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SEISMOLOGICAL BULLETIN

April, 1959

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COAST & GEODETIC SURVEY
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U. S. DEPARTMENT OF COMMERCE

Frederick H. Mueller, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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1959

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

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

*Indicates a station maintained by a local institution in cooperation with the Coast and Geodetic Survey.
**Indicates a station operating on an independent basis.
Other stations are observatories of the Coast and Geodetic Survey.

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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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

All magnitude determinations are by Pasadena unless otherwise stated. Minor earthquakes are listed at the end of the bulletin.

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

All seismograms are on file in the Coast and Geodetic Survey, except those from Balboa Heights, which may be obtained on loan by addressing the Seismograph Station Director, Meteorological and Hydrographic Office, Panama Canal Company, Balboa Height, Canal Zone.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Apr.	h m s	°	°	
1	00 34 18*	27½ N.	21 W.	Canary Islands. Felt on Palma. Mag. 6¼.
1	12 19 29**			Near east coast of Kamchatka.
1	14 11 30*	48 S.	98½ E.	Indian Ocean.
1	14 48 34*	18½ S.	169 E.	New Hebrides Islands. h about 200 km.
1	18 18 28*	40 N.	120 W.	California. Felt in northwestern California and western Nevada. Mag. 6 (Berk).
1	19 15 38*	17 S.	173 W.	Tonga Islands region.
1	22 47 54*	17 S.	168½ E.	New Hebrides Islands. h about 100 km.
1	23 33 45*	6 S.	154 E.	Solomon Islands. h about 100 km.
2	04 02 31*	26 N.	125 E.	Ryukyu Islands region.
2	04 34 20*	40 N.	29 E.	Northwestern Turkey. Extensive damage.
2	12 00 51*	8 S.	129 E.	Timor Island.
2	19 21 34*	20½ N.	121 E.	Batan Island region.
2	21 48 20**			Tonga Islands.
3	01 27 06*	51½ N.	179 E.	Rat Islands, Aleutian Islands.
3	05 19 05*	51 N.	179 E.	Rat Islands, Aleutian Islands.
3	05 48 45*	24 N.	122 E.	Near east coast of Formosa. h about 200 km.
3	14 22 48*	11½ N.	167 E.	Santa Cruz Islands.
3	19 33 50*	4 S.	81 W.	Near coast of northern Peru
4	03 08 44**			Brazil-Peru border.
4	19 04 59*	54 N.	161 E.	Near east coast of Kamchatka.
5	05 37 18*	52½ N.	169½ W.	Fox Islands, Aleutian Islands.
5	10 47 52*	44 N.	7 E.	Southeastern France. 2 injured and moderate property damage. Also felt in Italy.
5	15 12 10*	7 S.	113 E.	Madura Strait. h about 200 km.
5	18 13 30*	46 N.	17 E.	Hungry-Yugoslavia border.
5	19 59 58*	46 N.	151 E.	Kurile Islands.
5	20 32 48*	6 N.	77½ W.	Near west coast of Colombia.
5	21 05 54*	15½ S.	167½ E.	New Hebrides Islands. h about 150 km.
5	23 29 25*	5½ S.	146 E.	Near north coast of New Guinea.
6	05 24 11*	50½ N.	177 W.	Andreanof Islands, Aleutian Islands.
6	13 52 04*	2½ N.	72 W.	Colombia.
6	14 12 36*	10 S.	120½ E.	Sumba Island. Mag. 6¼.
6	23 58 52*	13 N.	146½ W.	Mariana Islands region.
7	05 43 54*			Northern Mariana Islands region.
7	10 29 42*	7½ N.	74 W.	Colombia.
8	01 23 26*	32½ S.	179½ E.	Kermadec Islands region. h about 400 km. Mag. 6 - 6¼.
8	08 01 36*	17 S.	174½ W.	Tonga Islands region. Felt at Apia. h about 100 km.
8	11 44 25*	50½ S.	73 W.	Southern Chile-Argentina border. Felt at Puerto Natales.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Apr.	h m s	°	°	
9	04 43 58*	14½ S.	167½ E.	New Hebrides Islands. h about 100 km.
9	06 18 34*	36 S.	77 E.	Indian Ocean, Kerguelen Islands region.
9	12 24 20*	44½ N.	149 E.	Kurile Islands. h about 60 km.
9	12 45 32*	50½ N.	180	Andreanof Islands, Aleutian Islands.
9	17 08 30*	25 N.	95 E.	India-Burma border.
9	17 36 10*	7 N.	82 W.	South of Panama. Mag. 6¼ - 6½.
10	05 47 34*	25 S.	178½ E.	South of Fiji Islands. h about 600 km.
11	09 25 08*	9½ N.	83 W.	Costa Rica-Panama border. Felt at Volcan, Panama.
11	11 28 50*	1 S.	128 E.	Spice Islands.
11	14 46 16*	7 N.	71½ W.	Colombia-Venezuela border.
11	17 55 53*	15 S.	173½ W.	Samoa Islands region. Felt at Apia.
12	06 04 18**			Samoa Islands region.
12	08 10 44**			Chile-Bolivia border. Felt at Baquedano, Calama, Coya Sur, and Quillagua, Chile.
12	09 54 51*	17½ N.	95 W.	Mexico. Damage at Cordoba. h about 100 km. Mag. 6¼.
12	10 59 21*	24½ N.	122 E.	Near east coast of Formosa. Felt at Taipei.
12	15 22 33*	4½ S.	134 E.	Near coast of New Guinea. h about 100 km.
12	20 54 00*	15½ S.	173 W.	Samoa Islands region. Felt at Apia. Mag. 6 - 6¼.
13	18 31 57*	23 N.	93½ E.	India-Burma border.
13	22 32 34*	50½ N.	180	Andreanof Islands, Aleutian Islands.
14	02 51 13**			Gulf of California foreshock.
14	02 53 04*	24 N.	109½ W.	Gulf of California. Mag. 5¼ - 5½.
14	06 19 46**			Northern Chile.
14	06 45 04**			Gulf of California aftershock.
14	07 20 28*	57½ N.	155 W.	Alaska Peninsula. h about 60 km.
15	00 15 21*	41½ N.	143 E.	Near south coast of Hokkaido, Japan.
15	04 59 14*	53½ S.	135 W.	Pacific Ocean.
15	17 02 45*	51 N.	177 W.	Andreanof Islands, Aleutian Islands.
15	19 11 20*	54 N.	160½ E.	Near east coast of Kamchatka.
15	23 52 40*	23 S.	180	Fiji Islands region. h about 600 km.
16	07 27 27*	23½ S.	179 E.	South of Fiji Islands. h about 550 km.
16	15 13 56*	12½ N.	143 E.	Mariana Islands region. h about 100 km. Mag. 6½.
17	00 49 42*	13 S.	167½ E.	New Hebrides Islands. h about 200 km.
17	10 31 35*	21 S.	178 W.	Fiji Islands. h about 500 km.
18	06 18 00*	4½ S.	153½ E.	New Ireland region. Felt at Londolovit and Rabaul. h about 100 km.
19	06 43 29**			Yukon, Canada region.
19	07 26 15*	45 S.	82 W.	Pacific Ocean. Mag. 6.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Apr.	h m s	°	°	
19	08 59 17*	40 N.	43 E.	Eastern Turkey.
19	14 51 03*	24½ N.	142 E.	Volcano Islands.
19	15 03 26*	58 N.	152½ W.	Near Kodiak Island, Alaska. Mag. 6¼.
19	17 38 50*	37½ N.	21 E.	Near west coast of Greece. Felt in Messinia.
19	19 43 04*	16 S.	172 W.	Samoa Islands region.
20	03 27 52*	6 S.	149½ E.	New Britain. Felt at Kandrian and Walindi. about 100 km. Mag. 6.
20	04 21 10*	8½ N.	83 W.	Costa Rica.
20	12 33 44*	40 N.	118 W.	Northwestern Nevada. Mag. 4¾ (Berk).
20	19 26 01*	54 N.	157½ E.	Near east coast of Kamchatka.
21	10 02 30*	45 N.	152½ E.	Kurile Islands.
21	12 42 50*	56 N.	162½ W.	Bristol Bay.
22	03 36 49**			Hindu Kush region. h about 200 km.
22	10 55 05*	54 N.	167 W.	Fox Islands, Aleutian Islands. Mag. 6.
22	17 24 05*	7½ N.	72 W.	Venezuela-Colombia border.
22	19 01 41*	11½ N.	86½ W.	Near coast of Nicaragua.
22	20 26 46*	36½ S.	97½ W.	Pacific Ocean. Mag. 5-3/4 - 6.
23	20 58 41*	37½ N.	80½ W.	Virginia-West Virginia border. Slight damage in Giles County, Virginia.
24	09 31 33*	11½ N.	86½ W.	Near coast of Nicaragua. Mag. 6¼ - 6½.
24	17 57 58*	31 S.	178 W.	Kermadec Islands. Mag. 6-3/4 - 7.
25	00 26 40*	37 N.	28½ E.	Turkey. Extensive damage in Mugla Province.
25	01 05 37**			Dodecanese Islands.
25	06 06 04*	19½ N.	66 W.	Puerto Rico region. Felt at San Juan.
26	05 17 47*	16 S.	171½ W.	Samoa Islands region. Felt at Apia.
26	05 47 28*	19½ S.	169½ E.	New Hebrides Islands. Felt at Lenakel.
26	06 21 56**			Off coast of Chile.
26	08 47 28*	7½ S.	157 E.	Solomon Islands.
26	12 34 49**			China-Burma border region.
26	14 45 16*	46½ N.	13 E.	Italy-Austria border. Minor damage in northeast Italy; felt also in southern Austria.
26	20 40 38*	25 N.	122½ E.	Near northeast coast of Formosa. 2 killed, minor damage at Taipei. h about 150 km. Mag. 7½ - 7-3/4.
27	09 48 09*	7 S.	129 E.	Banda Sea.
27	11 09 30*	15 N.	93 W.	Mexico-Guatemala border. Mag. 6½ - 6-3/4.
27	12 47 27*	½ S.	124 E.	Celebes region. h about 200 km.
27	13 09 20*	33½ N.	93 E.	Tsinghai Province, China.
28	01 44 21*	4 S.	135 E.	Western New Guinea.
28	13 00 57*	5 S.	152½ E.	New Britain. Felt at Karlai and Rabaul. h about 100 km.

Date 1959	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Apr.	h m s	°	°	
28	14 18 10**			Rat Island, Aleutian Islands.
28	15 58 13*	6½ S.	150 E.	Near south coast of New Britain.
28	17 11 15*	52 N.	173 W.	Andreanof Islands, Aleutian Islands.
28	22 01 04*	36 N.	141 E.	Near east coast of Honshu, Japan. Felt at Tokyo.
29	00 23 50*	28 N.	55 E.	Southern Iran.
29	15 35 45*	16½ N.	145 E.	Mariana Islands.
30	22 40 20**			Arctic Ocean, west of Spitsbergen.
30	13 25 35*	55½ S.	26 W.	Sandwich Islands.

Date and Station		Phase (GCT)
Apr. 1		h m s
BOZ	eP	00 45 40
	ePcP	46 15
BUT	eP	00 45 45
	ePP	48 24
	ePPP	50 07
COL	iP	00 46 26
	ePP	49 28
	e(S)	56 31
	eL	01 07 04
COLU	eP	00 43 28
EUR	iP	00 46 13
	i	46 28
	iPP	49 06
RC	iP	00 45 08
	e(ScP)	50 04
	eP'P'	01 13 43
SLC	eP	00 45 53
	ePcP	46 05
SJ	iP	00 42 17
	ePcP	44 10
THULE	iP	00 43 45
	iPP	45 56
	ePPP	46 45
TUC	iP	00 46 09
	e(ScS)	56 22
	eL	01 13 48
TUC-T	iP	00 46 08
	ePP	49 09
WASH	iP	00 42 59
	ePP	44 50
Apr. 1		
EUR	e(P)	04 26 21
Apr. 1		
EUR	eP	08 09 56
Apr. 1		
COL	eP	11 15 19
EUR	eP	11 15 11
RC	eP	11 14 01
Apr. 1		
EUR	eP	11 57 07
TUC-T	eP	11 58 08
Apr. 1		
COL	eP	12 24 58
	iP	25 01
EUR	eP	12 28 52
	i	29 06
TUC	eP	12 27 56
	e	33 04

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	12 27 49
	e	27 56
Apr. 1		
COL	e(P)	12 36 29
Apr. 1		
EUR	eP'	14 31 34
THULE	eP'	14 31 26
TUC	eP'	14 31 27
	e	31 32
TUC-T	eP'	14 31 32
Apr. 1		
COL	iP	15 01 13
EUR	iP	15 01 21
	iPP	04 56
TUC-T	iP	15 01 27
	e(pP)	02 19
	ePP	05 08
Apr. 1		
EUR	eP	16 52 04
	i	52 14
THULE	eP	16 51 56
	i	52 09
TUC-T	eP	16 52 02
Apr. 1		
BC	eP	18 19 56
	e	20 15
	eS	21 00
	eL	21 19
BOZ	eP	18 20 45
	e	21 16
	eS	22 24
	eL	23 12
BUT	eP	18 20 41
	e(S)	22 30
COL	eP	18 24 36
	iPcP	27 41
COLU	e(P)	18 24 56
EUR	iP	18 19 22
HH	e(P)	18 20 56
	e	23 37
	eL	23 50
RC	eP	18 21 41
	e(S)	24 22
	eL	25 35
SLC	eP	18 20 07
	eS	21 11
	eL	21 53

Date and Station		Phase (GCT)
		h m s
THULE	eP	18 26 31
	ePP	28 10
TUC	eP	18 21 15
	eL	23 35
TUC-T	eP	18 21 06
	i	21 11
	eL	23 57
UK	iP	18 19 10
	iS	19 38
	iL	19 40
WASH	eP	18 25 06
Apr. 1		
EUR	eP	18 53 24
Apr. 1		
COL	iP	19 28 09
EUR	eP	19 27 33
TUC	eP	19 27 47
TUC-T	eP	19 27 33
Apr. 1		
COL	iP	22 48 41
	i	48 51
Apr. 1		
COL	eP	23 00 43
EUR	iP	23 00 53
Apr. 1		
EUR	eP	23 11 20
Apr. 1		
BC	e(P)	23 47 00
COL	iP	23 46 00
EUR	iP	23 46 56
GUAM	iP	23 38 33
	ipP	38 54
	iS	42 28
Apr. 1		
GUAM	iP	23 54 20
	iS	54 31
Apr. 2		
EUR	eP	02 02 14
SJ	iP	01 54 29
	iS	55 42
	iL	55 45
TUC	eP	02 01 34
TUC-T	eP	02 01 34
Apr. 2		
COL	eP	02 39 34

Date and Station		Phase (GCT)
Apr. 2		h m s
EUR	eP	02 52 03
	i	52 11
	eS	52 41
	eL	52 46
Apr. 2		
BUT	eP	04 15 40
COL	eP	04 13 18
EUR	iP	04 15 50
	e	16 04
GUAM	iP	04 07 32
THULE	iP	04 14 29
Apr. 2		
RC	eP	04 34 10
	e	35 27
Apr. 2		
COL	eP	04 46 07
THULE	eP	04 43 43
Apr. 2		
COL	eP	04 48 19
EUR	iP	04 45 47
RC	eP	04 47 03
TUC	eP	04 44 58
TUC-T	iP	04 44 59
Apr. 2		
COL	iP	12 14 14
THULE	eP	12 16 43
Apr. 2		
EUR	eP	12 30 15
Apr. 2		
COL	e(P)	17 31 50
	i	32 11
Apr. 2		
COL	eP	19 33 02
GUAM	iP	19 26 50
	iS	30 36
	eL	31 56
THULE	iP	19 34 02
	e	34 17
TUC-T	eP	19 36 28
	ePP	40 19
Apr. 2		
EUR	eP	21 58 39
Apr. 2		
COL	iP	22 01 17

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Date and Station	Phase	(GCT) h m s
EUR	iP	22 00 44
TUC-T	iP	22 00 43
	i	00 51
Apr. 2		
EUR	iP	23 49 16
Apr. 3		
BC	e(P)	01 35 53
BOZ	eP	01 35 25
BUT	eP	01 35 15
COL	iP	01 32 02
EUR	iP	01 35 30
SLC	eP	01 34 44
SJ	eP	01 40 10
THULE	iP	01 35 28
	i	40 58
TUC	iP	01 36 30
	i	36 40
	e	37 37
TUC-T	iP	01 36 29
Apr. 3		
COL	iP	03 48 21
EUR	iP	03 51 44
Apr. 3		
EUR	iP	04 32 51
	eS	33 11
	eL	33 14
Apr. 3		
COL	eP	05 24 01
EUR	iP	05 27 29
SJ	eP	05 32 09
TUC	eP	05 28 29
TUC-T	eP	05 28 30
Apr. 3		
COL	eP	05 59 29
GUAM	eP	05 53 52
THULE	e(P)	06 00 30
	e	00 33
Apr. 3		
TUC-T	eP	09 20 58
Apr. 3		
EUR	eP'	10 43 37
Apr. 3		
EUR	eP	11 40 38
Apr. 3		
COL	eP	13 35 11
Apr. 3		
COL	eP	14 35 18
EUR	iP	14 35 47
Apr. 3		
EUR	eP	16 23 28
Apr. 3		
EUR	iP	17 12 52
	i	13 00
	eS	13 37
	eL	13 40
UK	eP	17 12 50
	eL	13 19
Apr. 3		
EUR	eP	17 24 28
Apr. 3		
EUR	eP	17 42 05
Apr. 3		
GUAM	iP	18 13 36
	iS	13 49
	eL	13 59
Apr. 3		
COL	iP	18 51 26
	i(S)	52 08
	iL	52 17
Apr. 3		
COL	eP	19 46 20
EUR	iP	19 43 16
SJ	eP	19 39 34
	iP	39 36
THULE	eP	19 46 04
TUC-T	iP	19 42 14
	i	42 28
	ePcP	43 51
Apr. 4		
EUR	eP	01 03 29
Apr. 4		
GUAM	iP	01 46 22
	iS	46 42
	iL	46 54
Apr. 4		
COL	eP	01 56 54
Apr. 4		
SLC	eP	02 44 09
TUC	eP	02 45 53
	e	47 28
TUC-T	eP	02 45 54
	e	47 22
Apr. 4		
GUAM	iP	03 05 43
	iS	06 05
	iL	06 14
Apr. 4		
EUR	eP	03 18 56
SJ	eP	03 14 28
TUC	iP	03 18 00
TUC-T	iP	03 18 00
Apr. 4		
COLU	eP	04 30 16
Apr. 4		
EUR	iP	05 13 11
	iS	13 31
	eL	13 34
Apr. 4		
THULE	eP	05 27 28
Apr. 4		
EUR	iP	06 11 53
Apr. 4		
COL	iP	10 25 02
Apr. 4		
COL	eP	13 39 24
Apr. 4		
EUR	eP	13 58 46
Apr. 4		
EUR	iP	15 27 00
TUC-T	iP	15 27 13
Apr. 4		
EUR	iP	19 01 28
Apr. 4		
COL	iP	19 10 47
EUR	iP	19 14 36
THULE	iP	19 13 26
TUC	eP	19 15 32
	e	15 39
TUC-T	eP	19 15 32
	e	15 39
Apr. 4		
SJ	e(P)	19 33 28
Apr. 4		
SJ	eP	19 39 34
	iP	39 36
Apr. 4		
COL	eP	23 30 42
Apr. 5		
EUR	eP	02 28 47
Apr. 5		
GUAM	eP	03 01 57
	i	02 10
Apr. 5		
EUR	eP	03 13 48
Apr. 5		
EUR	eP	05 14 31
Apr. 5		
COL	iP	05 41 18
	iS	44 23
	eL	46 35
EUR	eP	05 44 44
RC	e(P)	05 45 32
	e	45 38
SJ	eP	05 49 49
	e	50 01
TUC	eP	05 45 48
	e	46 01
	e	48 53
TUC-T	eP	05 45 48
	e	46 00
	e	48 54
Apr. 5		
EUR	eP	08 27 21
Apr. 5		
COL	iP	10 44 26
Apr. 5		
BC	e(P)	11 00 28
BUT	eP	10 59 39
COL	eP	10 59 02
COLU	e(P)	10 58 40
EUR	iP	11 00 15
RC	eP	10 59 19
SJ	eP	10 58 35
THULE	eP	10 56 00
	ePcP	57 37
TUC	iP	11 00 31
	e	00 43
TUC-T	iP	11 00 30
Apr. 5		
COL	eP	11 49 23
THULE	eP	11 51 20
Apr. 5		
TUC	e(P)	12 09 29
TUC-T	eP	12 09 25

B-4397-4.

Date and Station		Phase (GCT) h m s
TUC-T	e	12 09 39
Apr 5.		
EUR	eP	15 25 57
Apr. 5		
EUR	eP	15 41 39
Apr. 5		
BC	eP	20 11 03
COL	eP	20 07 21
EUR	iP	20 10 42
RC	eP	20 11 09
THULE	iP	20 09 34
	i	10 05
TUC	iP	20 11 32
TUC-T	iP	20 11 32
Apr. 5		
BH	iP	20 33 43
	iS	34 25
EUR	eP	20 41 31
RC	e(P)	20 40 46
	i	41 03
SJ	e(P)	20 36 46
	i	36 52
TUC	eP	20 40 32
	i	40 37
TUC-T	eP	20 41 31
Apr. 5		
EUR	eP	21 11 31
TUC-T	eP	21 11 03
Apr. 5		
BC	eP	21 18 42
	epP	19 17
COL	eP	21 18 28
EUR	iP	21 18 42
	ipP	19 18
	iPP	22 14
SJ	iP	21 24 49
TUC	eP	21 19 26
	ePP	22 27
TUC-T	eP	21 18 51
	ipP	19 25
	ePP	22 30
Apr. 5		
EUR	eP	21 44 14
TUC-T	eP	21 44 39

Date and Station		Phase (GCT) h m s
Apr. 5		
EUR	eP	23 15 53
TUC	eP	23 15 22
TUC-T	iP	23 15 22
	i	21 22
Apr. 5		
BUT	eP'	23 47 18
COL	iP	23 42 02
	i	42 15
COLU	eP'	23 48 33
EUR	eP	23 43 11
	i	43 24
	ePP	46 41
	iPP	47 15
	ePKKP	59 42
	i	00 00 01
	i	01 29
GUAM	eP	23 33 51
	i	34 12
	i	34 29
KIP	eP	23 39 41
RC	eP'	23 48 23
	ePKKP	59 08
SJ	iP'	23 49 05
	i	49 57
THULE	eP	23 43 53
	ePP	47 03
	ePKKP	58 56
	i	59 11
TUC	ePP	23 48 07
TUC-T	eP'	23 43 33
	e(PP)	47 42
	iPKKP	59 42
Apr. 6		
COL	eP	02 13 27
Apr. 6		
BC	eP	02 32 59
EUR	eP	02 33 51
	eL	36 01
TUC	eP	02 32 43
	e	32 49
	i	32 54
	iL	33 27
TUC-T	eP	02 32 42
	i	32 55
	iL	33 30
Apr. 6		
BC	eP	05 32 40
BOZ	eP	05 32 14

Date and Station		Phase (GCT) h m s
BUT	e(P)	05 32 06
COL	eP	05 28 57
	i	29 13
	e(S)	32 47
COLU	eP	05 35 14
EUR	iP	05 32 18
HH	eP	05 31 48
RC	iP	05 32 57
SLC	eP	05 32 32
THULE	eP	05 32 35
TUC	iP	05 33 18
	i	33 31
TUC-T	iP	05 33 18
	i	33 31
Apr. 6		
EUR	eP	06 09 49
	i	10 03
	eS	11 01
	eL	11 10
UK	iP	06 08 26
	i	08 29
	iS	08 32
	iL	08 33
Apr. 6		
COL	e(P)	07 35 31
EUR	eP	07 31 23
RC	eP	07 31 18
TUC	eP	07 29 58
	eL	35 08
TUC-T	iP	07 29 57
	eL	35 09
Apr. 6		
COL	iP	09 50 52
EUR	eP	09 50 31
TUC	eP	09 50 33
TUC-T	iP	09 50 33
Apr. 6		
EUR	eP	11 13 16
Apr. 6		
GUAM	iP	11 33 53
	eS	33 59
	eL	34 04
Apr. 6		
EUR	eP	11 55 19

Date and Station		Phase (GCT) h m s
Apr. 6		
COL	iP	14 04 44
RC	eP	14 00 58
SJ	iP	13 56 07
	e	56 25
	e(S)	58 50
THULE	e(P)	14 03 54
	iP	04 04
TUC	eP	14 00 38
TUC-T	eP	14 00 37
Apr. 6		
BC	eP'	14 31 41
BOZ	eP'	14 31 40
	ePP	33 22
BUT	eP'	14 31 36
	ePP	33 12
COL	iP	14 26 23
	ePP	30 27
	e(PS)	41 06
	ePKKP	43 10
	e	44 50
	eL	15 10 08
COLU	eP'	14 32 25
EUR	iP'	14 31 36
	i	31 53
	iPP	33 01
	e	37 29
GUAM	eP	14 19 18
	i(S)	24 36
HONO	eP	14 25 22
	i	25 49
HH	ePP	14 33 02
KIP	eP	14 25 22
RC	iP'	14 31 49
	ePP	33 57
	i	35 10
SLC	eP'	14 31 41
SJ	eP'	14 32 47
	ePP	34 03
	e	37 45
THULE	eP	14 27 25
	eP'	31 09
	ePP	32 02
	e	40 49
TUC	iP'	14 31 48
	ePP	33 30
	i	33 49

Date and Station	Phase	Phase (GCT) h m s
TUC-T	iP'	14 31 49
	iPP	33 52
WASH	iP'	14 32 22
	i	32 58
	e	33 15
	iPP	34 19
Apr. 6		
EUR	eP	19 36 42
Apr. 6		
BH	iP	21 54 47
	iS	55 13
Apr. 7		
BC	eP	00 11 53
BUT	eP	00 11 46
COL	iP	00 09 55
EUR	iP	00 11 43
GUAM	iP	23 59 29
THULE	e(P)	00 11 47
	i	11 59
TUC-T	iP	00 12 13
	e	12 24
	e	12 33
Apr. 7		
COL	eP	01 05 43
Apr. 7		
BUT	eP	05 56 22
COL	iP	05 54 13
EUR	iP	05 56 22
	e	56 57
GUAM	iP	05 45 47
RC	eP	05 56 55
THULE	iP	05 56 09
TUC	eP	05 56 54
TUC-T	eP	05 56 55
	e	57 29
Apr. 7		
EUR	eP	07 29 01
TUC	eP	07 28 16
TUC-T	eP	07 28 15
Apr. 7		
EUR	eP	07 58 15
THULE	eP	07 45 20
TUC-T	eP	07 57 32
Apr. 7		
COL	e(P)	10 37 33
EUR	eP	10 38 32
SJ	eP	10 32 53
	e	32 58
	e	35 12
TUC	eP	10 37 38
TUC-T	eP	10 37 38
Apr. 7		
COL	eP	11 04 03
	i	04 11
Apr. 7		
RC	eP	15 03 34
Apr. 7		
SJ	e(P)	15 50 53
Apr. 7		
EUR	eP	18 12 03
TUC	eP	18 12 05
Apr. 7		
EUR	eP	23 57 09
RC	eP	23 56 13
Apr. 8		
EUR	eP	00 36 40
RC	eP	00 35 44
Apr. 8		
EUR	eP	00 48 37
RC	eP	00 47 36
	epP	49 34
	ipP	49 39
TUC-T	eP	00 48 06
	e	50 04
Apr. 8		
EUR	eP	00 50 32
Apr. 8		
BC	iP	01 35 56
	epP	37 30
BUT	eP	01 36 29
COL	iP	01 36 33
	i	36 54
	ePP	39 37
EUR	iP	01 36 01
	i	36 24
	ipP	37 34
	isP	37 58
	ePKKP	53 06
	i	53 44
GUAM	eP	01 32 33
	i	33 03
HONO	iP	01 32 42
KIP	iP	01 32 43
	i	33 31
	e(pP)	34 13
RC	eP	01 36 48
	ePP	41 04
	ePKKP	52 36
SJ	iP'	01 41 33
	e	41 52
THULE	eP'	01 41 37
	iP'	41 44
	e(PP)	43 41
TUC	iP	01 35 57
	ipP	37 31
	e	38 19
	iS	46 54
	iPKKP	53 11
TUC-T	iP	01 35 59
	ipP	37 32
	e	38 19
	iPKKP	53 10
UK	iP	01 35 42
	epP	37 16
Apr. 8		
COL	eP	03 24 06
	e(S)	25 23
	iL	25 49
Apr. 8		
BC	eP	08 13 20
	epP	13 55
BOZ	eP	08 14 02
	epP	14 32
BUT	iP	08 13 58
	epP	14 29
COL	iP	08 13 59
	ipP	14 30
EUR	iP	08 13 28
	ipP	13 59
	isP	14 19
	ePKKP	40 22
GUAM	eP	08 10 31
RC	eP	08 13 21
	epP	13 51
SLC	eP	08 13 47
	e	14 20
TUC	iP	08 13 28
	ipP	13 59
TUC-T	iP	08 13 29
	ipP	13 59
	eP'P'	42 33
UK	eP	08 13 02
	epP	13 32
Apr. 8		
COL	iP'	12 03 35
COLU	eP	11 57 01
EUR	eP	11 58 03
	e	58 49
	iPP	12 01 59
	ePKKP	14 41
	i	15 10
RC	e(P)	11 58 02
	e	58 39
	ePP	12 01 19
	e	02 03
	ePKKP	15 05
SJ	iP	11 55 32
	e	56 30
THULE	iP'	12 03 31
	ePP	05 22
TUC	iP	11 57 25
	ePP	12 00 56
	ePKKP	15 05
TUC-T	iP	11 57 25
	e	12 00 53
	ePKKP	14 41
	i	15 03
WASH	iP	11 57 23
	ePP	12 01 51
Apr. 8		
TUC-T	eP	14 12 05
Apr. 8		
COL	iP	15 53 13
	i	53 27
EUR	eP	15 52 43
TUC	eP	15 52 42
TUC-T	iP	15 52 43
Apr. 8		
COL	eP	19 47 45
EUR	iP	19 51 13
	i	51 27
Apr. 8		
EUR	eP	20 27 28
TUC-T	eP	20 27 24
Apr. 9		
EUR	eP	01 58 46
Apr. 9		
EUR	eP	03 19 15

Date and Station		Phase (GCT)
		h m s
RC	eP	03 19 59
TUC	eP	03 20 55
TUC-T	eP	03 20 55
Apr. 9		
TUC	eP	04 24 37
	e	26 12
TUC-T	eP	04 24 38
	e	26 11
Apr. 9		
COL	iP	04 56 35
	ipP	56 57
EUR	iP	04 56 51
	ipP	57 16
THULE	eP'	05 02 26
TUC	eP	04 57 00
TUC-T	eP	04 57 00
Apr. 9		
BOZ	eP'	06 38 43
BUT	eP'	06 39 51
COL	eP'	06 37 58
	e	40 44
	ePP	41 05
COLU	eP'	06 38 38
	e	39 26
EUR	iP'	06 38 45
	i	39 56
	e	40 36
	ePP	43 45
	iPP	43 56
	e	46 19
	e	47 51
HH	eP'	06 39 41
RC	eP'	06 38 45
	e	40 09
	ePP	44 02
SJ	eP'	06 38 14
THULE	eP	06 37 58
	e	40 32
TUC	eP'	06 38 48
	e	40 15
	ePP	44 05
	e	48 06
	eL	07 38 50
TUC-T	iP'	06 38 47
	i	40 16
	ePP	44 10
	e	48 08

Date and Station		Phase (GCT)
		h m s
UK	e(P')	06 38 43
	e	39 33
Apr. 9		
EUR	e(P)	07 55 53
RC	eP	07 54 48
TUC	eP	07 55 11
TUC-T	eP	07 55 09
Apr. 9		
COL	iP	12 31 50
	ipP	32 03
EUR	iP	12 35 09
	ipP	35 25
	i	35 54
RC	iP	12 35 35
	epP	35 50
	ePKKP	13 03 02
THULE	iP	12 34 00
TUC	eP	12 35 58
TUC-T	eP	12 35 57
	ipP	36 13
Apr. 9		
COL	iP	12 50 27
EUR	eP	12 53 53
RC	eP	12 54 30
	e	54 43
TUC	eP	12 54 52
TUC-T	eP	12 54 52
Apr. 9		
COL	eP	13 06 53
EUR	eP	13 02 37
TUC	iP	13 01 12
	e	02 16
	e	08 26
TUC-T	iP	13 01 12
	e	02 28
Apr. 9		
COL	eP	17 20 31
THULE	eP	17 20 27
Apr. 9		
BC	eP	17 44 06
BOZ	eP	17 44 37
	e	45 34
BUT	eP	17 44 46

Date and Station		Phase (GCT)
		h m s
COL	eP	17 47 47
	ePP	50 14
	e(SeS)	57 14
	eL	18 11 44
COLU	eP	17 41 55
EUR	iP	17 44 24
HH	iP	17 45 04
RC	iP	17 43 59
	iPP	45 41
SLC	eP	17 44 10
	i	44 15
SJ	iP	17 40 40
	i	40 43
THULE	eP	17 47 20
	i	47 26
TUC	e(P)	17 43 19
	i	47 22
	iPcP	44 52
	e	49 12
	eL	54 49
TUC-T	eP	17 43 18
	iP	43 21
	ePP	44 24
UK	eP	17 45 05
	i	45 09
WASH	eP	17 42 41
	eS	50 50
	eL	51 00
Apr. 9		
COL	e(P)	18 42 20
Apr. 9		
COL	eP	19 35 03
EUR	eP	19 38 21
	i	38 38
Apr. 9		
EUR	eP	20 18 29
TUC-T	iP	20 17 41
	i	18 15
Apr. 10		
EUR	iP	00 03 50
Apr. 10		
EUR	eP	00 42 51
TUC	eP	00 38 42
	e	38 51
TUC-T	e(P)	00 38 38
	e	38 51
	eL	39 31

Date and Station		Phase (GCT)
Apr. 10		h m s
BC	eP	05 59 29
	epP	06 01 40
	ePP	03 05
BOZ	e(P)	06 00 05
	epP	02 12
	ePP	04 00
BUT	e(P)	05 59 59
	epP	06 02 10
COL	iP	05 59 53
	ipP	06 02 04
	i	02 11
	ePP	03 47
	iSKS	09 35
	iS	10 12
	e(SS)	16 20
	ePKKP	16 52
COLU	eP'	06 06 05
EUR	iP	05 59 33
	i	59 54
	ipP	06 01 44
	iPP	03 12
	ePKKP	16 28
	ipPKKP	17 51
GUAM	iP	05 55 46
	iPcP	56 53
	iPP	57 51
	iScP	59 53
	iPcS	06 00 54
	iS	02 19
	iScS	04 34
	isS	05 32
	iSS	06 17
HONO	iP	05 55 55
	i	56 42
HH	e(P)	06 02 10
KIP	iP	05 55 56
RC	eP	06 00 20
	e	00 33
	epP	02 37
	iPP	04 33
	e(SKS)	10 01
	ePKKP	16 38
	e	17 05
SLC	eP	05 59 49
	epP	06 02 01
	ePP	03 37
	eSKS	09 27
SJ	eP'	06 05 23
SIT	eP	05 59 43
	epP	06 01 58
THULE	iP'	06 05 20
	iPP	06 53
	ipP	07 59
	i(PKKP)	15 31

Date and Station		Phase	(GCT) h m s
TUC		iP	05 59 32
		ipP	06 01 44
		esP	03 12
		iSKS	09 06
		iS	09 39
		ePKKP	17 09
		eSKPP'	28 01
TUC-T		iP	05 59 33
		ipP	06 01 43
		esP	03 08
		iS	09 36
		iPKKP	17 08
		i	17 57
		eP'P'	25 11
UK		iP	05 59 12
		ipP	06 01 22
		esP	02 38
WASH		ePP	06 06 35
Apr. 10			
EUR		eP	07 57 18
Apr. 10			
EUR		eP	10 51 20
TUC		eP	10 50 09
TUC-T		eP	10 50 10
Apr. 10			
TUC-T		eP	13 49 47
Apr. 10			
COL		eP	13 55 55
Apr. 10			
EUR		e(P)	19 08 45
Apr. 10			
EUR		eP	20 00 39
Apr. 11			
BUT		eP	00 04 16
COL		iP	00 04 18
		i	04 30
EUR		iP	00 03 43
		e	04 07
TUC		eP	00 03 43
		e	03 52
TUC-T		eP	00 03 42
Apr. 11			
BC		eP	03 29 05
EUR		eP	03 27 35
		eL	31 04
TUC		eP	03 25 48
		e	26 05
		eL	36 56

Date and Station		Phase	(GCT) h m s
TUC-T		eP	03 25 50
		e	26 08
		iL	27 00
Apr. 11			
COL		iP	08 28 50
		iS	29 16
		iL	29 22
Apr. 11			
TUC		eP	09 12 23
		e	13 19
Apr. 11			
BH		iP	09 26 03
		iS	26 37
BOZ		e(P)	09 33 13
BUT		e(P)	09 33 23
COL		iP	09 36 29
COLU		eP	09 30 33
		eS	34 54
EUR		eP	09 33 03
SJ		iP	09 29 26
		eS	32 43
THULE		eP	09 35 07
TUC		eP	09 32 11
		eL	46 10
TUC-T		eP	09 32 11
		e	32 23
WASH		e(P)	09 31 21
		eL	42 47
Apr. 11			
EUR		eP	10 44 52
		eS	45 56
		eL	46 00
Apr. 11			
GUAM		iP	11 08 42
		iS	08 55
		iL	09 00
Apr. 11			
COL		eP	11 41 45
		ePP	45 12
		eS	52 29
EUR		eP	11 43 28
		eP'	47 32
GUAM		iP	11 33 46
		iPP	34 04
		i	34 13
		iS	38 13
TUC		eP'	11 47 44
		ePP	48 42

Date and Station		Phase	(GCT) h m s
TUC-T		iP'	11 47 44
		ePP	48 43
Apr. 11			
EUR		eP	11 58 28
Apr. 11			
EUR		eP	13 11 21
Apr. 11			
EUR		eP	14 20 55
Apr. 11			
COL		eP	14 26 29
		i	27 11
EUR		iP	14 29 56
		i	30 14
TUC		eP	14 30 56
		e	31 08
TUC-T		eP	14 30 56
Apr. 11			
BH		iP	14 48 17
		iS	49 49
BOZ		eP	14 55 24
COL		iP	14 58 18
EUR		iP	14 55 23
		i	55 40
SJ		iP	14 49 23
		iS	51 42
		eL	52 15
THULE		eP	14 57 30
TUC		iP	14 54 29
TUC-T		iP	14 54 28
		ePP	56 13
Apr. 11			
GUAM		iP	16 32 28
		iS	32 32
Apr. 11			
BOZ		eP	18 08 21
BUT		eP	18 08 17
COL		iP	18 08 18
EUR		eP	18 07 47
		i	08 11
SLC		e(P)	18 08 07
TUC		eP	18 07 47
TUC-T		eP	18 07 47
Apr. 11			
GUAM		iP	18 54 25
		iS	54 37

Date and Station		Phase	(GCT) h m s
Apr. 11			
COL		iP	19 13 57
Apr. 11			
GUAM		iP	20 15 51
		iS	16 06
		iL	16 08
Apr. 11			
TUC		eP	22 42 09
TUC-T		eP	22 42 08
Apr. 11			
COL		eP	23 32 59
Apr. 12			
EUR		eP	03 02 27
Apr. 12			
EUR		eP	03 10 56
TUC		e(P)	03 12 40
TUC-T		eP	03 12 37
Apr. 12			
COL		iP	06 16 39
		i	17 13
EUR		iP	06 16 04
		i	16 16
TUC		eP	06 16 04
		e	16 16
TUC-T		eP	06 16 05
		e	16 17
Apr. 12			
BH		iP	07 54 37
		iS	55 07
Apr. 12			
BC		eP	08 22 17
EUR		iP	08 22 34
		i	22 46
		e	23 12
SJ		e(P)	08 18 27
		eP	18 29
		i	18 33
		e	18 52
TUC		iP	08 21 46
TUC-T		iP	08 21 46
		e	22 14
Apr. 12			
BH		iP	09 59 04
BC		eP	10 00 18
		epP	00 38
		esP	00 53
BOZ		eP	10 01 10
		epP	01 41

Date and Station		Phase (GCT)
		h m s
BOZ	eS	10 06 11
BUT	eP	10 01 16
	epP	01 42
	esP	02 01
	ePP	02 27
	eS	06 22
COL	iP	10 04 46
	ipP	05 10
	eS	12 47
	iSeS	14 22
	eSS	16 50
	eL	20 23
	eP' P'	34 07
COLU	eP	09 59 31
	eS	10 03 22
	eL	07 00
EUR	iP	10 00 45
	ipP	01 18
	iPP	01 42
HONO	eP	10 04 46
	epP	05 12
HH	eP	10 01 40
	ipP	02 11
KIP	eP	10 04 46
	ipP	05 14
	isP	05 23
SLC	eP	10 00 35
	epP	01 05
SJ	eP	10 00 32
	iPP	01 23
SIT	eP	10 03 42
	ipP	04 17
THULE	iP	10 04 58
	ipP	05 23
	esP	05 34
	iPeP	05 42
	eS	13 11
TUC	iP	09 59 29
	iPP	10 00 05
	iS	03 17
	iL	04 12
TUC-T	iP	09 59 29
	iS	10 03 19
	eL	05 43
UK	eP	10 01 21
WASH	iP	10 00 25
	ipP	00 52
	i(PP)	01 49
	iPeP	03 37
	i(S)	05 37
	iL	08 03
Apr. 12		
EUR	iP	10 32 56

Date and Station		Phase (GCT)
		h m s
EUR	ipP	10 33 23
THULE	eP	10 34 06
TUC-T	e(P)	10 33 32
Apr. 12		
BUT	eP	11 12 44
COL	eP	11 10 26
EUR	eP	11 12 55
THULE	eP	11 11 28
Apr. 12		
COL	e(P)	11 17 07
Apr. 12		
COL	eP	11 50 56
EUR	eP	11 54 26
Apr. 12		
COL	e(P)	12 36 28
EUR	eP	12 39 57
Apr. 12		
COL	iP	15 05 35
Apr. 12		
COL	eP	15 35 22
	eS	46 01
	esPS	47 32
	eL	16 03 16
EUR	eP	15 36 57
	ePP	41 05
HONO	eP	15 33 55
HH	e(PP)	15 41 29
KIP	eP	15 33 54
	epP	34 15
RC	ePP	15 41 20
SJ	eP'	15 43 00
THULE	e(P)	15 36 49
TUC	eP'	15 41 17
	ePP	42 08
	eL	16 14 38
TUC-T	eP'	15 41 16
	ePP	42 06
Apr. 12		
COL	eP	15 48 44
Apr. 12		
COL	eP	15 58 19
EUR	eP	16 02 01
RC	eP	16 02 33

Date and Station		Phase (GCT)
		h m s
THULE	eP	16 01 00
Apr. 12		
EUR	eP	17 40 25
Apr. 12		
COL	eP	19 21 34
EUR	iP	19 24 59
Apr. 12		
BC	eP	21 05 48
	e	05 59
BOZ	eP	21 06 28
	e	06 40
BUT	eP	21 06 25
	e	06 36
	ePP	09 29
	eS	16 34
	eL	30 20
COL	iP	21 06 24
	i	06 35
	ePP	09 46
	iS	16 36
	eL	32 00
EUR	iP	21 05 54
	i	06 07
HONO	eP	21 01 33
	i	01 44
	e(S)	07 20
	i	07 44
	eL	10 48
	eT	41 11
	i	41 18
	iT	41 55
	eT	43 11
HH	iP	21 06 35
KIP	iP	21 01 35
	eT	41 36
RC	eP	21 06 50
	i	07 00
SLC	eP	21 06 13
	e	06 24
SIT	eP	21 06 08
	i	06 19
THULE	eP	21 08 34
	e(P')	12 43
TUC	iP	21 05 54
	i	05 57
	eL	29 08
TUC-T	iP	21 05 55
	e	08 01
UK	iP	21 05 29
	i	05 38

Date and Station		Phase (GCT)
		h m s
Apr. 12		
EUR	eP	22 14 32
Apr. 12		
COL	eP	23 30 50
	i	31 01
EUR	eP	23 34 27
Apr. 13		
BH	iP	00 19 26
	iS	20 14
Apr. 13		
THULE	eP	00 49 36
Apr. 13		
COL	iP	07 12 55
EUR	iP	07 12 26
RC	eP	07 13 18
TUC	iP	07 12 25
Apr. 13		
COL	iP	10 41 38
Apr. 13		
THULE	iP	11 24 10
Apr. 13		
EUR	eP	13 55 32
Apr. 13		
EUR	e(P)	14 06 43
Apr. 13		
EUR	eP	14 34 27
Apr. 13		
COL	eP	15 26 37
EUR	iP	15 24 04
RC	eP	15 24 44
Apr. 13		
THULE	eP	15 40 54
Apr. 13		
COL	eP	16 57 38
EUR	eP	17 01 04
Apr. 13		
COL	iP	18 44 15
	i	44 28
THULE	iP	18 44 12
Apr. 13		
EUR	eP	20 42 31
Apr. 13		
GUAM	iP	21 00 06
	iS	00 20
	eL	00 23

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

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	00 27 34
	i	27 48
Apr. 15		
COL	eP	01 27 09
Apr. 15		
EUR	eP	04 51 40
Apr. 15		
EUR	eP	05 12 37
TUC	eP	05 12 06
TUC-T	eP	05 12 07
Apr. 15		
EUR	eP	05 27 52
Apr. 15		
EUR	eP	05 41 18
Apr. 15		
TUC-T	e(P)	05 47 11
Apr. 15		
EUR	iP	12 00 29
Apr. 15		
EUR	eP	15 44 06
Apr. 15		
COL	eP	16 36 39
EUR	eP	16 37 15
Apr. 15		
BOZ	eP	17 10 47
COL	iP	17 07 25
	eL	11 41
COLU	eP	17 13 45
	e	14 04
EUR	iP	17 10 49
	i	11 04
	e	12 52
HH	eP	17 10 35
RC	eP	17 11 29
SJ	eP	17 15 39
SIT	e(P)	17 08 10
	e	08 21
TUC	e(P)	17 11 57
TUC-T	eP	17 11 50
	e	12 06
Apr. 15		
COL	e(P)	18 03 37
EUR	eP	18 07 04

Date and Station		Phase (GCT)
		h m s
Apr. 15		
BOZ	eP	19 20 48
COL	iP	19 17 10
EUR	iP	19 21 00
	i	21 19
RC	iP	19 21 24
TUC	iP	19 21 55
	e	22 27
TUC-T	iP	19 21 55
	e	22 25
	ePP	24 29
Apr. 15		
EUR	eP	19 31 46
Apr. 15		
COL	eP	21 46 52
EUR	iP	21 43 58
RC	iP	21 43 19
SJ	iP	21 38 18
	i	40 36
THULE	iP	21 46 08
TUC-T	iP	21 43 02
Apr. 15		
EUR	eP	22 02 41
Apr. 16		
COL	iP	00 04 48
EUR	iP	00 04 26
	epP	06 32
TUC	iP	00 04 26
TUC-T	iP	00 04 27
Apr. 16		
EUR	iP	03 21 00
	ipP	21 29
TUC	e(P)	03 20 15
TUC-T	eP	03 20 15
Apr. 16		
COL	iP	04 36 38
EUR	eP	04 40 01
Apr. 16		
EUR	iP	05 33 08
RC	eP	05 32 53
TUC	iP	05 32 21
TUC-T	iP	05 32 21

Date and Station		Phase (GCT)
		h m s
Apr. 16		
COL	eP	06 49 02
	i	49 09
	iS	49 34
	iL	49 53
Apr. 16		
COL	eP	07 39 40
	epP	41 41
EUR	iP	07 39 22
	epP	41 41
HONO	eP	07 35 37
KIP	eP	07 35 40
SLC	eP	07 39 38
THULE	e(P)	07 42 08
	iP'	46 38
	ePP	48 17
TUC	iP	07 39 22
	epP	41 25
TUC-T	iP	07 39 22
	epP	41 25
Apr. 16		
COL	eP	12 00 47
	e	01 18
Apr. 16		
BOZ	eP	16 27 00
COL	iP	16 25 00
	ipP	25 26
	eP' P'	52 58
EUR	iP	16 26 51
	ipP	27 13
	iPP	30 26
	e	38 16
GUAM	iP	16 14 26
HONO	iP	16 23 35
	ipP	23 54
HH	eP	16 26 45
KIP	iP	16 23 35
RC	eP	16 27 26
SLC	eP	16 27 05
THULE	eP	16 26 46
	ipP	27 07
TUC	iP	16 27 22
TUC-T	iP	16 27 22
	epP	27 41
	ePP	31 09
Apr. 16		
COL	eP	20 15 02

Date and Station		Phase (GCT)
		h m s
Apr. 17		
GUAM	iP	00 43 39
Apr. 17		
EUR	eP	00 58 14
Apr. 17		
COL	eP	01 01 58
	ipP	02 48
EUR	e(P)	01 03 09
Apr. 17		
EUR	eP	04 33 37
Apr. 17		
TUC	eP	07 10 44
Apr. 17		
COL	iP	10 43 37
EUR	iP	10 43 16
TUC	iP	10 43 16
TUC-T	iP	10 43 16
Apr. 17		
COL	eP	11 56 48
	e	57 46
Apr. 17		
COL	iP	12 13 39
	i	13 48
Apr. 17		
COL	iP	12 40 18
	iS	40 48
	iL	40 52
Apr. 17		
COL	eP	14 28 59
EUR	eP	14 32 15
Apr. 17		
COL	iP	16 16 12
	i	16 23
Apr. 17		
EUR	eP	16 20 21
	e(S)	21 24
	eL	21 45
Apr. 18		
SLC	e(P)	01 05 14
Apr. 18		
COL	eP	03 54 10
Apr. 18		
COL	iP	06 30 11
	ipP	30 34
	isP	30 45
	ePKKP	48 17
	eSKPP'	59 58
EUR	iP	06 31 11
	ipP	31 35

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

Date and Station		Phase (GCT)
		h m s
COLU	eP	04 26 45
	eS	31 24
EUR	iP	04 29 13
	i	29 43
HH	eP	04 29 50
	eL	51 28
RC	eP	04 28 37
SLC	eP	04 29 00
	e	31 02
SJ	iP	04 25 40
TUC	iP	04 28 09
	eL	38 22
TUC-T	iP	04 28 08
	e	31 37
Apr. 20		
BH	iP	04 39 34
	iS	40 16
Apr. 20		
BUT	eP	06 10 54
	e(S)	11 04
Apr. 20		
BH	iP	06 14 15
	iS	15 15
Apr. 20		
BH	iP	08 13 00
	iS	14 01
Apr. 20		
BH	iP	10 51 05
	iS	52 00
Apr. 20		
BC	eP	12 35 05
	eS	35 56
BOZ	e(P)	12 36 01
BUT	eP	12 36 06
	eS	37 44
EUR	iP	12 34 08
SLC	eP	12 34 59
	e	35 16
TUC	e(P)	12 36 33
	eL	38 41
TUC-T	eP	12 36 07
	e	36 18
	iL	38 43
Apr. 20		
COL	iP	13 49 45
Apr. 20		
BH	iP	16 30 14
	iS	31 06

Date and Station		Phase (GCT)
Apr. 20		h m s
EUR	eP	17 16 38
TUC-T	iP	17 14 59
Apr. 20		
BH	iP	17 38 32
	iS	39 25
Apr. 20		
BH	iP	18 26 28
	iS	27 15
Apr. 20		
BC	eP	19 35 54
COL	iP	19 31 42
EUR	iP	19 35 31
	i	35 45
RC	iP	19 35 56
	e	36 09
TUC-T	iP	19 36 27
	e	36 39
Apr. 20		
EUR	eP	23 08 32
TUC-T	eP	23 08 30
Apr. 21		
COL	eP	00 37 24
	e	37 34
EUR	eP	00 40 41
THULE	eP	00 39 31
Apr. 21		
COL	iP	01 39 47
	e	41 52
EUR	iP	01 39 27
	i	41 28
GUAM	eP	01 35 48
TUC	eP	01 39 27
	epP	41 28
TUC-T	iP	01 39 28
	ipP	41 29
Apr. 21		
EUR	iP	07 08 49
	iS	09 09
	iL	09 12
Apr. 21		
BC	eP	07 10 36
EUR	iP	07 11 34
	iS	11 55
	iL	11 59
Apr. 21		
COL	iP	07 49 03

Date and Station		Phase (GCT)
Apr. 21		h m s
BC	eP	10 13 29
BUT	eP	10 13 06
COL	iP	10 09 50
EUR	iP	10 13 08
	i	13 18
RC	eP	10 13 38
	i	13 48
SLC	eP	10 13 21
THULE	eP	10 12 04
TUC	eP	10 13 58
TUC-T	eP	10 13 58
Apr. 21		
EUR	eP	10 30 02
Apr. 21		
EUR	iP	11 09 42
Apr. 21		
GUAM	eP	11 02 18
THULE	eP	11 08 43
Apr. 21		
COL	eP	11 22 11
EUR	eP	11 25 42
TUC-T	e(P)	11 26 50
Apr. 21		
COL	eP	12 15 34
Apr. 21		
EUR	e(P)	12 33 55
Apr. 21		
BC	eP	12 50 08
BUT	eP	12 49 20
COL	eP	12 45 44
	i	46 32
	e	48 18
	eL	49 16
EUR	iP	12 49 41
	ipP	50 16
	i	50 35
	ePP	52 55
RC	iP	12 50 16
	i	50 53
SLC	eP	12 49 52
SIT	iP	12 46 30
	eS	49 13
	eL	49 29

Date and Station		Phase (GCT)
		h m s
TUC	iP	12 50 49
	e	50 58
TUC-T	iP	12 50 49
	e	51 32
Apr. 21		
EUR	iP	12 55 38
SJ	iP	12 54 50
	i	55 30
TUC-T	eP	12 55 11
Apr. 21		
BC	eP	13 45 22
COL	iP	13 50 00
EUR	iP	13 45 51
RC	eP	13 46 00
TUC	iP	13 44 29
	eL	50 17
TUC-T	iP	13 44 28
	eL	50 12
Apr. 21		
EUR	eP	16 47 57
	e	48 15
SJ	iP	16 43 42
	e	43 55
TUC-T	e(P)	16 47 14
Apr. 21		
EUR	eP	19 30 25
Apr. 21		
EUR	eP	19 48 42
TUC-T	eP	19 47 17
	e	53 07
Apr. 21		
THULE	iP	20 06 47
Apr. 21		
COL	eP	22 39 31
EUR	eP	22 42 58
	e	43 17
Apr. 21		
COL	iP	22 57 55
EUR	e(P)	23 01 51
Apr. 22		
COL	iP	03 47 50
EUR	eP	03 44 08
Apr. 22		
EUR	iP	03 44 55

Date and Station		Phase	(GCT) h m s
Apr. 22			
COL	eP		03 48 22
THULE	iP		03 47 22
Apr. 22			
EUR	eP		05 41 29
Apr. 22			
COL	eP		06 37 52
Apr. 22			
EUR	iP		07 50 12
	ipP		51 02
TUC	eP		07 53 40
TUC-T	eP		07 53 40
Apr. 22			
EUR	eP		08 00 37
TUC	iP		07 59 20
	e		08 06 08
TUC-T	iP		07 59 19
Apr. 22			
EUR	eP		08 03 37
Apr. 22			
EUR	eP		09 28 35
Apr. 22			
COL	iP		10 58 38
	iS		11 01 34
	eL		02 56
EUR	iP		11 02 16
	i		02 34
	i		02 45
HONO	eP		11 02 50
	e		03 19
HH	iP		11 01 43
	ePcP		03 37
KIP	e(P)		11 02 48
	iP		02 50
	eT		35 49
	iT		36 13
RC	iP		11 02 55
	ePcP		04 34
	iScS		08 32
SLC	eP		11 02 30
SJ	eP		11 07 24
	e		07 44
SIT	iP		10 59 23
	eS		11 02 54
	eL		04 13
THULE	iP		11 02 46
TUC	iP		11 03 22
	ePP		05 05

Date and Station		Phase	(GCT) h m s
TUC-T	iP		11 03 22
	e		03 40
	e		08 45
UK	iP		11 01 42
	e		02 00
Apr. 22			
BUT	eP		11 02 01
	e(S)		08 09
EUR	iP		11 08 15
	i		08 28
THULE	iP		11 08 29
Apr. 22			
COL	iP		15 51 13
EUR	eP		15 50 39
TUC-T	eP		15 50 35
Apr. 22			
EUR	eP		16 28 48
TUC-T	eP		16 27 04
Apr. 22			
BH	iP		17 25 53
	iS		27 15
COL	iP		17 36 00
	e		38 54
EUR	iP		17 33 05
	i		33 24
GUAM	eP		17 34 07
RC	iP		17 32 25
SJ	eP		17 27 04
	i		27 10
	eS		29 19
	eL		29 38
THULE	iP		17 35 14
TUC	eP		17 32 11
TUC-T	eP		17 32 16
Apr. 22			
EUR	eP		17 38 18
Apr. 22			
BH	iP		19 03 30
	iS		06 23
BC	eP		19 08 41
BUT	eP		19 09 26
COL	iP		19 08 56
COLU	eP		19 06 50

Date and Station		Phase	(GCT) h m s
EUR	iP		19 09 02
	ipP		09 12
	iPcP		11 14
	eScP		15 04
HH	eP		19 09 44
	ePcP		11 31
	eL		27 17
RC	iP		19 08 40
SLC	eP		19 08 51
	e		09 01
	ePcP		11 13
SJ	eP		19 06 26
	i		06 35
THULE	iP		19 12 25
	ePcP		12 52
	ePP		14 39
TUC	eP		19 08 06
	eL		18 40
TUC-T	eP		19 07 56
	i		08 06
	iPcP		10 55
	e		14 39
WASH	eP		19 07 42
	eL		17 35
Apr. 22			
COL	iP		19 12 37
	e		15 12
Apr. 22			
BH	iP		20 35 31
	iS		41 39
BC	eP		20 38 27
BOZ	eP		20 39 17
COLU	eP		20 38 12
EUR	eP		20 38 44
	i		38 55
	i		39 09
	i		39 47
HH	eP		20 39 32
RC	eP		20 39 00
TUC	eP		20 38 04
TUC-T	eP		20 37 57
	i		38 02
UK	eP		20 38 56
	e		39 00
WASH	eP		20 38 44
	eL		21 04 01
Apr. 22			
COL	eP		20 57 09

Date and Station		Phase	(GCT) h m s
EUR	eP		20 53 16
TUC	eP		20 52 04
TUC-T	iP		20 52 04
Apr. 22			
EUR	e(P)		21 05 53
Apr. 22			
EUR	eP		22 36 06
Apr. 22			
BH	iP		23 51 18
	e		52 18
Apr. 23			
EUR	eP		03 02 27
Apr. 23			
EUR	eP		04 01 39
Apr. 23			
EUR	iP		06 11 15
Apr. 23			
COL	eP		12 24 38
EUR	eP		12 23 23
Apr. 23			
THULE	eP		18 04 54
Apr. 23			
COL	eP		19 22 40
EUR	iP		19 22 56
	i		23 37
	i		23 49
TUC-T	eP		19 23 07
Apr. 23			
COL	eP		19 34 52
	i		35 01
	iL		36 23
Apr. 23			
EUR	eP		20 34 20
	e		35 12
Apr. 23			
COLU	eP		20 59 38
	e		21 00 22
EUR	eP		21 04 32
TUC-T	eP		21 04 08
WASH	eP		20 59 37
	i(S)		21 00 17
	iL		00 30
Apr. 23			
COL	iP		21 55 18
	e		55 36
EUR	iP		21 54 57

Date and Station		Phase (GCT)
		h m s
TUC-T	iP	21 54 59
Apr. 23		
COL	iP	22 45 56
Apr. 24		
EUR	e(P)	00 44 43
Apr. 24		
COL	iP	02 40 30
EUR	eP	02 39 56
TUC	eP	02 39 53
TUC-T	eP	02 39 54
Apr. 24		
EUR	eP	06 49 33
Apr. 24		
COL	iP	07 28 07
Apr. 24		
BOZ	eP	08 45 40
EUR	eP	08 46 21
	eL	47 37
RC	eP	08 46 41
	eL	47 57
SLC	eP	08 45 40
	e	46 12
Apr. 24		
EUR	eP	08 56 29
Apr. 24		
BH	iP	09 33 23
	iS	36 10
BC	e(P)	09 38 33
BOZ	eP	09 39 11
BUT	eP	09 39 19
COL	iP	09 42 31
	i	42 46
	iPP	45 05
COLU	eP	09 36 43
	eS	40 56
EUR	iP	09 38 56
	i	39 07
	iPcP	41 10
	e	44 59
HH	eP	09 39 37
	ePP	41 23
	eL	58 37
RC	iP	09 38 33
SLC	eP	09 38 44
	e	41 06

Date and Station		Phase (GCT)
		h m s
SJ	eP	09 36 19
	e	36 38
TUC	eP	09 37 50
	iPPP	39 04
	ePcP	40 48
	eL	45 18
TUC-T	eP	09 37 49
	i	38 04
	iPcP	40 48
	eL	45 30
WASH	eP	09 37 32
	iP	37 33
	ePP	38 47
	eS	42 34
	eL	46 36
Apr. 24		
COL	eP	10 01 17
	eL	03 24
Apr. 24		
TUC-T	e(P)	11 26 11
Apr. 24		
COL	iP	12 57 31
EUR	eP	12 56 52
TUC	eP	12 56 54
TUC-T	iP	12 56 55
	e	57 04
Apr. 24		
GUAM	iP	15 20 56
Apr. 24		
EUR	eP	15 33 54
Apr. 24		
BOZ	eP	18 11 41C
BUT	eP	18 11 40C
COL	iP	18 11 42C
	e	15 21
	iSKS	22 15
	ePS	24 38
	e	27 54
	ePKKP	27 56
	eP'P'	36 23
	eL	38 40
COLU	eP	18 17 34
EUR	iP	18 11 04C
	ePKKP	28 01
	iPKKP	28 34
	eP'P'	36 32
GUAM	iP	18 07 49C
	i	08 05
	i	08 28
	eS	15 32

Date and Station		Phase (GCT)
		h m s
HONO	eP	18 07 43D
	iP	07 45
	i	08 35
	iS	15 32
	e	18 48
HH	eP	18 11 39C
	ePP	15 38
	ePS	24 33
	eL	40 11
SLC	eP	18 11 25C
TUC	iP	18 11 06C
	e	12 32
	iPP	14 21
	iS	21 33
	eSKS	21 56
	i	23 07
	eSSS	31 41
UK	iP	18 10 50C
	i	11 04
Apr. 24		
GUAM	iP	19 03 24
	iS	03 32
Apr. 24		
EUR	eP	19 26 53
Apr. 24		
EUR	eP	19 33 06
Apr. 24		
EUR	eP	22 33 24
Apr. 24		
COLU	eP	22 53 30
TUC	eP	22 55 15
Apr. 25		
BUT	eP	00 39 42
COL	iP	00 38 43
	ePP	41 31
	eS	48 43
	eSS	53 32
	e	57 10
	e	57 35
	eL	01 08 50
COLU	eP	00 39 11
EUR	iP	00 40 14
HH	eP	00 39 34
SJ	eP	00 39 05
	i	39 08
SIT	eP	00 39 20
TUC	eP	00 40 33
	e	44 44
	eL	53 34

Date and Station		Phase (GCT)
		h m s
WASH	iP	00 38 40
Apr. 25		
COL	iP	01 17 43
EUR	iP	01 19 15
HH	eP	01 18 35
SJ	eP	01 18 06
SIT	eP	01 18 21
Apr. 25		
COL	iP	05 34 36
EUR	eP	05 35 59
Apr. 25		
COL	iP	06 17 12
COLU	eP	06 10 37
	e	14 05
EUR	iP	06 14 39
SJ	iP	06 06 25
WASH	eP	06 10 55
Apr. 25		
EUR	eP	11 47 05
Apr. 25		
EUR	eP	12 17 11
	i	17 14
	i	17 16
	iS	17 51
	iL	17 55
Apr. 25		
EUR	eP	15 12 29
TUC	e(P)	15 11 17
	i	11 22
	e(S)	12 09
	eL	12 12
Apr. 25		
TUC-T	iP	16 57 10
Apr. 25		
COL	eP	20 46 40
EUR	iP	20 43 53
TUC	eP	20 42 56
TUC-T	eP	20 42 55
Apr. 25		
EUR	eP	21 48 48
TUC	eP	21 48 09
TUC-T	eP	21 48 08
	e	48 38

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

Date and Station		Phase (GCT)
		h m s
WASH	iPP	10 10 58
Apr. 27		
EUR	iP	10 17 34
	i	18 54
	e	21 36
TUC	eP	10 17 22
TUC-T	eP	10 17 20
Apr. 27		
COL	eP	13 00 04
	e	00 48
EUR	eP	13 03 00
HONO	eP	12 59 16
Apr. 27		
COL	iP	13 20 45
EUR	eP	13 27 37
THULE	eP	13 20 34
Apr. 27		
BC	eP	17 46 06
	iP	46 09
EUR	iP	17 46 58
	i	47 16
	i	47 26
	eS	48 28
	eL	48 43
TUC	iP	17 46 13
	i	46 20
	e(S)	47 13
	iL	47 20
TUC-T	iP	17 46 06
	i	46 19
	eL	47 25
Apr. 27		
COL	eP	18 36 41
EUR	eP	18 40 59
Apr. 27		
THULE	e(P)	20 21 34
	e	24 58
Apr. 28		
GUAM	iP	01 49 01
Apr. 28		
COL	eP	01 57 15
Apr. 28		
COL	eP	10 28 39
	e(S)	29 43
	iL	30 03
Apr. 28		
SJ	eP	10 36 57

Date and Station		Phase (GCT)
Apr. 28		h m s
BH	iP	11 12 48
	iS	16 33
BC	eP	11 15 36
	e	17 10
	e(S)	21 08
	eL	25 27
BOZ	eP	11 16 24
	e	16 33
	e	16 47
BUT	iP	11 16 31
	e	17 32
	ePP	18 00
COL	iP	11 19 54
	iPcP	20 35
	ePP	22 19
	iS	28 23
	eScS	30 07
	eL	35 03
	eP'P'	48 56
COLU	iP	11 14 28
	iS	18 35
EUR	iP	11 16 02
	eS	22 43
	eP'P'	47 29
HONO	eP	11 19 54
	eS	28 23
	eL	35 52
HH	eP	11 16 50
	ePcP	19 07
	eS	22 42
	i	23 08
	eL	24 43
KIP	eP	11 19 52
SLC	iP	11 15 51
	e	16 28
	eS	21 01
	eL	27 21
SJ	eP	11 15 03
	i	15 21
	eL	23 22
SIT	iP	11 18 52
	e	19 17
	eS	26 35
	eL	42 23
THULE	eP	11 19 57
	ePcP	20 37
	eL	35 49
TUC	iP	11 14 50
	i	15 02
	iS	19 20
	eL	22 29
TUC-T	iP	11 14 50
	iS	19 17
	eL	22 12

Date and Station		Phase (GCT)
		h m s
UK	iP	11 16 36
	e(S)	22 26
	eL	26 31
Apr. 28		
EUR	eP	12 57 26
TUC	e(P)	12 56 32
TUC-T	eP	12 56 31
Apr. 28		
COL	iP	13 13 10
	i	13 42
	i	13 50
EUR	iP	13 14 11
	ipP	14 38
Apr. 28		
COL	iP	13 27 35
Apr. 28		
BC	eP	14 27 05
	e	27 27
COL	iP	14 23 11
	i	23 31
EUR	iP	14 26 41
	ipP	27 02
	iPcP	28 31
	iScP	32 01
	ePcS	32 41
HH	eP	14 26 10
THULE	iP	14 26 35
TUC-T	iP	14 27 41
	i	28 04
UK	iP	14 26 08
	e	26 26
Apr. 28		
COL	iP	16 10 48
EUR	eP	16 11 56
GUAM	iP	16 02 42
Apr. 28		
BC	e(P)	17 19 23
	e	19 37
BOZ	eP	17 18 57
COL	iP	17 15 34
	eS	19 09
	eL	21 21
COLU	eP	17 22 00
EUR	iP	17 19 01
	ipP	19 15
	iPcP	21 13

Date and Station		Phase (GCT)
		h m s
SIT	eP	17 15 24
	e	15 33
THULE	eP	17 19 18
TUC-T	eP	17 20 02
	i	20 15
Apr. 28		
TUC-T	iP	17 25 39
Apr. 28		
COL	iP	17 30 43
EUR	eP	17 26 50
Apr. 28		
TUC-T	eP	21 56 24
Apr. 28		
COL	iP	22 10 03
EUR	iP	22 12 58
	i	13 18
GUAM	eP	22 05 48
	iP	05 49
	i	05 58
	eS	09 16
THULE	e(P)	22 11 50
TUC-T	e(P)	22 13 39
	e	14 06
Apr. 29		
COL	eP	00 36 31
Apr. 29		
THULE	iP	01 35 04
Apr. 29		
EUR	iP	03 20 36
TUC	eP	03 18 53
TUC-T	eP	03 18 53
Apr. 29		
COL	iP	03 40 30
Apr. 29		
GUAM	iP	05 00 25
	eS	00 41
	iL	00 46
Apr. 29		
COL	e(P)	05 16 16
EUR	eP	05 19 45
	ipP	19 56
Apr. 29		
COL	iP	05 46 38
EUR	eP	05 42 44
TUC	eP	05 41 34

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

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
Apr.	
BUT	
1	05.9
	09.1
3	19.8
12	02.4
	03.9
13	05.1
16	04.7
17	21.9
18	17.3
	22.8
20	06.2
21	18.7
24	08.8
25	15.9
	19.5
27	00.2
Apr.	
COL	
2	21.4
3	16.7
4	03.9
	05.0
7	17.4
8	12.8
	14.0
9	07.8
11	12.4
	21.3
12	07.0
16	07.3
17	01.3
18	01.8
19	04.4
20	21.4
21	00.2
	00.6
	03.3
	07.3
	14.9
	17.8
22	14.4
23	09.7
	19.8
25	16.8
27	16.3
30	06.9
Apr.	
EUR	
2	03.3
3	04.5
4	01.9
	21.1
6	09.8
7	08.4
8	03.7
11	04.7
15	01.2
20	06.3
	13.1
21	07.3

Date and Station	Phase (GCT)
	h m s
Apr.	
EUR	
24	16.9
26	09.0
27	21.4
Apr.	
HONO	
3	01.5
5	10.2
11	01.5
Apr.	
KIP	
3	01.5
5	10.2
11	01.5
Apr.	
RC	
14	20.8
Apr.	
SJ	
1	20.4
4	03.4
	23.4
5	05.1
	22.3
	22.4
6	03.8
7	02.1
8	09.0
	20.9
11	09.8
12	06.3
	08.3
14	04.8
	05.9
16	06.8
	14.1
20	13.6
	22.6
21	09.5
	15.9
24	15.6
25	06.5
	06.9
	16.2
26	04.3
27	04.1
28	02.6
	03.2
30	07.3
Apr.	
SIT	
12	05.6
16	11.5
21	07.2
24	10.0
29	11.2
Apr.	
TUC	
2	05.8
	06.5

Date and Station	Phase (GCT)
	h m s
Apr.	
TUC	
2	07.9
3	06.9
4	07.4
	11.9
5	10.8
8	07.4
	07.6
10	01.0
11	06.2
12	16.1
14	04.0
	05.0
15	09.2
16	12.1
21	04.9
	05.0
	11.6
22	13.2
25	09.2
	09.8
	15.2
	18.1
26	01.6
	05.9
	08.8
30	00.6
Apr.	
UK	
2	23.8
4	02.5
11	14.1
13	18.6
23	11.3
25	12.5