59
	eL	03 07 34
EUR	iP	02 44 56
	i	45 26
	iPP	48 05
HH	eP	02 45 23

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Date and Station		Phase	(GCT) h m s
RC	eP		02 45 48
	iPP		49 38
SLC	iP		02 45 13
	e(PP)		48 33
	eS		55 45
	eL		03 12 41
TUC	eP		02 45 01
	iP		45 06
UK	iP		02 44 30
Sept. 11			
EUR	eP		03 35 04
Sept. 11			
EUR	eP		03 40 31
Sept. 11			
EUR	iP		03 50 20
HH	eP		03 50 51
TUC	eP		03 50 17
Sept. 11			
EUR	e(P)		04 27 16
	iP		27 20
TUC	eP		04 27 54
Sept. 11			
EUR	eP		05 00 45
TUC	eP		05 00 49
Sept. 11			
HH	e(P)		07 47 38
Sept. 11			
BC	eP		08 49 21
COL	iP		08 49 30
	i		50 12
EUR	eP		08 49 22
	i		49 43
HH	e(P)		08 50 09
TUC	eP		08 49 30
Sept. 11			
BC	eP		10 00 48
	isP		01 20
	iS		06 04
	iL		10 40
BOZ	eP		10 01 35
	e(S)		07 25
	eL		11 13
BUT	eP		10 01 43
	ipP		02 12
	e(S)		07 26
	[illegible]		[illegible] 03
	[illegible]		[illegible] 04

Date and Station		Phase	(GCT) h m s
CHI	eP		10 00 23
	eS		05 15
	eL		05 53
COL	iP		10 05 04
	e(ScS)		14 59
	e		16 03
	eL		23 35
COLU	eP		09 59 30
	ipP		59 45
	iPP		10 00 15
	i		00 32
	iS		03 45
	e		04 26
	eL		05 54
EUR	iP		10 01 16
	isP		01 57
HH	eP		10 02 04
	ePcP		04 12
RC	e(P)		10 01 13
	esP		01 34
	ePP		02 16
SLC	eP		10 01 04
	ipP		01 27
	eS		06 30
	eL		10 09
Sept. 11			
TUC	eP		10 00 07
	ePP		01 02
	eS		04 42
	iS		04 56
	eL		07 46
UK	e(P)		10 01 50
WASH	eP		10 00 30
	e(sP)		00 58
	iS		05 14
	eL		07 24
Sept. 11			
COL	iP		12 48 21
EUR	iP		12 51 50
Sept. 11			
BC	iP		15 57 05
	i		57 12
BUT	eP		15 57 35
COL	iP		15 57 04
	e		58 12
EUR	iP		15 57 06
HH	e(P)		15 57 30
TUC	eP		15 57 22
UK	iP		15 56 48

Date and Station		Phase	(GCT) h m s
Sept. 11			
COL	iP		16 02 57
Sept. 11			
BC	eP		20 53 35
	i		53 47
COL	iP		20 54 14
	i		54 25
EUR	iP		20 53 47
HH	e(P)		20 54 11
Sept. 11			
BC	iP		21 14 30
BOZ	eP		21 14 01
BUT	eP		21 13 54
	eS		21 53
	eSS		26 03
	eL		28 38
COL	iP		21 10 35
	iPP		11 49
	e(PcP)		13 26
	eS		15 49
	e		16 11
	eL		17 30
COLU	eP		21 16 24
	eS		26 37
	e(ScS)		27 05
	eL		40 00
EUR	iP		21 14 10
HH	iP		21 13 38
	iPcP		14 16
	ePP		16 17
RC	iP		21 14 36
SLC	eP		21 14 21
	eS		22 46
	e		25 47
	eL		31 45
SIT	iP		21 11 39
	ePcP		13 27
	iS		17 42
	i		18 10
	i(ScS)		20 49
	eL		24 24
TUC	e(P)		21 15 03
UK	eP		21 13 42
	e		14 09
Sept. 11			
EUR	eP		21 43 33
Sept. 11			
EUR	eP		22 18 23
Sept. 11			
EUR	eP		23 18 20

Date and Station		Phase	(GCT) h m s
Sept. 12			
EUR	eP		03 49 11
Sept. 12			
EUR	eP		06 16 13
Sept. 12			
COL	iP		06 37 04
	i		37 10
Sept. 12			
BC	iP		10 30 23
COL	eP		10 26 18
	i		26 25
EUR	iP		10 29 56
HH	e(P)		10 29 23
RC	eP		10 31 36
TUC	eP		10 31 03
	e		31 14
Sept. 12			
EUR	eP		10 32 23
Sept. 12			
EUR	eP		12 24 18
RC	e(P)		12 23 08
TUC	e(P)		12 23 55
Sept. 12			
BC	iP		13 38 16
BOZ	eP		13 38 08
BUT	eP		13 38 04
COL	iP		13 35 52
EUR	iP		13 38 05
HH	iP		13 37 54
RC	eP		13 38 35
SLC	eP		13 38 16
TUC	eP		13 38 38
Sept. 12			
EUR	eP		17 29 30
Sept. 12			
COL	iP		18 45 50
Sept. 12			
BC	eP		19 54 31
	e		58 34
	eL		20 00 49
BOZ	eP		19 56 15
BUT	eP		19 56 27

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Date and Station		Phase (GCT)
		h m s
EUR	eP	19 55 17
	e	20 00 25
HH	eP	19 56 43
RC	iP	19 56 05
SLC	eP	19 55 23
TUC	eP	19 55 16
	i	56 00
UK	eP	19 56 08
Sept. 12		
BC	iP	20 10 26
BOZ	eP	20 09 56
BUT	eP	20 09 48
COL	iP	20 06 29
	iS	11 36
	eL	12 41
COLU	eP	20 12 19
EUR	iP	20 10 04
	i	10 33
HH	iP	20 09 32
	i	10 31
RC	iP	20 10 31
	e	11 00
SLC	iP	20 10 15
UK	iP	20 09 38
	e	10 02
Sept. 12		
EUR	eP	23 36 54
Sept. 13		
EUR	eP	01 50 23
Sept. 13		
COL	eP	11 52 22
	i(P)	53 59
Sept. 13		
EUR	eP	12 16 16
Sept. 13		
COL	eP	14 10 06
Sept. 13		
EUR	eP	14 19 33
Sept. 13		
EUR	eP	14 49 28
Sept. 13		
COL	eP	14 59 19
EUR	eP	15 00 47
HH	e(P)	15 00 04
Sept. 13		
BC	eP	18 56 46
	i	56 55
EUR	eP	18 56 50
Sept. 13		
EUR	eP	19 02 30
Sept. 13		
EUR	eP	19 29 58
Sept. 13		
EUR	eP	20 00 00
Sept. 14		
BC	e(P)	02 12 21
	i	12 46
EUR	eP	02 13 14
TUC	eP	02 12 15
	i	12 35
	e(S)	13 04
	iL	13 17
Sept. 14		
EUR	eP	03 48 09
	e	48 46
Sept. 14		
BC	iP	06 22 48
BUT	eP	06 23 47
COL	iP	06 27 13
COLU	eP	06 22 07
	eS	26 06
	eL	27 31
EUR	iP	06 23 16
	i	23 45
	iPP	24 04
HH	eP	06 24 08
RC	eP	06 23 06
SLC	eP	06 23 07
SJ	eP	06 22 39
TUC	iP	06 22 02
	e	22 07
	eS	26 35
	eL	29 23
Sept. 14		
COL	iP	09 07 51
EUR	iP	09 08 44
	epP	09 30
Sept. 14		
COL	iP	09 20 35
Sept. 14		
BUT	eP	09 25 00
EUR	iP	09 24 09
	eS	25 46
	iL	26 01
HH	eP	09 25 03
RC	eP	09 26 13
TUC	eP	09 25 46
UK	eP	09 22 55
	e(S)	23 21
	eL	23 38
Sept. 14		
UK	eP	10 00 51
	i	01 15
Sept. 14		
BC	iP	12 19 06
COL	iP	12 19 29
EUR	iP	12 19 11
	ipP	19 31
HH	iP	12 19 39
TUC	eP	12 19 14
Sept. 14		
BOZ	eP	13 50 31
	i	50 43
HH	e(P)	13 51 30
	e(S)	52 10
	eL	52 21
Sept. 14		
COL	eP	15 53 27
EUR	eP	15 57 12
	e	57 50
Sept. 14		
EUR	eP	16 28 58
HH	eP	16 28 37
Sept. 15		
HH	e(P)	00 48 19
Sept. 15		
EUR	iP	01 03 39
Sept. 15		
EUR	eP	04 06 41
Sept. 15		
BUT	eP	06 45 17
Sept. 15		
BH	iP	07 21 08
	eS	22 06
RC	eP	07 27 40
Sept. 15		
BH	e(P)	07 45 05
BC	iP	07 50 16D
	ipP	50 41
	i(sP)	50 51
	eS	59 27
	iP'P'	08 18 09
BOZ	iP	07 50 44C
	ipP	51 11
	eS	08 00 21
	ePS	01 07
	esSS	06 03
	eL	14 07
BUT	eP	07 50 51D
	ipP	51 16
	isP	51 29
	i	52 43
	eS	08 00 35
	iPS	01 14
	esSS	06 15
	eL	10 15
COL	iP	07 52 57C
	e	56 17
	iPP	57 06
COLU	iP	07 48 32D
	ipP	48 56
	isP	49 08
	ePP	50 45
	iS	56 07
	isS	56 47
	iScS	58 11
	i	58 54
	eL	08 03 30
EUR	iP	07 50 33D
	ipP	51 05
HH	iP	07 51 04D
	ipP	51 30
	isP	51 41
	ePP	54 03
	i	55 17
	eS	08 00 47
	e(ScS)	00 57
	ePS	01 57
PHIL	i(P)	07 49 40
	e	52 33
	eS	57 10
	e	57 49
	isS	57 54
	i(ScS)	58 48
	i	59 32
	eL	08 04 15
RC	iP	07 50 17C
	ipP	50 48
	iS	59 28
	eScS	08 00 10
SLC	eP	07 50 27C
	ipP	50 50
	isP	51 04
	eS	59 45
	ePS	08 00 31
	eL	09 07
SJ	iP	07 46 20D
	ipP	46 45
	isP	47 05
	i	48 15
	e(ScP)	52 06

Date and Station		Phase	(GCT) h m s
TUC	iP		07 49 45D
	ePcP		50 14
	esP		50 21
	esPP		52 52
	eS		58 20
	iS		58 24
	esS		59 04
	i		59 34
	eL		08 07 15
UK	iP		07 50 57D
	e(sP)		51 29
WASH	iP		07 49 03D
	ipP		49 29
	i(PP)		51 31
	eS		56 51
	esS		57 51
	eSS		08 01 09
	eL		08 21
	e(P'P')		18 35
Sept. 15			
EUR	eP		08 18 09
Sept. 15			
BC	iP		10 45 55
COL	iP		10 44 47
	ipP		46 15
	esP		46 43
EUR	iP		10 45 51
	iPP		49 52
HH	eP		10 45 58
	ePP		49 53
SJ	i(P')		10 54 59
Sept. 15			
EUR	eP		11 34 41
Sept. 15			
EUR	eP		12 23 26
	i		24 23
UK	eP		12 22 53
	e		23 39
Sept. 15			
BC	eP		16 39 28
EUR	eP		16 39 29
UK	eP		16 40 48
Sept. 15			
EUR	eP		16 58 14
Sept. 15			
HH	i(P)		23 38 22
Sept. 16			
COL	eP		00 13 19
	i		13 33

Date and Station		Phase	(GCT) h m s
EUR	eP		00 16 54
SIT	eP		00 12 29
	iS		13 05
	iL		13 19
Sept. 16			
BC	eP		03 10 41
BUT	eP		03 10 57
EUR	iP		03 10 48
HH	eP		03 10 56
RC	e(P)		03 10 35
SLC	eP		03 10 43
Sept. 16			
EUR	iP		03 51 35
	ipP		51 55
Sept. 16			
HH	eP		05 24 21
Sept. 16			
UK	eP		07 55 47
Sept. 16			
BOZ	eP		08 44 17
BUT	eP		08 45 24
EUR	eP		08 43 58
HH	eP		08 44 44
RC	eP		08 44 49
TUC	eP		08 42 56
Sept. 16			
BC	eP'		08 56 00
	e		09 00 57
BOZ	eP'		08 54 41
	eSKS		09 01 56
	ePS		04 20
	eL		25 30
BUT	eP		08 51 16
	eP'		54 27
	eS		09 01 56
	e		04 34
	e		14 08
	eL		24 19
COL	iP		08 49 15
	e		50 42
	ePP		52 02
	ePPP		54 04
	iS		59 03
	iPPS		09 00 03
	e		01 26
	eSS		03 58
	eSSS		07 25
	eL		08 23

Date and Station		Phase	(GCT) h m s
COLU	eSKS		09 02 20
	eSKKS		03 11
	e(S)		04 05
	ePS		05 14
	eSS		11 20
	eL		24 10
EUR	eP		08 51 46
	e		54 54
	iPP		56 13
HH	eP		08 50 59
	e		54 05
	iPP		54 58
	eS		09 01 38
	ePKKP		07 34
PHIL	eSKS		09 01 42
	iSKS		01 47
	eSS		09 28
	eL		14 03
RC	eP		08 51 18
	ePP		55 30
	e		57 03
	eL		09 23 28
SLC	eP		08 51 39
	ePP		55 56
	eSKS		09 02 10
	eL		25 17
SIT	ePP		08 53 32
	eS		09 00 35
	eSS		06 21
	eL		13 07
TUC	eP'		08 56 10
	e		56 56
	e(PP)		57 04
	ePS		09 06 48
	eL		36 10
Sept. 16			
EUR	eP		09 07 11
Sept. 16			
EUR	eP		09 15 34
Sept. 16			
HH	eP		09 32 27
	i		32 40
	i(S)		33 16
	iL		33 35
Sept. 16			
BC	iP		13 38 21
	ipP		39 11
BUT	eP		13 39 03
	ipP		39 57
COL	iP		13 38 54
	ipP		39 54
EUR	eP		13 38 28
	ipP		39 20

Date and Station		Phase	(GCT) h m s
HH	eP		13 38 57
	epP		39 53
SLC	eP		13 38 44
	epP		39 39
TUC	eP		13 38 27
	epP		39 20
UK	eP		13 38 04
	epP		38 56
Sept. 16			
HH	e(P)		14 12 49
Sept. 16			
COL	iP		14 35 16
EUR	eP'		14 41 54
Sept. 16			
HH	e(P)		16 38 30
Sept. 16			
EUR	eP		16 44 45
HH	e(P)		16 44 33
Sept. 16			
BUT	eP		18 20 47
EUR	eP		18 21 17
HH	eP		18 20 33
	i		20 41
RC	eP		18 20 29
SJ	eP		18 19 56
Sept. 16			
BC	eP		18 55 25
Sept. 16			
BUT	eP		19 02 03
HH	e(P)		18 59 53
	eL		19 00 57
Sept. 16			
BC	iP		20 36 04
	ipP		36 20
BUT	eP		20 35 47
EUR	iP		20 35 45
	ipP		36 01
HH	eP		20 35 10
SLC	eP		20 35 53
TUC	eP		20 36 37
	epP		36 53
UK	eP		20 35 17
	ipP		35 33

Date and Station		Phase (GCT)
		h m s
Sept. 16		
EUR	eP	21 34 37
Sept. 16		
BC	iP	23 44 40
EUR	iP	23 44 43
HH	e(P)	23 44 58
TUC	iP	23 44 43
Sept. 16		
EUR	eP	23 48 19
Sept. 17		
EUR	eP	01 09 55
HH	eP	01 09 56
RC	eP	01 11 35
Sept. 17		
BC	iP	02 02 05
EUR	eP	02 02 39
TUC	eP	02 01 04
Sept. 17		
HH	eP	03 57 29
Sept. 17		
EUR	eP	04 02 29
Sept. 17		
BC	iP	04 36 01
EUR	iP	04 36 28
HH	eP	04 37 19
SLC	eP	04 36 18
TUC	iP	04 35 15
Sept. 17		
EUR	eP	05 29 42
TUC	eP	05 29 36
Sept. 17		
EUR	eP	05 35 58
RC	e(P)	05 36 22
Sept. 17		
HH	e(P)	07 35 28
Sept. 17		
EUR	eP	07 46 37
TUC	eP	07 44 27
Sept. 17		
EUR	iP	08 40 13
	epP	40 41
		h m s
HH	iP	08 39 14
	e	39 40
Sept. 17		
EUR	eP	16 28 58
Sept. 17		
HH	e(P)	16 38 15
Sept. 17		
BC	iPP	20 41 21
BUT	ePP	20 39 07
EUR	iP'	20 37 54
	iPP	39 56
HH	eP'	20 37 41
	ePP	39 11
	i(PKKP)	47 18
SLC	ePP	20 40 03
SJ	eP'	20 38 41
TUC	iPP	20 41 38
Sept. 17		
EUR	eP	20 50 47
Sept. 17		
COL	iP	21 48 14
	e	48 36
Sept. 17		
BC	e(P)	23 40 37
EUR	eP	23 41 23
	iP	41 26
HH	iP	23 42 51
TUC	e(P)	23 41 30
Sept. 18		
EUR	eP	00 00 11
HH	eP	00 01 37
TUC	e(P)	00 00 35
Sept. 18		
HH	eP	02 29 06
	e(S)	29 41
	iL	29 52
Sept. 18		
COL	iP	02 40 39
Sept. 18		
TUC	eP	05 25 11
Sept. 18		
HH	e(P)	05 26 54
	eL	27 34
Sept. 18		
HH	e(P)	07 30 59
		h m s
Sept. 18		
EUR	iP	08 49 05
HH	i(P)	08 53 55
Sept. 18		
BC	eP	10 00 11
EUR	eP	10 00 04
HH	eP	09 59 27
SLC	eP	09 59 42
TUC	e(P)	10 00 07
	e	00 17
Sept. 18		
EUR	eP	12 23 55
Sept. 18		
EUR	iP	12 29 57
Sept. 18		
COL	eP	13 56 35
Sept. 18		
COL	iP	15 07 50
EUR	iP	15 11 30
	i	11 48
Sept. 18		
BC	eP	16 14 35
BUT	eP	16 14 21
COL	e(P)	16 11 47
EUR	eP	16 14 22
HH	eP	16 14 03
	e	14 15
RC	eP	16 14 49
Sept. 18		
HH	e(P)	16 22 58
Sept. 18		
EUR	eP	18 18 19
Sept. 18		
EUR	eP	18 36 28
Sept. 19		
HH	eP	06 50 45
Sept. 19		
EUR	eP	12 19 27
Sept. 19		
COL	iP	15 03 11
EUR	iP	15 07 01
Sept. 19		
EUR	eP	15 32 35
		h m s
Sept. 19		
HH	e(P)	19 49 19
Sept. 19		
COL	:	23 59 43
	ipP	00 00 13
EUR	eP'	00 06 06
	epP'	06 49
HH	eP	00 01 39
	e	04 28
	e	04 51
	eP'	05 44
	ePP	06 18
	e(SKS)	12 03
	ePKKP	17 29
RC	epP'	00 06 56
SJ	iPP	00 10 14
TUC	eP'	00 06 29
	e	08 28
	e	09 51
Sept. 20		
EUR	iP	00 17 18
Sept. 20		
BC	eP	03 14 14
	e	14 45
COLU	eP	03 12 23
EUR	eP	03 14 31
HH	eP	03 14 51
RC	eP	03 14 21
	e	14 30
SJ	eP	03 10 20
	i	10 33
TUC	eP	03 13 31
	e	13 49
Sept. 20		
COL	iP	11 18 22
Sept. 20		
COL	iP	12 47 43
Sept. 20		
BC	eP	14 01 35
COL	iP	13 56 54
	ipP	57 15
	i	57 39
	i(S)	58 09
	iL	58 47
EUR	iP	14 01 06
HH	eP	14 00 22
RC	eP	14 01 38

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Date and Station		Phase (GCT) h m s
TUC	eP	14 02 18
Sept. 20		
BC	eP	20 16 22
	iPcP	17 09
COL	iP	20 12 17
	i	12 43
EUR	iP	20 16 01
	iPcP	16 44
HH	eP	20 15 26
RC	eP	20 16 28
	e	16 32
TUC	eP	20 17 19
Sept. 20		
BC	iP	22 02 11
	i	02 29
	iS	10 42
BOZ	eP	22 01 40
BUT	iP	22 02 06
COL	iP	21 58 08
	i	58 29
	i	58 35
	i	59 42
COLU	eP	22 04 09
	eL	34 21
EUR	iP	22 01 50
HH	eP	22 01 14
	i	01 42
	eScS	11 07
RC	iP	22 02 16
	i	02 22
	eP'P'	31 34
SLC	eP	22 02 02
	iP	02 19
TUC	eP	22 02 44
	i	03 02
	ePPP	07 04
UK	eP	22 01 28
Sept. 20		
EUR	eP	22 11 09
Sept. 20		
BC	e(P)	22 31 32
EUR	eP	22 31 28
Sept. 20		
COLU	eP	23 06 33
Sept. 20		
COLU	e(P)	23 13 30

Date and Station		Phase (GCT) h m s
EUR	eP	23 09 14
	e	09 33
HH	e(P)	23 09 09
TUC	e(P)	23 08 54
Sept. 20		
EUR	eP	23 16 44
HH	e(P)	23 16 21
TUC	eP	23 16 23
Sept. 21		
COL	eP	02 49 42
Sept. 21		
COL	eP	03 40 54
EUR	eP	03 44 35
Sept. 21		
COL	iP	03 50 08
EUR	eP	03 49 37
Sept. 21		
EUR	eP	05 27 05
Sept. 21		
COL	eP	05 49 47
EUR	eP	05 53 29
Sept. 21		
COL	iP	09 00 03
Sept. 21		
BC	iP	09 21 04
	i	21 31
	eL	28 39
COL	iP	09 25 47
COLU	e(P)	09 21 32
	eS	25 48
	eL	31 20
EUR	iP	09 21 35
	iPP	22 16
HH	iP	09 22 36
RC	eP	09 21 52
	eL	30 16
SLC	eP	09 21 31
	e(S)	26 30
	eL	29 34
TUC	iP	09 20 09
	e	20 22
	eL	23 54
Sept. 21		
EUR	eP	09 54 34

Date and Station		Phase (GCT) h m s
Sept. 21		
EUR	eP	12 17 37
HH	eP	12 17 44
RC	eP	12 17 41
TUC	eP	12 16 56
Sept. 21		
COL	iP	12 34 57
Sept. 21		
COL	iP	16 14 52
Sept. 21		
EUR	eP	17 05 35
Sept. 21		
EUR	eP	18 19 32
Sept. 21		
BC	iP	19 23 09
	ipP	25 13
	i	25 54
	eS	32 30
BUT	iP	19 23 44
	ipP	25 52
COL	i(P')	19 29 29
	e	30 30
COLU	eP	19 21 33
	ipP	23 30
	iS	29 20
	iScS	30 28
	e(SS)	33 26
EUR	iP	19 23 24
	ipP	25 30
	eS	32 54
HH	iP	19 23 48
	ipP	25 57
	eSKS	33 20
	ePKKP	41 29
RC	iP	19 23 10
	ipP	25 14
	e	25 53
SLC	eP	19 23 18
	ipP	25 24
SJ	iP	19 19 27
	iPcP	20 54
	iPP	21 25
TUC	eP	19 22 41
	ipP	24 44
	iS	31 32
Sept. 21		
SLC	eP	19 32 47
Sept. 21		
EUR	iP	19 41 43
	i	43 58

Date and Station		Phase (GCT) h m s
Sept. 21		
EUR	eP	19 49 49
Sept. 21		
EUR	eP	19 52 08
Sept. 21		
BC	eP	21 56 46
COL	iP	21 57 21
EUR	iP	21 56 53
HH	e(P)	21 57 22
TUC	eP	21 56 52
	e	58 46
Sept. 21		
BC	iP	23 06 43
	i	06 56
COL	iP	23 03 00
	i	03 11
EUR	iP	23 06 23
HH	eP	23 05 52
	e	07 35
RC	iP	23 06 49
	e	07 06
SLC	eP	23 06 34
TUC	eP	23 07 13
Sept. 22		
BC	iP	07 04 52
	ipP	07 04
COL	iP	07 05 18
	i	05 37
	ipP	07 29
EUR	iP	07 04 57
	epP	07 07
	ePP	08 24
HH	epP	07 07 38
RC	epP	07 08 02
SLC	eP	07 05 14
	epP	07 28
TUC	iP	07 04 57
	ipP	07 10
Sept. 22		
HH	e(P)	07 14 59
Sept. 22		
EUR	eP	08 37 02
Sept. 22		
EUR	eP	11 43 55

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Date and Station		Phase (GCT) h m s
Sept. 22		
HH	iP	12 06 17
	iS	06 29
	iL	06 34
Sept. 22		
COL	i(P)	14 13 54
Sept. 22		
COL	iP	16 05 55
EUR	e(P)	16 09 16
	ePP	12 24
Sept. 22		
BC	eP	18 29 20
	i	29 34
BUT	eP	18 29 07
COL	iP	18 25 39
	i	25 51
EUR	iP	18 29 02
HH	eP	18 28 34
RC	eP	18 29 40
TUC	e(P)	18 30 06
Sept. 23		
EUR	eP	02 20 46
Sept. 23		
COL	iP	03 09 29
	i	09 42
	e	09 58
EUR	iP	03 12 50
	iPcP	13 04
TUC	e(P)	03 13 44
	e	13 53
Sept. 23		
EUR	eP	05 47 40
HH	e(P)	05 48 12
SLC	eP	05 47 58
TUC	eP	05 47 41
Sept. 23		
BC	iP	08 53 12
	i	53 30
	i(S)	54 21
	iL	54 31
EUR	eP	08 54 01
	eS	55 46
	eL	56 05
HH	e(P)	08 56 05
SLC	e(P)	08 54 31
TUC	eP	08 53 06
	e(S)	54 10
	eL	54 24
	iL	55 05
Sept. 23		
BC	i(P)	08 56 39
	i	57 50
TUC	e(P)	08 56 35
	e	56 57
	eL	57 48
Sept. 23		
BC	iP	10 54 50
	i	55 41
	iL	57 06
TUC	iP	10 53 49
	e	54 15
	eL	54 56
Sept. 23		
EUR	eP	15 44 50
Sept. 23		
EUR	e(P)	17 28 10
Sept. 23		
EUR	eP	19 26 32
Sept. 23		
EUR	eP	19 34 58
Sept. 23		
EUR	e(P)	20 25 48
HH	e(P)	20 28 00
Sept. 23		
BUT	eP	21 25 16
Sept. 24		
EUR	eP	02 44 56
Sept. 24		
BC	iP	06 16 25
	iPcP	17 18
BUT	iP	06 17 02
COL	iP	06 17 02
EUR	iP	06 16 31
HH	iP	06 17 03
RC	eP	06 17 26
SLC	eP	06 16 50
TUC	iP	06 16 31
Sept. 24		
BC	e(P)	07 15 09
	i	15 15
BUT	e(P)	07 15 42
BUT	ePP	07 19 22
COL	iP	07 15 20
	ipP	15 35
	i	16 01
EUR	iP	07 15 12
	i	15 57
SLC	eP	07 15 29
SJ	e(P')	07 21 12
TUC	e(P)	07 15 16
Sept. 24		
RC	e(P)	07 20 14
HH	e(P)	07 19 21
SLC	eP	07 19 10
Sept. 24		
EUR	eP	09 40 24
Sept. 24		
BC	e(P')	10 39 25
	i(PP)	40 03
BUT	eP	10 34 29
COL	iP	10 32 31
	iPcP	32 53
EUR	eP	10 35 01
	e	37 44
HH	eP	10 34 17
	e	37 23
RC	e(P)	10 35 29
	ePP	38 46
SLC	eP'	10 38 46
TUC	eP	10 39 23
	ePP	40 16
Sept. 24		
EUR	eP	10 47 39
	i	47 54
	e	50 39
Sept. 24		
BC	iP	11 36 01
	e	36 41
EUR	iP	11 36 19
	i	36 59
RC	e(P)	11 36 13
TUC	eP	11 35 34
Sept. 24		
COL	iP	15 49 35
EUR	eP	15 46 14
HH	e(P)	15 46 49
SJ	eP	15 42 39
Sept. 24		
BC	iP	19 03 27
COL	iP	18 59 17
TUC	eP	19 02 31
Sept. 24		
EUR	eP	19 08 07
Sept. 24		
COL	eP	22 17 14
	e	17 32
	e	18 11
	e	18 34
	iL	18 52
Sept. 25		
TUC	eP	00 34 20
Sept. 25		
EUR	iP	02 14 03
Sept. 25		
BC	e(P)	04 54 27
Sept. 25		
BH	eP	05 19 23
	eS	20 08
HH	e(P)	05 27 02
SJ	e(P)	05 22 51
Sept. 25		
BH	eP	06 01 58
	eS	02 39
Felt at Puerto Armuelles		
SJ	e(P)	06 05 22
Sept. 25		
BH	eP	06 57 57
	eS	58 42
EUR	eP	07 05 02
HH	e(P)	07 05 39
SJ	e(P)	07 01 25
Sept. 25		
HH	e(P)	07 44 53
Sept. 25		
COL	iP	07 54 09
HH	e(P)	07 56 17
Sept. 25		
COL	iP	09 19 40

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Date and Station		Phase	(GCT) h m s
Sept. 25			
BC		e(P)	09 51 51
		i	52 48
		iL	53 58
EUR		eP	09 52 21
		eS	54 11
		eL	54 24
Sept. 25			
COL		iP	11 01 36
		e	02 20
		i	03 26
		i	03 52
Sept. 25			
TUC		eP	12 49 48
Sept. 25			
EUR		eP	13 35 53
HH		eP	13 35 10
Sept. 25			
COL		iP	16 37 06
		i	37 10
Sept. 25			
EUR		iP	18 30 51
Sept. 25			
BC		iP	18 35 04
		i	35 19
COL		iP	18 38 50
EUR		e(P)	18 35 27
		iP	35 32
HH		eP	18 36 05
RC		eP	18 34 59
		ePcP	36 59
SJ		iP	18 31 54
TUC		eP	18 35 24
Sept. 25			
COL		iP	19 27 10
Sept. 25			
BH		eP	21 31 56
		iS	32 42
BC		iP	21 38 57
		e	39 34
COL		eP	21 42 44
		ePP	45 19
EUR		eP	21 39 20
HH		eP	21 39 57
RC		eP	21 38 59
SJ		eP	21 35 44
TUC		eP	21 38 17
Sept. 25			
COL		eP	23 03 08
		e	03 27
Sept. 25			
EUR		eP	23 16 23
Sept. 26			
BC		iP	05 16 25
BUT		eP	05 16 03
COL		iP	05 13 30
EUR		iP	05 16 11
HH		iP	05 15 53
RC		iP	05 16 38
		e	17 25
SLC		eP	05 16 22
TUC		eP	05 16 50
Sept. 26			
COL		iP	05 41 30
EUR		eP	05 41 21
SLC		eP	05 41 42
Sept. 26			
BC		iP	06 34 01
EUR		eP	06 34 23
HH		e(P)	06 35 02
SJ		iP	06 30 43
TUC		eP	06 33 19
Sept. 26			
COL		eP	08 00 35
Sept. 26			
COL		eP	08 47 56
Sept. 26			
HH		e(P)	09 51 10
Sept. 26			
COL		eP	12 48 55
Sept. 26			
BC		iP	13 55 40
		iPcP	56 59
		iPP	57 43
BUT		eP	13 56 41
COL		iP	13 51 42
		ipP	51 58
		i	52 05
		isP	52 11
		iPP	52 30
COL		eS	13 55 23
		eL	56 08
EUR		iP	13 55 17
		ipP	55 38
		iPcP	56 48
		eScP	14 00 31
HH		iP	13 54 44
		iPP	56 34
		eScP	14 00 14
RC		iP	13 55 50
		esP	56 27
		ePcP	57 04
SLC		e(P)	13 55 29
SJ		iP	13 59 48
TUC		iP	13 56 17
		iPcP	57 18
UK		eP	13 54 46
Sept. 26			
COL		iP	14 57 08
		i	57 14
		i	57 50
		i	58 05
Sept. 26			
EUR		eP	17 55 22
		i	57 22
UK		eP	17 54 18
		e	55 04
Sept. 26			
EUR		eP	23 24 42
Sept. 27			
COL		eP	00 42 02
EUR		iP	00 45 14
TUC		eP	00 46 16
Sept. 27			
HH		iP	04 21 32
		i	22 04
Sept. 27			
EUR		eP	07 15 34
Sept. 27			
COL		eP	07 38 25
Sept. 27			
COL		iP	10 18 02
EUR		iP	10 21 33
HH		e(P)	10 21 01
Sept. 27			
COL		iP	10 58 19
Sept. 27			
COL		iP	13 49 34
Sept. 27			
BC		iP	14 11 50
EUR		iP	14 12 08
HH		iP	14 12 36
RC		eP	14 11 56
Sept. 27			
COL		iP	14 44 27
Sept. 27			
COL		iP	15 37 35
EUR		eP	15 41 09
Sept. 27			
COL		iP	20 41 45
Sept. 27			
EUR		eP	22 51 51
Sept. 27			
HH		i(P)	23 06 02
Sept. 28			
TUC		eP	03 22 41
Sept. 28			
COL		iP	04 55 50
EUR		eP	05 01 16
HH		iP	05 00 18
Sept. 28			
COL		iP	06 48 16
		i	48 24
		ipP	48 40
		isP	48 47
HH		eP	06 47 28
Sept. 28			
COL		eP	12 31 57
Sept. 28			
BC		iP	15 11 56
		i	12 03
BUT		eP	15 10 42
COL		iP	15 08 47
EUR		iP	15 11 34
HH		eP	15 10 27
RC		eP	15 10 43
SLC		eP	15 11 20
TUC		iP	15 12 17

Date and Station		Phase (GCT)
		h m s
Sept. 28		
EUR	eP	18 47 46
Sept. 28		
BC	iP	20 43 07
	i	43 43
	e	45 49
COL	eP	20 47 20
COLU	eP	20 42 04
	e	47 32
	eL	51 24
EUR	iP	20 43 34
HH	e(P)	20 43 46
	e	44 19
SLC	eP	20 43 22
TUC	eP	20 42 32
	e	44 40
Sept. 28		
SLC	eP	21 57 09
Sept. 28		
TUC	eP	22 41 48
Sept. 29		
COL	iP	03 24 07
EUR	iP	03 27 39
Sept. 29		
COL	eP	03 36 54
	e	37 01
Sept. 29		
EUR	eP'	04 13 40
HH	eP'	04 13 33
SJ	eP'	04 15 38
TUC	eP'	04 13 53
Sept. 29		
COL	e(P)	04 07 59
Sept. 29		
EUR	eP	04 24 23
SJ	iP	04 30 15
Sept. 29		
EUR	eP	06 21 46
Sept. 29		
HH	e(P)	07 44 07
Sept. 29		
EUR	eP	08 12 38
Sept. 29		
BC	eP'	09 22 48
	i	22 55
	e	23 53
	ePP	24 51

Date and Station		Phase (GCT)
		h m s
COL	eP	09 17 07
	iPP	20 50
	eL	47 53
EUR	iP	09 22 43
	iPP	24 37
	e	36 05
HH	eP'	09 22 30
	ePP	23 51
RC	eP'	09 22 47
SJ	eP	09 23 25
	i	23 37
TUC	eP	09 23 03
	ePKS	26 23
Sept. 29		
EUR	eP	09 32 17
Sept. 29		
HH	e(P)	10 58 10
Sept. 29		
BC	eP	11 41 47
COL	iP	11 44 54
	i	45 04
COLU	eP	11 40 06
	i	40 18
EUR	iP	11 42 08
HH	eP	11 42 44
RC	eP	11 41 53
SJ	eP	11 38 12
TUC	eP	11 41 12
Sept. 29		
BC	eP	12 06 08
	e	06 41
COL	iP	12 05 23
EUR	iP	12 06 05
Sept. 29		
COL	iP	14 44 07
Sept. 29		
EUR	eP	15 42 09
Sept. 29		
HH	eP	15 49 15
Sept. 29		
EUR	eP	16 51 41
Sept. 29		
BC	i(P)	18 03 54
	i	04 01
	iS	04 41
	i	04 59

Date and Station		Phase (GCT)
		h m s
BC	iL	18 05 29
EUR	eP	18 05 24
Sept. 29		
EUR	eP	19 56 23
Sept. 29		
BC	iP	21 32 55
	iPcP	33 28
	e	34 39
BUT	eP	21 32 27
	e(PcP)	33 14
COL	iP	21 29 37
	i	29 44
EUR	iP	21 32 38
HH	iP	21 32 13
RC	iP	21 33 02
	eS	43 02
SLC	eP	21 32 48
SIT	iP	21 30 32
TUC	iP	21 33 21
	i	34 20
Sept. 29		
HH	iP	21 54 02
Sept. 29		
COL	eP	22 35 20
	e	35 35
EUR	e(P)	22 37 15
	eP'	40 54
	iPP	41 50
HH	eP	22 37 09
	ePP	41 19
RC	ePP	22 42 16
	e	42 37
SJ	eP'	22 42 41
	iP'	43 16
Sept. 29		
EUR	eP	22 52 42
HH	e(P)	22 54 52
Sept. 29		
BC	eP	23 11 54
COL	e(P)	23 09 09
EUR	iP	23 11 33
TUC	eP	23 12 11
Sept. 29		
BC	iP	23 33 01C
	ipP	33 26

Date and Station		Phase (GCT)
		h m s
BC	i	23 35 01
	eS	43 17
	esS	43 57
BUT	iP	23 32 35C
	i	34 06
COL	iP	23 29 50D
COLU	eP	23 34 38D
	ePP	38 43
	eS	45 44
	eL	00 13 24
EUR	iP	23 32 45C
	isP	33 22
	iS	42 26
HH	iP	23 32 22C
	ePP	35 03
	epPP	35 27
	e	36 28
	eS	41 45
	eP'P'	59 37
RC	iP	23 33 10D
	iS	43 17
	ePKKP	51 38
	e	51 59
	e(P'P')	59 37
	e	00 04 31
SLC	iP	23 32 55D
	eP'P'	59 45
SJ	eP'	23 39 38
	ePP	41 09
SIT	iP	23 30 44
	iS	38 43
	eScS	40 28
TUC	iP	23 33 26C
	epP	33 43
	e(PP)	37 12
	iS	43 50
	e(sS)	44 34
UK	iP	23 32 20C
Sept. 29		
EUR	eP	23 56 17
TUC	e(P)	23 54 49
Sept. 30		
EUR	iP	00 15 20
HH	eP	00 14 57
Sept. 30		
EUR	eP	02 46 54
SLC	eP	02 47 05
TUC	eP	02 45 30

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Date and Station		Phase	(GCT) h m s
Sept. 30			
EUR		eP	03 28 52
Sept. 30			
COL		eP	05 33 37
Sept. 30			
BC		iP	10 21 55
		e	22 10
EUR		eP	10 21 37
		epP	23 33
HH		eP	10 21 08
Sept. 30			
BUT		eP	10 34 24
Sept. 30			
HH		eP	10 50 45
Sept. 30			
TUC		e(P)	11 16 05
Sept. 30			
TUC		e(P)	11 34 23
Sept. 30			
EUR		eP	12 35 48
Sept. 30			
BC		iP	12 55 30
Sept. 30			
BC		iP	14 54 41
		i	54 49
		ipP	55 13
		i	56 03
BUT		iP	14 54 34
		ipP	55 07
		i(sP)	55 28
		i	56 08
		ePP	58 03
COL		iP	14 52 38
		i	53 30
		i	54 09
		eP'P'	15 20 48
EUR		iP	14 54 32
		ipP	55 04
HH		iP	14 54 25
		ipP	54 58
		i	55 13
RC		eP	15 01 18
SLC		iP	14 54 44
		epP	55 18
SJ		eP'	15 00 55
		e(PP)	04 17
TUC		eP	14 55 02
		epP	55 34

Date and Station		Phase	(GCT) h m s
Sept. 30			
EUR		eP	15 28 59
Sept. 30			
EUR		eP	16 16 17
Sept. 30			
COL		eP	16 41 00
EUR		eP	16 40 26
Sept. 30			
HH		eP	17 56 57
		iS	57 15
		iL	57 17
Sept. 30			
COL		iP	19 36 11
Sept. 30			
EUR		iP	20 28 06
Sept. 30			
EUR		eP	23 12 58
Sept. 30			
EUR		eP	23 40 51

Local and Minor Earthquakes

BOZ	
Sept.	
12	20.3
18	02.5
COL	
Sept.	
2	05.0
	21.4
	22.2
3	01.5
	02.3
	02.7
	12.8
	21.1
4	09.2
	13.9
	17.5
5	17.1
	18.6
6	21.1
7	01.6
8	04.0
	07.2
	08.7
	14.6
12	06.6
	17.6
14	02.4
19	01.1
	15.7
23	06.1
27	02.5
28	06.1
29	01.1

Local and Minor Earthquakes

	hours
EUR	
Sept.	
2	05.5
3	23.5
4	21.1
6	08.5
15	00.6
17	01.0
23	10.9
	11.4
	13.9
30	04.5
	20.0
SJ	
Sept.	
1	18.2
2	03.2
5	20.2
	20.6
6	19.7
7	02.4
11	12.4
	18.7
15	00.5
19	11.2
23	01.2
27	17.2
28	00.8
29	05.1
30	10.2
	11.3
TUC	
Sept.	
1	01.8
	03.5
	06.0
	06.2
	08.8
	20.5
	22.8
2	10.4
	13.8
5	04.0
	05.7
6	08.7
8	05.7
	08.0
	08.6
	22.1
9	11.7
13	06.9
14	02.5
	09.1
16	18.9
17	00.1
	01.0
19	11.0
20	03.2
21	07.9
	08.1
23	09.8
	10.4
	11.4
	12.6

Local and Minor Earthquakes

	hours
TUC	
Sept.	
23	12.9
24	09.9
25	09.9
27	04.3
28	08.4
29	08.2
UK	
Sept.	
2	14.3
8	00.2
26	15.1
29	16.8