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SEISMOLOGICAL BULLETIN

SOUTH POLE - BYRD SUPPLEMENT

JANUARY-MARCH, 1960

MSI - 229A

CONTENTS

List of stations 1
Seismogram interpretations 2

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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JANUARY-MARCH, 1960

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

Station	Latitude	Longitude	Foundation	Elevation	Instruments	Components	T_o (Sec.)	T_g (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 (120°E.-60°W.) Horizontal Film.		5.6	0.48	15mm/mim.
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 locati 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	
BYR eP'	04 30 47
iSKP	34 18
Jan. 1	
SPA iP	09 56 02
Jan. 1	
SPA eP	10 30 46
Jan. 1	
BYR e(P)	11 46 58
SPA iP	11 47 12
Jan. 1	
BYR iP	15 47 01
SPA iP	15 47 32
Jan. 1	
BYR eP'	23 32 00
SPA iP'	23 32 11
i	32 27
i	32 50
Jan. 2	
SPA eP	02 03 12
Jan. 2	
BYR eP'	02 11 45
Jan. 2	
BYR iP	03 32 21
SPA iP	03 32 57
i(PcP)	33 12
ipP	33 35
e	34 18
Jan. 2	
BYR e(P)	05 21 01
SPA eP	05 20 21
e	20 43
Jan. 2	
BYR e(P')	07 19 06
SPA eP'	07 19 14
i	19 21
e	22 49
Jan. 2	
BYR iP	08 34 11
SPA iP	08 33 51
iPP	34 49
ePPP	35 10
iPcP	36 34
eL	40 24
Jan. 2	
BYR iP	12 29 27
ePP	30 53

Date and Station	Phase (GCT)
	h m s
SPA eP	12 28 39
i	28 43
i	28 56
i	29 27
iPcP	31 27
eL	40 39
Jan. 2	
BYR iP	12 29 27
ePP	30 53
Jan. 2	
BYR eP	13 49 45
Jan. 2	
SPA iP	15 22 33
Jan. 2	
SPA eP	16 18 55
i	19 13
i	19 48
Jan. 2	
BYR eP	21 35 30
SPA eP	21 35 42
Jan. 3	
BYR eP'	01 32 04
Jan. 3	
SPA eP	03 33 02
Jan. 3	
SPA eP	03 45 19
Jan. 3	
BYR eP	07 30 23
SPA eP	07 31 35
i	31 48
Jan. 3	
SPA iP	10 52 04
e	52 35
Jan. 3	
SPA eP	11 19 32
Jan. 3	
SPA eP	11 39 13
Jan. 3	
BYR e(P')	11 43 33
SPA eP'	11 43 27
e	49 56
Jan. 3	
BYR eP'	11 58 00
SPA iP'	11 58 25
i	58 33
i	58 43
Jan. 3	
SPA eP	13 19 06

Date and Station	Phase (GCT)
	h m s
Jan. 3	
SPA eP	14 15 21
e	15 29
Jan. 3	
SPA eP	14 20 51
e	21 05
Jan. 3	
SPA eP	20 38 08
Jan. 3	
BYR e(P')	21 42 38
Jan. 4	
SPA iP	10 35 27
e	35 47
ePcP	36 51
Jan. 4	
BYR eP	11 53 22
SPA eP	11 54 44
e	54 59
Jan. 4	
SPA eP	12 50 38
Jan. 4	
BYR eP	15 17 37
SPA iP	15 18 15
e	18 25
i	18 31
i	18 54
e	19 34
e	19 45
Jan. 4	
BYR iP	16 26 58
SPA eP	16 26 09
Jan. 5	
BYR eP	05 24 31
Jan. 5	
SPA eP	06 34 38
Jan. 5	
SPA iP	06 49 26
i	49 36
e(PcP)	50 18
Jan. 5	
BYR e(P)	09 43 16
SPA eP	09 43 50
e	44 14
Jan. 5	
SPA iP	18 00 23
Jan. 6	
SPA eP	00 01 58
Jan. 6	
SPA eP	03 02 44

Date and Station	Phase (GCT)
	h m s
Jan. 6	
SPA eP	03 20 43
i	21 07
Jan. 6	
SPA iP	06 16 41
Jan. 6	
SPA eP	07 50 05
Jan. 6	
SPA eP	11 29 54
Jan. 6	
SPA eP	13 23 07
Jan. 6	
SPA iP	18 43 01
i	43 17
Jan. 6	
SPA iP	19 28 58
i	29 12
e	29 39
e	31 55
Jan. 6	
BYR iP	20 29 14
Jan. 7	
SPA eP	11 02 47
Jan. 7	
SPA eP	12 21 59
Jan. 7	
SPA iP	12 39 49
Jan. 7	
SPA eP	13 03 10
e	03 32
Jan. 7	
BYR iP	13 35 17
e(PP)	36 15
e(PPP)	37 00
eS	41 04
SPA eP	13 35 03
i	35 46
iPP	36 22
i(PcP)	37 20
e(S)	41 12
eL	44 29
Jan. 7	
BYR eP	14 43 08
SPA iP	14 42 54
i	43 30
e	44 23
Jan. 7	
BYR eP	14 58 20
SPA eP	14 58 06
e	58 14
e	15 00 36

8-4297-4

Date and Station	Phase	(GCT)
Jan. 7		h m s
BYR	eP	15 13 33
SPA	eP	15 13 16
	i	13 31
Jan. 7		
SPA	eP	17 33 02
	i	33 23
Jan. 7		
SPA	eP	20 24 33
Jan. 8		
BYR	iP	02 41 46
SPA	iP	02 41 27
	i	41 41
	e	41 18
	i	43 03
	ePcP	43 54
	i	44 19
	iL	48 11
Jan. 8		
SPA	eP	06 11 25
Jan. 8		
BYR	e(P)	07 54 57
SPA	eP	07 55 35
Jan. 8		
SPA	iP	08 33 33
Jan. 8		
SPA	iP	10 11 21
Jan. 8		
SPA	eP	10 28 57
Jan. 8		
BYR	iP	11 36 26
	ePP	37 38
	ePPP	37 58
	e	11 47 27
SPA	iP	11 36 10
	i	36 31
	e(PP)	37 02
	e	39 35
	e(S)	42 26
Jan. 8		
SPA	eP	12 41 12
Jan. 8		
BYR	iP	14 53 02
	eL	15 01 10
SPA	iP	14 52 47
	e(PP)	53 32
	e(PPP)	54 11
	eL	59 09
	e	15 01 51
	i	04 13

Date and Station	Phase	(GCT)
Jan. 8		h m s
SPA	iP	15 34 58
	e	35 39
	ePP	35 56
	e(PPP)	36 40
Jan. 8		
SPA	eP	17 47 11
Jan. 8		
SPA	eP	17 54 56
	e	18 00 49
Jan. 8		
BYR	eP	21 52 33
SPA	eP	21 52 13
	e	52 32
	ePcP	53 06
Jan. 8		
SPA	eP	22 28 39
Jan. 9		
SPA	eP	01 13 03
Jan. 9		
SPA	eP'	01 47 11
Jan. 9		
SPA	eP	04 11 09
Jan. 9		
SPA	eP'	04 17 50
Jan. 9		
SPA	iP	04 30 57
Jan. 9		
SPA	iP	04 56 57
	e	59 05
Jan. 9		
SPA	eP	05 53 24
	e	53 35
Jan. 9		
SPA	eP	05 56 56
Jan. 9		
SPA	eP	06 23 58
Jan. 9		
SPA	eP	06 43 54
Jan. 9		
SPA	eP'	07 02 47
Jan. 9		
SPA	iP'	07 42 38
	e	43 00
	epP'	43 27
	eSKP	45 35
	i	45 52
	e	47 41

Date and Station	Phase	(GCT)
		h m s
BYR	eP'	07 42 50
	e	43 00
	e	43 20
	ePKS	46 09
Jan. 9		
BYR	e(P)	07 55 11
SPA	eP	07 54 56
	e	55 51
Jan. 9		
SPA	eP	13 39 04
Jan. 9		
SPA	iP	14 18 04
Jan. 9		
SPA	e(P)	15 32 06
	e	32 11
Jan. 9		
SPA	iP'	18 08 46
	i	09 24
	e(PP)	12 24
Jan. 9		
BYR	eP	21 03 09
SPA	eP	21 02 55
	e	03 23
Jan. 10		
BYR	e(P)	02 44 13
SPA	eP	02 45 02
	e	45 22
Jan. 10		
SPA	iP	03 52 01
		52 33
Jan. 10		
SPA	iP	05 27 16
	i	27 24
	i	27 58
	e(PP)	28 42
	e(ScS)	38 03
	eL	40 26
BYR	eP	05 27 30
	e(PP)	29 04
Jan. 10		
SPA	eP	06 15 36
Jan. 10		
BYR	eP	07 30 45
SPA	iP	07 30 30
	e	32 25
Jan. 10		
SPA	eP	12 41 28
Jan. 10		
SPA	eP	13 07 48

Date and Station	Phase	(GCT)
Jan. 10		h m s
SPA	iP	13 21 06
Jan. 10		
SPA	eP'	23 51 22
	i	51 25
Jan. 11		
SPA	iP	00 20 41
Jan. 11		
BYR	e(P)	15 06 11
SPA	eP	15 05 49
	e(PP)	09 17
Jan. 11		
BYR	iP	15 06 47
SPA	iP	15 06 25
Jan. 11		
SPA	eP	15 15 49
Jan. 11		
SPA	eP	15 28 17
	e	28 35
Jan. 11		
SPA	eP	18 00 21
	e	00 38
Jan. 11		
SPA	eP	19 47 52
Jan. 11		
BYR	e(P)	23 07 09
Jan. 11		
SPA	eP	23 06 57
	e	07 14
	e	07 29
Jan. 12		
BYR	eP	02 48 00
SPA	eP	02 47 47
Jan. 12		
BYR	iP	03 16 18
	ePP	17 46
	e(S)	22 20
	eL	24 17
SPA	eP	03 16 02
	e	20 21
	e	21 15
Jan. 12		
BYR	eP	03 21 36
Jan. 12		
BYR	eP	05 51 11
Jan. 12		
BYR	eP	06 37 47

Date and Station	Phase (GCT)
	h m s
SPA eP	06 37 33
e	45
e	38 53
Jan. 12	
SPA eP	08 04 14
i	23
ePcP	05 17
e(PP)	06 04
Jan. 12	
SPA eP	09 00 57
Jan. 12	
SPA eP	10 57 48
Jan. 12	
BYR iP	15 02 07
SPA eP	15 01 52
e	02 00
e	03 26
Jan. 12	
SPA eP	17 01 31
Jan. 12	
SPA eP	20 08 21
Jan. 12	
BYR eP	22 33 28
SPA eP	22 34 04
e	28
Jan. 12	
SPA iP	23 52 09
i	32
Jan. 13	
SPA eP	06 29 39
Jan. 13	
SPA iP	06 44 54
e	46 52
Jan. 13	
SPA eP	09 14 38
Jan. 13	
SPA eP	09 51 56
Jan. 13	
SPA iP	10 15 56
Jan. 13	
SPA eP	13 15 47
Jan. 13	
BYR iP	15 51 03
eS	16 00 14
eL	16 07 56
eP'P'	16 19 36
e(pP'P')	16 20 14
SPA iP	15 51 53
i	57 03
e	58 11
iS	16 01 27
e	10 15
eP'P'	19 27
e(pP'P')	20 04

Date and Station	Phase (GCT)
Jan. 13	h m s
BYR i(P')	16 49 00
SPA eP'	16 49 08
i	49 18
iSKP	53 22
Jan. 13	
SPA iP	17 31 44
Jan. 14	
SPA eP	05 46 53
Jan. 14	
BYR eP	06 35 33
SPA iP	06 35 23
Jan. 14	
BYR iP	07 38 27
ePP	39 57
SPA eP	07 38 12
ePP	39 29
eS	07 44 28
Jan. 14	
BYR eP	07 50 17
Jan. 14	
BYR eP	08 31 15
SPA eP	08 30 00
Jan. 14	
SPA eP'	09 46 11
Jan. 14	
BYR iP'	10 44 53
SPA eP'	10 44 49
e	45 35
e(SKP)	46 45
Jan. 14	
BYR e(P')	13 08 38
SPA iP'	13 08 46
i	08 53
Jan. 14	
SPA eP	13 24 11
Jan. 14	
SPA eP	13 33 30
Jan. 14	
SPA eP	14 45 42
Jan. 14	
SPA eP	15 41 48
Jan. 14	
BYR iP	16 12 04
SPA eP	16 11 44
Jan. 14	
BYR eP	17 20 32

Date and Station	Phase (GCT)
	h m s
SPA eP	17 20 17
Jan. 14	
SPA eP	18 51 33
e	52 00
Jan. 14	
BYR iP	19 04 09
SPA eP	19 03 53
e	04 29
e	05 03
Jan. 15	
BYR iP	09 41 14
e(pP)	41 41
SPA iP	09 41 55
i(pP)	42 21
i(sP)	42 37
iPP	44 24
e	49 20
eS	51 36
eP'P'	10 09 12
Jan. 15	
BYR eP	12 47 30
SPA eP	12 47 13
Jan. 15	
SPA iP	14 42 29
Jan. 15	
SPA eP	23 43 38
Jan. 15	
SPA iP	23 51 58
Jan. 16	
SPA eP	07 05 18
e	05 50
ePP	06 14
Jan. 16	
SPA iP	12 41 13
ePcP	41 31
ipP	43 12
Jan. 16	
SPA eP	12 53 50
Jan. 16	
SPA eP	13 08 16
Jan. 16	
BYR eP	15 43 34
SPA eP	15 43 57
ePcP	44 17
e	44 36
Jan. 16	
SPA eP	18 15 28
Jan. 16	
BYR eP	18 50 00

Date and Station	Phase (GCT)
	h m s
SPA eP	18 50 17
e	50 36
Jan. 16	
BYR iP	21 08 50
SPA iP'	21 09 04
i	09 14
i	09 27
ipP'	09 50
i	10 01
e	11 14
Jan. 16	
BYR eP	21 53 45
SPA iP	21 53 54
i	54 17
Jan. 17	
SPA iP	03 09 23
Jan. 17	
SPA iP'	03 10 31
Jan. 17	
SPA eP	04 00 13
Jan. 17	
SPA eP'	04 38 34
Jan. 17	
SPA eP	05 26 15
Jan. 17	
SPA eP	08 07 21
Jan. 17	
SPA eP	15 35 46
Jan. 18	
SPA eP	00 26 00
Jan. 18	
BYR e(P)	01 12 38
e	13 14
SPA iP	01 11 25
es	17 11
Jan. 18	
BYR e(P')	09 22 36
Jan. 18	
BYR e(P)	17 01 29
SPA eP	17 02 32
Jan. 18	
BYR e(P)	18 44 00
SPA eP	18 44 36
Jan. 18	
BYR eP	19 43 24

Date and Station	Phase	(GCT)
		h m s
SPA	eP	19 43 59
	e	44 08
	ePP	48 09
Jan. 19		
SPA	eP	02 00 29
Jan. 19		
BYR	e(P')	02 36 11
	e(SKP)	39 50
SPA	eP'	02 36 17
	e(SKP)	39 56
	e	47 12
Jan. 19		
SPA	eP	05 37 12
Jan. 19		
BYR	iP	09 24 35
	epP	26 26
	e(P'P')	53 04
SPA	iP	09 25 04
	e	25 42
	i	26 15
	ipP	27 02
	eS	33 16
Jan. 19		
BYR	e(P)	11 22 43
SPA	eP	11 23 29
Jan. 19		
SPA	iP	12 06 43
Jan. 19		
SPA	eP	16 57 54
Jan. 19		
BYR	e(P)	19 38 12
SPA	iP	19 38 42
Jan. 19		
BYR	eP	20 25 59
Jan. 20		
BYR	e(P)	01 16 57
SPA	iP	01 16 47
	e	17 01
Jan. 20		
BYR	e(P)	03 00 13
SPA	iP	03 00 44
Jan. 20		
SPA	eP	05 05 28
Jan. 20		
SPA	eP	08 18 29
Jan. 20		
BYR	EP	10 19 56

Date and Station	Phase	(GCT)
		h m s
SPA	eP	10 21 00
Jan. 20		
SPA	eP	11 48 27
Jan. 20		
SPA	eP	11 52 50
Jan. 20		
BYR	eP	20 08 52
Jan. 21		
SPA	iP	00 20 08
Jan. 21		
SPA	eP'	04 31 18
Jan. 21		
BYR	eP	10 53 51
SPA	eP	10 54 21
	ePcP	54 38
Jan. 21		
SPA	iP	13 03 16
	i	03 36
Jan. 21		
BYR	e(P)	17 54 43
SPA	iP	17 55 17
Jan. 22		
BYR	e(P')	02 33 33
Jan. 22		
BYR	iP	07 33 52
SPA	iP	07 34 37
	i	34 54
Jan. 22		
BYR	e(P)	07 48 06
SPA	eP	07 48 12
Jan. 22		
SPA	eP	11 25 12
Jan. 22		
BYR	iP	13 49 19
SPA	iP	13 48 57
	e	49 42
	e	49 55
Jan. 22		
BYR	e(P')	18 23 13
SPA	e(P')	18 23 43
Jan. 22		
SPA	eP	18 49 53
Jan. 22		
SPA	eP	22 26 51
Jan. 22		
SPA	eP	22 56 02

Date and Station	Phase	(GCT)
		h m s
Jan. 22		
SPA	eP	23 07 41
	e	07 50
Jan. 23		
BYR	iP	04 54 00
	e	56 26
	e	56 43
SPA	iP	04 53 40
	e	54 16
	e	55 29
Jan. 23		
BYR	iP	06 34 34
Jan. 23		
BYR	iP	07 44 18
	e	54 46
	eS	55 09
	e	56 29
SPA	iP	07 43 58
	ePP	47 12
	ePPP	49 12
	e	53 56
	eS	54 24
Jan. 23		
BYR	eP	07 53 46
Jan. 23		
SPA	eP	08 16 52
Jan. 23		
BYR	e(P)	08 46 58
SPA	eP	08 46 39
Jan. 23		
BYR	e(P)	09 49 06
SPA	iP	09 49 42
Jan. 23		
BYR	eP	12 10 06
SPA	eP	12 11 35
Jan. 23		
SPA	eP	12 20 39
	e	22 34
Jan. 23		
BYR	e(P)	12 29 39
SPA	eP	12 30 14
	e	30 31
Jan. 23		
SPA	iP	13 22 57
Jan. 23		
BYR	iP	18 09 34
SPA	eP	18 09 13
	e	09 55
	e	10 38
	ePP	12 46
	ePPP	14 40

Date and Station	Phase	(GCT)
		h m s
Jan. 23		
SPA	eP	22 09 47
Jan. 23		
SPA	eP	22 31 44
Jan. 24		
BYR	e(P)	01 20 00
Jan. 24		
SPA	eP	03 31 37
Jan. 24		
BYR	eP	04 32 50
	eL	52 06
Jan. 24		
SPA	iP	04 33 24
	i	33 39
	e	40 12
	e	41 16
Jan. 24		
SPA	iP	06 17 43
	i	17 54
Jan. 24		
SPA	eP	09 26 31
Jan. 24		
BYR	eP	09 27 43
SPA	iP	09 28 12
	epP	30 22
Jan. 24		
BYR	e(P)	12 29 01
SPA	iP	12 28 55
Jan. 24		
BYR	eP	17 08 13
SPA	iP	17 08 29
	i	08 41
Jan. 25		
SPA	eP	03 48 56
Jan. 25		
BYR	e(P')	09 05 56
Jan. 25		
BYR	eP	15 14 40
Jan. 25		
BYR	eP	16 40 41
SPA	iP	16 41 11
	e	43 21
Jan. 25		
SPA	eP'	16 55 33
Jan. 25		
SPA	eP	17 10 46
Jan. 26		
BYR	eP	03 28 56

Date and Station	Phase	(GCT)
		h m s
Jan. 26		
BYR	eP	04 19 18
Jan. 26		
BYR	eP	09 01 46
Jan. 26		
BYR	eP	09 28 14
Jan. 26		
BYR	e(P)	09 30 44
Jan. 26		
BYR	e(P)	18 33 11
Jan. 26		
BYR	iP'	20 46 18
Jan. 26		
BYR	iP	22 30 51
Jan. 27		
SPA	eP	02 22 17
Jan. 27		
BYR	iP	04 32 54
	e	42 09
	e	52 05
Jan. 27		
SPA	iP	08 23 46
	e	23 59
Jan. 27		
SPA	eP	09 38 37
Jan. 27		
SPA	iP	10 17 21
Jan. 27		
BYR	iP	17 23 13
Jan. 27		
SPA	eP	21 00 13
Jan. 28		
SPA	eP	01 48 26
Jan. 28		
SPA	eP	01 53 40
	i	53 46
Jan. 28		
SPA	eP	14 02 09
Jan. 28		
SPA	iP	15 32 25
	e	32 45
Jan. 28		
BYR	eP	22 31 38
Jan. 29		
BYR	e(P')	07 52 41
SPA	eP'	07 52 23
Jan. 29		
BYR	iP	07 54 28
	e(PP)	56 12
SPA	iP	07 53 30
	iPP	54 55
	eS	58 52
Jan. 29		
SPA	iP	08 15 25
Jan. 29		
BYR	iP	08 23 09
SPA	iP	08 23 01
	e	23 13
	i	23 36
	ePP	26 22
Jan. 30		
BYR	eP	00 48 29
Jan. 30		
BYR	e(P)	04 20 12
SPA	eP	04 20 44
	e	21 54
Jan. 30		
BYR	e(P)	05 19 23
SPA	iP	05 20 02
Jan. 30		
SPA	iP	07 44 49
Jan. 30		
BYR	eP	11 03 25
SPA	iP	11 04 00
Jan. 31		
BYR	iP	04 14 36
SPA	iP	04 14 52
	e	15 45
Jan. 31		
BYR	eP'	05 27 19
SPA	eP'	05 27 13
	e	27 39
Jan. 31		
BYR	iP	13 09 29
Jan. 31		
SPA	eP	16 52 16
Jan. 31		
BYR	e(P')	17 46 15
SPA	iP'	17 46 17
Jan. 31		
BYR	eP	19 18 27
		h m s
SPA	iP	19 19 04
Feb. 1		
BYR	eP'	02 27 33
Feb. 1		
BYR	iP'	03 00 41
SPA	eP'	03 00 37
Feb. 1		
SPA	eP	05 47 30
Feb. 1		
BYR	eP	10 30 20
Feb. 1		
SPA	eP'	12 18 38
Feb. 1		
BYR	e(P')	14 15 24
Feb. 1		
SPA	eP	15 54 23
	e	54 29
	e	55 08
Feb. 1		
BYR	iP	20 17 43
Feb. 1		
SPA	eP	20 18 20
Feb. 2		
BYR	eP	06 39 12
	e	39 28
	e(PcP)	40 21
	e	40 30
SPA	eP	06 39 43
	e(PcP)	40 23
	e	40 36
Feb. 2		
BYR	e(P')	08 29 49
SPA	eP'	08 29 45
Feb. 2		
BYR	eP	09 22 29
SPA	eP	09 23 12
	e	09 23 20
Feb. 2		
SPA	eP	17 22 26
Feb. 2		
BYR	eP	19 46 40
Feb. 2		
BYR	eP	23 53 31
Feb. 3		
SPA	eP	00 10 52
Feb. 3		
BYR	iP	02 29 46
		h m s
SPA	iP	02 30 17
	e	51
	e	35 14
Feb. 3		
BYR	e(P)	09 16 55
Feb. 3		
BYR	eP	12 03 26
SPA	eP	12 03 27
	e	03 42
Feb. 3		
BYR	e(P')	13 08 13
Feb. 3		
BYR	eP	13 40 54
SPA	eP	13 40 58
Feb. 3		
BYR	eP	14 39 27
SPA	eP	14 40 04
Feb. 3		
BYR	e(P)	18 04 03
SPA	eP	18 04 22
Feb. 3		
BYR	eP	18 22 24
SPA	eP	18 22 42
Feb. 4		
BYR	eP	03 59 06
	i	22
	i	59 42
	e	04 01 31
	ePP	02 14
	iS	09 02
	eL	22 19
SPA	eP	03 59 09
	ePP	04 02 24
	ePPP	04 12
Feb. 4		
SPA	eP	06 05 10
Feb. 4		
SPA	eP	07 21 18
Feb. 4		
BYR	eP	09 39 54
SPA	eP	09 39 54
	epP	40 21
	e	41 43
Feb. 4		
BYR	e(P')	10 39 53

8-4397-4

Date and Station	Phase	(GCT)
		h m s
SPA	eP'	10 39 34
Feb. 4		
BYR	e(P)	11 13 58
Feb. 4		
SPA	eP	12 22 34
Feb. 4		
BYR	e(P)	15 37 00
Feb. 4		
SPA	eP	15 49 56
	e	52 25
Feb. 4		
BYR	eP'	17 09 41
	e(PP)	11 55
	eL	40 18
SPA	eP'	17 09 36
	ePP	11 41
Feb. 4		
BYR	eP	17 34 16
SPA	iP	17 34 05
	i	34 42
Feb. 4		
BYR	eP	17 59 35
SPA	eP	17 59 28
Feb. 4		
SPA	eP	19 43 50
Feb. 4		
BYR	e(P)	20 48 20
SPA	eP	20 48 48
	epP	50 50
Feb. 4		
BYR	e(P')	21 16 30
SPA	e(P')	21 17 00
Feb. 4		
BYR	eP	22 11 01
SPA	eP	22 10 44
Feb. 5		
SPA	eP	00 12 11
Feb. 5		
BYR	eP	01 15 28
Feb. 5		
BYR	eP	01 20 21
Feb. 5		
BYR	eP	02 10 25
	e(PP)	12 05
SPA	eP	02 11 34
	e	11 45
Feb. 5		h m s
BYR	eP	05 52 23
SPA	eP	05 52 26
	e	52 51
Feb. 5		
SPA	eP	08 36 59
Feb. 5		
BYR	eP'	09 02 34
Feb. 5		
SPA	eP	12 44 09
Feb. 6		
BYR	e(P')	01 26 05
Feb. 6		
BYR	eP	01 32 56
SPA	eP	01 33 02
Feb. 6		
BYR	iP	01 38 58
Feb. 6		
BYR	eP	02 10 44
Feb. 6		
SPA	eP	05 18 21
Feb. 6		
BYR	eP	05 38 45
Feb. 6		
BYR	e(P)	11 48 40
SPA	eP	11 48 40
Feb. 6		
SPA	eP	14 50 02
Feb. 6		
BYR	iP	17 23 56
SPA	eP	17 23 20
Feb. 7		
SPA	eP	02 28 08
Feb. 7		
SPA	eP	02 41 18
Feb. 7		
BYR	eP	04 37 55
SPA	eP	04 38 27
Feb. 7		
SPA	eP	09 39 48
Feb. 7		
BYR	eP	10 20 35
	epP	22 34
	iPP	24 32
		h m s
SPA	eP	10 20 13
	e	20 24
	epP	22 22
Feb. 7		
BYR	iP	11 28 01
SPA	eP	11 28 36
Feb. 7		
SPA	eP	14 59 16
Feb. 7		
BYR	e(P)	22 46 21
Feb. 7		
BYR	e(P)	23 06 26
SPA	eP	23 05 55
Feb. 8		
BYR	e(P)	03 12 58
SPA	eP	03 13 28
Feb. 8		
BYR	e(P)	09 32 14
SPA	eP	09 32 16
	epP	32 42
Feb. 8		
SPA	eP	12 06 46
Feb. 8		
BYR	iP	12 51 20
	e	51 42
	eS	55 53
	eL	57 27
SPA	eP	12 52 02
	ePP	52 29
	e(PPP)	53 42
	eL	13 04 44
	e	06 59
Feb. 8		
SPA	eP	14 23 49
Feb. 8		
BYR	e(P')	19 13 20
	ePP	16 46
SPA	eP'	19 13 10
Feb. 8		
BYR	eP	19 17 39
SPA	e(P)	19 18 17
Feb. 8		
BYR	iP	19 18 18
SPA	iP	19 18 56
Feb. 8		
BYR	iP	22 06 48
Feb. 9		
BYR	e(P)	03 12 14
		h m s
SPA	eP	03 12 17
Feb. 9		
SPA	eP	05 41 25
Feb. 9		
SPA	eP	05 51 30
Feb. 9		
BYR	iP	12 09 14
SPA	eP	12 08 56
	e	12 17
Feb. 9		
BYR	e(P)	14 01 26
Feb. 9		
BYR	eP	16 47 23
SPA	eP	16 47 18
Feb. 9		
SPA	eP	17 01 13
Feb. 9		
SPA	eP	22 52 05
Feb. 10		
BYR	iP	00 08 52
	ePP	12 26
	e(PPP)	14 25
	eS	19 52
	eL	35 47
SPA	eP	00 08 32
	e	09 18
	e	09 26
	e(PP)	11 41
Feb. 10		
BYR	eP	01 28 46
SPA	eP	01 28 26
Feb. 10		
BYR	e(P)	01 41 53
SPA	eP	01 42 23
Feb. 10		
BYR	eP	02 12 09
SPA	eP	02 11 47
Feb. 10		
SPA	eP	04 12 26
Feb. 10		
SPA	e(P)	04 26 05
Feb. 10		
BYR	eP	08 01 36
	e	01 56
	i	02 05

Date and Station	Phase (GCT)
	h m s
Feb. 10	
SPA eP	11 27 08
Feb. 10	
SPA eP	12 43 25
Feb. 10	
SPA eP	12 57 25
Feb. 10	
BYR e(P)	15 57 24
SPA eP	15 57 28
e	58 00
Feb. 10	
BYR iP	21 28 12
Feb. 10	
SPA eP	22 03 29
e	03 34
Feb. 10	
BYR eP	23 30 54
Feb. 11	
SPA eP	03 26 30
Feb. 11	
BYR eP	04 08 51
SPA eP	04 09 23
e(PcP)	10 10
e(PP)	11 49
eS	17 29
Feb. 11	
BYR eP	04 38 08
Feb. 11	
BYR iP	05 57 22
SPA eP	05 57 39
Feb. 11	
SPA eP	06 47 25
Feb. 11	
BYR eP	08 41 23
SPA eP	08 41 26
e	42 06
Feb. 11	
BYR e(P)	10 48 28
SPA eP	10 48 13
e	48 40
Feb. 11	
BYR iP	13 02 47
SPA eP	13 03 32
e	04 13
ePcP	04 31
eP'P'	33 39
Feb. 11	
BYR iP	21 07 57

Date and Station	Phase (GCT)
	h m s
SPA eP	21 08 01
e	08 56
Feb. 12	
BYR eP	01 42 22
SPA eP	01 42 24
e	42 54
Feb. 12	
BYR eP	04 21 37
Feb. 12	
BYR e(P)	04 56 58
Feb. 12	
BYR e(P)	05 41 46
Feb. 12	
BYR e(P)	23 28 28
Feb. 13	
BYR iP	15 54 33
e	54 59
iPP	58 18
SPA eP	15 54 14
e	55 01
e	56 04
Feb. 13	
BYR iP	20 50 46
ipP	51 24
SPA eP	20 51 23
epP	51 58
Feb. 14	
BYR iP	05 30 25
e	30 58
SPA eP	05 31 05
e(PcP)	32 12
Feb. 14	
BYR iP	13 02 42
SPA eP	13 03 12
Feb. 14	
SPA eP	15 50 00
e	50 10
ePcP	50 26
Feb. 14	
BYR eP	16 49 24
14	
BYR eP	16 52 43
SPA e(P)	16 53 12
e	21
Feb. 14	
SPA eP	17 33 51

Date and Station	Phase (GCT)
	h m s
Feb. 14	
BYR iP	18 32 26
ipP	32 57
SPA eP	18 33 04
epP	33 37
Feb. 14	
SPA eP	19 03 03
Feb. 14	
BYR eP	19 40 44
SPA e(P)	19 39 44
Feb. 14	
BYR eP	20 35 08
Feb. 14	
BYR eP	20 43 18
e	43 44
SPA eP	20 43 22
e	43 49
Feb. 14	
SPA eP	21 05 38
Feb. 15	
BYR iP	02 46 19
Feb. 15	
BYR eP	03 54 50
Feb. 15	
BYR eP	05 27 04
Feb. 15	
BYR iP	08 42 28
Feb. 15	
SPA eP	11 06 39
Feb. 15	
BYR eP	22 28 09
SPA eP	22 28 44
e	28 53
e	30 19
Feb. 16	
BYR eP	01 19 11
SPA eP	01 19 46
e(PcP)	20 55
e	21 08
ePP	22 08
Feb. 16	
BYR iP	02 47 27
SPA eP	02 46 50
Feb. 16	
BYR eP	03 15 35
SPA eP	03 16 11
Feb. 16	
BYR eP	05 19 47

Date and Station	Phase (GCT)
	h m s
Feb. 16	
BYR iP	05 31 13
iPcP	32 17
e(PP)	33 43
SPA eP	05 31 45
ePcP	32 30
e	33 05
e	33 25
ePP	33 50
e	36 39
Feb. 16	
BYR eP	10 47 49
SPA eP	10 47 54
Feb. 16	
SPA eP	14 50 20
Feb. 16	
BYR eP	16 19 38
Feb. 16	
BYR eP	17 59 32
Feb. 16	
SPA eP	18 14 42
Feb. 16	
SPA eP	19 06 58
Feb. 16	
SPA eP	19 18 57
Feb. 17	
BYR iP	00 12 05
SPA eP	00 12 39
Feb. 17	
BYR eP	05 07 39
Feb. 17	
BYR eP	10 10 03
BYR eP	10 10 03
SPA eP	10 10 38
e	10 52
Feb. 17	
SPA eP	11 12 15
Feb. 17	
SPA eP	11 51 08
Feb. 17	
SPA eP	12 42 23
e	42 50
Feb. 17	
BYR eP	17 02 24
SPA eP	17 02 15
e	02 33
e	02 43

S 4297-4

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

Date and Station	Phase (GCT)
	h m s
Feb. 25	
SPA eP	10 22 45
Feb. 25	
SPA eP	15 36 43
e	37 45
Feb. 25	
SPA eP	18 27 27
Feb. 25	
BYR iP	19 38 42
Feb. 25	
SPA eP	20 52 23
Feb. 25	
BYR iP	21 08 00
SPA eP	21 08 04
Feb. 26	
BYR eP	01 19 41
Feb. 26	
BYR iP	02 21 40
SPA eP	02 21 28
e	21 38
e	22 30
Feb. 26	
SPA eP	04 32 48
e	34 43
Feb. 26	
BYR eP	05 25 21
e	26 50
e	31 09
SPA eP	05 25 06
e	25 14
e	28 40
Feb. 26	
BYR iP	06 43 15
SPA eP	06 43 51
ePcP	44 24
e	44 55
Feb. 26	
SPA eP	08 33 12
Feb. 26	
SPA eP	09 27 44
Feb. 26	
BYR eP	15 05 00
SPA eP	15 05 05
Feb. 26	
BYR e(P')	15 33 38
SPA eP'	15 34 02
Feb. 26	
BYR eP	17 29 38

Date and Station	Phase (GCT)
	h m s
Feb. 26	
BYR eP'	23 48 39
eSKP	52 14
SPA eP'	23 48 53
e	49 04
e	49 17
e	49 43
e	50 51
Feb. 27	
SPA eP	00 00 23
e	01 07
Feb. 27	
SPA eP'	00 26 48
Feb. 27	
SPA eP	06 04 37
e	11 02
Feb. 27	
BYR eP'	08 29 24
e	29 45
eSKP	32 54
SPA eP'	08 29 42
Feb. 27	
BYR iP	09 05 32
e(PcP)	06 19
eS	13 24
eSKS	22 46
SPA eP	09 06 05
e	06 10
ePcP	06 43
Feb. 27	
BYR iP	09 18 33
SPA eP	09 17 55
e	18 23
Feb. 27	
BYR eP	10 06 52
Feb. 27	
BYR iP	10 07 32
SPA iP	10 08 05
Feb. 27	
BYR eP	14 10 07
Feb. 27	
BYR iP	14 10 50
SPA eP	14 10 54
e	11 12
Feb 27	
BYR eP	14 35 36
SPA eP	14 35 40
Feb. 27	
BYR e(P)	15 08 31

Date and Station	Phase (GCT)
	h m s
SPA eP	15 08 36
Feb. 27	
BYR eP	16 06 18
Feb. 27	
BYR eP	20 00 54
Feb. 27	
BYR e(P)	23 19 24
Feb. 28	
BYR e(P)	01 28 21
Feb. 28	
SPA eP	01 47 12
e	47 57
e	48 41
Feb. 28	
BYR eP	07 25 51
SPA eP	07 27 21
Feb. 28	
BYR eP'	09 53 30
Feb. 28	
BYR eP	10 39 49
Feb. 28	
SPA eP	10 45 28
Feb. 28	
SPA eP	11 20 18
Feb. 28	
SPA eP	14 12 57
Feb. 28	
BYR iP	23 18 37
SPA eP	23 18 30
e	18 36
e	18 48
Feb. 29	
BYR eP	00 05 21
SPA eP	00 05 14
e	05 48
Feb. 29	
BYR eP	02 25 04
Feb. 29	
BYR eP	07 05 38
Feb. 29	
SPA eP	11 02 35
Feb. 29	
SPA eP	14 30 10
Feb. 29	
SPA e(P)	14 59 05

Date and Station	Phase (GCT)
	h m s
Feb. 29	
BYR iP	22 50 09
Feb. 29	
BYR eP'	23 59 15
March 1	
BYR eP	00 44 30
March 1	
BYR eP	02 17 12
March 1	
BYR iP	03 36 42
March 1	
SPA eP	04 33 24
March 1	
BYR eP	08 18 11
SPA eP	08 18 32
e	19 31
March 1	
SPA eP	11 51 33
March 1	
SPA eP	11 56 05
March 1	
SPA eP	12 03 14
March 1	
SPA eP	14 29 19
March 1	
BYR eP	16 22 45
SPA eP	16 23 21
March 1	
SPA eP	17 47 44
March 1	
SPA eP	20 10 38
e	10 45
ePcP	11 11
March 1	
BYR eP	22 08 01
March 2	
SPA eP	07 17 24
March 2	
SPA eP	09 04 46
March 2	
SPA eP	09 06 13
March 2	
SPA eP	09 42 04
March 2	
SPA eP	21 09 14

B-4297-4

Date and Station	Phase	Phase (GCT)
March 2		h m s
SPA	eP	21 36 30
March 3		
BYR	eP	01 14 40
SPA	eP	01 14 46
March 3		
SPA	eP	02 47 32
March 3		
SPA	eP	03 36 13
March 3		
SPA	eP	03 48 00
March 3		
BYR	e(P)	04 17 56
SPA	eP	04 18 27
March 3		
SPA	eP	04 33 18
March 3		
BYR	e(P')	05 19 07
March 3		
BYR	eP	11 33 16
SPA	eP	11 32 49
	e	32 56
	e	33 47
March 3		
BYR	e(P)	14 23 58
March 3		
BYR	e(P')	14 34 32
March 3		
BYR	iP	15 47 39
SPA	eP	15 48 32
	e	48 49
	epP	49 04
March 3		
BYR	eP	19 27 56
SPA	iP	19 28 29
March 3		
BYR	e(P)	21 49 15
March 3		
BYR	eP	23 27 37
March 4		
BYR	e(P)	01 16 33
March 4		
BYR	eP'	02 35 16
March 4		
BYR	iP'	04 11 53
	iPP	13 37

Date and Station	Phase	Phase (GCT)
		h m s
SPA	eP'	04 11 46
	e(SKP)	14 16
March 4		
SPA	eP	04 55 51
March 4		
SPA	eP	18 51 26
March 4		
SPA	eP	20 19 15
March 4		
BYR	eP	20 54 45
March 4		
SPA	eP	21 52 38
March 5		
SPA	eP	07 03 25
March 5		
SPA	eP	10 22 30
March 5		
BYR	iP'	11 44 13
	eSKP	47 29
March 5		
BYR	eP	14 02 41
	ePP	06 39
	eSKS	12 53
SPA	eP	14 02 24
	e	02 36
	e	03 18
	e	03 41
	e(S)	12 57
March 5		
SPA	eP	15 32 25
March 5		
BYR	e(P)	16 03 23
SPA	eP	16 03 08
March 5		
BYR	e(P)	21 00 32
SPA	eP	21 01 13
	e	01 31
	ePcP	02 06
March 5		
BYR	e(P)	21 06 07
SPA	e(P)	21 06 40
	e	06 51
March 5		
SPA	eP	21 33 45
March 6		
BYR	eP	02 35 32

Date and Station	Phase	Phase (GCT)
		h m s
SPA	eP	02 35 14
	e	35 19
	e	35 33
March 6		
SPA	eP	03 13 35
March 6		
BYR	eP	04 01 24
March 6		
BYR	eP	10 18 52
March 6		
BYR	eP	11 42 15
March 6		
BYR	eP	12 03 20
March 6		
SPA	eP	15 11 18
March 6		
BYR	eP	15 24 30
March 7		
BYR	eP	00 22 33
March 7		
BYR	iP	05 26 40
SPA	eP	05 26 20
	e	27 09
March 7		
BYR	eP	06 00 45
March 7		
BYR	e(P)	08 06 57
March 7		
BYR	eP	09 50 13
	ePP	53 00
SPA	eP	09 50 22
	e	50 48
	ePP	53 09
March 7		
SPA	eP	10 59 09
March 7		
SPA	eP	18 42 13
March 7		
SPA	eP	20 28 23
March 7		
BYR	eP	23 15 27
March 8		
SPA	eP	07 06 09
March 8		
SPA	eP	09 52 02
March 8		
BYR	eP	11 55 55
	e	58 23
	eS	12 00 01

Date and Station	Phase	Phase (GCT)
		h m s
SPA	eP	11 56 29
	e	56 38
March 8		
BYR	eP	14 49 30
SPA	eP	14 50 03
March 8		
BYR	iP	16 44 28
	epP	45 23
	ePP	46 46
	ePPP	48 48
	e	50 47
	eS	53 17
	esS	54 38
	eL	56 34
	i(P'P')	17 12 26
	e	14 25
	eSKPP'	15 41
SPA	iP	16 44 45
	ePP	47 52
	ePPP	49 00
	e	50 50
	e	52 08
	e	52 27
	eS	53 53
	epS	54 50
	e	17 09 50
	e	10 37
	e	12 01
	eP'P'	12 15
	e	12 22
March 8		
SPA	iP	19 38 16
March 9		
SPA	e(P)	12 10 19
March 9		
SPA	eP	13 42 34
March 9		
SPA	eP	14 49 54
	e	50 03
March 9		
BYR	eP	19 56 15
SPA	eP	19 56 20
	e	56 29
	e	56 37
March 9		
SPA	eP	21 33 35
March 9		
BYR	eP	22 18 17
SPA	eP	22 17 03
March 10		
	iP	00 05 09
	ipP	05 34

B-4297-4

Date and Station	Phase (GCT)
	h m s
SPA eP	00 05 49
epP	06 19
esP	06 39
ePP	08 37
epPP	09 07
March 10	
BYR eP'	00 44 00
ePP	46 37
SPA ePP	00 46 30
e	47 08
e(SKP)	47 35
March 10	
SPA eP	00 47 49
March 10	
BYR eP	05 09 06
SPA iP	05 09 37
ePcP	10 03
March 10	
SPA eP	05 58 50
March 10	
SPA eP	07 14 40
March 10	
SPA eP	07 43 49
March 10	
BYR eP	09 57 00
SPA eP	09 57 08
e	57 16
e	57 25
March 10	
BYR eP	10 45 56
March 10	
SPA eP	12 02 35
March 10	
BYR iP	13 55 34
SPA iP	13 56 08
e	56 14
ePcP	56 40
March 10	
BYR eP'	14 51 51
eSKP	55 11
SPA eSKP	14 55 14
March 10	
BYR e(P)	19 30 03
March 11	
BYR eP	00 18 28
March 11	
BYR e(P)	00 36 31
March 11	
BYR e(P)	01 48 38

Date and Station	Phase (GCT)
March 11	h m s
BYR eP	01 58 15
March 11	
BYR e(P)	10 24 18
March 11	
SPA eP	10 32 27
March 11	
BYR i(P)	11 36 17
March 11	
BYR eP	11 57 53
March 11	
BYR e(P)	15 21 32
March 11	
SPA eP	21 19 20
March 11	
SPA eP	22 36 47
e	37 07
March 12	
BYR e(P)	01 39 59
SPA eP	01 40 29
March 12	
BYR eP	02 27 25
e	28 11
March 12	
SPA eP	06 19 13
e	19 23
March 12	
BYR eP	12 16 12
March 12	
BYR iP	13 56 15
SPA iP	13 57 00
e(PcP)	57 59
March 12	
BYR eP	20 43 12
e	44 18
e	44 95
eS	53 38
e	40
e(P'P')	21 07 27
SPA eP	20 43 13
e	43 41
March 12	
BYR eP	23 42 56
March 13	
BYR e(P)	00 33 34
March 13	
BYR eP	00 56 42
March 13	
SPA eP	03 10 40
March 13	
SPA eP	13 31 17

Date and Station	Phase (GCT)
March 13	h m s
BYR e(P)	14 09 30
March 13	
BYR e(P)	16 05 45
March 13	
BYR eP	21 07 42
March 13	
BYR eP	21 57 05
March 14	
BYR eP	00 06 29
March 14	
BYR eP'	01 12 15
March 14	
BYR eP	04 33 34
March 14	
BYR e(P')	05 26 54
March 14	
BYR eP	08 54 37
SPA eP	08 54 54
March 14	
BYR eP	10 09 33
SPA eP	10 09 11
March 14	
BYR eP	11 01 24
SPA eP	11 01 01
March 15	
SPA eP	04 00 42
March 15	
SPA e(P)	06 37 40
March 15	
SPA eP'	09 40 04
e	40 18
e	40 29
e	41 07
e	44 30
March 15	
SPA eP	10 20 14
e	20 28
March 15	
SPA eP	13 00 18
March 15	
BYR eP	19 41 35
March 15	
BYR eP	20 11 07
SPA eP	20 10 38
e	10 51

Date and Station	Phase (GCT)
March 16	h m s
BYR eP	00 39 39
ePP	40 59
SPA eP	00 39 22
e	39 35
e	39 51
e	40 25
e	42 20
March 16	
SPA eP	08 12 27
March 16	
BYR eP	17 50 24
SPA eP	17 50 59
e	50 05
e	50 14
March 16	
BYR eP	19 02 33
March 16	
BYR e(P)	19 25 24
ePcP	26 52
SPA eP	19 25 58
March 16	
BYR eP	21 48 58
e	22 07 39
March 16	
BYR eP	21 53 13
SPA eP	21 53 48
March 16	
BYR e(P)	23 02 35
March 17	
BYR iP	01 31 13
March 17	
BYR eP	11 44 41
SPA eP	11 45 16
e	36
March 17	
BYR e(P)	12 14 05
March 17	
BYR e(P)	12 30 15
e	31 26
March 17	
SPA eP	15 51 12
March 17	
BYR iP	16 57 17
March 17	
BYR e(P')	20 33 20
March 17	
BYR eP	21 50 08

8-4267-4

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

Date and Station	Phase (GCT)
	h m s
March 26	
BYR eP	19 43 44
March 26	
BYR eP	20 37 43
March 27	
BYR eP	04 00 06
eS	09 50
SPA eP	04 00 20
e	00 29
e	00 38
e	00 56
March 27	
BYR eP	09 09 35
e(S)	19 41
SPA eP	09 09 49
e	10 00
e	10 07
e	10 32
e	15 08
March 27	
BYR eP	09 49 15
March 27	
BYR e(P)	12 34 40
March 27	
SPA eP	13 28 29
March 27	
BYR eP	17 34 14
SPA eP	17 34 47
e	34 53
ePcP	35 34
March 27	
BYR eP	19 47 03
SPA eP	19 47 16
e	23
March 27	
BYR iP	23 36 27
epP	37 20
ePP	38 31
SPA iP	23 37 11
e	37 33
e	37 45
e	37 55
epP	38 10
e(PcP)	38 31
e	39 11
e(PP)	39 21
eScP	41 50
eS	44 13
e(sS)	46 27
March 28	
BYR eP	00 26 37
e(P')	31 05

Date and Station	Phase (GCT)
	h m s
SPA e(P')	00 30 50
e	31 26
e	32 05
March 28	
BYR eP	06 47 36
SPA eP	06 47 53
e	47 57
e	48 21
March 28	
BYR e(P)	06 51 16
March 28	
BYR e(P)	06 54 24
SPA eP	06 54 38
e	54 44
e	54 58
March 28	
BYR e(P)	07 57 47
March 28	
BYR eP	08 07 37
March 28	
BYR eP	09 57 51
March 28	
SPA iP	12 48 50
e	49 06
ePcP	49 16
e	49 54
March 28	
BYR iP	13 03 17
March 28	
BYR eP'	21 08 22
March 29	
BYR eP	00 19 55
SPA iP	00 20 30
e	20 38
e	20 58
March 29	
BYR eP	06 24 00
e	24 48
e	25 31
e	27 18
e	28 36
SPA eP	06 25 33
March 29	
BYR iP	06 42 14
ePP	44 42
SPA eP	06 42 30
e	42 33
e	43 22
ePP	45 12
eS	52 01

Date and Station	Phase (GCT)
	h m s
March 29	
BYR iP	08 18 26
e	18 41
e	20 22
e	23 00
SPA eP	08 19 50
March 29	
BYR e(P)	14 36 46
SPA eP	14 37 01
e	37 18
March 29	
BYR eP	15 42 58
March 29	
BYR e(P)	18 18 59
SPA eP	18 19 33
March 29	
BYR eP	22 22 56
SPA eP	22 22 52
eS	23 03
e	15
March 30	
BYR e(P)	03 01 24
March 30	
BYR eP	09 49 27
March 30	
BYR eP	09 51 57
March 30	
BYR eP	10 04 01
March 30	
BYR eP	11 01 23
March 30	
BYR e(P)	14 25 00
March 30	
BYR eP	15 30 07
March 31	
BYR eP'	00 58 03
March 31	
BYR e(P')	03 21 21
March 31	
BYR e(P)	03 42 27
March 31	
BYR eP	03 51 20
March 31	
BYR eP	04 26 29
March 31	
BYR eP	15 16 28
March 31	
BYR e(P)	18 20 30
March 31	
BYR e(P')	21 51 56

Date and Station	Phase (GCT)
	h m s

8-4297-4