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SEISMOLOGICAL BULLETIN

April, 1954

MSI - 160

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U. S. DEPARTMENT OF COMMERCE

Sinclair Weeks, Secretary

U. S. COAST AND GEODETIC SURVEY—WASHINGTON

R. F. A. Studds, Director

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National Oceanic and Atmospheric Administration

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March 4, 2011

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

**Balboa Heights, C. Z. (BH)
The Panama Canal
*Boulder City, Nev. (BC)
Bureau of Reclamation
*Bozeman, Mont. (BOZ)
Montana State College
**Burlington, Vt. (BUR)
University of Vermont
*Butte, Mont. (BUT)
Montana School of Mines
*Chicago, Ill. (CHI)
University of Chicago and U. S. Weather Bureau
College, Alaska (COL)
*Columbia, S. C. (COLU)
University of South Carolina
Honolulu, T. H. (HONO)
*Hungry Horse, Mont. (HH)
Bureau of Reclamation
*Lincoln, Nebr. (LIN)
Nebraska Wesleyan University
**Logan, Utah (LOG)
Utah State Agricultural College
*Montezuma, Chile (MONT)
Smithsonian Institution
Nelson, Nev. (NEL)
**New Kensington, Pa. (NK)
Private station, Fred Keller, Sr.
**Philadelphia, Pa. (PHIL)
The Franklin Institute
**Rapid City, S. Dak. (RC)
South Dakota State School of Mines
*Salt Lake City, Utah (SLC)
University of Utah
San Juan, Puerto Rico (SJ)
Sitka, Alaska (SIT)
Tucson, Ariz. (TUC)
Ukiah, Calif. (UK)
International Latitude Observatory
Washington, D. C. (WASH)

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

All seismogram interpretations are made or revised at Washington except those for Balboa Heights. All magnitude determinations are by Pasadena unless otherwise stated. Minor earthquakes are listed at the end of the bulletin.

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

All seismograms are on file in the U. S. Coast and Geodetic Survey, except those from Balboa Heights, Burlington, Logan, and New Kensington which may be obtained on loan by addressing the Seismograph Station Director: - Meteorological and Hydrographic Office, Panama Canal Company, Balboa Heights, Canal Zone; University of Vermont, Burlington, Vermont; Utah State Agricultural College, Logan, Utah; 508 Pershing Drive, New Kensington, Pennsylvania.

Date 1954	Origin Time G. C. T.	Lat.		Long.		Region, Focal Depth, and Remarks
April	h m s	° ′		° ′		
1	02 22 16*	19½	N.	65½	W.	Off north coast of Puerto Rico.
1	14 08 59*	19½	N.	67	W.	North of Puerto Rico. h about 60 km.
1	18 18 47*	46½	N.	153½	E.	Kurile Islands. h about 60 km. Mag. 6-1/4.
1	23 11 22*	17½	N.	92	W.	Southern Mexico. Felt at Tichucalco, and Chiapas. h about 150 km.
2	10 23 25*	17	S.	178	W.	Fiji Islands region.
2	14 58 26*	28½	S.	177	W.	Kermadec Islands. h about 60 km.
2	20 25 45*	50½	N.	156	E.	Near south coast of Kamchatka.
3	00 04 40*	52½	N.	159½	E.	Off east coast of Kamchatka.
3	01 20 58*	53½	N.	163½	E.	Off east coast of Kamchatka.
3	07 59 44*	3	N.	80	W.	Off coast of Colombia.
4	13 20 04*	16½	S.	175	W.	Tonga Islands region. h about 200 km.
4	23 13 55*	42	N.	142½	E.	Near south coast of Hokkaido, Japan. Felt.
5	17 52 22*	23	S.	67½	W.	Argentina-Bolivia-Chile border. Felt in Calama, Chile. h about 150 km.
5	19 26 00*	48	N.	129	W.	Off Vancouver Island, British Columbia.
5	19 34 57*	48	N.	128	W.	Do.
6	14 35 10**					Southern Iran.
6	20 24 03**					New Hebrides Islands.
7	16 34 25**					Rat Islands region. Aleutian Islands.
8	16 39 52*	23½	S.	116	W.	Easter Island region.
9	06 17 30**					Southern Peru-Bolivia border region. h about 200 km.
9	07 15 03*	19½	N.	121½	E.	Off north coast of Luzon, Philippine Islands. Felt at Calayan and Aparri.
9	13 55 20*	27	N.	139½	E.	Bonin Islands.
10	03 07 47**					Off east coast of Kamchatka.
10	08 05 06**					New Hebrides Islands. h about 60 km.
10	10 15 46*	10½	N.	78	W.	Off north coast of Panama. Felt at Balboa Heights, Canal Zone.
10	13 14 17**					New Hebrides Islands. h about 200 km.
11	03 03 03*	7	S.	155	E.	Solomon Islands.
11	03 15 51**					Solomon Islands aftershock.
11	04 38 30**					Samoa Islands
11	05 40 03*	26½	S.	68½	W.	Northern Chile-Argentina border. h about 150 km.
11	10 25 21*	11	N.	57	E.	Arabian Sea.
11	10 53 20*	37	N.	70½	E.	Hindu Kush. h about 60 km.

Date 1954	Origin Time G. C. T.	Lat.		Long.		Region, Focal Depth, and Remarks
April	h m s	° ′		° ′		
11	18 36 33**					Solomon Islands.
12	19 36 15**					Samoa Islands.
13	07 36 23*	27½	S.	66	W.	Catamarca province, Argentina. h about 200 km.
13	07 54 51**					Northern Colombia-Venezuela border.
13	15 25 48*	34½	N.	133½	E.	Near south coast of Honshu, Japan.
14	07 45 27*	52½	N.	158½	E.	Near east coast of Kamchatka.
14	07 54 24*	22½	S.	70	W.	Northern Chile. Felt at Antofagasta. h about 100 km.
14	13 24 47*	10	N.	93	E.	Andaman Islands region.
15	04 02 30*	7½	N.	81	W.	Near south coast of Panama.
15	04 40 05**					Panama aftershock.
15	05 05 58**					Do.
15	07 48 46**					Do.
15	08 39 00**					Do.
16	10 30 25*	43	N.	142½	E.	Hokkaido, Japan. h about 60 km.
17	12 09 59*	43	N.	141	E.	Near west coast of Hokkaido, Japan. h about 60 km.
17	20 10 37*	51½	N.	179	W.	Andreanof Islands, Aleutian Islands. Felt on Adak. Mag. 6-3/4 - 7.
17	22 54 58*	51½	N.	180		Andreanof Islands, Aleutian Islands.
18	01 11 01**					Do.
18	03 03 26*	31	S.	178	W.	Kermadec Islands.
19	16 13 43**					Loyalty Islands region. h about 60 km.
19	16 53 20**					Western Sinkiang province, China.
21	09 57 40*	43	N.	46	E.	Dagestan, A.S.S.R.
21	18 40 45**					Windward Islands.
21	20 23 05*	13	S.	77	W.	Near coast of Peru. Felt at Lima. h about 100 km.
22	14 53 22	22	N.	142½	E.	Marianas Islands region.
23	01 21 20**					Near south coast of Costa Rica. h about 100 km.
24	08 33 04*	63	N.	148	W.	Southern Alaska. Felt at College. h about 100 km.
24	17 33 50*	34	N.	140½	E.	Near east coast of Honshu, Japan.
24	18 32 52*	43	N.	141½	E.	Central Hokkaido, Japan.
25	00 27 54*	0		15½	W.	Atlantic Ocean, about 500 miles southwest of Liberia.
25	03 42 25**					Northern Burma-China border region.
25	09 56 30**					Off northeast coast of Dominican Republic.
25	20 33 26.5	36.8	N.	121.8	W.	Near coast of central California. Minor damage at Watsonville and Gilroy. Mag. 5.3.
26	02 11 04*	42	N.	143	E.	Near south coast of Hokkaido, Japan.

Date 1954	Origin Time G. C. T.	Lat.		Long.		Region, Focal Depth, and Remarks
April	h m s	° '		° '		
26	09 17 20*	1/2	S.	91½	W.	Galapagos Islands.
26	20 24 44*	51	N.	158½	E.	Off southeast coast of Kamchatka. h about 60 km. Mag. 6-1/2 - 6-3/4.
27	10 06 24*	6	N.	82½	W.	South of Panama. Mag. 7
27	21 21 35*	56	S.	147	E.	South of Tasmania.
28	04 50 51*	51½	N.	175	E.	Near Islands, Aleutian Islands.
29	10 49 27*	29½	N.	112½	W.	Gulf of California foreshock. Minor damage in Western Mexico. Mag. 7-1/4 - 7-1/2.
29	11 34 34*	29½	N.	112½	W.	Gulf of California. Minor damage in Western Mexico. Mag. 7-1/2 - 7-3/4.
29	13 12 32**					Gulf of California aftershock.
30	00 03 10*	53	N.	162	E.	Off east coast of Kamchatka.
30	06 25 32**					Kermadec Islands.
30	12 01 10*	51½	N.	179	W.	Andreanof Islands, Aleutian Islands.
30	13 02 36*	39½	N.	22	E.	Central Greece. 26 killed, 157 injured. $10 million dollar damage. Mag. 7
30	19 33 30*	39½	N.	22	E.	Central Greece aftershock.
30	23 04 30*	1/2	N.	19	W.	Mid-Atlantic Ocean.

Date and Station		Phase	(GCT) h m s
April 1			
NEL		eP	00 21 26
April 1			
BC		e(P)	02 30 51
BUT		eP	02 30 47
COL		eP	02 33 20
COLU		eP	02 27 03
HH		eP	02 30 59
		e	31 11
NEL		iP	02 30 43.5
		e(pP)	30 56
		e	31 25
SJ		iP	02 22 38
		i	22 47
		iS	22 56
		iL	23 35
TUC		eP	02 30 14
April 1			
NEL		iP	03 58 06.8
April 1			
COL		eP	04 01 30
April 1			
HH		e(P)	04 54 31
April 1			
COL		eP	06 17 46
April 1			
BH		eP	08 33 05
		eS	33 50
SJ		eP	08 36 19
April 1			
BC		iP	10 19 19.6
		ipP	19 37.1
COL		iP	10 15 20
		ipP	15 35
		i	15 45
		i	16 05
HH		iP	10 18 25
		i	19 27
NEL		iP	10 19 21.2
		ipP	19 38.2
		i	20 00.2
April 1			
BC		iP	14 17 14.2
		ipP	17 31.4
BOZ		eS	14 27 10
		eL	31 23
BUT		eP	14 17 20
BUT		ipP	14 17 35
		i	18 01
		iPcP	18 37
		ePPP	20 09
		eL	32 17
CHI		e(S)	14 19 25
		eL	22 28
COL		eP	14 14 58
		iP	15 02
		epP	15 15
COLU		iP	14 13 22
		i	13 48
HH		eP	14 17 17
NEL		iP	14 17 13.5
		ipP	17 36.5
PHIL		eP	14 13 48
		e	14 37
		eS	17 45
		iL	18 28
SJ		iP	14 09 24
		i	09 35
		iS	09 42
		iL	10 35
TUC		iP	14 16 43
		e	17 15
		eL	30 56
WASH		iP	14 13 48
		ipP	14 06
		i	14 23
		iS	17 24
		isS	17 38
		eL	19 35
April 1			
COL		iP	14 20 01
		ipP	20 21
HH		eP	14 17 32
		iP	17 33
April 1			
HH		e(P)	17 16 54
April 1			
HH		iP	18 19 37
		i	20 09
April 1			
BC		iP	18 29 30.6
		i	29 43.1
		iPcP	30 08.1
		eS	38 12
BUT		eP	18 29 01
		eS	37 15
COL		iP	18 25 44
		iS	31 23
		eL	32 55
HH		eP	18 28 41
		i	28 53
		eS	36 45
NEL		iP	18 29 31.3
		ePP	32 04
PHIL		eS	18 41 25
		eL	53 26
TUC		eP	18 30 01
		eS	39 20
		eL	50 33
April 1			
COL		iP	20 34 33
April 1			
BC		iP	23 16 57.8
		ipP	17 35.2
BUT		iP	23 17 50
		ipP	18 24
COL		iP	23 21 18
COLU		iP	23 15 43
		eL	20 28
HH		iP	23 18 11
		ePP	19 35
NEL		iP	23 16 56.1
		iPP	17 37.9
		ePcP	20 16
SJ		eP	23 16 35
		e(S)	21 06
		eL	22 19
TUC		iP	23 16 12
		i	16 20
		ipP	16 31
		isP	16 40
		eL	20 40
WASH		iP	23 16 42
		e(S)	21 34
		iL	22 27
April 1			
COL		iP	23 59 05
April 2			
HH		iP	00 01 24
		i	01 28
April 2			
COL		eP	00 32 31
NEL		iP	00 31 47.4
TUC		eP	00 31 53
April 2			
COL		iP	02 04 55
April 2			
BC		eP	09 21 31
NEL		iP	09 21 29.7
April 2			
BC		iP	10 35 36.8
BUT		iP	10 36 09
COL		iP	10 36 02
		i	37 40
HH		iP	10 36 10
NEL		iP	10 35 35.8
		ePP	38 43
TUC		iP	10 35 43
April 2			
BC		eP'	11 18 11
BUT		iP'	11 18 48
		e	19 05
HH		iP'	11 19 00
		e(PP)	21 41
NEL		iP'	11 18 10.7
		iPP	20 34.1
		i	23 39.4
TUC		eP'	11 17 42
April 2			
TUC		e(P)	11 23 54
April 2			
COL		eP	14 16 45
April 2			
BC		iP	15 11 10.2
		i	11 19.7
		ipP	11 35.5
		ePP	14 48
		e(PKKP)	29 02
		eP'P'	37 09
BUT		iP	15 11 44
		i	12 00
		ipP	12 28
		ePP	15 31
COL		iP	15 11 49
HH		iP	15 11 46
		ePP	15 36
		ePKKP	28 30
		iPKKP	28 41
		eP'P'	36 53
NEL		iP	15 11 09.3
		ipP	11 25.1
		isP	11 42.9
		iPP	14 41.6
		ipPP	14 58.1
		ePKKP	28 30

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Date and Station		Phase (GCT) h m s
SJ	iP'	15 17 06
	i	17 23
TUC	iP	15 11 12
	ipP	11 28
April 2		
HONO	iP	16 07 40
	i	07 55
April 2		
NEL	e(P)	20 16 00
April 2		
BC	iP	20 36 13.4
	epP	36 39
COL	iP	20 32 12
	ipP	32 35
	isP	32 45
HH	eP	20 35 43
NEL	iP	20 36 14.4
	ipP	36 37.4
April 2		
COL	iP	22 45 28
NEL	eP	22 48 33
April 3		
BC	eP	00 14 52
	ipP	15 02.7
BUT	eP	00 14 09
COL	iP	00 10 42
	ipP	11 00
HH	iP	00 13 53
	i	15 07
	i	15 20
NEL	iP	00 14 52.6
	ipP	15 03.4
	e	15 40
April 3		
COL	iP	00 15 02
April 3		
COL	iP	00 26 42
April 3		
BC	iP	01 30 50.6
	ipP	31 02.1
BUT	iP	01 31 21
HH	iP	01 29 52
	iPcP	31 12
	i	31 24
NEL	iP	01 30 51.7
	ipP	31 03.5
	ePcP	31 43
TUC	eP	01 31 24
April 3		
BH	eP	03 00 32
	e	00 38
April 3		
HH	e(P)	05 42 37
April 3		
HH	e(P)	07 13 05
April 3		
BC	eP	08 08 17
BUT	eP	08 09 09
COL	eP	08 11 46
HH	eP	08 09 16
NEL	iP	08 08 13.5
	i	08 33.5
SJ	iP	08 04 26
	i	04 40
TUC	eP	08 07 35
April 3		
COL	eP	11 59 51
April 3		
HH	e(P)	13 19 21
April 3		
HH	e(P)	13 25 47
April 3		
HH	e(P)	18 20 10
April 3		
HH	e(P)	20 16 11
April 3		
BC	iP	21 10 33.6
NEL	iP	21 10 33
	e	10 40
April 3		
BC	iP	21 45 59.9
COL	iP	21 50 19
	i	50 27
COLU	eP	21 44 48
HH	eP	21 47 12
NEL	iP	21 45 58.4
	e	46 34
TUC	eP	21 45 14
April 4		
COL	iP	01 41 01
	iPcP	41 08
	epP	41 18
April 4		
COL	eP	02 45 39
April 4		
COL	eP	03 35 07
April 4		
HH	eP	05 46 55
NEL	iP	05 45 35.7
SJ	eP	05 42 06
April 4		
BC	iP	10 51 04.6
COL	eP	10 55 30
	ipP	55 39
HH	eP	10 52 25
NEL	iP	10 51 03.2
	i	51 16.2
TUC	eP	10 50 18
April 4		
COL	iP	11 01 05
April 4		
COL	iP	11 10 20
April 4		
COL	iP	12 21 09
April 4		
BC	eP	12 34 48
NEL	iP	12 34 47.3
April 4		
HH	iP	12 48 15
	iS	48 36
April 4		
BC	iP	13 31 42.6
	ipP	32 29.9
BUT	iP	13 32 18
	ipP	33 05
COL	iP	13 32 17
	ipP	33 03
	isP	33 35
HH	iP	13 32 19
	epP	33 06
NEL	iP	13 31 41.8
	i	31 46.3
	ipP	32 27.3
TUC	iP	13 31 48
April 4		
COL	iP	15 02 21
April 4		
BC	iP	15 16 55.7
NEL	iP	15 17 05.1
April 4		
BC	iP'	15 54 56.7
COL	eP'	15 55 51
	iP'	56 00
	i	56 11
	i	57 00
HH	eP'	15 58 27
NEL	iP'	15 54 55.3
SJ	iP	15 48 31
TUC	eP'	15 54 47
April 4		
HH	iP'	15 55 12
April 4		
NEL	eP	22 18 10
April 4		
BC	eP	22 32 40
	ipP	32 52.5
BUT	eP	22 31 45
COL	iP	22 33 41
	ipP	33 53
HH	iP	22 32 54.5
	ipP	33 10
NEL	eP	22 32 37
	epP	32 51
SJ	eP	22 26 13
TUC	eP	22 32 30
April 4		
HH	eP	22 36 11
April 4		
HH	iP	23 16 27
April 4		
BC	iP	23 25 41.0
	i	26 01.0
	i	26 28.2
	eS	35 16
BUT	iP	23 25 09
	i	25 24
	i	25 49
COL	iP	23 22 09
	iPcP	23 38
	iS	28 40
	eL	31 58
HH	iP	23 24 56
NEL	iP	23 25 41.9
	i	26 12.4

Date and Station	Phase	Phase (GCT) h m s
TUC	eP	23 26 09
April 5 HH	e(P)	01 43 37
April 5 COL	iP	04 56 50
	i	57 00
NEL	e(P)	05 00 35
April 5 COL	eP	06 44 56
NEL	iP'	06 50 26.6
	ePP	53 29
April 5 TUC	e(P)	07 31 35
April 5 BC	iP	07 47 17.3
HH	eP	07 47 53
NEL	iP	07 47 16.4
TUC	eP	07 47 19
April 5 COL	eP	08 25 44
	i	25 53
HH	eP	08 24 07
April 5 COL	e(P)	08 49 17
April 5 BC	iP	12 59 03.9
COL	iP	12 59 36
	e	59 55
HH	iP	12 59 39
NEL	iP	12 59 03.8
TUC	eP	12 59 09
April 5 HH	eP	14 35 26
NEL	iP	14 35 05.0
April 5 BC	iP	18 03 44.5
	iPcP	03 51.0
	ipP	04 11.5
	isP	04 17.5
	e(S)	13 54
BUT	iP	18 04 19
	ipP	04 43
COL	iP	18 06 23
	ipP	06 51
COLU	iP	18 02 04
	ipP	02 30
HH	iP	18 04 31.5
	ipP	04 59
	ePKKP	23 04
	eP'P'	31 10
MONT	iP	17 52 46
	iS	52 59
NEL	iP	18 03 42.9
	ipP	04 10.3
	isP	04 17.9
SJ	iP	17 59 55
	ipP	18 00 20
	ePP	01 33
TUC	iP	18 03 14
	epP	03 43
WASH	iP	18 02 33
	iPcP	02 59
	ipP	03 11
	isP	03 23
April 5 HH	iP	19 07 26
NEL	eP	19 11 38
April 5 NEL	eP	19 16 30
April 5 NEL	eP	19 19 26
April 5 BC	eP	19 29 44
	i	29 50.4
	i	30 05.9
BUT	iP	19 28 45
	eL	32 29
COL	eP	19 30 33
	iP	30 38
	eS	33 50
	eL	34 11
HONO	eL	19 41 08
T_L = 6 sec. $A_{max.}$=2.0mm.		
HH	eP	19 28 27
	eL	30 58
NEL	iP	19 29 46
	i	30 06
TUC	eP	19 30 42
April 5 BC	eP	19 38 40
BUT	eP	19 37 41
	i	37 56
	eL	41 28
HH	eP	19 37 20
	eL	39 57
NEL	iP	19 38 41.9
	i	38 57.9
TUC	eP	19 39 39
April 5 COL	iP	19 54 30
NEL	eP	19 51 28
April 5 COL	iP	21 38 05
April 6 COL	iP	01 50 13
NEL	eP	01 48 53
April 6 NEL	eP	01 54 08
April 6 COL	iP	02 03 46
April 6 COL	eP	04 42 32
April 6 HH	i(P)	05 13 15
April 6 COL	iP	06 32 47
April 6 COL	eP	07 41 02
April 6 COL	eP	09 22 16
HH	eP	09 24 25
April 6 COL	iP	11 00 05
	i	00 13
HH	eP	10 56 16
NEL	eP	10 55 26
April 6 COL	e(P)	12 08 19
April 6 COL	iP	14 47 47
HH	eP	14 49 07
April 6 BC	eP	18 12 30
NEL	iP	18 12 29.9
April 6 COL	iP	20 37 03
NEL	iP	20 37 11.7
April 7 NEL	e(P)	02 19 48
HH	e(P)	02 24 55
April 7 NEL	eP	05 16 03
April 7 BC	e(P)	05 41 01
COL	eP	05 45 16
NEL	eP	05 40 42
	i	41 10.0
April 7 COL	iP	05 50 23
April 7 BC	iP	06 40 04.5
BUT	iP	06 40 40
COL	iP	06 40 02
HH	iP	06 40 43
	e	41 01
NEL	iP	06 40 03.6
TUC	eP	06 40 10
April 7 BUT	eP	07 09 37
HH	eP	07 10 09
April 7 HH	eP	07 20 30
NEL	eP	07 20 43
April 7 COL	iP	07 55 42
	i	55 53
	ipP	56 05
April 7 COL	iP	12 26 56
April 7 NEL	e(P)	13 31 05
April 7 NEL	e(P)	15 45 32
April 7 BC	iP	16 43 31.8
	i	43 39.8
COL	eP	16 39 35
HH	eP	16 42 37
	i	44 25

Date and Station		Phase (GCT) h m s
COL	eP	16 47 42
NEL	iP	16 43 33.5
	i	43 41.0
TUC	eP	16 44 08
April 7		
BC	e(P)	18 39 24
	i	39 32.1
	i	39 59.7
COL	eP	18 39 04
	iP	39 07
	i	39 14
HH	eP	18 39 47
NEL	eP	18 39 14
	i	39 23.8
	ePP	42 53
April 7		
COLU	eP	21 29 30
	eS	33 01
HH	eP	21 33 40
NEL	iP	21 33 22.5
SJ	iP	21 25 20
April 7		
COL	eP	23 56 33
April 8		
NEL	e(P)	00 45 22
April 8		
COL	iP	03 48 12
April 8		
HH	eP	03 52 14
NEL	eP	03 53 20
April 8		
COL	iP	04 30 08
HH	eP	04 31 00
April 8		
BC	e(P)	04 44 50
COL	eP	04 44 32
NEL	eP	04 44 45
April 8		
COL	eP	09 03 48
April 8		
HH	eP	10 47 33
April 8		
BC	eP	11 43 10
COL	iP	11 38 38

Date and Station		Phase (GCT) h m s
HH	eP	11 41 56
NEL	iP	11 43 03.6
	i	43 11.4
April 8		
BC	eP	13 41 03
COL	eP	13 41 30
April 8		
COL	iP	15 00 36
NEL	eP	15 00 03
April 8		
BC	eP	16 49 57
	iP	50 06.3
	i	50 49.5
BUT	eP	16 51 24
COL	iP	16 53 09
COLU	eP	16 50 43
HONO	eL	16 58 37
HH	eP	16 51 18
NEL	iP	16 49 55.6
	i	50 47.6
	e	51 43
TUC	eP	16 49 30
	i	49 40
	eL	17 03 15
April 8		
BC	eP	18 14 01
NEL	iP	18 14 01.4
	e	14 12
April 8		
HH	e(P)	19 31 07
April 8		
BC	eP	19 37 13
NEL	eP	19 37 11
April 8		
NEL	e(P)	19 46 05
	e	47 01
April 8		
NEL	e(P)	21 07 42
April 9		
NEL	e(P)	00 30 32
April 9		
HH	e(P)	01 14 26
NEL	e(P)	01 13 03

Date and Station		Phase (GCT) h m s
April 9		
COL	eP	02 17 28
April 9		
HH	eP	02 30 13
NEL	iP	02 29 48.7
SJ	eP	02 23 09
	e	23 18
	e(S)	24 10
	eL	24 22
April 9		
COL	eP	03 05 21
April 9		
COL	eP	05 14 49
April 9		
NEL	eP	05 18 50
	e	22 36
April 9		
NEL	e(P)	05 48 46
April 9		
BC	iP	06 28 03.9
	epP	28 58
BUT	iP	06 28 39
COL	iP	06 30 51
COLU	eP	06 26 11
HH	iP	06 28 53
NEL	iP	06 28 02.6
	ipP	28 57.4
	isP	29 12.4
SJ	iP	06 23 57
TUC	iP	06 27 31
	epP	28 25
April 9		
COL	eP	07 26 34
	ipP	26 45
HH	eP	07 28 36
NEL	eP	07 29 19
April 9		
BC	e(P)	07 33 20
NEL	e(P)	07 33 29
April 9		
BC	iP	09 12 20.7
NEL	iP	09 12 19.8
TUC	eP	09 12 23

Date and Station		Phase (GCT) h m s
April 9		
NEL	e(P)	09 51 10
April 9		
HH	eP	11 54 59
April 9		
NEL	eP	12 09 35
April 9		
COL	eP	12 18 01
April 9		
COL	eP	12 43 39
April 9		
COL	eP	13 31 22
April 9		
BC	iP	14 08 03.4
COL	iP	14 05 21
	e	05 37
HH	iP	14 07 35
NEL	iP	14 08 03.4
	e	08 30
April 9		
NEL	iP	17 08 03
April 9		
COL	iP	17 16 30
April 9		
COL	eP	17 27 39
NEL	iP	17 32 08.3
April 9		
NEL	eP	17 53 50
April 9		
COL	eP	17 58 04
April 9		
NEL	eP	19 37 30
April 9		
COL	eP	20 47 24
	e	48 07
April 10		
COL	iP	03 06 13
April 10		
BC	iP	03 17 46.7
COL	iP	03 13 35
HH	eP	03 16 55
NEL	iP	03 17 47.5
	iPcP	17 54.3
	ipP	18 18.5
TUC	eP	03 18 20

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Date and Station	Phase	Phase (GCT) h m s
April 10		
COL	iP	05 54 29
April 10		
COL	eP	05 58 52
April 10		
COL	iP	06 03 32
April 10		
NEL	e(P)	07 57 14
April 10		
BC	eP	08 18 03
	iPcP	18 14.1
COL	eP	08 17 43
	iP	17 51
	ipP	18 01
	i	18 13
HH	eP	08 18 24
NEL	iP	08 18 03.5
	iPcP	18 12.7
	ipP	18 30.1
TUC	eP	08 18 14
April 10		
NEL	e(P)	09 54 16
	e	55 58
April 10		
BH	iP	10 16 21
	eS	16 44
BC	iP	10 23 42.3
	ipP	23 52.5
	i	24 00.5
BUT	iP	10 24 15
	ipP	24 25
COL	iP	10 27 13
COLU	iP	10 21 04
HH	iP	10 24 32
NEL	iP	10 23 41.0
	ipP	23 50.8
	iPP	25 34.8
SJ	eP	10 19 03
TUC	iP	10 23 03
April 10		
COL	iP	11 04 36
	ipP	04 45
April 10		
BC	eP	13 04 52
COL	iP	13 01 40
NEL	iP	13 04 51.9
April 10		
COL	iP	13 26 38
	i	26 47
	ipP	27 22
HH	eP	13 27 14
NEL	iP	13 26 53.4
	ipP	27 41.9
	iPP	30 24.6
TUC	eP	13 27 04
	epP	27 44
April 10		
COL	iP	14 30 22
HH	eP	14 29 01
NEL	eP	14 29 02
	i	29 39.0
April 10		
BUT	eP	15 02 18
COL	iP	14 59 32
NEL	iP	15 02 45.0
April 10		
BUT	eP	15 06 41
	i	06 58
	i	07 13
HH	eP	15 06 52
TUC	eP	15 07 32
UK	e(S)	15 05 04
	eL	05 28
April 10		
BH	eP	15 28 21
	e(S)	28 37
April 10		
COL	iP	16 10 07
HH	eP	16 09 18
April 10		
COL	eP	16 21 44
April 10		
HH	e(P)	23 38 49
April 11		
BC	iP	02 25 55.4
	i	26 24.0
HH	iP	02 26 44
NEL	iP	02 25 54
	ipP	26 22.8
TUC	eP	02 25 24
April 11		
BC	eP	03 16 26
BC	i	03 16 42.7
	ePP	20 11
COL	iP	03 15 30
COLU	eL	04 00 40
HH	e(P)	03 16 40
	ePP	20 12
NEL	eP	03 16 25
	i	16 42.7
	i	16 49.9
	i	17 42.7
	ePP	20 11
	eP'P'	41 41
PHIL	ePS	03 33 55
	eL	04 00 39
SJ	eP'	03 22 32
TUC	ePP	03 20 28
	ePS	29 19
WASH	eL	04 08 40
April 11		
BC	eP	03 29 13
	ePP	32 56
COL	iP	03 28 18
HH	e(P)	03 32 32
NEL	iP	03 29 11.9
	ePP	32 36
TUC	ePP	03 33 19
	e	43 55
	eL	46 26
April 11		
COL	iP	04 05 41
April 11		
BC	eP	04 50 10
	iP	50 13.9
BUT	e(P)	04 50 43
HH	eP	04 50 52
	e	51 15
NEL	eP	04 50 09
	i	50 40.8
TUC	e(P)	04 50 16
April 11		
BC	iP	05 51 39.5
	iPcP	51 56.0
	ipP	52 12.3
	isP	52 25.5
	e(P'P')	06 19 55
BUT	iP	05 52 14
	i	52 37
	ipP	52 47
COL	eP	05 54 15
	e(pP)	55 03
	iP'	58 20
COLU	iP	05 50 07
	ePcP	50 50
HH	iP	05 52 26
	ipP	53 00
	eP'P'	06 19 03
MONT	iP	05 40 57
NEL	iP	05 51 38.4
	iPcP	51 59.8
	ipP	52 10.3
	isP	52 23
	i	52 40.8
	i(P'P')	06 19 56.7
SJ	iP	05 48 01
TUC	iP	05 51 10
	epP	51 43
	e(P'P')	06 20 34
WASH	iP	05 50 35
April 11		
NEL	e(P)	06 54 36
April 11		
COL	eP	08 33 01
April 11		
BC	i(P)	09 15 44.7
NEL	eP	09 15 46
April 11		
BC	eP'	10 44 45
	i	44 52.1
	ePP	47 08
BUT	e(P')	10 45 39
	ePP	45 51
	iPP	46 05
COL	eP	10 39 36
	ePP	43 32
	ePPP	45 52
	e(PS)	52 49
	eSS	58 08
COLU	iPP	10 45 52
	i	47 37
	eS	54 25
	ePS	55 28
	eSS	11 01 44
HH	eP'	10 44 15
	ePP	45 42
NEL	iP'	10 44 41.1
	i	44 51.0
	i	45 04
	i	46 51.4
	iPP	47 01.1

Date and Station		Phase (GCT)
		h m s
NEL	i	10 47 14.1
PHIL	eS	10 52 43
	ePS	54 22
	eSS	11 00 13
	eL	14 22
TUC	eP'	10 44 47
	ePP	48 10
WASH	ePP	10 45 05
April 11		
BC	eP	11 07 33
	i(P')	11 51.6
	iPP	12 00.1
	ePKKP	22 52
BUT	iP	11 06 47
	ipP	07 03
	i	07 40
	ePP	10 42
	iPP	10 44
	eS	18 28
	e(SS)	26 07
COL	iP	11 04 50
	iPP	07 36
	iS	14 06
	eScS	15 04
	eSS	18 50
	eL	22 49
	iP'P'	31 46
	i(SKPP')	35 12
COLU	eSSS	11 31 43
	eL	36 49
HH	iP	11 06 36
	e	09 37
	iPP	10 24
NEL	iP	11 07 34.1
	ipP	07 41.1
	i	10 43.8
	i	11 05.1
	iP'	11 35.1
	i(PP)	11 53.6
	i	21 05.1
	iPKKP	22 52.1
PHIL	ePP	11 10 41
	e(S)	18 31
	ePPS	20 16
	e	20 43
	eL	34 35
TUC	eP'	11 11 46
	ePP	12 19
	e	15 39
	ePS	22 15
	eP'P'	31 30
WASH	ePP	11 10 52
April 11		
COL	iP	14 31 58

Date and Station		Phase (GCT)
		h m s
April 11		
BC	eP	14 54 44
COL	iP	14 57 56
NEL	iP	14 54 40.2
April 11		
BC	iP	15 17 21.2
COL	iP	15 13 08
HH	e(P)	15 16 28
NEL	iP	15 17 22.5
April 11		
COL	iP	15 57 11
	i	57 19
April 11		
COL	e(P)	18 02 16
April 11		
BC	eP	18 49 54
	e	50 06
COL	iP	18 49 00
NEL	eP	18 49 54
April 11		
BC	eP	19 32 16
	e	32 33
COL	iP	19 32 55
NEL	iP	19 32 15.4
TUC	e(P)	19 32 20
April 11		
COL	iP	20 31 11
	e	31 21
April 11		
BC	eP	22 43 14
NEL	iP	22 43 12.4
April 12		
BC	e(P)	00 50 10
	i	52 29.5
COL	iP	00 50 13
	i	51 33
NEL	e(P)	00 51 27
	i	52 28.7
TUC	eL	01 23 04
April 12		
COL	iP	01 17 45
April 12		
BC	e(P)	01 27 26
	i	27 31.9

Date and Station		Phase (GCT)
		h m s
BC	i	01 27 47.6
COL	iP	01 23 52
HH	e(P)	01 26 46
NEL	e(P)	01 27 32
	i	27 48.7
April 12		
BUT	e(P)	03 02 18
HH	eP	03 02 07
NEL	e(P)	03 02 38
April 12		
COL	iP	06 38 56
April 12		
COL	eP	08 20 27
April 12		
BC	iP	08 50 57.3
NEL	eP	08 50 57
TUC	eP	08 51 02
April 12		
BC	iP	10 56 09.9
BUT	iP	10 56 44
HH	iP	10 56 58
NEL	iP	10 56 09.1
	e(pP)	56 39
	e	56 52
TUC	eP	10 55 39
April 12		
COL	iP	12 00 25
April 12		
NEL	iP	13 27 48.2
April 12		
COL	e(P)	14 00 20
April 12		
COL	eP	14 02 54
April 12		
BC	e(P)	16 10 08
	i	10 24.8
COL	iP	16 09 51
NEL	e(P)	16 10 06.4
	i	10 24.2
	i	10 40.4
April 12		
BC	iP	19 47 39.8
COL	iP	19 48 21

Date and Station		Phase (GCT)
		h m s
HH	e(P)	19 48 19
NEL	iP	19 47 39.0
April 12		
COL	iP	21 10 14
HH	eP	21 12 21
April 12		
WASH	eL	21 26 17
April 12		
NEL	i(P)	21 59 50.1
April 13		
COL	e(P)	01 53 38
HH	e(P)	01 56 29
April 13		
COL	iP	02 33 30
HH	eP	02 36 33
NEL	iP	02 37 27.5
TUC	e(P)	02 37 58
April 13		
TUC	e(P)	03 07 58
April 13		
HH	eP	03 14 23
NEL	eP	03 13 59
SJ	eP	03 07 00
	e(S)	07 44
	eL	08 00
April 13		
HH	eP	07 33 56
NEL	eP	07 31 42
April 13		
BC	iP	07 48 05.4
	eS	57 49
BUT	iP	07 48 38
	i	48 49
COL	iP	07 50 39
	iP'	54 36
COLU	iP	07 46 33
	ipP	47 14
	iS	54 49
	eScS	55 38
	eSS	59 39
HH	iP	07 48 50
	ePP	52 19
	eS	59 00
	e	59 14
	eP'P'	08 14 35

Date and Station	Phase	(GCT) h m s
NEL	iP	07 48 04.2
	i	48 10.3
	i	48 22.1
	ipP	48 47.0
	iPKKP	08 07 04.3
	eP'P'	15 05
PHIL	eS	07 55 47
	eScS	56 45
	eSSS	08 03 36
SJ	iP	07 44 28
	ipP	45 06
	ePP	46 17
TUC	iP	07 47 36
	epP	48 21
	eS	56 52
WASH	iP	07 46 59
	ipP	47 41
April 13		
BC	eP	08 03 17
COL	iP	08 06 39
HH	e(P)	08 03 59
	iPPP	06 42
NEL	iP	08 03 17.3
	i	03 22.3
	i	03 30.3
	i	03 47.3
SJ	eP	07 57 24
	e(S)	59 18
TUC	eP	08 02 40
April 13		
HH	e(P)	09 49 17
April 13		
COL	eP	10 17 32
HH	eP	10 18 32
NEL	eP	10 19 30
April 13		
COL	eP	12 01 04
April 13		
NEL	iP	13 43 55.0
	e	44 33
	e	46 03
	e	47 11
April 13		
COL	iP	15 18 38
April 13		
BC	eP	15 38 30
BUT	eP	15 37 59
	i	38 06

Date and Station	Phase	(GCT) h m s
COL	iP	15 35 18
HH	eP	15 37 46
NEL	iP	15 38 29.7
	i	38 39.7
	i	38 50.2
April 13		
COL	iP	17 14 01
April 13		
NEL	e(P)	17 59 08
April 13		
NEL	eP	22 58 28
	e	58 44
April 14		
TUC	e(P)	00 58 15
April 14		
TUC	e(P)	01 05 16
April 14		
BC	iP	04 06 57.3
	i	07 00.1
COL	eP	04 07 47
HH	eP	04 07 12
NEL	iP	04 06 56.6
	i	06 58.9
TUC	iP	04 06 50
April 14		
BC	iP	07 55 40.1
COL	iP	07 51 33
HH	eP	07 54 41
	iPcP	55 52
NEL	iP	07 55 41.1
	i	55 43.6
	i	56 07.6
TUC	eP	07 56 12
April 14		
BC	iP	08 05 46.0
	ipP	06 09.8
BUT	iP	08 06 22
	i	06 38
	ipP	06 45
COL	iP	08 05 50
COLU	eP	08 04 10
	epP	04 35
HH	iP	08 06 33
	ipP	06 57

Date and Station	Phase	(GCT) h m s
NEL	iP	08 05 44.6
	ipP	06 08.1
	isP	06 18.6
	i	07 29.6
SJ	eP	08 02 02
	e(PcP)	04 17
TUC	iP	08 05 16
	ipP	05 40
	isP	05 48
April 14		
BC	iP	13 43 55.7
	i	44 05.5
BUT	ePP	13 45 03
COL	iP	13 38 01
HH	eP'	13 43 33
	e(PP)	45 54
SJ	iP'	13 44 26
TUC	eP'	13 44 04
WASH	iP'	13 43 59
	e	44 08
	ePKS	47 21
April 14		
TUC	iP	13 47 29
April 14		
HH	e(P)	13 53 53
April 14		
COL	iP	19 38 02
HH	eP	19 39 51
NEL	eP	19 40 05
	e	40 15
	e	40 46
April 14		
COL	eP	19 50 30
April 14		
COL	iP	19 55 22
NEL	e(P)	19 59 28
April 14		
HH	iP	21 14 00
NEL	iP	21 14 22.1
April 15		
COL	iP	00 36 04
	i	36 38
April 15		
NEL	e(P)	01 05 45
April 15		
HH	eP	03 51 02

Date and Station	Phase	(GCT) h m s
NEL	eP	03 51 40
April 15		
BC	eP	04 10 26
	ePcP	12 20
BUT	iP	04 11 05
COL	iP	04 14 06
HH	eP	04 11 20
	i	11 24
NEL	eP	04 10 21
	iP	10 23.7
	ePcP	12 20
SJ	eP	04 06 46
TUC	eP	04 09 45
April 15		
BC	eP	04 48 00
COL	eP	04 51 38
	iP	51 46
HH	eP	04 48 58
NEL	iP	04 47 58.8
SJ	eP	04 44 26
TUC	eP	04 47 20
April 15		
COL	iP	05 17 32
HH	e(P)	05 14 48
NEL	eP	05 13 49
SJ	eP	05 10 06
April 15		
BC	iP	05 25 47.2
BUT	iP	05 26 22
HH	iP	05 26 35
NEL	iP	05 25 45.4
	i	25 54.9
SJ	eP	05 21 47
TUC	eP	05 25 15
April 15		
NEL	e(P)	05 58 41
April 15		
BC	eP	07 56 47
	e	57 06
BUT	eP	07 59 24
COL	iP	08 00 24

Date and Station	Phase	(GCT) h m s
HH	eP	07 57 41
NEL	eP	07 56 42
	iP	56 46.0
	i	56 58.0
	i	57 04.0
SJ	eP	07 53 10
TUC	eP	07 56 02
April 15 BC	eP	08 46 38
COL	eP	08 50 23
HH	iP	08 47 37
NEL	iP	08 46 36.1
SJ	eP	08 43 25
TUC	eP	08 45 56
April 15 COL	iP	09 09 32
April 15 COL	iP	09 22 29
April 15 BC	i(P)	11 11 19.0
NEL	iP	11 11 16.4
	i	13 11.4
TUC	e(P)	11 10 29
April 15 HH	e(P)	13 53 00
April 15 BC	e(P)	13 52 52
	e	53 04
	e	53 40
HH	eP	13 53 48
NEL	iP	13 53 03.4
	e	53 10
	e	53 39
SJ	eP	13 52 48
TUC	eP	13 53 05
April 15 COL	eP	16 43 52
April 15 HH	e(P)	17 01 42
April 15 COL	iP	18 41 44
	i	41 50
April 15 BUT	e(P)	19 21 46
BUT	e	19 22 12
	i	22 23
	i	22 48
COL	eP	19 22 04
HH	eP	19 20 45
	i	20 59
	i	21 55
April 15 COL	eP	21 36 35
April 15 COL	eP	22 10 22
April 15 COL	eP	23 14 31
NEL	iP	23 13 49.5
TUC	eP	23 13 51
April 16 SJ	iP	00 43 05
	e	43 37
April 16 COL	eP	02 18 54
April 16 BC	i(P)	03 23 34.4
	e	23 50
April 16 NEL	eP	03 47 23
	epP	47 49
April 16 BC	e(P)	04 33 12
	epP	33 38
COL	iP	04 32 50
	ipP	33 14
	i	33 30
NEL	iP	04 33 11.3
	ipP	33 38.1
April 16 HH	e(P)	04 47 00
April 16 COL	iP	06 16 59
	i	17 05
April 16 NEL	eP	06 23 41
SJ	eP	06 24 49
April 16 BUT	e(P)	08 28 43
	e	33 11
NEL	iP	08 30 00.6
	ipP	30 17.6
April 16 COL	iP	08 35 46
	i(S)	36 11
April 16 COL	iP	08 37 38
NEL	eP	08 41 31
April 16 BC	iP	10 42 00.3
	ipP	42 16.0
	isP	42 28.3
BUT	iP	10 41 28
	ipP	41 43
COL	iP	10 38 27
	ipP	38 43
	i	39 00
	i	39 08
NEL	iP	10 42 00.7
	ipP	42 17.7
	isP	42 31.9
	i	43 01.2
	i	43 27.2
TUC	eP	10 42 28
April 16 BC	iP	12 21 40.0
	i	21 51.0
	i	22 10.5
April 16 NEL	e(P)	13 03 40
April 16 BC	eP	18 47 37
NEL	iP	18 47 36.1
	ipP	48 18.1
	i	50 06.1
SJ	eP	18 45 27
WASH	iP	18 46 36
April 16 BC	e(P)	19 46 59
TUC	eP	19 46 08
April 16 COL	eP	21 47 16
NEL	eP	21 47 13
	e	47 45
April 17 NEL	iP	01 08 40.9
TUC	eP	01 08 44
April 17 NEL	e(P)	01 21 15
April 17 COL	iP	03 25 48
NEL	iP	03 23 34.0
	ipP	23 54.5
SJ	iP	03 16 13
	i(S)	17 36
TUC	e(P)	03 23 08
April 17 COL	iP	09 33 56
April 17 BUT	iP	12 21 08
	ipP	21 29
COL	iP	12 18 11
NEL	iP	12 21 41.6
	i	21 49.8
	i(pP)	22 14.3
TUC	eP	12 22 07
April 17 COL	iP	14 59 47
NEL	eP	14 57 59
April 17 COL	iP	15 04 09
April 17 BC	i(P)	16 47 51.3
COL	iP	16 43 35
NEL	eP	16 47 34
April 17 COL	iP	17 27 57
April 17 COL	iP	19 11 20
NEL	eP	19 15 33
April 17 BC	iP	20 19 16.4
	i	19 29.6
	i	19 51.6
	eS	26 13
BOZ	eP	20 18 46
	ePP	20 36
	iS	25 15
	i	25 52
	iSS	28 44
	eL	30 25
BUT	iP	20 18 39
	ePP	20 20
	i	24 17
	iS	25 00
	eL	28 41

Date and Station		Phase (GCT) h m s
CHI	eP	20 20 41
	ePPP	24 25
	eS	28 43
	i	29 09
	e(SS)	33 25
	eL	38 33
COL	eP	20 15 22
	iP	15 23
	iS	19 00
	iP'P'	50 47
HONO	iP	20 17 27
	e(S)	23 14
	eL	25 11
T_L=12 sec. $A_{max.}$=8.5mm.		
HH	iP	20 18 22
	i(S)	24 10
NEL	iP	20 19 17
	iScP	24 39.0
	iS	26 14.5
	i	28 07.5
	eL	33 03
RC	eP	20 19 32
	ePcP	20 55
	ePP	21 42
	ePPP	22 09
	eS	26 35
	i	26 52
	iScS	29 16
	eSS	30 18
	eL	31 23
SLC	eP	20 19 07
	eS	25 46
	iS	25 50
	iScS	29 02
	eSS	29 29
	eL	30 15
SJ	eP	20 23 35
	eS	34 03
	e(PS)	35 38
	eL	47 16
SIT	e(P)	20 16 16
	ePP	16 38
	eS	20 13
	iL	20 40
TUC	iP	20 19 54
	i(PP)	22 15
	eS	27 18
	iS	27 21
	eSS	31 07
	eL	33 05
UK	eP	20 18 19
	ePP	19 52
	eS	24 28
	eL	27 28
WASH	eP	20 21 38
	i	25 14

Date and Station		Phase (GCT) h m s
WASH	e(S)	20 30 56
	eSS	34 52
	eL	39 16
April 17		
BC	iP	20 28 06.3
TUC	eP	20 28 44
April 17		
TUC	eP	20 37 56
April 17		
BC	iP	20 54 43.6
	i	54 53.8
COL	iP	20 55 06
NEL	e(P)	20 54 42
	i	54 54.3
	i	55 02.0
TUC	e(P)	20 55 18
	i	55 31
	e	56 47
April 17		
BC	iP	21 05 18.2
COL	iP	21 01 26
NEL	iP	21 05 19.0
TUC	iP	21 05 55
April 17		
COL	eP	21 02 50
April 17		
BC	i(P)	21 06 20.0
	i	06 39.8
BUT	iP	21 05 36
HH	i(P)	21 05 30
NEL	iP	21 06 21.5
	ipP	06 45.0
	i	06 52.0
	i	08 13.3
TUC	i(P)	21 06 26
	i	07 21
WASH	iP	21 04 16
	i	04 22
	e	11 24
April 17		
BC	iP	21 47 17.5
	i	47 22.0
April 17		
COL	iP	21 43 28
NEL	iP	21 47 18.3
	i	47 23.0
	i	47 30.3
TUC	e(P)	21 47 55

Date and Station		Phase (GCT) h m s
April 17		—
COL	iP	22 02 04
April 17		
COL	iP	22 17 34
April 17		
COL	iP	22 19 14
	i	19 40
April 17		
BC	iP	22 28 04.5
COL	eP	22 24 11
NEL	iP	22 28 05.0
TUC	eP	22 28 42
April 17		
BC	iP	22 33 54.5
COL	iP	22 30 03
	i	30 09
NEL	iP	22 33 55.5
TUC	eP	22 34 32
April 17		
NEL	iP	22 40 03.4
	epP	40 53
April 17		
COL	iP	22 43 53
NEL	e(P)	22 47 52
TUC	e(P)	22 48 23
April 17		
BC	iP	23 03 39.1
	i	03 44.9
	i	03 49.9
COL	iP	22 59 46
NEL	iP	23 03 40.2
TUC	iP	23 04 16
	i	04 22
	e	04 32
April 18		
BC	i(P)	00 42 50.3
NEL	iP	00 42 51.0
TUC	eP	00 43 28
April 18		
COL	eP	00 57 30
April 18		
BC	iP	01 19 40.7
	i	19 51.2

Date and Station		Phase (GCT) h m s
COL	iP	01 15 48
NEL	iP	01 19 41.8
TUC	iP	01 20 18
April 18		
NEL	eP	01 38 27
TUC	e(P)	01 38 28
April 18		
COL	eP	02 06 29
April 18		
COL	eP	02 12 41
April 18		
BC	iP	03 16 26.1
	i	16 38.6
COL	eP	03 17 07
NEL	iP	03 16 25.1
	i	16 37.9
TUC	eP	03 16 27
	eL	52 12
April 18		
BC	iP	04 46 15.6
COL	iP	04 42 24
NEL	iP	04 46 17.1
TUC	eP	04 46 53
April 18		
COL	eP	05 22 35
April 18		
BC	iP	05 53 55.5
	i	54 15.0
COL	eP	05 50 04
NEL	iP	05 53 56.9
TUC	eP	05 54 33
April 18		
BC	eP	07 48 26
NEL	e(P)	07 48 42
TUC	eP	07 48 00
April 18		
COL	eP	08 29 56
April 18		
BC	eP	08 55 25
COL	eP	08 55 31
NEL	e(P)	08 55 36

Date and Station		Phase (GCT) h m s
TUC	e(P)	09 00 00
April 18 COL	eP	18 08 52
April 18 BC	eP	19 45 08
COL	iP	19 41 14
	ipP	41 22
NEL	iP	19 45 08.8
TUC	eP	19 45 45
	e	45 51
April 18 COL	iP	20 36 05
April 18 BC	e(P)	22 07 31.0
COL	eP	22 01 58
	e	03 16
NEL	e(P)	22 07 31
April 19 BC	i(P)	03 32 52.1
COL	iP	03 28 00
NEL	iP	03 31 53.4
TUC	eP	03 32 29
April 19 COL	eP	03 51 39
April 19 BC	eP	04 46 12
COL	eP	04 40 18
NEL	eP	04 46 16
April 19 COL	eP	05 20 22
April 19 COL	eP	07 35 51
April 19 COL	eP	10 24 22
April 19 COL	eP	10 31 00
April 19 COL	eP	11 23 10
April 19 COL	iP	11 41 34
April 19 COL	iP	12 48 12
NEL	e(P)	12 47 37
April 19 NEL	eP	13 40 37
April 19 COL	eP	13 50 27
April 19 COL	iP	15 16 41
April 19 BC	iP	16 26 51.2
	i	26 57.7
	ipP	27 06.5
COL	iP	16 26 54
	i(PcP)	27 02
	ipP	27 09
NEL	iP	16 26 50.6
	ipP	27 06.6
April 19 BC	iP	16 40 29.7
COL	eP	16 40 25
NEL	iP	16 40 29.6
April 19 COL	iP	17 04 38
April 19 BC	eP	18 58 29
COL	iP	18 54 37
NEL	eP	18 58 29
April 19 NEL	e(P)	19 06 25
April 19 BC	eP	19 59 44
COL	iP	20 00 11
NEL	e(P)	19 59 44
TUC	eP	19 59 51
April 19 COL	iP	20 38 37
April 20 NEL	eP	01 35 25
April 20 COL	eP	04 40 21
April 20 COL	iP	05 56 56
	i	57 01
HH	eP	05 58 36
NEL	eP	05 59 00
April 20 NEL	eP	07 01 23
	e	01 53
April 20 NEL	eP	07 20 50
	e	21 32
April 20 COL	eP	08 30 17
April 20 COL	eP	09 23 38
NEL	iP	09 26 07.9
April 20 NEL	e(P)	16 10 21
April 20 COL	iP	16 27 14
April 20 BC	iP	23 09 07.8
	i	09 36.3
COL	iP	23 05 11
	i	05 31
NEL	iP	23 09 08.5
April 21 BUT	eP	00 15 34
COL	eP	00 13 29
April 21 NEL	iP	00 25 12.9
	e	25 56
April 21 COL	eP	00 30 14
NEL	e(P)	00 34 09
TUC	e(P)	00 34 45
April 21 COL	eP	06 05 07
NEL	e(P)	06 09 33
April 21 COL	iP	07 24 22
NEL	e(P)	07 30 41
April 21 NEL	eP	09 35 01
April 21 TUC	eP	10 01 03
April 21 BC	eP	10 11 27
BUT	eP	10 10 39
	i	10 42
	e	11 20
COL	iP	10 09 04
HH	e(P)	10 10 30
NEL	iP	10 11 26.6
	ePP	15 04
April 21 BC	eP	11 13 37
NEL	eP	11 13 32
TUC	e(P)	11 13 02
April 21 COL	eP	12 23 10
NEL	e(P)	12 26 18
April 21 COL	iP	13 11 09
April 21 BC	iP	18 50 11.1
BUT	iP	18 50 15
COL	iP	18 52 40
	e(pP)	53 04
HH	e(P)	18 50 25
NEL	iP	18 50 10.6
SJ	iP	18 42 37
	i	42 51
	i(S)	43 41
April 21 BC	iP	20 33 10.0
	i	33 27.0
	ipP	33 39.5
	e(S)	41 25
BUT	iP	20 33 51
	ipP	34 16
COL	iP	20 36 13
	ipP	36 32
	isP	36 40
	i	37 09
	i	37 40
COLU	eP	20 31 28
	ipP	31 58
HH	e(P)	20 34 08
NEL	iP	20 33 08.2
	i	33 22.2
	ipP	33 39.0
	i(PcP)	34 16.0

Date and Station	Phase	Phase (GCT) h m s
SJ	iP	20 29 31
TUC	iP	20 32 35
	e(S)	39 26
WASH	eP	20 32 04
	ipP	32 27
	isP	32 46
April 21		
NEL	e(P)	21 02 20
	e	02 35
April 21		
BC	iP	22 20 01.8
NEL	iP	22 20 00.1
	epP	20 26
	esP	20 41
April 21		
BC	eP	22 42 05
NEL	iP	22 42 05.8
April 21		
NEL	e(P)	23 20 14
April 22		
NEL	eP	10 40 32
April 22		
NEL	eP	10 44 07
April 22		
COL	iP	14 14 59
April 22		
BC	e(P)	14 39 34
COL	iP	14 37 50
NEL	iP	14 39 51.8
	ipP	40 28.0
April 22		
BUT	iP	15 05 53
	i	07 08
COL	iP	15 03 41
	iPcP	04 36
NEL	iP	15 06 07.6
	e	06 31
	i	07 22.8
	e	07 52
	iPP	09 33.8
	i	09 45.3
SJ	e(PP)	15 15 26
TUC	eP	15 06 30
HONO (WAH)	iP	15 02 56
April 22		
COL	iP	15 32 40
April 22		
COL	iP	17 46 33
April 22		
NEL	eP	18 45 37
April 22		
NEL	iP	18 51 39
	i	51 48
	i	52 01
	iS	52 30
April 22		
COL	eP	22 13 46
April 22		
COL	eP	23 12 32
April 22		
COL	eP	23 14 38
April 23		
BC	iP	01 28 49.8
	i	28 58.0
COL	iP	01 32 37
COLU	eP	01 26 46
NEL	iP	01 28 48.2
SJ	eP	01 25 50
TUC	eP	01 28 08
April 23		
BC	e(P)	02 13 44
NEL	iP	02 13 44.3
April 23		
NEL	eP	07 27 27
	e	27 46
TUC	e(P)	07 26 47
April 23		
BC	iP	08 46 24.4
NEL	iP	08 46 22.5
	epP	47 16
TUC	eP	08 46 26
April 23		
BC	eP	11 55 21
COL	iP	11 51 20
NEL	eP	11 55 22
TUC	e(P)	11 55 54
April 23		
NEL	e(P)	12 01 56
April 23		
COL	iP	12 30 27
April 23		
COL	iP	14 16 13
NEL	e(P)	14 15 38
April 23		
COL	eP	14 21 39
April 23		
COL	iP	14 28 34
NEL	e(P)	14 27 59.0
April 23		
COL	iP	18 33 48
HH	eP	18 35 53
April 23		
HH	e(P)	19 21 17
	e	23 06
April 23		
BC	iP	21 15 36.5
	i	15 53.0
HH	iP	21 16 21.5
	i	17 24
NEL	iP	21 15 35.0
	ipP	16 35.3
TUC	iP	21 15 07
April 23		
COL	eP	22 24 28
April 24		
COL	iP	00 18 39
NEL	e(P)	00 17 57
	e	18 53
April 24		
COL	iP	02 55 36
April 24		
COL	eP	06 39 24
April 24		
COL	eP	06 54 24
April 24		
BC	iP	08 39 42.1
	ipP	40 07.0
	isP	40 15.8
	i	40 33.8
	iPP	41 12.8
BUT	eP	08 38 34
	ipP	38 58
	isP	39 14
	e	47 13
COL	iP	08 33 36
	i	33 54
	iS	34 06
COLU	eP	08 41 52
HH	iP	08 38 12
NEL	iP	08 39 44.5
	i	40 01.5
	ipP	40 09.5
	iPP	40 54.5
	isPP	41 23.0
	iPcP	42 18.3
	iScP	45 57.5
SJ	eP	08 44 09
TUC	eP	08 40 23
	ipP	40 48
April 24		
BC	eP	10 07 07
	ipP	07 23.7
COL	eP	10 07 46
NEL	iP	10 07 06.4
	ipP	07 22.6
TUC	eP	10 07 08
	epP	07 25
April 24		
COL	iP	16 30 14
April 24		
BC	eP	17 46 06
BUT	eP	17 45 41
	e	46 07
HH	eP	17 45 27
	i	45 53
NEL	eP	17 46 03.7
	iP	46 05.8
	i	46 37.1
	i	46 54.0
April 24		
BC	iP	18 44 35.7
BUT	iP	18 44 03
COL	iP	18 41 03
	e	41 36
HH	iP	18 43 49
NEL	iP	18 44 36.6
TUC	eP	18 45 03
April 24		
COL	eP	23 48 27
April 25		
COLU	eP	00 39 10
HH	eP	00 41 27
NEL	eP	00 41 48
	ePP	45 59

Date and Station		Phase (GCT) h m s
April 25		
HH	e(P)	03 44 31
April 25		
BC	eP	03 54 40
COL	eP	03 54 05
NEL	eP	03 54 39
April 25		
BC	eP	04 00 23
COLU	eP	04 02 43
NEL	eP	04 00 47
	e	01 21
	i	01 28.1
TUC	eP	04 01 04
April 25		
BC	eP	04 05 38
	iP	05 43.1
BUT	iP	04 06 05
	i	06 11
COL	iP	04 08 52
	e	09 05
HH	eP	04 06 20
NEL	iP	04 05 36.8
	i	05 42.6
	e	05 54
TUC	eP	04 05 06
April 25		
HH	i(P)	04 29 07
April 25		
BC	iP'	05 42 43.5
COL	iP'	05 42 20
HH	eP'	05 43 00
NEL	iP'	05 42 42.8
TUC	eP'	05 42 55
April 25		
SJ	eP	06 25 33
	iP	25 34
	i(S)	25 45
April 25		
COL	e(P)	06 40 30
April 25		
BC	iP	10 04 32.8
COL	eP	10 07 28
COLU	eP	10 00 35
HH	eP	10 04 55
NEL	iP	10 04 31.8
	e	04 38
SJ	iP	09 57 21
	iS	58 00
TUC	eP	10 04 00
April 25		
BC	eP	10 43 46
	i	45 23.2
	iL	45 51.7
TUC	eP	10 43 03
	iP	43 06
	i	43 11
	i	43 21
	iS	43 42
	iL	43 56
April 25		
COL	eP	10 58 33
April 25		
NEL	eP	11 34 48
April 25		
HH	iP	14 51 40
April 25		
COL	eP	15 04 57
April 25		
COL	eP	20 15 31
HH	iP	20 16 18
April 25		
HH	iP	20 28 11
April 25		
COL	iP	20 32 09
HH	iP	20 33 33
April 25		
BC	iP	20 34 52.9
	i	35 07.1
	i	35 15.1
	i(S)	35 27.6
	i	36 07.6
	iL	36 25.6
BOZ	eP	20 36 34
	eL	39 12
BUT	eP	20 36 17
	i	36 53
	iL	39 03
COL	iP	20 39 53
COLU	eP	20 40 06
	eS	50 56
HH	eP	20 36 29
	i	36 42
	eL	40 11
NEL	iP	20 34 53.0
SLC	eP	20 35 (40)
	eS	37 (27)
	eL	37 (45)
TUC	eP	20 35 53
	iP	35 58
	e	36 16
	i(S)	38 23
	eL	38 41
UK	e(P)	20 34 11
	eS	34 24
	eL	34 29
WASH	eL	20 52 02
April 25		
COL	eP	21 41 21
April 26		
NEL	eP	00 04 47
April 26		
BC	iP	02 22 50.1
	i	23 05.8
BUT	iP	02 22 18
	e	22 46
COL	iP	02 19 18
HH	iP	02 22 03
NEL	iP	02 22 50.4
TUC	eP	02 23 17
April 26		
COL	eP	02 26 32
	ipP	26 50
April 26		
HH	e(P)	02 50 19
April 26		
COL	eP	05 21 17
April 26		
COL	eP	05 35 48
April 26		
COL	eP	08 01 37
April 26		
BC	iP	09 25 15.7
	i	25 21.2
	i	25 28.7
BUT	iP	09 26 14
	i	26 20
COL	iP	09 29 11
COLU	eP	09 24 21
	eL	32 21
HH	iP	09 26 34
	i	27 44
NEL	iP	09 25 14.4
	i	25 32.6
	ePP	26 42
	ePcP	27 08
SJ	eP	09 23 43
TUC	iP	09 24 34
April 26		
BC	e(P)	10 48 50
NEL	eP	10 48 30
	e	48 55
TUC	eP	10 47 40
April 26		
COL	iP	11 10 19
April 26		
HH	eP	11 32 29
NEL	eP	11 30 59
April 26		
BC	eP	13 11 39
COL	eP	13 15 25
HH	eP	13 13 10
NEL	iP	13 11 37.2
April 26		
BC	eP	16 03 51
COL	iP	16 08 03
NEL	iP	16 03 49.9
April 26		
COL	eP	16 53 52
April 26		
COL	eP	16 59 06
April 26		
BC	iP	17 53 59.7
BUT	iP	17 54 33
COL	eP	17 54 26
HH	iP	17 54 45
NEL	iP	17 53 59.0
	ipP	54 09.0
	isP	54 15

Date and Station		Phase (GCT) h m s
April 26		
BC	iP	20 34 57.0
	ipP	35 10.0
	i	36 17.5
	i(PP)	36 57.0
	eScS	39 17
	eS	43 14
	esS	43 38
	eP'P'	21 03 50
	iP'P'	04 22.0
BUT	eP	20 34 17
	iP	34 18
	ipP	35 20
	iPP	37 08
	eS	42 04
	e(sS)	42 23
	eL	49 23
CHI	eP	20 36 03
	eS	45 09
	esS	45 35
	eSS	50 05
	eL	55 33
COL	iP	20 35 52
	iS	35 44
	isS	36 18
	eL	36 46
COLU	iP	20 36 52
	ipP	37 09
	iS	46 50
	eSS	51 42
	eL	55 10
HONO	eS	20 39 47
	eSS	43 25
	e	45 22
	eL	46 10
HH	iP	20 34 00
	iPcP	35 10
	eS	41 25
	eScP	43 47
	eP'P'	21 03 51
NEL	iP	20 34 58.3
	ipP	35 14.1
	i	36 03.9
RC	eP	20 34 37
	epP	34 55
	iS	42 56
	iScP	44 23
	eL	50 08
	eP'P'	21 03 54
SJ	eP	20 38 30
	ePP	42 28
	eSKS	48 57
	ePS	51 27
	eSS	56 51
SIT	iP	20 32 00
	iPP	33 44
	iS	37 44
	eL	40 18

Date and Station		Phase (GCT) h m s
TUC	iP	20 35 29
	ipP	35 42
	ePP	38 22
	ePPP	39 51
	eS	44 16
	iS	44 17
	eSS	48 30
	eSSS	52 05
	eL	53 26
	eP'P'	21 04 04
WASH	iP	20 36 39
	ipP	36 55
	i	37 11
	i	37 21
	iPP	39 38
April 26		
COL	eP	20 45 50
April 26		
BC	iP	21 01 57.0
COL	iP	21 03 50
NEL	eP	21 01 56
April 26		
NEL	eP	21 04 16
	i	04 19.1
April 26		
COL	eP	23 31 31
COLU	eP	23 31 39
HH	eP	23 31 59
NEL	iP	23 32 08.5
April 26		
NEL	e(P)	23 50 43
	e	51 00
April 27		
COLU	e(S)	02 11 51
	eL	12 20
BC	eL	02 19 09
BUT	eL	02 18 48
HH	e(P)	02 13 45
	eL	19 47
NEL	eL	02 19 09
WASH	eL	02 14 09
April 27		
COL	eP	04 39 12
April 27		
NEL	eP	05 59 07
TUC	eP	05 59 47

Date and Station		Phase (GCT) h m s
April 27		
COL	iP	08 31 32
April 27		
BC	iP	10 14 21.0
	i	14 31.9
	i	14 41.9
	iPP	16 04.7
	eS	20 50
EOZ	eP	10 14 57
	ePP	16 51
	eS	21 54
	e	22 12
	eSS	25 09
	eL	26 24
BUT	iP	10 15 04
	i	15 33
	iPP	17 01
	eS	22 11
	eL	25 42
CHI	iP	10 13 27
	ePP	14 50
	eS	18 47
	eL	21 33
COL	iP	10 18 04
	iPP	20 45
	iS	27 42
COLU	iP	10 12 19
	iS	17 04
	eL	18 22
HH	iP	10 15 23
	ePPP	18 09
	eS	22 39
	eScS	25 12
NEL	iP	10 14 19.8
	i	14 31.8
	iPP	15 47.8
RC	iP	10 13 56
	i	15 33
	i	15 47
	eS	20 19
	eL	23 19
SJ	iP	10 11 05
	i	11 51
	iS	15 04
	eL	16 20
SIT	eP	10 17 10
	ePP	19 36
	eS	26 02
	eScS	27 06
	eSS	30 12
	eL	34 32
TUC	iP	10 13 40
	ipP	13 57
	iPP	15 09
	eS	19 33
	iS	19 36
	eL	21 36

Date and Station		Phase (GCT) h m s
WASH	iP	10 13 06
	i	13 29
	i	13 49
	eL	20 23
April 27		
BC	eP	11 09 14
COL	iP	11 13 19
COLU	eP	11 07 38
HH	eP	11 10 27
NEL	iP	11 09 12.6
	i	09 15.8
	i	09 21.8
TUC	eP	11 08 34
April 27		
NEL	e(P)	11 11 56
April 27		
COL	iP	16 29 56
April 27		
COL	eP	17 01 50
April 27		
COL	eP	17 15 21
HH	iP	17 17 33
April 27		
NEL	e(P)	18 38 12
April 27		
BC	eP'	21 40 36
BUT	eP'	21 40 53
COL	eP'	21 40 43
	ePKS	44 09
	eSS	22 00 39
COLU	eP'	21 41 06
HH	eP'	21 40 45
	ePKS	44 18
NEL	iP'	21 40 35.5
	i	40 59.5
	iPP	42 13.3
TUC	ePPS	21 54 31
	eSS	22 00 45
	eL	15 54
WASH	iP'	21 41 18
April 27		
NEL	e(P)	21 53 56
April 28		
COL	iP	00 18 34
	i	18 43

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Date and Station		Phase (GCT) h m s
April 28		
NEL	i(P)	01 11 52.7
April 28		
BC	iP	04 59 54.4
	i	59 57.8
BUT	i(P)	04 58 41
	e	59 52
	e	05 00 57
COL	iP	04 55 58
	eS	05 00 09
	eL	01 55
COLU	eP	05 02 15
HH	eP	04 59 00
	iPP	05 00 58
NEL	iP	04 59 55.5
	i	59 59.0
	i	05 00 06.9
SJ	eP	05 04 03
TUC	eP	05 00 30
	iP	00 34
	i	00 59
April 28		
NEL	eP	05 36 54
April 28		
NEL	e(P)	07 18 18
April 28		
NEL	i(P)	07 30 59.7
April 28		
NEL	i(P)	07 44 51.2
April 28		
NEL	eP	11 17 45
April 28		
NEL	e(P)	11 32 58
April 28		
COL	eP	15 29 37
April 28		
COL	iP	16 02 44
April 28		
COL	eP	16 44 38
April 28		
BC	iP	23 13 40.1
	i	16 06.6
BUT	eP	23 15 58
	i	16 09
HH	iP	23 16 22.5
NEL	iP	23 13 36.4

Date and Station		Phase (GCT) h m s
TUC	iP	23 12 52
	i	12 59
	i	13 05
	iS	13 56
	iL	14 11
April 29		
NEL	e(P)	00 18 47
April 29		
COL	eP	02 40 34
	ipP	40 45
HH	eP	02 43 48
NEL	eP	02 44 59
April 29		
COL	iP	06 50 56
	eL	52 18
HH	eP	06 55 30
NEL	eP	06 56 57
April 29		
COL	iP	07 00 53
April 29		
NEL	eP	09 40 57
April 29		
COL	iP	10 34 23
April 29		
BC	iP	10 51 14.8
BCZ	iP	10 53 28
	i	54 08
	eS	56 44
	iL	57 08
BUT	iP	10 53 31
	eL	57 11
CHI	eP	10 54 49
	ePP	55 23
	eS	59 09
	iS	59 17
	eL	11 00 49
COL	iP	10 57 20
	eS	11 03 40
	eL	06 45
COLU	iP	10 55 15
	i	56 43
	iL	11 00 00
HONO	e(P)	10 57 32
	eS	11 03 52
	eL	06 51
T_L = 8 sec. $L_{max.}$ = 12mm.		
HH	iP	10 53 57
	i	57 57
	eS	57 08
	eL	58 00

Date and Station		Phase (GCT) h m s
LIN	eP	10 53 22
	eS	56 55
	eL	57 04
NEL	iP	10 51 11.3
RC	iP	10 53 31
	iS	56 53
	iL	57 31
SLC	eP	10 52 21
	eL	55 25
SJ	eP	10 57 34
	iP	57 37
	ePP	59 37
	ePPP	59 53
	eS	11 04 06
	eSS	07 05
	eL	07 20
SIT	eP	10 55 59
	ePP	57 20
	ePcP	58 15
	eS	11 01 21
	eL	03 48
TUC	eP	10 50 26
	iP	50 27
	i	50 44
UK	e(P)	10 52 54
	eL	55 02
WASH	eP	10 55 54
	i	56 05
	i(PP)	57 06
	ePcP	58 21
	iL	11 01 25
April 29		
COL	eP	11 11 02
April 29		
BC	iP	11 36 17.4
	eP'P'	12 14 22
BCZ	iP	11 38 37
	iPP	39 29
	eS	41 36
	iS	41 53
	iL	42 40
BUT	iP	11 38 37
CHI	iP	11 39 53
	eS	44 12
	eL	45 37
COL	iP	11 42 28
	iP'P'	12 15 22
COLU	eP	11 40 23
	iP	40 26
	iS	45 08
HONO	eP	11 42 24
	eS	48 45

Date and Station		Phase (GCT) h m s
HONO	eL	11 51 50
T_L = 10 sec. $A_{max.}$ = 31mm.		
HH	iP	11 39 03
	eS	42 31
	eL	42 52
	iP'P'	12 14 16
LIN	iP	11 38 45
	iS	42 13
	iL	43 06
NEL	iP	11 36 17.4
	iP'P'	12 13 52.4
RC	iP	11 38 38
	iS	41 49
	eL	42 25
SLC	iP	11 37 30
	eL	40 05
SJ	iP	11 42 42
SIT	iS	11 46 22
	eL	48 10
TUC	iP	11 35 32
UK	e(P)	11 38 02
	eL	40 06
WASH	iP	11 41 03
	iL	46 40
April 29		
BC	eP	12 11 25
HH	eP	12 12 30
NEL	iP	12 11 23.4
April 29		
COL	iP	12 49 07
April 29		
BC	iP	13 14 27.1
	i	16 50.6
BUT	eP	13 16 42
	e	17 05
COL	iP	13 20 22
HH	iP	13 17 08
	i	17 31
NEL	iP	13 14 24.5
TUC	iP	13 13 36
	i	13 44
	i	13 52
	i(S)	14 28
April 29		
BC	eP	13 51 01

Date and Station	Phase	Phase (GCT) h m s
NEL	eP	13 51 07
April 29		
COL	iP	15 09 17
April 29		
BC	iP	17 16 03.9
COL	iP	17 18 37
HH	eP	17 15 45
NEL	iP	17 16 04.0
	i	16 17.4
TUC	eP	17 16 03
April 29		
COL	iP	18 05 46
April 29		
BC	eP	22 32 31
COL	iP	22 33 36
NEL	eP	22 32 29
April 29		
NEL	eP	23 26 02
April 29		
BC	iP	23 52 17.5
COL	iP	23 53 23
HH	iP	23 52 33.5
NEL	iP	23 52 16.8
April 30		
BC	iP	00 13 09.8
	i	13 12.4
	i	13 22.5
COL	iP	00 09 01
	eS	13 59
	eL	15 36
HH	iP	00 12 12
	e(PP)	14 34
NEL	iP	00 13 11.2
	i	13 15.4
	ipP	13 22.9
	i	13 44.4
TUC	eP	00 13 43
April 30		
NEL	e(P)	01 55 15
April 30		
NEL	e(P)	04 14 19
April 30		
BC	eP	05 17 28
HH	eP	05 16 02
NEL	iP	05 17 29.8
April 30		
BC	iP	06 38 25.0
COL	eP	06 39 04
NEL	iP	06 38 24.4
	i	38 31.9
TUC	eP	06 38 27
April 30		
COL	eP	08 41 01
April 30		
COL	iP	09 47 34
	i	47 44
HH	eP	09 46 46
April 30		
COL	iP	09 53 26
	i	53 36
HH	iP	09 52 37
April 30		
NEL	e(P)	11 00 32
April 30		
NEL	e(P)	11 45 11
April 30		
COL	eP	12 02 58
	iP	03 00
April 30		
BC	iP	12 09 49.1
	i	09 53.1
	i	10 11.2
COL	iP	12 05 56
	iS	10 01
	eL	12 12
HH	eP	12 08 55
	iPcP	10 55
	eS	14 45
NEL	iP	12 09 50.4
	i	10 02.4
	iPP	11 20.4
TUC	iP	12 10 26
April 30		
NEL	e(P)	12 15 13
April 30		
COL	eP	12 46 14
April 30		
COL	eP	13 07 25
HH	eP	13 08 12
April 30		
BC	iP	13 16 02.8
BC	i	13 16 05.9
	i	16 15.3
	ePP	19 47
	ePKKP	32 52
BOZ	eP	13 15 14
	ePP	18 20
	eS	25 52
	iS	25 58
	eL	35 40
BUT	eP	13 15 18
	iP	15 19
	i	15 27
	i	16 14
	iPP	18 21
	i	18 40
	eSKS	25 43
	iSKS	25 54
	ePPS	27 21
	eL	38 20
CHI	eP	13 14 32
	ePP	17 31
	ePPP	19 15
	eS	24 19
	eScS	24 51
	e	26 28
	eSS	29 24
	eL	35 43
COL	iP	13 14 23
	iPP	17 12
	iPPP	19 03
	iS	24 02
	iScS	24 45
	eSS	28 54
	eL	32 44
	eP'P'	41 41
	eSKPP'	44 48
COLU	iP	13 14 38
	eS	24 33
	iS	24 40
	i	26 32
	iSS	29 47
	eSSS	33 32
	eL	34 05
HH	iP	13 15 10
	iPP	18 28
	eS	25 28
	ePKKP	33 22
	eP'P'	41 29
LIN	eP	13 15 02
	eS	25 11
	ePPS	26 12
	eSS	29 55
	eL	36 11
NEL	iP	13 16 03.9
	i	16 51.9
	iPP	19 49.4
	ePKKP	32 47
RC	eP	13 15 07
	ePP	18 13
RC	e	13 25 27
	e	26 21
	e	27 35
	eL	35 40
SLC	eP	13 15 44
	ePP	19 15
	eS	26 10
	eSS	33 59
	eL	39 36
SJ	eP	13 14 33
	ePP	17 23
	ePPP	19 34
	eS	24 28
	eSS	29 02
	eSSS	32 42
	eL	35 00
SIT	iP	13 15 00
	ePP	17 46
	iS	25 17
	i(PPS)	26 00
	e(SS)	29 25
	eSSS	33 17
	eL	36 30
TUC	eP	13 16 08
	iP	16 10
	iPP	20 03
	eSKS	26 49
	iPPS	28 52
	eSS	33 25
	eL	39 39
WASH	iP	13 14 08
	i	14 31
	i	14 53
	e(PP)	17 25
	e(S)	23 37
	eL	32 19
April 30		
HH	i(P)	13 37 46
April 30		
HH	i(P)	13 43 04
	e	44 49
April 30		
COL	iP	13 55 16
HH	iP	13 56 03
April 30		
COL	eP	14 16 37
April 30		
COL	iP	17 04 53
April 30		
HH	e(P)	18 01 32
April 30		
BC	eP	19 46 56
BUT	eP	19 46 12

Date and Station		Phase	(GCT) h m s
COL		iP	19 45 17
HH		iP	19 46 03
		e	47 02
April 30 HH		eP	21 02 23
April 30 HH		e(P)	21 28 32
April 30 HH		e(P)	22 15 57
April 30 BUT		eP	23 18 12
COLU		eP	23 15 30
		ePPP	19 33
		eS	24 24
		eSS	28 37
		eSSS	31 20
		eL	31 30
SJ		eP	23 13 27
		ePP	15 34
		eS	20 41
		eSS	24 02
		eL	26 23
April 30 HH		eP	23 36 38

Local and Minor Earthquakes

day	hour
BUT	
Apr.	
1	03.0
3	14.2
5	23.1
6	21.7
7	10.2
	21.0
	22.7
13	11.4
15	23.2
17	00.1
	15.7
18	05.6
20	23.5
21	13.0
22	23.3
24	00.0
25	0.13
	0.13
	0.13
28	01.4
	04.5
	12.1
	12.4
	22.6
29	22.1
30	02.7

Local and Minor Earthquakes

day	hour
BUT	
Apr.	
30	11.3
	22.1
COL	
Apr.	
4	01.6
	04.2
	12.3
5	06.6
	06.8
6	06.6
	07.7
8	02.4
	20.3
	20.3
	22.3
11	04.1
	09.6
12	02.0
	12.0
	12.6
	13.8
13	01.6
	02.8
	04.0
	18.8
	20.1
14	01.9
	08.4
18	00.9
20	00.4
	02.6
	03.6
	20.3
21	02.6
22	03.6
	18.6
	18.7
	18.8
23	01.3
	11.0
	22.5
24	04.7
	08.0
	12.7
25	18.8
26	10.6
29	06.8
	19.3
	22.5
30	10.6
HONO	
Apr.	
10	02.4
22	22.4
SJ	
Apr.	
2	18.4
5	14.4
10	14.4
11	15.8
20	01.4
22	05.5

Local and Minor Earthquakes

day	hour
SJ	
Apr.	
25	04.0
	06.8
	12.2
30	10.7
TUC	
Apr.	
3	20.1
7	05.6
	18.6
9	06.4
	17.2
10	05.4
	08.1
16	02.7
	13.0
17	10.2
19	01.4
	04.7
23	12.0
29	03.3
	10.4
	10.7
	19.2
	20.3
	21.9
	22.4
	23.9
30	00.6
	01.3
	01.8
	04.1
	07.5
	10.9
	11.7