Seismological Bulletin of Syowa Station, Antarctica, 1979

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The present report describes the seismological data of 1979 recorded at Syowa Station. The data of the respective seismic events interpreted from the seismograms of HES and long-period seismographs are listed in chronological order.

The coordinates of seismographic vault are 69°00'31.7"S in latitude and 39°35'31.6"E in longitude. The elevation is 20 meters above the mean sea level.

Seismological observations up to January 1979 were carried out by K. Koike, members of the 19th Japanese Antarctic Research Expedition. For the succeeding period of January 1979 to January 1980, T. Morikawa, members of the 20th expedition, undertook the observations.

The seismograms were read again by Mr. R. Sakai and Miss K. Kokubun of Logistics Section, National Institute of Polar Research.

1. Date
2. Identified phase with its sharpness indication (e or i) and ground motion direction (+: Up, E, N, -: Down, W, S).
   The phase identified by the vertical component is denoted with Z and the phase by horizontal components is denoted with E (detected by E-W component) or N (detected by N-S component).
   The data from long-period seismographs are denoted with LP.
3. Arrival time in G. M. T.
4. Period of the phase in seconds.
5. Trace amplitude in millimeters.

The instrumental constants and magnification curve of HES and LP seismographs are shown in Table 1 and Fig. 1. The seismographs were operated with attenuation factor $\mu=1/4$ since March 1, 1970.

The read-out data were sent from Syowa Station to Environmental Research Laboratories throughout the wintering period.

References

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Table 1. Instrumental constants of HES and long-period seismographs.

Component		Z	N - S	E - W
HES				
T_1	(s)	1.03	1.02	1.02
S_1	(A/mm)	2.84×10^{-5}	1.96×10^{-5}	1.86×10^{-5}
R_1	(Ω)	1133	1095	1092
Ω_1	(Ω)	1041	1738	1849
h_1		1.0	1.0	1.0
T_2	(s)	1.13	0.94	1.16
S_2	(A/mm)	1.11×10^{-9}	1.47×10^{-9}	1.32×10^{-9}
R_2	(Ω)	570	630	565
Ω_2	(Ω)	1918	1592	1053
h_2		1.0	1.0	1.0
LP				
T_1	(s)	15.02	15.43	16.19
S_1	(A/mm)	2380	2840	2830
R_1	(Ω)	3100	2900	3200
Ω_1	(Ω)	48	37	156
h_1		1.0	1.0	1.0
T_2	(s)	18.0	21.1	19.2
S_2	(A/mm)	6.05×10^{-10}	5.46×10^{-10}	6.09×10^{-10}
R_2	(Ω)	359	365	368
Ω_2	(Ω)	1048	1080	782
h_2		1.0	1.0	1.0

T_1: Period of the pendulum.
T_2: Period of the galvanometer.
S_1: Sensitivity of the transducer.
S_2: Sensitivity of the galvanometer.
R_1: Resistance of the pendulum coil.
R_2: Resistance of the galvanometer coil.
Ω_1: External damping resistance of the transducer.
Ω_2: External damping resistance of the galvanometer.
h_1: Damping constant of the pendulum.
h_2: Damping constant of the galvanometer.

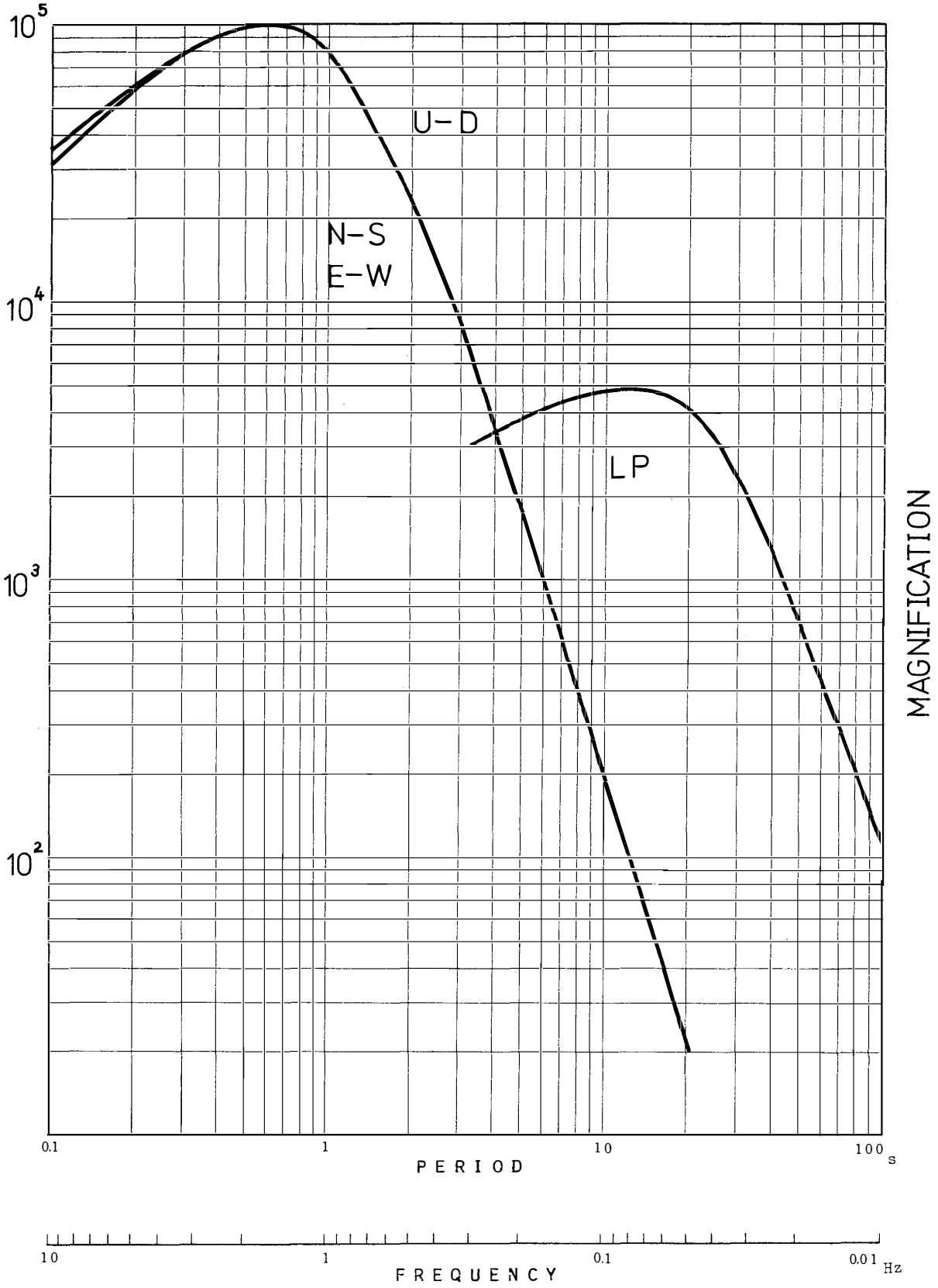

Fig. 1. Magnification curves of HES and long-period seismographs.

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
JAN	01	-EPE	16	02	12.9	1.0	1.1
		-EPZ	16	02	13.4	0.6	2.5
	02	+EPE	14	26	32.5	1.6	5.6
		-EPN	14	26	32.5	1.4	5.0
		-IPZ	14	26	32.0	1.5	4.5
	04	+EPE	13	33	13.8	0.8	0.5
		-EPN	13	33	13.4	0.6	0.5
		-EPZ	13	33	14.9	0.7	0.6
	06	+IPE	01	44	49.8	1.0	2.5
		+IPN	01	44	49.8	1.1	1.8
		+IPZ	01	44	49.8	1.2	9.0
	07	EPE	00	37	59.9		
		EPN	00	37	59.8		
		+IPZ	00	37	59.5	1.2	2.0
		+IPE	02	16	51.8	1.5	3.2
		+IPN	02	16	52.2	1.8	1.6
		+IPZ	02	16	51.8	1.8	9.3
		-EPE	11	03	09.9	1.2	1.0
		-EPN	11	03	09.4	1.0	1.0
		+IPZ	11	03	09.5	1.5	3.0
		-EPE	23	13	52.7	2.1	4.2
		+EPN	23	13	54.0	1.0	0.5
		+EPZ	23	13	54.9	1.0	0.6
	08	+EPE	07	39	59.3	1.4	1.3
		+EPZ	07	39	59.2	1.8	1.7
	09	+IPE	16	35	03.0	1.6	2.0
		-EPN	16	35	03.0	1.2	1.1
		+IPZ	16	35	03.0	1.3	3.7
	11	+EPE	06	40	05.1	1.3	2.5
		-EPN	06	40	05.9	1.1	1.1
		+EPZ	06	40	05.0	2.0	6.9
		LP ESE	06	49	52.5		
		LP-ESN	06	49	52.5	11.3	7.0
		LP-LRE	07	09	11.3	17.8	14.0
		LP-LRN	07	09	09.4	18.8	14.0
		-EPE	14	46	36.7	0.8	1.3
		+EPN	14	46	36.4	1.2	1.5
		+EPZ	14	46	37.0	1.1	1.0
	13	+EPE	06	25	10.0	0.8	1.5
		+EPN	06	25	09.8	0.8	1.0

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
JAN	13	-EPZ	06	25	09.6	1.0	2.5
		+IPE	08	50	34.0	1.0	3.5
		+IPN	08	50	34.1	1.0	2.0
		-IPZ	08	50	34.1	1.0	11.0
		+EPN	16	17	22.7	0.8	0.8
		-EPZ	16	17	21.1	1.9	2.0
		+IPE	19	41	52.7	1.2	1.0
		-EPN	19	41	53.2	1.0	0.5
		+EPZ	19	41	51.2	1.2	0.5
	16	+IPE	15	12	11.0	1.2	2.6
		EPN	15	12	12.5		
		+IPZ	15	12	11.0	1.3	3.9
		LP EPE	15	12	13.1		
		LP-ESE	15	17	56.3	11.3	4.0
		LP-SSE	15	20	09.4	13.1	7.0
		LP+SSSE	15	20	56.3	21.6	11.0
		LP-EXE	15	21	48.8	18.8	20.0
		LP+EXE	15	25	18.8	15.0	25.0
		LP-EXE	15	26	18.8	13.1	24.0
		LP-LRE	15	28	26.3	13.1	12.0
	19	+EPN	08	28	11.2	1.1	1.0
		+EPZ	08	28	11.5	1.0	1.2
	20	+EPE	05	27	55.0	1.0	2.0
		+EPN	05	27	56.5	0.8	0.7
		+IPZ	05	27	55.1	1.0	5.4
	22	+EPE	13	13	05.7	1.0	0.6
		+EPN	13	13	06.9	0.6	0.6
		+EPZ	13	13	07.0	0.7	1.0
		+EPE	15	01	31.9	0.8	1.5
		+EPN	15	01	32.0	0.5	0.7
	23	+EPE	21	56	00.5	1.6	2.0
		+EPN	21	56	01.0	1.2	1.6
		+EPZ	21	56	00.4	1.2	2.5
	25	+IPE	04	20	11.9	1.6	2.1
		+IPN	04	20	12.9	1.1	3.5
		+IPZ	04	20	11.9	2.1	10.5
		LP EPE	04	20	13.1		
		LP-ISE	04	30	16.9	11.3	9.5
		LP+LRE	05	02	43.1	15.0	8.5
		+EPE	19	51	14.5	0.6	1.0

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JAN	25	+EPN	19	51	14.5	1.0	1.5
		-IPZ	19	51	14.0	1.0	6.1
		-EPE	21	21	46.0	1.1	3.2
		-EPN	21	21	47.0	0.9	1.0
		-IPZ	21	21	46.1	1.0	10.5
		+IXE	21	24	31.8	1.5	6.0
		-EXN	21	24	32.0	1.0	1.5
		-IXZ	21	24	31.3	1.5	10.5
	26	+EPE	00	03	15.5	1.2	2.2
		+EPZ	00	03	15.3	1.0	4.0
		-EPN	01	19	40.5	1.0	0.6
		-EPZ	01	19	41.0	0.8	1.0
	27	+IPE	07	15	41.0	1.6	5.0
		-IPN	07	15	41.0	1.8	3.5
		+IPZ	07	15	41.0	1.5	8.4
		+IPE	18	27	37.3	1.5	8.6
		-IPN	18	27	37.8	1.5	5.5
		-IPZ	18	27	36.6	2.2	20.7
		LP+ESE	18	38	03.6	15.0	7.0
		LP+LRE	19	07	31.9	15.9	13.0
	29	-IPE	05	54	30.0	1.1	5.0
		+IPN	05	54	30.1	1.0	5.5
		IPZ	05	54	30.0		
		-EXE	05	56	22.0	1.8	2.2
		+EXZ	05	56	22.4	1.8	3.5
	31	+IPE	12	57	02.6	1.4	8.0
		+EPN	12	57	03.9	1.0	1.1
		IPZ	12	57	02.6		
FEB	01	-EXE	21	40	37.4	1.0	1.9
		+EXN	21	40	37.1	1.2	3.5
		+EXZ	21	40	35.8	1.0	5.0
	02	+EPE	08	35	48.2	1.2	1.3
		+EPN	08	35	48.3	1.2	2.2
		+IPZ	08	35	48.5	1.8	6.0
	03	+EPE	08	00	19.0	1.1	2.4
		+EPZ	08	00	18.9	1.1	6.0
		-EPE	08	52	26.8	1.2	1.1
		+IPN	08	52	26.5	1.1	1.0
		+IPZ	08	52	26.0	1.3	2.8
		-EPN	11	48	03.0	1.2	0.5

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
FEB	03	-EPZ	11	48	02.0	1.0	2.0
	04	-EPE	02	22	53.8	1.4	1.5
		-IPN	02	22	53.0	1.2	1.5
		-IPZ	02	22	52.7	1.4	2.6
	06	-EPE	18	23	42.5	1.3	2.0
		-IPN	18	23	42.0	2.0	2.1
		-IPZ	18	23	41.3	1.7	5.3
	07	+IPE	21	15	13.0	1.3	14.5
		+IPN	21	15	13.6	0.9	1.3
		IPZ	21	15	13.0		
		+EPE	22	34	31.5	1.0	0.8
		EPN	22	34	31.0		
		EPZ	22	34	31.2		
	08-10	EXTREME MICROSEISMIC ACTIVITY					
	11	-IPE	22	35	27.1	1.2	12.5
		+IPN	22	35	28.0	1.1	2.1
		IPZ	22	35	26.1		
	13	+EPZ	05	54	32.5	2.8	5.5
	14	IPE	17	07	42.0		
		-IPN	17	07	42.1	2.0	11.0
		IPZ	17	07	42.0		
	15	IPE	00	44	09.6		
		-IPN	00	44	09.6	2.2	14.0
		IPZ	00	44	09.4		
	16	IPE	22	30	38.5		
		+IPN	22	30	39.0	1.0	4.5
		EPZ	22	30	38.9		
	17	EXTREME MICROSEISMIC ACTIVITY					
	18	+EPE	05	29	24.3	2.2	4.0
		-EPN	05	29	23.4	2.0	7.3
		-IPZ	05	29	23.3	2.0	14.5
		LP-EPN	05	29	26.3	7.5	5.0
		LP-EPZ	05	29	26.3	8.4	7.5
		LP-ISE	05	34	02.8	13.1	48.0
		LP+IXN	05	34	22.5	26.3	73.0
	20	+EPN	06	51	48.5	0.8	1.5
		-IPZ	06	51	51.0	1.3	1.5
		LP+SSN	07	11	43.1	17.8	8.0
		LP+LRE	08	00	50.6	16.9	4.0
	24	+EPE	19	50	23.0	0.6	1.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
FEB 24	EPN	19	50	23.1		
	+EPZ	19	50	22.0	0.7	1.4
25	-EPE	15	57	07.0	1.3	3.0
	-EPN	15	57	06.4	1.0	2.0
	+EPZ	15	57	06.7	1.5	5.3
	+EPE	20	05	02.9	0.8	0.8
	+EPN	20	05	03.6	1.2	2.5
	+EPZ	20	05	03.5	1.0	1.3
26	+EPZ	19	59	22.3	1.1	4.0
27	+EPE	04	14	08.2	1.8	3.0
	+EPN	04	14	09.3	1.3	2.3
	+IPZ	04	14	09.0	1.2	6.3
	+EPE	19	31	37.0	1.4	2.0
	+EPN	19	31	35.5	1.8	1.2
	+EPZ	19	31	35.5	1.2	1.0
	+EPE	20	35	17.8	0.5	1.5
	+EPZ	20	35	19.0	0.6	0.7
28	EPE	14	16	57.3		
	+IPN	14	16	56.5	1.0	2.0
	IPZ	14	16	57.0		
	LP-EXN	21	43	56.3	13.1	5.0
	+PKP3Z	21	47	11.8	2.0	3.2
	LP-PKP3Z	21	47	26.3	10.3	21.0
	LP-PKP1Z	21	48	57.2	11.3	29.0
	LP-PKP1N	21	49	01.9	13.1	7.5
	+EPPE	21	52	39.9	2.0	3.2
	-EPPN	21	52	37.7	1.7	2.3
	-EPPZ	21	52	36.8	2.8	13.5
	LP-EPPN	21	52	47.8	15.0	11.0
	LP+EPPZ	21	52	47.8	9.4	30.0
	LP+IXZ	21	53	16.9	9.4	43.0
	LP-IXE	21	59	54.4	12.2	27.0
	LP+IXN	21	59	54.4	13.1	40.5
	LP+LRE	22	14	16.9	24.4	33.0
	LP-LRN	22	14	26.3	22.5	41.0
MAR 01	+EPE	00	18	05.5	1.2	1.2
	+IPN	00	18	05.0	1.2	2.7
	+IPZ	00	18	04.9	1.5	6.0
	+EXN	21	21	01.0	1.3	2.6
	-EXZ	21	21	00.3	1.2	2.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAR 02-03	EXTREME MICROSEISMIC ACTIVITY					
04	+EPN	03	12	01.3	1.0	1.0
	+EPZ	03	12	01.0	1.1	2.0
05-07	EXTREME MICROSEISMIC ACTIVITY					
08	+EPN	15	02	46.0	1.0	1.9
	LP-EPZ	15	02	41.3	7.5	4.0
	LP+ESE	15	13	34.7	11.3	4.0
	LP-ESN	15	13	31.9	5.6	5.0
	LP-ESZ	15	13	37.5	7.5	4.0
	LP+SPN	15	14	39.4	12.2	9.0
	LP+SPZ	15	14	37.5	9.4	4.5
	LP-LRE	15	37	31.9	18.8	8.5
	LP+LRN	15	37	24.4	20.6	8.5
	LP+LRZ	15	37	26.3	22.5	5.0
09	LP-EPZ	01	39	22.5	10.3	5.0
	LP-PPZ	01	43	15.0	6.6	4.5
	LP+ESE	01	49	54.4	11.3	4.0
	LP+SKSN	01	50	17.8	6.6	7.5
	LP-PSE	01	51	09.4	11.3	5.5
	-EPN	22	22	05.9	0.7	1.3
	-EPZ	22	22	05.5	1.0	1.4
10	EPE	17	28	41.2		
	EPN	17	28	39.0		
	-EPZ	17	28	39.4	1.0	1.5
12	LP-ESE	06	55	28.1	11.3	5.5
	LP+ESN	06	55	26.3	11.3	5.5
	LP+IXE	07	06	58.1	14.1	16.5
	LP+LRE	07	50	18.8	15.0	4.0
	LP-LRN	07	49	26.3	15.0	9.5
	+EPN	22	55	16.0	2.0	5.0
	-EPZ	22	55	17.8	2.0	6.0
	LP+ESE	22	59	22.5	11.3	3.5
	LP+ESSE	23	00	50.6	15.0	21.0
	LP+ESSN	23	00	52.5	18.8	7.0
	LP-SSSE	23	02	01.9	14.1	20.5
	LP-SCSE	23	04	31.9	12.2	13.5
	LP+SCSN	23	04	31.9	13.1	16.0
	LP+LRE	23	08	54.4	12.2	14.0
13	+EPE	20	38	02.0	1.0	3.3
	+EPN	20	38	03.0	0.8	1.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAR 13	+EPZ	20	38	04.0	0.8	1.1
14	+EPE	11	26	09.0	1.2	1.3
	+EPN	11	26	09.8	1.3	1.5
	+EPZ	11	26	09.9	1.4	3.1
	LP-PPE	11	28	05.6	15.0	4.5
	LP-PPN	11	28	04.7	16.9	6.5
	LP-SKSE	11	33	22.5	13.1	5.0
	LP-SKSN	11	33	20.6	17.6	13.0
	LP+EXE	11	34	48.8	13.1	7.5
	LP+IXN	11	34	48.8	15.0	15.0
	LP-EXE	11	35	56.3	20.6	13.0
	LP-IPSE	11	37	56.3	24.4	23.0
	LP-IPSN	11	37	56.3	16.9	34.5
	+EXZ	11	39	16.5	2.7	6.0
	LP-PPSE	11	39	22.5	16.9	10.5
	LP+PPSN	11	39	13.1	20.6	20.0
	LP-ISSE	11	44	43.1	15.9	35.5
	LP+ISSN	11	44	45.0	22.5	54.0
	LP+ISSSN	11	49	03.6	21.6	40.0
	LP+LRE	12	08	52.5	22.5	36.0
	LP-LRN	12	08	45.0	24.4	44.5
16	-IPE	04	25	30.3	1.4	2.5
	+IPN	04	25	30.5	1.8	2.1
	-EPZ	04	25	30.3	1.1	5.5
	+EPE	15	47	50.0	1.2	2.0
	+IPZ	15	47	50.3	1.2	6.2
17	+EPE	05	28	13.7	1.0	2.0
	+EPZ	05	28	15.8	0.6	2.0
	+EPZ	06	43	35.4	1.5	2.3
18	EPE	09	33	56.3		
	+EPZ	09	33	57.5	1.6	2.5
	EPE	22	45	44.3		
	IPN	22	45	45.0		
	-IPZ	22	45	45.1	1.2	9.0
	-EXE	22	48	43.0	0.8	0.7
	EXN	22	48	43.0		
	+EXZ	22	48	44.5	0.6	1.5
19	LP-ESE	22	44	37.5	11.3	2.0
	LP+ESN	22	44	39.4	11.3	2.0
	LP-SSE	22	47	37.5	13.1	4.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAR 19	LP-SSN	22	47	30.0	15.9	3.5
20	-EPZ	04	54	58.0	1.1	3.0
	+EPE	13	07	31.3	1.0	0.8
	+EPN	13	07	33.3	1.3	1.8
	+IPZ	13	07	32.0	1.5	3.7
	LP+PPE	13	09	11.3	7.5	2.0
	LP-ESE	13	13	39.4	13.1	10.0
	LP+ESN	13	13	39.4	13.1	8.5
	LP+ESSE	13	16	33.8	15.9	14.5
	LP-ESSN	13	16	33.8	18.8	15.5
	LP+LRE	13	20	45.0	16.9	9.5
	LP-LRN	13	20	33.8	16.9	13.0
	-EPE	21	21	46.0	1.1	2.0
	+EPN	21	21	46.0	1.1	2.0
	+EPZ	21	21	45.2	1.0	6.2
22-23	EXTREME MICROSEISMIC ACTIVITY					
24	+EPE	21	17	20.1	1.0	3.0
	-EPN	21	17	20.0	1.5	3.5
	+EPZ	21	17	19.0	4.0	13.0
25-26	EXTREME MICROSEISMIC ACTIVITY					
27	-EPE	22	58	39.0	1.2	2.3
	-EPN	22	58	38.0	0.8	1.2
28-29	EXTREME MICROSEISMIC ACTIVITY					
30	+IPE	22	28	16.6	1.2	2.3
	+IPZ	22	28	16.5	1.3	8.2
31	EPE	17	13	25.9		
	+EPN	17	13	26.6	1.0	0.8
	+EPZ	17	13	25.5	1.0	1.0
	-EPE	17	59	03.4	2.0	3.0
	EPN	17	59	04.9		
	-EPZ	17	59	03.0	1.8	8.5
APR 01	+EPE	01	04	06.9	1.2	3.1
	+EPN	01	04	06.2	1.2	2.0
	+EPZ	01	04	06.8	1.2	2.8
02	-EPE	04	37	02.2	1.3	1.6
	-EPZ	04	37	02.5	1.2	1.6
03-05	EXTREME MICROSEISMIC ACTIVITY					
09	+EPN	00	32	34.8	1.0	1.3
	EPZ	00	32	36.2		
10	+IPE	01	55	27.9	1.1	2.2

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
APR 10	+EXN	01	55	31.7	1.0	1.0
	+IPZ	01	55	28.0	2.2	5.0
	LP-EPE	01	55	28.1	12.2	7.0
	LP-EXE	01	56	12.2	14.1	7.5
	SKSE	02	05	57.2		
	+SKSN	02	05	58.3	1.7	4.1
	LP-SKSE	02	05	59.5	10.3	12.5
	LP-ESE	02	06	30.0	11.3	24.0
	LP+LRE	02	29	15.0	24.4	15.0
11-12	EXTREME MICROSEISMIC ACTIVITY					
13	+EPE	02	52	08.4	2.2	3.4
	+EPN	02	52	10.4	1.2	1.7
	+EPE	09	41	48.0	2.1	2.8
	-EPN	09	41	49.0	1.3	2.5
14	LP-ESE	10	21	11.3	11.3	19.0
	LP+SSE	10	25	45.0	11.3	11.0
	LP+LRE	10	37	01.9	15.0	47.0
	+EPE	21	28	49.9	0.7	1.5
	+EPN	21	28	50.0	1.0	1.5
	+EPZ	21	28	50.2	1.1	2.2
15	LP+PPE	06	39	11.3	7.5	2.5
	LP-SKSE	06	44	05.6	13.1	4.0
	LP+EXE	06	46	58.1	14.1	11.0
	LP-SPE	06	49	01.9	13.1	12.0
	LP-LRE	07	24	48.8	20.6	12.0
	LP+ISE	22	37	30.0	13.1	7.0
	LP+SKSE	22	41	03.6	11.3	12.0
19-21	EXTREME MICROSEISMIC ACTIVITY					
22	+EPE	18	29	13.4	1.4	6.5
	+EPN	18	29	15.4	0.7	1.3
	+EPZ	18	29	15.5	1.2	2.0
23	-EPE	05	56	26.0	1.2	2.6
	+EPN	05	56	25.4	1.6	1.6
	EPZ	05	56	27.0		
	LP+LRN	06	24	16.9	20.6	12.0
	LP+LRZ	06	24	18.8	18.8	19.0
	+EPE	22	03	34.8	1.2	2.5
	+IPN	22	03	35.2	1.5	4.5
	EPZ	22	03	34.0		
	LP+ESN	22	10	52.5	15.0	8.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
APR 23	LP+SSN	22	14	54.4	18.8	14.0
	LP-EXN	22	20	26.3	19.7	20.0
	LP-LRZ	22	25	52.5	15.0	52.5
24	-EPE	01	56	48.5	1.0	0.9
	-EPN	01	56	48.1	1.0	0.8
	-EPZ	01	56	48.5	1.0	3.5
	-ISE	01	58	56.9	2.9	4.8
	-ISN	01	58	58.0	2.0	4.0
	+ISZ	01	58	56.6	1.5	10.0
	+EPE	02	06	14.0	1.6	3.5
	-EPN	02	06	14.8	1.4	4.0
25	+EPE	00	02	20.0	1.0	1.9
	+EPN	00	02	19.0	1.2	1.5
	+EPZ	00	02	19.7	1.1	2.0
26	-EPE	02	10	52.9	1.0	2.0
	-EPN	02	10	52.8	1.1	1.3
	EPZ	02	10	53.0		
	+ESE	02	19	37.4	2.8	3.0
	-ESN	02	19	37.5	3.2	2.0
27-28	EXTREME MICROSEISMIC ACTIVITY					
29	+IPE	10	58	30.0	1.1	5.5
	+EPN	10	58	32.0	1.2	1.1
	+IPE	15	39	49.5	1.3	2.5
	+EPN	15	39	48.1	0.6	0.7
	+EPZ	15	39	48.3	1.2	1.5
	+EPE	16	43	16.8	1.0	1.4
	EPN	16	43	17.8		
	+EPZ	16	43	16.9	1.0	1.5
MAY 01	+EPE	10	34	11.8	1.2	3.5
	+EPN	10	34	11.5	1.1	1.3
	-EPZ	10	34	10.2	1.0	1.5
	-IPE	13	15	54.2	1.3	5.0
	+IPN	13	15	54.0	1.4	3.6
	IPZ	13	15	54.0		
	LP+EPE	13	16	05.6	7.5	5.0
	LP-EPN	13	16	05.6	7.5	2.5
	LP+IPZ	13	16	01.9	7.5	15.0
	LP+PPE	13	16	23.4	13.1	15.0
	LP+PPN	13	16	24.4	15.9	10.0
	LP-PPZ	13	16	23.4	13.1	54.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAY 01	+ISE	13	26	10.0	3.0	10.8
	+ISN	13	26	09.5	3.1	8.0
	+ISZ	13	26	09.8	5.7	20.0
	LP+ISE	13	26	24.4	15.0	30.5
	LP-ISN	13	26	24.4	13.1	30.0
	LP+ISZ	13	26	22.5	11.3	59.0
	LP-SSN	13	32	07.5	15.0	22.0
	LP+SSZ	13	32	09.4	14.1	22.0
	LP+SSSN	13	35	22.5	15.9	30.0
	+EPE	13	42	20.0	1.2	1.2
	LP-EXE	13	43	54.4	39.4	57.0
	LP+EXN	13	43	56.3	18.8	40.0
	LP-EXZ	13	43	50.6	31.9	45.0
	+ISZ	13	45	41.0	3.0	8.1
	+EPE	20	48	02.5	0.8	1.3
	+EPN	20	48	02.5	0.7	0.7
	-IPZ	20	48	02.6	1.1	6.5
02	-EXE	15	04	45.0	1.0	1.0
	-EXZ	15	04	44.8	3.4	4.0
	+IPE	18	28	03.0	2.1	6.0
	+IPN	18	28	02.5	1.5	3.5
	+IPZ	18	28	01.5	2.0	5.5
03	+EPE	21	29	25.0	1.3	2.0
	+EPN	21	29	25.8	1.5	1.0
	+EPZ	21	29	26.2	0.7	1.0
05	+EPE	20	29	18.5	1.6	1.0
	+EPN	20	29	18.9	1.2	1.0
	+EPZ	20	29	20.2	1.2	3.2
06	-EPE	02	31	06.0	1.4	3.5
	-EPZ	02	31	07.0	0.9	1.1
	-EPE	04	50	34.4	0.8	1.6
	+EPN	04	50	34.1	0.6	1.2
	+EPZ	04	50	34.2	0.7	1.0
	+EPE	07	20	17.8	1.3	1.8
	+EPN	07	20	18.3	1.1	1.0
	+IPZ	07	20	18.0	1.2	2.5
07	+EPE	13	03	40.1	2.0	3.4
	+EPN	13	03	42.0	1.4	0.7
	-EPZ	13	03	40.0	1.5	4.5
09	+EXN	19	54	08.0	1.0	1.2

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAY 10	-EPE	02	22	32.5	1.3	1.4
	+EPN	02	22	31.2	1.1	0.8
	EPZ	02	22	31.0		
11	-IPE	00	48	53.0	1.3	2.4
	+EPN	00	48	53.7	1.2	2.0
	EPZ	00	48	53.3		
13	+EPE	00	10	51.6	1.3	2.0
	+EPZ	00	10	50.0	2.2	4.5
	-EPE	06	44	05.0	1.5	2.3
	-EPZ	06	44	04.8	1.0	2.8
	+PSE	06	55	02.8	1.8	2.0
	+PSZ	06	55	02.2	1.0	1.6
	LP+PSE	06	55	07.5	13.1	6.0
	LP-PPSE	06	56	22.5	14.1	9.0
	LP+SPPE	06	57	13.1	15.0	8.0
	LP-EXN	07	00	16.9	15.0	7.5
	LP+LRN	07	14	11.3	22.5	11.5
	+EPE	10	53	07.8	1.0	0.7
	-IPE	17	42	24.8	1.8	9.0
	+IPN	17	42	25.0	0.9	1.0
	-IPZ	17	42	24.0	0.8	0.8
14	-EPE	05	49	56.2	1.5	3.0
	+EPN	05	49	56.2	1.2	1.5
	+EPZ	05	49	56.7	1.3	3.0
	+EPE	11	41	03.0	0.8	0.3
	+EPN	11	41	02.1	0.6	0.5
16	EPE	02	35	19.8		
	EPZ	02	35	19.0		
	+EPE	14	13	52.5	1.0	1.5
	-EPN	14	13	53.9	0.8	1.5
	+EPZ	14	13	53.9	0.8	1.6
17	EXTREME MICROSEISMIC ACTIVITY					
18	-IPE	16	11	10.4	1.2	5.5
	+IPN	16	11	10.4	1.4	10.2
	EPZ	16	11	10.3		
	+EPE	20	35	41.0	1.0	1.1
	+EPN	20	35	42.2	1.0	0.6
	EPZ	20	35	41.0		
	+ESE	20	41	37.4	2.4	7.0
	+ESN	20	41	37.9	1.0	0.8

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAY 18	+IPE	23	35	22.5	1.2	3.5
	-EPZ	23	35	21.0	1.1	1.6
19	EPE	22	46	24.8		
	+EPN	22	46	25.3	1.2	0.9
	+EPZ	22	46	25.8	1.1	2.6
20	LP+ESE	03	13	30.0	7.5	5.5
	LP+ESN	03	13	30.0	11.3	5.0
	LP+EXN	03	17	15.0	15.0	8.0
	LP-SCSE	03	19	22.5	13.1	11.0
	LP+LRE	03	20	39.4	13.1	12.0
	+EPE	08	45	54.3	1.8	1.2
	IPZ	08	45	54.7		
	+ISE	09	15	20.5	2.5	6.4
	+ISN	09	15	19.1	1.3	3.0
	+ESZ	09	15	16.5	1.9	2.5
	-EPN	19	49	06.9	0.6	0.7
	-IPZ	19	49	07.1	1.8	6.1
21	+EPE	05	15	18.2	1.4	2.1
	+EPN	05	15	19.0	1.1	0.6
	+EPZ	05	15	18.0	1.2	2.5
	+IPE	16	42	55.0	1.9	9.3
	EPN	16	42	56.0		
	IPZ	16	42	55.0		
	+IPE	22	34	23.4	1.0	4.5
	+IPN	22	34	23.5	1.1	3.5
	IPZ	22	34	23.3		
	LP+EPE	22	34	24.4	7.5	3.0
	LP-IPZ	22	34	24.4	8.4	9.5
	LP+EPPE	22	35	20.6	9.4	7.0
	LP-IPPZ	22	35	20.6	8.4	23.0
	-ISE	22	44	20.0	2.8	9.2
	-ISN	22	44	21.0	3.0	19.2
	-ESZ	22	44	21.8	1.2	2.0
	LP+ISE	22	44	22.5	12.2	36.5
	LP-ESZ	22	44	22.5	11.3	5.0
	LP+SKSE	22	45	28.1	13.1	11.5
	LP-IPSE	22	46	07.5	8.4	18.5
	LP+EPSZ	22	46	07.5	9.4	11.5
	+EPE	23	03	54.3	1.1	1.0
	+EPN	23	03	53.9	1.0	0.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAY 21	+EPZ	23	03	53.1	1.5	3.2
22	+IPE	02	02	26.0	1.3	4.1
	-EPN	02	02	25.6	1.1	1.0
	-IPZ	02	02	25.6	1.6	8.1
	+IPE	08	45	13.9	1.2	4.0
	+IPN	08	45	13.9	0.8	2.0
	IPZ	08	45	13.5		
	+EPE	21	44	37.1	1.8	1.9
	EPN	21	44	36.1		
	+EPZ	21	44	36.2	2.6	3.1
	LP-EXE	21	49	41.3	13.1	7.0
23	+IPE	01	00	19.9	1.0	3.4
	+EPN	01	00	20.4	1.1	1.5
	EPZ	01	00	19.0		
	+EPE	01	33	06.9	1.3	3.6
	+EPN	01	33	08.2	1.1	0.7
	+EPZ	01	33	07.0	1.2	2.5
25	+EPE	17	06	01.9	1.1	1.8
	+EPN	17	06	01.4	1.1	1.0
	+EPZ	17	06	01.6	1.5	5.5
	LP-EXE	17	16	31.9	7.5	3.0
	LP+LRE	18	14	22.5	17.8	5.0
	LP+LRZ	18	14	05.6	18.8	4.0
	-EPN	22	01	19.0	0.6	0.5
	+EPZ	22	01	18.0	1.3	0.5
27	-EPE	22	13	00.5	1.2	1.5
	+EPN	22	13	00.6	0.8	1.0
28	EPE	09	45	48.3		
	+EPN	09	45	48.6	1.3	1.1
	+EPZ	09	45	48.5	1.9	1.8
	+IPN	15	40	49.0	1.1	2.0
	IPZ	15	40	49.1		
29	+EXN	05	20	58.5	2.5	2.8
	+EPN	22	48	06.3	0.8	1.0
30	IPE	09	50	48.8		
	+IPN	09	50	50.1	1.8	2.5
	EPZ	09	50	48.5		
	LP+EPE	09	50	18.8	9.4	3.0
	LP+EPZ	09	50	46.9	11.3	7.0
	LP+ESE	10	00	41.3	13.1	5.5

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
MAY	30	LP+LRE	10	16	11.3	22.5	10.0
		LP+LRZ	10	16	05.6	22.5	7.0
		-EPE	18	01	32.6	1.6	4.1
		+IPN	18	01	33.7	1.1	1.9
		IPZ	18	01	33.1		
	31	+EPN	05	58	20.2	1.0	0.5
		+IPZ	05	58	19.9	1.3	1.5
JUN	01	+EPE	01	18	17.0	1.3	1.5
	02	-EPN	01	36	06.9	1.4	1.0
		+EPZ	01	36	07.0	0.9	1.0
		IPE	09	57	47.0		
		+EPN	09	57	49.5	0.9	1.0
		-IPZ	09	57	47.0	1.2	3.5
		LP+LRE	10	14	24.4	18.8	6.0
		+EPN	13	31	04.4	1.0	1.2
		IPZ	13	31	04.0		
	03	+EPN	05	40	16.5	1.0	0.6
		-EPZ	05	40	16.5	1.2	1.3
		+EPN	08	55	43.5	1.0	1.1
		+EPZ	08	55	44.0	1.2	3.0
	04	+EXN	07	16	40.0	0.7	0.5
		+EXZ	07	16	40.0	1.0	0.7
		-EPN	23	21	18.9	0.7	0.4
		+EPZ	23	21	18.5	1.2	2.0
	05	-EPN	06	15	39.9	0.8	1.0
		-EPZ	06	15	40.0	1.2	2.0
	06	+EPN	22	33	14.4	0.6	0.6
		EPZ	22	33	14.9		
	07	+EXE	04	34	15.6	1.0	1.6
		-EXZ	04	34	10.0	1.7	3.4
	08	+EPN	21	03	08.1	0.6	0.5
		+EPZ	21	03	07.5	0.7	0.4
	09	+EPE	21	56	14.8	0.9	0.9
		-EPZ	21	56	15.8	1.3	1.5
	10	EPE	06	44	08.4		
		-EPN	06	44	06.4	0.8	0.5
		+IPZ	06	44	06.4	1.1	1.5
		LP+ESE	06	53	26.3	13.1	3.0
		+EPE	07	03	12.3	1.1	1.1
		+EPZ	07	03	11.3	1.0	1.5

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JUN	10	ESE	07	06	49.8		
		+ESZ	07	06	48.5	1.5	1.1
		LP-LRE	07	38	11.3	17.8	6.0
		LP+LRZ	07	38	11.3	17.8	5.5
		+EPE	21	57	05.4	1.2	0.6
		+IPN	21	57	06.0	1.3	2.5
		+IPZ	21	57	05.0	2.1	6.5
		LP+EXE	22	14	24.4	30.0	5.0
		LP+EXN	22	14	22.5	21.6	11.5
		LP-EXZ	22	14	45.0	17.8	13.0
	11	-EPN	14	19	39.7	1.2	1.8
		+IPZ	14	19	39.8	2.2	5.2
		+EPE	19	27	25.1	0.6	0.6
		EPN	19	27	25.2		
		+IPZ	19	27	24.9	1.1	2.0
		+EPE	20	59	28.0	1.0	0.5
		+EPN	20	59	27.0	1.0	0.7
		+EPZ	20	59	30.0	0.8	1.1
	12	+EPE	00	02	16.9	0.8	0.4
		+EPN	00	02	17.5	0.6	0.6
		-EPE	00	03	20.8	1.3	1.0
		-EPN	00	03	20.6	1.2	1.4
		-IPZ	00	03	20.1	1.7	3.8
		LP+EPZ	00	03	22.5	7.5	2.0
		LP+PPPZ	00	05	22.5	12.2	3.5
		LP+SCSZ	00	13	56.3	20.6	4.0
		LP+LRE	00	15	30.0	18.8	3.0
		+EXE	03	49	37.5	1.0	0.7
		+EXN	03	49	38.3	1.3	0.8
		-EXZ	03	49	40.9	1.2	1.5
		+EPE	21	29	48.8	1.4	2.5
		+EPN	21	29	50.9	1.3	1.4
		-EPZ	21	29	50.0	0.8	1.5
		-EPE	23	17	16.2	1.3	5.0
		+EPN	23	17	16.8	1.2	1.8
		+IPZ	23	17	16.0	1.6	12.0
		-ISE	23	22	16.2	1.8	3.6
		+ISN	23	22	16.0	1.4	4.5
		+ISZ	23	22	16.6	2.5	12.4
		+IXE	22	23	34.9	1.1	3.5

DATE		PHASE	ARRIVAL TIME			PERIOD (S)	AMP (MM)
			H	M	S		
JUN	12	+IXZ	22	23	34.0	2.0	13.5
		+EXE	23	27	30.7	1.0	1.3
		-EXN	23	27	30.9	2.0	4.0
		-EXZ	23	27	27.0	1.3	2.0
	15	+EPN	09	06	17.8	1.0	0.6
		+IPZ	09	06	18.1	1.0	2.0
		EPE	09	59	05.0		
		-EPZ	09	59	06.8	0.8	1.0
		+EPE	20	26	29.0	1.1	1.8
		+EPN	20	26	29.0	1.1	1.7
		+EPZ	20	26	29.2	1.1	2.2
		EPE	20	34	31.6		
		+EPN	20	34	32.0	0.9	0.4
		+EPZ	20	34	31.4	1.1	0.5
	16	-EPE	07	52	51.6	1.0	1.3
		-EPN	07	52	51.4	0.9	1.3
		+EPZ	07	52	51.6	1.0	2.1
	17	+EPN	14	26	18.9	1.0	5.2
		+IPZ	14	26	18.7	1.1	4.2
		+IPE	19	45	22.8	1.6	3.1
		+IPN	19	45	22.8	1.2	1.5
		IPZ	19	45	22.6		
	19	EPE	13	36	16.6		
		+EPN	13	36	15.3	1.2	0.6
		-EPZ	13	36	15.0	1.0	1.0
		+EPN	17	45	03.4	1.2	2.2
		-EPZ	17	45	01.9	1.2	2.0
	20	+EPN	05	59	18.8	0.6	1.5
		-EPZ	05	59	18.5	0.6	1.0
		-EPE	20	27	52.6	0.7	2.1
		+EPN	20	27	52.7	0.8	1.6
		+EPZ	20	27	52.1	1.0	3.8
		LP+SPE	22	01	22.5	13.1	2.0
		LP SPN	22	01	24.4		
		LP+LRE	22	12	33.8	16.9	10.0
	22	EPN	06	49	33.0		
		+EPZ	06	49	34.9	1.7	2.9
		LP-PPE	06	51	11.3	15.0	5.0
		LP-PPN	06	51	11.3	14.1	5.0
		LP-EXE	06	56	28.1	11.3	7.0

DATE		PHASE	ARRIVAL TIME			PERIOD (S)	AMP (MM)
			H	M	S		
JUN	22	LP-EXN	06	56	28.1	11.3	9.0
		LP+SKSE	06	57	22.5	11.3	8.5
		LP+SKSN	06	57	20.6	11.3	10.0
		LP+EXE	07	00	54.4	12.2	2.5
		LP+EXN	07	00	54.4	15.0	13.0
		LP+SPE	07	01	39.4	17.8	11.0
		LP+SPN	07	01	37.5	18.8	11.5
		LP+SSPE	07	08	20.6	16.9	14.0
	23	-EPE	03	15	54.6	0.9	1.5
		-EPN	03	15	54.8	0.9	0.7
		+IPZ	03	15	54.1	1.4	4.0
		-IPE	05	20	42.0	1.1	3.3
		+EPN	05	20	42.0	1.0	0.5
		-IPZ	05	20	42.1	1.0	9.0
	24	-EPN	01	53	02.1	0.8	0.5
		-EPZ	01	53	01.8	1.0	1.1
		-EPZ	04	36	36.7	0.9	1.2
	25	-IPE	05	11	49.8	0.7	2.5
		+IPN	05	11	49.9	0.6	0.9
		IPZ	05	11	49.7		
		-EPE	05	32	54.9	0.8	1.1
		+EPN	05	32	54.9	1.2	2.6
		+EPZ	05	32	54.9	1.3	3.4
		LP+EPE	05	41	54.4	15.0	4.0
		LP-ISE	05	53	32.8	11.3	19.0
		LP+SKSE	05	53	55.3	13.1	40.0
		LP+LRE	06	25	31.9	16.9	12.0
		LP+LRN	06	24	50.6	17.8	7.0
		+IPE	11	13	59.7	1.2	9.0
		-IPN	11	13	59.5	1.5	6.6
		+IPZ	11	13	59.4	1.7	24.0
		+EPZ	12	30	15.2	1.4	2.4
		-EPE	19	05	34.6	1.7	2.0
		+EPN	19	05	35.6	0.8	0.5
		+EPZ	19	05	34.1	1.1	3.0
	26	+EPE	04	01	54.5	1.3	1.3
		+EPZ	04	01	54.8	1.2	2.0
		LP-LRE	04	40	01.9	16.9	5.0
		LP+LRN	04	40	13.1	15.0	2.5
		LP+LRZ	04	40	05.6	15.9	2.5

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JUN	26	+EPE	23	01	21.9	1.1	1.1
		-EPN	23	01	21.7	1.0	1.4
		+EPZ	23	01	22.5	1.2	1.6
	27	EXE	10	08	35.8		
		+EXZ	10	08	35.9	1.8	2.0
		LP+LRE	10	55	07.5	13.1	2.5
		LP-LRN	10	54	50.6	16.9	3.0
		LP-LRZ	10	55	16.9	16.9	8.0
		-IPE	21	57	18.5	0.7	4.0
		-IPN	21	57	18.4	0.7	2.1
		+IPZ	21	57	18.5	0.6	10.5
		-EXE	22	25	25.0	1.2	1.0
		-EXN	22	25	26.5	1.0	0.6
		+EXZ	22	25	23.5	1.8	1.6
	28	+EPE	04	27	02.8	1.6	2.0
		-EPN	04	27	03.0	2.1	1.1
		-IPZ	04	27	01.8	2.0	6.3
		-EPN	08	09	58.4	1.0	0.9
		+EPZ	08	09	58.6	1.2	1.2
		+IPE	15	03	39.5	1.1	2.0
		+IPN	15	03	39.4	1.2	3.3
		+IPZ	15	03	38.9	1.2	7.5
	29	+EPE	02	12	36.8	0.8	0.7
		+EPN	02	12	37.0	1.2	1.9
		+EPZ	02	12	36.7	1.0	3.6
		+EPE	12	33	53.5	1.1	5.0
		+EPN	12	33	54.3	1.3	1.1
		EPZ	12	33	54.0		
		+EPE	14	23	18.7	1.2	1.5
		-EPN	14	23	18.9	1.1	2.0
		-EPZ	14	23	18.3	1.2	6.0
JUL	01	LP-EXE	21	04	41.3	11.3	2.0
		LP+EXN	21	04	39.4	13.1	2.5
		LP-PPSZ	21	07	52.5	16.9	3.5
		LP+SSE	21	13	28.1	16.9	4.5
		LP+SSZ	21	13	26.3	16.9	10.0
		LP+SSSE	21	16	46.9	16.9	9.0
		LP-SSSN	21	16	45.0	16.9	4.0
		LP+SSSZ	21	16	45.0	17.8	16.5
	03	-EPE	03	01	55.3	1.1	1.5
JUL	03	-IPN	03	01	55.6	1.4	3.0
		IPZ	03	01	55.0		
		+EPE	03	08	14.0	1.1	1.2
		+EPZ	03	08	16.7	1.6	1.5
		+EPE	03	13	06.0	1.3	1.6
		-EPZ	03	13	06.0	1.3	7.0
		+EPE	05	16	26.9	0.5	0.6
		+EPZ	05	16	28.8	1.0	3.0
	04	-EPN	06	28	44.2	1.2	0.6
		+EPZ	06	28	44.0	1.2	1.5
		-EPE	17	54	09.8	1.0	2.0
		-EPN	17	54	11.3	0.7	1.0
		+EPZ	17	54	10.0	0.6	1.5
		+EPE	22	01	33.3	1.3	3.5
		-EPN	22	01	33.8	1.2	1.0
		+EPZ	22	01	33.3	1.6	7.0
	05	+EPE	06	15	24.5	1.0	1.5
		+EPN	06	15	24.1	0.9	1.4
		+EPZ	06	15	23.5	0.6	0.6
	06	-IPE	02	12	07.2	1.5	10.3
		-IPN	02	12	07.3	1.5	7.2
		IPZ	02	12	07.0		
		+EXZ	02	40	21.0	1.9	1.5
		LP+EXN	21	41	28.1	18.8	8.5
		LP+EXZ	21	41	22.5	18.8	10.0
	07	-EPE	04	05	54.9	0.8	1.3
		-EPN	04	05	54.7	0.6	0.9
		IPZ	04	05	54.0		
		+IPE	04	14	03.3	1.3	3.0
		-EPN	04	14	03.2	1.2	0.6
		+IPZ	04	14	03.4	1.4	7.1
		+IPE	05	07	12.5	0.8	2.0
		-IPN	05	07	14.1	0.6	0.5
		+IPZ	05	07	12.6	0.8	4.6
		EPN	22	03	21.0		
		-EPZ	22	03	20.0	1.1	1.0
	08	+EPZ	04	21	39.0	1.4	1.2
		IPE	09	07	20.0		
		+IPN	09	07	20.0	1.0	2.0
		-IPZ	09	07	20.0	0.9	9.0

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
JUL	08	+EPZ	09	22	33.8	1.0	1.5
		+EPE	21	43	16.5	1.0	1.1
		+EPZ	21	43	18.1	1.4	1.9
	09	+EPE	02	18	49.4	1.4	2.4
		+EPZ	02	18	49.9	1.3	1.5
		-EPN	16	21	20.2	1.2	0.9
		-IPZ	16	21	20.0	1.7	4.1
		LP+ESE	16	31	56.3	11.3	8.0
		LP+ESN	16	31	54.4	11.3	2.0
		LP+PSE	16	33	37.5	13.1	8.0
		LP+SSSE	16	42	37.5	13.1	5.0
		+EPE	19	13	55.1	1.1	2.5
		+EPN	19	13	55.3	1.1	2.0
		+EPZ	19	13	55.0	0.6	0.5
		-EXN	19	16	08.5	0.8	1.0
		+EXZ	19	16	09.9	1.0	1.1
	10	+EPN	11	18	58.8	1.0	6.0
		IPZ	11	18	58.6		
		+IPE	16	37	38.0	1.9	5.5
		-IPN	16	37	38.0	1.2	3.6
		+IPZ	16	37	38.3	1.2	14.1
		-EPE	18	11	54.8	1.3	2.3
		+EPN	18	11	54.0	1.7	1.0
		-EPZ	18	11	54.8	1.0	1.0
		+EPE	19	50	21.0	1.0	2.2
		+EPZ	19	50	22.6	0.6	1.5
		+EPE	21	59	27.0	0.8	1.0
		+EPZ	21	59	27.0	0.8	1.0
		+EPN	23	24	40.5	0.5	0.5
		+EPZ	23	24	40.7	0.6	1.0
		+EPE	23	46	05.5	0.9	2.0
		+EPN	23	46	03.8	1.1	1.4
		+EPZ	23	46	05.6	0.6	1.2
	11	+EPE	02	17	27.5	1.3	0.6
		-EPN	02	17	23.6	0.8	0.5
		+EPZ	02	17	24.9	0.8	0.4
		+EPE	08	38	32.9	0.9	1.1
		+EPZ	08	38	34.3	1.2	1.5
		+EPE	08	42	14.6	1.3	2.2
		EPN	08	42	17.0		

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
JUL	11	-EPZ	08	42	16.4	1.3	1.5
	12	-EPE	23	33	35.5	1.2	1.1
		+IPN	23	33	34.9	1.6	1.5
		+IPZ	23	33	33.8	1.7	2.0
		LP+EXE	23	58	58.1	15.0	3.0
	13	LP+LRN	00	02	09.4	15.0	3.0
		LP+LRZ	00	02	05.6	18.8	6.0
		-EPE	08	28	58.9	0.8	1.0
		EPZ	08	28	58.3		
	14	IPE	06	41	54.8		
		+IPN	06	41	54.9	1.0	1.4
		+IPZ	06	41	54.6	1.2	6.5
		-EPN	10	02	47.0	1.0	0.8
		-EPZ	10	02	48.5	0.8	1.0
		-EPN	12	16	48.4	1.2	1.6
		+EPZ	12	16	50.7	1.2	4.3
		-IPE	17	20	32.0	1.8	2.0
		+EPN	17	20	32.4	1.1	1.0
		+IPZ	17	20	31.3	1.8	3.1
	15	+EPE	00	14	09.8	1.7	6.0
		-EPN	00	14	10.0	1.8	2.0
		+EPZ	00	14	11.8	1.4	3.5
		+EPN	02	46	59.3	0.6	2.1
		+EPZ	02	46	59.7	0.5	2.0
		+IPZ	09	21	15.0	1.0	2.0
		+IPE	21	18	39.5	1.1	0.7
		+IPN	21	18	39.0	1.5	2.5
		+IPZ	21	18	38.8	1.7	4.5
		+EPE	21	22	34.6	0.4	0.5
		+EPN	21	22	33.8	1.0	1.1
		+EPZ	21	22	32.8	0.5	0.9
	16	+EPN	19	47	30.0	1.1	1.1
		+EPZ	19	47	30.2	1.6	1.6
	18	+EPE	05	36	50.0	1.8	1.8
		+EPN	05	36	49.5	1.8	1.1
		+EPZ	05	36	49.3	2.0	2.0
		-EPE	08	09	49.8	1.2	3.0
		-EPZ	08	09	49.8	1.2	6.3
		+EPE	13	31	24.1	1.4	0.8
		+EPN	13	31	25.0	1.4	1.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JUL 18	+EPZ	13	31	24.8	1.2	1.1
	+IPE	16	12	56.0	1.8	4.2
	+IPZ	16	12	55.8	2.0	9.1
	+EXE	21	52	12.5	1.0	1.0
	+EXN	21	52	12.5	0.7	0.5
	-EXZ	21	52	12.9	0.7	1.0
19	-EXN	00	21	27.0	0.6	0.6
	+EXZ	00	21	26.0	1.2	1.0
	EPE	19	05	42.0		
	-EPN	19	05	42.0	0.7	1.0
	+EPZ	19	05	42.0	0.6	0.7
20	+EPE	13	02	29.0	2.0	1.9
	+EPN	13	02	29.8	1.3	0.9
	+EPZ	13	02	29.0	1.9	3.5
	+EPE	21	47	17.1	1.1	2.0
	-IPN	21	47	17.0	1.0	1.5
	+IPZ	21	47	16.9	1.1	4.5
	+IPE	22	56	32.2	1.5	4.4
	-IPN	22	56	32.1	1.2	2.2
	+IPZ	22	56	32.1	1.1	15.0
	+EXN	22	58	36.2	1.0	1.5
	-EXZ	22	58	35.1	1.3	2.8
	+ISE	23	06	05.5	1.8	7.5
	-ISN	23	06	07.9	1.7	5.7
	+ISZ	23	06	06.1	1.6	4.9
21	+IPE	02	49	42.5	0.8	1.5
	+EPN	02	49	42.5	1.2	1.5
	-IPZ	02	49	42.3	1.1	5.5
	+EPE	07	52	32.6	1.2	0.6
	+EPZ	07	52	31.7	1.2	1.4
22	-IPE	04	18	44.0	1.9	10.5
	+EPN	04	18	44.2	2.2	3.1
	+IPZ	04	18	44.0	1.8	10.0
	ESE	04	23	44.9	2.1	14.8
	-ESN	04	23	43.2	2.1	3.2
	-ESZ	04	23	44.9	2.0	5.5
	-EPE	13	47	52.0	1.6	3.7
	+EPN	13	47	52.4	1.9	6.3
	+IPZ	13	47	52.2	2.3	9.5
	+EPE	23	31	23.1	1.3	1.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JUL 22	+EPN	23	31	22.8	1.2	1.3
	-IPZ	23	31	22.6	1.8	5.6
23	-ESE	05	41	52.4	1.1	1.8
	+ESZ	05	41	52.0	1.1	2.8
24	+EPE	01	06	44.0	1.7	4.0
	+EPN	01	06	44.2	1.2	3.5
	IPZ	01	06	43.5		
	LP-EPZ	01	06	46.9	9.4	2.5
	LP-ESE	01	17	15.0	14.1	3.0
	LP-ESN	01	17	15.0	13.1	8.0
	LP+LRE	01	43	58.1	18.8	7.0
	LP+LRN	01	43	56.3	18.8	9.0
	LP-LRZ	01	43	58.1	18.8	16.0
	EPN	09	33	54.0		
	-EPZ	09	33	52.7	1.9	6.0
	+EPZ	09	35	54.0	1.0	0.6
	+EPE	17	27	27.0	1.0	1.0
	-EPN	17	27	27.9	0.8	1.1
	+EPZ	17	27	27.5	1.0	3.0
	IPE	19	42	39.7		
	+IPN	19	42	39.5	2.0	6.0
	IPZ	19	42	39.3		
	LP+EPE	19	42	41.3	14.1	3.0
	LP-EPN	19	42	43.1	16.9	2.0
	LP+IPZ	19	42	41.3	15.0	12.5
	LP-PCPE	19	43	41.3	11.3	6.0
	LP+PCPN	19	43	37.5	9.4	3.0
	LP+PCPZ	19	43	39.4	11.3	17.0
	-ISE	19	51	57.4	4.8	10.5
	-ISN	19	51	58.0	3.2	9.0
	-ESZ	19	51	54.5	3.0	4.0
	LP-ISE	19	51	58.1	22.5	43.0
	LP-ISN	19	51	58.1	24.4	33.0
	LP-ISZ	19	51	58.1	16.9	22.0
	LP-IXE	20	05	01.9	30.0	80.0
	LP-IXN	20	05	01.9	28.1	85.0
	LP-IXZ	20	05	01.9	28.1	120.5
	LP+LRE	20	17	46.9	16.9	51.0
	LP+LRZ	20	17	52.5	17.8	71.5
25	+EPE	00	21	01.6	1.6	2.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
JUL 25	-EPN	00	21	03.8	0.9	0.8
	-EPZ	00	21	03.6	0.9	1.0
	+IPE	09	35	12.0	0.8	1.2
	+EPN	09	35	12.0	0.6	1.3
	+IPZ	09	35	12.0	1.1	6.5
	-EPE	18	09	58.3	1.2	1.7
	+EPN	18	09	58.0	1.3	3.0
	+EPZ	18	09	57.5	1.8	6.5
26	+EPN	20	08	55.5	1.1	1.0
	-EPZ	20	08	56.9	0.9	1.5
27	+EPN	04	40	19.0	1.2	1.5
	+EPZ	04	40	21.4	1.1	2.5
	+EPE	05	13	38.8	1.3	2.4
	+EPN	05	13	39.3	1.2	1.5
28	-IPE	00	06	10.7	1.2	2.8
	-IPZ	00	06	10.8	0.9	4.0
	+EPE	04	59	18.9	1.1	1.5
	EPN	04	59	19.5		
	+IPZ	04	59	19.0	0.9	2.5
29	+EPE	05	37	16.1	1.4	1.8
	+EPZ	05	37	14.7	1.6	1.7
	-EPE	22	16	04.6	1.0	1.0
	+EPZ	22	16	04.0	1.0	1.0
	LP-LRE	22	28	05.6	16.9	3.0
	LP+LRN	22	28	18.8	17.8	4.0
	LP+LRZ	22	28	18.8	17.8	6.0
	EPE	22	46	18.0	0.7	1.6
	EPN	22	46	18.2		
	-EPZ	22	46	17.9	1.0	1.2
30	+EPE	00	47	18.5	0.6	1.4
	+EPZ	00	47	18.2	0.7	1.2
	LP+LRE	01	28	41.3	18.8	2.0
	LP-LRN	01	28	15.0	18.8	2.0
	LP+LRZ	01	28	16.9	18.8	4.0
	-EXE	02	38	25.0	0.6	0.7
	EPZ	02	38	24.0		
	+EPN	22	49	53.5	1.2	0.8
	-EPZ	22	49	52.6	1.9	1.7
AUG 01	-EPE	00	01	40.0	1.1	2.0
	+EPN	00	01	40.0	1.2	0.9

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 01	+EPZ	00	01	40.2	1.2	2.2
	EPN	02	08	28.0		
	+EPZ	02	08	27.8	0.6	0.1
	+EXN	02	10	06.0	1.3	1.1
	-EXZ	02	10	06.2	1.3	2.2
	LP+LRN	02	25	33.8	15.9	3.5
	LP+LRZ	02	25	26.3	16.9	8.0
	-EPE	03	40	03.5	1.3	3.2
	+IPZ	03	40	03.3	1.2	3.5
	+EPE	11	10	20.5	1.4	1.1
	-IPZ	11	10	18.4	1.8	3.5
	-EXN	11	16	18.0	1.8	2.1
	+EXZ	11	16	18.0	2.1	5.5
	LP+ESE	11	23	06.6	8.4	3.0
	LP-LRE	11	34	24.4	18.8	9.0
	LP-LRZ	11	34	26.3	16.9	15.0
	LP-LRZ	14	43	20.6	16.9	4.5
02	+EPN	07	51	41.0	1.2	1.8
	IPZ	07	51	40.6		
	+EPN	11	43	24.4	0.8	0.7
	IPZ	11	43	24.7		
	-EPE	22	22	51.2	1.0	2.1
	+EPN	22	22	52.0	0.8	0.5
	+EPZ	22	22	50.8	1.1	3.5
03	+EPE	15	27	10.5	1.0	0.3
	+EPN	15	27	09.5	1.2	1.0
	+EPZ	15	27	09.0	1.1	1.9
04	-IPE	00	49	56.0	1.2	1.4
	+IPN	00	49	56.0	1.4	2.0
	+IPZ	00	49	55.0	2.5	4.7
	LP+ESE	00	56	54.4	7.5	2.0
	LP+ESN	00	56	54.4	9.4	4.0
	LP+EXN	01	07	58.1	20.6	10.0
	LP+EXZ	01	07	52.5	17.8	26.0
	LP+EXE	01	08	28.1	15.9	13.5
	-IPE	04	15	54.0	1.0	2.0
	+EPN	04	15	54.4	0.9	1.0
	IPZ	04	15	53.9		
05	+EPE	01	05	58.9	1.0	1.7
	IPN	01	05	59.7		

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 05	IPZ	01	05	58.8		
	LP-EPE	01	05	59.1	5.6	1.5
	ISE	01	15	58.5		
	ESN	01	15	59.1		
	+ESZ	01	15	59.9	2.3	5.5
	LP+ISE	01	15	58.1	8.4	17.0
	LP-ISN	01	15	58.1	7.5	45.0
	LP+SKSE	01	17	04.7	13.1	12.5
	LP-SKSN	01	17	01.9	13.1	14.0
	LP+IPSE	01	17	50.6	12.2	16.5
	LP+IPSN	01	17	45.0	12.2	28.0
	+EXE	01	32	03.7	1.7	1.6
	+EXZ	01	32	04.1	1.4	1.8
	EXE	12	02	31.0		
	+EXZ	12	02	28.8	1.3	1.4
	LP+ESZ	12	09	05.6	13.1	4.0
	LP+LRE	12	19	47.8	18.8	12.5
	LP+LRN	12	19	56.3	15.0	7.0
	LP+LRZ	12	19	52.5	16.9	16.5
	+EXN	16	18	25.5	1.0	0.7
	+EXZ	16	18	25.2	1.3	1.3
06	+EPN	17	25	03.6	1.1	0.6
	-EPZ	17	25	03.2	2.4	4.3
	LP+LRZ	18	22	52.5	18.8	7.0
07	+EPZ	04	53	09.5	1.3	1.1
	-EPE	13	37	43.2	1.2	3.0
	+IPN	13	37	42.9	2.4	2.7
	+IPZ	13	37	41.7	1.6	1.6
	LP+EPE	13	37	45.0	6.6	5.0
	LP+EPZ	13	37	46.9	11.3	4.0
	LP+ESE	13	41	28.1	13.1	5.0
	LP+ESN	13	41	26.3	11.3	5.0
	LP+PCPZ	13	42	52.5	20.6	6.5
	+EXN	13	52	14.7	1.0	0.6
	+EXZ	13	52	15.0	0.7	0.6
	EPE	18	40	52.0		
	EPN	18	40	50.5		
	-EPZ	18	40	52.2	1.0	1.3
	-IPE	22	46	54.0	1.3	8.0
	-EPN	22	46	55.0	1.1	0.6

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 07	+IPZ	22	46	53.7	1.3	13.5
08	IPE	08	53	43.0		
	EPN	08	53	43.3		
	-IPZ	08	53	42.5	0.7	4.2
	+EPE	10	18	41.3	1.8	4.0
	-IPZ	10	18	41.2	1.7	6.5
	LP+EXE	10	30	28.1	18.8	3.0
	LP+EXZ	10	30	33.8	18.8	6.0
	-EPE	15	19	40.8	1.1	1.0
	-EPN	15	19	39.6	1.0	0.6
	-IPZ	15	19	39.0	1.2	3.4
	+EPE	16	43	27.9	1.0	1.0
	+EPN	16	43	27.3	1.0	0.7
	+EPZ	16	43	27.1	1.0	1.0
09	-EPE	03	37	10.5	0.8	0.5
	+EPN	03	37	11.3	1.1	0.7
	+EPZ	03	37	10.8	1.2	1.3
	LP-LRZ	04	10	22.5	17.8	3.0
	-EPE	12	33	06.0	1.0	1.0
	+EPN	12	33	06.0	1.0	1.0
	-IPZ	12	33	06.0	1.2	3.5
	EPE	20	23	47.8		
	+EPN	20	23	48.2	1.6	1.5
	+IPZ	20	23	47.9	1.5	4.1
10	+EPE	01	40	02.7	1.2	2.0
	-EPN	01	40	03.3	1.2	1.0
	-IPZ	01	40	03.0	1.1	4.3
	+EXE	04	53	55.4	2.1	1.5
	-EXN	04	53	55.6	3.2	1.9
	+EXZ	04	53	54.2	2.0	2.0
	+EPE	10	37	03.0	1.0	1.1
	+IPN	10	37	02.8	1.0	1.6
	+IPZ	10	37	03.2	1.5	2.2
	+EPE	14	47	10.8	2.6	3.0
	EPN	14	47	10.8		
	EPZ	14	47	11.3		
	LP+IPN	14	47	11.3	5.6	11.0
	LP+IPZ	14	47	07.5	9.4	19.0
	LP-ISN	14	50	46.9	13.1	29.0
	LP+ISZ	14	50	48.8	11.3	26.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 10	LP-EXZ	14	52	15.0	20.6	24.0
	LP-EXN	14	53	24.4	15.9	7.0
11	+EPE	05	23	45.8	1.8	2.5
	+EPN	05	23	45.0	1.5	1.5
	+IPZ	05	23	45.4	2.0	4.0
	LP+EXN	05	42	31.9	17.8	5.0
	LP-LRE	05	44	18.8	17.8	5.5
	LP-LRZ	05	44	22.5	16.9	7.5
	-EPE	15	30	13.8	1.2	1.8
	+EPN	15	30	13.9	1.2	1.5
	+EPZ	15	30	13.0	0.9	1.1
	EXE	15	32	14.0		
	-EXZ	15	32	11.0	1.1	1.1
12	+EPE	07	32	15.9	1.3	3.0
	+IPN	07	32	16.0	1.0	1.1
	-IPZ	07	32	15.0	1.6	5.0
	+EPE	16	21	21.4	0.9	2.0
	+EPN	16	21	21.3	0.6	1.0
	+EPZ	16	21	21.7	0.8	2.4
13	+EPN	02	53	07.0	1.5	1.0
	+EPZ	02	53	06.8	1.8	2.3
	+EPE	03	16	58.0	1.5	3.5
	+EPN	03	16	52.8	1.2	1.1
	+IPZ	03	16	55.6	1.2	2.1
	-EPE	09	41	45.0	1.0	1.0
	EPN	09	41	44.9		
	EPZ	09	41	44.5		
	-EPE	12	22	58.1	1.1	1.0
	EPN	12	22	59.8		
	-EPZ	12	22	59.0	1.0	1.0
	+EPE	16	17	23.0	1.0	1.1
	-EPN	16	17	20.5	1.1	1.0
	-EPZ	16	17	23.0	1.0	2.0
14	-EPE	00	11	11.8	0.8	2.0
	EPN	00	11	12.3		
	EPZ	00	11	11.0		
	+EPE	03	55	29.5	1.3	1.1
	+EPZ	03	55	30.0	1.5	2.3
	EPE	11	09	37.8		
	+IPN	11	09	38.5	1.5	3.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 14	IPZ	11	09	38.2		
	+EPE	12	11	13.0	1.2	4.0
	-EPN	12	11	14.0	1.0	2.0
	EPZ	12	11	13.3		
16	-IPN	02	29	49.0	1.5	2.0
	+EPZ	02	29	48.3	2.5	2.5
	+EPE	21	49	20.2	1.2	0.8
	+EPZ	21	49	19.0	0.9	1.0
	LP EXE	21	51	58.1		
	LP EXN	21	51	58.1		
	LP+IXZ	21	51	56.3	9.4	8.0
17	+EPE	10	56	30.8	1.5	1.5
	+EPN	10	56	31.7	1.8	2.0
	-EPZ	10	56	30.3	1.2	1.8
	+IPE	13	11	49.0	2.0	3.6
	-IPN	13	11	49.0	1.8	2.6
	IPZ	13	11	49.0		
	LP-EPE	13	11	52.5	7.5	2.0
	LP-EPZ	13	11	52.5	7.5	6.0
	LP+ESE	13	22	16.9	15.9	24.0
	LP-ESN	13	22	16.9	9.4	10.0
	LP+ESZ	13	22	18.8	15.0	6.5
	LP-LRE	13	50	23.4	16.9	16.0
	LP-LRN	13	50	28.1	17.8	13.0
	LP+LRZ	13	50	02.8	16.9	24.0
	IPE	14	31	15.0		
	-EPN	14	31	14.3	1.8	1.5
	-IPZ	14	31	15.0	1.3	4.0
	+EPE	15	31	06.7	1.8	2.4
	EPN	15	31	06.8		
	-EPZ	15	31	06.0	1.6	2.8
	EPE	18	29	54.8		
	EPN	18	29	54.9		
	-EPZ	18	29	56.8	1.1	0.6
18	+EPE	03	10	54.0	1.0	1.5
	-EPN	03	10	54.0	0.8	0.7
	IPZ	03	10	53.5		
	+EPE	12	57	17.8	1.2	0.6
	+EPN	12	57	17.8	1.2	1.1
	+EPZ	12	57	17.0	1.3	2.5

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
AUG	18	+EPE	17	30	19.1	1.0	1.1
		+EPZ	17	30	18.0	1.5	1.3
		-IPE	18	24	45.8	1.2	4.5
		-EPN	18	24	45.8	1.2	2.5
		+IPZ	18	24	45.6	1.2	6.2
	19	EPE	03	18	09.1		
		+EPN	03	18	09.5	1.7	1.1
		-EPZ	03	18	09.0	2.0	0.9
		EPE	07	24	32.5		
		EPN	07	24	32.0		
		-EPZ	07	24	32.0	1.0	1.0
		EPN	09	39	50.0		
		EPZ	09	39	51.2	1.3	2.0
		+EPE	23	17	22.0	1.2	1.5
		-EPN	23	17	22.0	1.0	1.1
		+IPZ	23	17	21.8	1.2	4.0
		+EPE	23	51	38.2	1.0	1.1
		+EPN	23	51	38.0	0.8	1.0
		-IPZ	23	51	37.4	0.7	1.5
	20	-EXE	04	08	54.1	0.6	1.0
		EXN	04	08	52.0		
		EXZ	04	08	51.5		
		EXN	04	20	06.5		
		+EXZ	04	20	05.6	1.1	1.1
	21	-IPE	23	17	40.0	1.4	2.0
		+EPN	23	17	39.2	0.7	0.5
		-IPZ	23	17	40.0	1.0	4.5
	22	-EPE	12	33	38.9	1.2	1.9
		-IPN	12	33	38.9	1.1	1.6
		+IPZ	12	33	38.1	1.5	3.0
		+EPE	18	50	21.9	1.2	1.8
		+EPN	18	50	22.3	1.4	1.3
		+EPZ	18	50	20.5	2.0	2.5
		+EPE	20	36	46.0	1.1	0.8
		EPN	20	36	45.8		
		-EPZ	20	36	46.2	1.5	1.6
		-EXN	20	37	33.2	0.8	0.6
		+EXZ	20	37	33.5	1.8	1.9
	23	-EPZ	00	37	39.0	1.3	2.2
	24	+EPZ	02	26	37.2	1.2	2.2

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
AUG	24	+EPE	04	45	45.7	1.5	1.1
		+EPN	04	45	47.1	1.3	0.6
		-EPZ	04	45	45.5	1.5	3.0
		LP-SKSE	04	52	03.6	15.0	3.0
		LP-EPSE	04	55	20.6	16.9	3.5
		LP+EPSZ	04	55	20.6	16.9	7.0
		LP+EXE	05	25	24.4	18.8	9.0
		LP+EXZ	05	25	24.4	18.8	8.0
		LP+EXE	05	32	39.4	16.9	7.5
		LP+EXZ	05	32	35.6	16.9	14.0
		LP+EXE	05	33	56.3	15.9	10.5
		LP+EXZ	05	33	56.3	15.9	23.0
		+EPE	07	17	11.8	1.2	1.1
		+EPZ	07	17	13.9	1.5	1.5
		-EPN	17	17	32.8	1.0	0.6
		-EPZ	17	17	34.0	1.2	1.6
		+EXE	17	18	19.4	1.2	1.0
		+EXN	17	18	20.9	0.8	0.4
		IXZ	17	18	20.0		
	25	-EPZ	08	57	36.4	2.4	2.3
		LP-EPSE	09	10	35.6	18.8	8.5
		LP-EPSZ	09	10	54.4	16.9	6.0
		LP+EXE	09	29	20.6	26.3	15.0
		LP+EXZ	09	29	16.9	28.1	19.5
		LP+LRE	09	33	26.3	18.8	24.0
		+EPE	21	17	50.2	1.0	1.0
		+EPN	21	17	50.8	1.0	1.1
		+EPZ	21	17	50.1	1.2	2.0
		LP+LRE	21	53	45.0	16.9	3.0
		LP-LRZ	21	53	48.8	18.8	5.0
	26	+IPE	01	31	02.1	1.0	2.8
		+IPN	01	31	01.6	1.1	2.1
		-IPZ	01	31	01.5	1.3	2.1
		+EPN	01	34	12.0	1.4	1.5
		-EPZ	01	34	12.7	2.0	5.0
		+IPE	10	42	18.3	1.2	1.0
		-EPN	10	42	18.3	1.3	1.1
		+IPZ	10	42	18.5	1.0	1.1
		LP-EPE	12	00	18.8	11.3	2.0
		LP+ESE	12	10	39.4	15.0	8.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
AUG 26	LP+EPSE	12	11	24.4	13.1	5.5
	LP+LRE	12	39	32.8	15.0	10.5
	EPE	14	45	33.0		
	+EPZ	14	45	34.0	1.5	2.0
	+ESE	14	49	42.5	2.0	2.1
	+ESN	14	49	39.0	1.2	1.0
	+ESZ	14	49	42.5	2.0	2.1
	LP-ESE	14	56	20.6	12.2	9.0
	LP-IPSE	14	59	14.1	15.0	14.0
	LP+EXE	15	02	29.1	16.9	9.0
	LP-SSSE	15	09	46.9	14.1	11.0
	LP-LRE	15	22	31.9	28.1	28.0
	+EPE	17	08	52.5	1.2	1.1
	+EPN	17	08	53.1	1.5	1.0
	+EPZ	17	08	52.7	1.7	3.3
	+EPZ	20	42	55.2	2.0	2.0
	+EPE	21	46	29.2	1.5	2.0
	+EPN	21	46	30.7	1.0	0.6
	EPN	23	56	42.0		
	-EPZ	23	56	41.1	1.0	1.1
27	-EXN	00	07	54.0	0.8	1.0
	-EXZ	00	07	54.3	1.0	1.1
	+EPE	03	20	56.1	1.1	1.1
	-EPN	03	20	56.6	1.0	1.0
	-IPZ	03	20	55.9	1.1	4.1
	+EPE	12	00	06.3	1.5	2.0
	+EPN	12	00	07.0	1.0	0.5
	+IPZ	12	00	06.4	1.7	4.0
	-EPE	21	55	47.7	1.1	1.2
	+EPN	21	55	48.9	1.0	1.0
	+EPZ	21	55	48.0	1.1	0.6
28	+EPE	00	37	37.0	1.5	0.6
	EPN	00	37	37.5		
	EPZ	00	37	39.0		
	+EPN	17	13	16.8	1.3	1.0
	+EPZ	17	13	15.5	1.2	1.2
	+EPE	17	23	20.5	0.6	0.7
	+EPN	17	23	20.5	0.7	0.6
	+IPZ	17	23	20.2	0.5	2.0
	-EPE	19	24	25.2	1.3	1.6
AUG 28	+EPN	19	24	26.0	1.1	1.1
	-EPZ	19	24	25.6	1.1	3.1
	IPE	20	58	48.2	1.1	2.6
	+EPN	20	58	48.7	1.1	0.9
	+IPZ	20	58	48.2		
29	EXN	05	02	40.0		
	-EXZ	05	02	40.2	1.5	1.0
	LP-LRE	05	18	18.8	16.9	4.0
	LP+LRN	05	18	11.3	16.9	6.0
	LP+LRZ	05	19	03.0	16.9	7.0
	EPE	15	27	40.0		
	+EPN	15	27	39.9	1.2	1.6
	-IPZ	15	27	39.9	1.3	5.0
30	+EPE	09	27	29.8	1.0	1.5
	-EPZ	09	27	30.0	1.0	4.0
	-EPE	13	34	48.9	1.3	1.7
	+EPZ	13	34	48.0	1.5	3.1
	-IPE	19	13	35.0	1.2	8.0
	-IPN	19	13	35.0	1.2	4.0
	IPZ	19	13	34.5		
	+EXE	21	02	27.5	1.6	1.5
	+EXN	21	02	27.9	1.2	1.4
	+EXZ	21	02	30.3	1.0	0.8
SEP 01	+EPE	05	47	08.5	1.5	0.7
	EPN	05	47	09.3		
	+EPZ	05	47	08.4	2.0	2.1
	+EPE	06	01	09.5	1.1	1.7
	-EPN	06	01	07.9	1.0	1.0
	-IPZ	06	01	09.9	1.0	1.5
	+EPE	18	14	40.0	1.3	0.8
	+EPN	18	14	40.8	1.1	0.5
	+EPZ	18	14	42.7	2.4	5.0
	LP-EPE	21	48	13.1	19.7	4.0
	LP+EPZ	21	48	09.4	19.7	6.0
	-IPE	21	54	36.0	1.2	1.5
	+IPN	21	54	36.0	1.2	2.0
	+IPZ	21	54	35.8	1.6	3.0
	LP+ESE	21	58	12.2	14.1	3.0
	LP+ESZ	21	58	09.4	14.1	5.0
02	+EPE	05	59	21.8	1.3	1.1

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 02	+EPN	05	59	21.0	1.0	0.6
	+EPZ	05	59	20.7	1.3	3.2
	LP+EXE	06	17	09.4	18.8	4.0
	LP-EXN	06	17	28.1	15.0	3.0
	+EPE	08	19	45.6	1.4	0.5
	EPN	08	19	45.0		
	+EPZ	08	19	43.7	0.8	0.5
	+EPE	08	24	28.8	1.4	2.7
	+EPN	08	24	25.3	1.9	0.8
	+EPZ	08	24	27.4	1.4	2.5
	LP+ESE	08	30	15.0	13.1	3.0
	LP+SSSE	08	33	43.1	18.8	6.0
	LP-SSSN	08	33	41.3	18.8	3.0
	LP+EXE	08	41	11.3	12.2	4.0
	+EPE	18	50	27.0	1.6	2.9
	-EPN	18	50	27.2	1.0	1.1
	-IPZ	18	50	26.4	1.5	4.2
	+EPN	19	54	27.0	2.0	1.3
	+EPZ	19	54	28.8	2.6	3.6
03	-IPE	07	27	45.5	1.0	2.3
	-EPN	07	27	45.0	0.8	0.9
	IPZ	07	27	45.2		
	+EPE	19	56	14.0	1.0	1.0
	+EPZ	19	56	14.1	1.4	1.5
04	+EPE	21	15	11.5	1.4	1.5
	-EPN	21	15	10.3	0.8	0.5
	+EPZ	21	15	09.2	0.8	1.0
	+IPPE	21	15	26.0	1.4	3.5
	+EPPN	21	15	24.5	0.7	0.7
	-IPPZ	21	15	25.1	1.8	4.6
	+EPN	22	37	47.5	1.0	1.8
	+EPZ	22	37	49.0	1.2	3.1
05	+IPN	14	06	28.9	0.7	2.0
	IPZ	14	06	28.5		
	IXE	14	08	24.0		
	+IXN	14	08	24.2	1.8	3.5
	-IXZ	14	08	23.0	1.0	2.2
06	+EPE	05	10	10.1	0.8	1.2
	+EPN	05	10	10.0	0.7	1.2
	+EPZ	05	10	10.0	0.5	1.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 06	+EPE	08	22	40.8	1.2	1.0
	+EPN	08	22	41.5	1.5	1.1
	-EPZ	08	22	41.5	1.1	3.0
	+IPE	15	49	39.2	1.3	4.8
	-IPN	15	49	38.9	1.3	5.0
	IPZ	15	49	38.4		
07	NO RECORD					
08	+EPE	07	19	38.5	1.2	1.0
	+EPN	07	19	39.0	1.2	0.8
	+EPZ	07	19	38.3	1.5	3.0
	+EPE	13	59	48.0	1.2	1.3
	-EPN	13	59	48.2	0.6	0.5
	-EPZ	13	59	48.0	1.0	2.4
	ESN	14	01	24.5		
	+ESZ	14	01	23.9	1.3	0.5
	+EPE	18	20	32.2	0.8	0.8
	+EPN	18	20	31.8	1.0	1.0
	EPZ	18	20	31.5		
09	-EPE	23	16	21.6	1.0	1.3
	-EPN	23	16	21.7	1.0	0.6
05	+EPE	07	45	22.6	1.0	1.6
	-EPN	07	45	22.7	0.7	1.0
	+EPZ	07	45	22.5	0.8	0.8
	+IPZ	07	50	38.9	0.8	4.3
	IPE	14	06	28.6		
09	-EPZ	23	16	22.2	1.0	1.0
10	-EPN	09	14	42.9	0.9	0.5
	+IPZ	09	14	44.0	1.4	1.7
	+EPE	18	45	33.4	1.2	0.6
	-EPN	18	45	33.0	1.2	1.0
	-EPZ	18	45	34.8	1.2	1.2
11	NO RECORD					
12	-EPE	05	30	57.1	1.2	1.0
	EPN	05	30	57.0		
	-IPZ	05	30	57.0	2.0	3.3
	LP-EPE	05	30	58.1	9.4	2.0
	LP+EPZ	05	30	58.1	8.4	7.5
	ESE	05	31	21.5		
	+ESN	05	31	21.3	1.5	1.5
	-ESZ	05	31	18.8	1.8	4.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 12	LP+EXZ	05	32	42.2	14.1	19.0
	LP+ISE	05	41	46.9	11.3	26.5
	LP-IXE	05	42	09.4	14.1	59.0
	LP-IXZ	05	42	11.3	16.9	29.0
	LP+IPSZ	05	42	58.1	17.8	33.0
	LP+IXZ	05	45	18.8	15.9	49.0
	LP+SSPZ	05	48	46.9	30.0	37.0
	LP+IXE	06	07	46.9	23.4	162.0
	LP-IXZ	06	07	09.4	20.6	153.0
	EXE	06	09	21.0		
	EXZ	06	09	23.0		
	LP+IXE	06	39	37.5	15.0	60.0
	LP+IXN	06	39	09.4	15.0	37.0
	LP+IXZ	06	39	37.5	13.1	56.0
	LP+IXE	06	40	15.0	15.0	80.0
	LP+IXZ	06	40	18.8	15.0	112.0
	LP+IXZ	06	43	16.9	13.1	81.0
	LP+IXE	06	45	15.0	15.0	82.0
	LP+IXZ	06	45	31.9	15.0	75.0
13	+EPE	06	44	14.9	1.1	1.5
	-EPN	06	44	14.8	1.1	1.0
	-IPZ	06	44	15.0	0.7	1.5
	+IPE	06	46	08.0	1.9	4.0
	+EPN	06	46	09.9	1.1	0.7
	+IPZ	06	46	08.0	1.8	10.5
	LP-EPZ	06	46	09.4	13.1	3.0
	-EPE	06	54	25.5	1.0	0.5
	+EPZ	06	54	25.0	1.4	1.6
	LP-PSE	06	58	19.7	16.9	7.0
	LP-LRE	07	24	37.5	18.8	7.0
	LP+LRN	07	25	09.4	18.8	7.0
	LP+LRZ	07	24	33.8	17.8	17.0
	LP+EXE	07	27	54.4	15.9	10.5
	LP+EXZ	07	27	56.3	15.0	19.0
	LP+EXE	07	28	39.4	16.9	11.0
	+EPE	08	58	30.2	0.9	1.2
	+EPN	08	58	29.4	0.8	0.6
	+EPZ	08	58	29.9	1.5	1.3
	+IPE	20	06	35.5	1.6	2.8
	-EPN	20	06	36.2	0.8	0.3

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 13	-IPZ	20	06	35.8	1.5	3.1
14	+EPE	04	06	24.4	0.8	0.6
	-EPN	04	06	24.5	0.8	0.4
	+IPZ	04	06	26.4	1.2	1.5
	+IPE	07	48	25.5	1.4	3.0
	+IPN	07	48	25.8	1.1	1.6
	+IPZ	07	48	25.1	2.0	7.0
15	+EPE	10	14	11.2	1.6	1.6
	+EPN	10	14	11.5	1.0	0.9
	-IPZ	10	14	11.5	1.3	5.0
	+ESE	10	24	04.0	2.0	1.1
	-ESN	10	24	07.0	2.2	6.3
	+ESZ	10	24	02.7	1.1	1.8
16-21	NO RECORD					
22	+EPN	15	03	13.8	1.1	1.0
	+EPZ	15	03	13.6	1.2	1.2
23	+IPE	21	20	30.0	1.2	0.8
	+EPN	21	20	29.2	1.1	0.8
	-IPZ	21	20	29.2	1.3	1.6
	IPE	22	50	41.2		
	-IPN	22	50	41.3	1.2	4.0
	IPZ	22	50	41.2		
	LP EPE	22	50	46.9		
	LP EPN	22	50	46.9		
	LP+EPZ	22	50	43.1	9.4	4.0
	LP+ISE	22	56	18.8	16.9	13.0
	LP+ISN	22	56	18.8	15.0	19.0
	LP+EXE	23	02	30.0	18.8	16.0
	LP+IXN	23	02	30.0	16.9	21.0
	LP+EXZ	23	03	31.9	16.9	24.0
	-IPE	23	10	27.0	1.8	3.0
	-IPN	23	10	27.7	2.0	2.5
	IPZ	23	10	26.8		
	LP+LRE	23	29	06.6	13.1	31.0
	LP+LRN	23	29	07.5	12.2	22.0
	LP-LRZ	23	29	09.4	14.1	37.0
24	+IPE	03	49	29.8	1.1	1.0
	-IPN	03	49	29.0	1.2	1.4
	IPZ	03	49	29.3		
	-IPN	06	47	48.0	1.2	1.4

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 24	IPZ	06	47	48.0		
	LP+EXE	06	59	07.5	13.1	2.0
	LP+EXN	06	59	09.4	15.0	2.0
	LP+EXZ	06	59	18.8	18.8	4.0
	+EPE	13	18	31.0	1.7	1.5
	+EPN	13	18	31.9	1.2	1.0
	+EPZ	13	18	30.9	2.2	4.0
	LP+LRE	13	59	35.6	16.9	2.0
	LP+LRN	13	59	30.0	15.9	1.5
	LP-LRZ	13	59	09.4	15.9	5.0
25	LP+EXE	02	18	41.3	15.0	3.0
	LP+EXN	02	18	03.6	15.0	2.0
	LP+EXZ	02	18	45.0	15.0	4.0
	-EPE	13	24	34.5	1.0	1.0
	EPN	13	24	34.0		
	EPZ	13	24	34.2		
	+EPN	14	49	21.5	1.1	0.8
	-EPZ	14	49	21.0	1.1	0.8
26	NO RECORD					
27	+IPE	01	19	40.0	1.1	2.8
	+IPN	01	19	40.0	1.3	5.0
	IPZ	01	19	40.0		
	IPE	14	12	21.0		
	-IPN	14	12	21.0	1.7	4.5
	IPZ	14	12	21.0		
	LP+ESE	14	22	45.0	9.4	4.0
	LP-ESN	14	22	45.0	9.4	1.5
	LP+LRE	14	48	03.6	17.8	4.0
	LP+LRZ	14	48	26.3	15.9	4.5
28	-EPN	17	43	24.5	1.2	1.0
	+IPZ	17	43	25.0	2.1	2.1
29	+EPN	05	16	38.4	1.4	0.6
	+EPZ	05	16	37.9	1.0	1.5
	+IPE	12	54	18.0	1.7	1.5
	-IPZ	12	54	17.0	2.6	4.0
	+IPE	18	49	16.0	3.5	7.0
	+EPN	18	49	16.0	4.0	3.0
	+IPZ	18	49	16.0	4.0	12.0
	LP+EPE	18	49	16.9	8.4	2.0
	LP+EPN	18	49	16.9	7.5	2.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
SEP 29	LP+ISE	18	59	16.9	12.2	31.0
	LP-ISN	18	59	15.9	13.1	35.0
	LP+SSE	19	04	22.5	13.1	15.0
	LP+EXE	19	05	24.4	14.1	14.0
	LP-IXE	19	10	31.9	22.5	42.5
	LP+IXN	19	10	31.9	26.3	31.0
	LP+IXE	19	11	31.9	21.6	52.5
30	-EPE	06	31	57.8	2.2	3.3
	+EPZ	06	31	58.0	2.0	2.4
OCT 02	-EPE	10	24	45.9	1.1	1.1
	+EPZ	10	24	45.3	1.2	2.2
	+EPE	14	46	53.5	1.2	1.0
	-EPN	14	46	52.9	1.2	0.8
	+EPZ	14	46	52.8	1.6	2.1
	+EPE	15	50	45.0	0.9	0.5
	+EPN	15	50	44.1	1.5	1.4
	+EPZ	15	50	45.0	1.0	0.5
04	+EPE	01	02	11.7	1.0	0.6
	-EPN	01	02	13.4	0.7	0.6
	+EPZ	01	02	11.8	1.0	2.0
	+EPE	04	28	23.8	1.3	1.6
	-EPZ	04	28	23.3	1.5	2.8
	+IPE	19	53	28.5	1.2	2.0
	EPN	19	53	30.5		
	+IPZ	19	53	28.7	1.2	4.9
	EPE	20	11	44.0		
	EPN	20	11	44.9		
	-EPZ	20	11	46.0	1.0	1.4
05	EPE	00	03	52.0		
	-EPZ	00	03	53.5	1.0	1.2
	+EPE	04	54	55.4	1.2	0.8
	+IPZ	04	54	55.7	1.4	2.0
	EPE	17	39	56.5		
	-EPN	17	39	54.4	1.0	1.0
	EPZ	17	39	54.9		
	+EPE	19	37	10.8	1.0	0.5
	+EPN	19	37	12.5	1.0	0.4
07	-EPN	07	40	07.0	1.0	1.0
	+EPZ	07	40	06.0	1.0	1.2
	-EPZ	14	19	59.9	1.5	2.7

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
OCT	07	-IPE	19	39	19.0	1.2	2.0
		EPN	19	39	22.0		
		-IPZ	19	39	19.0	1.4	4.0
		+EPE	23	06	01.6	1.1	1.1
		+EPN	23	06	01.8	0.8	0.5
		+IPZ	23	06	01.4	1.1	2.1
	08	-EPE	02	03	35.8	0.6	1.0
		+EPN	02	03	35.4	0.6	0.6
		IPZ	02	03	35.3		
		+EPE	09	58	55.0	1.5	1.0
		-EPZ	09	58	55.5	1.5	2.1
	09	+IPE	01	59	33.0	1.0	2.1
		EPN	01	59	35.0		
		IPZ	01	59	33.0		
	10	EPN	13	50	53.2		
		-IPZ	13	50	52.3	2.1	4.5
		LP+ESE	14	00	23.4	11.3	2.0
		LP+ESN	14	00	23.4	11.3	2.0
		LP+LRE	14	16	15.0	20.6	2.5
		LP+LRN	14	16	16.9	20.6	2.5
	11	-EPN	09	06	41.0	1.0	1.0
		+EPZ	09	06	40.8	1.1	2.1
	12	+EPE	05	54	52.1	1.5	0.7
		+EPN	05	54	52.4	1.2	1.0
		+IPZ	05	54	52.0	1.1	2.0
		-EPE	06	43	10.0	1.3	1.2
		-EPZ	06	43	10.5	2.0	2.5
		+IPE	10	35	12.5	1.0	3.0
		+IPN	10	35	12.3	1.2	2.0
		+IPZ	10	35	11.8	1.5	3.7
		LP+EPE	10	35	15.0	15.0	8.0
		LP+EPN	10	35	15.0	15.0	5.0
		LP+ISE	10	43	14.1	22.5	40.0
		LP+ISN	10	43	15.0	18.8	31.0
		LP-ISPE	10	43	46.9	26.3	32.5
		LP-ISSE	10	47	26.3	22.5	22.0
		LP+IXE	10	52	25.3	17.8	34.0
		LP+IXE	10	52	54.4	33.8	71.0
		LP-IXE	11	15	06.6	16.9	93.0
		-EXE	11	22	53.9	1.0	2.0

DATE		PHASE	ARRIVAL TIME			PERIOD	AMP
			H	M	S	(S)	(MM)
OCT	12	+EXN	11	22	53.9	1.0	2.0
		EXZ	11	22	53.5		
		+IPE	13	45	12.0	1.2	2.1
		-IPN	13	45	12.0	1.2	1.5
		IPZ	13	45	12.0		
	13	-EPE	14	58	09.8	1.1	1.0
		-EPN	14	58	09.5	1.5	1.2
		+EPZ	14	58	09.4	1.1	4.0
	14	+IPN	04	47	23.0	1.8	3.5
		IPZ	04	47	23.0		
		+EPN	11	47	09.8	0.8	1.0
		EPZ	11	47	10.0		
	15	+EPE	11	01	27.5	1.0	1.0
		EPN	11	01	27.8		
		-EPZ	11	01	27.2	0.6	1.5
		EPE	23	36	36.0		
		-IPZ	23	36	33.2	1.1	1.0
		LP+EPPZ	23	40	20.6	9.4	2.0
		LP+SSPE	23	58	15.0	15.0	4.0
	16	LP+LRN	00	28	33.8	22.5	5.0
		LP+LRZ	00	28	22.5	23.4	9.0
		+EPE	00	42	48.9	1.9	1.5
		+EPZ	00	42	48.8	2.0	2.5
		-EPE	07	10	55.0	1.2	1.6
		+IPN	07	10	54.8	1.2	1.5
		+IPZ	07	10	54.8	1.3	3.0
		+EPE	10	47	34.0	1.2	0.6
		+EPZ	10	47	34.0	1.2	1.1
		+EXZ	21	07	04.8	1.8	1.3
		-EPE	21	35	59.0	1.6	1.5
		-IPZ	21	35	59.1	1.4	5.0
	17	EPE	05	56	52.8		
		-EPZ	05	56	52.0	2.2	2.5
		+EXE	06	00	42.5	1.8	5.0
		EXN	06	00	43.0		
		EXZ	06	00	42.3		
		LP EXE	06	01	46.9		
		LP+EXZ	06	01	46.9	11.3	3.0
		LP-EXE	06	06	37.5	13.1	5.0
		LP+SKSE	06	10	35.6	16.9	6.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
OCT 17	LP+SKSZ	06	10	35.6	15.0	14.0
	+EPE	10	22	04.1	1.1	1.1
	+EPN	10	22	04.8	1.1	1.1
	+EPZ	10	22	04.2	1.4	2.1
	LP EPE	10	22	11.3		
	LP-EPZ	10	22	11.3	9.4	2.0
	LP+PPE	10	23	26.3	13.1	3.0
	LP+PPZ	10	23	45.0	11.3	5.0
	LP+ISE	10	28	30.0	13.1	8.0
	LP+ESZ	10	28	31.9	11.3	5.0
	LP+SSSE	10	32	35.6	14.1	5.0
	LP-EXE	10	36	52.5	15.0	8.0
	LP+EXE	10	37	46.9	15.0	25.0
	LP+IXE	10	39	05.6	20.6	29.0
	LP-IXZ	10	39	05.6	18.8	39.0
	LP+IXE	10	40	42.2	15.0	21.0
	LP+IXZ	10	40	43.1	14.1	29.0
	-IPE	23	42	32.4	1.0	1.1
	+IPN	23	42	34.0	1.0	0.5
	+IPZ	23	42	32.0	1.3	3.6
	LP EPZ	23	42	33.8		
18	LP+EXE	00	24	09.4	15.9	11.0
	LP-EXZ	00	24	07.5	15.9	18.0
	LP+LRE	00	28	48.8	16.9	8.0
	LP-LRZ	00	28	45.0	17.8	9.0
	+EPE	03	55	15.5	1.5	1.3
	EPN	03	55	15.9		
	EPZ	03	55	16.1		
	-EPE	05	27	03.0	1.0	0.5
	+EPN	05	27	03.0	1.2	0.6
	-EPZ	05	27	03.0	1.2	1.0
	LP EPZ	05	27	01.9		
	LP+ESZ	05	35	20.6	22.5	5.0
	-EPE	07	29	29.8	1.1	0.7
	-EPN	07	29	29.8	1.4	1.1
	-IPZ	07	29	29.0	1.1	6.0
	+EPE	08	07	53.5	1.0	0.5
	+EPN	08	07	52.8	1.2	1.4
	+IPZ	08	07	53.0	1.5	2.0
19	+IPE	02	51	15.2	1.2	2.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
OCT 19	EPN	02	51	16.0		
	-IPZ	02	51	14.8	1.4	4.2
20	+IPE	01	53	03.6	2.0	11.5
	-EPN	01	53	05.0	0.8	0.9
	IPZ	01	53	03.5		
	LP-EPE	01	53	03.6	11.3	5.0
	LP-EPN	01	53	03.6	11.3	2.0
	LP+IPZ	01	53	03.6	11.3	18.0
	LP-ESE	02	02	54.4	15.0	9.0
	LP-ESN	02	02	54.4	09.4	5.0
	LP+PSN	02	03	33.8	11.3	9.0
	LP-IXE	02	19	03.6	20.6	22.0
	LP-IXN	02	19	05.6	22.5	13.0
	LP-IXZ	02	19	26.3	22.5	37.0
	LP-IXE	02	22	54.4	18.8	19.0
	LP-IXN	02	22	54.4	17.8	23.0
	LP+IXZ	02	22	54.4	18.8	43.0
	LP+LRE	02	27	48.8	17.8	8.0
	LP+LRN	02	27	48.8	17.8	13.0
	LP+LRZ	02	27	50.6	16.9	28.0
	EPN	23	48	11.9		
	IPZ	23	48	11.1		
22	+EPE	06	11	43.8	2.0	2.1
	+EPN	06	11	46.4	0.9	0.5
	+IPZ	06	11	43.4	1.4	6.1
	LP EPE	06	11	43.1		
	LP-EPZ	06	11	43.1	15.0	5.5
	LP-ESE	06	22	13.1	9.4	6.0
	LP+ISN	06	22	28.1	9.4	15.0
	LP-LRE	06	47	07.5	21.6	11.0
	LP+LRN	06	47	20.6	21.6	11.0
	LP+LRZ	06	47	05.6	21.6	23.0
	+IPE	17	12	53.8	1.7	4.8
	-IPN	17	12	53.8	1.7	4.2
	+EPZ	17	12	53.8	2.0	5.0
23	-EPE	08	32	05.0	0.8	0.6
	EPN	08	32	05.0		
	EPZ	08	32	03.0		
	+IPE	10	04	09.0	2.1	1.4
	EPN	10	04	10.0		

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
OCT 23	+IPZ	10	04	09.0	2.2	3.2
	LP-EPE	10	04	13.1	15.0	4.0
	LP-IPZ	10	04	11.3	16.9	12.0
	LP+EXE	10	05	13.1	13.1	5.0
	LP+IXZ	10	05	12.2	13.1	11.0
	LP+ISE	10	14	46.9	13.1	12.0
	LP+ISN	10	14	46.9	13.1	28.0
	+EXE	10	20	25.0	1.9	1.8
	+EXN	10	20	26.0	1.1	0.8
	+EXZ	10	20	25.0	2.1	4.5
	LP-EXE	10	41	35.6	18.8	38.0
	LP+EXN	10	41	46.9	16.9	22.0
	LP-EXZ	10	41	22.5	17.8	47.0
	LP+IXE	10	44	05.6	18.8	66.0
	LP-IXE	10	47	30.0	15.9	54.0
	LP+IXN	10	47	30.0	15.9	28.0
	LP-IXZ	10	47	30.0	16.9	47.0
	+EXE	10	53	28.6	1.8	1.0
	EXN	10	53	28.4		
	+EXZ	10	53	28.3	1.0	2.2
	LP+IXE	10	53	41.3	15.0	62.0
	LP+EXN	10	53	37.5	15.0	34.0
24	+EPE	01	11	33.3	1.7	1.6
	-EPN	01	11	33.2	1.0	1.0
	+IPZ	01	11	33.0	1.5	2.5
	LP+LRE	12	31	03.6	17.8	1.5
	LP+LRN	12	31	16.9	17.8	2.5
	LP+LRE	17	32	09.4	17.8	3.0
	LP+LRN	17	32	03.6	19.7	2.0
25	-EPE	12	07	55.6	1.2	0.6
	-EPZ	12	07	55.6	2.0	2.0
27	EXE	04	10	50.0		
	EXZ	04	10	50.6		
	EPE	07	59	02.5		
	+EPN	07	59	02.4	1.0	0.6
	-EPZ	07	59	02.6	1.0	1.0
	EPE	14	54	40.3		
	-EPZ	14	54	40.1	1.0	1.0
	-EXE	14	55	46.0	3.0	3.2
	+EXN	14	55	46.2	2.0	1.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
OCT 27	+EXZ	14	55	45.7	3.0	7.5
	LP-EPE	14	55	46.9	15.0	4.0
	LP-EPN	14	55	46.9	15.0	3.5
	LP+SKSE	15	02	41.3	13.1	3.0
	LP-PSE	15	05	26.3	15.9	6.0
	LP-PSN	15	05	26.3	15.0	4.0
	LP+SSN	15	11	50.6	16.9	10.0
	LP+LRE	15	38	03.6	17.8	17.0
	LP+LRN	15	38	26.3	17.8	8.0
	+EPE	22	02	02.0	1.1	0.4
	+EPN	22	02	02.2	1.2	0.6
	+EPZ	22	02	02.9	1.0	0.7
	+IXE	22	03	09.5	2.2	1.9
	+EXN	22	03	09.4	2.0	1.1
	+IXZ	22	03	08.2	1.7	2.2
	LP-PPE	22	03	11.3	13.1	4.0
	LP-PPN	22	03	11.3	14.1	3.0
	LP-PSE	22	13	07.5	14.1	8.0
	LP-PSN	22	13	06.6	14.1	8.0
	LP+SSN	22	19	15.0	15.0	9.0
	LP+LRE	22	46	20.6	17.8	25.0
	LP+LRN	22	46	46.9	16.9	19.0
28	-EPE	03	35	54.8	0.8	1.0
	-EPN	03	35	54.0	0.4	0.5
	IPZ	03	35	54.2		
	-EPE	05	38	29.8	1.2	1.0
	EPN	05	38	30.4		
	-EPZ	05	38	29.9	1.0	3.5
	+EPE	18	52	37.0	0.8	0.7
	+EPN	18	52	37.2	0.7	1.1
	EPZ	18	52	36.0		
	-EPE	20	38	52.9	1.2	1.1
	+IPN	20	38	52.9	1.2	1.2
	-IPZ	20	38	52.8	1.5	4.0
	-EPE	22	36	43.6	1.1	0.8
	EPN	22	36	43.7		
	-EPZ	22	36	43.7	1.5	1.9
29	+IPE	09	08	02.6	1.1	1.0
	-IPN	09	08	02.6	1.0	1.0
	-IPZ	09	08	02.2	1.1	2.0

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
OCT	30	-EPE	02	45	11.0	0.7	0.6
		-EPN	02	45	11.3	0.9	0.9
		-EPZ	02	45	10.2	0.7	0.5
		EPN	09	08	33.0		
		-EPZ	09	08	33.0	1.5	1.0
	31	-EPE	19	53	21.5	1.6	1.1
		+EPN	19	53	21.6	1.2	1.0
		+EPZ	19	53	21.2	1.2	2.3
NOV	01	+EPE	04	26	00.7	1.6	1.5
		+IPZ	04	26	00.7	1.4	2.9
		+EXE	04	29	36.0	1.2	1.0
		+EXZ	04	29	36.0	2.0	1.4
		EPE	05	59	00.0		
		EPN	05	59	00.0		
		+IPZ	05	58	59.1	1.5	4.5
		+EPE	06	58	29.5	1.3	2.5
		+EPN	06	58	29.9	1.1	2.0
		+EPZ	06	58	29.9	0.7	0.6
	02	+IPE	01	45	14.5	2.0	8.5
		-IPN	01	45	14.4	1.1	5.0
		IPZ	01	45	14.3		
		LP EPZ	01	45	15.0		
		LP-ESE	01	56	05.6	12.2	3.0
		LP+ESN	01	56	01.9	11.3	1.5
		LP-LRE	02	20	16.9	17.8	4.0
		+IPE	16	04	40.5	1.4	5.5
		+IPN	16	04	40.4	1.1	0.6
		IPZ	16	04	40.2		
		LP+EPE	16	04	39.4	15.0	3.0
		LP+EPN	16	04	39.4	09.4	2.0
		LP+ESE	16	14	11.3	12.2	6.0
		LP+ESN	16	14	11.3	09.4	4.0
		LP+LRE	16	28	37.5	26.3	15.0
		LP+LRN	16	29	09.4	24.4	8.0
		+EPE	19	05	17.7	1.6	1.0
		EPN	19	05	18.0		
		-IPZ	19	05	17.0	2.2	2.5
		+EPE	23	33	30.5	1.3	1.5
		+IPZ	23	33	30.5	1.4	4.0
	03	-EPE	04	32	37.0	1.0	1.0

DATE		PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV	03	-EPN	04	32	36.8	1.0	0.6
		+EPZ	04	32	36.6	1.2	2.5
		+EPE	23	30	15.5	1.1	0.7
		+EPZ	23	30	15.8	1.0	1.5
		LP+ESE	23	40	50.6	14.1	4.0
		LP+ESN	23	40	50.6	10.3	3.0
	04	LP+LRE	00	07	22.5	17.8	4.5
		+EPE	14	57	21.9	1.3	1.0
		+EPN	14	57	22.5	1.3	1.1
		+EPZ	14	57	21.8	1.9	3.5
	05	+EPE	01	14	18.0	1.7	4.0
		+IPN	01	14	18.5	1.9	2.5
		IPZ	01	14	18.0		
		LP-ESE	01	21	37.5	15.0	2.0
		LP+EXE	01	29	30.0	20.6	2.0
		LP+EXN	01	29	30.0	18.8	3.0
		+EPE	02	09	11.7	0.9	0.5
		+EPZ	02	09	11.4	1.5	0.5
	06	-EPE	01	36	40.1	1.2	3.0
		+EPN	01	36	40.2	1.3	2.0
		EPZ	01	36	40.3		
		-EXE	01	38	46.2	0.9	1.0
		EXN	01	38	47.9		
		EXZ	01	38	46.2		
		+EXE	01	46	06.0	2.1	4.9
		+EXN	01	46	06.2	1.3	2.2
		-EXZ	01	46	06.7	1.9	3.0
		+EPE	11	51	35.7	1.1	1.6
		IPN	11	51	35.5		
		IPZ	11	51	35.8		
		LP-EPE	11	51	37.5	15.0	1.5
		LP-EPZ	11	51	37.5	13.1	4.5
		LP-PPE	11	55	33.8	13.1	2.0
		LP-PPZ	11	55	33.8	12.2	3.5
		LP+ESE	12	02	11.3	11.3	4.0
		LP+LRE	12	32	37.5	16.9	11.0
		LP+LRZ	12	32	41.3	16.9	15.0
	08	+EPE	08	09	45.2	1.8	1.8
		+EPN	08	09	47.5	1.1	1.1
		+EPE	16	07	28.8	0.8	1.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 08	+EPN	16	07	26.0	1.0	1.0
	+IPZ	16	07	30.1	1.1	1.5
	LP PPZ	16	09	20.6		
	-EPE	16	16	32.5	1.0	2.5
	+EPN	16	16	32.5	2.0	5.5
	+EPZ	16	16	32.5	1.2	2.8
	LP-ESE	16	16	31.9	13.1	4.0
	LP-ESN	16	16	31.9	7.5	1.5
	LP ESZ	16	16	31.9		
	LP+LRZ	16	41	05.6	15.9	2.0
09	+EPE	02	06	03.5	1.0	1.1
	+EPN	02	06	05.9	0.7	0.6
	+EPE	11	50	29.0	2.2	6.6
	EPN	11	50	28.0		
	+EPZ	11	50	29.2	1.1	1.5
	+IPE	14	05	39.9	1.4	1.6
	-EPN	14	05	40.8	1.1	0.8
	+IPZ	14	05	39.8	2.0	7.5
	-IPE	14	50	19.0	1.0	2.0
	IPN	14	50	19.0		
	-EPZ	14	50	19.0	1.0	2.1
	-IPE	16	52	19.2	1.1	6.5
	-IPN	16	52	19.8	1.9	3.1
	IPZ	16	52	19.5		
	LP-EPZ	16	52	22.5	13.1	3.0
	LP+ESE	17	03	26.3	11.3	6.0
	LP+LRE	17	29	52.5	17.8	8.0
	LP-LRZ	17	29	48.8	18.8	11.0
10	-EPE	07	50	34.0	1.2	0.8
	+EPN	07	50	33.8	2.0	1.6
	+IPZ	07	50	33.4	2.1	3.5
	LP EPZ	07	50	33.8		
	LP+PPE	07	52	05.6	14.1	2.0
	LP+PPZ	07	52	07.5	12.2	4.0
	LP+EXE	08	09	58.0	15.0	9.5
	LP+EXZ	08	09	58.0	18.8	12.0
	LP+EXE	08	10	56.3	15.9	10.0
	-EPN	16	57	25.0	1.0	0.8
	-EPZ	16	57	27.0	1.2	2.0
12	-EPE	19	52	10.1	1.0	1.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 12	-EPN	19	52	10.0	1.0	1.0
	+IPZ	19	52	09.8	0.9	1.1
13	EPE	19	16	46.8		
	+EPZ	19	16	45.5	1.8	1.4
	LP EPE	19	16	46.9		
	LP+EPZ	19	16	45.0	7.5	3.0
	LP+ESE	19	26	28.1	15.9	3.0
	LP+ESZ	19	26	28.1	15.9	3.0
	LP-LRE	19	41	56.3	20.6	12.0
	LP+LRZ	19	41	48.8	21.6	18.0
	-IPE	20	56	09.9	1.9	14.1
	+IPN	20	56	10.0	2.0	11.0
	IPZ	20	56	09.7		
	LP-EPE	20	56	09.4	7.5	3.0
	LP-IPZ	20	56	10.3	9.4	15.0
	LP+IXZ	20	56	46.9	9.4	11.5
	LP+ISE	21	06	41.3	13.1	23.0
	LP-EXE	21	18	42.2	15.0	10.5
	-EXZ	21	22	22.8	1.3	1.6
	LP-LRE	21	31	31.9	17.8	20.0
	LP-LRZ	21	31	37.5	17.8	21.0
14	+EPE	01	34	18.7	1.2	1.5
	-EPN	01	34	18.1	1.0	1.0
	-EPZ	01	34	18.2	1.2	3.0
	+PPE	02	39	34.8	1.7	0.8
	+PPN	02	39	34.2	1.8	1.0
	+PPZ	02	39	34.5	2.0	1.7
	LP PPZ	02	39	41.3		
	LP+ESE	02	47	24.4	18.8	3.0
	LP+SPZ	02	49	45.0	13.1	3.0
	LP-LRE	03	14	05.6	17.8	10.0
	LP+LRZ	03	14	05.6	20.6	24.0
15	+EPE	01	06	59.0	0.9	1.8
	+EPN	01	06	59.2	1.6	2.0
	EPZ	01	06	59.7		
	+EPE	13	49	58.0	1.3	1.5
	-IPZ	13	49	58.5	1.5	3.0
	+IPE	20	07	27.3	1.0	1.4
	-EPN	20	07	28.7	1.9	2.0
	+IPZ	20	07	27.8	1.8	6.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 16	EPN	12	04	55.1		
	+EPZ	12	04	55.7	1.3	1.5
	-IPE	15	34	22.0	1.3	1.4
	EPN	15	34	22.0		
	-IPZ	15	34	23.8	1.1	3.3
	LP EPE	15	34	28.1		
	LP+SKSE	15	45	06.6	15.0	9.0
	LP-ESE	15	45	41.3	13.1	17.0
	LP+IXE	16	04	22.5	26.3	47.0
	LP+IXE	16	07	00.0	16.9	42.0
	LP-IXE	16	13	28.1	16.9	121.0
	LP-IXE	16	26	46.9	15.0	37.0
	+EPE	18	23	45.6	1.7	1.0
	-IPZ	18	23	46.0	2.2	4.8
17	+EPE	06	03	14.0	1.2	3.0
	+EPN	06	03	14.0	1.0	1.0
	EPZ	06	03	15.8		
	-EPE	18	55	57.8	1.5	6.5
	+EPN	18	55	57.8	1.6	2.5
	IPZ	18	55	57.9		
	+EXN	18	59	42.5	1.1	1.5
	-EXZ	18	59	44.0	2.0	2.1
18	+EXE	01	36	04.0	1.1	2.5
	+EXN	01	36	04.0	1.1	2.0
	-EXZ	01	36	04.2	1.0	1.1
	-IPE	06	27	28.4	1.3	1.5
	-IPN	06	27	29.0	1.1	2.0
	IPZ	06	27	28.0		
19	+EPE	19	22	47.5	1.1	0.4
	-EPZ	19	22	49.1	1.0	1.5
	LP EPE	22	30	30.0		
	LP-PPE	22	34	41.3	11.3	2.0
	LP-ESE	22	41	31.9	11.3	5.5
	LP+SPE	22	43	13.1	15.0	8.0
	-EPE	22	55	44.4	0.8	0.5
	+EPZ	22	55	44.0	1.1	1.5
	+EPE	22	57	31.9	1.5	1.7
	-EPN	22	57	33.3	1.1	1.5
	-EPZ	22	57	32.9	1.5	4.5
20	+IPE	04	30	29.4	0.8	1.5

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 20	EPN	04	30	30.3		
	IPZ	04	30	29.3		
	-IPE	06	57	36.2	1.3	2.0
	-IPN	06	57	36.5	1.6	3.0
	+IPZ	06	57	36.0	2.0	5.0
21	+EPE	10	37	29.0	1.2	0.6
	-EPZ	10	37	30.3	0.7	0.7
22	+IPE	02	52	29.8	1.3	2.6
	+EPN	02	52	30.6	1.3	1.1
	IPZ	02	52	29.6		
	EXE	03	01	45.6		
	EXN	03	01	45.0		
	EXZ	03	01	45.0		
23	+EPE	00	43	32.0	1.1	2.2
	-EPZ	00	43	32.7	0.8	1.5
	EPN	03	40	13.0		
	-EPZ	03	40	11.0	1.0	0.8
	-EPE	23	54	19.8	1.3	1.0
	+IPZ	23	54	19.0	2.0	3.5
	LP+EPZ	23	54	18.8	13.1	3.0
	LP+PPE	23	58	39.4	11.3	3.0
	LP-PPZ	23	58	39.4	16.9	8.0
24	LP-IXE	00	04	46.9	12.2	24.0
	LP-IXN	00	04	46.9	11.3	18.0
	LP+ESE	00	05	37.5	14.1	15.0
	LP+ESN	00	05	37.5	11.3	18.0
	LP-IPSE	00	08	15.0	18.8	31.0
	LP-IPSN	00	08	15.0	18.8	19.0
	LP-IPSZ	00	08	09.4	13.1	21.0
	LP-PPSE	00	09	07.5	14.1	23.0
	-EPE	03	52	37.5	1.1	0.8
	EPN	03	52	37.3		
	+EPZ	03	52	37.8	1.4	1.2
	+EPE	05	10	20.0	1.2	1.0
	+EPZ	05	10	19.6	1.3	2.0
	+EPE	05	55	14.7	1.2	1.8
	-EPN	05	55	14.8	1.0	0.7
	+EPZ	05	55	15.0	1.3	1.5
	-EPE	19	31	54.0	1.0	1.1
	+EPZ	19	31	54.1	2.0	2.1

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 24	LP EPZ	19	31	54.4		
	LP-ESE	19	42	20.6	11.3	3.5
	LP+PSE	19	43	48.8	15.0	9.0
	LP-PSZ	19	43	46.9	11.3	9.0
	LP+LRE	20	07	45.0	22.5	29.0
	LP+LRZ	20	07	48.8	20.6	35.0
25	EPE	08	41	02.0		
	-EPN	08	41	01.0	0.6	1.0
	+EPZ	08	41	02.0	1.4	0.9
	-EPE	11	49	09.9	1.0	1.4
	+EPN	11	49	10.6	1.0	0.6
	+EPZ	11	49	10.5	1.2	1.0
	-EPE	23	14	31.0	1.1	1.0
	+EPN	23	14	30.9	1.2	1.5
	+EPZ	23	14	30.9	1.2	1.8
27	LP-EPZ	17	24	41.3	9.4	3.0
	LP+PPN	17	29	00.0	7.5	3.0
	LP+PPZ	17	29	00.0	7.5	6.0
	LP+ISE	17	36	41.3	16.9	21.0
	LP-SPPN	17	39	22.5	15.0	19.0
	LP+ISSN	17	44	09.4	15.9	26.0
	-IPE	17	48	16.2	1.1	2.3
	-EPN	17	48	16.3	0.6	1.9
	+IPZ	17	48	16.1	1.1	7.0
	LP-IXZ	18	02	15.0	23.4	36.0
	LP+IXE	18	03	15.0	18.8	23.0
	LP+IXN	18	03	18.8	22.5	63.0
	LP+IXZ	18	03	22.5	22.5	89.0
	LP-IXE	18	05	37.5	21.6	37.0
	LP+IXN	18	05	37.5	19.7	51.0
	LP+IXZ	18	05	37.5	18.8	59.0
	+EPE	18	17	37.0	1.3	0.7
	+EPN	18	17	36.4	1.5	1.9
	+EPZ	18	17	35.2	1.3	3.3
	LP-LRE	18	22	46.9	15.9	24.0
	LP+LRN	18	22	46.9	17.8	45.0
	LP+LRZ	18	22	50.6	16.9	48.0
	+EXE	19	58	57.9	2.0	1.7
	EXN	19	58	58.3		
	+EXZ	19	58	58.0	4.2	7.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
NOV 28	+IPE	15	06	12.0	1.1	0.5
	+IPN	15	06	12.8	1.0	1.0
	+IPZ	15	06	12.5	1.1	2.0
	-EPN	21	02	04.9	0.8	0.8
	-EPZ	21	02	04.0	1.2	1.1
	LP+EXE	21	19	13.1	20.6	5.0
	LP+EXZ	21	20	18.8	16.9	6.0
29	+EPE	00	28	22.6	1.3	0.6
	+EPN	00	28	22.1	1.1	0.6
	-EPZ	00	28	22.0	1.2	1.5
	-EPE	02	12	01.5	1.0	1.5
	-EPN	02	12	01.5	1.0	1.4
	-EPZ	02	12	01.8	1.1	2.1
	+IPE	10	31	47.8	1.5	1.5
	-EPN	10	31	48.0	1.0	0.7
	-IPZ	10	31	47.2	1.3	2.5
	+EPE	19	48	57.9	1.2	1.1
	+EPN	19	48	57.1	1.0	1.0
	-IPZ	19	48	57.0	1.5	2.0
	+EXZ	22	53	22.2	2.0	1.5
	+EPE	23	38	51.7	1.6	1.5
	+EPN	23	38	51.2	1.4	1.1
	+IPZ	23	38	50.4	1.5	1.5
30	+EXN	04	35	04.8	1.2	1.0
	-EXZ	04	35	03.0	0.9	0.7
DEC 01	+EPE	06	01	47.9	1.4	1.7
	+EPN	06	01	46.0	1.1	1.3
	+EPZ	06	01	45.9	0.8	1.0
02	+EPE	04	55	55.0	1.4	1.2
	-EPN	04	55	56.0	0.7	1.0
	+IPZ	04	55	54.7	0.9	5.5
	+EXE	06	30	33.4	1.8	3.0
	-EXN	06	30	35.1	1.1	1.5
	+EXZ	06	30	35.3	1.1	2.0
04	-EPN	00	00	42.5	1.3	1.5
	+IPZ	00	00	42.1	1.2	2.1
	LP-ESE	00	08	37.5	15.0	2.0
	LP-ESZ	00	08	37.5	13.1	3.0
	LP-LRE	00	19	15.0	16.9	13.0
	LP+LRZ	00	19	37.5	21.6	15.0

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
DEC 04	-EPE	01	53	12.0	1.1	1.1
	+EPN	01	53	12.3	1.1	1.0
	-EPZ	01	53	12.0	1.5	4.0
	+EPN	07	46	03.7	1.3	1.1
	-EPZ	07	46	02.8	1.8	2.3
	+IPE	18	48	50.9	1.6	3.1
	-IPN	18	48	50.9	1.2	3.0
	IPZ	18	48	50.8		
	LP+ESE	18	58	28.1	11.3	1.5
	LP+LRE	19	21	46.9	17.8	2.5
	LP+LRZ	19	21	37.5	18.8	3.0
05	+EPE	08	28	41.7	1.2	2.0
	+EPN	08	28	41.7	0.8	0.6
	+EPZ	08	28	42.0	1.0	1.5
	EPE	19	46	53.9		
	+EPN	19	46	54.8	1.1	1.5
	+IPZ	19	46	54.0	1.1	3.3
06	-EPE	07	49	30.4	1.1	1.5
	-IPZ	07	49	30.3	1.3	3.7
	+EPE	22	40	11.0	1.1	0.9
	EPN	22	40	12.3		
	EPZ	22	40	12.2		
	+EPE	23	22	26.3	1.2	0.9
	-EPN	23	22	25.0	1.0	0.6
	-EPZ	23	22	25.9	0.9	2.0
07	+EPE	16	25	22.0	0.6	0.6
	-EPZ	16	25	24.0	1.2	3.9
09	+EPE	12	54	27.3	0.6	1.0
	+IPN	12	54	28.0	1.1	1.5
	+IPZ	12	54	27.9	0.9	2.3
	+IPE	13	19	44.9	1.4	2.1
	+IPN	13	19	45.2	1.5	2.1
	+IPZ	13	19	44.9	1.3	7.1
	-EPE	16	45	43.0	2.0	2.0
	+EPN	16	45	43.0	1.9	1.5
	-IPZ	16	45	43.4	1.6	3.5
	+EPN	16	58	51.1	1.1	0.6
	-IPZ	16	58	51.7	1.7	2.9
	-EPZ	22	45	58.6	1.3	1.2
10	-EPE	11	48	06.0	0.8	0.7

DATE	PHASE	ARRIVAL TIME H	M	S	PERIOD (S)	AMP (MM)
DEC 10	-EPZ	11	48	06.0	0.9	1.5
	EPE	21	15	01.6		
	-EPZ	21	15	02.0	1.8	1.1
11	+EPE	05	40	49.8	1.4	1.0
	-EPN	05	40	50.0	1.0	0.6
	+IPZ	05	40	50.0	1.6	2.6
	-EPE	16	12	28.0	0.9	0.7
	+EPN	16	12	28.0	1.0	0.7
	EPZ	16	12	28.4		
	-EPE	17	44	55.9	1.1	0.8
	-IPZ	17	44	56.0	1.2	2.1
	LP+PPE	17	46	03.6	13.1	2.0
12	-EPE	08	11	02.8	1.3	1.1
	-EPN	08	11	02.7	1.4	1.1
	-IPZ	08	11	01.9	1.7	2.5
	LP EPE	08	12	56.3		
	LP+IXE	08	13	39.4	15.0	11.0
	LP-IPPE	08	17	46.9	14.1	30.5
	LP+IXE	08	18	46.9	11.3	41.0
	LP+PPPE	08	19	56.3	14.1	34.0
	LP+IXE	08	22	37.5	13.1	35.0
	LP-SKSE	08	23	18.8	18.8	35.0
	LP-ISE	08	24	46.9	18.8	51.0
	LP-ISSE	08	32	22.5	21.6	91.0
	LP-IXE	08	33	22.5	18.8	115.0
	LP-IXE	08	52	18.8	20.6	84.0
	+EPE	16	44	27.6	1.2	1.7
	+IPN	16	44	27.1	1.2	1.5
	-IPZ	16	44	27.7	1.0	4.5
	-EXE	16	52	13.7	1.1	1.5
	+EXN	16	52	13.7	1.2	1.4
	+IXZ	16	52	13.4	1.2	3.5
13	LP+LRE	06	10	18.8	17.8	5.0
	LP+LRZ	06	10	15.0	17.8	5.0
	EPE	23	11	28.0		
	EPZ	23	11	28.4		
	LP+EXZ	23	13	50.6	13.1	2.5
	LP+LRE	23	46	09.4	16.9	5.0
	LP+LRZ	23	46	11.3	15.9	6.0
14	EPE	02	15	54.8		

DATE	PHASE	ARRIVAL TIME			PERIOD	AMP
		H	M	S	(S)	(MM)
DEC 14	+EPN	02	15	54.7	0.7	0.5
	+EPZ	02	15	55.0	0.6	0.6
	-EXE	10	34	31.8	2.2	3.0
	-EXN	10	34	32.0	1.2	1.5
	EXZ	10	34	32.0		
15	+IPE	00	14	35.8	2.2	3.5
	-EPN	00	14	37.3	1.0	1.0
	-IPZ	00	14	35.5	1.5	4.0
	LP EPE	00	14	37.5		
	LP-ESE	00	24	30.0	18.8	6.0
	LP-EXE	00	36	05.6	22.5	14.0
	LP+EXE	00	40	46.9	21.6	15.0
	LP+EXE	00	45	33.8	19.7	10.0
	EPE	16	46	29.8		
	+EPN	16	46	31.4	1.3	1.0
	+EPZ	16	46	29.9	1.4	1.6
	EPE	22	51	52.0		
	EPN	22	51	51.9		
	+IPZ	22	51	52.0	0.8	0.5
17	-EPE	01	45	18.2	1.0	1.0
	-EPN	01	45	17.9	0.9	0.7
	+EPZ	01	45	17.9	1.0	1.3
	-EPN	05	02	22.1	1.0	1.4
	+IPZ	05	02	21.5	1.0	1.2
	+EXE	09	09	37.0	1.1	1.0
	-EXN	09	09	39.5	1.1	1.0
	+EXZ	09	09	39.0	1.1	1.6
	+EPE	11	16	32.0	1.1	1.3
	-IPN	11	16	29.9	1.1	2.0
	+IPZ	11	16	30.0	1.4	5.5
	+IPE	20	10	17.1	1.2	3.0
	IPZ	20	10	17.3		
	LP-EPE	20	10	22.5	14.1	6.0
	LP-EPN	20	10	22.5	12.2	3.0
	LP-EPZ	20	10	22.5	13.1	1.5
	LP+ISE	20	20	09.4	13.1	17.0
	LP ESN	20	20	09.4	13.1	6.5
	LP-IPSE	20	20	50.6	18.8	12.0
	LP+IPSN	20	20	50.6	11.3	12.0
	LP-LRE	20	36	18.8	23.4	26.0

DATE	PHASE	ARRIVAL TIME			PERIOD	AMP
		H	M	S	(S)	(MM)
DEC 17	LP+LRN	20	36	56.3	20.6	28.0
	LP+LRZ	20	36	37.5	20.6	5.0
18	+EPE	19	35	57.5	1.3	0.8
	+EPZ	19	35	59.0	1.4	1.6
	-EPE	22	41	20.0	1.1	0.9
	+EPN	22	41	20.0	1.1	1.0
	+EPZ	22	41	19.5	1.0	2.1
20	-EPE	13	24	08.5	1.5	2.9
	+IPN	13	24	08.3	1.3	2.0
	+IPZ	13	24	07.6	1.9	4.9
	LP-LRE	13	42	46.9	17.8	4.0
	LP+LRN	13	42	11.3	20.6	5.0
	LP+LRZ	13	42	26.3	20.6	7.0
	EPE	13	45	26.6		
	EPZ	13	45	27.0		
	LP+LRE	13	57	50.6	18.8	3.0
	LP-LRZ	13	57	43.1	16.9	3.0
21	EPE	09	16	57.5		
	EPN	09	16	56.9		
	+EPZ	09	16	57.6	0.9	0.9
22	-EPE	07	55	52.1	1.1	0.9
	EPN	07	55	51.3		
	+EPZ	07	55	53.6	1.1	0.5
	-EPE	08	22	05.8	0.7	0.6
	EPN	08	22	05.0		
	+EPZ	08	22	06.8	0.6	0.6
	+EPN	15	55	59.2	0.6	0.5
	+IPZ	15	55	59.0	1.4	2.0
23	EPE	05	15	54.7	0.9	1.2
	EPN	05	15	55.4		
	+EPZ	05	15	54.3	0.9	4.1
	EPE	08	47	09.5		
	+IPZ	08	47	08.0	3.0	5.5
24	EPE	00	54	38.7		
	+EPN	00	54	38.0	1.0	0.6
	-EPZ	00	54	38.0	1.2	2.2
	+EPZ	18	43	20.3	1.2	1.5
25	+EPE	03	57	33.6	1.8	1.5
	EPN	03	57	35.0		
	-EPZ	03	57	33.0	1.6	2.5

DATE	PHASE	ARRIVAL TIME			PERIOD	AMP
		H	M	S	(S)	(MM)
DEC 25	+IPE	04	52	26.0	1.5	3.6
	+EPN	04	52	26.3	1.0	0.7
	+IPZ	04	52	26.0	2.0	8.2
	+IXE	05	02	30.0	2.0	6.5
	-IXN	05	02	30.7	1.6	5.5
	-EXZ	05	02	30.0	1.4	2.5
	+EPE	23	57	42.7	1.2	1.1
	+EPN	23	57	42.6	1.5	1.1
	-IPZ	23	57	40.0	1.2	2.0
	LP EPZ	23	57	41.3		
26	LP-ESE	00	06	54.4	11.3	2.0
	LP+ESN	00	06	52.5	11.3	3.0
	LP-ESZ	00	06	54.4	7.5	1.5
	LP+LRE	00	21	22.5	15.0	2.0
	LP-LRN	00	21	41.3	18.8	3.0
	LP+LRZ	00	21	37.5	17.8	3.5
	+IPE	19	54	01.0	1.0	2.9
	-IPN	19	54	01.3	1.2	3.0
	-IPZ	19	54	01.0	1.1	7.1
27	+EXN	02	00	12.2	1.2	1.1
	-EXZ	02	00	11.9	3.3	3.2
	LP-PPE	02	01	54.4	9.4	1.0
	LP+PPN	02	01	54.4	11.3	1.0
	LP-PPZ	02	01	54.4	7.5	1.5
	LP+ESE	02	06	33.8	13.1	1.5
	LP-ESN	02	06	33.8	13.1	2.0
	LP+ESZ	02	06	33.8	13.1	2.0
	LP-EXE	02	15	11.3	15.0	4.0
	LP-EXN	02	15	11.3	15.0	6.0
	LP+EXE	02	17	20.6	16.9	6.0
	LP+EXN	02	17	18.8	15.0	3.0
	LP-EXZ	02	17	20.6	16.9	9.0
	+EPZ	11	16	57.5	1.2	1.4
28	+IPE	13	57	45.3	1.1	2.0
	+IPN	13	57	45.6	1.0	1.0
	-IPZ	13	57	45.3	1.1	6.0
	+EPN	17	07	09.0	1.3	1.2
	-EPZ	17	07	10.7	1.3	1.0
29	NO RECORD					
30	+IPE	04	37	10.1	1.1	3.1
DEC 30	+EPN	04	37	10.5	0.8	0.6
	-IPZ	04	37	09.3	1.8	6.6
	+IPE	06	36	32.6	1.2	2.1
	-IPN	06	36	33.0	1.0	2.0
	-IPZ	06	36	32.6	1.2	7.5
	-EPE	17	55	09.5	1.3	1.6
	+EPZ	17	55	07.2	1.0	1.3
	LP-ESE	18	01	52.5	13.1	2.0
	LP+SSSZ	18	06	22.5	15.0	3.0
31	+EPE	08	07	45.8	2.0	1.5
	EPN	08	07	46.3		
	-EPZ	08	07	47.9	1.8	2.1
	+IPE	21	31	57.8	1.3	2.3
	+EPN	21	31	57.8	1.2	0.6
	+IPZ	21	31	57.8	1.4	6.5