JUNE-SEPT 65

DAVAO STATION

QUARTERLY SEISMOLOGICAL BULLETIN

MANILA OBSERVATORY

PHILIPPINES

DAVAO SEISMIC STATION

Davao, Philippines

Latitude	7° 8' 12'' N
Longitude	125° 36' 59'' E
Elevation	250 ft.

Instruments: World-wide standardized seismographs (USCGS)

S. P.: Benioffs (designated as N, E, Z)

T_o - 1.0 sec.

T_g - 0.75 sec.

Magnification: usually 6,250

L. P.: Sprengnethers (designated as N', E', Z')

T_o - 15 secs.

T_g - 100 secs.

Magnification: usually 3,000

Date	Phase	Comp.	Time (GCT)	Distance, etc.
01 JUN				
(1)	iP	NEZ	02 35 36.9	D= 550 km
	iS	NEZ	36 32.1	
	LR	N'E'Z'	37 18.0	
(2)	iP	NEZ	04 39 34.2	D* 3600 km
	e(S)	N'E'Z'	44 30.0	20.2 N
	LQ	N'E'	47 32.0	94.9 E (CGS)
	LR	N'E'Z'	50 22.0	
(3)	eP	NEZ	08 00 50.0	D* 5000 km
	e(S)	N'E'Z'	07 29.0	28.5 N
	LR	N'E'Z'	11 00.0	83.2 E
(4)	iP	NEZ	09 13 44.8	
(5)	iP	NEZ	10 10 34.8	D* 560 km
	iS	NEZ	11 34.5	
	LQ	N'E'	12 17.0	
(6)	iP	NEZ	13 09 47.0	
(6 a)	e(S)	N'E'Z'	16 24.0	
	LQ	N'E'	17 57.0	
	LR	N'E'Z'	19 28.0	
(7)	eP	NEZ	15 43 09.3	
(8)	eX	N'E'Z'	15 50 46.0	
(9)	iP	NEZ	17 48 57.0	
(10)	i(P)	NEZ	17 50 11.5	
	iS	NEZ	50 44.0	
(11)	e(P)	N'E'Z'	18 35 30.0	
	LQ	N'E'	53 21.0	
	LR	N'E'Z'	19 01 06.0	
(12)	iP	NEZ	20 21 42.0	
	i(S)	NEZ	21 49.0	
(13)	eX	N'E'Z'	21 11 14.0	
(14)	iP	NEZ	21 41 36.5	
(15)	e(P)	NEZ	21 49 34.0	
(16)	iP	NEZ	22 21 57.6	D* 480 km
	iS	NEZ	22 48.0	
(17)	e(P)	NEZ	22 45 54.5	

Date	Phase	Comp.	Time (GCT)			Distance, etc.
02 JUN						
(1)	eP	NEZ	02	31	42.0	
(2)	eP	NEZ	04	05	30.5	
(3)	LR	N'Z'	04	35	50.0	
(4)	eP	NEZ	05	30	05.0	
	e(S)	N'Z'		33	32.0	
(5)	iP	NEZ	06	04	40.5	D $\overset{*}{=}$ 360 km
	iS	NEZ		05	19.4	
(6)	iP	NEZ	06	21	14.0	D $\overset{*}{=}$ 200 km
	iS	NEZ		21	36.3	
(7)	iP	NEZ	10	01	50.0	D $\overset{*}{=}$ 110 km
	iS	NEZ		02	03.4	
(8)	iP	NEZ	14	55	05.0	
	e(S)	N'Z'		57	20.0	
	LR	N'Z'	15	03	00.0	
(9)	eP	NEZ	15	02	32.4	
(10)	iP	NEZ	15	07	40.7	
(11)	eP	NEZ	18	05	13.8	D $\overset{*}{=}$ 230 km
	iS	NEZ		05	39.0	
(12)	eP	NEZ	18	30	14.0	
(13)	iP	E	18	37	55.4	
	eP	NZ	18	37	55.4	
(14)	eX	N'Z'	20	31	47.0	
	LR	N'Z'		33	21.0	
(15)	iP	NEZ	22	24	43.7	
(16)	iP	Z	22	54	07.2	D $\overset{*}{=}$ 60 km
	eP	NE		54	07.2	
	iS	NEZ		54	14.9	
(17)	iP	NEZ	22	56	07.4	D $\overset{*}{=}$ 25 km
	iS	NEZ		56	12.0	
(18)	eP	NEZ	23	36	40.3	
03 JUN						
(1)	eX	Z'	00	00	18.0	
	LR	N'Z'		01	10.0	

Date	Phase	Comp.	Time (GCT)	Distance, etc.
03 JUN				
(2)	eP	N'E'Z'	04 52 10.0	
	LQ	N'E'	59 57.0	
	LR	N'E'Z'	05 07 21.0	
(3)	iP	Z	05 24 16.9	D ± 630 km
	iS	N'E'Z'	25 22.0	
(4)	e(P)	N'E'Z'	08 02 31.0	
	LQ	N'E'	09 05.0	
	LR	N'E'Z'	12 30.0	
(5)	iP	Z	10 16 45.0	D ± 200 km
	iS	E'	17 07.0	
	eS	N'Z'	17 07.0	
(6)	iP	Z	11 17 06.2	D ± 70 km
	iS	Z	17 14.9	
(7)	LR	N'E'Z'	12 14 09.0	
(8)	eX	E'	17 14 18.0	
(9)	iP	Z	18 21 41.3	D ± 210 km
	IS	Z	22 04.5	
(10)	i(P)	Z	20 04 44.7	
	eS	N'E'Z'	05 14.0	
04 JUN				
(1)	eX	N'E'	00 10 57.0	
(2)	eP	Z'	13 36 15.0	D ± 2700 km
	eS	Z'	40 48.4	18.0 N
	LQ	N'	41 18.0	146.5 E (CGS)
	LR	E'Z'	42 23.0	
(3)	eP	Z'	15 12 54.0	D ± 6900 km
	esS	N'	21 30.8	51.1 N
	esSS	N'	25 19.5	178.5 E (CGS)
	LR	N'E'Z'	27 57.0	
(4)	iP	Z	17 58 53.2	
05 JUN				
(1)	iP	Z	01 53 41.5	
	i(S)	Z	54 02.0	
	iX	Z	54 11.5	
(2)	eP	Z'	03 51 11.0	D ± 1300 km
	eS	Z'	53 53.0	1.6 S
	LR	N'E'Z'	54 41.0	126.7 E (CGS)

Date	Phase	Comp.	Time (GCT)	Distance, etc.
05 JUN				
(3)	LQ	N'	06 56 25.0	
	LR	N'E'Z'	57 18.0	
(4)	eX	Z'	13 04 47.0	
(5)	eX	Z'	13 24 07.0	
(6)	i(P)	Z	13 38 16.2	
	eS	Z'	40 48.0	
	LR	N'E'Z'	41 38.0	
(7)	ePcP	Z'	14 13 52.0	
	eS	N'	16 48.0	
	LQ	E'	18 03.0	
	LR	N'Z'	19 30.0	
06 JUN				
(1)	LR	Z'	11 30 44.0	
(2)	iP	Z	11 37 20.5	D $\stackrel{*}{=}$ 620 km
	iS	Z	38 24.5	
(3)	iPn	Z	12 14 29.0	
	i(P*)	Z	14 37.5	
	i(Pg)	Z	14 47.0	
(4)	LR	N'Z'	14 31 28.0	
(5)	eX	N'Z'	15 42 16.9	
(6)	eX	Z'	16 07 36.9	
	LR	Z'	08 54.9	
07 JUN				
(1)	LR	N'E'Z'	06 56 29.9	
(2)	LR	N'E'Z'	13 44 31.9	
(3)	iP	Z	13 59 49.9	D $\stackrel{*}{=}$ 350 km
	iS	Z	14 00 27.4	
(4)	iP	Z	20 15 12.5	
	iX	Z	16 07.8	
08 JUN				
(1)	iP	NEZ	04 07 18.0	D $\stackrel{*}{=}$ 185. km
	iS	NEZ	07 38.6	
(2)	i P	NE	05 11 17.5	D $\stackrel{*}{=}$ 140. km
	i S	NE	11 33.8	

		Comp.	Time (GCT)			Distance, etc.
08 JUN						
(3)	i(P)	E	07	12	46.5	
	iX	E		12	48.5	
(4)	iP	EZ	07	29	57.0	
(5)	iP	EZ	07	46	12.0	
	iS	EZ		46	15.7	
(6)	e(PcP)	N'E'Z'	12	19	11.0	D $\overset{*}{=}$ 7800 km
	ePP	N'E'Z'		20	05.0	
	ePPP	N'E'Z'		21	40.0	
	e(ScS)	N'E'Z'		28	18.0	
	e(SS)	N'E'Z'		32	08.0	
	eSSS	N'E'Z'		34	09.0	
	LQ	N'E'		35	32.0	
	LR	N'E'Z'		38	06.0	
(7)	iP	NEZ	12	59	43.8	D $\overset{*}{=}$ 190 km
	iS	NEZ	13	00	04.9	
(8)	LR	N'E'Z'	14	34	17.0	
(9)	eP	NEZ	20	05	40.5	D $\overset{*}{=}$ 370 km
	iS	NEZ		06	19.0	
(10)	eX	N'E'	20	07	06.0	
(11)	eP	NEZ	20	12	30.0	D $\overset{*}{=}$ 340 km
	iS	NEZ		13	06.2	
09 JUN						
(1)	i P	NEZ	08	19	57.0	D $\overset{*}{=}$ 90 km
	i S	NEZ		20	07.5	
(2)	e P	NE	11	19	40.8	D $\overset{*}{=}$ 100 km
	iS	NE		19	53.0	
(3)	eP	NEZ	18	38	59.5	D $\overset{*}{=}$ 160 km
	iS	NEZ		39	17.2	

Date	Phase	Comp.	Time (GCT)			Distance, etc.
09 JUN						
(4)	eP	Z	19	08	35.5	D ± 1700 km
	eX	N'E'Z'		09	06.0	8.6 S
	eX	N'E'Z'		10	05.0	127.3 E (CGS)
	eSS	N'E'		13	57.0	
	eX	N'E'Z'		14	55.0	
	LQ	N'		16	07.0	
	LR	E'Z'		17	27.0	
(5)	eP	NEZ	20	44	04.9	D ± 310 km
	iX	N'E'		44	30.0	
	iS	N'E'Z'		44	38.0	
(6)	e P	NEZ	12	52	08.5	D ± 80 km
	iS	NE		52	18.5	
10 JUN						
(1)	iP	Z	15	18	08.6	D ± 600 km
	eP	NE		18	08.6	1.9 N
						126.6 E (CGS)
	eS	N'E'		19	04.0	
(2)	iP	Z	17	16	01.8	D ± 110 km
	eP	NE		16	01.8	
	iS	NEZ		16	14.5	
(3)	eP	NEZ	18	11	08.3	D ± 100 km
	iS	NEZ		11	20.0	
11 JUN						
(1)	LR	N'E'Z'	00	41	48.0	
(2)	eP	NEZ	03	41	37.5	D ± 4700 km
	iS	N'E'Z'		48	10.0	44.7 N
	LQ	N'		50	15.0	148.7 E
	LR1	N'Z'		51	25.0	
	LR2	N'E'Z'	04	43	40.0	
	LR3	N'E'Z'	05	00	40.0	
(3)	eP	NEZ	09	44	50.0	D ± 110 km
	iS	NEZ		45	03.0	
(4)	eP	NEZ	11	47	56.5	
(5)	iP	Z	14	55	41.7	D ± 210 km
	eP	NE		55	41.7	
	iS	NEZ		56	04.9	

Date	Phase	Comp.	Time (GCT)			Distance, etc.
11 JUN						
(6)	i(P)	NEZ	15	36	14.4	
12 (1)	iP	Z	01	03	09.9	
	eP	NE		03	09.9	
	e(S)	N'E'Z'		04	38.0	
(2)	LQ	N'	03	47	00.0	
	LR	N'Z'		53	13.0	
(3)	iP	Z	08	42	03.4	D ± 280 km
	eP	NE		42	03.4	
	iS	NEZ		42	33.5	
(4)	eP	NEZ	09	43	09.4	D ± 380 km
	iS	NEZ		43	49.5	
(5)	eP	NEZ	10	49	18.4	
(6)	eP	NEZ	11	40	01.9	D ± 540 km
	iS	NEZ		40	57.5	
(7)	eP	NEZ	18	00	05.7	D ± 2700 km
	iS	N'E'Z'		04	38.0	6.3 S
	LQ	N'E'		05	25.0	105.8 E
(8)	e P	N'E'Z'	19	00	13.0	D ± 2050 km
	iS	E'		03	20.0	
	eS	N'Z'		03	20.0	
	LQ	N'		03	35.0	
(9)	eX	N'E'	22	31	24.0	
	e(S)	N'E'Z'		34	37.0	
	LQ	N'E'		39	29.0	
	LR	N'E'Z'		41	56.0	
13 JUN						
(1)	e(P)	NEZ	04	29	05.0	
(2)	i P	Z	07	13	31.5	
	e P	NE		13	31.5	41.9 N
	eS	NEZ		19	21.9	143.4 E
	LQ	N'		22	53.0	D ± 4250 km
(3)	e(P)	NEZ	11	04	38.9	
(4)	eP	NEZ	13	14	44.9	D ± 380 km
	iS	NEZ		15	24.5	

Date	Phase	Comp.	Time (GCT)	Distance, etc.
13 JUN (5)	e(P)	NEZ	13 40 29.3	
(6)	LQ	E'	17 36 07.0	
	LR	N'E'Z'	37 32.0	
(7)	e(P)	NEZ	18 00 15.5	
(8)	LQ	N'E'	20 46 48.0	
	LR	N'E'Z'	52 09.0	
14 JUN (1)	LR	N'E'Z'	01 29 00.0	
(2)	eP	NEZ	01 39 34.4	D $\stackrel{*}{=}$ 170 km
	iS	NEZ	39 53.4	
(3)	iP	NZ	01 57 06.0	
	eP	E	57 06.0	
(4)	iP	NZ	05 45 20.2	D $\stackrel{*}{=}$ 220 km
	eP	E	45 20.2	
	iS	NE	45 44.3	
(5)	LQ	N'	06 17 00.0	
	LR	N'Z'	17 56.0	
(6)	eX	N'E'Z'	07 53 56.0	
	LQ	E'	08 06 40.0	
	LR	N'E'Z'	07 52.0	
(7)	iP	NEZ	09 52 08.2	D $\stackrel{*}{=}$ 60 km
	iS	NE	52 16.4	
(8)	LR	N'E'Z'	10 23 42.0	
(9)	eP	NEZ	12 18 18.4	
	iS	NE	18 36.9	
	eS	Z	18 36.9	
15 JUN (1)	eX	Z'	03 38 10.0	
(2)	eX	Z'	05 04 50.0	
(3)	eX	Z'	05 09 14.0	
	(LR)	Z'	16 17.0	

Date	Phase	Comp.	Time (GCT)	Distance, etc.
15 JUN				
(4)	e(P)	NEZ	07 15 40.5	
(5)	eX	N'E'	08 18 26.0	
	eLR	N'E'Z'	08 21 10.0	
(6)	eP	NEZ	09 30 15.9	D $\stackrel{*}{=}$ 180 km
	eS	NEZ	09 30 36.0	
(7)	eP	NEZ	17 54 52.5	D $\stackrel{*}{=}$ 20 km
	iS	NEZ	17 54 57.0	
(8)	iX	NEZ	20 56 19.4	
(9)	eP	N'E'Z'	23 20 03.0	D $\stackrel{*}{=}$ 6250 km
	e(PP)	N'E'Z'	23 22 40.0	20.9 S
	ePPP	N'E'Z'	23 23 13.0	173.7 E
	eS	N'E'Z'	23 27 44.0	
	eScS	E'Z'	23 29 40.0	
	LQ	N'E'	23 33 28.0	
	(LR)	N'E'Z'	23 36 35.0	
16 JUN				
(1)	LR	N'E'Z'	04 52 00.0	
(2)	iP	Z	05 22 09.6	D $\stackrel{*}{=}$ 240km
	eP	NE	05 22 09.6	
	iS	EZ	05 22 35.5	
(3)	eP	NEZ	05 39 41.0	D $\stackrel{*}{=}$ 160 km
	iS	NEZ	05 39 58.9	
(4)	eP	N'E'Z'	10 16 26.0	
	e(S)	N'E'Z'	10 18 25.5	
17 JUN				
(1)	e(P)	NEZ	03 09 26.7	
	e(S)	N'E'Z'	03 11 04.0	
(2)	e P	NEZ	06 27 48.0	D $\stackrel{*}{=}$ 150 km.
	iS	NE	06 28 04.5	
(3)	iS	NEZ	09 22 08.0	
(4)	i(P)	Z	09 58 12.0	

Date	Phase	Comp.	Time (GCT)	Distance, etc.
17 JUN				
(4)	e(P)	NE	09 58 12.0	
	eS	N'E'	09 59 10.0	
	LR	E'Z'	09 59 21.0	
(5)	e P	NEZ	10 47 40.5	D $\overset{*}{=}$ 1950 km
	eS	N'Z'	10 50 49.0	23.9 N
	LR	N'E'Z	10 52 05.0	123.3 E
(6)	LR	N'Z'	13 20 10.0	
(7)	eP	EZ	19 34 14.5	
	LQ	N'E'	19 37 08.0	
(8)	e(ScSScS)	E'Z'	20 32 55.0	
	LQ	N'E'	20 34 16.0	
	LR	N'E'Z'	20 38 15.0	
18 JUN				
(1)	i(P)	NEZ	01 16 05.0	
(2)	LR	E'Z'	08 35 50.0	
(3)	i(P)	NEZ	10 25 49.5	
(4)	e(P)	NEZ	10 30 32.0	
(5)	eX	N'E'Z'	23 05 07.0	
19 JUN				
(1)	eP	NEZ	17 01 40.9	D $\overset{*}{=}$ 80 km
	iS	NE	17 01 50.6	
	eS	Z	17 01 50.6	
(2)	eP	NEZ	17 43 55.4	D $\overset{*}{=}$ 500 km
	iS	NEZ	17 44 47.4	
(3)	eS	N'E'Z'	19 52 15.0	
	LQ	E'	19 52 42.0	
	LR	N'E'Z'	19 53 25.0	
20 JUN				
(1)	iP	NEZ	07 54 33.0	D $\overset{*}{=}$ 400 km
				10.4 N
				126.1 E
	i S	NEZ	07 44.5	

Date	Phase	Comp.	Time (GCT)	Distance, etc.
20 JUN				
(2)	e(P)	N'E'Z'	12 43 14.0	
	eS	N'E'Z'	12 46 06.0	
(3)	eP	NEZ	14 55 40.6	D $\overset{*}{=}$ 560 km
	iS	NEZ	14 56 39.1	
(4)	eP	NEZ	16 51 35.3	D $\overset{*}{=}$ 360 km
	iS	NEZ	16 52 13.1	
(5)	eP	Z	18 03 24.5	D $\overset{*}{=}$ 310 km
	eS	NEZ	18 03 57.1	
(6)	e P	EZ	20 42 36.6	D $\overset{*}{=}$ 310 km
	iS	NEZ	20 43 09.1	
(7)	e(P)	N'E'	23 38 15.0	
	eS	N'E'	23 29 40.0	
	LQ	N'E'	23 30 05.0	
21 JUN				
(1)	eX	N'E'	02 21 27.0	-
(2)	e(P)	NEZ	02 33 50.0	
	eS	E'Z'	02 34 50.0	
	LQ	N'E'	02 35 12.0	
(3)	e(P)	NZ	02 41 54.0	
	iS	NE	02 42 26.5	
(4)	i(S)	NEZ	05 07 27.5	
(5)	iP	EZ	15 38 32.7	D $\overset{*}{=}$ 340 km
	iS	NE	15 39 09.1	
(6)	iP	EZ	20 46 35.2	D $\overset{*}{=}$ 170 km
	iS	NEZ	20 46 54.6	
(7)	e(P)	NEZ	22 05 49.6	
	eS	N'E'Z'	22 06 20.0	

Date	Phase	Comp.	Time (GST)	Distance. etc.
21 JUN (8)	iP	Z	23 43 16.2	D $\overset{*}{=}$ 220 km
	iS	N'E'Z'	23 43 40.0	
22 JUN (1)	eX	NEZ	01 50 49.0	
(2)	iP	Z	04 21 30.9	D $\overset{*}{=}$ 750 km
	iS	N'E'Z'	04 22 50.0	0.6 N
	LR	N'E'Z'	04 23 40.0	125.4 E (CGS)
(3)	eP	NEZ	05 48 05.9	D $\overset{*}{=}$ 160 km
	iS	NE	05 48 23.5	
(4)	eSSS	N'E'	13 33 17.0	
	eScSScS	N'E'Z'	13 35 51.0	
	LQ	N'E'	13 36 27.0	
	LR	N'E'Z'	13 41 00.0	
(5)	iP	NEZ	18 55 48.7	D $\overset{*}{=}$ 160 km
	iS	NEZ	18 56 06.5	
(6)	iS	NEZ	19 59 35.6	
(7)	eP	N'E'Z'	21 17 22.0	D $\overset{*}{=}$ 1900 km
	eS	N'E'	21 20 51.0	2.3 S
	LQ	E'	21 21 40.0	138.5 E
	LR	N'E'Z'	21 23 47.0	
(8)	iP	EZ	23 48 40.7	D $\overset{*}{=}$ 320 km
	eP	N	23 48 40.7	7.1 N
				123.5 E (CGS)
23 JUN (1)	eP	NEZ	02 44 09.0	D $\overset{*}{=}$ 190 km
	iS	NEZ	02 44 30.3	
(2)	iP	Z	06 02 01.3	D $\overset{*}{=}$ 150 km
	eP	NE	06 02 01.3	
	eS	NEZ	06 02 18.5	
(3)	iP	EZ	11 21 22.6	D $\overset{*}{=}$ 8900 km
	eP	N	11 21 22.6	56.6 N
	eS	N'E'Z'	11 31 25.0	152.9 W (CGS)
	ePPS	N'Z'	11 32 41.0	
	eSS	N'E'Z'	11 36 32.0	
	eSSS	N'E'	11 40 26.0	
	LQ	N'E'	11 42 30.0	
	LR	N'E'Z'	11 45 30.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
23 JUN				
(4)	e(P)	NEZ	11 28 07.0	
(5)	iP	EZ	12 02 11.4	
	eP	N	12 02 11.4	
	iS	NEZ	12 03 05.1	520
(6)	e(P)	NEZ	12 17 49.3	
	iS	NEZ	12 18 39.0	
(7)	e(P)	NEZ	13 27 50.1	
	eS	NEZ	13 28 05.6	
(8)	iS	NEZ	13 39 02.5	
(9)	iS	NEZ	15 19 43.1	
(10)	eP	NEZ	16 12 31.1	1650
	eS	N'E'Z'	16 16 07.0	4.1 S
	LR	N'E'Z'	16 17 36.0	135.3 E (CGS)
(11)	e(P)	NEZ	16 29 49.6	
(12)	e(P)	NEZ	16 38 00.0	
	iS	NEZ	16 38 26.0	
(13)	e(P)	EZ	16 48 33.1	
	iS	NEZ	16 49 41.6	
24 JUN				
(1)	eX	N'E'Z'	05 01 29.0	
(2)	eP	NEZ	07 34 13.6	
	iS	NEZ	07 34 33.1	180
(3)	iP	EZ	07 45 27.6	90
	eP	N	07 45 27.6	7.0 N
				126.2 E (CGS)
(4)	iP	Z	08 42 50.1	
	eP	NE	08 42 50.1	
	iS	NEZ	08 42 58.6	70
(5)	eP	NEZ	13 51 26.6	
	iS	NEZ	13 52 10.1	420
	LR	N'E'Z'	13 53 16.0	
(6)	LR	N'E'Z'	14 56 18.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
24 JUN				
(7)	e P	NE	23 12 05.2	1600
	eS	N'E'Z'	23 15 08.0	20.1 N
	LR	N'Z'	23 16 22.0	120.8 E (CGS)
25 JUN				
(1)	iP	NE	01 30 29.0	
(2)	iP	NEZZ'	06 29 12.0	230
	iS	NE	06 29 37.2	
(3)	iP	NE	07 10 50.0	
(4)	iP	NE	08 27 24.4	580
	iS	Z'NE	08 28 24.0	
(5)	iP	NE	08 35 59.2	
(6)	iP	NE	08 57 42.5	
(7)	iP	NEZ	12 44 44.3	440
	eX	N	12 45 16.0	
	eS	Z'	12 45 30.5	
(8)	iP	NEZN'Z'	12 51 10.0	300
	iS	Z'	12 51 58.0	9.6 N
				126.3 E (CGS)
(9)	i(P)	NE	13 42 59.0	
(10)	iP	NEZZ'	14 15 30.5	300
	eS	Z'	14 16 02.0	
(11)	eP	E	15 18 32.8	
(12)	iS	NE	15 56 18.5	
(13)	eP	Z	19 37 30.2	
(14)	iP	NEZ	20 05 22.5	80
	iS	NE	20 05 32.0	
(15)	iP	NEZ	20 12 35.4	20
	iS	NEZ	20 12 40.5	
26 JUN				
(1)	iP	NE	03 02 29.0	
(2)	i(P)	E	03 06 04.7	
(3)	iP	NE	11 13 14.0	
(4)	iP	NE	12 47 52.1	
(5)	iP	N	12 57 26.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
26 JUN				
(6)	iP	EZ	16 30 25.7	580
	eS	Z'	16 31 26.0	
(7)	e(S)	E'Z'	16 47 12.0	
	LR	Z'	16 48 38.0	
(8)	iP	NZ	17 07 32.8	
	i(S)	NE	17 07 58.5	
	eX	E'	17 08 07.0	
(9)	iP	Z	18 52 31.0	
(10)	i(S)	NE	19 03 11.0	
(11)	eP	Z'	20 34 51.9	1700
	eS	Z'	20 37 43.0	
	LQ	N'E'	20 37 53.0	
	LR	Z'	20 38 39.0	
(12)	iP	NEZN'E'Z'	21 37 58.0	100
	iS	E'	21 38 09.8	
(13)	iP	NE	21 46 35.4	
(14)	iP	N	21 49 55.0	
27 JUN				
(1)	(PcP)	Z'	01 05 50.0	
	S	N'Z'	01 11 55.0	
	SS	Z'	01 15 27.0	
	LR	Z'	01 19 38.0	
(2)	iP	E	01 45 37.7	
(3)	iP	NE	01 57 50.4	
(4)	iP	NEZ	03 55 25.7	500
	eS	N'	03 56 15.0	2.6 N 127.8 E (CGS)
(5)	iP	E	04 46 19.0	20
	iS	NE	04 46 24.0	
(6)	iP	NEZZ'	06 04 49.0	
	i(S)	E'	06 05 10.0	
(7)	eX	E'	06 30 52.5	
(8)	iP	NE	06 30 56.0	
(9)	iP	NE	07 21 13.5	
(10)	iP	E	08 20 28.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
27 JUN (11)	i(P)	E	10 12 30.0	
	iS	ne	10 12 39.0	
(12)	iP	E	10 39 34.5	120
	iS	NEN'	10 39 48.0	
(13)	iP	E	10 47 07.7	850
	eS	E'	10 48 35.0	
	LR	Z'	10 48 47.0	
(14)	eP	Z'	11 02 18.0	1450
	eS	E'	11 04 42.0	
	(LR)	Z'E'	11 05 04.0	
(15)	eP	Z'	11 40 09.0	
	iS	E'	11 43 24.0	1900
	(LR)	Z'	11 44 47.0	23.8 N 121.5 E (CGS)
(16)	iX	E	16 27 04.9	
(17)	iP	E	16 46 35.1	
(18)	iP	EZZ'	17 35 58.0	300
	iS	Z'	17 36 26.0	4.9 N 127.5 E (CGS)
(19)	eX	N'E'Z'	19 53 26.0	
(20)	iP	Z	22 01 26.1	90
	iS	NEZ'	22 01 37.1	
28 JUN (1)	iP	NEZN'E'Z'	01 25 21.0	
	i(S)	Z'	01 25 36.0	
(2)	iP	NZ'	01 38 13.0	120
	iS	NE	01 38 27.0	
(3)	iP	NE	02 14 29.4	
	eS	N'E	02 14 43.0	120
(4)	iP	NE	02 17 32.7	
(5)	iP	E	02 32 37.8	
(6)	eX	E	02 48 26.7	
(7)	iP	NE	03 34 14.5	
(8)	iP	EZ'	03 39 49.5	
	iS	N'Z'	03 44 53.0	3400
	LQ	N'E'	03 46 38.0	5.1 S 153.0 E (CGS)
	LR	N'E'Z'	03 47 51.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
28 JUN				
(9)	eP	NE	03 50 25.2	
(10)	iP	NE	05 03 19.3	
(11)	iP	NE	06 18 46.8	
(12)	iP	NE	10 17 36.5	
	iS	NE	10 17 48.5	100
(13)	iP	NE	11 27 53.0	
	eS	N'	11 28 06.0	110
(14)	iP	N	14 51 51.5	
(15)	eP	Z'	15 48 50.5	
	eS	E'	15 52 04.0	1900
	(ScP)	Z'	16 55 29.6	23.9 N 121.6 E (CGS)
(16)	iP	E	18 38 40.0	
	iS	NE	18 38 44.7	20
(17)	iS	N	19 46 14.2	
(18)	eP	N'	19 57 06.3	
	iP	N	19 57 06.3	
(19)	iP	NE	22 00 55.5	
(20)	iP	E	23 06 44.8	
	eS	N'E'	23 06 57.0	100
(21)	iP	EZ	24 09 29.0	
	iS	ZZ'	24 09 50.0	190
29 JUN				
(1)	eP	Z'	02 12 16.2	
	eS	Z'	02 20 43.2	7000
	ScS	N'	02 22 17.2	
	LR	Z'	02 29 32.2	
(2)	iP	N,	01 56 30.7	
(3)	iP	NE	04 00 57.8	
(4)	iP	NE	06 17 43.7	
(5)	iP	E	08 32 54.8	
(6)	iP	N	09 16 49.7	
(7)	iP	E	10 11 59.7	

Date	Phase	Comp.	Time (GCT)	Distance (km)
29 JUN				
(8)	iP	NE	13 56 52.6	
(9)	eP	NE	15 13 22.6	
(10)	iP	E	15 31 42.1	610
	iS	NE	15 32 45.3	
(11)	iP	E	15 59 55.1	
(12)	iP	Z	16 02 00.1	200
	eS	E'	16 02 22.1	
(13)	iS	NE	16 49 18.1	
(14)	iP	NE	18 11 57.9	
(15)	iP	NE	20 29 02.6	
(16)	i(S)	N	22 43 43.1	
(17)	eP	E	24 03 54.1	
	e(S)	E'	24 04 19.6	
		N'Z'	24 04 29.1	
30 JUN				
(1)	iP	E	16 19 49.5	
(2)	iP	E	19 43 04.0	
	eP	N'	19 43 04.0	
	eS	N'	19 44 15.0	690
(3)	eP	E	19 58 11.8	
	eS	N'E'	19 59 17.5	640
(4)	iP	E	20 17 57.5	
(5)	iP	NEZ	21 08 08.0	
	eS	N'E'	21 08 29.0	190
(6)	iP	NZ	21 17 40.5	180
	iS	E'	21 18 00.0	
(7)	iX	NE	22 26 58.0	
1 JUL				
(1)	iP	NE	06 13 10.4	
(2)	iP	E	06 19 44.0	
	eP	N'	06 19 44.0	
	eS	E'Z'	06 20 34.5	490
	LR	Z'	06 21 17.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
1 JUL				
(3)	iP	E	06 50 19.7	
	iS	NE	06 50 22.9	
(4)	iP	E	07 22 00.0	
	eS	N'E'	07 26 22.0	2700
	LR	Z'	07 27 30.0	18.2 N 146.3 E (CGS)
(5)	iP	NEZZ'	09 17 03.4	
	iS	EN'E'	09 17 25.0	200
(6)	iP	NZ	09 20 56.0	360
	eS	Z'	09 21 34.0	
(7)	iP	NE	17 33 33.6	
(8)	eP	Z'	23 25 33.6	
	eS	E'	23 36 19.3	9950
(9)	iP	NEZN'E'Z'	23 41 57.1	
	LR	Z'	24 03 18.6	
2 JUL				
(1)	iP	NEZ	00 25 50.6	
	iS	E	00 26 14.9	220
(2)	iS	NE	02 40 07.6	
(3)	eX	N'	05 26 33.1	
	eX	N'	05 30 45.1	
(4)	iP	NEZZ'	06 51 54.4	
	iS	EN'	06 52 17.1	210
(5)	iP	NE	08 36 13.8	
(6)	eP	Z'E'	09 45 42.1	
	eX	N'Z'	09 47 24.1	
	eX	N'	09 47 48.1	
(7)	eX	E'	13 31 16.1	
(8)	e(P)	N'	15 01 14.0	
	eX	N'	15 04 25.0	
	LQ	N'	15 06 52.0	
(9)	iP	Z	15 36 19.8	
	iS	E	15 36 20.5	
(10)	iP	EZ	15 37 57.4	
	iS	NE	15 38 18.1	190
(11)	iP	NE	18 03 32.1	

Date	Phase	Comp.	Time (GCT)	Distance (km)
2 JUL (12)	eP	E	20 21 15.0	
(13)	eX	E'	20 38 09.0	
(14)	iP	NE	20 54 28.0	
(15)	iP	NEZN'E'Z'	21 09 54.1	7900
	eS	NN'Z'	21 19 00.1	53.1 N,167.7 W (CGS)
3 JUL (1)	iP	NEZ	06 57 41.2	
	iX	N	06 58 09.0	
	iX	E	06 58 19.8	
(2)	iP	NEZ	11 06 15.0	12000
	iS	E'	11 19 48.3	
	ePS	N'	11 21 29.3	
	LQ	N'	11 38 35.1	
	LR	Z'	11 42 10.1	
(3)	eP	NEZ	12 26 21.1	
(4)	eX	Z'	14 17 49.1	
(5)	iP	NEZ	15 35 41.3	
(6)	iP	NEZ	15 41 59.3	
(7)	iP	NE	16 21 39.0	
(8)	eX	E'	21 07 17.1	
4 JUL (1)	iP	NEZ	08 05 17.9	
(2)	iP	NEZ	09 28 20.6	
(3)	iP	NEZ	10 42 02.5	
(4)	iP	NEZ	11 25 45.5	
(5)	iP	NEZ	11 43 03.4	
(6)	iP	NEZ	13 42 08.8	
(7)	iP	NEZ	14 38 21.0	
(8)	iP	NEZ	14 49 05.5	
	iS	NEZ	14 49 29.0	220
(9)	iP	NEZ	16 07 11.9	
	iS	NEZ	16 07 35.4	220

Date	Phase	Comp.	Time (GCT)			Distance (km)
4 JUL						
(10)	iP	NEZ	18	34	15.2	
(11)	eP	NEZ	19	3[illegible]	24.2	
(12)	eX	NEZ	23	22	44.3	
	LR	Z'	23	23	40.0	
(13)	iP	Z	23	28	37.0	
5 JUL						
(1)	iP	NEZ	01	40	05.0	
	iX	N	01	40	29.0	
(2)	ePKP	E'Z'	05	52	20.8	
	eSS	E'	09	08	26.6	
	(G)	E'	09	21	41.6	
	LQ	E'	09	22	50.0	
	LR	Z'	09	25	00.0	
(3)	iP	NEZ	09	58	04.9	200
	iS	N'	09	58	27.0	
(4)	iP	NEZ	12	48	07.2	
(5)	iP	NEZ	12	50	54.0	
(6)	iP	NEZ	16	22	54.1	
	iX	E	16	23	08.6	
	iX	N	16	23	10.0	
(7)	iP	NEZ	18	28	31.8	
6 JUL						
(1)	iP	NEZ	00	05	49.1	
(2)	iP	Z	01	02	19.0	
	iS	N	01	02	37.2	160
(3)	eP	Z'	03	13	50.4	
(4)	iP	Z	03	50	51.6	
	iS	N	03	51	17.9	240
(5)	iP	Z	04	09	23.6	
(6)	iP	Z	04	34	46.0	
(7)	iP	Z	04	45	19.5	
(8)	iP	Z	04	51	27.0	
(9)	iP	Z	04	56	00.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
6 JUL				
(10)	eP	Z	05 01 32.6	
(11)	iP	Z	05 07 06.9	
(12)	iP	Z	05 15 35.3	
(13)	iP	Z	08 10 03.4	
	iS	Z	08 10 38.2	330
(14)	iP	Z	08 17 29.5	
(15)	iP	Z	13 05 53.4	
	iS	E	13 07 29.5	950
(16)	iP	Z	16 23 58.8	
	iS	Z	16 24 09.2	80
(17)	iP	Z'	18 42 29.0	
	iS	Z'	18 47 01.2	3000
(18)	iP	N	18 52 54.5	
(19)	iP	Z	19 14 09.6	
(20)	iP	E	22 46 53.6	
	iS	E	22 47 16.2	210
7 JUL				
(1)	iP	N	00 37 43.4	
(2)	iP	E	00 54 45.6	
(3)	iP	ZZ'	07 43 36.5	
	iS	N	07 44 01.5	230
(4)	iP	E	08 54 34.2	
(5)	iP	ZZ'	09 10 43.9	
	iS	N	09 11 09.7	240
(6)	iP	E	10 24 21.0	
	iS	E	10 24 25.0	
	e(LR)	Z'	10 25 03.0	
(7)	eP	Z'	12 18 31.0	
	eS	N'	12 26 16.0	6550
	LR	N'Z'	12 36 04.2	49.7 S,117.1 E(CGS)

Date	Phase	Comp.	Time (GCT)	Distance (km)
7 JUL				
(8)	eP	Z'	15 48 02.0	
	eS	Z'	15 56 37.6	7250
	LQ	N'	16 05 00.0	15.0 S, 173.0 W(CGS)
	LR	Z'	16 07 57.6	
(9)	iP	Z	17 16 54.8	
(10)	iP	Z	18 52 48.4	
	LR	Z'	18 53 32.0	
(11)	iP	Z	21 33 10.5	
	iS	E	21 33 21.9	90
(12)	iP	N'Z'	21 45 15.0	
	eS	N'E'	21 51 20.0	4450
(13)	iP	E	22 14 36.2	
	iS	Z	22 15 27.8	500
(14)	eX	N'Z'	22 15 21.0	
(15)	iP	Z	23 05 18.0	
	eS	N'	23 09 46.0	2700
	LQ	N'	23 10 16.0	6.9 S, 105.6 E (CGS)
	LR	Z'	23 12 43.5	
8 JUL				
(1)	iP	Z	02 56 52.6	
	iS	E	02 57 18.2	240
(2)	iP	E	06 32 48.9	
	iS	E	06 33 12.0	210
(3)	eX	N'E'	08 15 18.0	
	eX	N'E'	08 30 30.2	
	LR	Z'	08 37 41.2	
(4)	iP	N	11 25 34.4	
(5)	iP	E	11 58 37.0	
	iS	E	11 59 00.0	210
	(LR)	Z'	11 59 00.0	
(6)	e P	Z'	13 14 07.5	
	eS	E'	13 22 22.4	6600
	LR	Z'	13 32 37.5	15.8 S,179.2 W (CGS)
(7)	iP	E	15 51 51.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
8 JUL				
(8)	eS	N'	16 26 17.2	
	LQ	N'	16 34 17.5	
(9)	iP	E	18 38 16.6	
(10)	iP	Z	21 23 41.4	
	iS	NE	21 23 48.8	50
9 JUL				
(1)	iP	NEZZ'	00 46 41.4	
	eS	N'E'Z'	00 50 49.0	2600
	LR	Z*	00 51 44.0	
(2)	iP	NEZ	04 24 00.1	
(3)	e(S)	N'E'Z'	09 24 55.6	
(4)	iP	NEZN'E'Z	10 30 52.5	
	iS	N'	10 31 01.5	70
(5)	iP	Z	12 55 15.8	235
	iX	E	12 55 29.7	
	iS	Z	12 55 41.0	
(6)	eP	NE	17 20 14.8	
(7)	iP	NEZ	22 54 44.2	
	iS	E	22 54 51.8	60
10 JUL				
(1)	iP	E	01 39 34.5	
(2)	iP	N	01 41 02.1	
	iS	N	01 41 16.2	120
(3)	iP	Z	04 07 05.2	
	iS	N	04 07 23.4	160
(4)	iP	E	12 19 20.4	
(5)	iP	Z	16 36 19.8	
	iS	N	16 36 30.8	90
11 JUL				
(1)	iP	N	07 52 29.8	
(2)	iP	E	10 18 18.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
11 JUL				
(3)	iP	Z	12 17 00.2	
(4)	iP	N	14 11 59.6	
(5)	iP	E	20 32 16.8	85
	iS	E	20 32 26.4	
12 JUL				
(1)	iP	E	10 09 52.4	
(2)	iP	E	13 21 28.2	
(3)	iP	Z	16 04 00.8	450
	iS	E	16 04 50.2	
(4)	iP	N	18 11 05.4	
13 JUL				
(1)	iP	E	03 32 52.2	
(2)	eP	Z'	14 42 21.0	
	eS	N'	14 44 00.0	980
	iX	E	14 45 07.4	
14 JUL				
(1)	(LQ)	N'	01 15 01.0	
(2)	iP	E	08 09 41.6	
(3)	iP	E	09 39 39.6	
	eS	N'	09 40 11.6	300
(4)	iP	Z	10 12 43.4	
	iS	N	10 12 53.0	80
(5)	iP	E	15 34 48.0	
	iS	E	15 35 10.6	210
(6)	iP	Z	18 15 11.6	
	eS	E'	18 16 41.6	860
	LR	Z'	18 16 42.2	0.1 S, 122.8 E (CGS)
(7)	LR	Z'E'	18 31 43.4	
15 JUL				
(1)	(LQ)	N'E'	01 16 24.4	
(2)	iP	Z	04 10 34.2	
	iS	N'	04 11 28.0	520

Date	Phase	Comp.	Time (GCT)	Distance (km)
15 JUL				
(3)	eX	E'	19 41 29.0	waves over a minute in period
(4)	iP	E	11 36 54.6	
(5)	iP	NEZN'E'Z'	18 34 44.2	
(6)	iP	N	20 24 47.8	
(7)	iP	E	22 56 33.4	
(8)	iS	E'	22 58 25.8	
	LQ	E'	22 58 49.8	
(9)	iP	E	23 08 01.2	
16 JUL				
(1)	iP	N	01 24 36.8	510
	iS	E'	01 25 29.8	
	LR	Z'	01 25 49.2	
(2)	iP	E	01 58 12.2	
(3)	eX	N'	06 16 02.0	
(4)	iP	E	08 00 10.6	
(5)	iP	Z	08 14 30.2	
(6)	iP	Z	08 35 37.4	
(7)	iP	E	08 41 31.4	
(8)	eX	E'N'	09 59 54.0	
(9)	iP	Z	11 49 10.4	
(10)	e(S)	N'Z'	13 31 43.2	
	LQ	N'	13 35 44.0	
	LR	Z'	13 39 06.2	
(11)	iP	Z	16 38 08.6	1280
	iS	Z'E'N'	16 40 14.8	
	LR	Z'	16 41 35.0	
(12)	iP	N	17 33 42.6	
(13)	iP	E	21 40 54.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
16 JUL (14)	eP	Z'	22 41 31.0	11.8 S, 166.1 E
	eS	E'	22 48 05.4	5000
	LQ	N'	22 52 18.0	
	LR	Z'	22 54 47.4	
17 JUL (1)	eX	N'	01 39 02.0	
(2)	iP	N	03 10 50.2	
(3)	eP	NEZ'	07 27 49.4	9.7 S, 159.8 E
	eS	Z'	07 33 40.0	4250
(4)	iP	E	13 52 12.0	
(5)	iP	Z'	12 54 16.0	7.2 S, 153.6 E
	iS	N'	12 59 14.4	3550
	LQ	N'	13 01 22.0	
	LR	Z'	13 02 55.4	
(6)	iP	NE	21 47 51.6	
18 JUL (1)	iP	E	04 09 22.6	
(2)	iP	E	05 13 20.2	
(3)	eP	EZZ'	05 36 18.6	2080
	eS	N'	05 39 43.0	
(4)	iP	E	08 19 39.2	
(5)	iP	E	10 48 41.4	
	eS	N'Z'	10 49 20.6	
(6)	iP	Z	13 55 04.4	
	i(S)	Z	13 55 09.6	
(7)	iP	Z	13 58 11.6	33
	iS	Z	13 58 17.6	
(8)	eP	E	18 52 42.0	590
	iS	Z	18 53 43.4	
(9)	iX	E	21 14 02.0	
(10)	iX	E	21 42 33.8	
(11)	(LQ)	N'	22 34 27.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
19 JUL				
(1)	iP	E	00 53 46.8	730
	iS	E	00 55 02.0	
(2)	eP	E	04 13 48.4	170
	iS	N	04 14 07.2	
(3)	eX	N'	05 54 19.4	
	(LR)	Z'	05 57 13.0	
(4)	eX	E	06 22 43.0	
(5)	iP	E	08 20 00.0	
(6)	eX	Z'	09 18 54.8	
	(LQ)	N'	09 26 34.6	
	(LR)	Z'	09 27 27.8	
(7)	iP	N	13 30 46.8	
(8)	iP	N	14 43 06.4	
(9)	e(PPP)	Z'	16 54 19.0	
	eS	Z'	16 58 53.2	
	LQ	N'	17 05 45.0	
	LR	Z'	17 08 05.6	
(10)	iP	ZZ'	20 09 27.6	7.1 N, 126.8 E(CGS)
	iS	N'	20 09 47.6	180
(11)	iP	E	22 02 39.2	
(12)	iP	E	23 53 49.0	
20 JUL				
(1)	iP	E	01 33 03.4	
(2)	iP	E	05 02 43.2	
(3)	iP	NE	06 11 47.2	
(4)	iP	N	07 52 47.6	
(5)	iP	NEZN'E'Z'	13 18 50.8	7.5 N, 124.3 E (CGS)
(6)	iP	N	13 44 56.0	
(7)	iX	Z'	13 48 07.0	
(8)	iP	N	13 51 16.0	
(9)	iP	N	14 03 24.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
20 JUL				
(10)	iP	Z	14 09 46.6	
	i(S)	N	14 10 05.8	
(11)	iP	E	14 15 46.6	
(12)	iP	NE	16 47 05.4	
21 JUL				
(1)	iX	E	00 42 40.8	
(2)	eP	Z'	03 02 08.4	20.8 S, 175.8 W (CGS)
	eS	N'	03 10 50.8	7100
	LQ	N'	03 19 18.4	
	LR	Z'	03 22 48.0	
(3)	iP	E	05 28 38.0	33
	iS	N	05 28 44.2	
(4)	iP	N	06 03 35.4	
(5)	iP	N	06 46 52.0	
(6)	iP	Z	17 27 14.2	290
	iS	E	17 27 44.8	
(7)	eP	Z'	18 02 34.6	53.3 N, 170.4 E (CGS)
	eS	E'Z'	18 10 33.0	6650
	SSS	N'E'Z'	18 17 15.4	
	LR	Z'	18 20 36.6	
(8)	iP	E	18 08 27.0	
(9)	eX	N'E'Z'	21 16 02.0	
	eX	N'	21 16 46.8	
22 JUL				
(1)	eX	N'E'Z'	01 37 02.0	
(2)	iP	E	06 58 28.6	
(3)	iP	Z	09 04 25.6	380
	eS	N'Z'	09 05 05.4	
(4)	iP	NE	11 54 47.4	
(5)	(LR)	Z'	20 22 51.8	
(6)	iP	NE	21 11 56.8	
(7)	e(P)	N'E	23 04 15.6	
	iS	NEZN'E'	23 04 21.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
23 JUL				
(1)	iP	N	01 44 27.6	
(2)	eP	E	02 34 02.0	80
	iS	E	02 34 12.0	
(3)	iP	N	03 28 08.6	
(4)	iP	E	03 39 41.4	
(5)	iP	E	04 52 11.0	
(6)	iP	NE	06 04 32.2	
(7)	eP	E	06 34 50.4	
(8)	eP	NE	17 28 20.6	220
	iS	NE	17 28 44.6	
(9)	iP	N	19 01 14.6	
(10)	iP	Z	23 21 57.8	190
	iS	N	23 22 18.6	
24 JUL				
(1)	iP	Z	03 45 38.4	130
	iS	EN'	03 45 53.4	
	LQ	N'	03 45 53.4	
(2)	LR	N' Z'	05 21 43.0	
(3)	iP	Z	08 21 21.6	
(4)	iP	E	11 06 01.6	
(5)	iP	Z	11 07 21.4	130
	iS	Z	11 07 36.8	
(6)	iP	E	12 06 56.2	
(7)	iP	NE	12 48 20.6	
(8)	iP	NE	15 32 55.6	
(9)	iP	Z	18 58 23.6	200
	iS	Z	18 58 45.6	
(10)	iP	NEZ	22 16 14.2	33
	iS	NE	22 16 20.4	
(11)	iP	N	22 52 20.8	

Date	Phase	Comp.	Time (GCT)	Distance (km)
25 JUL				
(1)	iP	ZZ'	03 46 15.2	2.0 N, 99.3 E (CGS)
	eS	N'E'Z'	03 51 00.0	Northern Sumatra(CGS)
	LQ	N'E'	03 52 54.0	3000
	LR	Z'	03 54 07.0	
(2)	iP	NE	09 24 31.8	
(3)	iP	N	10 41 51.8	possibly a separate
	i(S)	E	10 44 06.6	shock
(4)	eP	E	13 40 34.4	
(5)	eP	Z'	13 46 46.4	1750
	eS	Z'	13 49 38.8	
	LQ	E'	13 50 02.0	
	LR	Z'	13 51 05.0	
(6)	eX	E'	22 05 18.6	
(7)	eX	E'	22 08 48.6	
(8)	eS	Z'	22 12 22.8	
	LQ	N'	22 13 13.4	
	LR	Z'	22 14 08.8	
26 JUL				
(1)	iP	E	05 03 19.6	
(2)	iP	NE	06 46 26.8	110
	iS	E	06 46 39.8	
(3)	iP	ZN'E'Z'	07 00 58.9	
(4)	iP	E	14 42 44.4	
(5)	eP	Z'	15 34 32.0	15.8 S, 172.9 W (CGS)
	eS	E'	15 43 42.0	7350
	LR	Z'	15 55 15.4	
(6)	iP	EZ	19 34 41.0	235
	iS	EZ	19 35 06.5	
(7)	iP	Z	21 35 27.2	180
	iS	E	21 35 47.6	
27 JUL				
(1)	iP	Z	00 00 00.4	220
	iS	E	00 00 24.2	
(2)	iP	N	01 57 21.6	
(3)	iP	NE	02 05 14.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
27 JUL				
(4)	iP	NE	05 33 12.6	
(5)	iP	N	07 51 17.0	520
	iS	N	07 52 11.4	
(6)	iP	Z	07 54 55.0	6.0 N, 126.0 E (CGS)
	iX	N	07 54 57.6	
(7)	iP	Z	12 16 58.4	260
	iS	NN'E'	12 17 26.4	
(8)	iP	Z	12 58 45.2	240
	iS	NE	12 59 11.0	
(9)	iP	E	13 12 19.2	
(10)	iP	Z	15 05 39.0	60
	iS	E	15 05 47.2	
(11)	iP	Z	18 31 02.0	390
	iX	E	18 31 30.2	
	iS	N'Z'	18 31 43.0	
(12)	iP	Z	22 55 27.2	200
	iS	NN'	22 55 49.2	
28 JUL				
(1)	iP	N	01 57 27.2	
(2)	iP	Z	02 30 40.4	160
	iS	N	02 30 58.8	
(3)	eP	Z'	04 00 06.0	2250
	eS	Z'	04 03 46.4	
	LR	Z'	04 05 24.0	
(4)	eP	E	04 51 13.6	
(5)	iP	N	15 57 08.0	
(6)	iP	N	17 08 50.6	
(7)	iP	NE	20 55 10.4	
(8)	iP	NE	21 26 04.0	
(9)	iP	E	21 52 35.8	
(10)	iP	ZZ'	22 34 57.0	2.2 S, 101.8 E (CGS)
	eS	Z'	22 38 49.4	2800
(11)	iP	E	22 45 28.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
29 JUL				
(1)	iP	Z	01 44 29.2	
(2)	iP	NE	05 09 24.0	
(3)	iP	ZZ'	08 40 19.6	51.2 N, 171.3 W (CGS)
	iS	Z'	08 49 20.6	7660
	LR	Z'	09 01 19.0	
(4)	eX	N	13 35 19.6	
(5)	LR	Z'	15 43 33.8	
(6)	iP	N	20 12 03.8	
30 JUL				
(1)	iP	NE	01 44 40.2	
(2)	iP	E	02 28 35.2	
(3)	LR	Z'	08 42 33.0	
(4)	iX	N	12 15 11.6	
(5)	iP	NZ	17 16 06.4	
(6)	iP	Z	19 41 10.6	290
	iS	E	19 41 41.4	
(7)	iP	E	21 28 53.6	
(8)	iP	E	23 23 47.6	
31 JUL				
(1)	iP	Z	00 40 30.2	210
	iS	N	00 40 53.6	
(2)	iP	Z	00 45 09.2	220
	iS	N	00 45 32.8	
(3)	eX	N'Z'	01 09 36.0	
(4)	iP	N	01 27 07.0	200
	iS	E	01 27 28.6	
(5)	iP	NE	06 47 53.4	
(6)	eP	Z'	07 03 22.0	
	eX	E'	07 03 53.0	
(7)	e(S)	Z'	07 50 06.0	
	LR	Z'	07 52 52.4	

Date	Phase	Comp.	Time (GCT)	Distance (km)
31 JUL (8)	iP	ZE'Z'	14 03 13.2	
(9)	iP	NE	15 58 46.6	
(10)	iP	E	16 14 13.6	
(11)	iP	E	17 23 22.4	
(12)	LR	Z'	17 29 41.4	
(13)	iP	Z	18 51 41.8	
(14)	iP	NEZZ'	18 59 04.8	
	i(S)	N	18 59 21.2	
(15)	LR	Z'	19 25 29.2	
(16)	eX	Z'	22 06 42.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
1 AUG				
(1)	iP	E	05 49 32.2	
(2)	iP	Z	05 57 15.6	
(3)	iP	Z	08 41 15.4	
	iX	N	08 41 37.0	
(4)	eP	Z'	09 21 26.6	980
	iS	E'	09 23 05.2	0.3 N, 125.8 E (CGS)
(5)	iP	N	10 16 07.0	
(6)	iP	N	12 34 30.4	
(7)	iP	Z	15 10 16.4	
(8)	eX	E'	15 19 38.0	
(9)	eX	N'	20 28 37.2	
	LR	Z'	20 30 32.2	
(10)	iP	E	22 19 20.6	
2 AUG				
(1)	iP	Z'	13 30 54.0	7585
	iP	Z	13 31 04.4	56.2 S, 158.2 E (CGS)
	i S	Z'	13 40 00.0	
(2)	iP	NE	19 08 46.0	
(3)	iP	E	21 18 49.2	
(4)	iP	Z	21 25 54.4	
(5)	iP	N	23 27 53.6	
3 AUG				
(1)	iP	E	02 22 05.8	
(2)	iP	E	02 31 51.2	
(3)	LR	Z'	02 46 06.5	
(4)	iP	N	02 52 33.6	
(5)	LR	Z'	03 12 25.0	
(6)	eX	Z'	08 42 42.0	
	eX	N'	08 43 25.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
3 AUG				
(7)	iP	N	13 25 52.4	
(8)	iP	NE	13 43 31.4	
(9)	iP	Z	15 54 31.2	
(10)	iP	N	15 55 46.2	
(11)	iP	Z	16 39 13.6	
(12)	iP	NE	19 15 15.4	1270
	eS	N'	19 17 22.0	
4 AUG				
(1)	e(P)	NEZ	03 16 46.0	
(2)	eX	E'	09 01 52.0	
	eX	E'Z'	09 07 30.0	
	LR	Z'	09 10 07.0	
(3)	eP	NE	09 49 35.0	
	i(S)	E	09 49 50.0	
(4)	iP	Z'	19 32 39.5	225
	eP	NEE'Z'	19 32 39.5	
	iS	NE	19 33 04.0	
(5)	iP	Z	23 02 38.0	215
	eP	NE	23 02 38.0	
	iS	NEN'E'Z'	23 03 01.5	
5 AUG				
(1)	e(P)	NEZN'E'Z'	00 13 47.5	
(2)	eP	N	05 40 21.4	180
	iS	N	05 40 41.4	
(3)	iP	Z	08 18 37.2	
	iS	Z	08 18 42.2	
(4)	iP	Z	08 31 06.8	110
	iS	E	08 31 20.2	
(5)	iP	Z	08 38 43.6	
(6)	iP	NEZ	08 47 40.2	
(7)	iP	NEZ	13 42 51.2	
(8)	iP	NZ	15 27 19.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
5 AUG				
(9)	e(P)	Z'	19 59 51.0	
	eS	E'	20 08 04.4	
	LR	Z'	20 17 37.4	
6 AUG				
(1)	e(P)	N	01 44 39.0	
(2)	eX	NE	03 07 05.0	
(3)	eX	NE	03 53 54.5	
(4)	eX	NE	07 57 11.2	
(5)	eX	NE	12 04 42.0	
(6)	e(P)	NE	12 38 37.0	
	eX	N'	12 39 33.0	
	LR	E'Z'	12 40 04.0	
(7)	eP	NEN'E'Z'	13 34 02.0	160
	eS	NE	13 34 20.0	
	eS	N'E'	13 34 20.0	
(8)	i(P)	NEZ	18 21 14.5	
(9)	e(P)	NEZ	19 10 27.5	
(10)	e(P)	NEZ	19 27 46.5	
	eS	N'E'Z'	19 28 20.0	
(11)	eP	Z'	20 52 22.0	3800
	eS	E'	20 57 46.0	
	LR	Z'	21 01 38.0	
(12)	eP	NE	21 36 54.0	
(13)	iP	NEZ	23 47 01.0	260
	eP	N'E'Z'	23 47 01.0	
	iS	NEN'E'	23 47 29.0	
7 AUG				
(1)	eX	E	01 10 47.2	
(2)	iP	N	08 28 44.6	
(3)	iP	E	09 05 15.2	
(4)	iP	ZE'Z'	13 26 44.4	6.8 N, 126.9 E (CGS)
(5)	iP	ZZ'	14 06 27.4	6.8 N, 126.9 E (CGS)

Date	Phase	Comp.	Time (GCT)	Distance (km)
7 AUG				
(6)	iP	Z	14 42 15.8	200
	iS	E	14 42 38.0	
(7)	iP	E	15 22 42.6	
(8)	eP	Z	19 17 28.4	
(9)	eX	NE	20 10 57.0	
(10)	eX	N	23 41 04.4	
8 AUG				
(1)	iP	ZE'Z'	04 33 07.0	6.8 N, 127.0 E (CGS)
(2)	iP	NEZ'	09 47 31.2	460
	iS	N'	09 48 22.4	4.1 N, 128.6 E (CGS)
(3)	eP	Z'	13 00 06.0	
	eS	E'	13 08 32.0	7000
	SSS	E'	13 16 22.4	
	LR	Z'	13 20 00.0	
(4)	iP	E	13 50 37.0	
(5)	eP	E	18 05 09.4	
	eX	Z'	18 05 25.0	
(6)	iP	E	18 28 11.4	
(7)	iP	N	23 31 11.2	
9 AUG				
(1)	eP	E'	10 17 16.0	
	LR	Z'	10 19 39.8	
(2)	eX	E'	10 29 46.6	
	eX	Z'	10 31 33.2	
(3)	iP	NEN'E'Z'	10 38 57.4	
(4)	e(P)	N'	13 13 47.0	
	iS	N'	13 14 44.4	
	LR	Z'	13 15 06.0	
(5)	eP	E'Z'	16 41 09.6	870
	iS	E	16 42 42.0	0.6 S, 127.4 E (CGS)
(6)	iP	N	16 48 37.0	
(7)	e(P)	Z'	17 32 52.4	
	eX	N'	17 37 41.0	

Date	Phase	Comp.	Time (GOT)	Distance (km)
9 AUG				
(8)	iP	Z	21 07 17.6	180
	iS	EE'	21 07 37.6	
(9)	iP	Z	21 45 25.0	
10 AUG				
(1)	e(P)	N'	00 38 31.0	
	eX	N'	00 40 04.6	
	eS	N'	00 43 30.4	
(2)	iP	N	01 36 02.0	
(3)	iP	ZE'	21 05 46.8	190
	iS	EN'	21 06 07.4	
(4)	iP	Z	21 11 00.0	210
	iS	N'	21 11 23.0	
(5)	eP	E	21 17 03.6	
11 AUG				
(1)	eP	E	02 30 17.4	
(2)	eX	E	03 19 04.0	
(3)	iP	Z'	03 49 26.0	5230
	eX	Z'	03 51 08.0	15.4 S, 166.9 E
	eS	Z'	03 56 18.0	(CGS)
	LQ	N'	04 00 44.0	
	LR	Z'	04 03 07.0	
(4)	iP	NE	08 49 22.4	
(5)	iP	Z	14 36 29.2	200
	iS	E	14 36 51.4	
(6)	iP	Z	16 20 37.6	
(7)	eX	Z	18 42 04.8	
(8)	eP	Z'	20 01 02.0	5260
	iS	N'Z'	20 07 53.0	15.7 S, 167.1 E
	LQ	N'	20 12 56.0	(CGS)
	LR	Z'	20 16 10.0	
(9)	iX	Z	20 22 50.6	
(10)	eP	N	21 45 07.4	90
	iS	E	21 45 18.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
11 AUG				
(11)	eP	Z'	22 40 20.0	5250
	iS	Z'	22 47 27.0	15.8 S, 167.2 E (CGS)
12 AUG				
(1)	iP	EZ	01 35 03.4	570
	iS	E'	01 36 02.0	
(2)	iP	Z	01 40 34.2	
(3)	eX	E	02 30 18.6	
(4)	eX	E	03 06 02.0	
(5)	iP	Z	05 19 21.4	
(6)	iP	Z'	08 10 17.6	5290
	eS	N'	08 17 10.0	15.9 S, 167.5 E
	LQ	N'	08 22 00.0	(CGS)
	LR	Z'	08 24 58.0	
(7)	iP	Z	12 46 11.0	280
	iS	E	12 46 41.4	
(8)	eP	Z'	13 03 09.0	5400
	eX	Z'	13 10 08.0	5.3 S, 152.2 E (CGS)
(9)	eP	Z'	18 13 26.4	
	eS	N'	18 20 18.8	5230
	LQ	N'	18 25 09.4	16.0 S, 167.4 E
	LR	Z'	18 28 24.0	(CGS)
(10)	iP	NE	18 25 40.0	
(11)	LR	Z'	19 27 00.0	
(12)	eX	Z'	21 12 51.0	
	LR	Z'	21 14 50.6	
(13)	eP	N	22 25 31.0	
	eP	Z'	22 25 51.0	
13 AUG				
(1)	iP	NE	00 20 44.4	
(2)	eP	Z'	04 49 27.4	5260
	eS	E'	04 56 20.6	15.9 S, 167.5 E
	LQ	N'	05 01 09.0	(CGS)
	LR	Z'	05 04 50.0	
(3)	iP	N	06 52 38.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
13 AUG				
(4)	eP	Z'	11 33 22.0	5240
	eS	N'	11 40 11.0	16.0 S, 167.0 E
	LR	Z'	11 46 19.0	(CGS)
(5)	eP	Z'	12 48 33.0	5150
	eX	Z'	12 51 42.0	15.9 S, 166.8 E
	eX	Z'	12 56 08.6	(CGS)
(6)	eP	Z'	18 05 02.0	5290
	eS	Z'	18 12 02.0	16.6 S, 167.6 E
	LR	Z'	18 18 30.0	(CGS)
(7)	iP	Z	18 21 52.2	
(8)	eX	E	19 27 22.0	
(9)	eP	Z'	22 03 11.4	2900 6.4 S
	eS	Z'	22 07 54.0	148.5 E
				(CGS)
(10)	iP	NE	22 26 11.4	
14 AUG				
(1)	iP	Z	05 30 54.2	
	eP	Z'	05 30 54.2	
(2)	eP	Z'	11 16 12.0	5160
	eS	N'E'	11 23 04.6	15.8 S, 166.8 E
	eX	N'	11 28 46.4	(CGS)
	LR	Z'	11 31 14.0	
(3)	eP	Z'	13 26 14.0	5015
	eS	E'	13 32 47.6	11.5 S, 166.3 E
	(LQ)	N'	13 37 58.0	(CGS)
	LR	Z'	13 39 55.0	
(4)	eX	N'	14 55 11.0	
(5)	iP	NE	17 08 34.2	
(6)	iP	NE	17 44 45.0	
(7)	iP	N	19 37 47.2	
(8)	iP	NE	20 50 05.4	
(9)	iP	Z	22 43 20.6	
(10)	iP	E	22 55 31.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
15 AUG				
(1)	iP	Z	02 09 26.6	240
	eX	Z'	02 09 49.0	
	iS	NE	02 09 52.6	
(2)	iP	Z	04 46 32.8	1010
	eS	E'	04 48 57.0	14.3 N, 120.1 E (CGS)
(3)	iP	Z	05 29 02.0	
	eS	N'Z'	05 29 44.4	400
(4)	iP	N	05 49 46.8	
(5)	eP	Z'	07 07 48.0	190
	iP	E	07 07 49.4	
	iS	N	07 08 09.0	
(6)	iP	N	09 28 32.4	
(7)	iP	N	13 54 41.8	
(8)	eP	N'	14 36 11.0	
	e(S)	E'	14 36 55.0	
(9)	iP	NE	15 44 21.4	
(10)	iP	Z	15 50 01.6	350
	iS	N	15 50 38.6	
(11)	eP	Z	16 00 09.6	
(12)	eP	Z	18 42 17.0	
16 AUG				
(1)	eP	N	08 36 29.6	
(2)	PKP	Z'	12 55 59.0	
	(SS)	N'	13 18 04.0	
	(SSS)	E'	13 23 58.6	
	LQ	N'	13 36 52.0	
(3)	iP	Z	15 04 47.6	
(4)	eP	EE'	16 19 51.2	11.0 N, 121.7 E (CGS)
	i(S)	E	16 20 46.2	
(5)	iP	E	16 41 58.4	
(6)	eP	E'	17 15 37.8	
	e(S)	E'	17 22 11.0	
	LR	Z'	17 29 50.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
16 AUG				
(7)	iP	E	17 44 09.0	
(8)	iX	NE	17 54 57.0	
(9)	iP	Z	18 44 24.4	580
	eS	N'	18 45 24.4	
	LR	Z'	18 45 55.8	
(10)	iP	N	20 50 36.4	
(11)	iP	Z	23 14 02.0	2690
	eS	N'	23 18 15.0	
	LQ	N'	23 21 06.0	
	LR	Z'	23 23 16.0	
17 AUG				
(1)	iP	Z	03 33 04.6	135
	iS	E	03 33 20.0	
(2)	iP	N	04 21 27.0	
(3)	iP	Z	07 08 22.8	
(4)	eP	Z'	07 37 34.0	590
	eS	N'	07 38 44.0	12.4 N, 125.7 E (CGS)
(5)	iP	Z	07 42 11.8	
	iS	N	07 43 27.6	740
(6)	iP	Z	08 07 27.2	590
	iS	Z	08 08 51.4	12.4 N, 125.7 E (CGS)
(7)	iP	N	08 40 03.4	
(8)	iP	E	10 11 30.6	
(9)	iP	E	10 41 07.2	3280
	eS	Z'	10 46 21.0	5.3 N, 96.2 E
	LR	Z'	10 49 54.0	(CGS)
(10)	iP	E	13 10 06.8	
(11)	iP	N	14 12 10.4	750
	eS	Z'	14 13 27.0	
(12)	iP	N	14 15 47.8	
(13)	eP	Z'	16 26 03.0	5100
	eS	N'	16 32 53.0	15.2 S, 166.6 E
	LQ	N'	16 37 53.0	(CGS)
	LR	Z'	16 41 02.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
17 AUG				
(14)	iP	E	18 05 32.6	
(15)	iP	E	19 11 07.0	1060
	eS	E'	19 12 54.0	
	LQ	N'	19 13 36.0	
	LR	Z'	19 14 32.4	
(16)	iP	Z	19 54 33.2	190
	iS	N	19 54 54.2	
(17)	iP	E	21 17 04.4	
(18)	eP	E'	22 35 12.0	3440
	e(PPP)	E'	22 36 41.6	
	eS	N'	22 40 12.6	
	LR	Z'	22 43 45.8	
18 AUG				
(1)	iP	N	00 04 44.0	
(2)	iX	Z	03 16 25.4	1750 10.5 N, 141.3 E (CGS)
(3)	eP	Z'	05 14 12.0	
	eS	E'	05 17 08.6	
	(LR)	Z'	05 47 56.6	
(4)	eP	E	06 54 19.8	450
	eS	N'	06 55 06.6	
	(LQ)	N'	06 55 26.0	
(5)	iP	N	07 02 06.6	
(6)	eP	Z'	07 21 15.0	50
	eS	E'	07 21 21.8	
(7)	iP	I	08 34 31.2	
(8)	iP	E	09 26 11.2	380
	iS	E	09 26 51.4	
(9)	iP	E	11 16 46.2	
(10)	iP	E	12 46 47.6	
(11)	eP	N'	14 35 19.0	
	LR	Z'	14 46 41.0	
(12)	eP	Z'	15 00 02.0	5270
	e(S)	E'	15 06 03.0	16.0 S, 167.0 E
	LQ	E'	15 15 23.0	(CGS)
	LR	Z'	15 17 21.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
18 AUG				
(13)	iP	N	15 18 35.8	
	iX	E	15 18 52.8	
(14)	eX	E	21 57 51.6	
19 AUG				
(1)	eP	Z'	02 54 25.2	6.8 N, 127.1 E
	iP	Z	02 54 25.2	(CGS)
	e(S)	N'	02 54 43.0	
	LR	Z'	03 00 36.0	
(2)	eX	E	03 30 28.4	
(3)	iP	Z	07 25 03.8	180
	eP	Z'	07 25 03.8	
	iS	E	07 25 24.0	
(4)	iP	Z	14 04 21.2	
(5)	eP	N	15 41 29.0	
(6)	iP	NE	16 42 07.4	
(7)	iP	N	17 16 26.0	
(8)	iP	N	19 42 47.4	
(9)	iP	Z	19 52 20.4	
(10)	eP	N	19 56 19.6	
	eX	N'E'	19 58 45.0	
(11)	eX	N	20 36 30.4	
(12)	iP	Z	21 00 44.4	
(13)	iP	E	22 00 28.4	
20 AUG				
(1)	iP	NZ	05 57 48.6	
(2)	iP	NEZ	08 31 49.2	4170
	iS	N	08 37 35.4	
(3)	eP	Z'	10 02 36.0	
	eX	N'	10 17 49.4	
(4)	iP	Z	14 59 44.8	
	LR	Z'	15 02 55.0	
(5)	iP	N	15 01 46.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
20 AUG				
(6)	iX	E	16 55 55.4	
(7)	iP	Z	18 23 47.6	
(8)	iP	Z	21 02 24.6	
(9)	iP	E	21 28 00.0	
(10)	iP	Z	21 32 19.6	7170
	eP	Z'	21 32 19.6	22.9 S, 176.3 W
	eS	E'	21 40 51.8	(CGS)
	LQ	N'E'	21 49 35.0	
	LR	Z'	21 52 13.0	
(11)	iP	EZ	23 45 18.8	100
	eP	N'	23 45 18.8	
	eS	N'E'	23 45 30.6	
(12)	eP	Z'	23 49 29.0	
(13)	iP	E	23 49 46.8	
21 AUG				
(1)	iP	NE	01 02 25.2	
(2)	iP	E	05 16 25.4	
(3)	eX	E	05 19 07.2	
(4)	LR	Z'	08 19 38.0	
(5)	eX	E'	09 09 20.0	
(6)	iP	Z	14 55 09.2	
(7)	eP	Z'	15 09 43.0	2810
	eS	E'	15 14 07.0	5.9 S, 104.2 E
	LQ	N'	15 16 00.0	(CGS)
	LR	Z'	15 17 41.6	
22 AUG				
(1)	iP	Z	02 45 15.4	200
	eP	Z'	02 45 15.4	
	iS	E	02 45 37.6	
(2)	eP	Z'	04 03 41.0	4450
	eS	E'	04 09 44.0	
	(ScS)	Z'	04 13 40.0	
(3)	iX	E	07 55 43.4	
(4)	eP	Z'	07 59 20.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
22 AUG				
(4)	e(S)	N'	08 00 21.0	
(5)	iX	E	09 59 07.8	
(6)	eP	Z'	10 01 11.0	290
	eS	N'	10 01 42.0	
(7)	eP	E'	10 27 34.0	
	(LQ)	N'	10 28 00.0	
	(LR)	Z'	10 28 36.0	
(8)	iP	Z	13 44 20.0	780
	iS	N	13 45 40.0	
(9)	iP	Z	14 41 22.0	170
	iS	N	14 41 41.4	
(10)	eX	E	15 38 12.0	
(11)	eP	N	15 39 41.2	
(12)	iP	EZ	21 51 43.4	
23 AUG				
(1)	iP	E	00 06 22.2	980
	eS	E'	00 08 01.0	
(2)	iP	E	04 35 49.2	
(3)	iP	E	07 41 05.0	
(4)	iP	N	08 26 29.8	
(5)	iP	E	09 12 17.6	
(6)	iP	NE	09 35 52.2	
(7)	iP	E	13 20 02.2	
(8)	iP	E	13 42 47.0	
(9)	eP	Z'	14 36 29.0	
	eX	N'	14 43 26.0	
	eX	N'	14 47 15.0	
	LQ	N'	14 51 06.0	
(10)	iP	N	18 41 37.6	
(11)	eP	Z'	20 02 11.0	16.3 N, 95.8 W
	ePKP	Z'	20 04 57.0	(CGS)
(12)	eP	Z	20 05 20.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
23 AUG				
(13)	eX	N	22 15 52.0	
24 AUG				
(1)	iP	E	03 27 37.6	
(2)	eP	Z'	04 51 25.0	1650
	eS	E'	04 54 09.0	5.8 S, 132.37 E
	LQ	E'	04 54 27.0	MO
	LR	Z'	04 55 08.0	
(3)	iP	EZ	07 04 40.2	
	eS	N'	07 04 41.0	
(4)	iP	N	09 19 42.0	710
	eS	E'	09 20 55.0	7.7 N, 118.93 E
	LR	Z'	09 21 00.0	MO
(5)	iP	Z	10 32 51.0	170
	iS	N	10 33 09.6	
(6)	iP	NE	10 46 38.5	
(7)	iX	E	11 31 30.4	
(8)	iP	EZ	11 33 34.0	120
	eP	E'Z'	11 33 34.0	
	iS	E	11 33 48.2	
(9)	eP	E'Z'	11 52 25.4	1225
	eX	N'	11 53 26.0	
	eS	N'E'	11 54 28.0	
(10)	e(P)	Z'	13 34 49.6	
	eX	N'E'	13 48 05.0	
	eX	N'	13 49 41.0	
	LR	Z'	13 54 36.0	
(11)	eP	Z'	14 07 38.0	2120
	eS	N'	14 11 04.0	3.2 S, 141.0 E (CGS)
(12)	iP	E	14 28 52.8	
	iS	E	14 30 04.4	700
(13)	e(P)	N'	15 57 34.0	
	e(S)	E'	15 58 26.0	
25 AUG				
(1)	iP	Z	01 17 34.4	
(2)	iP	ZZ'	02 15 53.2	
	eS	N'E'	02 16 14.6	190

Date	Phase	Comp.	Time (GCT)	Distance (km)
25 AUG				
(3)	iP	E	06 36 03.4	240
	eS	E'	06 36 29.6	
(4)	eP	Z'	07 16 19.0	
(5)	iP	Z	09 01 53.0	
(6)	eX	E'	09 13 05.0	
(7)	iX	E	17 47 53.2	
(8)	iP	N	17 49 23.0	
(9)	eP	Z'	19 05 35.4	720
	iS	N	19 06 49.8	
	LQ	N'E'	19 07 15.0	
	LR	Z'	19 07 25.0	
(10)	iP	Z	22 01 25.4	180
	iS	NE	22 01 45.0	
26 AUG				
(1)	iP	NEZ	06 22 26.4	
	eP	N'E'Z'	06 22 26.4	
(2)	iX	E	15 04 30.4	
(3)	iP	NZ	16 30 32.8	
(4)	iP	NE	19 23 45.0	
(5)	iP	N	22 16 03.6	
27 AUG				
(1)	iP	Z	00 15 06.4	
(2)	iP	E	04 09 16.4	
(3)	e(P)	Z'	07 20 16.0	
	e(S)	N'	07 22 43.0	
(4)	LR	Z'	07 31 50.0	
(5)	eS	N'	18 36 44.0	
	LQ	N'	18 40 33.0	
	LR	Z'	18 42 22.0	
(6)	eX	N'	18 54 11.0	
(7)	iP	E	21 06 48.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
28 AUG				
(1)	iX	E	03 00 11.6	
(2)	iX	N	04 45 13.2	
(3)	iP	NE	07 48 24.8	
(4)	iP	Z	10 44 22.2	
	e(S)	N'E'	10 47 38.0	
(5)	iP	E	11 01 06.4	
	e(S)	N'	11 02 11.0	
(6)	iP	Z	16 43 04.0	
(7)	iP	E	16 43 48.2	
(8)	iP	NE	17 33 34.2	
(9)	iP	Z	19 44 06.4	190
	iS	N	19 44 27.2	
29 AUG				
(1)	iP	Z	02 23 02.6	290
	eS	NE	02 23 34.0	
(2)	eP	Z'	12 55 09.0	5360
	eS	N'E'	13 02 05.6	11.6 N, 175.28 E
	LQ	N'E'	13 07 26.0	(MO)
	LR	Z'	13 09 20.0	
(3)	iP	Z	15 14 21.6	115
	iS	E	15 14 45.2	
(4)	iP	Z	15 58 17.2	
	i(S)	N	15 59 08.4	
(5)	iX	E	17 56 29.6	
30 AUG				
(1)	eX	E	11 06 16.0	
(2)	iP	Z'	11 56 13.0	255
	iS	NE	11 56 40.5	
(3)	iP	NEZZ'	14 01 25.0	175
	iS	NE	14 01 49.0	5.5 N, 126.0 E (CGS)
(4)	iP	ZZ'	18 15 03.6	
	iX	E	18 15 37.0	2820
	iS	NE	18 19 54.0	6.5 S, 104.7 E
	LR	Z'	18 21 54.0	(CGS)

Date	Phase	Comp.	Time (GCT)	Distance (km)
30 AUG				
(5)	eP	NEZZ'	21 18 16.0	
	e(S)	N'	21 18 46.5	
31 AUG				
(1)	iP	N	08 57 05.0	
(2)	eX	Z'	08 41 32.0	
	LR	Z'	08 41 46.4	
(3)	eP	Z'	09 59 21.6	620
	eS	E'	10 00 25.4	
(4)	iX	E	15 54 16.6	
(5)	eX	E'	16 47 49.0	
	LQ	N'	16 56 38.0	
	LR	Z'	17 00 39.0	
(6)	iP	Z	19 47 42.4	2460
	eS	E'	19 51 26.0	17.0 N, 145.2 E
	LQ	N'	19 51 53.0	(CGS)
	LR	Z'	19 53 05.0	
(7)	iP	Z	22 50 01.6	270
	iS	N	22 50 30.8	7.3 N, 128.03 E MO

Date	Phase	Comp.	Time (GCT)	Distance (km)
1 SEPT.				
(1)	e(X)	Z'	05 01 13.0	
	eS	N'	05 06 46.0	
	(LQ)	E'	05 11 00.0	
	LR	Z'	05 15 53.0	
(2)	eX	Z'	05 19 37.0	
(3)	iP	EZ	06 42 18.6	340
	iS	E	06 42 55.0	
(4)	iP	E	06 46 57.6	
(5)	eP	Z'	06 47 32.0	4260
	eS	E'	06 53 24.0	
	(LQ)	E'	06 55 21.0	
	LR	Z'	06 58 46.0	
(6)	iX	N	07 26 54.6	
(7)	iP	NE	07 53 53.4	190
	iS	N	07 54 14.2	
(8)	LR	Z'	11 14 52.0	
(9)	iX	N	21 45 13.6	
2 SEPT				
(1)	iX	Z	02 00 08.4	
(2)	iP	E	04 11 29.6	
(3)	iP	E	04 37 06.0	
(4)	eP	Z'	04 36 46.0	Aleutian Islands
	eS	E'	04 45 04.0	51.9 N, 175.5 E
	(ScS)	E'	04 46 36.0	(CGS)
	(LQ)	N'	04 51 51.0	
	LR	Z'	04 55 02.0	
(5)	(LQ)	E'	05 08 28.0	
	LR	Z'	05 09 49.0	
(6)	iP	N	06 19 04.4	
(7)	iP	Z	06 45 13.4	220
	iS	N	06 45 37.2	
(8)	iP	N	08 36 55.0	
(9)	iP	Z	09 30 50.8	

Date	Phase	Comp.	(GCT)			Distance (km)
2 SEPT.						
(10)	iX	E	11	19	29.4	
(11)	iX	E	15	30	20.0	
(12)	LR	Z'	19	05	10.0	
(13)	eX	N'Z'	23	24	34.0	
	LR	Z'	23	34	08.0	
3 SEPT.						
(1)	iP	N	05	03	43.6	
(2)	iP	N	09	24	04.0	
(3)	iP	N	10	34	44.2	
(4)	iP	Z	11	59	24.6	110
	iS	N'E'	11	59	37.4	6.4 N, 125.9 E (CGS)
(5)	iP	NE	16	51	11.2	
(6)	iP	Z	18	19	03.8	90
	iS	N	18	19	14.6	
(7)	eP	Z'	21	45	04.0	3220
	eS	E'	21	49	51.0	17.5 S 142.7 E(MO)
	LQ	N'	21	52	04.0	
	LR	Z'	21	53	28.0	
4 SEPT.						
(1)	eP	Z'	01	07	27.0	
	eS	E'	01	09	04.4	
	(LR)	Z'	01	09	20.0	
(2)	eX	N'	01	29	24.0	
	LR	Z'	01	30	06.0	
(3)	iP	E	02	39	14.6	
(4)	iP	E	02	51	26.4	
(5)	iP	E	05	47	08.6	
(6)	e(P)	Z'	08	09	11.0	
	e(S)	N'	08	17	32.0	
	LR	Z'	08	22	26.4	
(7)	iP	N	08	42	04.8	

Date	Phase	Comp.	Time (GCT)	Distance (km)
4 SEPT				
(8)	eP	Z'	10 28 15.0	46.6 N, 153.5 E (CGS)
	eS	N'	10 34 58.0	
	LQ	N'	10 39 22.0	
	LR	Z'	10 42 14.0	
(9)	iX	N	14 24 25.8	
(10)	iP	Z	14 44 55.4	58.2 N, 152.6 W (CGS)
	eS	E'	14 54 58.0	
	eX	Z'	15 07 17.0	
	LR	Z'	15 11 19.0	
(11)	eP	N	14 54 52.8	
(12)	iX	N	15 54 14.6	
(13)	iP	EZ	17 33 59.6	
(14)	iX	N	20 27 33.4	
(15)	iP	N	21 09 26.4	
(16)	eX	N	22 46 44.6	
5 SEPT				
(1)	iP	Z	04 18 46.4	
(2)	iX	N	05 49 34.4	
(3)	iP	EZ	06 42 11.0	
(4)	iP	E	07 18 52.2	
(5)	iP	Z	08 47 01.6	200
(6)	iP	E	10 46 16.4	
	iS	E	10 46 38.6	
(7)	ix	E	11 26 12.6	
	iS)	N	11 26 59.0	
(8)	iX	E	13 23 43.4	
(9)	iP	Z	14 56 07.4	

Date	Phase	Comp.	Time (GCT)	Distance (km)
5 SEPT				
	iS	E	14 56 43.4	
(10)	eX	N	18 09 42.2	
(11)	eX	N'	21 04 42.0	
(12)	eX	E	22 23 23.0	
(13)	eP	Z'	23 05 30.0	1830
	eS	E'	23 08 31.0	20.8 N, 121.4 E
	LR	Z'	23 10 25.0	(CGS)
(14)	iP	Z	23 49 07.8	
	e(S)	N'	23 50 51.0	
6 SEPT				
(1)	iP	E	00 52 07.6	
(2)	iX	E	01 50 11.4	
(3)	iX	N	02 35 12.0	
(4)	iP	NE	02 46 29.4	
(5)	eX	E'	03 03 26.0	
	LR	Z'	03 03 38.0	
(6)	iP	Z	03 22 11.6	Taiwan Region
	eS	N'Z'	03 24 58.0	21.2 N, 121.4 E
	LQ	N'E'	03 25 24.0	(CGS)
	LR	Z'	03 26 36.0	
(7)	iP	Z	04 55 50.6	
(8)	iP	E	05 33 10.6	
(9)	eX	N'	13 29 13.0	
	LQ	N'	13 29 26.0	
(10)	iP	Z	17 46 39.4	
	iS	E	17 46 59.0	
(11)	eS	E'	19 23 36.0	
	LQ	E'	19 24 54.6	
	LR	Z'	19 26 20.4	
(12)	e(P)	Z'	20 39 45.0	
	eS	E'	20 42 46.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
6 SEPT				
	LQ	N'	20 43 20.0	
	LR	Z'	20 44 49.0	
(13)	eX	Z	21 33 11.8	
(14)	LR	Z'	22 21 26.0	
(15)	LR	Z'	22 56 43.0	
7 SEPT				
(1)	iP	E	01 27 37.8	
(2)	iP	Z	01 51 46.6	
(3)	iX	E	02 41 24.6	
(4)	iX	N	03 34 42.2	
(5)	eP	Z'	07 02 38.0	3140
	eS	Z'	07 07 20.0	31.5 N, 140.68 E
	LQ	E'	07 08 53.0	(MO)
	LR	Z'	07 10 02.0	
(6)	iP	N	07 40 09.2	
(7)	e(P)	Z'	08 37 26.0	
	e(S)	E'	08 44 21.0	
	LR	Z'	08 52 10.0	
(8)	iP	Z	11 23 46.2	
(9)	iP	E	11 32 07.6	
(10)	iP	Z	12 19 28.2	
(11)	iP	Z	13 59 46.8	
(12)	iP	ZZ'	15 30 40.2	330
	eS	N'	15 31 15.2	
(13)	eP	Z'	15 44 29.0	18.2 N, 144.2 E
	eS	N'	15 48 24.0	(CGS)
	LQ	N'	15 49 09.0	
	LR	Z'	15 50 00.0	
(14)	iX	Z	19 33 40.2	
(15)	eP	Z	19 48 50.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
7 SEPT				
(16)	iP	Z	22 18 57.0	280
	iS	E	22 19 27.4	
8 SEPT				
(1)	eP	Z'	03 38 32.0	57.5 N, 152.1 W (CGS)
	eS	N'	03 48 41.0	
	LQ	N'	04 01 12.0	
	LR	Z'	04 04 20.0	
(2)	iP	E	04 39 59.4	
(3)	iP	E	07 06 40.8	19.2 N, 145.3 E (CGS)
(4)	eP	N'	07 10 19.0	
	eX	N'	07 10 55.0	
(5)	eX	E'	11 38 22.6	
	(LQ)	N'	11 49 36.0	
	LR	Z'	11 54 40.4	
(6)	iP	N	11 58 57.6	
(7)	iP	N	16 11 41.4	
(8)	iP	NE	23 06 30.0	
9 SEPT				
(1)	iX	N	02 38 33.0	
(2)	iP	E	03 03 37.6	
(3)	iP	Z	04 15 03.4	120
	iS	N	04 15 17.8	
(4)	LQ	E'	04 57 33.0	
	LR	Z'	04 59 04.0	
(5)	i(PKP)	Z	10 22 11.6	
	e(SS)	N'Z'	10 45 52.0	
	LQ	N'	11 03 46.0	
	LR	Z'	11 10 18.0	
(6)	iP	Z	11 40 48.6	
	iS)	NE	11 41 10.4	
(7)	iP	Z	13 05 36.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
9 SEPT				
(8)	iP	E	13 07 22.4	
(9)	iP	Z	14 17 30.6	
(10)	iP	Z	14 43 35.4	
(11)	iP	Z	16 40 31.2	
(12)	iP	Z	21 19 11.0	140
	iS	NE	21 19 27.0	
10 SEPT				
(1)	iP	N	01 35 03.4	
(2)	iP	Z	03 23 52.2	
(3)	eP	Z'	03 24 33.0	
(4)	i(P)	E	04 14 17.8	
	i(S)	E	04 15 10.2	
(5)	(LR)	Z'	07 43 14.0	
(6)	iP	Z	09 49 29.0	
(7)	iP	N	10 21 18.4	
(8)	iX	E	14 55 45.4	
(9)	eP	E	15 09 17.6	
(10)	eS	E'	19 37 41.0	
	LQ	E'	19 40 09.0	
(11)	iP	Z	21 16 09.6	190
	iS	E	21 16 31.0	
11 SEPT				
(1)	eP	Z'	01 07 08.0	120
	iS	N	01 07 22.2	
(2)	e(P)	Z'	05 31 27.0	
	LR	Z'	05 34 06.0	
(3)	eP	Z'	06 59 05.0	3375
	eS	Z'	07 04 02.0	3.5 S, 153.69 E
	LQ	N'	07 06 17.0	(MO)
	LR	Z'	07 10 00.0	

Date	Phase	Comp.	Time (GCT)	Distance (km)
11 SEPT				
(4)	iP	NE	07 20 04.0	
	i(S)	E	07 20 41.0	
(5)	iP	N	15 57 44.0	
(6)	iP	Z	16 10 03.0	210
	iS	N	16 10 26.0	
(7)	LR	Z'	17 33 13.0	
(8)	iP	EZ	20 03 08.6	
12 SEPT				
(1)	iP	ZZ'	02 36 56.8	140
	iS	NN'	37 13	
(2)	eiP	Z'	08 46 12	6.3 S, 151.6 E
	eP	Z	46 12	(CGS)
	iS	E'	50 55	
	LQ	N'	52 30	
	LR	Z'	54 02	
(3)	eX	Z	08 54 10	
(4)	iP	Z	17 03 52	
	i(S)	E'	04 18.5	
(5)	e(P)	Z	17 57 32.5	
	iS	NE	57 48.5	
(6)	e(P)	Z	18 01 07	
	iS	NE	01 12	
(7)	eX	NE	18 54 24	
(8)	iP	Z	18 59 52.5	
	i(S)	N	19 00 11.5	
(9)	iP	ZE'Z'	22 12 13	6.4S, 70.8 E
	ePPP	Z'	15 32	(CGS)
	iS	N'E'	20 02	
	LR	Z'	29 49	
13 SEPT				
(1)	iP	Z	01 29 06.4	220
	iS	NE	01 29 30.6	
(2)	iP	Z	02 42 04.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
13 SePT				
(3)	iP	NE	03 22 09.6	
(4)	iP	E	03 32 55.4	160
	iS	N	03 33 13.0	
(5)	iP	Z	05 03 15.2	
(6)	iP	Z	06 46 36.0	190
	iS	N	06 46 57.4	
(7)	iP	Z	09 22 05.4	
	iS	E	09 22 09.0	
(8)	iP	Z	09 58 43.4	250
	iS	E	09 59 10.2	
(9)	eP	Z'	13 17 49.0	55.5 N, 165.7 E (CGS)
	eS	Z'	13 25 51.0	
	eX	Z'	13 32 21.0	
	LR	Z'	13 34 33.0	
(10)	iP	Z	16 08 23.4	
(11)	(LR)	Z'	17 25 08.0	
(12)	iP	E	19 17 46.4	190
	iS	E	19 18 07.2	
(13)	i(P)	N	19 19 15.0	
(14)	iP	Z	20 41 43.0	
14 SEPT				
(1)	iP	Z	00 00 43.6	140
	iS	E	00 00 59.2	6.5 N, 126.35 E Cotobato (MO)
(2)	e(P)	NEZ	03 49 24.5	
(3)	eX	NZ	08 07 55	
(4)	iP	ZZ'	08 27 50.5	8.4 N, 126.8 E (CGS)
(5)	iP	Z	09 56 50.8	310
	iS	N	57 24	
(6)	iP	Z	12 13 14.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
14 SEPT				
(7)	e(P)	NEZ	16 53 46	
(8)	i(P)	EZ	19 26 39.5	
	i(S)	N	27 10	
(9)	iP	NEZ Z'	21 54 49	120
	iS	E'	55 03	
	IR	Z'	55 28	
15 SEPT				
(1)	iP	ZZ'	08 08 04.6	250
	eS	E'	08 08 32.0	
(2)	iP	N	12 21 17.8	
(3)	iP	N	16 45 47.6	
(4)	iP	Z	17 48 41.6	240
	iS	Z	17 49 07.6	
(5)	iP	E	20 35 23.8	
(6)	iP	E	20 38 11.2	
	i(S)	E	20 39 35.2	
(7)	iP	E	20 42 19.6	
(8)	iP	Z	22 31 59.0	
	i(S)	E	22 33 31.2	
(9)	iP	Z	23 35 58.4	150
	iS	E	23 36 15.0	
16 SEPT				
(1)	iP	Z	00 50 55	
	i(S)	N	51 22	
(2)	iP	NEZ N'E'Z'	13 50 40.3	7.1 N, 126.5 E (CGS)
(3)	iP	EZ	19 10 01	
	iS	N	10 32.5	295
(4)	e(P)	Z	21 03 46	
(5)	e(P)	NEZ	21 26 53.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
16 SEPT (6)	eP	Z	23 53 30	90
	iS	E	53 41	
17 SEPT (1)	iP	N	01 03 10.4	
(2)	iP	E	03 24 11.8	350
	iS	E	03 24 48.2	
(3)	iP	Z	05 57 36.8	180
	iS	N	05 57 56.6	
(4)	iP	N	08 29 09.0	
(5)	iP	E	11 25 40.4	
(6)	e(PKP)	Z'	11 33 31.0	
	e(SS)	N'	11 57 22.0	
(7)	eX	N'	13 34 21.4	
	LR	Z'	13 38 47.0	
(8)	iP	N	14 08 39.2	
(9)	eX	E'	14 36 15.0	
	LR	Z'	14 39 46.0	
(10)	iP	NE	15 25 05.4	36.3 N, 141.2 E (CGS)
	eS	N'	15 30 15.0	
	LR	Z'	15 36 04.0	
(11)	eP	Z'	16 27 44.0	36.3 N, 141.1 E (CGS)
	eS	E'	16 32 56.0	
	LQ	E'	16 35 04.0	
	LR	Z'	16 37 01.0	
(12)	iP	E	17 36 13.2	
(13)	iP	E	17 50 07.6	
(14)	iP	Z	18 12 44.8	
(15)	iP	N	18 46 18.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
17 SEPT (16)	iP	Z	18 50 49.0	300
	iS	E	18 51 21.0	
(17)	iP	Z	19 28 02.2	20
	iS	NE	19 28 07.2	
(18)	eP	E	21 03 07.6	
	eX	E'	21 04 21.0	
	LR	Z'	21 05 11.4	
(19)	iP	Z	21 14 43.6	
	e(S)	E	21 17 21.4	
18 SEPT (1)	eX	Z	15 30 44.5	
(2)	eP	Z	20 59 07	59.5 N, 145.1 W (CGS)
	iS	E'	21 09 41	
(3)	iP	NEZ N'E'Z'	22 03 46.5	8.2 N, 126.8 E (CGS)
(4)	iP	Z	22 28 09	
(5)	iP	Z	22 38 45.5	
(6)	iP	Z	22 57 48	
	eP	N	57 48	
(7)	iP	NZ	23 05 00	
(8)	iP	Z	23 18 22	
(9)	iP	Z	23 54 38	
19 SEPT (1)	iP	Z	00 23 42	
(2)	e(P)	E	00 36 25.0	
(3)	eX	E'	01 46 18.0	
	LR	Z'	02 03 11.0	
(4)	iP	E	02 39 34.4	

Date	Phase	Comp.	Time (GCT)	Distance (km)
19 SEPT (5)	iP	E	02 44 38.0	
(6)	iP	N	03 10 10.6	
(7)	eP	Z'	04 14 54.0	240
	eS	N'	04 15 20.0	
(8)	iP	Z	05 31 02.8	270
	iS	E	05 31 31.4	
(9)	i(P)	Z	06 04 57.2	
	i(S)	Z	06 05 17.6	
(10)	iP	Z	06 33 04.0	
(11)	iP	Z	07 04 26.4	290
	iS	E	07 04 57.4	
(12)	iP	E	08 27 13.4	
	i(S)	E	08 27 30.4	
(13)	iP	Z	08 53 52.4	
(14)	iP	Z	09 40 31.6	240
	iS	E	09 40 57.6	
(15)	iP	E	11 08 46.4	
(16)	iP	Z	13 17 44.0	710
	eS	Z'	13 18 57.0	126.7 E, 13.55 N (MO)
(17)	iP	N	17 43 44.4	
(18)	iP	Z	21 49 02.6	
	iS	N	21 49 31.2	
(19)	iP	NE	23 51 11.0	
20 SEPT (1)	iP	Z	04 44 46.6	
(2)	iP	E	09 42 19.6	
(3)	iP	Z	09 46 50.2	
(4)	iP	Z	09 58 05.0	210 7.66 N, 137.4 E (MO)

Date	Phase	Comp.	Time (GCT)	Distance (km)
20 SEPT				
	eP	Z'	09 58 05.0	
	iS	E	09 58 28.0	
(5)	iP	E	10 52 35.0	
(6)	iP	Z	11 00 28.6	
(7)	iP	Z	11 03 11.4	
	eS	N'	11 04 21.0	
(8)	iP	Z	12 31 47.2	
(9)	iP	NE	13 20 35.2	
(10)	iP	N	13 32 14.6	
(11)	iP	E	15 38 24.2	
(12)	iP	E	17 00 46.4	
(13)	iP	E	17 07 44.6	
(14)	iP	Z	17 13 07.0	12.1 N, 125.7 E (CGS)
	eS	E'	17 14 14.2	
	(LQ)	E'	17 14 56.0	
	LR	Z'	17 15 14.0	
(15)	iP	N	19 48 26.6	
(16)	iP	NE	20 19 19.4	
(17)	eP	Z	21 18 26.2	
21 SEPT				
(1)	iP	ZZ'	01 43 07.2	29.1 N, 128.2 E (CGS)
	iS	NE	47 02	
(2)	i(S)	NE	03 20 20.5	
(3)	eX	Z'	12 48 57	
	(LQ)	N'E'	52 50	
	(LR)	Z'	53 44	
(4)	iP	Z	17 54 59.2	
	iX	Z	55 23.5	

Date	Phase	Comp.	Time (GCT)	Distance (km)
21 SEPT				
(5)	iP	Z	19 16 45	
	i(S)	NE	17 07.6	
	(LR)	Z'	17 14	
(6)	e(P)	Z.	19 34 06.2	
	iS	NN'	35 16	
	(LR)	Z'	35 52	
(7)	e(P)	Z	20 03 22	
	eX	Z	04 15	
22 SEPT				
(1)	iP	Z	00 05 25	
(2)	eP	Z	04 30 48.5	20.8 N, 99.3 E
	iS	E'	35 48.5	(CGS)
	LQ	N'	37 21	
	LR	Z'	39 05	
(3)	iP	ZN'E'Z'	09 38 19.5	1.3 S, 134.0 E
	iS	E'	40 49.1	(CGS)
	LR	Z'	42 52	
(4)	iP	ZZ'	11 41 00	240
	iS	E'	41 26	
(5)	i(S)	E'	12 59 36	
	(LR)	Z'	13 04 24	
(6)	eP	Z'	17 19 56.3	4570
	iS	E'	26 07	6.2 S, 164.78 E
	(LQ)	N'	30 04	(MO)
	LR	Z'	33 18	
(7)	iP	ZZ'	20 07 41.5	5.4 S, 151.5 E
	iS	E'	12 39.5	(CGS)
	LR	Z'	15 18.5	
(8)	iP	ZZ'	22 14 27	36.4 N, 141.3 E
	iS	E'	19 39	(CGS)
	LQ	E'	21 44	
	(LR)	Z'	25 27	
(9)	iP	Z	23 38 42	
23 SEPT				
(1)	eX	E'	01 00 23.0	
(2)	iP	Z	05 14 29.2	2040
	eP	Z'	05 14 29.2	

Date	Phase	Comp.	Time (GCT)	Distance (km)
23 SEPT				
	eS	N'	05 17 49.0	
	(LQ)	E'	05 18 44.0	
(3)	e(P)	Z'	09 31 20.0	
	eS	N'	09 34 05.0	
	LQ	N'E'	09 34 30.0	
	LR	Z'	09 35 28.0	
(4)	iP	E	19 08 04.4	
(5)	e(P)	Z'	19 10 34.0	
	e(S)	N'	19 12 54.0	
24 SEPT				
(1)	iP	Z	00 13 54.6	320
	iS	E	00 14 28.6	
(2)	iP	N	01 15 36.4	
(3)	iX	E	01 42 27.2	
(4)	i(P)	Z	01 52 35.0	
	i(S)	N	52 59.0	
(5)	eX	N'	03 39 47.6	
	LR	Z'	42 30	
(6)	iP	N	08 50 34.2	
(7)	iP	N	10 41 09.0	
(8)	eP	E	15 19 18.6	
(9)	iP	E	15 30 04.4	
(10)	iP	Z	18 51 28.2	450
	iS	N	52 15.4	
(11)	iP	E	19 34 23.6	
(12)	iP	Z	20 08 04.8	270
	iS	E	08 34.2	
(13)	iP	Z	20 14 40.8	220
	eS	E'	15 04.8	
(14)	iP	NE	20 50 23.2	

Date	Phase	Comp.	Time (GCT)			Distance (km)
24 SEPT						
	LR	Z'		54	55.2	
(15)	iP	E	23	25	24.4	
(16)	eP	Z'	23	58	18	13.1 N, 145.3 E
	eS	N'	00	02	25	(CGS)
25 SEPT						
(1)	i(P)	E	00	07	22.8	
(2)	e(P)	Z	02	27	12.6	
	iS	N		27	44.8	
	LR	Z'		28	00	
(3)	e(P)	N	06	23	02	
(4)	iP	Z	09	49	58.5	
(5)	eX	Z	14	45	30	
	iS	E'		49	59	
	(LQ)	E'		53	09	
	LR	Z'		54	47	
(6)	iP	Z	15	42	40.5	
	iX	Z'		42	46	
(7)	iP	Z'	15	55	43	3310
	iS	E'	16	00	36	5.0 S, 153.08 E
	LR	Z'		05	38	(MO)
(8)	iP	N'E'Z'	16	56	47	12.9 N, 145.3 E
	eP	Z		56	47	(CGS)
	iS	E	17	00	45	
	(LR)	Z'		03	44	
(9)	e(P)	Z	18	34	17	
	i(S)	N		35	32	
(10)	eP	Z	19	44	22	
(11)	iP	Z	20	04	06.5	275
	iS	N		04	36	
(12)	e(P)	Z'	21	20	24	
	(LR)	Z'		22	32	
(13)	e(P)	Z	21	37	06	

Date	Phase	Comp.	Time (GCT)	Distance (km)
26 SEPT				
(1)	iX	E	03 35 23.5	
(2)	e(P)	N	04 58 42	
	LR	Z'	59 55	
(3)	eX	N	05 07 47	
(4)	i(P)	N	05 44 08.5	
(5)	e(P)	E	06 56 11	
(6)	i(P)	E	13 11 46	
	i(S)	N'	12 59	
	(LR)	Z'	13 25	
(7)	iP	E	13 22 21	
(8)	e(P)	Z'	21 53 08	
	i(S)	N'	56 23	
	(LR)	Z'	59 01	
27 SEPT				
(1)	iX	NE	02 29 44.6	
(2)	iP	Z	03 59 12.8	240
	iS	N	59 38.6	
(3)	iX	N'E'	05 27 37	
	iX	N'	34 17	
	(LR)	Z'	39 46	
(4)	iX	NE	07 11 27	
(5)	iX	N	09 12 25.5	
(6)	i(P)	Z	13 54 05	
(7)	iP	Z	18 09 43	610
	eS	E'	10 47	12.55 N, 126.9 E
	(LQ)	E'	11 42	(MO)
(8)	i(P)	Z	18 29 35	
28 SEPT				
(1)	iP	Z	04 38 53.2	160
	iS	E	04 39 11.6	

Date	Phase	Comp.	Time (GCT)	Distance (km)
28 SEPT				
(2)	iX	E	05 12 20.6	
(3)	eP	Z'	05 17 16.0	7180
	eS	E'	05 25 52.0	
	LQ	N'E'	05 33 33.0	
	LR	Z'	05 37 54.0	
(4)	i(P)	N	06 53 14.4	
	iS	E	06 58 25.4	
(5)	iP	EZ	08 21 48.2	50
	iS	N	08 21 55.4	
(6)	iP	E	09 09 49.8	
(7)	i(P)	E	12 04 14.2	
	iS	E	12 04 39.2	
(8)	iP	E	16 54 52.6	
29 SEPT				
(1)	iP	Z	02 08 06.5	610
	iS	NE N'E'	09 10	
(2)	iX	NEZ	07 27 09.5	
(3)	iP	NEZ E'Z'	13 11 48.3	250
	iS	N'	12 15.8	
(4)	iP	Z	15 20 11	170
	iS	E	20 30	
(5)	i(P)	Z	15 54 28.5	
(6)	i(P)	E	23 46 38.5	
30 SEPT				
(1)	iP	E	15 36 30.2	
(2)	i(P)	E	19 13 34.2	
(3)	iP	Z	18 21 04.6	190
	iS	E	18 21 26.0	
(4)	iX	N	22 42 51.0	

OCT-DEC 65

DAVAO STATION

QUARTERLY SEISMOLOGICAL BULLETIN

MANILA OBSERVATORY

PHILIPPINES

DAVAO SEISMIC STATION

Davao, Philippines

Latitude	7° 8' 12'' N
Longitude	125° 36' 59'' E
Elevation	250 ft.

Instruments: World-wide standardized seismographs (USCGS)

S. P.: Benioffs (designated as N, E, Z)

T_o - 1.0 sec.

T_g - 0.75 sec.

Magnification: usually 6,250

L. P.: Sprengnethers (designated as N', E', Z')

T_o - 15 secs.

T_g - 100 secs.

Magnification: usually 3,000

Date	Phase	Time (GMT)			Comp.	T_Z(sec)	A_Z(micron)
1 OCT.							
1.	(LR)	00	28	15.0	Z'		
2.	iP	08	41	15.6	Z	1.2	0.78
	iS		41	40.8	E		
3.	eP	09	02	19.0	Z'	1.6	1.84
	eS		10	41.0	E'		
	LQ		17	39.0	N'		
	LR		20	53.0	Z'		
4.	iP	09	24	36.8	E		
5.	i(P)	13	18	09.6	Z		
	i(S)	13	18	43.2	N		
6.	iP	13	31	13.2	E		
7.	iP	13	38	11.0	E		
8.	iP	15	02	15.6	Z	0.6	0.35
	iS	15	02	29.8	N		
9.	i(P)	16	13	45.2	E		
	i(S)	16	14	34.6	E		
10.	iP	16	43	26.8	N		
2 OCT.							
1.	iP	02	41	30.0	Z	0.8	0.22
	iS		41	36.0	NE		
2.	iP	03	27	17.0	Z	0.7	0.93
	iS		27	37.0	NE		
3.	i(P)	08	37	23.8	Z		
4.	LR	08	45	56.0	Z'		
5.	iP	09	39	42.0	Z		
	i(S)		39	54.0	E		
6.	(LR)	20	04	24.0	Z'		
3 OCT.							
1.	iP	01	10	06.2	E		
2.	iP	06	13	44.0	Z	1.0	0.21
	iS		14	33.2	N		
	eX		15	16.0	N'		

Date	Phase	Time (GMT)			Comp.	T_Z(sec)	A_Z(micron)
3 OCT.							
3.	iP	06	25	07.4	Z		
4.	iP	08	36	05.0	Z		
	i(S)		36	13.6	N		
5.	iP	10	04	~~59.0~~ 35.0	Z	1.1	2.66
	eS	10	04	59.0	E'		
6.	iP	14	31	05.4	Z		
	i(S)		31	31.4	E		
7.	iP	14	54	35.0	Z	1.4	1.18
	eS	15	01	24.0	N'E'		
	LQ		06	05.0	N'		
	LR		09	02.0	Z'		
8.	iP	14	56	08.0	Z	0.6	1.51
	iS		56	20.0	NE		
9.	iX	14	59	23.0	N		
10.	iP	16	15	14.2	Z	0.8	0.24
	iS		15	36.4	NE		
11.	iP	16	18	06.6	Z		
	i(S)		18	49.0	E		
	e(S)		18	49.0	E'		
12.	eX	17	26	10.0	Z'		
13.	LR	18	18	50.0	Z'		
14.	iX	21	34	38.6	E		
4 OCT.							
1.	i(P)	00	19	03.4	Z		
	i(S)		19	45.2	N		
2.	eX	00	24	17.0	Z'		
3.	iX	00	42	51.8	Z		
4.	iP	01	50	22.0	Z	0.8	0.51
	iS		50	52.0	E'		
	(LR)		51	08.0	Z'		
5.	iP	06	24	08.0	Z		
6.	iP	09	36	10.0	Z	0.5	0.23
	iS		36	36.5	N		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
4 OCT.					
7.	i(P)	11 22 51.0	EZ		
	iS	23 14.5	N		
8.	iP	15 35 40.0	NEZ	0.2	1.16
	iS	36 04.5	N		
9.	iP	16 12 02.1	Z		
	iS	12 21.0	N		
5 OCT.					
1.	iP	00 56 02.0	Z	1.3	1.20
	iS	56 16.0	E		
2.	e(P)	01 35 10.0	Z		
3.	iP	06 03 54.0	Z		
	iS	04 00.0	N		
4.	iP	08 00 43.2	Z	1.1	0.54
	iS	01 06.3	E		
6 OCT.					
1.	iP	02 55 27.0	Z	0.4	0.29
	iS	55 35.2	N		
2.	i(P)	02 57 04.0	EZ		
3.	iP	08 21 36.6	N		
4.	iX	10 44 05.0	E		
5.	iP	11 06 15.9	Z	0.9	0.27
	iS	06 41.6	E		
6.	iP	13 52 37.6	E		
7.	iP	15 26 54.2	NE		
8.	i(P)	20 05 52.6	E		
9.	i(P)	20 21 14.0	N		
10.	eX	20 41 37.0	E		
11.	iX	20 42 22.4	N		
7 OCT.					
1.	iP	03 38 58.5	Z	1.2	0.73
	iS	41 53.0	E'		
	LR	42 17.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
7 OCT.					
2.	i(P)	03 48 07.5	Z		
3.	iP	14 04 30.5	Z		
	iS	04 50.2	E		
4.	iP	23 55 30.0	Z		
	i(S)	55 59.5	E		
8 OCT.					
1.	iX	01 34 52.2	N		
2.	eX	03 48 25.0	N'		
3.	iP	04 15 16.2	Z		
4.	iP	05 01 10.6	E		
5.	iP	07 30 06.4	N		
6.	iX	07 32 45.4	N		
7.	iP	08 24 45.0	NE		
8.	i(P)	14 17 37.2	Z		
	i(S)	18 11.0	E		
9.	iP	14 41 28.2	Z		
	iS	14 42 26.2	E		
10.	iP	15 26 33.4	Z		
11.	iP	17 55 02.6	Z		
	i(S)	56 31.6	E		
	LR	56 51.0	Z'		
12.	eX	18 29 29.2	E		
13.	iP	18 45 36.2	Z		
14.	iP	20 40 14.2	Z		
9 OCT.					
1.	i(P)	06 13 07.5	Z		
2.	i(P)	12 07 37.0	NE		
3.	eX	13 36 54.0	N'		

Date	Phase	Time (GMT)			Comp.	T_Z(sec)	A_Z(micron)
9 OCT.							
4.	eP	18	49	25.5	Z	0.6	0.18
	iS		49	44.5	N		
5.	iP	19	50	31.0	Z		
	eX		51	25.0	N'		
	i(S)		51	45.5	N		
6.	i(P)	21	06	51.5	N		
7.	i(P)	22	16	00.5	N		
10 OCT.							
1.	e(P)	02	39	04.5	Z	0.8	0.14
	iS		40	07.5	E		
2.	i(P)	03	08	53.8	Z	1.0	0.40
3.	eX	10	29	18.5	Z'		
4.	LR	18	23	54.0	Z'		
5.	e(P)	21	12	11.0	Z		
6.	iX	22	58	50.0	NE		
7.	e(P)	23	19	43.0	Z		
11 OCT.							
1.	iP	04	37	31.8	N		
2.	iP	04	52	40.6	Z	0.8	5.37
	i(S)	04	53	06.7	N		
3.	i(P)	05	01	42.8	E		
4.	iP	05	04	53.0	Z	0.6	0.31
	iS		05	22.0	E		
5.	i(P)	05	14	30.4	E		
6.	iP	05	17	14.6	E		
	iS		17	38.8	N		
7.	iP	05	22	52.8	E		
	iS		23	18.2	NE		
8.	iP	05	32	58.2	Z	1.2	0.87
	iS		33	26.4	N		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
11 OCT.					
9.	iP	05 35 35.4	Z	1.1	0.37
	iS	36 02.8	N		
10.	iX	06 53 17.8	E		
11.	eP	06 56 52.0	Z'	0.6	1.22
	iS	57 23.0	NE		
12.	iP	08 31 58.0	Z	1.0	0.51
	eS	32 27.2	N'E'		
13.	eP	08 54 02.0	Z'	0.6	0.51
	i(S)	54 31.1	N		
14.	iP	08 55 42.2	Z	0.8	1.02
	iS	56 11.1	N		
15.	iX	09 10 28.4	E		
16.	iP	10 01 14.4	Z	0.4	0.35
	iS	01 41.8	E		
17.	iP	10 05 43.4	Z'	1.1	3.85
	eS	06 13.5	E'		
18.	iP	15 56 09.8	Z		
	i(S)	56 37.4	NE		
19.	iP	16 49 49.4	Z		
	i(S)	50 16.4	E		
20.	iP	20 07 04.6	Z	0.7	0.06
	iS	07 37.2	N		
21.	iP	20 42 20.0	Z		
	i(S)	42 48.6	N		
22.	iX	21 19 44.4	E		
23.	iP	21 40 53.0	Z	0.8	0.74
	iS	41 22.4	E		
24.	iP	22 37 17.0	Z		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
11 OCT.					
25.	iP	22 42 19.4	Z		
	i(S)	42 49.4	E		
26.	iX	23 09 34.0	E		
12 OCT.					
1.	iP	00 36 35.5	Z		
2.	i(P)	06 31 43.5	Z		
3.	iP	13 53 06.0	Z	1.0	0.29
	iS	14 03 04.0	N'E'		
	LQ	13 04.0	N'		
	LR	21 31.0	Z'		
4.	i(S)	15 32 45.0	NE		
5.	iP	18 57 38.0	Z	1.0	0.56
	iS	59 03.0	N'		
6.	iP	23 53 50.5	NEZ	0.7	0.40
	iS	54 50.0	EN'E'		
13 OCT.					
1.	i(P)	02 07 40.5	Z	1.0	0.30
	iS	08 33.0	NE		
2.	iP	02 50 10.0	NZ	1.0	0.30
	i(S)	50 33.0	E'		
3.	iP	04 23 42.0	NEZ,Z'	0.5	1.08
	i(S)	24 10.5	E		
4.	iP	04 35 08.0	NEZ,Z'	0.5	1.42
	iS	35 35.0	E,N'		
	LR	35 54.0	Z'		
5.	iP	05 03 28.0	NZ	0.5	0.62
	iS	03 33.0	NE		
6.	iX	13 58 19.0	NE		
7.	eP	14 55 44.0	Z'		
	e(S)	15 03 26.2	N'E'		
	(LR)	12 37.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
13 OCT.					
8.	i(P)	21 25 09.0	Z		
	i(S)	25 29.0	E		
14 OCT.					
1.	iP	01 13 40.0	Z		
2.	iP	01 31 50.6	Z		
3.	eP	08 14 49.0	N' Z'		
4.	iX	11 04 13.6	E		
5.	iX	18 40 04.4	N		
6.	iX	20 55 10.6	E		
15 OCT.					
1.	LR	01 34 13.0	Z'		
2.	iP	06 48 21.5	Z	0.9	0.11
3.	LR	14 35 12.6	Z'		
4.	iP	17 02 04.6	Z	0.7	0.04
	iS	02 32.1	E		
5.	iP	18 44 03.0	Z	0.8	1.46
	iS	44 24.3	N		
6.	iP	18 57 05.5	Z	0.4	0.07
	iS	57 23.3	N		
7.	iP	19 03 02.0	Z	0.8	0.29
	iS	03 23.0	N		
8.	iP	21 00 54.4	Z	0.9	0.69
	iS	01 30.6	E'		
16 OCT.					
1.	eiP	02 41 24.2	Z	1.5	2.55
	iS	41 49.7	E		
2.	iP	03 20 09.0	Z	1.3	1.33
	iS	20 35.6	E'		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
16 OCT.					
3.	iP	06 54 26.1	Z	1.1	0.77
	iS	54 54.3	E		
4.	iP	08 24 11.1	Z	1.0	12.00
	iS	25 09.0	E'		
5.	eiP	12 02 55.2	Z	1.0	0.18
6.	iP	12 27 21.2	Z	1.1	0.39
	iS	27 48.9	E		
7.	eP	15 02 36.3	Z	1.2	0.23
	i(S)	03 04.3	E		
8.	iP	18 14 54.0	Z	0.6	0.10
	iS	15 12.8	E		
9.	eP	20 11 45.8	Z	1.8	0.30
	e(S)	20 32.0	E'		
	LQ	25 46.0	N'		
	LR	28 05.6	Z'		
10.	eX	22 33 34.0	N'		
	LR	44 20.0	Z'		
17 OCT.					
1.	iP	01 58 05.5	Z	0.9	0.11
2.	eP	02 00 18.0	Z'		
	eS	02 05 19.6	N'		
	e(SS)	08 02.4	E'		
	(LQ)	08 28.6	N'		
	LR	09 56.0	Z'		
3.	iP	03 53 22.5	Z	0.8	0.10
	iS	53 47.9	N		
4.	iP	04 59 14.3	Z	1.0	0.08
	iS	05 00 34.2	E'		
5.	iP	08 15 55.5	Z	1.0	0.19
	i(S)	16 28.9	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
17 OCT.					
6.	iP	15 00 29.0	E		
	i(S)	01 20.2	E		
7.	iP	16 24 08.1	Z	1.5	0.09
	iS	24 33.0	E		
8.	iP	17 08 05.8	Z	1.0	0.14
18 OCT.					
1.	iX	01 48 09.0	E		
2.	iP	02 43 02.0	Z	1.0	0.32
	e(S)	43 13.5	N		
3.	iX	02 45 41.6	N		
4.	iP	06 45 23.0	Z	1.2	0.11
	i(S)	45 48.5	E		
5.	iX	09 59 11.5	E		
6.	iX	10 57 02.0	N'		
7.	iX	12 05 33.5	E		
8.	eP	12 44 25.7	Z	1.5	0.30
9.	i(P)	20 22 39.0	E		
10.	i(P)	21 06 25.0	E		
11.	iP	21 52 08.0	Z	2.1	12.34
12.	iP	23 03 16.2	Z	2.0	0.96
19 OCT.					
1.	iP	04 42 04.8	Z	1.0	0.26
	eS	43 10.0	E'		
2.	eP	14 19 09.6	Z	2.2	1.03
	eS	21 34.0	N'		
3.	eP	20 58 51.5	Z	2.2	0.93
	eS	21 07 04.0	E'		
	eX	14 07.0	Z'		

Date		Phase	Time (GMT)			Comp.	T_Z(sec)	A_Z(micron)
20 OCT.								
	1.	iP	02	45	54.8	Z	0.8	0.11
		e(S)		46	46.0	E'		
		LR		47	18.4	Z'		
	2.	iP	03	06	57.9	Z	0.9	0.37
		iS		07	05.1	E		
	3.	iP	04	12	47.5	Z	1.0	1.25
		iS		13	13.7	E		
	4.	iP	07	26	38.6	Z	1.1	0.21
		iS		27	07.1	E		
	5.	eiP	10	39	27.5	Z	1.8	1.96
	6.	iP	11	19	47.4	Z	1.6	0.75
		iS		20	12.4	N		
		LR		20	28.0	Z'		
	7.	LR	11	40	51.0	Z'		
	8.	eiP	13	51	49.6	Z	0.5	0.31
21 OCT.								
	1.	iP	15	48	26.0	Z	0.8	0.34
		iS		48	46.7	E		
		LQ		48	48.6	E'		
	2.	eP	21	19	29.3	Z	0.6	0.05
22 OCT.								
	1.	iX	01	57	51.0	Z		
	2.	eP	02	08	11.6	E		
		e(PcP)		10	03.8	N'		
		eX		14	26.0	E'		
		LR		15	38.0	Z'		
	3.	iP	03	09	04.7	Z	0.8	1.02
		iS		10	10.9	NN'		
	4.	iP	15	09	16.8	Z	1.0	0.56
		iS		09	37.8	E'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
22 OCT.					
5.	iP	15 38 11.3	Z		
	i(S)	38 42.0	N		
6.	eX	20 48 10.0	Z'		
	LR	52 48.4	Z'		
23 OCT.					
1.	eP	08 34 32.0	N'E'Z'		
	eS	44 55.6	E'		
	eSS	52 55.6	E'		
	LQ	09 00 42.0	E'		
	LR	04 11.8	Z'		
2.	iP	18 39 37.1	Z	0.7	0.10
	i(S)	40 37.0	E		
24 OCT.					
1.	iP	00 55 11.2	Z	0.6	0.55
	iS	55 31.3	N		
2.	eP	04 29 58.0	Z	0.7	0.12
3.	i(P)	14 16 29.5	Z		
4.	iP	14 32 58.0	Z,N'Z'	0.8	9.14
5.	iP	18 23 56.0	Z	1.5	0.57
6.	e(P)	18 31 02.0	N'Z'		
	LR	38 36.0	Z'		
7.	e(P)	20 29 31.5	Z	1.2	0.57
	eX	29 42.0	Z		
	e(S)	32 09.0	N'		
	LR	33 11.5	Z'		
8.	iX	21 33 28.0	N		
25 OCT.					
1.	eP	00 22 09.0	E'Z'		
2.	eX	03 56 12.0	E'		
3.	eP	08 47 43.5	Z'		
	i(S)	55 10.0	N'		
	LR	09 05 02.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
25 OCT.					
4.	iP	09 57 19.5	NEZ,Z'	1.0	5.28
	iS	57 36.5	E,N'		
5.	i(P)	14 16 24.5	Z	0.8	0.15
	e(S)	19 21.0	N'		
	(LR)	21 13.0	Z'		
6.	iP	14 47 04.0	Z	0.6	0.20
7.	iX	14 55 31.0	NE		
8.	eX	15 57 53.0	Z'		
	eX	16 04 09.0	N'		
9.	iX	17 23 42.0	Z		
10.	i(P)	17 48 10.2	Z		
	i(S)	48 29.5	N		
11.	e(P)	18 04 47.5	Z'		
	e(S)	14 19.0	E'		
	(LR)	22 15.0	Z'		
12.	eX	22 24 37.5	E		
13.	iP	22 41 50.5	Z,Z'	1.8	4.27
	iS	47 49.0	NE		
14.	iP	23 43 12.0	Z	1.1	0.58
	iS	44 46.0	NE		
26 OCT.					
1.	iX	02 46 31.5	N		
2.	i(P)	04 33 33.0	Z	0.5	0.22
3.	i(P)	04 54 23.0	Z	0.7	0.21
	i(S)	55 25.0	E		
	LR	55 43.0	Z'		
4.	iX	06 59 10.5	NE		
5.	iX	09 04 12.0	NE		
6.	i(P)	10 04 34.5	Z	0.7	0.19

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
26 OCT.					
7.	i(P)	10 20 06.0	Z	0.7	0.29
	iS	20 39.0	E,E'		
8.	i(P)	12 18 44.0	E		
	i(S)	19 15.0	N,E'		
9.	eX	12 22 09.5	N		
10.	eX	14 17 18.8	NE		
11.	i(P)	15 44 12.6	Z	0.6	0.11
	iS	44 46.0	N		
12.	i(P)	16 39 12.0	Z		
	i(S)	39 34.0	E		
13.	iP	19 15 51.0	Z		
	iX	15 58.6	NE		
14.	(LR)	20 40 00.0	Z'		
15.	iP	23 14 58.0	Z,N'E'Z'	0.9	12.67
	i(S)	15 12.0	N'E'		
27 OCT.					
1.	iP	09 58 18.2	Z	0.9	0.20
	iS	58 43.0	E		
2.	i(P)	12 15 07.0	Z	0.6	0.35
	iS	15 15.5	N,N'		
	LR	15 19.0	Z'		
3.	eX	15 10 25.2	E		
4.	iP	15 42 28.7	NZ,N'Z'	0.8	1.26
	iS	43 35.5	E'		
5.	iX	21 57 05.0	Z		
6.	eX	22 57 02.0	Z'		
28 OCT.					
1.	iP	01 11 48.3	Z	0.8	0.25
	iS	11 58.5	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
28 OCT.					
2.	iX	01 23 19.0	E		
3.	iX	02 37 02.0	E		
4.	e(P)	04 49 23.0	E		
	i(S)	49 52.0	N		
5.	e(P)	05 53 44.0	Z'		
	e(S)	06 01 20.0	N'		
	(LR)	10 14.0	Z'		
6.	eP	09 00 28.0	Z'	0.7	0.24
	eS	02 19.0	E'		
	(LR)	03 52.0	Z'		
7.	i(S)	11 56 59.5	E		
8.	i(P)	14 24 34.0	EZ	0.8	0.19
	i(S)	25 53.0	E		
	LR	26 16.0	Z'		
9.	i(P)	14 33 21.5	E		
	iS	33 55.2	E		
30 OCT.					
1.	eP	07 08 19.0	Z'		
	eS	17 08.0	E'		
	eSS	22 06.0	N'		
2.	LQ	07 25 28.0	N'		
	LR	29 05.0	Z'		
3.	eP	08 06 49.5	Z	1.2	0.57
4.	i(P)	18 24 42.0	Z		
	iS	25 05.0	E		
5.	eP	19 26 58.0	Z	1.1	0.48
6.	eP	19 43 19.5	Z'		
	eS	51 11.0	E'		
	LQ	57 53.0	N'		
	LR	20 00 02.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
30 OCT.					
7.	eX	20 24 35.0	NE		
8.	e(P)	21 04 05.5	N		
	iS	04 15.0	N		
31 OCT.					
1.	eX	00 23 51.0	N		
2.	iP	02 52 54.5	Z	0.8	0.40
	iS	53 43.0	E'		
	(LR)	54 06.0	Z'		
3.	iP	03 53 18.2	Z,Z'	1.0	0.10
	i(S)	58 19.0	E'		
	LR	04 01 10.0	Z'		
4.	eX	06 50 19.0	Z'		
5.	iP	12 11 50.0	Z	0.07	
	iS	12 13.5	N		
6.	eX	15 14 13.0	Z'		
	eX	22 46.0	E'		
	LR	33 51.0	Z'		
7.	e(P)	15 50 48.0	Z		
8.	eP	17 31 13.8	Z,Z'	1.0	0.08
	e(PP)	32 45.0	Z'		
	eS	36 54.0	N'E'		
	LQ	39 14.0	N'E'		
	(LR)	40 42.0	Z'		
9.	LR	19 55 10.0	Z'		
10.	eP	21 08 33.2	E		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
1 NOV.					
1.	eP	14 17 40.5	Z	1.0	0.40
2.	iP	18 12 28.3	Z,Z'	0.8	0.43
	eX	21 36.0	N'		
	eX	24 16.0	E'		
	(LR)	29 14.0	Z'		
3.	i(P)	18 51 05.0	Z		
	i(S)	52 13.2	N		
4.	i(P)	19 37 21.0	Z	0.5	0.13
	iS	37 54.5	NE		
	(LR)	38 12.0	Z'		
5.	iP	21 56 41.0	Z	0.5	0.05
6.	i(P)	22 46 13.0	Z	0.5	0.06
7.	eX	22 57 29.0	N'		
2 NOV.					
1.	i(P)	14 40 04.6	NE		
2.	i(P)	15 27 02.0	Z	0.5	0.06
	i(S)	27 48.0	E		
3.	eP	15 53 07.0	Z,Z'	0.9	0.09
	e(S)	56 35.0	E'		
	(LR)	58 28.0	Z'		
4.	iP	19 42 56.9	Z	1.0	0.19
	e(S)	43 23.2	N'		
	(LQ)	43 46.5	N'		
	(LR)	43 53.0	Z'		
5.	eiP	19 59 39.9	Z	1.0	0.70
	i(S)	59 59.0	E'		
	(LR)	20 00 20.0	Z'		
6.	eP	20 04 38.0	Z	1.0	0.10
	iS	05 04.5	N		
7.	iX	23 33 43.2	Z		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
3 NOV.					
1.	iP	01 58 00.5	Z'	0.9	0.40
	iS	02 08 32.0	E'		
	(LQ)	15 49.0	E'		
	LR	23 03.0	Z'		
2.	iP	03 33 07.2	Z	0.7	0.33
	iS	33 35.0	N		
3.	eX	07 40 36.0	Z'		
4.	i(P)	09 19 49.0	Z	0.8	0.25
	iS	19 54.0	N		
5.	i(P)	11 30 03.5	Z	0.9	0.11
6.	iP	16 43 43.0	Z,Z'	1.0	0.75
	iS	45 51.0	E'		
	LR	46 31.0	Z'		
7.	e(P)	18 51 33.0	Z'		
	eX	19 11 44.0	N'		
	LR	17 16.0	Z'		
4 NOV.					
1.	iP	10 20 49.8	E		
	iS	20 56.5	E		
2.	i(P)	10 24 31.0	Z	0.6	0.18
	i(S)	24 45.0	N		
3.	eiP	11 29 53.1	Z	1.0	0.64
	i(S)	31 19.0	E'		
	(LR)	32 09.0	Z'		
4.	iP	15 40 52.8	Z,Z'	1.7	4.57
	i(S)	41 36.5	N'		
5.	eiP	16 23 08.8	Z	1.0	0.30
	iS	24 31.5	E'		
6.	iP	17 01 29.5	Z	1.2	0.16
	iS	02 54.0	E'		
7.	i(P)	21 33 59.6	Z	0.7	0.09
	i(S)	34 27.2	E		
8.	i(P)	23 56 24.5	E		

Date	Phase	Time (GMT)	Comp.	T_Z (sec)	A_Z (micron)
5 NOV.					
1.	eX	10 59 34.5	Z'		
	eX	11 04 05.0	Z'		
	LR	08 14.0	Z'		
2.	eX	15 08 06.0	Z'		
	eX	12 18.0	Z'		
3.	iP	17 49 49.1	Z	0.5	0.41
	i(S)	50 10.0	E		
4.	iP	19 05 46.0	Z,Z'	1.7	0.51
	iS	09 53.0	E'		
5.	(LR)	22 15 30	Z'		
6 NOV.					
1.	iP	03 28 46.8	Z	0.7	2.17
	iS	29 27.0	E		
2.	iP	03 38 57.3	Z	0.8	0.57
3.	iX	04 04 05.8	NE		
4.	iX	06 10 56.5	E		
5.	eP	09 02 58.0	Z'		
	iS	08 23.5	E'		
6.	e(P)	18 34 59.6	Z	0.6	0.10
	iS	35 17.0	E		
7.	iP	22 21 50.0	Z,Z'	0.8	2.29
	iS	22 01.5	NE		
7 NOV.					
1.	iX	03 59 01.0	E		
2.	iX	04 14 25.0	N		
3.	iP	04 18 10.8	Z	0.5	0.20
	i(S)	18 37.5	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
7 NOV.					
4.	iP	06 59 54.4	Z	1.1	0.60
	iS	07 00 15.5	E		
5.	iX	19 17 24.5	N		
6.	iP	23 51 41.5	Z	0.8	0.43
8 NOV.					
1.	e(P)	05 32 31.8	E		
2.	eP	07 52 39.0	EZ	0.8	0.43
3.	iP	13 19 37.5	Z	0.8	0.41
	iS	20 45.0	E		
9 NOV.					
1.	iP	02 42 23.8	Z	0.9	1.47
	iS	42 45.6	E		
2.	iX	06 40 44.5	NE		
3.	iP	09 20 05.7	Z	1.0	1.22
	iS	20 28.4	N		
4.	iP	11 55 02.8	Z	0.6	0.20
	iS	55 25.0	E		
5.	i(P)	21 02 28.0	Z		
	iS	02 47.5	N		
10 NOV.					
1.	iP	00 21 53.2	Z	1.0	0.25
	iS	22 11.5	N		
2.	i(P)	02 15 04.5	Z	0.7	0.25
	iS	15 27.0	E		
3.	iP	18 28 05.8	Z	1.0	0.45
	iS	28 32.8	N		
4.	iX	22 27 46.0	NE		
5.	iP	23 28 42.3	Z	1.0	0.58
	iS	28 57.0	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
11 NOV.					
1.	e(P)	01 42 25.0	Z'		
	e(S)	49 36.0	E'		
	(LR)	59 39.0	Z'		
2.	e(P)	03 02 41.5	Z'		
	e(S)	12 24.0	E		
	(LR)	26 24.0	Z'		
3.	e(P)	05 17 22.0	Z'		
	e(S)	24 19.0	N'		
	LR	32 49.0	Z'		
4.	e(P)	17 12 24.0	Z'		
	e(S)	23 10.0	N'E'		
	(LR)	36 23.0	Z'		
5.	iP	17 17 46.5	Z	0.3	0.36
	iS	18 09.5	N		
6.	iX	21 44 14.5	NE		
7.	eX	23 10 16.0	Z'		
	(LR)	22 06.0	Z'		
12 NOV.					
1.	e(P)	02 32 34.0	Z'		
	eX	49 34.0	E'		
	LR	56 18.0	Z'		
2.	i(P)	03 32 22.0	Z	1.0	0.42
	iS	33 29.5	E'		
	LR	34 05.5	Z'		
3.	iP	03 53 20.5	Z	0.8	0.51
4.	iP	12 13 37.0	Z	0.5	0.19
	iS	14 06.0	N		
5.	iP	14 42 16.5	Z	0.5	1.24
	iS	42 34.8	E		
6.	eP	17 19 57.0	Z	1.2	0.37
	i(S)	24 40.0	N'		
7.	iP	17 58 08.0	Z	2.0	3.20

Date		Phase	Time (GMT)			Comp.	T_Z(sec)	A_Z(micron)
13 NOV.								
	1.	iP	04	42	40.5	Z	1.0	1.60
		i(S)		49	29.0	N'		
		(LR)		59	14.0	Z'		
	2.	iX	08	04	49.5	N		
	3.	(LR)	11	23	24.0	Z'		
	4.	iP	14	47	41.8	Z,Z'	1.4	2.88
		iS		48	15.5	E'		
	5.	e(P)	18	19	32.0	Z'		
	6.	(LR)	19	15	20.0	Z'		
	7.	i(P)	23	08	16.0	Z		
		i(S)		08	24.0	NE		
14 NOV.								
	1.	eX	06	08	12.0	N'		
		(LR)		10	16.0	Z'		
	2.	iP	10	24	37.2	Z	0.7	0.15
		iS		25	08.0	E		
	3.	(LQ)	16	06	05.0	N'		
		(LR)		09	43.5	Z'		
	4.	(LQ)	16	14	10.0	N'		
		(LR)		16	53.0	Z'		
	5.	(LQ)	16	22	06.5	N'		
		(LR)		25	06.0	Z'		
	6.	(LQ)	16	28	28.0	N'		
		(LR)		41	31.0	Z'		
	7.	iP	16	34	44.5	Z	0.5	0.10
		iS		34	50.5	E		
	8.	iP	20	26	31.8	Z		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
15 NOV.					
1.	i(P)	03 53 52.0	NE		
2.	iP	08 51 31.0	Z	0.8	0.48
	iS	51 52.0	E		
3.	eP	11 38 20.3	Z'		
4.	e(P)	12 11 19.0	E		
5.	(LR)	12 30 44.0	Z'		
6.	e(P)	13 49 36.5	E		
7.	iP	19 12 00.7	Z	0.6	0.53
	iS	12 27.0	E		
8.	e(P)	20 49 44.0	Z	0.8	0.13
9.	eX	20 54 26.0	Z'		
16 NOV.					
1.	i(P)	01 13 26.5	NE		
2.	i(P)	01 35 16.0	E		
3.	iP	03 49 19.0	Z	0.8	0.91
	iS	49 35.5	NE		
4.	iX	05 35 54.5	NE		
5.	iX	05 53 24.6	N		
	iX	54 45.0	E'		
6.	iP	06 46 23.5	Z		
7.	eP	15 44 12.0	Z'		
8.	LR	16 39 57.0	Z'		
9.	iP	16 56 21.5	Z	0.5	0.57
	iS	56 41.9	N		
10.	eiP	17 09 47.2	Z,Z'	0.9	0.53
	iS	13 24.0	E'		
11.	iP	21 19 20.6	Z	0.8	0.80
	iS	19 26.0	N'E'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
17 NOV.					
1.	iP	02 34 42.3	Z	1.0	0.48
	iS	35 02.0	E		
2.	i(P)	04 12 17.3	N		
3.	iX	06 24 25.0	NE		
4.	iP	09 22 39.0	Z,Z'	0.5	0.60
	iS	22 58.0	N		
5.	i(P)	17 31 38.8	Z	0.9	0.27
	i(S)	32 04.0	E		
6.	iX	17 50 26.0	Z		
	iX	51 21.5	N'		
7.	i(P)	20 21 06.0	Z		
8.	iP	21 29 27.2	Z	0.7	0.21
	iS	30 32.5	E		
9.	i(P)	22 41 56.2	Z		
	iS	42 05.5	E		
10.	iX	23 34 01.0	E		
18 NOV.					
1.	i(P)	03 24 22.5	E		
	i(S)	25 13.0	N'		
	(LR)	25 28.0	Z'		
2.	eX	07 26 53.0	E		
3.	iP	10 34 26.6	Z	0.8	0.40
4.	iP	17 20 43.6	Z,N'Z'	1.0	0.64
	iS	23 35.2	N		
5.	iP	19 33 52.0	Z	1.0	0.40
	iS	34 22.5	N		
6.	iP	20 09 55.0	Z,Z'	1.0	1.09
	iS	17 44.5	E'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
18 NOV.					
7.	eP	22 07 44.0	Z	1.0	0.48
	iS	15 23.0	N'E'		
	LR	24 13.0	Z'		
8.	iX	23 18 45.0	E		
19 NOV.					
1.	iP	03 33 37.5	Z	1.0	0.40
	iS	34 48.0	E'		
2.	eP	07 18 51.0	Z'		
	eS	27 57.0	E'		
	LR	39 31.5	Z'		
3.	iX	08 42 29.5	N		
4.	iP	10 22 13.0	Z	0.7	0.88
	iS	22 34.4	E		
5.	iP	10 50 39.5	Z	0.7	0.21
	iS	51 01.0	E		
6.	iP	14 30 58.5	Z	1.0	1.44
	iS	31 30.0	E		
7.	eP	22 35 08.0	Z'	1.9	0.77
20 NOV.					
1.	eX	04 17 55.5	Z'		
	LR	23 11.0	Z'		
2.	iP	06 58 31.0	Z'	1.0	0.56
	e(S)	07 04 00.0	E'		
	LR	05 32.0	Z'		
3.	iP	09 20 44.2	Z	0.8	0.22
	i(S)	22 44.0	Z		
	(LR)	24 21.0	Z'		
4.	eP	10 02 51.0	Z'		
	e(S)	07 47.0	E'		
	(LQ)	10 12.0	N'		
	LR	11 34.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
20 NOV.					
5.	(LR)	11 56 51.0	Z'		
6.	e(P)	15 03 05.5	Z	1.4	0.16
	iS	03 24.5	E		
7.	eP	15 09 04.4	Z,Z'	2.0	8.40
	i(S)	11 54.0	Z'		
	e(PKP)	21 09.0	E		
8.	eP	16 11 46.5	Z	1.0	0.42
9.	iP	17 24 59.5	Z	0.8	2.34
	eS	25 16.8	E		
10.	iP	18 35 10.0	Z	1.4	3.14
	iS	36 00.0	E		
11.	iX	19 17 19.8	N		
21 NOV.					
1.	iX	03 39 26.0	E		
2.	iX	05 03 21.5	N		
3.	iP	10 50 10.0	Z,N'Z'	2.2	17.04
	iS	53 00.0	E		
4.	iS	19 24 07.0	NE		
22 NOV.					
1.	iP	02 55 52.6	Z	1.2	0.25
2.	iP	07 13 29.5	Z	1.1	0.48
	iS	13 55.0	N		
3.	i(P)	11 28 05.5	Z	0.7	0.15
4.	iX	17 39 13.8	E		
5.	eX	20 35 57.0	Z		
23 NOV.					
1.	iP	03 00 38.3	Z	0.7	0.15
	i(S)	01 14.0	NE		
2.	iX	08 43 04.0	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
23 NOV.					
3.	iP	13 01 41.9	Z	1.2	0.46
	iS.	02 37.0	N		
4.	iP	16 35 56.1	Z	1.4	0.90
5.	iS	16 42 14.6	NE		
6.	iX	20 10 12.0	E		
7.	iP	21 41 13.8	Z	0.6	0.20
24 NOV.					
1.	i(P)	07 23 21.5	E		
2.	i(P)	12 41 27.0	N		
3.	iP	18 14 14.0	Z	0.5	0.11
25 NOV.					
1.	iP	18 15 01.8	Z	0.5	1.14
	iS	15 29.0	NE		
2.	iP	21 12 31.2	Z		
	iS	12 43.0	E		
3.	i(P)	22 04 10.2	Z	1.0	0.16
4.	iX	22 40 49.5	Z		
26 NOV.					
1.	iX	04 45 05.0	NE		
2.	iX	05 54 56.0	NE		
3.	iP	09 03 05.3	Z	1.0	0.96
	iS	03 21.5	NE		
4.	iP	13 40 55.5	Z	0.8	0.17
	iS	41 07.0	E		
5.	iX	17 27 10.5	E		
6.	iS	18 27 21.0	E		
7.	iP	19 43 40.8	Z	1.2	0.46
	iS	43 59.0	N		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
27 NOV.					
1.	iX	01 36 04.5	E		
2.	iP	01 43 31.4	Z	1.0	0.40
3.	iP	03 10 04.6	Z	1.2	0.46
	e(S)	14 53.0	E'		
	eX	15 58.0	N'		
4.	iP	06 14 23.8	E		
	iS	14 45.2	NE		
5.	eP	12 09 08.5	Z'		
	e(S)	17 43.0	E'		
	LQ	21 35.0	E'		
	LR	24 23.0	Z'		
6.	iP	12 31 16.5	NE		
7.	iS	15 59 28.5	NE		
8.	iP	17 27 16.8	E		
	iS	27 33.5	NE		
9.	iX	21 13 51.5	E		
10.	iS	22 48 34.2	N		
28 NOV.					
1.	eX	05 02 15.0	Z'		
2.	(LR)	06 03 14.0	Z'		
3.	iP	18 59 06.2	Z		
	iS	59 21.5	E		
4.	eP	19 01 07.0	Z'		
	e(S)	04 05.0	N		
	(LR)	06 27.0	Z'		
5.	iP	21 37 09.0	Z	1.3	2.00
	(LR)	42 23.0	Z'		
29 NOV.					
1.	i(P)	07 59 56.5	E		
2.	iP	10 22 36.0	Z	1.0	0.63
	iS	23 31.5	N,E'		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
29 NOV.					
3.	iP	13 49 04.2	Z	1.5	6.02
	iS	50 26.0	E'		
4.	iP	15 10 16.5	Z	1.0	0.24
	iS	10 42.0	N		
5.	iX	22 04 40.0	NE		
30 NOV.					
1.	iX	18 59 06.0	E		
2.	iX	20 09 16.5	N		
3.	iX	23 27 05.5	N		

Date		Phase	Time (GMT)			Comp.	T (sec)	A (micron)
1 DEC.								
	1.	iX	02	20	11.2	N		
	2.	iX	06	21	18.0	E		
	3.	i(P)	08	14	19.5	E		
		iS		14	38.5	NE		
	4.	iX	09	10	12.2	N		
	5.	i(S)	14	41	19.5	E		
	6.	eX	17	33	50.0	E'		
		eX		43	46.5	Z'		
	7.	eX	20	28	51.5	E		
2 DEC.								
	1.	iP	02	04	43.0	Z	0.8	0.40
		iS		04	56.2	E		
	2.	eX	02	56	34.0	Z'		
	3.	eX	04	37	34.0	N		
	4.	iX	13	31	06.2	Z		
	5.	iP	15	22	51.0	Z	1.0	0.48
		iS		23	11.5	E'		
	6.	i(P)	19	01	28.2	Z		
		i(S)		01	51.0	E		
3 DEC.								
	1.	iP	01	20	37.5	Z	0.7	1.13
		iS		20	59.0	N		
	2.	iP	01	24	51.0	Z	0.7	1.98
		iS		25	11.0	E,N'		
	3.	e(P)	06	55	48.0	Z'		
		eX	07	12	21.0	N'		
		(LR)		17	15.0	Z'		
	4.	iX	09	05	32.0	E		
	5.	iX	14	37	51.8	E		
	6.	iS	15	03	51.8	E		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
3 DEC.					
7.	eX	15 39 33.0	E'		
	eX	46 15.0	E'		
	(LR)	50 00.0	Z'		
8.	iX	18 39 46.0	N		
9.	i(P)	19 53 53.7	Z	0.8	0.11
10.	iX	20 39 40.5	Z		
11.	i(P)	20 59 29.0	Z		
	iS	59 46.8	NE		
12.	eX	21 13 08.0	E'		
	LR	23 04.0	Z'		
13.	iX	21 27 43.0	E		
14.	iX	22 39 10.5	N		
15.	iX	22 44 45.5	N		
4 DEC.					
1.	iX	02 22 54.0	E		
2.	eX	04 27 39.0	Z		
3.	eX	06 14 29.0	N		
4.	iP	16 03 57.5	Z	0.8	0.15
	iS	04 13.5	N		
5.	iX	16 32 33.5	Z		
6.	iS	16 45 15.8	NE		
7.	iS	18 29 25.8	E		
8.	iX	20 33 48.8	Z		
5 DEC.					
1.	iP	06 30 19.0	Z	0.8	2.68
	iS	30 39.5	E,N'		
2.	iP	06 33 46.5	Z	0.8	1.60
	iS	34 08.5	NEZ		
3.	eX	07 33 32.0	NE		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
5 DEC.					
4.	iP	09 09 31.6	Z	0.9	1.33
	iS	09 45.5	E		
5.	iP	09 15 11.0	Z	0.5	0.46
	iS	15 33.0	NE		
6.	iX	09 31 46.0	NE		
7.	iX	09 47 54.5	E		
8.	iX	10 24 09.0	NE		
9.	iX	10 29 36.0	E		
10.	eX	11 15 13.0	E		
11.	iX	11 22 31.0	E		
12.	iX	12 47 38.0	E		
13.	iP	13 03 08.9	Z	0.5	0.88
	iS	03 31.5	E		
14.	eiP	13 25 22.0	Z	0.7	0.46
	iS	25 44.5	E		
15.	iP	16 29 28.0	Z	0.5	0.22
	eX	38 06.0	E'		
16.	eP	18 24 52.5	Z	1.0	0.16
	e(S)	33 02.0	E'		
	(LQ)	39 52.0	N'		
	(LR)	42 19.5	Z'		
17.	eX	22 45 43.0	N'		
6 DEC.					
1.	iX	06 50 26.0	NE		
2.	eX	12 17 45.0	E'		
	(LQ)	25 09.0	N'		
	(LR)	30 43.0	Z'		
3.	i(P)	14 24 46.0	E		
	i(S)	25 24.0	N		
4.	i(P)	16 46 21.0	N		
5.	iP	18 45 13.0	Z	1.0	0.16

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
6 DEC.					
6.	eX	19 32 43.0	N'		
	LR	38 20.0	Z'		
7.	iP	21 09 31.5	Z	0.8	0.11
7 DEC.					
1.	i(P)	06 59 16.0	E		
	i(S)	59 37.2	E		
2.	iP	11 46 51.0	E		
3.	iX	15 00 26.5	N		
4.	iX	16 25 13.5	NEZ		
5.	iX	16 38 31.0	N		
6.	iP	16 46 36.0	Z	0.9	0.11
	iS	46 55.5	N		
7.	i(P)	22 24 27.0	Z,Z'	2.0	3.20
	i(S)	29 31.0	N'		
8 DEC.					
1.	iX	03 01 42.5	E		
2.	iP	03 50 16.0	Z	0.8	0.63
	iS	50 39.0	E		
3.	iX	06 46 40.0	N		
4.	eX	08 37 43.5	E		
5.	iP	12 55 10.8	Z	0.5	0.10
6.	eP	18 15 51.5	Z'	1.5	3.81
7.	i(P)	20 18 54.5	Z		
	i(S)	19 12.9	N		
9 DEC.					
1.	iX	05 31 29.0	N		
2.	e(P)	06 28 54.0	Z'		
	eX	46 23.0	N'		
3.	iP	13 10 50.5	Z	0.8	0.23
	i(S)	11 16.0	E		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
9 DEC.					
4.	eX	13 22 12.0	NE		
5.	eX	13 24 09.0	Z'		
6.	iX	19 57 56.8	NE		
7.	iX	20 33 28.8	Z		
10 DEC.					
1.	i(P)	00 01 42.5	E		
	iS	01 52.5	E		
2.	iX	13 24 10.0	Z		
3.	i(P)	14 22 17.0	N		
4.	iP	17 04 37.2	Z	0.8	0.33
	iS	05 02.0	NE		
5.	iX	17 10 16.0	E		
6.	iX	18 30 19.0	E		
7.	eiP	18 40 31.5	Z	0.8	0.85
	iS	40 58.0	NE		
8.	iX	20 34 28.5	E		
9.	eP	22 01 25.0	Z'		
	eS	07 56.0	E'		
	LQ	12 18.0	N'		
	LR	14 37.0	Z'		
11 DEC.					
1.	iX	02 06 24.0	E		
2.	iP	04 02 35.2	Z	0.8	0.80
	iS	02 58.0	E		
3.	iP	05 06 08.5	Z	0.9	0.15
	i(S)	06 29.0	NE		
4.	i(P)	12 07 13.0	Z	1.0	0.16
5.	iX	20 40 05.5	Z		
6.	(LR)	23 12 06.0	Z'		
7.	iS	23 19 49.5	NE		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
12 DEC.					
1.	iX	04 01 47.0	E		
2.	iP	05 23 11.5	Z	0.6	2.15
	iS	23 16.5	E'		
3.	eX	07 51 33.0	Z'		
4.	iX	09 33 19.5	E		
5.	iX	10 01 11.5	E		
6.	iX	13 12 17.0	E		
7.	iX	14 39 39.5	E		
8.	eX	17 13 09.0	Z'		
9.	iX	17 16 28.0	E		
10.	iX	21 10 43.5	E		
11.	i(P)	21 49 21.0	Z		
	i(S)	49 54.0	N'		
13 DEC.					
1.	iX	02 02 13.0	NE		
2.	e(P)	03 48 25.0	Z'		
	eX	54 48.0	Z'		
3.	eX	06 00 10.0	N'		
	eY	03 39.0	N'		
	(LR)	11 11.0	Z'		
4.	iS	07 36 43.5	NE		
5.	eP	11 00 09.0	Z'		
	eX	06 43.0	E'		
6.	i(P)	13 19 23.5	E		
	iS	19 48.5	NE		
7.	eP	14 54 18.0	Z'	1.0	0.37
	e(S)	15 00 45.0	E'		
	(LQ)	04 35.0	N'		
8.	iX	22 54 19.0	E		
9.	eX	22 56 04.0	N'		
	(LR)	23 02 06.0	Z'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
13 DEC.					
10.	(LR)	23 22 14.0	Z'		
14 DEC.					
1.	iS	01 48 51.5	NE		
2.	iS	05 44 57.8	NE		
3.	iX	08 03 06.0	N		
4.	iP	09 41 57.0	Z	1.0	1.29
	iS	42 19.0	E,N'E'		
5.	iP	12 33 47.5	Z	0.7	0.18
	iS	34 10.9	E		
6.	iP	17 21 17.5	Z	1.0	0.14
	iS	21 39.0	N		
7.	iX	17 43 49.9	N		
15 DEC.					
1.	iP	06 56 09.0	Z	0.9	0.26
	i(S)	56 22.5	N		
2.	iP	08 07 01.2	Z	0.7	0.57
	iS	07 31.0	E,N'E'		
3.	iP	08 24 07.5	Z,Z'	1.0	2.72
	iS	25 31.0	N'		
4.	iP	09 08 01.0	Z	0.8	0.69
	iS	09 25.0	N'		
5.	iX	10 46 57.5	Z		
6.	eX	10 47 09.0	Z'		
7.	eX	12 33 46.0	N'		
	eX	47 14.0	E'		
	(LR)	57 17.0	Z'		
8.	iX	15 26 44.5	NE		
9.	iX	17 11 27.0	NE		
10.	iP	19 26 29.0	Z	0.7	0.11
11.	eX	20 07 33.0	Z'		
12.	iP	21 44 41.0	Z	0.8	0.17

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
15 DEC.					
13.	iP	22 01 49.5	Z	1.0	0.32
14.	iP	23 25 07.0	Z'	2.0	2.40
16 DEC.					
1.	i(P)	02 58 21.5	N		
	iS	58 27.0	E		
2.	iX	07 43 38.0	Z		
3.	eX	10 33 31.0	E'		
	(LR)	36 48.0	Z'		
4.	iP	12 28 20.0	E		
5.	iX	14 57 54.0	E		
6.	iX	16 57 48.5	E		
7.	iX	17 58 10.5	N		
8.	e(P)	18 55 08.0	Z		
	i(S)	55 33.0	E		
9.	eiP	20 10 40.5	Z	1.0	0.48
10.	eX	22 23 29.0	E'		
17 DEC.					
1.	iP	03 47 17.3	Z	0.9	0.37
	iS	47 59.5	N		
2.	iX	07 34 20.5	E		
3.	iX	10 21 24.5	E		
4.	iP	13 32 05.8	Z	0.9	1.47
	iS	32 27.0	E		
5.	iX	16 15 20.5	Z		
6.	iX	19 45 06.0	E		
7.	iX	21 36 54.5	E		
18 DEC.					
1.	iS	10 47 15.0	N		
2.	eX	13 44 15.0	Z'		
3.	i(P)	20 06 03.5	Z		
	iS	06 28.5	N		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
18 DEC.					
4.	i(P)	20 41 58.0	Z		
19 DEC.					
1.	i(P)	03 35 40.8	E		
2.	iX	03 41 10.5	Z		
3.	iX	04 40 45.0	N		
4.	i(S)	05 57 55.5	NEZ		
5.	e(P)	17 28 09.0	Z		
6.	i(P)	17 47 24.8	E		
7.	iP	21 24 12.0	Z	0.8	0.26
	i(S)	24 42.2	N		
8.	e(P)	22 16 33.5	Z	2.0	0.15
	i(S)	24 41.5	E'		
	LQ	31 15.0	E'		
	LR	34 15.0	Z'		
9.	iP	22 52 10.0	Z	0.7	0.98
	iS	52 28.5	NE,E'		
20 DEC.					
1.	iP	05 26 50.0	Z	0.8	0.46
2.	iX	08 30 24.0	N		
3.	iX	09 02 15.0	N		
4.	iX	11 46 31.5	N		
5.	i(S)	16 25 17.6	E		
6.	iP	21 33 27.8	Z	0.8	0.65
	iS	33 35.0	NE		
21 DEC.					
1.	eX	03 01 11.0	E'		
	(LR)	02 13.0	Z'		
2.	i(P)	06 18 15.8	E		
	i(S)	18 32.0	E		
3.	i(P)	09 01 28.0	E		
	iS	01 47.3	NE		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
21 DEC.					
4.	iX	15 18 36.2	Z		
5.	iX	15 54 43.0	N		
6.	iX	19 05 05.7	Z		
	iS	05 12.4	N		
22 DEC.					
1.	e(P)	00 37 53.0	Z'		
	e(S)	45 44.0	E'		
	eX	52 10.0	N'		
2.	iP	00 54 03.2	Z,Z'	1.0	8.25
	iS	54 58.0	N'E'		
3.	iX	02 05 29.8	N		
4.	eX	07 56 20.0	N'		
5.	i(P)	11 05 46.8	N		
6.	eX	15 44 43.8	E		
7.	iP	19 53 25.5	Z,Z'	1.0	0.80
	iS	20 03 23.0	N'		
	LQ	20 14 45.0	E'		
	LR	18 59.0	Z'		
23 DEC.					
1.	iX	04 21 41.5	N		
2.	i(P)	04 56 34.8	Z		
	i(S)	57 02.0	N		
3.	iX	17 33 51.0	NE		
4.	iX	19 12 49.0	E		
5.	i(P)	19 34 11.0	Z		
6.	iX	21 00 15.5	Z		
7.	iS	21 10 50.0	E'		
	eX	23 13.0	N'		
	(LR)	31 05.5	Z'		
24 DEC.					
1.	iX	01 38 15.5	NE		
2.	iX	03 19 50.8	N		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
24 DEC.					
3.	iX	06 29 12.5	E		
4.	iX	08 16 50.0	NE		
5.	(LR)	09 37 13.0	Z'		
6.	iX	10 31 17.2	N		
7.	iX	16 29 01.8	E		
8.	iP	22 04 07.0	Z	0.8	0.11
	i(S)	04 29.0	N		
9.	iX	23 04 23.0	E		
25 DEC.					
1.	iP	00 23 27.0	Z	0.5	0.24
	i(S)	23 49.7	E		
2.	eiP	03 07 08.0	Z	0.8	0.69
	iP	07 08.0	Z'		
	ePPP	10 19.0	Z'		
	iS	14 33.0	E'		
	e(SS)	17 55.5	N'		
3.	iP	09 32 35.0	Z	1.0	0.35
	i(S)	33 05.0	E		
	(LR)	33 20.0	Z'		
4.	eiP	10 42 45.4	Z	1.0	1.12
	iS	43 08.0	E,N'E'		
5.	iX	14 06 42.0	Z		
6.	eX	14 09 40.5	Z'		
7.	iX	14 28 01.5	Z		
8.	iP	19 29 56.0	Z	0.8	0.51
9.	iS	20 07 52.0	E		
26 DEC.					
1.	iP	02 29 42.0	Z	0.6	1.68
	iS	29 56.4	NE		
2.	eP	03 59 03.0	Z	2.0	2.40
	iP	59 03.0	Z'		
	iX	59 54.0	Z		
	eX	04 04 47.5	N		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
26 DEC.					
3.	iP	06 19 31.0	Z	0.6	0.80
	iS	19 52.5	E		
4.	iX	08 21 13.5	Z		
5.	iX	12 59 19.5	N		
6.	iX	13 23 05.0	Z		
7.	i(P)	14 16 11.2	Z		
8.	e(P)	14 52 10.5	Z		
9.	iP	18 06 23.5	Z		
	iS	06 26.0	NE		
10.	eX	20 27 30.8	Z		
11.	iX	20 51 12.8	Z		
12.	iX	21 15 11.5	Z		
27 DEC.					
1.	iX	02 13 48.0	E		
2.	iX	04 31 08.0	N		
3.	iP	05 25 40.2	Z	0.7	0.67
	iS	25 57.2	E		
4.	iX	13 35 53.2	E		
5.	eX	13 38 34.5	E		
6.	iS	17 06 00.8	NE		
7.	iX	17 51 18.2	Z		
8.	iX	17 54 02.5	Z		
9.	iP	20 19 36.0	Z'	1.0	0.27
	i(S)	20 28.0	E'		
10.	iX	20 53 36.3	E		
11.	eX	21 02 10.0	N		
12.	eX	21 07 41.0	E		
13.	iX	22 24 22.5	Z		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
28 DEC.					
1.	iX	01 20 24.5	N		
2.	eX	07 09 12.0	N'		
	(LR)	12 55.0	Z'		
3.	iX	07 24 28.9	E		
4.	iX	07 42 28.2	Z		
5.	iX	07 47 25.0	Z'		
6.	eX	07 47 45.9	E		
7.	i(P)	08 31 03.8	Z		
	i(S)	31 53.5	N		
	eX	32 36.0	Z'		
8.	iP	12 11 33.0	Z,Z'	1.2	0.69
	iS	12 30.5	E		
9.	iP	15 07 13.0	Z	0.7	0.46
	eP	07 13.0	Z'		
	iS	07 50.5	E'		
	(LR)	09 14.0	Z'		
10.	iP	20 37 55.2	Z,Z'	1.0	0.56
	i(S)	42 20.0	N'		
	(LQ)	43 14.0	N'		
	(LR)	44 56.5	Z'		
29 DEC.					
1.	iP	04 21 04.0	Z'	2.0	2.40
	i(S)	24 05.0	N'		
	(LR)	26 09.0	Z'		
2.	iX	05 04 46.7	Z		
3.	iX	06 27 57.0	Z		
	eX	28 50.0	E'		
	(LR)	29 42.0	Z'		
4.	iX	06 50 40.8	E		
5.	iX	07 36 27.0	Z		
6.	eX	08 51 15.6	Z		
7.	iP	15 39 45.1	Z	0.8	0.22
	iS	40 49.0	N'		

Date	Phase	Time (GMT)	Comp.	T_Z(sec)	A_Z(micron)
29 DEC.					
8.	(LR)	17 24 21.0	Z'		
9.	iX	19 32 14.2	E		
10.	iX	21 18 16.5	N'		
11.	iP	21 54 32.1	Z	0.3	0.60
	iS	54 43.5	NE		
12.	iX	23 03 49.5	N		
30 DEC.					
1.	i(S)	02 27 27.0	E'		
	(LQ)	37 06.0	N'		
	LR	40 43.0	Z'		
2.	i(P)	05 11 30.2	E		
3.	iX	05 31 24.0	E		
4.	i(P)	05 54 04.2	E		
	i(S)	55 05.0	E		
	(LR)	55 50.0	Z'		
5.	iP	06 21 51.5	Z	1.2	0.57
	e(S)	23 13.0	E'		
	(LR)	23 41.0	Z'		
6.	eX	09 02 15.5	N'		
7.	eX	09 46 53.5	N'		
8.	eX	09 55 52.0	N'		
9.	eX	10 57 08.0	N'		
10.	iP	13 12 58.5	Z		
	iX	13 07.5	Z		
	iS	13 10.0	NE		
11.	iX	17 08 23.0	E		
12.	eX	17 10 51.0	N'		
13.	iX	21 14 07.0	N		
	iX	31 17.0	N		
	i(S)	32 06.5	N		

Date	Phase	Time (GMT)	Comp.	T_z(sec)	A_z(micron)
31 DEC.					
1.	i(P)	01 47 10.2	E		
2.	iP	19 47 42.0	Z,Z'	1.6	1.31
	iS	50 53.0	N'		
	(LR)	52 42.0	Z'		
3.	iP	21 00 13.5	Z	0.9	1.20
4.	i(P)	21 47 00.0	Z		
5.	iX	22 45 25.7	E		