USCGS
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COAST & GEODETIC SURVEY
MAR 22

SEISMOLOGICAL BULLETINS

IGC SUPPLEMENT
SOUTH POLE - BYRD

JANUARY-MARCH, 1959

MSI - 217A

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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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IGC SUPPLEMENT

January - March
1959

The instrumental results tabulated in this supplement are from the following seismographic stations.

Station	Latitude	Longitude	Foundation	Elevation	Instruments	Components	To (Sec.)	Tg (Sec.)	Time Scale
South Pole (SPA) In Charge: W.S. Jacobs	90° S.	0°	1995 meters of ice.	2800 meters.	Benioff Paper.	Z	1.6	0.5	60mm/min.
					Wilson-Lamison (30°E.-150°W.) Horizontal Film.		6.0	0.5	15mm/min.
Byrd (BYR) In Charge: L.E. Davis	80°01'S.	119°31'W.	2570 meters of ice.	1515 meters.	Benioff.	Z	1.2	0.5	60mm/min.
					Wilson-Lamison with G.E. Galvo.	N	6.2	3.5	30mm/min.
					Wilson Lamison with G.E. Galvo.	E	7.2	3.5	30mm/min.

These stations were first established by the Coast and Geodetic Survey for the IGY to provide additional control for locating teleseismic epicenters in regions inadequately covered by previously existing stations and to provide data for studies in regional seismicity, crustal structure and other pertinent earth science problems.

Date and Station		Phase (GCT) h m s
Jan. 1		
SPA	iP	02 04 53
Jan. 1		
SPA	eP'	02 26 43
	eP'	28 22
	ePP	32 13
Jan. 1		
SPA	iP	04 35 38
Jan. 1		
BYR	iP	07 37 02
	eS	45 35
SPA	iP	07 37 35
Jan. 1		
BYR	iP	08 00 30
	ePP	03 21
	eS	09 05
SPA	iP	08 01 03
Jan. 1		
SPA	eP'	08 07 02
Jan. 1		
BYR	eP	09 19 10
SPA	iP	09 18 04
Jan. 1		
BYR	iP	11 58 12
Jan. 1		
SPA	iP	11 58 46
Jan. 1		
BYR	eP	13 35 30
SPA	iP	13 36 04
Jan. 1		
SPA	iP	14 58 41
Jan. 1		
BYR	iP	18 52 19
SPA	iP	18 52 48
	i	53 43
Jan. 1		
BYR	eP	20 51 34
Jan. 1		
SPA	iP	23 38 44
Jan. 2		
BYR	iP	02 10 33
SPA	iP	02 11 15
Jan. 2		
BYR	eP'	03 35 02
Jan. 2		
SPA	eP	06 11 13

Date and Station		Phase (GCT) h m s
Jan. 2		
BYR	eP	06 22 07
SPA	iP	06 22 25
Jan. 2		
BYR	e(P)	10 30 49
SPA	eP	10 31 26
Jan. 2		
SPA	e(P)	12 25 43
Jan. 2		
BYR	iP	13 03 37
SPA	iP	13 04 07
Jan. 2		
BYR	iP	20 15 54
SPA	iP	20 16 36
Jan. 2		
BYR	iP	22 25 45
	e	26 11
Jan. 3		
SPA	eP	02 23 15
Jan. 3		
SPA	iP	02 46 00
Jan. 3		
BYR	iP	04 21 09
SPA	iP	04 20 50
Jan. 3		
BYR	iP	04 26 54
	ePP	30 30
SPA	iP	04 27 36
Jan. 3		
BYR	eP	04 57 39
SPA	e(P)	04 58 20
Jan. 3		
BYR	eP	05 52 14
SPA	iP	05 52 34
	i	52 52
Jan. 3		
SPA	eP'	08 18 14
Jan. 3		
BYR	iP	08 50 28
Jan. 3		
SPA	iP	09 15 31
Jan. 3		
BYR	eP	10 17 04
SPA	iP	10 16 48

Date and Station		Phase (GCT) h m s
Jan. 3		
BYR	iP	11 28 42
	iPcP	29 03
	iS	38 21
	i	40 48
	eP'P'	57 04
SPA	iP	11 29 25
	i	29 37
Jan. 3		
BYR	iP	13 53 58
Jan. 3		
BYR	iP	15 24 45
SPA	iP	15 24 47
Jan. 3		
BYR	iP	15 55 58
SPA	iP	15 56 30
Jan. 3		
BYR	e(P)	17 19 16
Jan. 3		
BYR	iP	19 01 33
SPA	eP	19 02 18
Jan. 3		
BYR	iP	19 05 22
SPA	iP	19 06 07
Jan. 3		
BYR	iP	22 21 05
Jan. 3		
SPA	iP	22 21 25
Jan. 4		
SPA	iP	00 58 28
Jan. 4		
BYR	iP	03 29 21
SPA	iP	03 28 47
Jan. 4		
BYR	iP	03 42 52
SPA	iP	03 43 27
Jan. 4		
BYR	eP'	04 16 59
Jan. 4		
BYR	iP	06 25 28
Jan. 4		
BYR	iP'	07 30 05
SPA	eP'	07 30 11
Jan. 4		
BYR	i(PP)	08 18 56
SPA	eP'	08 15 39
	e(PP)	18 59

Date and Station		Phase (GCT) h m s
Jan. 4		
BYR	eP	10 08 00
SPA	iP	10 08 24
Jan. 4		
BYR	eP	16 17 50
SPA	iP	16 17 52
Jan. 4		
BYR	eP	18 31 31
SPA	eP	18 31 09
Jan. 4		
SPA	eP	19 46 23
Jan. 4		
BYR	eP	20 09 25
Jan. 4		
BYR	iP	21 20 48
	e(PcP)	21 33
SPA	iP	21 19 45
	i	21 14
Jan. 4		
BYR	eP'	23 33 04
Jan. 5		
BYR	iP	09 47 27
SPA	iP	09 47 31
Jan. 5		
BYR	iP	09 57 23
	iPcP	57 48
	i	10 01 49
	iS	05 56
	iScS	07 07
	eSS	10 14
	eP'P'	25 59
SPA	iP	09 57 45
	iPcP	58 09
	iPP	59 52
	iS	10 06 35
	ePKKP	16 25
	e	24 14
	iP'P'	25 04
Jan. 5		
BYR	eP	12 07 47
SPA	eP	12 07 21
Jan. 5		
SPA	eP	12 41 49
Jan. 5		
BYR	eP	13 17 28
SPA	iP	13 17 32
Jan. 5		
BYR	iP	14 01 44

Date and Station	Phase	Phase (GCT) h m s
SPA	iP	14 01 22
Jan. 5		
BYR	e(P)	14 04 40
	e	04 57
	e	05 06
SPA	e(P)	14 06 24
	e	06 30
Jan. 5		
BYR	eP	20 01 24
Jan. 5		
BYR	eP	20 17 48
SPA	eP	20 18 08
Jan. 5		
SPA	eP	21 25 10
Jan. 6		
BYR	eP'	01 45 27
SPA	eP'	01 45 27
Jan. 6		
SPA	iP	03 13 40
Jan. 6		
BYR	eP	04 28 04
SPA	e(P)	04 28 09
Jan. 6		
BYR	iP	05 00 28
Jan. 6		
BYR	eP	06 00 17
SPA	iP	05 59 21
Jan. 6		
BYR	iP	12 05 51
SPA	iP	12 05 54
Jan. 6		
BYR	eP'	12 24 59
SPA	eP'	12 25 06
Jan. 6		
BYR	iP	14 27 58
SPA	iP	14 28 37
Jan. 6		
BYR	iP	15 01 05
	i	01 19
SPA	iP	15 00 29
Jan. 6		
SPA	e(P)	20 33 49
	i	34 49

Date and Station	Phase	Phase (GCT) h m s
Jan. 6		
SPA	e(P')	22 11 11
Jan. 7		
BYR	eP	02 27 37
Jan. 7		
BYR	iP	02 36 15
	e(S)	43 07
SPA	iP	02 36 46
Jan. 7		
BYR	iP	02 46 26
SPA	iP	02 46 56
Jan. 7		
BYR	eP'	05 32 12
SPA	iP'	05 31 51
	ePP	32 55
Jan. 7		
BYR	eP	05 36 36
SPA	iP	05 38 01
Jan. 7		
BYR	eP	06 03 36
Jan. 7		
SPA	eP	06 43 31
	i	43 42
Jan. 7		
BYR	eP'	06 47 54
SPA	eP'	06 47 42
	i	47 51
Jan. 7		
BYR	eP	07 33 52
SPA	iP	07 33 53
Jan. 7		
BYR	eP'	08 48 18
SPA	eP'	08 48 05
Jan. 7		
SPA	iP	10 40 19
Jan. 7		
SPA	eP	13 22 20
Jan. 7		
BYR	iP	13 40 30
SPA	iP	13 41 00
Jan. 7		
BYR	iP	15 02 15
SPA	iP	15 03 01
Jan. 7		
SPA	iP	15 55 16

Date and Station	Phase	Phase (GCT) h m s
Jan. 7		
BYR	eP'	18 22 39
Jan. 7		
SPA	eP'	20 48 39
Jan. 7		
SPA	eP'	22 40 51
Jan. 8		
BYR	eP	04 19 49
SPA	iP	04 19 09
	ipP	19 48
Jan. 8		
SPA	iP	05 00 03
Jan. 8		
SPA	eP	08 12 18
	e	13 17
Jan. 8		
BYR	eP	15 04 10
Jan. 8		
BYR	eP	16 07 08
SPA	eP	16 07 55
Jan. 8		
BYR	iP	18 13 46
SPA	iP	18 13 50
Jan. 8		
BYR	iP	22 49 00
	eL	23 23 28
SPA	iP	22 48 48
	i	48 55
Jan. 8		
SPA	iP	23 03 59
Jan. 9		
BYR	eP	00 38 34
SPA	iP	00 38 22
Jan. 9		
BYR	eP	00 59 03
Jan. 9		
BYR	eP'	02 14 25
SPA	eP'	02 13 55
Jan. 9		
BYR	iP	06 06 30
SPA	iP	06 05 53
Jan. 9		
SPA	e(P')	06 59 36
Jan. 9		
SPA	iP'	15 43 44

Date and Station	Phase	Phase (GCT) h m s
Jan. 9		
SPA	eP	16 33 41
Jan. 9		
BYR	eP	17 16 44
SPA	iP	17 17 09
Jan. 10		
BYR	eP	03 19 34
Jan. 10		
BYR	iP	06 05 26
	i(pP)	05 50
SPA	iP	06 05 27
	e(PcP)	05 34
	i(pP)	05 50
Jan. 10		
BYR	iP	06 15 03
SPA	iP	06 15 33
Jan. 10		
SPA	iP	09 27 17
Jan. 10		
SPA	eP	17 10 50
Jan. 10		
BYR	iP	23 30 26
SPA	iP	23 30 42
Jan. 11		
BYR	iP	01 10 47
SPA	iP	01 11 15
Jan. 11		
BYR	eP	05 23 41
Jan. 11		
BYR	eP	07 35 48
	epP	36 34
	ePP	39 16
Jan. 11		
BYR	eP'	07 55 13
Jan. 11		
BYR	eP'	08 56 34
Jan. 11		
BYR	eP	10 06 21
Jan. 11		
BYR	iP	13 36 35
	e	36 49
SPA	iP	13 37 09
Jan. 11		
BYR	iP	16 36 46
	i(pP)	36 56
SPA	iP	16 36 49
	i(pP)	36 58

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Date and Station	Phase (GCT)
	h m s
Jan. 11	
BYR eP'	17 03 12
SPA eP'	17 03 52
Jan. 12	
BYR eP	03 13 16
SPA iP	03 13 09
Jan. 12	
SPA e	07 50 07
Jan. 12	
SPA eP	08 31 39
Jan. 12	
BYR iP'	14 35 39
iSKP	38 56
SPA eP'	14 35 27
epP'	35 38
eSKP	38 55
ePKS	39 09
eSKKP	48 13
Jan. 12	
SPA eP'	17 59 09
Jan. 13	
BYR iP	00 04 04
Jan. 13	
BYR e(P)	01 29 48
ePP	33 48
SPA eP	01 29 19
ePP	33 45
ePKKP	45 45
eP'P'	54 37
Jan. 13	
BYR iP	04 43 44
Jan. 13	
BYR eP'	07 40 19
SPA eP'	07 40 24
Jan. 13	
BYR eP	07 46 59
SPA iP	07 46 19
i	46 23
e	51 39
Jan. 13	
BYR eP	08 47 09
i	47 20
SPA eP	08 47 41
Jan. 13	
BYR eP	09 15 59
SPA iP	09 16 24
Jan. 13	
BYR eP	09 50 26
SPA eP	09 49 40

Date and Station	Phase (GCT)
	h m s
Jan. 13	
BYR eP	12 01 51
SPA eP	12 01 54
Jan. 13	
BYR iP'	14 51 15
i	51 31
SPA eP'	14 51 16
Jan. 13	
BYR eP	16 45 28
Jan. 13	
BYR iP	19 17 24
ipP	18 05
SPA iP	19 18 04
epP	18 31
Jan. 13	
BYR iP	20 44 38
ipP	45 02
eS	51 40
SPA iP	20 45 23
epP	45 50
eS	53 02
Jan. 13	
SPA eP	24 04 03
Jan. 14	
BYR iP	03 17 56
Jan. 14	
SPA iP	04 54 21
Jan. 14	
SPA iP	06 08 28
Jan. 14	
SPA iP	06 18 53
Jan. 14	
SPA iP	06 36 09
Jan. 14	
BYR eP	07 35 21
Jan. 14	
BYR iP	09 38 34
Jan. 14	
BYR iP	09 56 48
Jan. 14	
BYR iP	11 03 50
eS	07 19
eL	08 23
Jan. 14	
BYR e(P)	12 13 15
Jan. 14	
BYR iP'	13 25 48
Jan. 14	
BYR eP	13 27 17
epP	29 18

Date and Station	Phase (GCT)
	h m s
Jan. 14	
SPA iP	14 15 01
Jan. 15	
BYR iP	05 49 16
e	49 42
i	50 13
SPA iP	05 49 55
Jan. 15	
BYR iP	06 44 49
SPA iP	06 45 22
Jan. 15	
BYR e(P)	07 43 08
SPA iP	07 43 28
Jan. 15	
BYR eP	08 44 46
SPA eP	08 45 18
Jan. 15	
BYR eP'	15 58 04
Jan. 15	
BYR iP	16 50 27
epP	50 50
Jan. 15	
SPA iP	18 28 30
Jan. 15	
BYR iP	20 28 25
SPA iP	20 28 24
Jan. 15	
BYR iP	21 29 50
ipP	31 30
iS	37 28
iScS	38 54
esS	40 29
iSS	41 40
e	52 31
iP'P'	58 51
SPA iP	21 30 19
iPcP	30 43
ipP	32 06
iSS	38 21
eP'P'	58 30
Jan. 15	
SPA iP	23 15 36
Jan. 16	
BYR eP'	01 50 31
ePP	54 08
eSKKP	02 02 53
eL	33 21
SPA iP'	01 50 48
ipP'	50 57
iPP	54 27
Jan. 16	
SPA eP	05 34 16

Date and Station	Phase (GCT)
	h m s
Jan. 16	
BYR eP	08 27 38
Jan. 16	
BYR iP	11 02 36
SPA iP	11 02 56
Jan. 16	
BYR iP	15 27 29
SPA iP	15 28 05
Jan. 16	
SPA iP'	17 10 11
Jan. 16	
SPA iP	20 52 00
e	53 18
Jan. 16	
SPA eP	22 51 07
Jan. 17	
BYR eP	07 09 42
SPA e(P)	07 10 00
e	10 05
Jan. 17	
BYR e(P)	09 39 04
ePP	42 36
e(PKKP)	54 30
SPA eP	09 38 23
ePP	41 27
e(SKS)	48 56
e(PKKP)	54 40
Jan. 17	
BYR eP'	10 36 46
Jan. 17	
SPA eP	11 35 52
Jan. 17	
BYR iP	11 42 48
SPA iP	11 42 57
Jan. 17	
SPA eP	12 17 37
Jan. 17	
BYR iP	13 53 18
SPA iP	13 53 34
Jan. 17	
BYR iP	14 47 17
SPA eP	14 48 37
Jan. 17	
SPA e(P)	17 17 18
e	17 24

Date and Station	Phase	(GCT) h m s
Jan. 17		
SPA	eP	20 03 34
	e	03 47
Jan. 18		
BYR	iP	01 48 33
SPA	iP	01 48 49
Jan. 18		
BYR	e(P)	03 08 05
SPA	iP	03 08 00
Jan. 18		
BYR	iP	03 35 01
SPA	iP	03 35 34
Jan. 18		
BYR	iP'	07 56 51
SPA	iP'	07 56 55
Jan. 18		
SPA	e(P)	10 54 58
Jan. 18		
BYR	iP	12 52 02
Jan. 18		
BYR	iP	14 53 44
	ePP	56 57
	eS	15 04 04
SPA	iP	14 53 45
	ePKKP	15 11 42
Jan. 18		
BYR	eP'	16 07 23
SPA	eP'	16 07 29
	i	07 33
Jan. 18		
BYR	eP	19 22 02
SPA	eP	19 21 42
	i	21 56
Jan. 18		
BYR	eP	19 38 31
SPA	eP	19 38 25
	e(PP)	42 17
	ePKKP	56 19
Jan. 18		
BYR	iP	22 33 23
	ipP	35 02
	eS	41 34
	esS	44 40
	iP'P'	23 01 22
	eSKPP'	03 41
SPA	iP	22 33 51
	ipP	35 30
	iS	42 32
Jan. 19		
BYR	e(P)	02 33 10
Jan. 19		
BYR	iP	04 33 52
	ipP	34 19
	isP	34 31
Jan. 19		
BYR	eP	07 57 27
Jan. 19		
BYR	iP'	08 31 47
Jan. 19		
BYR	iP	10 35 47
Jan. 19		
BYR	iP	10 55 03
SPA	iP	10 55 19
Jan. 19		
BYR	iP	14 31 31
SPA	iP	14 31 14
Jan. 19		
BYR	iP	23 41 45
SPA	iP	23 41 46
Jan. 20		
BYR	iP	01 35 30
SPA	eP	01 35 05
Jan. 20		
SPA	eP	11 59 59
Jan. 20		
BYR	eP	12 00 14
	e	00 27
Jan. 20		
BYR	iP	16 58 49
	eS	17 09 22
	eP'P'	27 12
SPA	iP	16 58 26
Jan. 20		
BYR	iP	21 36 08
SPA	iP	21 37 30
Jan. 21		
BYR	iP	02 41 47
Jan. 21		
SPA	eP	08 09 51
Jan. 21		
BYR	iP	13 20 00
	i(pP)	21 09
	e(PP)	22 39
SPA	iP	13 19 38
	i	19 55
Jan. 21		
SPA	iP	16 48 17
Jan. 21		
BYR	eP	20 05 30
SPA	eP	20 06 01
	i	06 11
Jan. 22		
SPA	e(P)	01 31 39
Jan. 22		
SPA	iP	05 13 49
Jan. 22		
BYR	iP'	05 29 33
	ePP	31 34
	eSKP	33 00
	e	34 22
	i(SKS)	37 33
	i	38 52
	eSP	42 24
	e(P'P')	48 55
	eL	06 02 49
SPA	iP'	05 29 30
	ePP	31 34
	e	41 47
	iSP	42 15
Jan. 22		
BYR	eP	05 49 41
SPA	iP	05 49 25
Jan. 22		
BYR	eP'	07 52 20
	i	52 35
	eSKP	56 05
SPA	eP'	07 52 29
	ePP	54 58
	e(SKP)	55 41
Jan. 22		
BYR	iP'	10 05 36
SPA	eP'	10 05 32
Jan. 22		
BYR	iP	11 14 40
SPA	eP	11 15 11
Jan. 22		
BYR	eP'	12 11 08
Jan. 22		
BYR	eP	18 03 50
SPA	eP	18 03 51
Jan. 22		
BYR	iP	19 53 42
	i(pP)	54 08
Jan. 22		
BYR	iP	23 23 17
Jan. 23		
BYR	iP	01 49 12
Jan. 23		
BYR	iP	06 31 25
Jan. 23		
BYR	eP'	07 38 08
	e	38 29
Jan. 23		
BYR	iP	08 00 51
Jan. 23		
SPA	eP	11 40 24
Jan. 23		
BYR	eP'	19 11 31
SPA	eP'	19 11 46
	ipP'	12 00
Jan. 23		
SPA	eP	23 16 41
Jan. 24		
BYR	eP	00 39 01
SPA	iP	00 39 26
Jan. 24		
BYR	iP'	05 27 40
	epP'	28 05
	ePP	29 40
Jan. 24		
BYR	eP	08 04 13
	ePP	07 53
	ePKKP	20 46
SPA	iP	08 03 46
Jan. 24		
SPA	eP	09 40 33
	e(pP)	40 51
Jan. 24		
BYR	iP	10 09 36
SPA	eP	10 08 35
Jan. 24		
BYR	eP	10 57 46
SPA	iP	10 58 13
Jan. 24		
BYR	iP	12 13 10
SPA	iP	12 13 20
Jan. 24		
BYR	iP	12 20 05
Jan. 24		
BYR	iP	15 46 28
SPA	iP	15 46 27
	epP	46 50

Date and Station		Phase (GCT)
		h m s
Jan. 24		
BYR	iP	16 02 36
SPA	iP	16 03 07
	ipP	03 26
	esP	03 52
	i	04 29
Jan. 24		
BYR	iP	19 38 30
Jan. 24		
BYR	iP'	20 14 20
	ePP	16 16
	eSKP	18 07
SPA	eP'	20 14 17
Jan. 24		
SPA	iP	21 20 09
Jan. 25		
SPA	iP	01 15 32
Jan. 25		
BYR	iP	02 47 56
SPA	iP	02 48 37
Jan. 25		
BYR	iP	05 26 55
SPA	iP	05 26 57
Jan. 25		
SPA	eP	08 23 14
Jan. 25		
SPA	iP	11 59 06
Jan. 25		
BYR	eP	16 12 40
SPA	eP	16 13 22
Jan. 25		
SPA	eP	16 49 19
Jan. 25		
BYR	iP	17 57 56
	ipP	58 21
	isP	58 31
SPA	iP	17 58 34
	ipP	58 59
	isP	59 10
Jan. 25		
BYR	eP	21 25 29
SPA	eP	21 25 45
Jan. 25		
BYR	eP	22 08 44
SPA	iP	22 09 01
Jan. 25		
BYR	iP	22 39 10
		h m s
SPA	iP	22 39 29
	i(pP)	39 49
Jan. 26		
BYR	iP	02 35 45
SPA	iP	02 36 36
Jan. 26		
BYR	iP	03 28 37
SPA	iP	03 29 20
Jan. 26		
BYR	iP	05 59 03
	ipP	06 00 04
SPA	iP	05 59 36
	epP	06 00 41
Jan. 26		
SPA	eP	07 45 54
Jan. 26		
SPA	eP	14 54 40
Jan. 26		
BYR	iP	17 55 21
	epP	55 48
SPA	iP	17 54 54
Jan. 26		
BYR	iP	17 58 48
	epP	59 30
SPA	iP	17 59 25
Jan. 26		
BYR	eP	18 58 32
SPA	eP	19 00 02
Jan. 26		
BYR	iP	21 09 43
	epP	10 02
	eP'P'	36 51
SPA	eP	21 10 24
	epP	10 43
	e	11 41
	eP'P'	36 20
Jan. 26		
BYR	iP	22 08 52
Jan. 27		
SPA	eP	00 34 40
Jan. 27		
BYR	iP	02 23 00
Jan. 27		
BYR	iP	02 31 46
SPA	eP	02 31 47
	ePcP	32 01
	ipP	32 11
	e(S)	42 11
		h m s
Jan. 27		
BYR	eP'	03 56 26
SPA	iP'	03 56 16
Jan. 27		
BYR	iP	06 58 39
SPA	eP	06 58 47
Jan. 27		
BYR	eP'	07 04 23
SPA	eP'	07 04 26
Jan. 27		
BYR	eP	09 41 48
SPA	iP	09 42 06
Jan. 27		
SPA	iP	12 46 53
Jan. 27		
SPA	iP	15 32 59
Jan. 27		
BYR	iP	17 33 56
SPA	eP	17 34 22
	epP	36 31
Jan. 27		
BYR	iP	20 20 20
SPA	iP	20 20 01
Jan. 27		
BYR	eP	21 18 52
	epP	22 19
SPA	eP	21 18 31
	ipP	19 09
Jan. 28		
BYR	eP'	01 40 06
SPA	eP'	01 40 28
	iPP	42 50
Jan. 28		
BYR	iP	10 13 23
	iPcP	14 34
Jan. 28		
BYR	iP'	14 17 48
	e(PP)	20 32
SPA	iP'	14 17 42
Jan. 28		
SPA	iP	16 31 04
Jan. 28		
BYR	iP	17 20 47
	i	21 13
SPA	eP	17 20 22
		h m s
Jan. 28		
SPA	i(P)	21 34 36
	e	35 06
Jan. 29		
BYR	iP	01 44 36
Jan. 29		
BYR	iP	05 39 16
	i	40 18
SPA	eP	05 38 56
	e	39 34
Jan. 29		
BYR	iP	05 41 10
Jan. 29		
BYR	iP	07 21 00
	i	21 32
Jan. 29		
SPA	iP'	20 40 52
Jan. 29		
BYR	iP'	21 17 37
	ePP	21 21
SPA	iP'	21 17 45
	ePP	21 30
Jan. 29		
BYR	iP	22 46 19
SPA	iP	22 46 55
Jan. 29		
BYR	iP'	23 44 33
	i	45 33
	i(PP)	49 18
Jan. 30		
BYR	iP	00 25 07
	ipP	25 18
SPA	iP	00 25 47
Jan. 30		
BYR	iP	00 31 27
SPA	iP	00 31 37
Jan. 30		
BYR	eP'	05 37 09
Jan. 30		
BYR	eP	09 32 10
Jan. 30		
BYR	iP	09 50 46
Jan. 30		
BYR	iP	13 54 17
	epP	54 46
SPA	eP	13 53 48

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Date and Station	Phase	(GCT) h m s
Jan. 30		
BYR	iP'	13 59 49
	e	14 00 10
Jan. 30		
BYR	iP	15 20 34
	ipP	20 45
SPA	eP	15 20 47
Jan. 30		
BYR	iP	16 25 27
	ipP	25 42
Jan. 30		
BYR	iP	18 18 35
	iPcP	19 33
	ePP	20 38
	i(PPP)	22 41
	iS	25 40
	iScS	27 32
	iP'P'	48 39
	eSKPP'	50 43
SPA	iP	18 19 05
	ipP	19 26
	eP'P'	48 11
Jan. 30		
BYR	iP	20 36 54
Jan. 30		
BYR	iP'	20 57 30
	ipP'	58 17
Jan. 30		
BYR	iP'	22 36 09
	e(PP)	38 37
SPA	eP'	22 35 56
Jan. 30		
BYR	iP'	22 59 57
Jan. 31		
SPA	eP	01 20 17
Jan. 31		
BYR	iP	04 01 36
Jan. 31		
BYR	iP	05 56 22
	epP	58 04
	eP'P'	06 24 39
SPA	iP	05 56 53
	epP	58 38
	eP'P'	06 24 36
Jan. 31		
BYR	iP	07 45 32
SPA	iP	07 45 39
Jan. 31		
BYR	eP'	11 26 24
Feb. 1		
BYR	iP	02 59 44

Date and Station	Phase	(GCT) h m s
Feb. 1		
BYR	eP'	03 32 18
SPA	iP'	03 32 08
Feb. 1		
BYR	eP	04 28 54
SPA	eP	04 28 36
Feb. 1		
BYR	eP	05 41 51
SPA	eP	05 41 47
Feb. 1		
BYR	eP'	06 49 57
Feb. 1		
BYR	eP	08 50 21
SPA	iP	08 50 50
Feb. 1		
BYR	eP	11 59 41
Feb. 1		
BYR	eP	17 04 45
SPA	eP	17 05 26
Feb. 1		
SPA	iP	18 59 02
Feb. 1		
BYR	e(P)	19 39 44
Feb. 1		
SPA	iP	21 32 18
Feb. 2		
BYR	iP	04 08 49
	ipP	09 14
SPA	iP	04 08 28
	epP	08 53
Feb. 2		
BYR	eP	08 56 04
Feb. 2		
BYR	eP	14 06 06
	e	06 53
Feb. 2		
BYR	eP'	20 09 19
SPA	eP'	20 08 51
Feb. 2		
BYR	eP	22 52 24
Feb. 3		
SPA	eP	02 39 10
Feb. 3		
BYR	iP	11 10 52
	e(S)	15 06
SPA	iP	11 11 23

Date and Station	Phase	(GCT) h m s
Feb. 3		
BYR	iP	16 10 25
SPA	e(P)	16 11 35
Feb. 3		
BYR	iP	17 21 02
SPA	eP	17 21 58
Feb. 3		
BYR	iP	22 46 24
SPA	iP	22 46 12
Feb. 3		
BYR	iP	23 31 37
	epP	32 09
	e(PP)	33 43
	eScP	36 40
SPA	iP	23 32 03
	ipP	32 37
Feb. 4		
SPA	eP'	00 25 56
Feb. 4		
SPA	eP	08 46 20
Feb. 4		
SPA	eP	13 51 39
Feb. 4		
BYR	eP	19 27 18
Feb. 4		
SPA	eP'	20 39 29
Feb. 4		
SPA	eP	23 04 28
Feb. 5		
BYR	eP'	01 24 05
	ePP	27 34
SPA	eP'	01 24 20
	epP'	24 48
	esP'	24 58
	ePP	27 52
Feb. 5		
BYR	eP	04 09 12
SPA	eP	04 09 42
Feb. 5		
BYR	eP	07 21 16
SPA	eP	07 21 50
Feb. 5		
BYR	eP'	10 24 45
Feb. 5		
SPA	eP	18 55 12
Feb. 6		
BYR	eP	05 06 04

Date and Station	Phase	(GCT) h m s
Feb. 6		
SPA	eP	09 19 06
Feb. 6		
BYR	eP'	14 52 19
	ePP	55 47
SPA	eP'	14 52 26
	epP'	52 56
	e	56 05
	eSKP	56 39
	e(SKKP)	15 04 25
Feb. 6		
SPA	eP	20 43 21
Feb. 7		
BYR	iP	09 48 50
	ePP	51 38
	eP'P'	10 15 28
SPA	iP	09 49 35
	e(S)	10 00 14
	ePKKP	07 31
	eP'P'	15 34
Feb. 7		
BYR	eP	13 07 10
SPA	eP	13 06 54
Feb. 7		
SPA	ePP	14 55 56
Feb. 7		
BYR	eP	15 00 57
SPA	iP	15 01 27
Feb. 7		
BYR	iP	16 57 37
	epP	59 41
SPA	iP	16 57 07
	e(PcP)	57 34
Feb. 7		
BYR	eP	21 35 23
SPA	eP	21 36 40
Feb. 7		
BYR	eP	23 47 33
SPA	eP	23 47 14
	e	49 41
Feb. 7		
BYR	eP	23 53 18
SPA	iP	23 53 02
Feb. 8		
BYR	eP'	01 21 47
	ePP	24 38
	e(PKS)	25 15
SPA	eP'	01 21 47
	ePP	24 29

Date and Station		Phase (GCT) h m s
Feb. 8		
BYR	iP	05 55 45
	epP	57 37
	eS	06 03 32
SPA	iP	05 56 15
	iPcP	56 35
	i	56 56
	epP	58 14
	ePKKP	06 13 30
	eP'P'	21 21
	eSKPP'	24 29
Feb. 8		
SPA	eP	09 23 39
Feb. 8		
SPA	eP	10 08 53
Feb. 8		
BYR	eP	12 34 41
SPA	eP	12 35 14
Feb. 8		
BYR	eP	12 40 40
SPA	eP	12 41 12
Feb. 8		
BYR	eP	13 15 45
SPA	eP	13 16 59
Feb. 8		
SPA	eP	15 32 53
Feb. 8		
BYR	iP	16 03 25
	e	03 50
SPA	iP	16 04 01
	e	04 14
Feb. 8		
BYR	eP'	17 14 09
SPA	eP'	17 14 07
Feb. 8		
BYR	iP	20 29 10
SPA	e(P)	20 27 58
	e	28 36
Feb. 9		
BYR	eP'	05 01 51
	ePP	05 14
SPA	eP'	05 01 56
Feb. 9		
BYR	iP	05 44 50
Feb. 9		
BYR	eP	08 58 18
SPA	eP	08 58 47

Date and Station		Phase (GCT) h m s
Feb. 9		
SPA	eP	09 26 35
Feb. 9		
BYR	iP	10 04 52
SPA	eP	10 05 33
Feb. 9		
BYR	iP	15 13 10
SPA	eP	15 12 53
Feb. 9		
BYR	iP	21 25 50
	ipP	26 12
	ePP	29 11
SPA	iP	21 25 43
	ipP	26 16
	ePP	29 10
Feb. 10		
BYR	eP	00 43 03
Feb. 10		
SPA	iP	04 03 53
Feb. 10		
BYR	iP	12 56 05
SPA	eP	12 55 29
Feb. 10		
BYR	eP	18 40 34
SPA	eP	18 40 46
Feb. 10		
BYR	eP	21 10 44
SPA	eP	21 11 23
Feb. 10		
BYR	eP	23 28 59
Feb. 11		
BYR	eP	02 54 37
Feb. 11		
BYR	eP	08 42 52
SPA	eP	08 42 17
Feb. 11		
BYR	eP	09 03 28
Feb. 11		
BYR	eP	13 00 54
SPA	eP	13 01 09
Feb. 11		
BYR	eP	14 05 47
Feb. 11		
BYR	iP	20 09 06
SPA	iP	20 09 47

Date and Station		Phase (GCT) h m s
Feb. 11		
BYR	iP	21 47 56
SPA	iP	21 48 31
	e	49 00
Feb. 12		
BYR	eP	00 13 48
Feb. 12		
BYR	eP	17 13 52
SPA	iP	17 14 14
	ePP	16 06
Feb. 12		
BYR	eP	18 57 42
Feb. 12		
SPA	eP	20 52 57
Feb. 12		
BYR	eP	21 31 42
SPA	eP	21 32 18
Feb. 13		
BYR	iP	01 54 59
	ePcP	56 44
SPA	iP	01 55 29
	e	55 57
	ePcP	57 15
Feb. 13		
BYR	iP	02 12 14
Feb. 13		
BYR	eP	15 19 07
SPA	iP	15 19 39
Feb. 13		
BYR	eP	19 44 23
SPA	iP	19 44 57
Feb. 14		
BYR	eP	04 49 00
SPA	iP	04 48 41
Feb. 14		
BYR	eP	07 42 02
Feb. 14		
BYR	eP'	22 29 45
SPA	eP'	22 29 33
Feb. 14		
BYR	eP'	22 44 51
SPA	eP'	22 44 37
	e	45 37
Feb. 15		
BYR	iP	04 05 58
	e	06 15
	ePP	06 51
	ePcP	08 26
	e	11 04
	e(S)	12 21

Date and Station		Phase (GCT) h m s
SPA	iP	04 05 40
	e	06 20
	ePP	06 39
	e(PPP)	06 56
Feb. 15		
BYR	iP	04 49 07
	e	49 37
	ePP	51 31
	eS	54 13
	e	55 35
	e	05 00 30
SPA	iP	04 48 50
Feb. 15		
BYR	iP	05 17 46
SPA	iP	05 18 26
Feb. 15		
SPA	eP	11 23 36
	e	24 55
Feb. 15		
BYR	eP	15 01 10
Feb. 16		
BYR	eP	00 51 52
SPA	eP	00 52 32
Feb. 16		
SPA	eP	06 03 30
Feb. 16		
BYR	eP	08 03 56
SPA	iP	08 04 25
	epP	06 09
Feb. 17		
BYR	eP	01 27 40
SPA	eP	01 27 22
Feb. 17		
SPA	eP	03 04 52
Feb. 17		
SPA	eP	07 58 52
Feb. 17		
BYR	eP	11 32 42
SPA	iP	11 33 00
Feb. 17		
SPA	eP'	12 05 23
Feb. 17		
BYR	eP'	12 22 20
SPA	iP'	12 22 28
	ePP	26 15
	eSKS	29 33
	e(SKKS)	33 37

Date and Station	Phase	(GCT) h m s
Feb. 17		
BYR	eP'	13 08 09
SPA	iP'	13 08 07
Feb. 17		
SPA	iP'	16 10 10
Feb. 18		
BYR	iP	00 43 35
SPA	eP	00 44 15
Feb. 18		
BYR	eP	02 06 55
	ipP	08 36
SPA	iP	02 07 25
	epP	09 09
Feb. 18		
SPA	eP	08 49 05
Feb. 18		
BYR	eP'	12 24 42
Feb. 18		
SPA	iP	12 59 11
Feb. 19		
BYR	eP	00 48 12
Feb. 19		
BYR	eP'	21 32 44
SPA	eP'	21 33 01
Feb. 20		
BYR	eP	01 42 42
SPA	eP	01 42 24
Feb. 20		
BYR	eP'	03 34 05
Feb. 20		
BYR	eP	04 02 38
	e	03 04
SPA	eP	04 03 18
Feb. 20		
BYR	iP	04 22 10
	epP	22 30
	ePP	24 33
	eP'P'	52 10
SPA	iP	04 22 55
	epP	23 22
	e	24 24
	e	24 58
	ePP	25 49
	eP'P'	52 29
Feb. 20		
BYR	eP'	04 45 38
Feb. 20		
BYR	iP	12 12 00
	epP	14 03
SPA	iP	12 12 29
Feb. 20		
BYR	eP	12 26 20
SPA	iP	12 26 49
Feb. 21		
BYR	eP	04 09 16
Feb. 21		
BYR	eP	13 07 15
Feb. 21		
BYR	eP	16 02 27
SPA	eP	16 02 55
Feb. 22		
BYR	eP'	03 50 11
Feb. 22		
BYR	eP'	03 54 59
Feb. 22		
BYR	eP	10 38 57
SPA	eP	10 38 39
	e	39 18
Feb. 23		
SPA	iP	02 11 12
	ipP	11 25
	eS	21 33
Feb. 23		
SPA	eP'	10 50 34
	ePP	54 08
Feb. 23		
SPA	iP	15 52 36
Feb. 23		
SPA	eP'	16 24 12
Feb. 23		
SPA	eP	18 07 44
Feb. 23		
SPA	iP	18 45 17
Feb. 23		
SPA	eP	20 42 39
Feb. 23		
SPA	iP	22 31 21
	ipP	31 34
	e(P'P')	23 00 28
Feb. 24		
SPA	eP	07 36 37
Feb. 24		
SPA	eP	11 03 59
	e	05 38
Feb. 24		
SPA	eP	12 59 18
Feb. 24		
BYR	iP	16 25 14
SPA	iP	16 24 35
Feb. 25		
SPA	iP	10 13 17
	iPcP	13 28
Feb. 25		
SPA	iP'	11 36 52
Feb. 25		
SPA	eP	16 28 30
Feb. 25		
SPA	eP	18 37 33
	ePP	39 45
Feb. 25		
SPA	iP	20 20 42
	e	22 54
	e	24 36
Feb. 25		
SPA	iP	23 48 16
	i	48 23
	iPcP	50 28
Feb. 26		
SPA	iP	04 53 32
	i	53 48
Feb. 26		
SPA	iP	15 41 32
Feb. 26		
SPA	eP'	21 40 19
Feb. 26		
SPA	eP	23 44 21
Feb. 27		
SPA	eP	00 43 38
Feb. 27		
SPA	iP	13 59 05
Feb. 27		
SPA	e(P)	14 50 50
Feb. 27		
SPA	eP	15 31 29
Feb. 27		
SPA	eP	18 58 35
Feb. 27		
BYR	eP'	21 15 27
	i	15 42
	ePP	17 07
	ePKKP	25 33
SPA	iP'	21 15 17
	e/	15 32
	ePP	16 42
	ePKKP	25 38
Feb. 28		
BYR	eP'	01 13 56
Feb. 28		
SPA	eP'	01 51 53
Feb. 28		
BYR	eP	04 07 03
SPA	eP	04 06 46
Feb. 28		
BYR	e(P)	06 10 15
	i	11 35
Feb. 28		
SPA	eP	06 12 05
Feb. 28		
SPA	eP	06 18 23
	e	20 28
Feb. 28		
BYR	eP	07 01 34
SPA	iP	07 02 08
Feb. 28		
BYR	eP	11 51 19
	e(PcP)	53 13
SPA	iP	11 51 05
	e	51 18
	ePP	52 19
Feb. 28		
SPA	iP	13 36 06
Feb. 28		
SPA	eP	20 32 59
Feb. 28		
SPA	eP	22 33 38
March 1		
BYR	eP	00 28 38
March 1		
BYR	eP'	00 52 37
	ePP	56 26
SPA	eP'	00 52 19
	ePP	56 27
March 1		
SPA	eP	01 53 16
March 1		
SPA	eP	09 22 14
March 1		
SPA	eP	13 24 15
March 1		
BYR	iP	17 02 19
	ipP	02 35
	ePP	06 00
	iS	12 52
	eP'P'	28 21
SPA	eP	17 02 05
	ePP	05 39
	eS	12 12
	eL	40 13

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Date and Station	Phase (GCT)
March 1	h m s
BYR e	18 37 00
SPA eP	18 36 46
March 1	
BYR eP	20 55 27
SPA eP	20 55 12
March 1	
SPA eP	21 23 45
March 1	
SPA eP'	23 53 12
March 1	
SPA eP	23 45 50
March 2	
BYR iP	01 50 57
SPA iP	01 50 20
i	50 29
March 2	
BYR eP	06 02 24
March 2	
BYR eP	09 26 25
SPA eP	09 26 05
March 2	
BYR eP	10 13 20
March 2	
BYR eP'	11 41 52
SPA eP'	11 41 32
March 2	
BYR eP'	16 10 34
ePP	13 49
SPA eP'	16 10 17
ePP	13 10
March 2	
SPA eP	21 23 46
March 3	
SPA eP	05 33 01
March 3	
SPA e(P)	06 15 12
March 3	
SPA eP	06 55 15
March 3	
SPA eP	10 58 05
March 4	
SPA eP'	01 12 58
March 4	
SPA eP	06 55 14
ePcP	55 25

Date and Station	Phase (GCT)
March 4	h m s
BYR eP	11 06 50
SPA eP	11 07 25
March 4	
SPA eP	11 54 13
March 4	
BYR e(P)	17 52 29
March 4	
BYR eP	19 05 33
SPA iP	19 06 07
epP	06 53
March 4	
SPA eP'	20 15 15
March 4	
SPA eP	21 22 28
March 4	
SPA iP	22 12 58
March 4	
SPA e(P)	22 21 32
March 4	
SPA eP	22 47 18
March 5	
SPA eP'	00 34 38
e	34 53
March 5	
SPA eP	03 08 41
March 5	
SPA eP	03 53 35
March 5	
SPA eP	05 53 25
e(pP)	53 37
March 5	
SPA eP	13 07 09
March 5	
SPA eP'	14 29 23
ePP	32 24
March 5	
SPA eP	14 57 17
March 5	
SPA eP	16 01 27
March 5	
SPA eP	16 39 08
March 5	
SPA eP	23 08 40
March 6	
SPA iP	03 49 06
March 6	
SPA eP	07 20 23

Date and Station	Phase (GCT)
March 6	h m s
SPA eP	13 27 15
March 6	
BYR eP	20 40 40
SPA eP	20 40 51
March 6	
BYR eP	20 53 50
SPA eP	20 54 00
March 6	
BYR eP	21 16 09
i	21 12
SPA eP	21 16 41
March 7	
BYR eP	09 13 48
SPA eP	09 14 14
March 7	
BYR eP	09 25 51
SPA eP	09 25 17
March 7	
BYR eP	10 48 17
SPA iP	10 48 52
March 7	
BYR eP	14 57 03
SPA eP	14 57 43
March 7	
SPA eP'	16 01 46
March 7	
SPA iP	16 19 03
March 8	
SPA eP	15 00 18
March 8	
SPA eP	17 19 02
March 8	
SPA eP	23 14 47
March 9	
BYR eP	01 47 01
March 9	
BYR eP	02 42 34
March 9	
BYR eP	07 22 19
March 9	
BYR eP'	19 03 30
March 9	
BYR e(P)	21 41 28
e	42 19

Date and Station	Phase (GCT)
March 10	h m s
BYR eP'	07 18 08
March 10	
BYR eP	12 02 30
March 10	
BYR eP	18 00 52
March 10	
BYR eP	18 47 26
March 11	
BYR eP	00 41 54
March 11	
BYR eP	07 19 46
e	24 56
March 11	
BYR eP	20 50 48
ePP	53 28
March 13	
SPA eP	10 58 37
March 13	
BYR eP	13 30 32
March 13	
BYR eP	16 50 30
epP	51 19
SPA iP	16 51 04
March 13	
SPA eP'	19 27 07
March 13	
SPA eP'	20 46 51
March 13	
BYR eP	23 14 11
SPA eP	23 14 47
March 14	
SPA eP	07 07 51
i(pP)	08 01
March 14	
SPA eP	12 37 19
March 14	
SPA eP	14 31 54
March 14	
SPA eP	17 16 28
March 15	
SPA eP	04 59 32
March 15	
BYR iP	05 43 25
SPA eP	05 43 09
March 15	
SPA eP	07 35 16

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Date and Station	Phase	Phase (GCT) h m s
March 15		
SPA	iP	08 26 23
March 15		
BYR	eP	12 15 12
SPA	iP	12 15 00
March 15		
SPA	eP	18 37 41
March 15		
BYR	i(P)	19 09 54
SPA	iP	19 09 38
	e	12 15
March 15		
BYR	e(P)	21 36 00
March 15		
BYR.	eP	21 39 58
SPA	iP	21 39 33
March 16		
SPA	eP'	01 56 22
March 16		
SPA	eP	04 52 28
March 16		
BYR	eP	06 43 07
SPA	eP	06 42 53
March 16		
SPA	eP	07 55 32
March 16		
BYR	eP'	08 21 35
SPA	eP'	08 21 32
March 16		
BYR	eP	22 17 58
SPA	eP	22 18 33
March 16		
BYR	eP'	23 54 02
March 17		
BYR	iP	00 28 33
SPA	eP	00 28 40
March 17		
BYR	eP'	08 02 58
March 17		
BYR	iP'	08 44 13
	i	44 32
	iPP	45 35
	ePKKP	54 23
	e(PPS)	56 56
SPA	eP'	08 44 07
	iPP	45 23
	ePKKP	54 13

Date and Station	Phase	Phase (GCT) h m s
March 17		
BYR	iP	10 43 59
	i(pP)	44 09
SPA	iP	10 44 15
March 17		
BYR	iP	13 05 51
	i	05 33
	eS	11 41
	eScS	15 36
	eL	17 44
SPA	iP	13 05 34
	eS	11 23
March 17		
SPA	eP	13 45 03
March 17		
BYR	eP	15 11 12
	ePP	12 26
SPA	iP	15 10 58
March 17		
SPA	eP	16 30 55
March 17		
BYR	eP	17 17 28
SPA	iP	17 17 31
March 17		
SPA	eP	19 15 08
March 17		
BYR	iP	23 11 14
	i	11 29
SPA	iP	23 10 55
March 18		
BYR	iP	00 01 13
SPA	eP	00 01 29
March 18		
SPA	eP'	01 00 05
March 18		
BYR	iP'	07 45 42
March 18		
BYR	eP	15 07 37
	e(pP)	08 15
March 18		
BYR	iP	16 03 08
SPA	eP	16 02 48
March 18		
BYR	eP	19 20 54
SPA	iP	19 21 22

Date and Station	Phase	Phase (GCT) h m s
March 19		
BYR	iP	02 11 43
SPA	iP	02 11 16
	e	12 44
	e(PP)	15 03
March 19		
BYR	eP'	07 43 14
SPA	eP'	07 45 04
March 19		
BYR	eP'	08 44 34
	e(PP)	46 23
SPA	eP'	08 44 41
March 19		
BYR	eP'	09 57 23
SPA	iP'	09 57 47
March 19		
BYR	eP'	10 34 43
March 19		
BYR	eP'	14 33 53
March 19		
BYR	eP	19 00 55
	i(PcP)	01 03
SPA	eP	19 01 13
March 19		
BYR	iP	19 43 18
March 19		
BYR	eP	22 29 04
March 19		
BYR	eP	23 14 21
March 20		
BYR	iP	00 59 07
	e(pP)	01 00 08
SPA	iP	00 58 43
March 20		
BYR	eP'	01 22 19
SPA	eP'	01 21 58
March 20		
BYR	iP	02 21 12
SPA	iP	02 21 47
March 20		
BYR	iP	07 26 11
SPA	iP	07 26 40
March 20		
BYR	eP	11 02 59
SPA	eP	11 02 34

Date and Station	Phase	Phase (GCT) h m s
March 20		
SPA	eP	15 00 04
March 20		
SPA	eP'	15 43 56
March 20		
BYR	eP'	16 03 17
March 20		
SPA	eP	18 53 59
March 20		
BYR	iP	19 12 43
SPA	eP	19 13 28
March 20		
BYR	eP	23 25 23
SPA	eP	23 25 13
March 20		
BYR	eP	24 06 04
March 21		
BYR	iP	04 37 20
	ipP	39 21
SPA	iP	04 37 51
	ipP	39 52
March 21		
BYR	eP	05 05 33
March 21		
BYR	eP	08 44 25
SPA	eP	08 44 16
March 21		
BYR	eP'	09 11 13
March 21		
BYR	iP	10 17 56
SPA	iP	10 17 46
March 21		
BYR	eP	16 48 37
SPA	eP	16 48 10
March 21		
SPA	eP'	19 55 41
March 21		
BYR	iP	19 56 37
SPA	iP	19 56 08
	ePcP	56 25
	eS	20 05 13
March 22		
SPA	eP	12 08 50
March 22		
SPA	iP	14 45 57

Date and Station	Phase	Phase (GCT) h m s
March 22		
BYR	eP	15 45 27
March 22		
BYR	eP	17 26 40
SPA	eP	17 27 12
March 22		
SPA	eP	23 04 05
March 23		
BYR	eP	02 57 24
March 23		
BYR	eP	06 14 25
SPA	iP	06 14 04
March 23		
BYR	eP'	07 29 16
	ePKKP	39 29
SPA	eP'	07 30 35
	ePKKP	38 03
March 23		
SPA	eP	08 30 57
March 23		
SPA	eP	10 25 35
March 23		
BYR	iP	13 35 12
	epP	35 48
SPA	eP	13 36 27
March 23		
BYR	e(P)	13 55 20
March 23		
SPA	eP	19 34 41
March 23		
SPA	eP	22 58 19
March 24		
BYR	iP	01 24 43
SPA	eP	01 24 54
March 24		
BYR	iP	05 15 20
	ePcP	15 48
SPA	iP	05 16 06
March 24		
BYR	e(P)	15 52 01
March 24		
BYR	eP	17 24 01
March 24		
BYR	eP'	17 37 27
March 24		
SPA	iP	18 00 19
March 24		
BYR	eP'	21 01 36
March 25		
SPA	eP	00 10 31
March 25		
SPA	iP	00 23 53
March 25		
SPA	eP	04 01 35
March 25		
SPA	eP	07 13 32
March 25		
SPA	eP	09 12 00
	e	18 07
March 25		
SPA	eP	11 26 21
March 25		
SPA	eP	15 04 33
	ePcP	06 51
March 25		
SPA	iP	16 25 46
March 25		
SPA	eP	17 04 20
March 25		
SPA	eP	20 45 38
March 25		
SPA	eP	23 13 01
March 26		
SPA	iP	02 36 35
March 26		
SPA	eP	04 58 36
March 26		
SPA	eP'	05 13 04
March 26		
SPA	iP	05 37 45
March 26		
SPA	iP	08 00 54
March 26		
SPA	eP	09 05 45
March 26		
SPA	iP	11 54 50
March 26		
SPA	eP	14 13 12
March 27		
SPA	eP	00 34 45
March 27		
SPA	eP	03 48 05
March 27		
SPA	eP	06 21 00
March 27		
SPA	eP	06 53 52
March 27		
SPA	eP	07 31 33
March 27		
SPA	eP	07 51 48
March 27		
SPA	eP	08 04 35
March 27		
SPA	eP	09 33 22
March 27		
SPA	eP	16 40 12
March 27		
SPA	eP	23 10 41
	ePP	14 39
March 28		
BYR	eP	03 45 57
SPA	eP	03 47 11
March 28		
SPA	iP	06 43 52
March 28		
BYR	eP'	08 04 25
March 28		
SPA	iP	11 28 18
March 28		
BYR	iP	15 02 07
SPA	iP	15 02 20
March 28		
BYR	iP	19 56 36
	epP	58 31
	eS	20 04 38
SPA	iP	19 57 26
	ePP	59 22
	eS	20 05 45
	eP'P'	24 45
March 28		
BYR	eP'	19 01 34
SPA	eP'	19 01 31
March 28		
SPA	eP	24 03 09
March 29		
SPA	e(P)	00 33 03
March 29		
SPA	eP	00 52 17
March 29		
SPA	eP	09 44 22
March 29		
SPA	eP	12 20 02
March 29		
SPA	e(P)	12 53 54
March 29		
SPA	eP'	19 28 55
	ePP	31 25
March 29		
SPA	eP	21 12 47
March 29		
SPA	eP	23 05 46
March 30		
BYR	eP	02 46 18
March 30		
BYR	eP	07 30 20
March 30		
BYR	iP	08 11 20
SPA	iP	08 12 15
March 30		
SPA	eP	11 50 32
March 30		
BYR	i(P)	12 03 22
March 30		
SPA	eP	14 24 48
March 30		
SPA	iP	18 30 32
March 30		
SPA	eP	20 50 00
	e	50 44
March 30		
SPA	eP	22 40 00
March 31		
SPA	eP'	01 24 55
March 31		
SPA	eP	02 14 28
March 31		
SPA	eP	03 33 46
March 31		
SPA	eP	05 20 41
March 31		
BYR	iP	07 32 01
SPA	iP	07 32 28
	e	33 29
March 31		
SPA	eP	08 43 05
March 31		
SPA	eP	09 20 29
March 31		
SPA	eP	10 03 54

Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)	Date and Station	Phase (GCT)
	h m s		h m s		h m s		h m s
March 31 SPA iP	13 20 39						
March 31 SPA eP	15 25 29						
March 31 BYR eP	16 12 12						