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April, 1960

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U. S. DEPARTMENT OF COMMERCE

Luther H. Hodges, Secretary

COAST AND GEODETIC SURVEY—WASHINGTON

H. Arnold Karo, Director

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National Oceanic and Atmospheric Administration

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1960

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the data from the horizontal components of the seismographs at all stations except College, Honolulu, and Tucson will not be published for earthquakes occurring outside the United States.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 1960	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth, and Remarks
Apr.	h m s	°	°	
1	02 55 04*	22 S.	179½ W.	Fiji Islands region. h about 650 km.
1	13 18 23*	14½ S.	73½ W.	Southern Peru. h about 100 km.
1	14 12 05*	49 N.	129½ W.	Off coast of Vancouver Island.
1	23 02 31*	17½ S.	180	Fiji Islands. h about 550 km.
2	06 39 08*	18½ N.	146 E.	Mariana Islands.
2	10 29 50*	36½ N.	71 E.	Hindu Kush. h about 200 km.
2	11 07 57*	½ N.	80½ W.	Near coast of Ecuador.
2	14 14 42*	6 S.	152 E.	New Britain.
2	15 00 36*	3 N.	76½ W.	Colombia. h about 150 km.
2	22 36 08*	36 N.	50 E.	Western Iran. Damage at Asadabad and Malayer. Felt at Hamadan, Kermansha and Toysarkan.
2	23 02 50*	11 S.	113 E.	Off south coast of Java.
2	23 33 09*	34½ N.	48½ E.	Western Iran. Felt at Malayer and Asadabad.
3	05 10 32*	28 N.	139½ E.	Bonin Islands region. h about 550 km.
3	07 19 58*	40 N.	143 E.	Off northeast coast of Honshu, Japan.
3	09 52 05*	6 S.	148½ E.	New Britain.
3	17 04 19*	31 S.	72½ W.	Off the coast of central Chile. h about 150 km.
3	23 57 50*	15½ N.	60½ W.	Lesser Antilles.
4	07 56 15*	10 S.	161½ E.	Solomon Islands. h about 100 km.
4	10 20 12*	1 S.	145½ E.	Bismarck Archipelago.
4	12 45 30*	5 S.	152 E.	New Britain. Felt at Rabaul and Karla. h about 100 km.
4	13 12 57*	35 N.	103 E.	China.
4	18 52 15*	15 N.	119½ E.	Luzon, Philippine Islands.
4	20 52 15*	15 N.	119½ E.	do.
4	23 22 47*	50½ N.	177 W.	Aleutian Islands.
5	07 17 45*	61 S.	26 W.	Sandwich Islands.
5	12 36 15*	60½ S.	25 W.	do.
5	17 25 19*	65 N.	2 W.	North Atlantic Ocean.
6	02 05 06*	20 S.	168½ W.	Chile-Bolivia border.
7	03 05 35*	21 S.	179½ W.	Fiji Islands region. h about 600 km.
7	08 36 54*	40 N.	143 E.	Off east coast of Honshu, Japan.
7	13 47 28*	24 S.	179½ W.	Fiji Islands region. h about 500 km.
7	20 03 37*	12 N.	143½ E.	Mariana Islands.
7	23 55 54*	21 S.	177 W.	Tonga Islands. h about 200 km. Mag. 6 (Berk).
8	08 35 37*	6 S.	147 E.	New Guinea.
9	02 43 51*	40 N.	143 E.	Near east coast of Honshu, Japan.
9	20 15 43*	45 N.	111½ W.	Montana.
10	00 04 43*	36 N.	142 E.	Near coast of Honshu, Japan.
10	04 49 41*	12½ N.	143½ E.	Mariana Islands region. h about 100 km.

Date 1960	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
Apr.	h m s	°	°	
10	08 52 10**			San Luis Province, Argentina.
10	13 07 30*	27 N.	141 E.	Bonin Islands.
10	20 26 12*	53 N.	167½ W.	Fox Islands, Aleutian Islands.
10	22 05 29*	38 N.	27½ E.	Western Turkey.
11	16 00 26*	17 S.	167½ E.	New Hebrides Islands.
12	01 16 40*	58 N.	155 W.	Alaska Peninsula.
12	04 22 37*	37½ N.	28 E.	Western Turkey.
12	07 11 54*	40 N.	143½ E.	Off east coast of Honshu, Japan.
12	11 32 10**			New Britain Island region. Felt at Rabaul.
12	20 41 10*	46½ N.	96 E.	Outer Mongolia.
12	21 46 02*	3½ S.	152 E.	New Ireland. Felt at Rabaul.
13	04 50 28*	52 N.	175 W.	Andreanof Islands, Aleutian Islands.
13	07 57 46*	44½ N.	127 E.	Manchuria.
13	11 27 58*	35 N.	25½ E.	Crete. Felt at Kasos.
13	12 37 38*	15½ N.	92½ W.	Guatemala- Mexico border. 1 killed, 14 injured. Mag. 6.
13	13 14 28*	52½ N.	169 W.	Fox Islands, Aleutian Islands.
14	06 24 30*	8 S.	118 E.	Sumbawa Island region.
15	03 25 38*	27 S.	113 W.	Easter Island region. Mag. 6½
15	04 13 25*	13½ S.	166 E.	New Hebrides Islands.
15	08 33 08*	28 S.	177 W.	Kermadec Islands.
15	10 06 20*	42½ N.	143½ E.	Near south coast of Hokkaido, Japan.
15	11 03 45*	42 N.	144 E.	do.
15	11 39 01*	40½ N.	142 E.	Near north coast of Honshu, Japan. h about 150 km.
15	22 05 06*	13½ S.	166 E.	New Hebrides Islands. Mag. 6½.
16	20 38 25*	45 N.	150 E.	Kurile Islands.
17	01 12 44*	54 N.	164 W.	Unimak Island region.
17	15 40 02*	21 S.	175½ W.	Tonga Islands.
17	18 29 20**			Guatemala.
17	21 49 24*	20 S.	180	Fiji Islands. h about 500 km.
18	08 07 07*	28 N.	139½ E.	Bonin Islands region. h about 450 km.
18	09 01 20*	13½ S.	166 E.	New Hebrides Islands.
18	13 01 12*	13½ S.	166 E.	do.
18	16 54 52*	16½ S.	168 E.	New Hebrides Islands.
19	01 13 27*	46 N.	151 E.	Kurile Islands.
19	09 22 31*	20 S.	173½ W.	Tonga Islands.
19	19 26 00*	51½ N.	174 W.	Andreanof Islands, Aleutian Islands.
19	20 06 10*	13½ S.	166 E.	New Hebrides Islands.
19	20 32 51*	51 N.	172½ W.	Fox Islands, Aleutian Islands.
19	22 16 42*	13½ S.	166½ E.	New Hebrides Islands.

Date 1960	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
Apr.	h m s	°	°	
19	22 44 39*	13½ S.	166 E.	New Hebrides Islands.
20	19 23 04*	37 N.	71 E.	Hindu Kush. Felt at Warsak. h about 200 km.
20	21 36 41*	2½ S.	140 E.	Near north coast of New Guinea.
21	02 16 29*	2½ S.	110 W.	Pacific Ocean, about 1200 miles west of Galapagos Islands. Mag. 5 3/4 (Berk).
21	12 57 41*	22 N.	144 E.	Mariana Islands region. h about 200 km.
21	16 14 42**			Near coast of Sumatra.
21	16 21 57*	20½ S.	174 W.	Tonga Islands.
21	17 49 30*	45 N.	111 W.	Hebgen Lake, Montana.
22	14 58 16*	30½ S.	177½ W.	Kermadec Islands.
22	18 47 17*	12½ N.	123½ E.	Masbate, Philippine Islands.
22	20 26 28*	17½ S.	174½ W.	Tonga Islands. h about 200 km.
23	06 26 16*	31½ N.	50½ E.	Iran.
23	12 09 00*	17 S.	175 W.	Tonga Islands. h about 200 km.
23	13 08 35*	45 N.	98 E.	Outer Mongolia.
23	17 58 19*	6 S.	154½ E.	Solomon Islands.
23	23 58 23*	53 N.	172½ E.	Near Islands, Aleutian Islands.
24	03 22 23*	6 S.	113½ E.	Java Sea. h about 600 km.
24	06 00 06*	40 N.	39 E.	Eastern Turkey.
24	12 14 26*	28 N.	54½ E.	Southern Iran. 500 dead, many injured and major property damage at Gerash and Lar.
24	14 50 45*	32½ S.	72 W.	Near coast of central Chile.
24	18 04 05*	29 S.	177 W.	Kermadec Islands.
24	20 36 57*	43 N.	111½ W.	Idaho.
25	00 14 17*	42 N.	142 E.	Near south coast of Hokkaido, Japan.
25	04 01 10*	46 N.	144 E.	Off north coast of Hokkaido, Japan.
25	12 46 04*	50 N.	158 E.	Off south coast of Kamchatka.
25	14 53 53*	56 N.	155 W.	Kodiak Island region.
25	16 28 32*	38½ N.	25 E.	Aegean Sea.
25	18 53 17*	13½ N.	88½ W.	Near coast of El Salvador.
26	04 34 06*	11 N.	84½ W.	Nicaragua-Costa Rica border.
26	16 23 01*	44½ N.	111 W.	Hebgen Lake, Montana.
26	16 30 19*	44½ N.	111 W.	do.
26	18 07 46*	11½ S.	166½ E.	Santa Cruz Islands.
26	20 19 10*	24½ N.	122½ E.	Off coast of Formosa.
26	21 27 12*	39 N.	101 E.	Kansu Province, China.
27	04 32 30*	44½ N.	111 W.	Hebgen Lake, Montana. Felt at West Yellowstone.
27	11 05 40*	9 S.	160 E.	Solomon Islands.
27	17 11 30*	3½ S.	146½ E.	Bismarck Sea.
27	17 39 32*	28 N.	54½ E.	Southern Iran. Depth slightly greater than normal.

Date 1960	Origin Time G. C. T.	Lat.	Long.	Region, Focal Depth and Remarks
Apr.	h m s	°	°	
27	21 05 51*	40 N.	142 E.	Near north coast of Honshu, Japan.
27	22 43 49*	18 N.	120 E.	Off coast of Luzon, Philippine Islands.
28	00 49 16*	53½ N.	168 W.	Fox Islands, Aleutian Islands.
28	02 10 14*	59½ S.	26 W.	Sandwich Islands.
28	05 08 07*	3½ S.	144½ E.	Near coast of New Guinea.
28	16 33 25*	35½ N.	27 E.	Dodecanese Islands.
29	02 15 35*	56½ S.	26 W.	Sandwich Islands.
29	03 43 04*	55½ S.	25 W.	do.
29	05 45 14**			do.
29	09 16 08*	0	121½ E.	Celebes.
29	09 53 26*	0	122 E.	do.
29	10 06 14*	0	122 E.	do.
29	11 30 47*	0	122 E.	do.
29	12 47 16*	1 S.	78½ W.	Ecuador.
29	13 38 31*	30 S.	178½ W.	Kermadec Islands.
29	14 45 42**			Kermadec Islands region.
29	15 35 08**			Near New Britain. Depth slightly greater than normal.
29	18 55 42*	½ S.	121½ E.	Celebes.
29	19 32 12*	0	122 E.	do.
29	20 44 27*	0	121½ E.	do.
30	00 20 09*	0	122 E.	do.
30	04 01 32*	0	122 E.	do.
30	10 11 23*	0	121½ E.	do.
30	11 00 05*	16 S.	173 W.	Tonga Islands region.
30	13 11 29*	0	122 E.	Celebes.
30	14 17 04*	9 S.	157 E.	Solomon Islands.
30	22 10 07*	6 S.	124½ E.	Banda Sea. h about 600 km.
30	23 09 10*	0	122 E.	Celebes.

Date and Station		Phase (GCT) h m s
Apr. 1		
EUR	e(P)	00 41 01
	i	41 09
	eL	42 21
RC	eP	00 41 09
	e	42 26
Apr. 1		
COL	iP	03 07 03
	epP	09 12
EUR	iP	03 06 41
GUAM	iP	03 03 06
SLC	eP	03 06 58
TUC	iP	03 06 42
TUC-T	iP	03 06 43
Apr. 1		
EUR	iP	05 02 01
Apr. 1		
HH	i(P)	05 51 48
RC	e(P)	05 51 26
	e	52 44
Apr. 1		
COL	eP	07 54 12
EUR	iP	07 54 33
Apr. 1		
EUR	iP	08 09 54
Apr. 1		
BOZ	eP	13 29 22
BUT	iP	13 29 26
COL	iP	13 31 43
EUR	iP	13 29 09
	ipP	29 34
RC	iP	13 28 51
SLC	eP	13 28 59
THULE	iP	13 31 19
	e	31 43
TUC	iP	13 28 14
TUC-T	iP	13 29 14
	epP	29 39
WASH	iP	13 29 31
	eL	40 04
Apr. 1		
THULE	e(P)	14 12 05

Date and Station		Phase (GCT) h m s
Apr. 1		
BOZ	eP	14 15 11
	e	15 26
	eL	19 03
BUT	eP	14 14 54
	eL	19 12
COL	iP	14 16 29
	iS	20 09
	eL	21 54
COLU	eP	14 19 32
EUR	iP	14 15 22
HH	eP	14 14 38
	eL	17 16
RC	iP	14 16 26
	eL	23 25
SLC	eP	14 15 41
	e	16 13
THULE	eP	14 19 14
TUC	iP	14 17 03
	eS	21 16
	eL	25 14
TUC-T	eP	14 17 02
UKIAH	eP	14 15 44
	iP	15 47
Apr. 1		
COL	eP	14 46 58
EUR	eP	14 45 54
RC	eP	14 46 58
Apr. 1		
COL	eP	15 12 06
Apr. 1		
TUC-T	iP	17 08 04
	iL	08 23
Apr. 1		
COL	iP	23 14 19
	epP	16 20
EUR	iP	23 12 08
	ipP	14 00
TUC	eP	23 13 03
TUC-T	iP	23 13 03
Apr. 2		
SJ	eP	01 37 03
	e	37 54
Apr. 2		
COLU	eP	03 08 20
Apr. 2		
COL	iP	05 22 01

Date and Station		Phase (GCT) h m s
EUR	iP	05 21 40
TUC	eP	05 21 41
Apr. 2		
BUT	eP	06 51 42
	e	52 09
COL	iP	06 49 39
EUR	iP	06 51 42
GUAM	iP	06 40 24
	iS	41 18
RC	eP	06 52 15
	e	52 47
SLC	eP	06 51 53
	e	52 20
THULE	iP	06 51 33
TUC	eP	06 52 13
Apr. 2		
EUR	iP	08 43 56
TUC	e(P)	08 42 25
Apr. 2		
COL	eP	10 41 10
	epP	42 03
Apr. 2		
BH	iP	10 35 04b
	iS	35 40
Apr. 2		
COL	eP	11 20 07
EUR	iP	11 16 58
RC	iP	11 16 37
SLC	eP	11 16 47
SJ	iP	11 12 54
TUC	eP	11 15 56
TUC-T	eP	11 15 57
Apr. 2		
COL	iP	12 02 02
EUR	eP	12 01 28
TUC	e(P)	12 01 28
	e	01 42
Apr. 2		
COL	iP	14 27 10
	i	27 25
EUR	iP	14 28 09
GUAM	eP	14 19 27

Date and Station		Phase (GCT) h m s
Apr. 2		
COL	iP	14 59 54
EUR	e(P)	14 59 21
TUC	eP	14 59 19
Apr. 2		
BH	iP	15 02 12
	iS	03 25
COL	iP	15 12 27
	epP	13 06
EUR	iP	15 09 25
	ipP	10 01
THULE	iP	15 11 52
SJ	iP	15 04 36
	epP	05 18
Apr. 2		
EUR	iP	19 02 30
	i	02 36
	eS	03 27
	eL	03 34
Apr. 2		
COL	iP	19 31 55
Apr. 2		
COL	iP	22 48 10
THULE	eP	22 46 24
Apr. 2		
EUR	eP	23 06 24
Apr. 2		
EUR	iP'	23 22 01
Apr. 2		
COL	iP	23 45 22
THULE	eP	23 43 36
Apr. 3		
GUAM	iP	02 20 23
	iS	20 30
Apr. 3		
COL	iP	05 19 36
	epP	21 18
EUR	iP	05 22 03
	ipP	23 53
GUAM	iP	05 13 45
	eS	16 22
SLC	eP	05 22 15
	e(pP)	24 14
THULE	iP	05 21 17
	epP	23 08
TUC	eP	05 22 40

Date and Station		Phase	(GCT)
			h m s
Apr. 3			
EUR	iP		05 57 41
Apr. 3			
COL	iP		06 56 53
EUR	eP		06 57 14
Apr. 3			
COL	eP		07 28 23
	i		28 35
EUR	iP		07 31 30
THULE	eP		07 30 20
Apr. 3			
COL	iP		10 04 40
EUR	eP		10 05 44
Apr. 3			
COL	e(P)		11 36 46
	i		37 00
Apr. 3			
EUR	iP		16 17 22
Apr. 3			
EUR	iP		17 16 21
Apr. 3			
COL	eP		21 42 20
	iS		43 05
	iL		43 22
Apr. 3			
EUR	eP		22 33 50
Apr. 3			
EUR	iP		23 56 35
Apr. 4			
COL	eP		00 09 35
EUR	iP		00 08 17
TUC	eP		00 06 38
	e		06 53
TUC-T	eP		00 06 37
Apr. 4			
BUT	iP		02 04 08
	eS		04 28
	eL		04 46
EUR	iP		02 05 16
SLC	eP		02 04 50
Apr. 4			
EUR	eP		02 13 54
Apr. 4			
TUC	eP		04 09 25
	iP		09 28
Apr. 4			
EUR	iP		04 27 58
SLC	eP		04 28 06
TUC	iP		04 26 20
TUC-T	iP		04 26 21
Apr. 4			
SLC	eP		07 54 29
Apr. 4			
BC	eP		08 09 14
	epP		09 35
	ePP		12 50
BUT	eP		08 09 31
COL	iP		08 08 37
	ipP		09 04
	eS		18 53
EUR	iP		08 09 12
	ipP		09 40
GUAM	eP		08 02 07
	epP		02 27
HONO	iP		08 05 10
	eT		56 37
KIP	eP		08 05 11
	eT		59 13
RC	eP		08 10 00
SJ	eP'		08 14 26
TUC-T	eP		08 09 26
	iP		09 28
UKIAH	eP		08 08 47
	epP		09 13
Apr. 4			
SJ	e(P)		10 15 44
Apr. 4			
COL	eP		10 32 31
EUR	eP		10 33 48
Apr. 4			
SJ	iP		10 30 02
Apr. 4			
COL	i(P)		11 00 21
Apr. 4			
EUR	eP		11 37 53
Apr. 4			
BC	eP		12 58 53
COL	eP		12 57 46
	ipP		58 00
EUR	iP		12 58 48
	ipP		59 02
	i		13 00 52
GUAM	eP		12 50 00
	epP		50 14
Apr. 4			
COL	eP		13 23 47
Apr. 4			
COL	eP		17 17 58
EUR	iP		17 21 34
THULE	eP		17 19 47
Apr. 4			
COL	eP		19 04 14
Apr. 4			
COL	iP		21 04 13
THULE	eP		21 05 08
Apr. 4			
EUR	eP		22 27 35
Apr. 4			
COL	eP		23 11 06
THULE	eP		23 03 41
Apr. 4			
BC	eP		23 31 15
COL	eP		23 27 33
	eS		31 16
	eL		32 40
EUR	iP		23 30 53
	ePcP		32 38
THULE	eP		23 31 06
TUC	eP		23 31 53
TUC-T	eP		23 31 52
Apr. 4			
BH	eP		23 51 56
	iS		52 42
Apr. 5			
COL	eP		01 54 08
	i		55 11
	iL		55 35
Apr. 5			
EUR	iP		05 24 46
Apr. 5			
BC	eP'		07 37 37
BOZ	eP'		07 36 50
BUT	eP'		07 36 50
COL	eP'		07 37 41
	i		37 59
EUR	eP'		07 36 37
	ePP		38 53
	iPKKP		46 32
	iSKKP		50 17
RC	eP'		07 36 39
SLC	eP'		07 36 42
THULE	e(P')		07 36 59
	eP'		37 11
	ePP		40 08
	i		40 55
TUC	eP'		07 36 28
TUC-T	eP'		07 36 28
Apr. 5			
EUR	eP		11 41 07
TUC	eP		11 41 04
	e		41 14
TUC-T	eP		11 41 04
	e		41 14
Apr. 5			
BC	eP'		12 56 09
BOZ	eP'		12 55 21
COL	iP'		12 56 03
	i		56 16
	i		56 31
EUR	iP'		12 56 15
	ePKKP		13 08 19
RC	eP'		12 55 10
TUC	eP'		12 54 59
	e		55 07
TUC-T	eP'		12 54 58
	e		55 07
Apr. 5			
EUR	eP		14 53 20
Apr. 5			
COL	iP		17 34 02
EUR	iP		17 35 56
THULE	eP		17 30 27
Apr. 5			
TUC	eP		19 09 36
	i		09 42
	eL		10 28
TUC-T	eP		19 09 38
	e		09 49
	eL		10 30

Date and Station		Phase (GCT) h m s
Apr. 5		
BC	eP	19 13 07
Apr. 5		
TUC	eP	19 30 44
	eL	31 35
TUC-T	e(P)	19 30 48
	eL	31 37
Apr. 5		
BC	eP	19 34 22
Apr. 5		
EUR	iP	20 47 11
TUC-T	eP	20 46 03
Apr. 6		
BC	eP	02 16 26
	e	16 42
BUT	eP	02 17 03
	e	17 25
COL	eP	02 19 09
COLU	eP	02 14 43
EUR	iP	02 16 45
HH	eP	02 17 15
RC	iP	02 16 29
SLC	eP	02 16 37
SJ	iP	02 12 34
THULE	iP	02 18 40
TUC	iP	02 15 55
TUC-T	iP	02 15 54
	i	16 24
Apr. 6		
SJ	iP	06 58 14
	iS	58 34
	iL	58 38
Apr. 6		
COL	iP	07 07 49
EUR	iP	07 08 09
TUC	e(P)	07 08 26
TUC-T	eP	07 08 27
Apr. 6		
COL	eP	08 06 02
EUR	eP	08 09 33
Apr. 6		
SJ	i(P)	08 23 25

Date and Station		Phase (GCT) h m s
Apr. 6		
COL	iP	09 28 18
EUR	iP	09 31 57
	e	33 47
Apr. 6		
COL	iP	10 39 37
EUR	eP	10 35 23
THULE	eP	10 33 59
Apr. 6		
EUR	eP	13 03 07
Apr. 6		
BH	iP	14 59 28
	iS	15 00 15
Apr. 6		
BC	eP	17 17 27
COL	iP	17 13 38
EUR	iP	17 16 50
	ipP	17 08
Apr. 6		
COL	eP	18 49 37
Apr. 6		
EUR	iP	18 58 37
Apr. 6		
BC	eP	21 24 56
EUR	iP	21 24 51
	ipP	25 33
THULE	eP	21 22 47
Apr. 6		
EUR	eP	22 23 37
Apr. 7		
COL	eP	03 17 31
EUR	eP	03 17 11
TUC	eP	03 17 12
Apr. 7		
EUR	eP	04 54 27
TUC	eP	04 52 37
	e	53 04
	eL	54 41
Apr. 7		
BH	iP	06 02 44
	iS	03 20
Apr. 7		
COL	eP	08 45 17
EUR	eP	08 48 23
THULE	eP	08 47 12

Date and Station		Phase (GCT) h m s
Apr. 7		
SJ	i(P)	10 20 48
Apr. 7		
BC	eP	13 59 18
	epP	14 01 06
COL	iP	13 59 46
	ipP	14 01 39
	eS	10 04
EUR	iP	13 59 23
	ipP	14 01 13
GUAM	iP	13 55 47
KIP	eP	13 55 31
SLC	eP	13 59 41
TUC	iP	13 59 23
	ipP	14 01 12
	eS	09 14
Apr. 7		
EUR	eP	14 25 15
Apr. 7		
BOZ	eP	16 26 23
Apr. 7		
COL	eP	20 14 50
EUR	iP	20 16 41
GUAM	iP	20 04 10
	iS	04 31
THULE	eP	20 16 34
Apr. 7		
COL	eP	20 46 15
EUR	eP	20 49 31
Apr. 8		
BC	eP	00 07 57
BOZ	eP	00 08 34
BUT	eP	00 08 31
COL	iP	00 08 29
	ipP	09 20
	iSKS	18 41
	iS	19 00
EUR	iP	00 08 01
	eP'P'	34 14
GUAM	iP	00 05 44
HH	eP	00 08 31
KIP	eP	00 03 53
RC	iP	00 08 52
THULE	eP'	00 14 13

Date and Station		Phase (GCT) h m s
TUC	iP	00 08 00
	ipP	08 44
	eS	18 53
UKIAH	iP	00 07 38
	epP	08 29
Apr. 8		
EUR	eP	04 58 27
Apr. 8		
EUR	eP	06 44 21
Apr. 8		
COL	iP	08 48 14
EUR	iP	08 49 22
	e	50 20
SJ	iP'	08 55 15
Apr. 8		
SJ	i(P)	10 28 37
Apr. 8		
EUR	eP	10 34 56
TUC	e(P)	10 34 43
Apr. 8		
BC	e(P)	10 37 25
Apr. 8		
COL	i(P)	18 08 06
EUR	iP	18 07 46
TUC-T	eP	18 07 48
Apr. 9		
EUR	iP	00 21 54
Apr. 9		
EUR	eP	00 53 03
Apr. 9		
EUR	iP	02 14 44
TUC	e(P)	02 13 06
TUC-T	eP	02 13 05
Apr. 9		
BC	eP	02 55 41
COL	eP	02 52 19
EUR	eP	02 55 23
Apr. 9		
BH	iP	07 19 04
	i	19 43
Apr. 9		
COL	iP	07 46 31
	i	47 03
EUR	iP	07 46 00

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Date and Station		Phase	(GCT) h m s
TUC-T	eP		07 46 01
	e		46 35
Apr. 9 COL	eP		09 09 20
Apr. 9 COL	eP		11 22 40
EUR	iP		11 26 00
Apr. 9 BOZ	eP		12 03 51
Apr. 9 EUR	iP		13 26 26
Apr. 9 COL	e(P)		17 14 40
Apr. 9 COL	iP'		19 00 43
EUR	eP'		19 01 35
Apr. 9 COL	eP		19 49 33
Apr. 9 BOZ	eP		20 15 58
	eL		16 47
BUT	eP		20 16 06
EUR	eP		20 17 16
SLC	eP		20 16 47
Apr. 9 COL	eP		22 59 22
Apr. 10 COL	eP		00 14 02
	eS		21 16
EUR	eP		00 16 56
Apr. 10 COL	eP		05 00 45
EUR	iP		05 02 34
	ipP		03 03
GUAM	iP		04 50 06
	iS		50 27
Apr. 10 COL	eP		05 20 06
Apr. 10 EUR	e(P)		07 59 56
Apr. 10 BUT	eP		09 05 03
EUR	iP		09 04 50
RC	eP		09 04 42
TUC	eP		09 04 06
TUC-T	eP		09 04 06
Apr. 10 COL	iP		10 22 49
Apr. 10 EUR	iP		10 41 21
Apr. 10 BUT	eP		13 19 47
COL	eP		13 17 22
EUR	iP		13 19 52
RC	eP		13 20 53
THULE	eP		13 19 11
Apr. 10 TUC	iP		16 06 50
	i(S)		07 12
	iL		07 13
TUC-T	iP		16 06 48
	iL		07 06
Apr. 10 EUR	iP		16 10 38
Apr. 10 COL	eP		17 11 11
EUR	eP		17 13 15
GUAM	eP		17 02 22
	eS		03 27
Apr. 10 BC	eP		20 33 48
BOZ	eP		20 33 19
BUT	eP		20 33 04
COL	eP		20 29 52
	eS		33 00
	eL		34 28
EUR	iP		20 33 24
	iPcP		35 18
SJ	eP		20 38 34
	e		40 26
SIT	eP		20 30 34
THULE	iP		20 33 59
TUC	eP		20 34 29
	ePcP		36 22
TUC-T	iP		20 34 29
Apr. 10 EUR	eP		20 46 27
Apr. 10 BUT	eP		22 18 23
COL	eP		22 17 24
EUR	eP		22 18 56
THULE	eP		22 14 59
Apr. 11 EUR	eP		00 40 16
Apr. 11 COL	eP		01 58 12
EUR	eP		01 57 50
TUC	eP		01 57 51
TUC-T	eP		01 57 51
Apr. 11 COL	i(P)		05 11 01
Apr. 11 BUT	eP		05 54 26
	eS		54 44
	eL		54 49
EUR	eP		05 55 40
HH	e(P)		05 55 35
RC	eP		05 55 42
	eL		57 12
SLC	e(P)		05 54 55
Apr. 11 BUT	e(P)		06 50 20
EUR	eP		06 49 54
Apr. 11 COL	e(P)		07 51 57
Apr. 11 COL	eP		08 27 23
Apr. 11 COL	eP		08 42 48
Apr. 11 SJ	e(P)		10 12 00
TUC	eP		10 16 45
TUC-T	eP		10 16 45
Apr. 11 EUR	eP		10 22 38
HH	e(P)		10 23 05
RC	e(P)		10 22 51
	e		23 50
Apr. 11 COL	iP		11 39 26
	i		40 19
	iL		40 30
Apr. 11 COL	eP		16 13 24
EUR	eP		16 13 31
Apr. 11 EUR	eP		17 50 17
Apr. 12 COL	iP		01 18 32
	iS		19 49
	iL		20 13
EUR	eP		01 23 00
	i		23 14
Apr. 12 COL	eP		04 34 14
	i		35 36
EUR	eP		04 36 07
RC	eP		04 35 30
THULE	eP		04 32 12
Apr. 12 EUR	eP		06 34 18
Apr. 12 COL	e(P)		07 20 32
EUR	eP		07 23 25
THULE	eP		07 22 25
Apr. 12 COL	iP		09 30 18
Apr. 12 COL	eP		11 44 29
Apr. 12 EUR	eP		13 02 58
Apr. 12 COL	iP		14 06 11
	e		10 03
EUR	eP		14 09 56
Apr. 12 EUR	eP		19 04 36
Apr. 12 COL	iP		20 51 08
EUR	eP		20 54 10
Apr. 12 COL	iP		21 58 20
Apr. 12 EUR	eP		23 17 29

Date and Station		Phase (GCT)
		h m s
TUC-T	eP	23 16 48
Apr. 13		
EUR	iP	00 24 36
	ipP	25 20
TUC-T	eP	00 23 51
Apr. 13		
TUC	e(P)	02 03 17
Apr. 13		
SJ	iP	03 24 48
	e(S)	25 16
	eL	25 18
Apr. 13		
BC	eP	04 58 50
COL	eP	04 54 57
COLU	eP	05 01 22
EUR	iP	04 58 24
	i	05 00 17
SJ	eP	05 03 17
TUC	eP	04 59 26
TUC-T	eP	04 59 25
	e	59 32
Apr. 13		
COL	iP	05 50 07
	i	50 44
	iL	50 50
Apr. 13		
COL	iP	08 06 34
EUR	eP	08 09 51
TUC	eP	08 10 36
TUC-T	eP	08 10 38
Apr. 13		
COL	eP	11 40 12
THULE	eP	11 37 47
Apr. 13		
EUR	eP	11 59 44
Apr. 13		
EUR	eP	12 11 47
Apr. 13		
BH	iP	12 40 58
	iS	43 48
BC	eP	12 43 42
	eS	48 29
	eL	53 09
BOZ	eP	12 44 27

Date and Station		Phase (GCT)
		h m s
BUT	eP	12 44 33
	eS	50 16
	eL	57 00
COL	iP	12 48 00
	eS	56 32
	eL	13 03 06
COLU	eP	12 42 26
	e	42 50
	eS	46 34
	eL	51 10
EUR	iP	12 44 07
HH	eP	12 44 56
RC	iP	12 43 50
	iPP	44 41
SLC	eP	12 44 57
	e	45 28
SJ	iP	12 43 06
	iPP	43 45
THULE	iP	48 03
TUC	iP	12 42 56
	eS	47 25
	eL	50 49
TUC-T	iP	12 42 56
	iL	50 42
UKIAH	eP	12 45 46
	iP	45 48
WASH	eP	12 43 22
	eS	48 21
	eL	55 54
Apr. 13		
BC	eP	13 22 03
BOZ	eP	13 21 42
COL	iP	13 18 19
EUR	iP	13 21 48
RC	eP	13 22 33
SJ	eP	13 26 55
THULE	eP	13 22 21
TUC-T	eP	13 23 02
Apr. 13		
COL	eP	14 09 54
EUR	eP	14 09 30
Apr. 13		
EUR	eP	15 08 21
RC	eP	15 08 11

Date and Station		Phase (GCT)
		h m s
Apr. 13		
GUAM	iP	16 32 54
	iS	33 01
Apr. 13		
TUC-T	iP	17 55 26
	iL	55 45
Apr. 14		
EUR	iP	00 12 41
TUC	eP	00 12 53
TUC-T	iP	00 12 52
Apr. 14		
COL	iP	00 49 53
EUR	iP	00 49 18
TUC-T	e(P)	00 49 21
	e	49 28
Apr. 14		
COL	iP	05 00 37
Apr. 14		
COL	eP	19 38 58
EUR	iP	19 42 02
Apr. 15		
GUAM	iP	02 00 25
	iS	00 31
Apr. 15		
COL	eP	02 25 54
	iL	27 00
Apr. 15		
BH	iP	03 34 25
	iS	41 32
BC	eP	03 36 07
BOZ	eP	03 37 08
	e	37 43
BUT	eP	03 37 11
COL	eP	03 39 06
	ePP	43 02
	e(SKS)	49 49
	ePS	51 46
	eSS	56 58
	eL	04 10 54
COLU	eP	03 36 41
EUR	iP	03 36 30
	iPcP	37 02
HH	eP	03 37 23
RC	eP	03 37 02
	i	37 05
SLC	eP	03 36 40

Date and Station		Phase (GCT)
		h m s
TUC	eP	03 35 41
	i	54 18
TUC-T	iP	03 35 42
	e	38 11
	e	55 34
Apr. 15		
BC	eP	04 26 24
COL	iP	04 26 03
EUR	iP	04 26 24
TUC	eP	04 26 34
TUC-T	eP	04 26 34
	i	26 36
Apr. 15		
EUR	eP	05 11 00
Apr. 15		
COL	eP	07 37 12
Apr. 15		
COL	eP	08 46 37
EUR	iP	08 46 02
	ipP	46 36
TUC	eP	08 45 58
	epP	46 25
TUC-T	eP	08 45 59
	epP	46 25
Apr. 15		
COL	eP	09 57 31
	iL	58 42
Apr. 15		
COL	eP	10 14 30
EUR	eP	10 17 41
THULE	iP	10 16 26
Apr. 15		
COL	eP	11 11 55
EUR	iP	11 15 07
RC	eP	11 15 31
THULE	iP	11 13 53
Apr. 15		
BC	eP	11 50 42
	epP	51 05
BOZ	eP	11 50 17
	epP	50 38
BUT	iP	11 50 09
	epP	50 32
	esP	51 29

Date and Station		Phase	(GCT) h m s
COL		iP	11 47 14
		ipP	47 33
		eS	53 50
		i	54 23
		eL	57 28
EUR		iP	11 50 24
		ipP	50 47
GUAM		eP	11 47 37
		e(S)	50 06
RC		iP	11 50 46
		i	51 08
		e	12 00 29
SLC		eP	11 50 33
		e	50 55
SIT		e(P)	11 48 12
THULE		iP	11 48 05
		ipP	48 25
TUC		iP	11 51 07
		epP	51 31
TUC-T		iP	11 51 08
		ipP	51 31
Apr. 15			
COL		e(P)	13 22 40
THULE		eP	13 20 14
Apr. 15			
TUC-T		eP	19 58 29
Apr. 15			
EUR		eP	20 27 39
Apr. 15			
EUR		iP	20 58 21
Apr. 15			
COL		eP	22 10 32
EUR		iP	22 10 52
Apr. 15			
COL		iP	22 16 41
EUR		iP	22 16 40
TUC-T		eP	22 17 12
Apr. 15			
BC		eP	22 18 10
BUT		eP	22 18 28
COL		iP	22 17 49
		iS	28 20
		e	30 12
		eSS	34 12
		e	43 26
		eL	44 14

Date and Station		Phase	(GCT) h m s
EUR		iP	22 18 09
		iPP	20 30
HH		eP	22 18 28
SJ		iP'	22 24 21
SIT		eP	22 17 49
THULE		eP'	22 23 14
		ePP	24 17
TUC		iP	22 18 20
		eL	46 33
TUC-T		iP	22 18 20
		e	35 38
UKIAH		eP	22 17 44
Apr. 15			
COL		iP	22 20 11
Apr. 15			
COL		iP	22 26 49
EUR		iP	22 27 10
Apr. 15			
COL		iP	22 59 55
EUR		iP	23 00 14
Apr. 16			
GUAM		iP	04 27 22
		iS	27 30
Apr. 16			
COL		e(P)	12 48 12
Apr. 16			
COL		iP	19 19 39
EUR		iP	19 19 50
Apr. 16			
COL		iP	19 43 35
Apr. 16			
COL		eP	20 45 53
EUR		iP	20 49 15
THULE		iP	20 48 06
Apr. 17			
RC		eP	00 51 36
Apr. 17			
COL		eP	01 16 01
EUR		iP	01 19 39
THULE		eP	01 20 16
Apr. 17			
COL		iP	02 05 20
		iL	06 19

Date and Station		Phase	(GCT) h m s
Apr. 17			
EUR		iP	04 50 56
Apr. 17			
EUR		iP	07 30 58
TUC		eP	07 29 25
		e	34 02
TUC-T		eP	07 29 27
Apr. 17			
COL		eP	07 57 02
COLU		eP	07 51 45
EUR		iP	07 53 12
TUC-T		eP	07 52 02
Apr. 17			
EUR		iP	08 02 13
Apr. 17			
EUR		iP	11 36 01
Apr. 17			
COL		iP	15 52 58
EUR		iP	15 52 29
RC		e(P)	15 53 20
TUC-T		eP	15 52 29
Apr. 17			
TUC		eP	16 07 28
Apr. 17			
BC		eP	18 35 38
COL		e(P)	18 40 05
		i	40 25
		i	40 43
EUR		iP	18 36 04
		i	36 20
RC		eP	18 37 01
THULE		eP	18 40 07
TUC		eP	18 34 56
TUC-T		eP	18 34 56
Apr. 17			
RC		eP	22 01 02
BUT		eP	22 01 34
COL		iP	22 01 29
		epP	03 36
EUR		iP	22 01 07
SLC		eP	22 01 18
TUC		iP	22 01 08

Date and Station		Phase	(GCT) h m s
TUC-T		iP	22 01 09
Apr. 18			
EUR		eP	00 59 48
TUC		eP	00 58 31
TUC-T		eP	01 58 31
		e	58 41
Apr. 18			
BC		eP	02 17 59
EUR		eP	02 17 42
		i	17 56
		eS	18 37
		eL	18 41
Apr. 18			
EUR		eP	04 36 17
RC		eP	04 37 20
Apr. 18			
BC		eP	08 19 01
		epP	20 36
BUT		eP	08 18 42
		e	20 16
		epP	20 26
BOZ		eP	08 18 47
		epP	20 22
COL		iP	08 16 15
EUR		iP	08 18 48
		ipP	20 22
		epS	30 06
GUAM		eP	08 10 29
HH		eP	08 18 30
RC		iP	08 19 13
		iPP	20 49
		e	29 17
SLC		eP	08 18 58
		e	19 26
		epP	20 38
THULE		iP	08 17 59
TUC		iP	08 19 23
TUC-T		iP	08 19 24
		epP	21 04
Apr. 18			
THULE		e(P)	08 55 12
Apr. 18			
BC		eP	09 14 21
COL		iP	09 14 01
EUR		iP	09 14 21

Date and Station		Phase (GCT) h m s
TUC	eP	09 14 31
TUC-T	eP	09 14 32
Apr. 18 COL	eP	09 27 03
Apr. 18 COL	eP	11 20 38
EUR	iP	11 24 05
	i	24 24
RC	eP	11 24 41
	e	24 51
TUC	eP	11 25 05
Apr. 18 BC	eP	13 14 13
COL	iP	13 13 53
EUR	iP	13 14 13
TUC	e(P)	13 14 24
TUC-T	eP	13 14 26
Apr. 18 BC	eP	13 16 59
COL	iP	13 16 39
EUR	iP	13 17 00
TUC-T	eP	13 17 11
Apr. 18 COL	eP	14 53 37
Apr. 18 COL	eP	17 07 44
EUR	eP	17 07 56
Apr. 18 COL	eP	17 38 04
Apr. 18 THULE	iP	21 19 38
	iS	20 01
Apr. 19 COL	eP	00 19 08
Apr. 19 COL	iP	01 20 47
RC	eP	01 24 35
THULE	iP	01 23 02
Apr. 19 COL	iP	09 35 20
EUR	eP	09 34 45

Date and Station		Phase (GCT) h m s
TUC	eP	09 34 43
TUC-T	eP	09 34 44
Apr. 19 EUR	eP	12 15 58
Apr. 19 EUR	eP	15 03 11
TUC-T	eP	15 02 26
Apr. 19 EUR	iP	15 20 31
Apr. 19 EUR	iP	16 21 12
Apr. 19 COL	eP	19 30 27
EUR	eP	19 33 52
TUC-T	e(P)	19 34 54
	e	35 03
Apr. 19 COL	iP	20 18 51
EUR	iP	20 19 11
Apr. 19 BC	eP	20 40 56
BOZ	eP	20 40 30
COL	eP	20 37 15
EUR	iP	20 40 33
	iPcP	42 33
TUC	iP	20 41 35
TUC-T	eP	20 41 35
Apr. 19 COL	iP	22 29 22
EUR	iP	22 29 43
Apr. 19 COL	iP	22 57 20
EUR	iP	22 57 40
TUC-T	eP	22 57 51
Apr. 20 EUR	eP	04 11 46
Apr. 20 COL	e(P)	05 13 24
EUR	eP	05 16 32
Apr. 20 EUR	eP	06 12 30

Date and Station		Phase (GCT) h m s
Apr. 20 COL	eP	06 24 00
EUR	iP	06 26 58
Apr. 20 COL	eP	07 13 17
EUR	eP	07 16 16
Apr. 20 EUR	eP	07 27 03
Apr. 20 EUR	e(P)	07 33 07
Apr. 20 EUR	eP	08 19 47
Apr. 20 COL	e(P)	09 59 30
EUR	eP	10 01 21
GUAM	iP	09 48 48
	iS	49 05
Apr. 20 SJ	iP	15 35 26
Apr. 20 COL	eP	16 55 55
Apr. 20 COL	iP	19 34 27
	ipP	35 14
Apr. 20 COL	eP	21 49 17
Apr. 21 BH	iP	02 23 04
BC	eP	02 24 00
	ePcP	26 11
BOZ	eP	02 25 15
BUT	eP	02 25 17
	ePcP	26 43
COL	iP	02 28 02
	e(PS)	38 11
	eL	53 14
COLU	eP	02 24 52
	eS	31 30
EUR	iP	02 24 29
	iPcP	26 21
HH	eP	02 25 36
RC	iP	02 25 05
SLC	eP	02 24 37
SJ	iP	02 25 11
	e	25 27

Date and Station		Phase (GCT) h m s
SIT	eP	02 27 03
TUC	iP	02 23 25
	eL	33 34
TUC-T	iP	02 23 26
	ePPP	24 49
	e(PcP)	25 59
UKIAH	iP	02 24 39
WASH	eP	02 25 37
	eS	32 55
Apr. 21 EUR	eP	03 09 42
Apr. 21 EUR	eP	03 54 24
RC	eP	03 54 25
	e	55 31
Apr. 21 EUR	eP	08 07 45
TUC	eP	08 07 40
Apr. 21 COL	iP	09 53 50
EUR	iP	09 49 58
TUC	e(P)	09 48 50
	e(pP)	49 05
TUC-T	e(P)	09 48 48
	e(pP)	49 04
Apr. 21 COL	e(P)	11 32 45
EUR	eP	11 34 14
Apr. 21 EUR	eP	11 44 55
TUC	iP	11 43 43
TUC-T	iP	11 43 43
Apr. 21 TUC	eP	12 12 12
TUC-T	eP	12 12 12
Apr. 21 COL	eP	13 07 40
EUR	eP	13 09 52
GUAM	e(P)	12 59 35
	eS	13 01 06
Apr. 21 COL	iP	16 34 48
EUR	iP	16 34 15

Date and Station		Phase	(GCT) h m s
TUC		eP	16 34 15
		e	34 29
TUC-T		iP	16 34 14
Apr. 21			
BOZ		iP	17 49 46
BUT		iP	17 49 59
		iS	50 20
		iL	50 26
EUR		iP	17 51 08
		i	51 14
		eS	52 11
		eL	52 14
HH		eP	17 50 33
		iL	51 39
RC		e(P)	17 51 11
		e	51 18
		eL	52 12
SLC		eP	17 50 32
Apr. 21			
BC		eP	18 09 41
EUR		e(P)	18 10 13
TUC		eP	18 09 52
Apr. 21			
TUC		e(P)	19 07 35
		e	07 47
Apr. 21			
RC		eP	21 20 12
Apr. 21			
COL		eP	22 14 44
Apr. 21			
BC		eP	23 40 25
EUR		eP	23 41 01
		e(S)	42 27
		eL	42 46
TUC		iP	23 40 21
		i	40 37
		i(S)	41 19
		iL	41 26
TUC-T		eP	23 40 23
		i	40 51
		eL	41 48
Apr. 21			
EUR		eP	23 53 30
Apr. 22			
EUR		eP	05 54 14
Apr. 22			
COL		eP	08 04 50

Date and Station		Phase	(GCT) h m s
Apr. 22			
COL		e(P)	08 53 52
		e(pP)	54 05
EUR		eP	08 56 39
GUAM		e(P)	08 49 07
Apr. 22			
COL		eP	11 07 02
EUR		iP	11 07 46
Apr. 22			
COL		eP	14 55 54
Apr. 22			
COL		eP	15 11 55
EUR		eP	15 11 20
Apr. 22			
COL		iP	17 06 35
Apr. 22			
EUR		eP	18 43 32
Apr. 22			
COL		eP	18 59 19
Apr. 22			
BC		eP	20 38 07
BOZ		eP	20 38 48
BUT		eP	20 38 43
		epP	39 32
COL		iP	20 38 42
		i(pP)	39 36
		eS	48 48
		e(SP)	50 06
EUR		iP	20 38 12
GUAM		iP	20 35 11
		ipP	35 58
HONO		iP	20 34 03
HH		eP	20 38 45
KIP		iP	20 34 04
RC		iP	20 39 07
SIT		eP	20 38 26
TUC		iP	20 38 13
		epP	39 02
TUC-T		iP	20 38 14
		ePcP	38 23
		epP	39 03
		esP	39 29
THULE		eP'	20 44 38
		iPP	45 17

Date and Station		Phase	(GCT) h m s
Apr. 23			
GUAM		iP	02 06 15
		iS	06 36
Apr. 23			
COL		eP	06 38 40
Apr. 23			
COL		iP	12 21 14
		ipP	22 09
EUR		eP	12 20 45
Apr. 23			
COL		iP	13 18 38
EUR		eP	13 21 40
RC		eP	13 21 35
Apr. 23			
EUR		eP	13 36 29
RC		eP	13 37 02
Apr. 23			
COL		iP	18 10 43
EUR		iP	18 11 37
		i	11 53
Apr. 23			
BUT		eP	20 10 39
COL		eP	20 08 14
EUR		e(P)	20 10 45
Apr. 23			
BC		eP	21 27 15
Apr. 23			
EUR		iP	21 58 04
		i	58 08
		i	58 36
		e(S)	59 24
		eL	59 29
TUC		eP	21 57 18
		i	57 33
		i(S)	58 20
		iL	58 30
TUC-T		eP	21 57 20
		i	57 37
		e(S)	58 20
		iL	58 32
Apr. 23			
EUR		eP	22 07 29
RC		eP	22 04 09
Apr. 24			
COL		iP	00 03 31
EUR		iP	00 07 14
RC		iP	00 07 45

Date and Station		Phase	(GCT) h m s
SJ		eP	00 11 39
TUC		eP	00 08 13
TUC-T		eP	00 08 13
Apr. 24			
COL		eP	00 22 36
Apr. 24			
COL		eP	01 45 01
Apr. 24			
BH		iP'	03 41 28
BC		e(P')	03 40 17
		e(PP)	42 29
		e(S)	50 25
BOZ		eP'	03 40 24
		ePP	42 12
		epP'	42 45
		ePKKP	50 03
		e(SKKP)	53 37
BUT		eP'	03 40 20
		e	40 56
		epP'	42 35
		ePKKP	50 10
		eSKKP	53 01
COL		iP	03 35 06
		ipP	37 16
		iPP	39 18
		ipPP	41 09
		eSKS	45 46
		i(PS)	48 46
		esPS	51 02
		i	51 18
		iPKKP	51 29
		eP'P'	59 36
COLU		eP'	03 41 07
		epP'	43 26
		e(SKKS)	50 34
		eSKKP	51 25
EUR		eP	03 37 03
		iP'	40 20
		iPP	42 15
		iPKKP	50 06
		iSKKP	53 00
		i	53 52
GUAM		iP	03 28 48
		iPcP	30 53
		iS	33 42
		i(PcS)	35 01
HONO		iP	03 34 31
		ipP	36 42
HH		iP'	03 40 17
		e	41 37
		iPP	41 59
KIP		iP	03 34 32

Date and Station		Phase (GCT)
		h m s
RC	e	03 40 16
	iP'	40 33
	ipP'	42 52
SLC	eP'	03 40 27
	e	41 01
	ePP	42 29
	eP'KKP	49 58
	eSKKP	53 03
SJ	iP'	03 41 27
	i	42 39
	ipP'	43 50
	i	44 13
	esP'	44 51
	e	46 27
TUC	eP'	03 40 20
	iP'	40 32
	ipP	42 55
	iPP	43 05
TUC-T	eP'	03 40 18
	iP'	40 36
	ipP'	42 55
	iPP	43 06
UKIAH	iP'	03 40 15
	iPP	41 44
	epP'	42 32
WASH	eP'	03 40 59
	i	41 01
	ipP'	43 20
	iPP	44 28
	iSKKP	51 36
	e(PS)	55 26
	e(PSP)	57 36
Apr. 24		
COL	iP	04 08 18
	e	09 53
Apr. 24		
COL	eP	04 33 58
Apr. 24		
EUR	eP	05 09 10
Apr. 24		
COL	eP	06 11 54
Apr. 24		
BUT	e(P')	12 32 41
COL	iP	12 27 11
	ePP	30 30
	e(S)	37 40
	e(PS)	38 42
	eP'KKP	45 10
	e(P'P')	52 33
	eL	56 42
EUR	eP	12 29 14
	e	32 23
	ePKKP	43 56

Date and Station		Phase (GCT)
		h m s
RC	eP	12 28 42
	e	31 43
	eP'	32 10
	e	32 36
THULE	iP	12 25 43
	ePP	28 14
	eS	34 59
TUC	eP'	12 33 21
	e	33 37
	i	33 56
	ePKKP	43 34
TUC-T	eP'	12 33 20
	e	34 36
Apr. 24		
COL	eP	14 56 16
	e	58 02
	iL	59 10
Apr. 24		
BC	eP	15 02 52
BUT	eP	15 03 28
	e	03 43
EUR	iP	15 03 10
RC	eP	15 03 03
TUC	iP	15 02 24
	e	02 40
	e	03 13
TUC-T	eP	15 02 25
Apr. 24		
COL	eP	16 40 34
Apr. 24		
TUC	iP	17 09 28
	iL	09 49
Apr. 24		
EUR	eP	18 17 04
Apr. 24		
BOZ	eP	20 37 34
BUT	eP	20 37 41
	eL	38 22
EUR	eP	20 38 05
	e(S)	39 10
	eL	39 15

Date and Station		Phase (GCT)
		h m s
RC	e(P)	20 38 21
	e	38 37
	eL	39 53
SLC	iP	20 37 28
	i	37 57
Apr. 24		
TUC-T	e(P)	23 47 32
	eL	48 52
Apr. 25		
BUT	eP	00 25 37
EUR	eP	00 25 46
RC	e(P)	00 26 09
	e	26 21
THULE	iP	00 24 27
Apr. 25		
EUR	eP	01 35 03
Apr. 25		
EUR	iP	04 11 41
	ipP	12 59
RC	eP	04 12 02
TUC	eP	04 12 28
Apr. 25		
EUR	eP	05 50 14
Apr. 25		
EUR	eP	08 38 31
Apr. 25		
THULE	eP	09 36 29
	iL	37 26
Apr. 25		
TUC-T	e(P)	12 03 55
Apr. 25		
EUR	iP	12 56 08
RC	eP	12 56 36
THULE	eP	12 55 05
Apr. 25		
EUR	e(P)	13 29 38
Apr. 25		
BC	eP	15 00 37
BUT	eP	14 59 48
EUR	iP	15 00 09
RC	iP	15 00 46
	i	01 07
THULE	eP	15 00 56

Date and Station		Phase (GCT)
		h m s
TUC	eP	15 01 20
TUC-T	eP	15 01 19
Apr. 25		
EUR	eP	15 03 14
Apr. 25		
EUR	iP	15 06 50
Apr. 25		
THULE	eP	16 37 59
	iP	38 06
Apr. 25		
BC	eP	18 59 45
BOZ	eP	19 00 30
	e(pP)	00 49
BUT	eP	19 00 36
COL	iP	19 03 52
	epP	04 22
COLU	eP	18 58 09
	e(PP)	58 58
EUR	iP	19 00 12
	epP	00 32
	isP	00 48
	i(ScP)	06 19
RC	eP	18 59 51
	e(PP)	19 00 56
SJ	eP	18 58 05
	epP	58 27
THULE	eP	19 03 44
TUC	iP	18 59 08
TUC-T	eP	18 59 04
Apr. 26		
EUR	eP	00 29 13
Apr. 26		
EUR	eP	01 14 50
Apr. 26		
BH	iP	04 35 25
EUR	eP	04 41 46
TUC	eP	04 40 41
Apr. 26		
COL	iP	05 15 30
EUR	iP	05 17 19
Apr. 26		
GUAM	eP	06 20 14
	eS	20 29

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

Date and Station		Phase (GCT)
		h m s
Apr. 29		
EUR	iP	00 00 05
Apr. 29		
BC	eP'	02 34 26
COL	eP'	02 35 19
	i	35 28
EUR	iP'	02 34 30
	i(PKKP)	44 32
SJ	iP	02 27 56
	e	28 17
THULE	eP'	02 34 45
	iP'	34 53
	iPP	38 12
TUC	eP'	02 34 15
Apr. 29		
COL	eP'	04 02 45
	i	02 53
EUR	eP'	04 01 58
THULE	eP'	04 02 19
Apr. 29		
EUR	eP	04 11 57
TUC	eP	04 11 29
TUC-T	eP	04 11 29
Apr. 29		
COL	eP	04 24 08
EUR	iP	04 23 51
TUC	eP	04 23 53
TUC-T	eP	04 23 53
Apr. 29		
COL	eP	04 48 14
EUR	eP	04 51 54
Apr. 29		
THULE	eP'	05 04 28
	iPP	07 47
Apr. 29		
COL	eP'	06 04 55
	i	05 04
EUR	eP'	06 04 06
SJ	eP	05 57 31
Apr. 29		
BOZ	eP	06 27 01
Apr. 29		
EUR	eP	09 14 44
Apr. 29		
EUR	eP	09 43 19

Date and Station		Phase (GCT)
		h m s
Apr. 29		
COL	eP	10 06 30
EUR	eP'	10 12 11
GUAM	eP	09 59 10
SJ	eP'	10 14 11
Apr. 29		
COL	eP	10 19 16
EUR	e(P)	10 23 04
	eP'	24 57
	ePKKP	35 46
SJ	eP'	10 26 57
Apr. 29		
COL	eP	10 35 53
EUR	iP	10 39 06
Apr. 29		
COL	e(P)	11 43 55
Apr. 29		
BH	iP	12 49 38
COL	eP	12 59 39
EUR	iP	12 56 33
SJ	eP	12 52 19
	i	52 24
TUC	eP	12 55 33
TUC-T	eP	12 55 31
	e	55 35
Apr. 29		
COL	eP	13 46 20
GUAM	eP	13 39 01
Apr. 29		
BC	eP	13 51 29
	e	52 09
COL	eP	13 52 08
EUR	iP	13 51 34
	ePKKP	14 08 57
HONO	eP	13 48 06
KIP	eP	13 48 05
SLC	eP	13 51 52
SJ	iP	13 54 01
	e	54 23
THULE	iP'	13 57 26
TUC	iP	13 51 29
	e	52 13

Date and Station		Phase (GCT)
		h m s
TUC-T	iP	13 51 29
	i	51 47
UKIAH	eP	13 51 16
	e	51 40
Apr. 29		
GUAM	iP	14 45 23
	eS	45 56
Apr. 29		
COL	eP	14 59 06
EUR	iP	14 58 43
GUAM	eP	14 55 00
HONO	eP	14 55 10
THULE	iP'	15 04 28
TUC	eP	14 58 41
TUC-T	eP	14 58 41
Apr. 29		
COL	eP	15 47 38
EUR	iP	15 48 39
GUAM	iP	15 39 51
HONO	eP	15 44 56
KIP	eP	15 44 57
Apr. 29		
GUAM	iP	15 45 04
	eS	46 02
Apr. 29		
BH	iP'	19 52 11
BC	eP'	19 51 02
BOZ	eP'	19 50 59
	ePP	51 57
	e(PKKP)	20 01 38
COL	iP	19 45 15
	iS	56 07
	e	20 01 26
	e	06 25
	eL	09 45
COLU	eP'	19 51 37
EUR	e(P)	19 47 10
	iP'	50 56
	i	51 30
GUAM	iP	19 37 56
	eS	41 39
HONO	eP	19 44 32
HH	ePP	19 51 35

Date and Station		Phase (GCT)
		h m s
KIP	eP	19 43 55
SJ	iP'	19 52 15
	i	52 56
	e(PP)	56 46
SLC	eP'	19 51 01
	ePP	52 08
	ePKKP	20 01 27
SIT	eP	19 45 48
THULE	eP	19 46 13
	iPP	50 21
TUC	eP'	19 51 10
TUC-T	eP'	19 51 09
	i	20 01 12
WASH	iP'	19 51 41
Apr. 29		
BUT	e(P)	20 01 42
	e	04 45
Apr. 29		
COL	iP	20 57 30
EUR	eP	21 03 13
	ePKKP	13 50
GUAM	iP	20 50 11
SJ	eP'	21 04 30
	e	04 42
	i	05 11
Apr. 29		
EUR	iP	21 58 03
Apr. 29		
COL	iP	22 12 48
EUR	iP	22 13 09
Apr. 29		
COL	iP	22 15 54
Apr. 30		
EUR	iP	00 05 48
	e(PKKP)	22 48
Apr. 30		
COL	eP	00 33 15
GUAM	eP	00 25 53
Apr. 30		
COL	eP	01 25 50
EUR	iP	01 26 11
Apr. 30		
COL	iP	03 21 35
EUR	iP	03 21 56

Date and Station		Phase (GCT)
		h m s
Apr. 30		
BOZ	e(P')	04 20 18
	ePKKP	30 59
COL	iP	04 14 35
	iS	25 32
	e	30 52
	eL	38 08
EUR	e(P)	04 16 45
	i	20 17
GUAM	eP	04 07 17
	eS	11 50
SJ	eP'	04 21 35
	i	22 16
TUC	eP'	04 20 29
TUC-T	eP'	04 20 30
Apr. 30		
BUT	eP	04 31 04
Apr. 30		
TUC-T	eP	04 43 14
Apr. 30		
COL	eP	10 24 28
GUAM	eP	10 17 07
Apr. 30		
BUT	eP	11 12 30
COL	iP	11 12 32
EUR	iP	11 11 59
TUC	eP	11 11 57
TUC-T	eP	11 11 59
Apr. 30		
COL	eP	14 29 40
EUR	iP	14 30 28
Apr. 30		
COL	iP	14 43 29
EUR	eP	14 43 51
Apr. 30		
COL	iP	15 25 25
EUR	iP	15 25 04
TUC	iP	15 25 03
TUC-T	iP	15 25 03
Apr. 30		
BC	eP'	22 27 52
	ePP	29 11
	epP'	30 28
BOZ	eP'	22 27 51

Date and Station		Phase (GCT)
		h m s
COL	iP	22 22 24
COLU	eP'	22 28 37
	e	31 18
EUR	iP'	22 27 47
	iPP	29 06
	ipP'	30 25
GUAM	iP	22 15 18
	eS	19 24
HH	iP'	22 27 44
	epP'	30 21
SJ	eP'	22 29 05
	i	30 04
	ePP	33 49
TUC	iP'	22 28 00
	e	30 16
	i(pP')	30 37
TUC-T	iP'	22 28 00
	i	30 37

Date and Station		Phase (GCT)
		h m s

Date and Station		Phase (GCT)
		h m s

Date and Station	Phase (GCT)
	h m s
Local and Minor Earthquakes	
Apr.	
BOZ	
1	00.7
	05.8
3	03.1
	09.3
	21.6
4	02.1
	08.3
	19.5
	22.4
5	06.7
	12.6
8	14.5
	10.6
19	09.7
	18.5
21	03.9
	17.8
	21.3
22	05.9
26	11.5
	22.3
Apr.	
BUT	
1	00.7
	05.8
	07.1
3	09.3
4	08.3
	22.4
5	06.7
8	14.5
16	14.4
19	09.7
21	03.9
	11.6
21	21.3
22	05.9
24	20.2
25	02.0
26	11.5
29	06.5
Apr.	
COL	
1	04.7
2	05.5
4	20.4
5	23.3
8	19.1
	21.9
9	08.2
	20.6
10	11.7
12	01.1
13	19.8
14	16.5
17	21.1
18	06.6
	06.8
19	13.3
	15.5
21	09.4
	09.9
	21.7

Date and Station	Phase (GCT)
	h m s
COL	
22	06.7
23	13.3
24	08.3
	10.1
26	10.4
29	01.3
	16.6
30	00.6
	17.3
Apr.	
EUR	
2	13.1
3	09.3
5	03.6
	04.1
9	03.7
	04.1
	04.6
10	19.4
19	17.0
23	17.5
Apr.	
HONO	
29	16.2
Apr.	
KIP	
29	16.2
Apr.	
RC	
27	06.4
Apr.	
SJ	
2	03.7
3	21.1
6	03.5
	06.3
	11.4
9	21.4
10	05.6
	21.9
11	03.7
	04.4
	17.2
12	13.0
14	22.8
15	19.3
17	15.4
	19.8
	20.0
19	14.5
	20.2
	23.4
	23.6
20	14.6
	19.6
21	00.9
	08.1
	11.7
22	04.5
	09.9
	18.9
23	07.6
	13.2

Date and Station	Phase (GCT)
	h m s
SJ	
25	14.5
	15.0
	18.5
26	13.5
	16.0
	16.7
27	12.2
	13.5
29	15.7
30	17.3
Apr.	
SIT	
25	15.1
Apr.	
TUC	
1	05.4
	07.3
	07.8
3	11.6
5	08.2
8	10.5
9	00.5
13	02.9
14	03.9
	10.3
	20.8
15	08.0
	10.0
17	13.8
18	08.5
19	02.4
	02.5
	15.2
21	18.6
22	12.3
23	22.4
24	23.8
25	08.1
26	07.8
	08.1
28	04.0
	04.5
	04.8
	08.1
30	09.9
Apr.	
UKIAH	
6	14.6
9	03.7
	04.0
	04.4
	04.6
12	12.6
	14.7
16	19.3
20	22.2
28	12.9
	23.0
29	02.5
	10.0