AKADEMIE DER WISSENSCHAFTEN DER DDR

Zentralinstitut für Physik der Erde (ZIPE)
Seismologischer Dienst Jena

Seismological Bulletin 1969
Station Moxa (MOX)

By

Johannes Stelzner, Dorothea Güth
and Joachim Weyrauch

AKADEMIE-VERLAG · BERLIN
1974

AKADEMIE DER WISSENSCHAFTEN DER DDR

Zentralinstitut für Physik der Erde (ZIPE)
Seismologischer Dienst Jena

Seismological Bulletin 1969 Station Moxa (MOX)

By

Johannes Stelzner, Dorothea Güth,
and Joachim Weyrauch

With 2 Figures

AKADEMIE-VERLAG · BERLIN

1974

TABLE OF CONTENTS

Preliminary notes for the interpretation of seismograms

In the Bulletin the international code is used:

1. Phase interpretation

Pg — direct longitudinal wave in near epicentral distances ($D < 10°$)

Pb, Pn — guided longitudinal head waves along the CONRAD- or MOHOROVIČIĆ-discontinuity ($D < 10°$)

P — direct longitudinal wave travelled through the earth mantle

PKIKP — direct longitudinal wave travelled through the inner core (travel-time branch DF)

PKHKP — direct longitudinal wave refracted in the intermediary zone between inner and outer core. Phase symbol according to BOLT [1] (travel-time branch GH)

PKP2 — direct longitudinal wave travelled through the outer core only (travel-time branch AB)

PKP — first noticeable onset of longitudinal core phase, not identified

PP, PPP — waves reflected on the earth surface with permanent longitudinal character

PKKP — core phase reflected once within the core at the outer core boundary

PKPPKP — longitudinal core phase reflected at the earth surface

Sg — direct transversal wave in near epicentral distances ($D < 10°$)

Sb, Sn — guided transversal head waves along the CONRAD- or MOHOROVIČIĆ-discontinuity ($D < 10°$)

S — direct transversal wave travelled through the earth mantle

SKS — direct wave travelled transversal through the mantle and longitudinal through the core

SS, SSS — waves reflected on the earth surface with permanent transversal character

SKKS — wave travelled transversal through the mantle, longitudinal through the core and reflected within the core at the outer core boundary

PcP, ScS, PcS, ScP — longitudinal and transversal waves with steady or changing character reflected at the outer core

PS, SP, PPS — longitudinal and transversal waves with changing character reflected at the surface of the earth

pP, sP, pPP, sPP, pPKIKP, sPKP2, pS — phases of deep-focus earthquakes of longitudinal or transversal waves with steady or changing character. p;s — reflected near the epicentre

pPKP, sPKP — phases of deep focus earthquakes of longitudinal core waves not exactly to be coordinated

SKP, PKS — core phases with different character before and after the direct transit of the core

SKSP — SKS wave with longitudinal character after the reflection at the surface of the earth

P1, P2, P3,...

PP1, PP2,...

S1, S2,...

PKKP1, PKKP2,...

PKPPKP1, PKPPKP2,... — multiple onsets of body waves

Pn, Sn — teleseismic Pn and Sn waves in the epicentral distances $23° < D < 40°$ after BÅTH [2]

Pa, Sa — waves probably guided in the asthenosphere channel or higher modes of surface waves

PL — leaking modes, normal dispersed train of waves of periods greater than about 10 s, beginning at or near the time of initial P-wave

X, Y, Z — remarkable phases of body waves, not to be identified

LmV, LmH — maximum of the vertical and horizontal component respectively of longperiodical surface waves. If there are several maxima with comparable proportions in A/T, the numeration was carried out in a temporal sequence e. g. Lm1H, Lm2H

The phase symbol is followed by the designation of the type of seismometer from which the time of onsets is taken.

A — seismograph with amplitude characteristic of type A (short-period)
B — seismograph with amplitude characteristic of type B (middle-period)
C — seismograph with amplitude characteristic of type C (long-period)

2. Measurement of amplitudes and calculation of magnitudes

All data of amplitudes and periods printed in the column "remarks" are always taken from the records of the same instruments, from which are taken the onset-times of the corresponding phases. In case of doubt the symbol of phase and component is followed by the symbol of the type of instruments in parenthesis e. g.: PV(A), PV(B), SH(B)

Data of amplitudes obtained from records of instruments of type A are given in units of length of nm (1 nm = 1 nanometre = 10^{-6} millimetre). Data of amplitudes obtained from instruments of type B and such obtained from instruments of type C are given in units of length μm (1 μm = 1 mikrometre = 10^{-3} millimetre) e. g.: PV: 1.25 s 38.6 nm, SH: 10 s 3.2 μm, LmH: 22 s 15 μm.

Magnitudes are determined from all those phases, for which calibrating functions are known and internationally used, i. e.

for maxima of body waves P(PH, PV), PP(PPH, PPV), and S(SH)-Q-functions from GUTENBERG and RICHTER [3] — and

for maxima of surface waves (h < 100 km) LmH, LmV — calibrating functions from Prague σ [4] —.

The station correction S was not yet taken into consideration.

MPV, MP1V, MP2V, MPPV — magnitude of vertical component V of the adequate body waves
MPH, MPPH, MSH — magnitude of horizontal component H of the adequate body waves
MLV, ML1V, ML2V — magnitude of the vertical component V of the maximum surface waves
MLH, ML1H, ML2H — magnitude of the horizontal component H of the maximum surface waves
MAG or Mb — magnitude of vertical component V of the first onset of P-waves (body-waves) given by USCGS
Ms resp. ML — magnitude of horizontal component H of maximum surface waves given by USCGS resp. BCIS

If there are several evaluations of amplitudes from different types of seismographs for the same wave, the symbol of magnitudes is followed by the symbol of instruments e. g.: MPV(A), MPV(B).

3. *Direction of body-wave onsets*

If the direction of motion at the beginning of a wave onset is clearly to be recognized, the sign + or — is placed before the phase symbol. It means:

in the Z component	+ ground motion upwards, compression
	— ground motion downwards, dilatation
in the N component	+ ground motion to the north
	— ground motion to the south
in the E component	+ ground motion to the east
	— ground motion to the west

4. *Further abbreviations*

i — sharp beginning of phase motion (impetus)
e — gradual beginning of phase motion (emersio)
D — epicentral distances in degree (°), calculated according to geocentric coordinates, the maximum error of the own calculations amounts to ± 0,1°
Az — azimuth: clockwise measured angle between north direction in epicentre and the connecting line from epicentre to station Moxa
h — depth of focus in km, our data for depth of focus are based on travel-time curves for deep focus earthquakes after GUTENBERG and RICHTER [5]
H — origin time in GMT (Greenwich Mean Time)
USCGS — United States Coast and Geodetic Survey, Washington
BCIS — Bureau Central International de Séismologie, Strasbourg
ANUSSR — Academia Nauk USSR, Moscow
USAEC — United States Atomic Energy Commission, Washington, D. C.
ISC — International Seismological Centre, Edinburgh

For abbreviations of seismological stations and other agencies in the international three letter code see the introductions to the Regional Catalogue of Earthquakes, Edinburgh and the Bulletins of the International Seismological Centre, Edinburgh.

Round brackets indicate uncertainties in interpretation of phase, time, depth of focus or epicentral distances respectively.

[1] BOLT, A., The velocity of seismic waves near the earths center. Bull. Seism. Soc. Am. 54 (1964) 1, 191—208.
[2] BÅTH, M., Propagation of Sn and Pn teleseismic distances. Pure and Applied Geophysics 64 (1966/II) 19—30.
[3] GUTENBERG, B. and RICHTER, C. F., Magnitude and energy of earthquakes. Annali di Geofisica 9 (1956) 1, 1—15.
[4] KÁRNÍK, V., KONDORSKAJA, N. V. u. a., Standardization of the earthquake magnitude scale. Stud. Geophys. et Geodet., Prague 6 (1962) 41—48.
[5] GUTENBERG, B. and RICHTER, C. F., Materials for the study of deep-focus earthquakes. Bull. Seism. Soc. Am. 26 (1936) 4, 341—390.

Seismological Station Moxa (MOX) of the Central Earth Physics Institute

Elevation above mean sea level:	455 m
Bedrock:	clay slate of the lower carboniferous formation
Geographic coordinates:	$\varphi = 50°38'46''$ N $\lambda = 11°36'58''$ E
Address:	Central Earth Physics Institute (since February 1969) Seismological Service GDR-69, Jena, Burgweg 11 German Democratic Republic Telex: 058 8668 seis dd

Seismographs and their parameters 1969

T_s — seismometer free period
T_g — galvanometer free period
D_s — seismograph damping
D_g — galvanometer damping
V_0 — magnification factor
N — north-south component
E — east-west component
Z — vertical component
σ^2 — coupling coefficient

SKM — Seismograph Kirnos modified
SSJ — Seismic Station Apparatus Type Jena
VSJ — Vertical Seismograph Type Jena

Type of Seismograph	Comp.	T_s/[s]	T_g/[s]	D_s	D_g	V_0	σ^2
VSJ-II	Z	1.0	1.0	0.5	0.5	47200	0.56
A SKM-III	N	1.64	0.39	0.52	1.98	25700	
	E	1.64	0.39	0.51	1.93	25400	
	Z	1.64	0.39	0.51	1.99	24600	
B SSJ-I	N	20	1.13	0.50	8.87	109	0.074
		20	1.14	0.50	8.79	1110	0.074
	E	20	1.13	0.49	8.85	103	0.071
		20	1.16	0.49	8.61	1050	0.071
	Z	20	1.13	0.48	8.82	108	0.048
		20	1.24	0.48	8.05	1070	0.048
C SSJ-I/L	N	30	70.7	1.24	0.5	1500	0.15
	E	30	79.1	1.3	0.5	1200	0.087
	Z	30	77.2	1.3	0.5	1300	0.066
Strain/L	NS		85.4		0.70	65*)	
	EW		86.2		0.70	67*)	
(coupled)	NS+EW		86.2		0.70	42*)	
Wiechert 1200 kp	N	8.5		0.32		190	
	E	8.3		0.35		190	
Mainka 150 kp	N	20		0.36		50	
200 kp	E	20		0.47		40	

*) for wave velocity 5 km s^{-1}

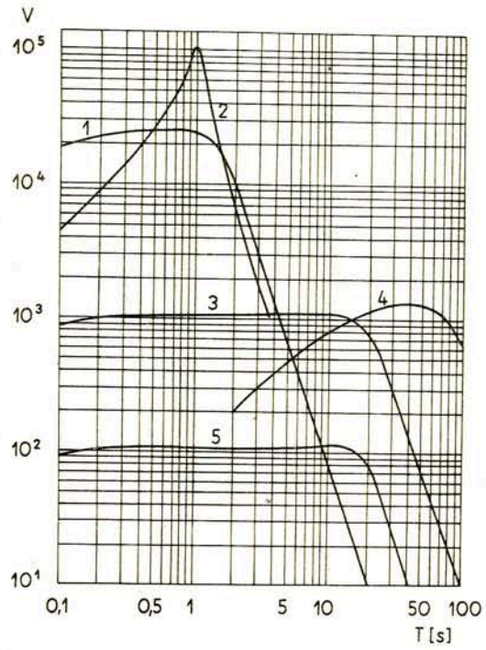

Fig. 1. Mean amplitude characteristics of the electromagnetic seismographs of the station Moxa 1969

1 — Seismograph Kirnos Modernised-III (SKM-III) (NS-, EW- and Z-component)
2 — Seismograph Type Jena II (Z-component)
3 — Seismic Station Apparatus Type Jena I/1000 (SSJ-I/1000) (NS-, EW- and Z-component)
4 — Seismic Station Apparatus Type Jena I/L (SSJ-I/L) (NS-, EW- and Z-component)
5 — Seismic Station Apparatus Type Jena I/100 (SSJ-I/100) (NS-, EW- and Z-component)

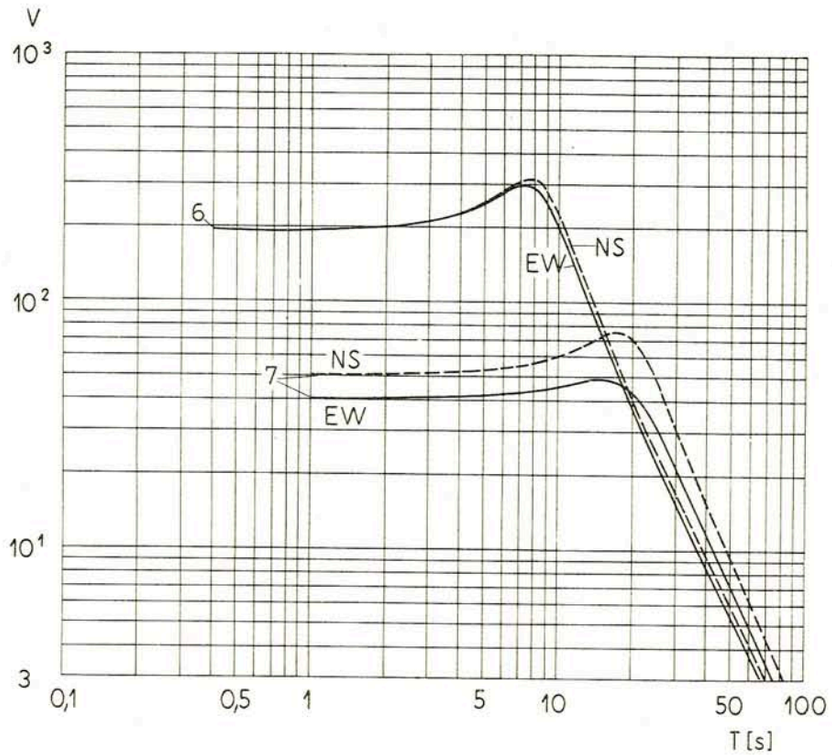

Fig. 2. Mean amplitude characteristics of the mechanical seismographs of the station Moxa 1969

6 — Wiechert Seismograph (NS- and EW-component)

7 — Mainka Seismograph (NS- and EW-component)

Seismological Recordings at Station Moxa 1969

Day	Phase		h m s	Remarks
1.	eP	A	05 05 33.5	Fox Islands, Aleutian Is.
				52.09 N 170.02 W
				H = 84 53 37.7 h = normal MAG=4.6
				D = 77.63 Az = 358.9 (USCGS)
1.	ePKP2	A	07 13 50	West of Maquarie Island
	LmH	B	08 36.4	60.52 S 150.55 E
	LmV	B	37.3	H = 06 53 29.0 h = normal MAG=-
				D = 155.18 Az = 265.1 (USCGS)
				PKP2V:1.4s 13.9nm
				LmH:18s 0.5/um MLH=5.3
1.	+iP	A	09 19 01.2	Andreanof Islands/Aleutian Is.
	LmH	B	10 02.5	51.24 N 179.37 W
				H = 09 07 04.3 h = 34 km MAG=5.4
				D = 78.06 Az = 352.9 (USCGS)
				PV:0.9s 43.0nm MPV=5.6
				LmH:16s (0.3/um) MLH=(4.7)
1.	ePKP	A	09 44 34.5	Fiji Islands 16.22 S 178.36 E
				H = 09 25 00.5 h = normal MAG=5.3
				D = 144.04 Az = 345.6 (USCGS)
1.	eiP	A	21 45 19	Southern Greece 36.43 N 22.98 E
				H = 21 41 25.1 h = 10 km MAG=4.5
				D = 16.40 Az = 333.6 (USCGS)
2.	e(P)	A	01 13 20	North Atlantic Ridge 30.63 N 41.99 W
	LmH	B	29.3	H = 01 05 07.0 h = normal MAG=4.9
	LmV	B	29.4	D = 44.23 Az = 47.3 (USCGS)
				LmH:21s 0.7/um MLH=4.6
				LmV:18s 0.5/um MLV=4.5
2.	eiP	A	00 44 20	North Atlantic Ridge 30.51 N 41.90 W
	LmH	B	01 00.4	H = 00 36 11.7 h = normal MAG=4.7
	LmV	B	00.4	D = 44.25 Az = 47.2 (USCGS)
				LmH:19s 0.4/um MLH=4.3
				LmV:19s 0.6/um MLV=4.5

Day	Phase		h m s	Remarks
2.	ePKP	A	03 32 37	Tonga Islands 16.38 S 174.74 W H = 03 13 26.6 h = 250 km MAG=4.3 D = 145.44 Az = 352.9 (USCGS) PKPV:0.8s 13.5nm
2.	eP	A	12 19 20.5	North Atlantic Ridge 47.51 N 27.93 W H = 12 13 49.0 h = normal MAG=4.7 D = 25.88 Az = 68.2 (USCGS) PV:1.6s 24.6nm MPV=4.8
2.	eiP	A	14 18 26	Near East Coast of Kamchatka 53.91 N 160.56 E H = 14 07 05.2 h = 76 km MAG=4.9 D = 72.61 Az = 339.9 (USCGS)
2.	eP	A	15 22 00	Eastern Mediterranean Sea
	e	A	22 08.5	35.50 N 28.36 E
	e	A	22 12	H = 15 17 33.9 h = normal MAG=4.5
	e	A	22 16	D = 19.39 Az = 326.5 (USCGS)
	LmH	B	31.9	PV:1.4s 16.2nm MPV=4.1
	LmV	B	31.8	LmH:15s 1.0/um MLH=4.3 LmV:18s 0.8/um MLV=4.2
2.	ePKP	A	17 51 42	Tonga Islands 15.17 S 173.58 W H = 17 32 09.8 h = normal MAG=4.7 D = 144.37 Az = 354.3 (USCGS) PKPV:1.6s 21.9nm
2.	eP	A	18 19 01.5	Hokkaido, Japan 41.98 N 142.40 E H = 18 07 07.9 h = 70 km MAG=4.7 D = 78.25 Az = 330.5
3.	eP1	A	03 23 35	Iran-USSR Border Region
	eP2	A	23 38.5	37.13 N 57.90 E
	LmH	B	43.3	H = 03 16 38.1 h = 11 km MAG=5.6
	LmV	B	44.4	D = 35.40 Az = 307.4 (USCGS) P1V:1.9s 41.6nm MP1V=4.9 P2V:1.7s 109.0nm MP2V=5.4 LmH:15s 1.5/um MLH=4.9 LmV:11s 1.7/um MLV=5.2

Day	Phase		h m s	Remarks
3.	eP	A	11 31 50	Guatemala 14.48 N 91.65 W H = 11 19 13.6 h = 89 km MAG=5.0 D = 87.13 Az = 38.3 (USCGS) PV:1.2s 12.5nm MPV=5.0
3.	+iP	AB	13 40 10	Andreanof Island/Aleutian Is.
	epP	A	40 14.5	51.17 N 179.38 W
	e(S)	AB	50 05	H = 13 28 12.8 h = 29 km MAG=5.8
	LmH	B	14 22.5	D = 78.13 Az = 352.9 (USCGS)
	LmV	B	22.8	PV:1.6s 115.0nm MPV=5.8 LmH:18s 0.7/um MLH=5.1 LmV:20s 0.9/um MLV=5.1
4.	-iP	A	16 18 13	Kodiak Island 57.93 N 153.88 W H = 16 06 58.9 h = 61 km MAG=4.5 D = 71.13 Az = 9.7 (USCGS) PV:1.3s 19.7nm MPV=5.1
4.	e(P)	A	18 24 13	South Indian Ocean 26.01 S 68.80 E H = 18 10 55.2 h = normal MAG=5.1 D = 91.48 Az = 327.6 (USCGS) traces
4.	ePKP	A	22 55 14	Banda Sea 6.77 S 129.80 E H = 22 36 47.9 h = 107 km MAG=5.7 D = 112.89 Az = 322.5 (USCGS) traces
5.	-iP	A	13 16 36.5	Sea of Okhotsk 48.40 N 146.15 E H = 13 05 48.8 h = 466 km MAG=4.6 D = 73.90 Az = 331.6 (USCGS) PV:1.6s 27.4nm MPV=5.0
5.	ePdiff.	C	13 42 35	Solomon Islands 7.98 S 158.91 E
	e	C	45 16	H = 13 26 39.9 h = 47 km MAG=6.4
	ePKIKP	A	45 45	D = 129.56 Az = 333.5 (USCGS)
	-iX	AB	45 47	XV:1.8s 296.0nm
	e	B	47 32	LmH:21.5s 62.3/um MLH=7.3
	ePP	C	47 40	LmV:21.5s 63.0/um MLV=7.3

Day	Phase		h m s	Remarks
cont.				
5.	iPP	AB	13 47 56	
	ePKS	B	49 05	
	ePS	C	58 25	
	eiSPP	C	59 46	
	eSS	C	14 05 28	
	LmH	B	43.2	
	LmV	B	47.5	
5.	ePKP	A	16 10 28	Loyalty Islands 21.40 S 168.60 E H = 15 50 49.0 h = normal MAG=- D = 145.67 Az = 333.8 (USCGS) PKPV:1.5s 30.0nm
5.	ePP	A	17 09 53	Flores Island Region 8.86 S 123.45 E H = 16 50 42.8 h = 27 km MAG=5.6 (USCGS) D = 110.7
6.	ePKHKP	A	12 47 58.5	South of Fiji Islands
	ePKP2	A	48 07.5	22.53 S 179.23 E H = 12 29 12.5 h = 586 km MAG=4.5 D = 150.31 Az = 344.0 (USCGS)
6.	ePKIKP	A	15 50 11	Kermadec Islands 30.24 S 177.98 W
	iPKP2	A	50 47	H = 15 30 29.7 h = 137 km MAG=5.2 D = 158.39 Az = 343.3 (USCGS) PKIKPV:1.7s 12.0nm PKP2V:1.8s 60.4nm
6.	-iPKIKP	A	15 58 18.5	Santa Cruz Islands 10.51 S 164.47 E
	e	B	58 19	H = 15 39 00.9 h = 32 km MAG=6.2
	ePP	B	16 00 44	D = 134.17 Az = 336.1 (USCGS)
	LmH	B	56.6	PKIKPV:1.8s 60.4nm
	LmV	B	17 06.1	LmH:20.5s 31.1/um MLH=7.0 LmV:16.5s 25.7/um MLV=7.0
6.	ePKIKP	A	17 52 59	Santa Cruz Islands 10.71 S 164.38 E
	e	A	53 06.5	H = 17 33 40.5 h = normal MAG=5.4 D = 134.32 Az = 336.0 (USCGS)

Day	Phase		h m s	Remarks
6.	ePKP2	A	21 10 36.5	Kermadec Islands Region 30.18 S 178.19 W H = 20 50 24.6 h = 189 km MAG=4.5 (USCGS) D = 158.3
6.	ePn	A	22 05 05	Northern Italy 44.11 N 10.71 E
	iPg	A	05 40	H = 22 03 24.7 h = 7 km MAG=4.5
	iSn	A	06 15.5	D = 6.56 Az = 5.1 (USCGS)
	eSg	A	07 02	PV:0.6s 13.6nm
	LmH	B	08.0	LmH:12s 1.7/um MLH=3.7
	LmV	B	08.7	LmV:9s 1.3/um e 05 31 ei 05 58 ei 06 16 i 06 17
6.	ePKP	A	23 19 11	Loyalty Islands 21.08 S 168.39 E
	e	A	19 17.5	H = 22 59 36.3 h = normal MAG=- D = 145.30 Az = 333.8 (USCGS)
7.	e	A	00 57 27	Greece 38.53 N 20.14 E
	e	A	59 08	H = 00 50 45.8 h = 15 km MAG=4.3 (USCGS)
	LmH	B	01 00.7	D = 13.9
	LmV	B	00.7	LmH:8s 1.0/um MLH=4.3 LmV:8s 0.9/um
7.	eP	A	07 14 33	Ryukyu Islands 26.12 N 129.54 E
	LmH	B	58.3	H = 07 01 55.2 h = 61 km MAG=5.3
	LmV	B	58.4	D = 86.01 Az = 325.7 (USCGS) LmH:16s 0.9/um MLH=5.4 LmV:16s 1.0/um MLV=5.3
7.	eP	A	22 08 43	Off East Coast of Kamchatka
	LmV	B	47.3	51.56 N 159.51 E
	LmH	B	47.5	H = 21 57 05.9 h = normal MAG=4.6 D = 74.59 Az = 339.5 (USCGS)
9.	ePKP	A	12 07 19.5	Fiji Islands 18.78 S 179.43 E H = 11 48 47.2 h = 619 km MAG=4.5 D = 146.75 Az = 345.8 (USCGS)

Day	Phase		h m s	Remarks
9.	ePKIKP	A	19 11 51	South of Fiji Islands 25.19 S 178.42 E
	ePKHKP	A	11 57	H = 18 53 03.5 h = 550 km MAG=5.0
	ePKP2	A	12 11	D = 152.62 Az = 341.6 (USCGS)
9.	e	A	21 45 20.5	Hokkaido, Japan 41.37 N 140.30 E
				H = 21 33 24.4 h = 132 km MAG=4.3
				D = 77.98 Az = 329.5 (USCGS)
10.	eP	A	03 33 24	Ryukyu Islands 28.97 N 130.65 E
	epP	A	33 35	H = 03 20 55.0 h = normal MAG=5.5
	isP	A	33 40.2	D = 84.21 Az = 326.0 (USCGS)
	eS	C	43 19	PV:1.6s 0.6nm MPV=5.3
	LmH	B	04 15.9	LmH:12.5s 2.8/um MLH=5.8
	LmV	B	16.1	LmV:14s 5.9/um MLV=5.9
10.	eP	A	04 35 05.5	Greece-Albania Border Region
				39.41 N 20.25 E
				H = 04 32 03.6 h = normal MAG=4.5
				D = 12.77 Az = 334.4 (USCGS)
10.	iPn	A	16 19 01.6	Northern Italy 44.62 N 11.98 E
	eiPg	A	19 30	H = 16 17 31.1 h = 11 km MAG=4.5
	iSn	A	20 07.2	D = 6.03 Az = 357.8 (USCGS)
	e(Sg)	A	20 39	LmH:4s 0.7/um MLH=3.8
	LmH	B	21.3	i 19 03.6 i 19 07.7 i 20 08.7
11.	ePKIKP	B	04 46 14	Kermadec Islands 28.41 S 176.96 W
	ePKHKP	A	46 27.5	H = 04 26 26.8 h = 68 km MAG=5.4
	ePKP2	A	46 45	D = 156.86 Az = 346.0 (USCGS)
	ePP	C	50 20	PKHKPV:2.8s 64.0nm
	e(SKSP)	C	05 00 50	LmH:17s 2.2/um MLH=6.0
	eSS	C	10 15	LmV:17s 3.1/um MLV=6.2
	LmH	B	06 08.6	
	LmV	B	06.5	
11.	ePKP2	A	05 08 02	Kermadec Islands 28.50 S 176.82 W
	epPKP2	A	08 20	H = 04 47 42.7 h = 68 km MAG=5.1 (USCGS)
				D = 156.97 Az = 346.0 (ISC)
				PKP2V:1.5s 20.0nm

Day	Phase		h m s	Remarks
11.	ePKP2	A	05 23 24	Kermadec Islands 28.55 S 176.73 W
	epPKP2	A	23 30	H = 05 02 55.9 h = 76 km MAG=5.2 (USCGS)
				D = 157.12 Az = 346 (ISC)
11.	ePKP	A	06 46 09	Fiji Islands 17.67 S 178.84 W
				H = 06 27 29.0 h = 529 km MAG=4.5
				D = 146.06 Az = 348.1 (USCGS)
				PKPV:1.4s 20.8nm
11.	e	A	10 25 22.5	Greece 38.35 N 20.10 E
	e	A	25 37	H = 10 21 52.0 h = normal MAG=4.1
	eX	A	26 29	D = 13.69 Az = 336.6 (USCGS)
	e	A	27 50.5	XV:0.7s 11.6nm
11.	+iP	A	12 09 20	Ascension Islands 10.25 S 13.17 W
	LmH	C	35.6	H = 11 58 46.8 h = normal MAG=4.9
	LmV	C	36.5	D = 64.37 Az = 17.2 (USCGS)
				PV:1.8s 47.0nm MPV=5.4
				LmH:24s 0.8/um MLH=4.8
				LmV:24s 0.9/um MLV=4.9
13.	eP	A	05 50 08	Greece 38.31 N 22.59 E
				H = 05 46 41.1 h = 51 km MAG=4.7
				D = 14.59 Az = 331.2 (USCGS)
13.	eP	A	08 01 24	Crete 34.67 N 25.16 E
	e	A	01 25	H = 07 57 07.0 h = 47 km MAG=4.6
	e	A	01 28	D = 18.77 Az = 332.4 (USCGS)
13.	ePKIKP	A	09 14 09	Solomon Islands 7.97 S 158.88 E
	e	A	14 17	H = 08 55 03.9 h = 48 km MAG=5.7
	epPKIKP	A	14 22	D = 129.54 Az = 333.5 (USCGS)
				PKIKPV:1.4s 27.8nm
13.	e(PKP)	A	21 44 18.5	Tonga Islands 18.84 S 173.76 W
	esPKP2	A	44 29	H = 21 24 22.5 h = normal MAG=4.8
				D = 147.98 Az = 353.5 (USCGS)

Day	Phase		h m s	Remarks
14.	ePn	A	01 00 24	Northern Italy 46.77 N 12.85 E
	ePg	A	00 40	H = 00 59 24.4 h = normal MAG=-
	i	A	00 44	D = 3.97 Az = 348.5 (USCGS)
	eSn	A	01 11.5	
	eSg	A	01 31	
14.	ePKHKP	A	11 45 57	Tonga Islands 20.25 S 175.81 W
	ePKP2	A	46 02	H = 11 26 08.4 h = 16 km MAG=4.9
				D = 149.10 Az = 350.8 (USCGS)
				PKHKPV:1.5s 30.0nm
14.	iP	A	16 14 14.3	Near East Coast of Honshu, Japan
	ipP	A	14 26	37.49 N 141.50 E
				H = 16 02 00.7 h = 60 km MAG=4.8
				D = 81.80 Az = 330.4 (USCGS)
14.	+iP1	A	23 16 31.5	Turkey 36.18 N 29.20 E
	iP2	A	16 36.5	H = 23 12 07.9 h = normal MAG=5.5
	-iP3	A	16 40	D = 19.23 Az = 324.3 (USCGS)
	iS	C	20 06	P1V:1.5s 285.0nm MP1V=5.3
	LmH	B	23.3	P3V:1.8s 3040.0nm MP3V=6.2
	LmV	B	24.9	PV(B):8s 11.1/um MPV(B)=6.1
				LmH:17s 109.5/um MLH=6.2
				LmV:11s 44.9/um MLV=6.2
15.	+iP	A	08 49 07	Rumania 45.56 N 26.42 E
				H = 08 46 29.4 h = 135 km MAG=4.5
				D = 11.12 Az = 302.5 (USCGS)
				PV:1.5s 50.0nm
15.	eP	A	19 42 18	Southern Nevada 37.21 N 116.23 W
				H = 19 30 00.0 h = 0 km MAG=5.3
				D = 81.23 Az = 30.6 (USCGS)
				Nuclear Explosion "WINESKIN"
				37°12'33" N 116°13'31" W (USAEC)
				PV:1.1s 20.2nm MPV=6.1

Day	Phase		h m s	Remarks
15.	e(P)	A	22 07 05	Poland 50.35 N 18.84 E
				H = 22 05 38.3 h = - MAG=3.2 (ISC)
				D = 4.45
16.	ePKHKP	A	11 26 28.5	South of Fiji Islands 23.59 S 176.12 W
	ePKP2	A	26 37	H = 11 06 35.7 h = 45 km MAG=5.1
				D = 152.33 Az = 349.4 (USCGS)
				PKHKPV:1.2s 18.9nm
16.	eP	A	15 33 14	Ryukyu Islands 27.64 N 129.19 E
	esP	A	33 24	H = 15 20 42.6 h = 38 km MAG=4.8
	LmH	B	16 16.0	D = 84.59 Az = 325.5 (USCGS)
	LmV	B	15.8	LmH:16s 1.0/um MLH=5.3
				LmV:16s 1.2/um MLV=5.4
16.	e(P)	A	15 47(20)	Near East Coast of Honshu, Japan
	e	A	47 32	40.14 N 142.30 E
				H = 15 35 15.5 h = 45 km MAG=4.4
				D = 79.81 Az = 330.6 (USCGS)
17.	eP	A	08 38 44.5	Kurile Islands 47.70 N 153.95 E
	esP	A	39 19	H = 08 26 54.8 h = normal MAG=4.8
				D = 76.81 Az = 336.4 (USCGS)
18.	ePKIKP	A	03 20 57	South Sandwich Islands Region
	eSP	C	31 00	56.84 S 26.79 W
	ePKKP	A	32 03	H = 03 02 36.7 h = 141 km MAG=5.9 (USCGS)
	LmV	B	04 07.7	D = 111.7
	LmH	B	08.0	e(A) 22 06.5 e(C) 23 00
19.	+iP	A	17 13 31	Hokkaido, Japan 45.01 N 143.17 E
	ipP	B	14 25	H = 07 02 04.4 h = 204 km MAG=6.4
	isP	B	14 52	D = 75.88 Az = 330.6 (USCGS)
	eiPP	B	16 16	PV:2.2s 2220.0nm MPV=6.5
	ipPP	B	17 13	PmV:1.8s 4870.0nm MPmV=6.9
	iPPPP	B	19 29	PV(B):6s 20.3/um MPV(B)=7.0
	-iS	AB	22 51	SH:9s 116.0/um MSH=7.9
	iSKS	B	23 17	LmH:15.5s 48.9/um MLH=6.9

Day	Phase		h m s	Remarks
:ont.				
19.	iSSSS	B	17 33 15	LmV:14s 24.8/um MLV=6.9
	eiPKPPKP	A	40 37	
	LmH	B	45.8	
	LmV	B	48.8	
19.	eiPKIKP	A	19 09 58.5	New Hebrides Islands 14.89 S 167.19 E
	eiPP	A	13 00	H = 18 50 52.1 h = 112 km MAG=6.2
	eSKP	B	13 31	D = 139.23 Az = 336.2 (USCGS)
	eSKKP	A	22 09	PKIKPV:1.2s 5.85nm
				i(B) 10 04 i(A) 10 07.5
20.	ePn	A	06 01 33	Adriatic Sea 43.3 N 14.4 E
	eSn	A	03 02	H = 05 59 40 h = 4 km
	eSg	A	03 48.5	D = 7.57 Az = 346 (ISC)
20.	ePKIKP	A	12 44 03	Santa Cruz Islands 10.29 S 164.63 E
	ePP	B	46 24	H = 12 24 35.2 h = 4 km MAG=5.6
	ePKS	B	47 30	D = 134.04 Az = 336.3 (USCGS)
	LmH	B	13 42.4	LmH:22s 3.6/um MLH=6.0
	LmV	B	42.5	LmV:21s 2.8/um
20.	+iP	A	14 31 39.2	Komandorsky Islands 54.86 N 166.03 E
	iPP	B	34 22	H = 14 20 11.5 h = 23 km MAG=6.1
	LmH	B	15 05.5	D = 72.71 Az = 343.3 (USCGS)
	LmV	B	05.8	PV:1.6s 357.0nm MPV=6.2
				LmH:18s 3.5/um MLH=5.7
				LmV:20s 2.3/um MLV=5.5
21.	ePKIKP	A	02 05 55.5	Banda Sea 7.31 S 128.32 E
				H = 01 47 29.6 h = 91 km MAG=5.6 (USCGS)
				D = 112.4
21.	eP	A	08 14 06	North Altantic Ridge 28.74 N 43.58 W
	iS	B	21 04	H = 08 05 40.1 h = normal MAG=5.2
	eSS	C	24 08	D = 46.54 Az = 46.1 (USCGS)
	LmH	B	09 31.3	PV:1.6s 21.9nm MPV=5.0
	LmV	B	31.3	LmH:17.5s 3.8/um MLH=5.4
				LmV:16s 2.9/um MLV=5.4

Day	Phase		h m s	Remarks
21.	eP	A	14 45 05	Tadzhik SSR 38.27 N 69.69 E
	LmH	B	15 03.2	H = 14 37 15.1 h = 52 km MAG=5.1
	LmV	B	06.2	D = 42.22 Az = 306.5 (USCGS)
				PV:2.2s 48.8nm MPV=4.9
				LmH:17s 1.2/um MLH=4.9
				LmV:13s 1.0/um MLV=5.1
21.	ePKP	A	20 57 40	Loyalty Islands 21.91 S 169.88 E
	eipPKP	A	57 50.5	H = 20 38 00.7 h = 33 km MAG=4.9
	LmH	C	22 11.5	D = 146.64 Az = 334.6 (USCGS)
	LmV	C	22.0	PKPV:1.0s 19.9nm
21.	eP	A	21 15 03.5	Norwegian Sea 73.72 N 13.73 E
	e	A	15 09	H = 21 09 55.3 h = 7 km MAG=4.6
				D = 23.18 Az = 183.4 (USCGS)
21.	eP	A	23 23 28.5	Off East Coast of Kamchatka
	e	A	23 42	55.94 N 162.99 E
				H = 23 12 10.0 h = 23 km MAG=4.8
				D = 71.15 Az = 341.2 (USCGS)
				PV:1.0s 19.9nm MPV=5.2
22.	+iP	A	00 53 47.7	Off East Coast of Kamchatka
	ipP	A	53 53	55.86 N 163.01 E
	LmH	B	01 29.2	H = 00 42 30.0 h = normal MAG=5.5
	LmV	B	33.1	D = 71.23 Az = 341.2 (USCGS)
				PV:1.2s 109.0nm MPV=5.9
				LmH:14s 1.2/um MLH=5.4
				LmV:14s 0.9/um MLV=5.2
22.	eiP	A	03 28 49.5	Off East Coast of Kamchatka
	ei	A	28 52	55.91 N 163.02 E
				H = 03 17 33.3 h = normal MAG=5.0
				D = 71.19 Az = 341.2 (USCGS)
				PV:1.1s 16.2nm MPV=5.1

Day	Phase		h m s	Remarks
22.	eP	A	04 05 48	Off East Coast of Kamchatka
				55.89 N 163.07 E
				H = 03 54 29.9 h = 25 km MAG=4.8
				D = 71.21 Az = 341.3 (USCGS)
				PV:1.0s 13.8nm MPV=5.0
22.	iP	A	17 26 25	Kurile Islands 49.35 N 155.49 E
	esP	A	26 45	H = 17 14 42.9 h = 50 km MAG=5.4
	LmH	B	18 01.5	D = 75.69 Az = 337.2 (USCGS)
	LmV	B	04.8	PV:2.2s 97.5nm MPV=5.5
				LmH:19s 1.2/um MLH=5.2
				LmV:18s 1.1/um MLV=5.2
22.	eP	A	19 50 44	West Pakistan 32.22 N 69.98 E
				H = 19 42 21.8 h = 41 km MAG=4.7
				D = 46.19 Az = 311.3 (USCGS)
24.	iPKIKP	A	02 51 42.7	Fiji Islands 21.88 S 179.58 W
	iPKHKP	A	51 49.2	H = 02 33 03.5 h = 595 km MAG=5.9
	ePKP2	A	51 57	D = 149.98 Az = 345.7 (USCGS)
	epPKP	B	53 52	PKIKPV:2.4s 552.0nm
	esPKP	B	55 00	e(A) 51 43 e(C) 13 53 e(C) 13 56
	eSKKS	B	03 01 06	e(C) 17 36 e(C) 23 00
	ePSKS	C	05 40	
	eSS	C	13 53	
24.	iP	A	03 05 10.5	Kurile Islands 45.20 N 151.7 E
				H = 02 53 13 h = 26 km MAG=5.5
				D = 78.45 Az = 335 (ISC)
25.	eP	A	05 33 23.5	Molucca Passage 0.80 N 126.08 E
	ePP	A	37 47	H = 05 19 17.2 h = 24 km MAG=5.9
	eSKS	C	43 58	D = 104.65 Az = 323.2 (USCGS)
	eiS	C	45 14	PV:2.0s 55.6nm MPV=6.1
	eSS	C	52 25	LmH:22s 3.0/um MLH=5.8
	LmH	B	06 23.1	LmV:26s 4.5/um MLV=5.9
	LmV	B	23.0	e(A) 33 27.5 e(A) 33 45 e(A) 37 37
				e(C) 48 28

Day	Phase		h m s	Remarks
25.	eP	A	12 21 30.5	Near East Coast of Kamchatka
				55.93 N 162.94 E
				H = 12 10 13.3 h = normal MAG=4.9
				D = 71.15 Az = 341.2 (USCGS)
				PV:1.4s 14.0nm MPV=4.9
25.	eP	A	16 03 47	Kenai Peninsula, Alaska
				60.08 N 151.88 W
				H = 15 52 47.6 h = 68 km MAG=4.4
				D = 68.82 Az = 11.2 (USCGS)
25.	eP	A	23 45 17.5	India-East Pakistan Border Region
	epP	A	45 31.5	22.91 N 92.34 E
	ePcP	A	45 45.5	H = 23 34 28.4 h = 50 km MAG=5.2
				D = 66.85 Az = 316.9 (USCGS)
				PV:1.4s 16.3nm MPV=5.1
26.	ePKP2	A	00 12 44	West of Macquarie Island
				54.35 S 143.75 E
				H = 23 52 42.4 h = normal
				D = 151.07 Az = 282.6 (USCGS)
				MAG=4.5 (ISC)
				PKP2V:1.4s 16.3nm
26.	eP	A	02 32 35	Iran 36.76 N 54.49 E
				H = 02 25 55.8 h = 48 km MAG=4.8
				D = 33.47 Az = 308.2 (USCGS)
26.	eP	A	06 19 51	Philippine Islands 6.56 N 127.45 E
				H = 06 06 05.9 h = 50 km MAG=5.4
				D = 100.84 Az = 324.3 (USCGS)
26.	iP	A	10 07 14.5	Tadzhik-Sinkiang Border Region
				38.21 N 73.83 E
				H = 09 59 12.1 h = 138 km MAG=5.1
				D = 44.86 Az = 307.0 (USCGS)
				PV:1.4s 18.6nm MPV=4.8

Day	Phase		h m s	Remarks
26.	eP	A	14 29 59.5	Algeria 35.58 N 6.04 E
	e	A	30 10	H = 14 26 17.2 h = 31 km MAG=4.7
	LmH	B	36.6	D = 15.59 Az = 13.3 (USCGS)
	LmV	B	36.5	LmH:14s 0.6/um MLH=3.9
26.	+iP	B	15 16 52	Near East Coast of Kamchatka
	ePP	A	19 31	55.84 N 162.93 E
	eS	B	26 12	H = 15 05 32.7 h = 16 km MAG=5.5
	ePS	B	26 40	D = 71.23 Az = 341.2 (USCGS)
	eSS	C	30 45	PV:2.0s 111.0nm MPV=5.6
	LmH	B	54.4	LmH:14s 4.2/um MLH=5.8
	LmV	B	54.0	LmV:16s 4.7/um MLV=5.9
				i(A) 16 53 +i(A) 16 55.5 e(A) 17 01
				e(A) 19 09
26.	eP	A	16 00 17	Near East Coast of Kamchatka
				55.89 N 162.94 E
				H = 15 49 00.1 h = normal MAG=4.8
				D = 71.19 Az = 341.2 (USCGS)
26.	eP	A	16 37 33	Near East Coast of Kamchatka
	e	A	37 40	55.92 N 162.93 E
				H = 16 26 13.7 h = 19 km MAG=4.7
				D = 71.16 Az = 341.2 (USCGS)
				PV:1.4s 14.0nm MPV=4.9
26.	eiP	A	16 56 32	Near East Coast of Kamchatka
				55.96 N 163.06 E
				H = 16 45 15.1 h = normal MAG=4.9
				D = 71.15 Az = 341.2 (USCGS)
				PV:1.5s 32.7nm MPV=5.2
26.	iP	A	17 00 12	Off East Coast of Kamchatka
	e	A	00 19	55.89 N 163.01 E
				H = 16 48 52.7 h = 21 km MAG=5.0
				D = 71.20 Az = 341.2 (USCGS)
				PV:1.4s 32.6nm MPV=5.3

Day	Phase		h m s	Remarks
26.	ePKP	A	17 46 28	Tonga Islands 20.09 S 174.83 W
				H = 17 26 40.0 h = normal MAG=4.8
				D = 149.08 Az = 352.0 (USCGS)
27.	ePKIKP	A	03 14(40)	Kermadec Islands 30.58 S 177.18 W
	ePKHKP	A	14(50)	H = 02 54 40.2 h = normal MAG=5.0
	ePKP2	A	15 12	D = 158.90 Az = 344.3 (USCGS)
				PKP2V:1.4s 23.3nm
27.	ePKP2	A	03 29 48	Kermadec Islands Region
	LmH	B	04 44.5	30.53 S 176.97 W
	LmV	B	45.4	H = 03 09 16.1 h = 24 km MAG=5.0
				D = 158.9 Az = 345 (ISC)
				LmH:18.5s 1.0/um MLH=5.6
				LmV:19s 0.7/um
27.	-iP	A	06 45 58	East of Severnaja Zemlya
	+ipP	A	46 07	80.81 N 121.88 E
	eS	C	52 35	H = 06 37 57.6 h = 37 km MAG=5.0
	e	B	52 45	D = 43.48 Az = 299.8 (USCGS)
	eSS	C	55 16	PV:2.2s 109.0nm MPV=5.2
	LmH	B	07 08.5	LmH:13.5s 1.4/um MLH=5.0
	LmV	B	09.0	LmV:16s 1.5/um MLV=5.1
27.	+iPKP2	A	10 21 05	Kermadec Islands 30.94 S 179.66 W
				H = 10 01 05.7 h = 300 km MAG=4.9 (USCGS)
				D = 158.79 Az = 340 (ISC)
27.	eP	A	11 07 31	Afghanistan-USSR Border Region
				37.30 N 71.48 E
				H = 10 59 27.2 h = 49 km MAG=5.2
				D = 43.93 Az = 307.5 (USCGS)
27.	eP	A	13 29 38	West Caroline Islands 8.76 N 137.73 E
	ePP	B	33 52	H = 13 15 24.4 h = 5 km MAG=5.5
	eSKS	C	40 25	D = 104.73 Az = 327.9 (USCGS)
	ePS	BC	43 00	LmH:17.5s 5.7/um MLH=6.2
	ePPS	C	43 55	LmV:17.5s 5.5/um MLV=6.2
	eiSS	BC	49 00	

Day	Phase	h m s	Remarks
ont. 27.	LmH B	14 28.7	
	LmV B	28.7	
27.	ePKIKP A	18 43 33.5	New Hebrides Islands 13.17 S 166.91 E
			H = 18 24 23.0 h = 130 km MAG=5.1
			D = 137.56 Az = 336.8 (USCGS)
27.	ePKP A	19 01 16.5	New Hebrides Islands 20.48 S 169.63 E
	eipPKP2 A	01 36.5	H = 18 41 45.1 h = 46 km MAG=4.6
			D = 145.25 Az = 335.3 (USCGS)
28.	ePKP A	00 47 08	Samoa Islands 14.85 S 173.45 W
	LmH C	01 51.0	H = 00 27 31.2 h = 13 km MAG=5.2
	LmV C	58.2	D = 144.06 Az = 354.5 (USCGS)
			LmH:20s 0.3/um MLH=5.1
			LmV:18s 0.5/um
28.	+iPKHKP A	11 48 27	Fiji Islands 21.93 S 179.69 W
	ePKP2 A	48 35	H = 11 29 44.7 h = 640 km MAG=4.5
			D = 150.00 Az = 345.5 (USCGS)
			PKHKPV:1.2s 24.4nm
28.	ePg A	21 26 38	Germany 50.39 N 8.0 E
	iSg A	27 07.5	H = 21 25 56.3 h = 0 km
			D = 2.31 Az = 82 (ISC)
29.	e(P) A	08 54 00	New Ireland 4.69 S 153.21 E
			H = 08 34 51.3 h = 70 km MAG=4.6
			D = 124.05 Az = 331.5 (USCGS)
29.	-iPKP A	18 04 09.5	Tonga Islands 17.20 S 171.57 W
	+iPKP2 A	04 11	H = 17 44 31.1 h = normal MAG=6.0
	ipPKP B	04 20	D = 146.54 Az = 356.3 (USCGS)
	i A	04 24	PKPV:0.9s 467.0nm
	i A	04 40	LmH:17.5s 1.1/um MLH=5.6
	LmH B	19 16.6	LmV:18s 1.3/um
	LmV B	16.6	

Day	Phase	h m s	Remarks
29.	ePKIKP A	19 49 32	Santa Cruz Islands 11.37 S 166.40 E
			H = 19 30 26.5 h = 153 km MAG=5.0 (USCGS)
			D = 135.69 (ISC)
			PKIKPV:1.2s 10.2nm
30.	eP A	02 47 23	Talaud Islands 4.11 N 126.45 E
	LmH C	03 33.5	H = 02 33 34.1 h = 68 km MAG=5.5
			D = 102.23 Az = 323.8 (USCGS)
			PV:1.2s 10.2nm
			LmH:25s 0.4/um MLH(C)=(4.9)
30.	eP A	10 43 30	Talaud Islands 4.81 S 127.44 E
	iP2 A	43 32	H = 10 29 40.4 h = 70 km MAG=5.9
	eiPP B	47 52	D = 102.25 Az = 324.1 (USCGS)
	eSKS B	54 13	P2V:1.6s 76.9nm MP2V=6.3
	iS B	55 17	PV(B):20s 11.2/um MPV(B)=7.2
	eSS B	11 02 24	LmH:20s 370.0/um MLH=7.9
	LmH B	33.0	LmV:22s 463.0/um MLV=8.0
	LmV B	32.9	e(B) 43 34 e(B) 43 40 i(B) 43 52
30.	eP A	15 12 19	Southern Nevada 37.05 N 116.03 W
			H = 15 00 00.0 h = 0 km MAG=4.8
			D = 81.28 Az = 30.7 (USCGS)
			PV:1.3s 17.5nm MPV=5.0
			Nuclear Explosion "VISE"
			37°03'12" N 116°01'45" W (USAEC)
30.	eP A	17 33 29	Talaud Islands 4.87 N 127.50 E
	e(PP) A	37 32	H = 17 19 35.0 h = 72 km MAG=5.3
			D = 102.3 (USCGS)
30.	eP A	00 58 12	North of Halmahera 4.18 N 128.08 E
	ePP B	01 02 31	H = 00 44 13.3 h = normal MAG=5.7
	iSKS B	09 21	D = 103.14 Az = 324.2 (USCGS)
	LmH B	43.3	PV:2.0s 42.7nm MPV=5.8
	LmV B	50.6	PV(B):14s 1.6/um MPV(B)=6.6
			LmH:16.5s 13.8/um MLH=6.6
			LmV:17s 11.5/um MLV=6.5

Day	Phase		h m s	Remarks
31.	-iP	A	04 21 39	Near East Coast of Kamchatka
				53.48 N 158.67 E
				H = 04 10 26.3 h = 145 km MAG=5.2
				D = 72.60 Az = 338.7 (USCGS)
				PV:1.1s 64.5nm MPV=5.7
31.	eiP	A	14 44 34	Crete 34.30 N 26.30 E
	LmH	B	51.4	H = 14 40 03.8 h = 34 km MAG=5.1
	LmV	B	15 07.4	D = 19.53 Az = 331.1 (USCGS)
				LmH:16.5s 2.9/um MLH=4.7
				LmV:17s 2.6/um MLV=4.8
31.	eiPKP	A	15 18 39.5	Tonga Island 15.45 S 175.02 W
	iX	A	18 40.5	H = 14 59 34.3 h = 262 km MAG=5.4
				D = 144.49 Az = 352.7 (USCGS)
				XV:1.4s 193.0nm
31.	eP	A	15 37 35	Greece-Albania Border Region
				39.15 N 20.22 E
				H = 15 34 30.9 h = normal MAG=4.5
				D = 13.00 Az = 335.0 (USCGS)
31.	ePKP	A	23 50 27.5	South of Kermadec Islands
	eiPKP2	A	51 09	32.09 S 179.58 E
	epPKP2	A	52 49.5	H = 23 31 16.2 h = 391 km MAG=5.2
				D = 159.43 Az = 337.8 (USCGS)
				PKPV:1.6s 38.5nm
				PKP2V:1.4s 181.0nm

Day	Phase		h m s	Remarks
1.	ePKP	A	04 37 28	Fiji Islands 21.68 S 179.34 W
				H = 04 18 45.0 h = 616 km MAG=4.3
				D = 149.84 Az = 346.1 (USCGS)
1.	LmH	B	17 23.3	Probably North of Halmahera (USCGS)
	LmV	B	29.6	LmH:22s 1.4/um
				LmV:20s 1.5/um
2.	eP	A	01 52 44	North of Halmahera 3.91 N 128.24 E
	ePP	A	57 04	H = 01 38 44.2 h = normal MAG=5.4 (USCGS)
	eS	C	02 04 35	D = 103.4
	iPPS	C	06 55	PPV:3.0s 214.0nm MPPV=6.2
	iPPS	B	07 00	PPSH(B):15.5s 2.0/um
	LmV	B	44.3	LmV:16s 3.0/um MLV=5.9
	LmH	B	44.4	LmH:16s 4.0/um MLH=5.8
2.	LmH	C	06 28.5	Probably North of Halmahera (USCGS)
				LmH(C):16s 0.5/um
2.	e	A	20 06 25	Mascarene Islands 17.21 S 66.49 E
	e	A	06 30	H = 19 53 53.6 h = normal MAG=5.2
				D = 82.91 Az = 328.3 (USCGS)
3.	ePKIKP	A	08 10 05	South of Fiji Islands 25.82 S 178.13 E
	ePKHKP	A	10 14	H = 07 51 25.4 h = 629 km MAG=5.3
	ePKP2	A	10 29	D = 153.13 Az = 340.8 (USCGS)
	epPKP	A	12 30	PKIKPV:1.8s 33.8nm
	i	A	12 35	
3.	ePKHKP	A	08 32 36	South of Fiji Islands 25.62 S 178.07 E
	ePKP2	A	32 49	H = 08 13 44.2 h = 610 km MAG=4.9
				D = 152.92 Az = 340.9 (USCGS)
3.	ePKIKP	A	08 36 52	South of Fiji Islands 25.74 S 178.27 E
	ePKHKP	A	37 01	H = 08 18 14.7 h = 654 km MAG=5.3
	eiPKP2	A	37 16	D = 153.10 Az = 341.0 (USCGS)
	epPKHKP	A	39 36	
	epPKP2	A	39 50	

Day	Phase		h m s	Remarks
3.	iP	A	09 08 50.5	Kurile Islands 49.38 N 155.60 E
				H = 08 57 06.8 h = normal MAG=5.4
				D = 75.70 Az = 337.3 (USCGS)
				PV:1.2s 32.5nm MPV=5.3
3.	e	A	19 19 31	North of Halmahera 4.37 N 128.08 E
	ePP	B	19 44	H = 19 01 29.4 h = normal MAG=5.2 (USCGS)
	e	B	24 50	D = 103.0
	e(S)	C	27 00	LmH:19s 2.5/um MLH=5.8
	e(PPS)	C	29 40	LmV:18s 1.1/um MLV=5.4
	LmH	B	20 00.4	
	LmV	B	07.8	
3.	eP	B	21 55 34	Talaud Islands 4.90 N 127.38 E
	eiP	A	55 36	H = 21 41 42.0 h = normal MAG=6.1
	ePP	B	58 46	D = 102.14 Az = 324.1 (USCGS)
	iPPP	B	22 02 00	PV(A):3.0s 303.0nm MPV=6.4
	eSKS	B	06 09	LmH:25s 45.2/um MLH=6.9
	iS	B	07 14	LmV:19.5s 13.6/um MLV=6.5
	iPS	B	08 45	
	eiPPS	B	09 32	
	eSS	B	14 10	
	LmH	B	36.0	
	LmV	B	48.4	
4.	ePP	A	01 56 40	Northern Celebes 0.63 S 121.74 E
	e	B	56 48	H = 01 38 26.2 h = normal MAG=4.8 (USCGS)
	e	B	02 00 04	D = 102.70
	eS	B	04 08	MPPV:2.5s 61.5nm MPPV=5.6
	e	B	05 32	LmH:18s 6.1/um MLH=6.2
	eSS	B	11 30	LmV:17s 4.0/um MLV=6.0
	LmH	B	47.3	
	LmV	B	47.4	
4.	eiP	A	04 23 48	Off Coast of Northern Peru
	e	B	24 00	8.23 S 80.16 W
	ePP	B	27 56	H = 04 10 13.3 h = 16 km MAG=6.0
	e	A	28 35	D = 97.42 Az = 39.9 (USCGS)

Day	Phase		h m s	Remarks
cont.				
4.	eiSKS	B	04 34 20	PV:1.8s 71.0nm MPV=6.0
	-iSKS	C	34 24	LmV:19s 3.5/um MLV=5.9
	+iS	C	35 10	LmH:18.5s 5.4/um MLH=6.1
	eSS	C	41 48	
	eSSS	C	45 20	
	LmV	B	05 06.6	
	LmH	B	08.9	
4.	ePKIKP	A	11 47 13	Fiji Islands 19.78 S 178.90 W
	eiPKHKP	A	47 22.5	H = 11 28 44.5 h = 623 km MAG=5.0
	ePKP2	A	47 27.5	D = 148.10 Az = 347.3 (USCGS)
				PKIKPV:1.4s 46.5nm
5.	eP	A	09 24 28	Crete 34.49 N 24.67 E
				H = 09 20 13.0 h = 56 km MAG=4.3
				D = 18.74 Az = 333.4 (USCGS)
				PV:1.3s 15.3nm MPV=4.0
5.	LmH	B	11 35.8	Probably North of Halmahera (USCGS)
	LmV	B	42.3	
5.	eP	A	23 55 33	Central Mid-Atlantic Ridge
	e	A	56 24	0.74 N 29.66 W
	eS	C	24 04 55	H = 23 45 21.4 h = normal MAG=4.9
	LmH	B	20.0	D = 60.77 Az = 28.8 (USCGS)
	LmV	B	20.3	PV:1.6s 33.0nm MPV=5.2
				LmV:20s 1.0/um MLV=5.0
6.	eP	A	08 47 46	Hokkaido, Japan 42.35 N 142.42 E
				H = 08 35 50.3 h = normal MAG=5.1
				D = 77.93 Az = 330.5 (USCGS)
6.	eP	A	14 53 38	Alaska Peninsula 55.19 N 160.40 W
	e	A	53 48	H = 14 42 01 8 h = normal MAG=4.7
				D = 74.33 Az = 5.3 (USCGS)
7.	LmH	C	01 20.0	Probably Western Iran (USCGS)
	LmV	C	26.3	LmH(C):42s 1.0/um
				LmV(C):67s 3.2/um

Day	Phase		h m s	Remarks
7.	ePKP	A	03 24 10	Loyalty Islands 20.09 S 168.54 E
	e	A	24 21	H = 03 04 37.2 h = normal
				D = 144.47 Az = 334.6 (USCGS)
7.	e	A	21 38 13	Near Coast of Northern California
				40.37 N 124.50 W
				H = 21 25 45.4 h = 6 km MAG=5.2
				D = 81.55 Az = 26.5 (USCGS)
8.	eP	A	23 30 32	Southern Iran 29.88 N 50.95 E
				H = 23 23 34.9 h = 52 km MAG=5.1
				D = 35.91 Az = 316.5 (USCGS)
				PV:1.2s 18.3nm MPV=4.8
9.	eP	A	15 46 16	Burma-China Border Region
	LmH	B	16 18.5	21.65 N 101.29 E
				H = 15 34 44.4 h = normal MAG=5.0
				D = 73.37 Az = 318.4 (USCGS)
				PV:1.6s 22.0nm MPV=5.0
				LmH:19s 0.9/um MLH=5.1
9.	e	A	18 15 54.5	Near West Coast of Columbia
	LmH	C	58.5	5.56 N 77.47 W
				H = 18 03 07.7 h = normal MAG=4.5
				D = 85.16 Az = 39.7 (USCGS)
9.	eP	A	18 37 27	Northwest Africa 5.55 N 0.12 W
	e	A	37 32	H = 18 29 04.0 h = normal MAG=4.9
				D = 46.01 Az = 10.4 (USCGS)
				PV:1.4s 18.6nm MPV=4.9
9.	+iPn	A	23 09 46	Hungary 47.66 N 18.15 E
	e	A	10 07	H = 23 08 27.7 h = normal MAG=4.6
	ePg	A	10 13	D = 5.22 Az = 307.3 (USCGS)
	e	B	11 10	PV:0.9s 27.2nm
	eSg	A	11 15	LmH:9s 1.0/um MLH=3.5
	eSg	B	11 16	LmV:9.5s 1.0/um
	LmH	B	12.0	
	LmV	B	12.1	

Day	Phase		h m s	Remarks
10.	eP	A	14 33 46	Talaud Islands 2.70 N 125.30 E
	LmH	B	15 15.0	H = 14 19 52.3 h = 57 km MAG=5.1
	LmV	B	15.0	D = 102.68 Az = 323.3 (USCGS)
				LmH:19s 0.6/um MLH=5.1
				LmV:16s 0.4/um MLV=5.1
10.	eiP	A	21 59 55	Kurile Islands 44.21 N 148.54 E
				H = 21 47 55.9 h = normal MAG=5.1
				D = 78.40 Az = 333.6 (USCGS)
				PV:1.2s 26.4nm MPV=4.2
10.	-iPKIKP	A	23 16 38.5	South of Fiji Islands 22.71 S 178.61 E
	-i	A	16 39.5	H = 22 58 05.8 h = 673 km MAG=6.0
	iX	A	16 40	D = 150.32 Az = 343.2 (USCGS)
	ipPKP	A	19 12	XV:3.1s 2360.0nm
	esPKP	C	20 09.5	
	i	C	20 12	
	+isPP	C	23 48	
	-iPSKS	C	30 50	
	-eiPPS	C	33 35	
	eiSS	C	38 45	
	eSSS	C	44 50	
	eSSSS	C	48 55	
10.	iPKHKP	A	23 21 37	South of Fiji Islands 23.14 S 178.80 E
				H = 23 02 57.5 h = 670 km MAG=5.8 (USCGS)
				D = 151.0
11.	+iP	B	22 17 19	Kirgiz-Sinkiang Border Region
	+iP	A	17 20	41.35 N 79.21 E
	iX	A	17 22.5	H = 22 08 54.7 h = normal MAG=5.8
	ePP	C	19 12	D = 46.35 Az = 305.6 (USCGS)
	eS	C	24 10	PV(A):1.4s 182.0nm MPV(A)=6.0
	eS	B	24 12	XV:1.1s 504.0nm MXV =6.6
	eSS	C	27 12	LmH:9.5s 57.0/um MLH=6.7
	eSS	B	27 18	LmV:11s 51.4/um MLV=6.8
	LmH	B	39.5	
	LmV	B	39.5	

Day	Phase		h m s	Remarks
12.	eP	A	00 31 03.5	Kirgiz-Sinkiang Border Region 41.28 N 79.33 E H = 00 22 37.4 h = normal MAG=4.9 D = 46.47 Az = 305.6 (USCGS) PV:1.3s 21.8nm MPV=5.1
12.	iP	A	15 51 11	Near East Coast of Kamchatka 55.86 N 162.92 E H = 15 39 54.6 h = 44 km MAG=5.1 D = 71.21 Az = 341.2 (USCGS) PV:1.8s 67.5nm MPV=5.5
	e	A	51 16	
	LmH	C	16 23.5	
12.	-iPKHKP	A	18 59 38	South of Fiji Islands 22.70 S 179.36 W H = 18 40 38.3 h = 470 km MAG=4.6 D = 150.81 Az = 345.6 (USCGS) PKHKPV:1.8s 27.0nm
	ePKP2	A	59 47.5	
13.	+iP	A	01 47 49	Fox Islands, Aleutian Islands 52.16 N 169.91 W H = 01 35 52.4 h = 16 km MAG=5.1 D = 77.56 Az = 359.0 (USCGS) PV:1.0s 21.7nm MPV=5.2
	e	A	48 01	
13.	ePKP2	A	10 23 28	Kermadec Islands Region 30.15 S 178.01 W H = 10 02 58.0 h = 23 km MAG=4.9 (USCGS) D = 158.2
13.	eP	A	10 36 23	Mindanao, Philippine Islands 4.97 N 126.89 E H = 10 22 31.1 h = normal MAG=4.9 D = 101.80 Az = 324.0 (USCGS)
	e	A	36 31.5	
13.	iP	A	11 19 54	Western Pakistan 24.97 N 62.89 E H = 11 11 25.5 h = normal MAG=5.2 D = 46.75 Az = 317.0 (USCGS) PV:1.1s 24.2nm MPV=5.1 LmH:16s 1.4/um MLH=5.0 LmV:18s 1.2/um MLV=5.0
	e	A	20 02	
	LmH	B	28.7	
	LmV	B	31.3	

Day	Phase		h m s	Remarks
13.	eP	A	15 13 42	Mediterranean Sea 34.70 N 22.64 E H = 15 09 33.1 h = normal MAG=4.6 D = 17.84 Az = 336.6 (USCGS)
14.	LmH	B	01 39.2	Probably Off Coast of Northern Peru (USCGS) LmH:18s 0.9/um
14.	eiPKP	A	03 23 40	Tonga Islands 16.13 S 172.97 W H = 03 04 04.1 h = normal MAG=5.3 D = 145.37 Az = 354.9 (USCGS) PKPV:1.8s 115.0nm
	e	A	23 45	
	e	A	23 51	
14.	eP	A	13 23 36	Near Coast of Guerrero, Mexico 16.60 N 99.11 W H = 13 10 36.9 h = 18 km MAG=5.1 D = 89.83 Az = 36.5 (USCGS)
14.	iPg	A	14 43 29.3	Dornreichenbach, GDR, explosion 51°22'16" N 12°53'30" E yield 7.35 to D = 1.0
	iSg	A	43 44	
15.	ePKHKP	A	07 10 04	Fiji Islands 20.48 S 175.97 W H = 06 50 34.1 h = 160 km MAG=4.6 D = 149.30 Az = 350.5 (USCGS) PKHKPV:1.7s 36.4nm
	ePKP2	A	10 08.5	
	epPKP	A	10 48	
15.	eP	A	08 56 19.5	Italy 43.9 N 11.6 E H = 08 54 42 (BCIS) D = 6.8 PV:1.2s 12.2nm
	i	A	56 22	
	ePg	A	56 54	
	iSn	A	57 30	
15.	ePKHKP	A	09 02 28	South of Fiji Islands 24.09 S 179.97 W H = 08 43 34.4 h = 550 km MAG=5.0 D = 152.00 Az = 344.2 (USCGS)
15.	ePKIKP	A	14 08 06	New Hebrides Islands 13.61 S 167.17 E H = 13 49 13.6 h = 205 km MAG=5.3 D = 138.05 Az = 336.8 (USCGS)
	e	A	08 16	
	e	A	10 51	

Day	Phase		h m s	Remarks
15.	ePKHKP	A	15 21 56.5	South of Fiji Islands 25.96 S 178.10 E
	ePKP2	A	22 12	H = 15 03 12.3 h = 680 km MAG=4.6
				D = 153.25 Az = 340.7 (USCGS)
15.	eP	A	24 07 35	Kirgiz-Sinkiang Border Region
	epP	A	07 45	41.47 N 79.46 E
	esP	A	07 49	H = 23 59 10.6 h = normal MAG=5.0
	e	A	09 51	D = 46.43 Az = 305.5 (USCGS)
	LmH	C	24.5	PV:1.1s 8.1nm MPV=4.7
	LmV	C	28.3	
16.	e	A	04 36 33	Tonga Islands 16.74 S 173.67 W
				H = 04 16 41.9 h = normal MAG=4.1
				D = 145.91 Az = 354.0 (USCGS)
16.	ePKP	A	11 20 35	Fiji Islands 18.30 S 178.22 W
				H = 11 02 02.2 h = 650 km MAG=4.1
				D = 146.78 Az = 348.5 (USCGS)
16.	e	A	15 21 28	Mid-Indian Rise 16.89 S 67.02 E
				H = 15 08 58.9 h = normal MAG=5.1
				D = 82.91 Az = 328.1 (USCGS)
17.	eP	A	00 57 07	North of Halmahera 3.81 N 128.43 E
	ePP	C	01 01 16	H = 00 42 59.2 h = 14 km MAG=5.6
	e	A	01 24	D = 103.64 Az = 324.2 (USCGS)
	eS	C	08 45	PV:2.4s 96.8nm MPV=6.2
	ePPS	C	11 15	LmV:17.5s 9.3/um MLV=6.4
	e	C	12 20	LmH:19s 10.4/um MLH=6.4
	eSS	C	16 00	
	eSSS	C	19 50	
	LmV	B	48.8	
	LmH	B	49.8	
17.	eP	A	07 41 18.5	Honshu, Japan 37.49 N 140.74 E
	epP	A	41 38	H = 07 29 07.3 h = 86 km MAG=4.8
				D = 81.51 Az = 330.0 (USCGS)

Day	Phase		h m s	Remarks
17.	eP	A	09 16 12	Eastern Mediterranean Sea
	e	A	16 17	33.93 N 25.19 E
	e	A	16 24.5	H = 09 11 43.4 h = 13 km MAG=4.7
				D = 19.44 Az = 333.3 (USCGS)
17.	ePg	A	16 20(53)	Peißenberg, GFR 47 3/4 N 11.0 E
	eSn	A	21 18	H = 16 19 58 (BCIS)
	iSg	A	21 29.5	47°50' N 11°06' E (FUR)
				D = 2.9
18.	ePKIKP	A	05 34 35	South of Fiji Islands 24.02 S 176.70 W
	ePKHKP	A	34 42.5	H = 05 14 55.9 h = 99 km MAG=5.4
	e	A	34 48	D = 152.64 Az = 348.4 (USCGS)
	ePKP2	A	34 53	
	e	A	35 08	
	e	A	35 40	
	e	A	37 35	
18.	eiP	A	21 01 51.5	Fiji Islands 17.85 S 178.59 W
	ei	A	01 54	H = 20 43 13.6 h = 569 km MAG=5.2
	e	A	04 08	D = 146.28 Az = 348.3 (USCGS)
19.	ePKHKP	A	03 41 34	South of Fiji Islands 22.60 S 176.52 W
				H = 03 21 59.3 h = 162 km MAG=4.8
				D = 151.29 Az = 349.2 (USCGS)
20.	ePKHKP	A	03 18 59	Tonga Islands 20.12 S 173.91 W
	eiPKP2	A	19 04	H = 02 59 14.0 h = normal MAG=5.3
	LmH	C	04(26)	D = 149.23 Az = 353.1 (USCGS)
	LmV	C	34.0	PKHKPV:2.2s 131.0nm
				LmV:20s 0.3/um
20.	eP	A	10 09 34	North of Halmahera 3.54 N 128.19 E
	ePP	B	14 00	H = 09 55 33.8 h = 33 km MAG=5.7
	eSKS	B	20 20	D = 103.71 Az = 324.1 (USCGS)
	eiS	B	21 20	LmH:16s 9.5/um MLH=6.4
	esS	B	21 44	LmV:17.5s 12.0/um MLV=6.5
	ePPS	B	23 45	
	eSS	B	28 35	

Day	Phase		h m s	Remarks
cont.				
20.	eSSS	B	10 32 20	
	LmH	B	11 07.8	
	LmV	B	10.5	
20.	+eP	A	10 44 18	North of Halmahera 3.48 N 128.44 E
	ePP	B	48 44	H = 10 30 22.1 h = 77 km MAG=6.0
	LmH	B	11 37.8	D = 103.90 Az = 324.2 (USCGS)
	LmV	B	37.9	PV:2.0s 103.0nm MPV=6.2
				LmH:17.5s 9.4/um
				LmV:17s 10.4/um
20.	ePKP	A	13 20 47	Fiji Islands 19.85 S 177.67 W
				H = 13 02 04.1 h = 579 km MAG=5.0
				D = 148.40 Az = 348.7 (USCGS)
				PKPV:1.2s 30.5nm
20.	e	A	17 12 23	North of Halmahera 3.66 N 128.20 E
	LmH	B	58.8	H = 16 58 13.8 h = 48 km MAG=5.3
	LmV	B	18 05.7	D = 103.62 Az = 324.1 (USCGS)
				LmH:17.5s 5.7/um MLH=6.2
				LmV:17s 5.4/um MLV=6.2
21.	eP	A	08 52 09.5	Southern Alaska 60.74 N 158.88 W
				H = 08 41 06.1 h = normal MAG=4.2
				D = 68.70 Az = 6.5 (USCGS)
21.	eP	A	18 43 09	Greece 39.25 N 22.03 E
	e	A	43 16	H = 18 39 56.6 h = 41 km MAG=4.6
	LmH	C	49.7	D = 13.56 Az = 330.6 (USCGS)
	LmV	C	49.7	PV:0.8s 9.6nm
				LmV:18s 0.6/um
21.	-iPKP	A	21 06 03	Tonga Islands 16.14 S 173.05 W
	i	A	06 15	H = 20 46 27.1 h = 38 km MAG=5.4
				D = 145.38 Az = 354.8 (USCGS)
				PV:1.4s 93.0nm

Day	Phase		h m s	Remarks
22.	eP	A	10 01 01	Kodiak Island 56.80 N 153.86 W
				H = 09 49 40.2 h = 66 km MAG=4.2
				D = 72.25 Az = 9.7 (USCGS)
22.	ePKP2	A	12 34 30.5	South of Fiji Islands 22.42 S 177.07 W
				H = 12 14 57.9 h = 239 km MAG=4.4
				D = 151.02 Az = 348.6 (USCGS)
22.	ePKIKP	A	18 30 36	South of Fiji Islands 24.80 S 177.00 W
	ePKHKP	A	30 44	H = 18 11 01.2 h = 138 km MAG=5.0
	ePKP2	A	30 55.5	D = 153.36 Az = 347.7 (USCGS)
				PKHKPV:1.4s 55.8nm
22.	ePg	A	23 16 15.5	Würtemberg, GFR 48.7 N 9.1 E
	iSg	A	16 46	H = 23 15 24 (BCIS)
				D = 2.5
23.	eP	AB	00 51 00	Celebes 3.12 S 118.87 E
	ePP	A	55 10	H = 00 36 56.7 h = 13 km MAG=6.1
	iPP	C	55 14	D = 103.31 Az = 321.3 (USCGS)
	iS	C	01 02 36	PV(B):10s 1.7/um MPV=6.8
	eiPS	C	04 16	LmH:22s 65.1/um MLH=7.1
	iSS	C	10 00	LmV:19.5s 40.5/um MLV=7.0
	e	A	14 57	
	e	A	15 16	
	LmH	B	37.1	
	LmV	B	43.1	
23.	ePP	A	06 22 00	Celebes 3.42 S 119.02 E
	eSS	C	36 50	H = 06 03 47.0 h = 7 km MAG=5.3 (USCGS)
	LmV	B	07 14.3	D = 103.7
	LmH	B	15.2	PPV:2.3s 42.7nm MPPV=5.5
				LmV:18s 1.2/um MLV=5.5
				LmH:17.5s 1.7/um MLH=5.6
24.	ePKIKP	A	00 27 20	Tanimbar Islands 6.16 S 131.03 E
	ePP	B	28 15	H = 00 08 45.6 h = 38 km MAG=5.8
	e	C	35 44	D = 113.15 Az = 322.9 (USCGS)
	eSP	B	37 28	LmH:19s 2.0/um MLH=5.7

Day	Phase		h m s	Remarks
cont.				
24.	eiSP	C	00 37 35	LmV:20s 1.4/um MLV=5.6
	eSPP	C	38 44	
	eSS	C	43 53	
	iSSS	C	47 55	
	LmH	B	01 15.0	
	LmV	B	22.0	
24.	LmH	C	17 41.0	Probably North of Halmahera (USCGS)
24.	eP	A	22 56 15	Northern Colombia 6.85 N 72.94 W H = 22 44 14.0 h = 150 km MAG=5.0 D = 81.30 Az = 39.9 (USCGS)
25.	eP	A	01 39 10	Arabian Sea 14.34 N 50.34 E H = 01 30 08.0 h = normal D = 51.08 Az = 324.8 (USCGS)
25.	eP	A	02 14 15.5	Honduras 15.27 N 87.54 W H = 02 01 44.0 h = 13 km MAG=4.8 D = 84.03 Az = 39.2 (USCGS)
25.	ePKIKP	A	04 11 10	South of Kermadec Islands 32.39 S 179.98 E
	ePKP2	A	11 46	H = 03 51 45.6 h = 325 km MAG=5.1 (USCGS) D = 159.9
25.	eiP	A	07 51 31	Honduras 15.23 N 87.47 W
	-ei	A	51 35	H = 07 39 00.6 h = 15 km MAG=5.4
	LmH	B	08 27.5	D = 84.01 Az = 39.2 (USCGS)
	LmV	B	27.5	LmH:20s 0.7/um MLH=5.0 LmV:20s 0.6/um MLV=5.0
25.	ePKP2	A	10 55 34	South of Fiji Islands 25.76 S 176.28 W H = 10 35 26.3 h = 55 km MAG=5.0 D = 154.42 Az = 348.3 (USCGS) PKP2V:2.0s 34.2nm

Day	Phase		h m s	Remarks
25.	eP	A	13 16 15	South Atlantic Ridge 19.55 S 12.17 W H = 13 04 45.8 h = normal D = 72.97 Az = 15.6 (USCGS)
25.	eP	A	14 17 27	South Atlantic Ridge 19.26 S 12.13 W
	eX	A	17 29	H = 14 06 00.0 h = normal MAG=5.3 D = 72.67 Az = 15.6 (USCGS) XV:2.4s 138.0nm MXV=5.7
25.	e	A	15 01 40	Austria 47.3 N 15.4 E
	e	A	02 04	H = 14 59 53.5 (BCIS) D = 4.1
25.	eP	A	16 36 23	Svalbard 76.42 N 10.41 E
	i	A	36 27.5	H = 16 30 50.4 h = normal MAG=4.4
	e	A	36 33.5	D = 25.88 Az = 178.2 (USCGS) PV:1.4s 18.6nm MPV=4.5
25.	eP	A	16 43 50	Off East Coast of Kamchatka
	e	A	44 08	53.89 N 161.30 E
	e	A	44 15	H = 16 32 25.2 h = 53 km MAG=4.7 D = 72.77 Az = 340.3 (USCGS) PV:1.0s 9.8nm MPV=4.9
26.	+iPn	A	01 28 45.5	Germany 48.36 N 9.06 E
	iPg	A	28 51	H = 01 28 01.3 h = 27 km MAG=4.4
	i	B	29 24	D = 2.83 Az = 35.1 (USCGS)
	iSg	B	29 32	LmH:5s 20.3/um MLH=4.7
	LmH	B	29.7	LmV:5s 11.7/um
	LmV	B	29.9	
26.	eP	A	12 39 58	Dodecanese Islands 36.63 N 27.17 E H = 12 35 47.8 h = 27 km MAG=4.8 D = 17.92 Az = 326.3 (USCGS) PV:1.0s 7.9nm MPV=3.8
27.	ePg	A	15 45 26	Explosion
	eSg	A	45 43	49°49.5' N 13°10' E yield 3 to (PRU) D = ca. 1.3

Day	Phase		h m s	Remarks
27.	ePKP	A	19 56 23	Tonga Islands 18.44 S 175.25 W H = 19 36 55.4 h = 145 km MAG=4.5 D = 147.41 Az = 351.9 (USCGS)
28.	+iP	A	02 45 24	North Atlantic Ocean 36.01 N 10.57 W
	Pm	B	46 00	H = 02 40 32.5 h = 22 km MAG=7.3
	iS	St	49 25	D = 21.67 Az = 40.6 (USCGS) PmH(B):23s 1550.0/um MPH=8.1 St - Strain/L
28.	+iP	A	04 30 26	North Atlantic Ocean 36.23 N 10.48 W H = 04 25 36.9 h = normal MAG=5.7 D = 21.45 Az = 40.9 (USCGS) PV:1.3s 763.0nm MPV=5.9
28.	e	A	06 00 40	Explosion 49°08.7' N 13°45.2' E
	e	A	01 05	yield 18 to (PRU)
	iSg	A	01 07.5	
28.	eP	A	10 04 41	North Atlantic Ocean 35.94 N 10.83 W H = 09 59 48.0 h = 25 km MAG=4.6 D = 21.85 Az = 40.8 (USCGS) PV:1.8s 43.9nm MPV=4.6
28.	iPg	A	11 50 19.5	Explosion 50°33.8' N 14°00.4' E
	iSg	A	50 40.5	yield 14.8 to (PRU) D = ca. 1.6
28.	eP	A	13 58 43.5	Near East Coast of Kamchatka 51.66 N 158.03 E H = 13 47 11.7 h = 58 km MAG=5.0 D = 74.16 Az = 338.5 (USCGS) PV:1.1s 18.2nm MPV=5.0
28.	eP	A	15 25 31	North Atlantic Ocean 35.87 N 10.75 W H = 15 20 38.6 h = 27 km MAG=4.2 D = 21.86 Az = 40.6 (USCGS)

Day	Phase		h m s	Remarks
28.	eP	A	18 29 30	North Atlantic Ocean 36.23 N 10.96 W H = 18 24 39.0 h = normal MAG=4.2 D = 21.70 Az = 41.4 (USCGS)

Day	Phase		h m s	Remarks
1.	eP	A	10 49 58.	Kurile Islands 46.80 N 153.65 E
				H = 10 38 03.4 h = normal MAG=4.7
				D = 77.55 Az = 336.4 (USCGS)
1.	eP	A	11 01 02	Kurile Islands 47.02 N 153.71 E
				H = 10 49 13.4 h = 82 km MAG=4.1 (USCGS)
				D = 77.3
1.	e	A	16 47 22	Germany 48.3 N 9.0 E
				H = 16 45 48 (BCIS)
				D = 3.1
1.	ePg	A	20 28 11	Germany 48.23 N 8.75 E
	e	A	28 15.5	H = 20 27 17.6 h = 12 km
	eiSg	A	28 47	D = 3.06 Az = 36.6 (USCGS)
1.	eSg	A	20 31 22	Germany 48.3 N 9.0 E
				H = 20 29 50 (BCIS)
				D = 3.1
1.	eSg	A	20 33 02.5	Germany 48.3 N 9.0 E
				H = 20 31 30 (BCIS)
				D = 3.1
1.	ePKP	A	21 23 05.5	New Hebrides Islands 19.16 S 169.14 E
				H = 21 03 50.2 h = 157 km MAG=4.5
				D = 143.87 Az = 335.6 (USCGS)
				PKPV:1.1s 20.2nm
2.	e	A	13 08 44	Near Islands/Aleutian Is.
				51.40 N 174.71 E
				H = 12 56 43.7 h = 53 km MAG=4.5
				D = 77.32 Az = 349.1 (USCGS)
2.	eP	A	22 36 20.5	Mindoro/Philippine Islands
				12.91 N 120.80 E
				H = 22 23 17.4 h = 80 km MAG=5.0
				D = 91.87 Az = 323.0 (USCGS)

Day	Phase		h m s	Remarks
3.	eP	A	01 02 48	Turkey 40.12 N 27.43 E
	i	A	02 50	H = 00 59 10.5 h = 4 km MAG=5.6
	i	A	02 56	D = 15.27 Az = 318.8 (USCGS)
	e	A	02 58	PV:2.0s 188.0nm
	eiS	C	05 38	LmH:14s 23.6/um MLH=5.5
	LmH	B	08.2	LmV:12s 14.3/um MLV=5.5
	LmV	B	09.8	
3.	eiP	A	06 29 46	Tibet India Border Region
				30.17 N 79.92 E
				H = 06 20 21.8 h = 20 km MAG=5.3
				D = 53.88 Az = 312.9 (USCGS)
				PV:1.3s 24.1nm MPV=5.1
3.	eP	A	15 01 08	Off East Coast of Kamchatka
	eS	C	10 42	51.62 N 159.26 E
	LmH	B	39.8	H = 14 49 28.0 h = 12 km MAG=5.3
	LmV	B	39.8	D = 74.48 Az = 339.3 (USCGS)
				PV:3.0s 606.0nm MPV=6.1
				LmH:19.5s 6.6/um MLH=5.9
				LmV:19.5s 8.9/um MLV=6.1
3.	ePKP	A	16 49 52.5	Samoa Islands 16.92 S 172.54 W
	ei	A	50 20	H = 16 30 13.8 h = normal MAG=5.1
	LmH	B	17 56.5	D = 146.19 Az = 355.2 (USCGS)
	LmV	B	18 05.7	PKPV:2.6s 173.0nm
				LmH:20s 1.1/um MLH=5.6
3.	LmH	C	21 20.0	Probably North of Halmahera (USCGS)
				LmH(C):23s 0.8/um
4.	eiP	A	01 51 47	Turkey 36.96 N 31.08 E
				H = 01 47 25.5 h = 109 km MAG=5.0
				D = 19.52 Az = 320.6 (USCGS)
				PV:1.3s 205.0nm MPV=5.3
4.	ePKHKP	A	06 42 17	South of Fiji Islands 23.82 S 179.13 E
	ePKP2	A	42 28.5	H = 06 23 22.8 h = 534 km MAG=4.7
				D = 151.52 Az = 343.2 (USCGS)
				PKHKPV:1.2s 12.2nm

Day	Phase		h m s	Remarks
4.	ePKIKP	A	20 29 46	New Britain Region 5.07 S 152.45 E H = 20 10 51.9 h = 62 km MAG=5.1 D = 124.02 Az = 331.0 (USCGS)
5.	ePKP	A	00 39 12	Tonga Islands 16.94 S 173.70 W H = 00 19 32.8 h = normal MAG=4.3 D = 146.11 Az = 353.9 (USCGS) PKPV:1.8s 60.5nm
5.	eP	A	03 02 25.5	North Atlantic Ocean 35.94 N 10.81 W
	i	A	02 27.2	H = 02 57 33.5 h = normal MAG=4.7 D = 21.85 Az = 40.7 (USCGS)
5.	eP	A	09 04 47	Mindanao/Philippine Islands 9.91 N 125.83 E H = 08 51 20.6 h = 66 km MAG=5.1 D = 97.21 Az = 324.2 (USCGS)
5.	eP	A	14 06 03	North of Halmahera 4.01 N 128.16 E
	e	A	06 13	H = 13 52 04.9 h = 48 km MAG=5.7
	e	A	09 14	D = 103.31 Az = 324.2 (USCGS)
	ePP	A	10 15	PV:1.6s 33.0nm MPV=5.8
	e	B	10 20	LmH:18s 4.7/um MLH=6.0
	ePPP	C	12 38	LmV:22s 5.1/um MLV=6.0
	eSKS	C	16 45	
	eS	C	17 50	
	eiSPP	C	20 16	
	eSS	C	25.3	
	LmH	B	51.3	
	LmV	B	55.5	
5.	eP	A	14 44 52.5	Turkey 40.04 N 27.46 E H = 14 41 16.1 h = normal MAG=4.7 D = 15.34 Az = 318.9 (USCGS)
5.	iP	A	19 41 11.3	Hindu Kush 36.43 N 70.75 E
	iX	A	41 12.8	H = 19 33 23.0 h = 208 km MAG=5.9
	epP	A	41 56	D = 44.00 Az = 308.1 (USCGS)

Day	Phase		h m s	Remarks
cont.				
5.	eisP	A	19 42 18	PV:2.4s 1000.0nm MPV=5.9
	ePP	C	43 00	XV:2.4s 1420.0nm MXV=6.0
	isPP	C	44 00	
	eS	C	47 20	
	eisS	C	48 44	
	eSS	C	50 30	
6.	+iP	A	19 28 34.3	North Atlantic Ocean 36.04 N 10.58 W
	LmH	B	36.2	H = 19 23 44.1 h = normal MAG=4.8 D = 21.65 Az = 40.7 (USCGS) PV:1.2s 73.2nm MPV=5.0 LmH:19s 3.2/um MLH=4.8
7.	eiPKP	A	02 03 38.5	Tonga Islands 17.80 S 175.39 W H = 01 44 26.7 h = 264 km MAG=4.5 D = 146.76 Az = 351.9 (USCGS) PKPV:1.1s 24.2nm
7.	+iP	A	08 34 46.3	Eastern Kazakh, SSR 49.81 N 78.15 E
	ePn	A	36 17.5	H = 08 26 57.5 h = 0 km MAG=5.5 D = 41.26 Az = 297.7 (USCGS) PH:0.9s 120.0nm MPH=5.8 PV:0.9s 198.5nm MPV=5.8 Probably underground explosion
7.	ePg	A	14 05 20	Hilders/Rhön, explosion
	eSg	A	05 33	$50^{\circ}32.51'$ N $10^{\circ}02.51'$ E H = 14 05 00.89 yield 10.75 to (Hannover) D = 1.0
8.	eP	A	03 40 49	North Atlantic Ocean 35.91 N 10.39 W H = 03 35 59.9 h = normal MAG=4.2 D = 21.65 Az = 40.3 (USCGS) PV:1.3s 13.8nm MPV=4.2
8.	eP	A	10 31 49	Hokkaido/Japan Region 41.29 N 139.62 E
	e	A	32 29	H = 10 20 09.3 h = 169 km MAG=5.7
	epP	A	32 35	D = 77.79 Az = 329.1 (USCGS)

Day	Phase		h m s	Remarks
cont.				
8.	e	A	10 34 29.5	PV:1.0s 15.7nm MPV=4.7
	ePP	A	34 47	
8.	eiPKP	A	18 28 21	Tonga Islands 15.59 S 173.68 W
				H = 18 09 01.8 h = 154 km MAG=5.1
				D = 144.77 Az = 354.2 (USCGS)
				PKPV:1.4s 60.4nm
8.	ePg	A	23 43 45	Swabian Jura/GFR 48.3 N 9.0 E
	eSg	A	44 17	H = 23 42 47 (BCIS)
				D = 2.9
9.	ePg	A	06 59 09.5	Swabian Jura/GFR 48.3 N 9.0 E
	eSg	A	59 41	H = 06 58 13 (BCIS)
	ei	A	59 44	D = 2.9
9.	eP	A	11 46 30.5	Northwest of Kurile Islands
				48.07 N 148.34 E
				H = 11 35 30.4 h = 388 km MAG=5.1
				D = 74.86 Az = 333.1 (USCGS)
				PV:1.3s 17.5nm MPV=4.6
9.	ePKP	A	12 49 15.5	Fiji Islands 20.19 S 177.89 W
				H = 12 30 26.7 h = 520 km MAG=4.3
				D = 148.69 Az = 348.3 (USCGS)
				PKPV:1.4s 27.9nm
9.	eP	A	13 13 05	North Atlantic Ocean 36.16 N 10.51 W
	e	A	13 08	H = 13 08 16.5 h = normal MAG=4.5
	e	A	13 29	D = 21.52 Az = 40.8 (USCGS)
				PV:0.8s 11.5nm MPV=4.3
9.	ePKIKP	A	14 06 39	West New Guinea 4.13 S 135.51 E
	e	A	06 49	H = 13 47 59.5 h = 14 km MAG=5.5
	ePP	A	07 32	D = 114.16 Az = 324.6 (USCGS)
	e	A	07 43	PPV:3.6s 179.0nm MPPV=6.2
	e	C	15 25	LmH:17s 15.8/um MLH=6.7
	ePS	C	17 12	LmV:19s 10.1/um MLV=6.4

Day	Phase		h m s	Remarks
cont.				
9.	ePPS	C	14 18 52	
	e	C	19 32	
	eSS	C	23 12	
	e	C	27 00	
	LmH	B	51.7	
	LmV	B	15 00.6	
9.	e	A	14 39 18	South of Honshu, Japan 31.23 N 141.55 E
	e(PP)	A	42 28.5	H = 14 26 18.9 h = normal MAG=5.2
				D = 87.26 Az = 330.7 (USCGS)
9.	e	A	14 58 35	Probably West New Guinea Region (USCGS)
	e	A	58 41	
10.	-iP	A	05 47 44.5	Taiwan Region 22.80 N 121.05 E
	e	A	47 55	H = 05 35 15.1 h = 37 km MAG=4.8
	e	A	48 04.5	D = 84.16 Az = 322.9 (USCGS)
				PV:1.0s 11.8nm MPV=5.1
10.	eiPKIKP	A	07 12 48.5	East New Guinea Region 5.59 S 147.21 E
	+iX	A	12 50.5	H = 06 54 17.6 h = 206 km MAG=5.8
	eisPKIKP	A	14 23	D = 121.82 Az = 328.4 (USCGS)
	e	C	25 25	PKIKPV:1.0s 31.5nm
	e	C	26 28	XV:1.3s 109.0nm
	eSS	C	30 48	LmH:20s 3.9/um
	ei	C	32 12	LmV:16s 2.3/um
	LmH	B	08 00.2	
	LmV	B	06.0	
10.	eP	A	08 27 45	Near Coast of Nicaragua 12.35 N 87.46 W
	e	A	28 01	H = 08 15 08.4 h = 62 km MAG=5.3
				D = 86.23 Az = 39.1 (USCGS)
10.	-iP	A	19 11 53.5	Afghanistan-USSR Border Region
				36.42 N 70.99 E
				H = 19 04 02.9 h = 201 km MAG=5.1
				D = 44.16 Az = 308.1 (USCGS)
				PV:1.4s 35.0nm MPV=4.7

Day	Phase		h m s	Remarks
12.	eP	A	17 50 56.5	Southern Iran 28.25 N 53.08 E
				H = 17 43 34.1 h = 16 km MAG=4.5
				D = 38.37 Az = 317.2
13.	eP	A	18 54 09	Northwest Territories, Canada
	e	A	54 31	63.45 N 128.98 W
	ei	A	54 43	H = 18 43 48.9 h = normal MAG=4.8
				D = 62.11 Az = 27.2 (USCGS)
13.	ePP	A	20 57.17	Java Sea 5.46 S 110.39 E
				H = 20 40 12.5 h = 502 km MAG=5.2 (USCGS)
				D = 99.9
13.	eP	A	22 33 10.5	Off Coast of Northern Peru
	e	A	33 17	8.03 S 80.08 W
	e	A	33 20.5	H = 22 19 37.2 h = 38 km MAG=5.4
	LmV	B	23 16.3	D = 97.22 Az = 39.9 (USCGS)
	LmH	B	16.6	
14.	+iP	B	08 59 34	Nicaragua 12.92 N 86.76 W
	+iP	A	59 34.6	H = 08 47 16.3 h = 178 km MAG=5.6
	e	A	59 49	D = 85.36 Az = 39.2 (USCGS)
	epP	A	09 00 19	
	ePP	A	03 02	
	eSKS	C	09 40	
	eSP	C	10 35	
	eSS	C	15 35	
	e	C	22 25	
	ei	C	24 00	
14.	e(Sg)	A	14 06 38.5	Eschenlohe, explosion
				47°37.90' N 11°08.68' E
				H = 14 05 00.59 yield 7.7 to (ASFA)
15.	e	A	04 32 04	Northwest of Kurile Islands
				50.82 N 150.07 E
				H = 04 21 26.4 h = 520 km MAG=4.3
				D = 72.91 Az = 333.8 (USCGS)

Day	Phase		h m s	Remarks
15.	e(P)	A	08 31 30	Caspian Sea 42.38 N 48.98 E
	e	A	31 46	H = 08 26 08.4 h = 46 km MAG=5.0(USCGS)
				D = 25.8
15.	e	A	12 03 33	Ceram Sea 2.80 S 126.51 E
				H = 11 44 42.3 h = normal MAG=5.6
				D = 107.76 Az = 322.7 (USCGS)
15.	+iP	A	13 47 31	Andreanof Islands, Aleutian Is.
	LmH	B	14 23.8	51.24 N 179.07 W
	LmV	B	31.6	H = 13 35 35.3 h = 46 km MAG=5.6
				D = 78.08 Az = 353.1 (USCGS)
				PV:1.4s 81.4nm MPV=5.7
16.	ePKP	A	03 42 44	Loyalty Islands 21.64 S 169.80 E
				H = 03 23 05.7 h = normal MAG=-
				D = 146.37 Az = 334.7 (USCGS)
16.	eiP	A	14 20 26	Carlsberg 9.77 N 57.77 E
	e	A	20 46	H = 14 10 52.2 h = normal MAG=4.9
				D = 55.02 Az = 326.2 (USCGS)
16.	iP	A	16 06 31	Near East Coast of Honshu, Japan
	ei	A	06 43	38.50 N 142.67 E
	eS	C	15 40	H = 15 54 17.2 h = 40 km MAG=5.4
	eiPS	C	16 21	D = 81.37 Az = 330.9 (USCGS)
	eSS	C	21 40	PV:1.4s 69.7nm MPV=5.5
	eSSS	C	25 00	LmH:16s 3.8/um MLH=5.8
	LmH	B	42.2	LmV:16s 3.4/um MLV=5.8
	LmV	B	47.2	
17.	ePKP	A	01 14 36	Fiji Islands 17.69 S 179.86 E
	e	A	17 21	H = 00 56 06.2 h = 614 km MAG=5.4
				D = 145.80 Az = 346.7 (USCGS)
				PKPV:1.5s 75.4nm
17.	ePKP	A	01 20 26	Fiji Islands 17.76 S 179.96 E
				H = 01 01 55.6 h = 625 km MAG=4.5
				D = 145.89 Az = 3467.7 (USCGS)
				PKPV:1.5s 35.2nm

Day	Phase		h m s	Remarks
17.	ePKP	A	01 48 37.5	Fiji Islands 17.63 S 179.82 E
				H = 01 30 07.3 h = 615 km MAG=4.8
				D = 145.73 Az = 346.6 (USCGS)
				PKPV:1.5s 60.3nm
18.	ePKP	A	03 45 12	Loyalty Islands 21.36 S 171.11 E
	e	A	45 14	H = 03 25 31.8 h = 15 km MAG=5.5
	i	A	45 19	D = 146.62 Az = 336.1 (USCGS)
	e	B	45 28	
18.	iPKP	A	03 52 30.7	Loyalty Islands 21.37 S 170.94 E
	e	A	52 38	H = 03 32 50.8 h = normal MAG=5.3
	e	A	52 43.5	D = 146.56 Az = 335.9 (USCGS)
				PKPV:2.2s 76.4nm
18.	ePKP	A	04 01 07.5	Tonga Islands 15.22 S 173.46 W
				H = 03 41 22.7 h = 39 km MAG=5.1
				D = 144.43 Az = 354.4 (USCGS)
18.	eP	A	04 22 26	North Atlantic Ocean 36.01 N 10.52 W
	LmH	B	48.6	H = 04 17 34.6 h = 23 km MAG=4.2
	LmV	B	05 00.2	D = 21.64 Az = 40.6 (USCGS)
				LmH:23s 1.6/um MLH=4.4
				LmV:20s 1.0/um MLV=4.4
18.	eP	A	05 21 04	Kurile Islands 47.08 N 153.87 E
				H = 05 09 09.6 h = 35 km MAG=4.4
				D = 77.36 Az = 336.5 (USCGS)
18.	ePKP	A	08 06 23	Loyalty Islands 21.48 S 171.11 E
				H = 07 46 44.6 h = normal MAG=3.9
				D = 146.73 Az = 336.0 (USCGS)
18.	iP	A	16 28 41.5	Kurile Islands 44.15 N 150.96 E
	i	A	28 44.5	H = 16 16 39.6 h = 44 km MAG=5.7
	eipP	A	28 54	D = 79.19 Az = 335.0 (USCGS)
	LmH	B	17 07.2	PV:1.3s 39.3nm MPV=5.3
	LmV	B	12.2	LmH:16s 1.1/um MLH=5.3
				LmV:15s 1.0/um MLV=5.3

Day	Phase		h m s	Remarks
18.	eP	A	20 43 04	Vancouver Island 50.14 N 129.96 W
	LmH	B	21 13.6	H = 20 31 27.3 h = normal MAG=5.0
	LmV	B	18.7	D = 74.37 Az = 24.3 (USCGS)
				LmH:16s 1.0/um MLH=5.2
				LmV:16s 0.8/um MLV=5.1
18.	ePKHKP	A	22 55 20	South of Fiji Islands 24.00 S 175.97 W
	ePKP2	A	55 32	H = 22 35 30.2 h = 68 km MAG=5.4
				D = 152.76 Az = 349.4 (USCGS)
18.	iP	A	23 42 13	Kurile Islands 50.75 N 156.69 E
	epP	A	42 30	H = 23 30 41.2 h = 90 km MAG=4.7
	LmH	C	24 06.3	D = 74.70 Az = 337.8 (USCGS)
				PV:1.1s 24.2nm MPV=4.6
19.	iP	B	14 11 35	Ryukyu Islands 28.78 N 128.22 E
	ipP	B	12 15	H = 13 59 22.7 h = 136 km MAG=5.8 (USCGS)
	esP	B	12 25	D = 83.1
	ePP	B	14 44	LmH:13s 1.7/um
	ipPP	B	15 27	LmV:13s 1.7/um
	iS	C	21 40	
	e	C	22 36	
	ePS	C	22 53	
	LmH	B	53.6	
	LmV	B	53.6	
19.	eP	A	18 31 02	Kurile Islands 44.06 N 150.97 E
				H = 18 18 58.9 h = 50 km MAG=4.8
				D = 79.27 Az = 335.0 (USCGS)
				PV:1.2s 16.3nm MPV=4.9
20.	iP	B	08 30 22	Gulf of California 31.25 N 114.28 W
	eS	C	40 55	H = 08 17 41.9 h = 20 km MAG=5.4 (USCGS)
	e	C	41 25	D = 85.4
	LmV	B	09 14.5	PV(B):6.0s 0.74/um MPV=6.0
	LmH	B	14.6	LmV:15.5s 5.4/um MLV=6.0
				LmH:15s 4.0/um MLH=5.9

Day	Phase		h m s	Remarks
20.	eP	A	13 43 05	South of Honshu, Japan 29.83 N 138.59 E
				H = 13 31 06.1 h = 429 km MAG=4.6
				D = 87.20 Az = 329.4 (USCGS)
20.	iPg	A	15 05 30.5	Dortheim Hessen, explosion
	eSg	A	05 50.5	50°57.89' N 9°13.12' E
				H = 15 05 01.3 yield 7.8 to
				D = 1.5 (Hannover)
20.	-iP	A	16 32 35.3	Philippine Islands 8.69 N 127.25 E
	-i	A	32 40	H = 16 18 56.4 h = normal MAG=6.1
	eSKS	C	43 10	D = 99.01 Az = 324.5 (USCGS)
	eS	C	44 03	PV:1.4s 195.5nm MPV=6.6
	LmH	B	17 30.3	LmH:17s 6.0/um MLH=6.2
	LmV	B	30.5	LmV:16.5s 5.9/um MLV=6.2
20.	eP	A	18 23 10	Nevada/USA
				underground explosion (UPP)
20.	eP	A	18 27 59.5	Andreanof Islands, Aleutian Is.
				51.61 N 174.93 W
				H = 18 16 06.4 h = 59 km MAG=4.8
				D = 77.97 Az = 355.7 (USCGS)
				PV:1.2s 12.2nm MPV=4.7
20.	eP	A	23 52 20	Philippine Islands 8.77 N 127.32 E
				H = 23 38 40.6 h = normal MAG=5.1
				D = 98.98 Az = 324.5 (USCGS)
				PV:1.1s 20.2nm MPV=5.8
21.	ePKP	A	02 00 28	New Hebrides Islands 20.31 S 169.82 E
	epPKP	A	00 58	H = 01 41 02.7 h = 96 km MAG=4.4
				D = 145.18 Az = 335.5 (USCGS)
				PKPV:1.2s 14.2nm
21.	+iP	A	03 17 20.4	Off East Coast of Honshu, Japan
	e	A	17 29	40.32 N 143.68 E
	e	A	17 37	H = 03 05 11.9 h = normal MAG=5.3
	e	A	20 09	D = 80.17 Az = 331.3 (USCGS)

Day	Phase		h m s	Remarks
cont.				
21.	eS	C	03 27 24	PV:1.6s 63.2nm MPV=5.3
	LmH	B	58.0	LmH:15s 2.6/um MLH=5.7
	LmV	B	04 00.5	LmV:14s 2.0/um MLV=5.6
21.	eP	A	04 06 19	Gulf of California 31.22 N 114.30 W
	LmH	B	45.4	H = 03 53 42.4 h = normal MAG=5.3
	LmV	B	46.8	D = 85.54 Az = 31.1 (USCGS)
				PV:2.6s 208.0nm MPV=5.9
				LmH:17s 1.2/um MLH=5.4
				LmV:14s 1.6/um MLV=5.6
21.	i(P)	A	05 08 52	Gulf of California 31.17 N 114.23 W
	e	A	09 48	H = 04 56 20.3 h = normal MAG=5.4
	LmH	B	48.0	D = 85.55 Az = 31.2 (USCGS)
	LmV	B	49.4	LmH:17s 4.8/um MLH=5.0
				LmV:15s 4.4/um MLV=6.0
21.	eP	A	06 47 03	Gulf of California 31.13 N 114.25 W
	eS	B	57 40	H = 06 34 22.2 h = 4 km MAG=5.5
	LmH	B	07 26.2	D = 85.60 Az = 31.2 (USCGS)
	LmV	B	27.5	PV:3.1s 568.0nm MPV=6.3
				LmH:16s 2.7/um MLH=5.7
				LmV:15s 3.4/um MLV=5.8
21.	eP	A	07 33 49	Gulf of California 31.28 N 114.24 W
	LmH	B	08 12.8	H = 07 21 11.6 h = normal MAG=5.1
	LmV	B	17.9	D = 85.46 Az = 31.2 (USCGS)
				PV:3.0s 263.0nm MPV=5.8
				LmH:16s 1.6/um MLH=5.5
				LmV:14s 2.1/um MLV=5.7
21.	eP	A	10 22 51	Gulf of California 31.19 N 114.29 W
				H = 10 10 10.7 h = 5 km MAG=5.4
				D = 85.56 Az = 31.1 (USCGS)
				PV:2.9s 260.0nm MPV=5.9

Day	Phase		h m s	Remarks
21.	eP	A	10 37 32	Philippine Islands 8.50 N 127.31 E
	LmH	B	11 07.0	H = 10 23 53.0 h = normal MAG=5.2
	LmV	B	07.0	D = 99.20 Az = 324.5 (USCGS)
				LmH:13.5s 1.7/um MLH=5.6
				LmV:15s 2.1/um MLV=5.7
21.	eP	A	12 16 57	Kurile Islands 49.65 N 155.61 E
	LmH	B	52.0	H = 12 05 16.3 h = 50 km MAG=5.3
	LmV	B	55.3	D = 75.45 Az = 337.3 (USCGS)
				PV:1.8s 30.4nm MPV=5.1
				LmH:23s 0.8/um MLH=5.0
				LmV:16s 0.5/um MLV=4.9
21.	eSg	A	15 23 28	Germany 48.3 N 9.0 E
	ei	A	23 30	H = 15 22 00 (BCIS)
				D = 2.9
21.	LmH	B	16 49.5	Probably Gulf of California (USCGS)
	LmV	B	54.5	LmH:17s 0.5/um
				LmV:15s 0.6/um
21.	LmH	B	17 21.3	Probably Gulf of California (USCGS)
	LmV	B	26.6	LmH:16s 0.6/um
				LmV:15s 0.7/um
21.	LmH	B	18 52.0	Probably Gulf of California (USCGS)
	LmV	B	57.1	LmH:16s 0.5/um
				LmV:14s 0.8/um
22.	-ePKP	A	02 10 23	Tonga Islands 18.01 S 174.11 W
				H = 01 50 49.5 h = 95 km MAG=4.7
				D = 147.12 Az = 353.3 (USCGS)
22.	eP	A	05 00 29	Afghanistan-USSR Border Region
	iPP	A	02 08	38.90 N 70.62 E
	LmH	B	20.5	H = 04 52 32.6 h = 8 km MAG=5.3
	LmV	B	22.5	D = 42.43 Az = 306.0 (USCGS)
				PV:1.3s 56.8nm MPV=5.1
				LmH:12s 1.0/um MLH=4.9
				LmV:12s 1.1/um MLV=5.0

Day	Phase		h m s	Remarks
22.	iP	A	07 38 15.4	Gulf of California 31.35 N 114.07 W
	e	A	38 46	H = 07 25 35.6 h = normal MAG=5.1
	eS	C	48 47	D = 85.32 Az = 31.3 (USCGS)
	LmH	B	08 14.7	PV:3.8s 260.0nm MPV=5.8
	LmV	B	18.7	LmH:18s 1.5/um MLH=5.4
				LmV:16s 2.4/um MLV=5.7
22.	e	A	12 33 00	Tonga Islands 15.10 S 173.88 W
				H = 12 13 15.8 h = 46 km MAG=4.6
				D = 144.27 Az = 354.0 (USCGS)
22.	iP	A	13 48 06	Kurile Islands 43.36 N 147.36 E
	e	A	48 20	H = 13 36 06.1 h = 40 km MAG=5.0
	ePP	A	51 11	D = 78.75 Az = 333.1 (USCGS)
				PV:1.5s 20.1nm MPV=5.0
22.	ePKP	A	13 50 43	Fiji Islands 16.45 S 177.55 W
	e	A	50 48	H = 13 31 07.8 h = normal MAG=5.0
	e	A	50 54	D = 145.10 Az = 349.8 (USCGS)
22.	e(P)	A	18 04 53	Turkey 39.08 N 28.60 E
				H = 18 00 54.6 h = normal MAG=4.5
				D = 16.65 Az = 319.5 (USCGS)
				PV:1.6s 16.5nm
22.	LmH	B	19 14.7	Probably Gulf of California (USCGS)
	LmV	B	16.0	LmH:16s 0.5/um
				LmV:14s 0.6/um
23.	ePKIKP	A	02 26 41	South of Fiji Islands 24.77 S 179.80 E
	ePKHKP	A	26 49	H = 02 07 52.6 h = 550 km MAG=5.1
	ePKP2	A	27 02	D = 152.60 Az = 343.5 (USCGS)
				PKP2V:1.3s 17.5nm
23.	eP	A	04 30 36	India-West Pakistan Border Region
				24.43 N 68.66 E
				H = 04 21 31.4 h = 15 km MAG=4.4
				D = 50.74 Az = 316.4 (USCGS)

Day	Phase		h m s	Remarks
23.	eP	A	12 02 10	Near West Coast of Colombia
	e	A	02 15	6.21 N 77.76 W
				H = 11 49 35.6 h = 24 km MAG=5.0
				D = 84.85 Az = 39.7 (USCGS)
23.	eP	A	12 11 00	Central Mid-Atlantic Ridge
	eX	A	11 05	0.95 N 26.00 W
	ePPP	C	14 40	H = 12 01 01.5 h = normal MAG=4.9
	eS	B	19 10	D = 58.87 Az = 27.0 (USCGS)
	LmH	B	29.5	XV:2.0s 42.7nm MXV=5.1
	LmV	B	35.3	SH:14s 1.5/um MSH=5.6
				LmH:20s 1.5/um MLH=5.1
				LmV:16s 1.3/um MLV=5.2
23.	LmH	B	16 30.8	Probably Gulf of California (USCGS)
	LmV	B	32.0	LmH:16s 0.6/um
				LmV:16s 0.7/um
23.	eP	A	21 12 35	Turkey 39.16 N 28.48 E
	-iX	A	12 39	H = 21 08 42.6 h = 12 km MAG=5.6
	iS	C	15 44	D = 16.53 Az = 319.5 (USCGS)
	LmH	B	18.5	PV:1.6s 57.7nm MPV=4.5
	LmV	B	21.6	XV:2.1s 615.0nm MXV=5.4
				LmH:12s 41.6/um MLH=5.9
				LmV:12s 25.8/um MLV=5.8
24.	ePKHKP	A	01 13 41	Tonga Islands 19.38 S 175.70 W
				H = 00 54 17.5 h = 205 km MAG=4.7
				D = 148.26 Az = 351.1 (USCGS)
				PKHKPV:1.7s 36.4nm
24.	eP	A	02 03 24	Turkey 39.13 N 28.48 E
	eX	A	03 26.5	H = 01 59 30.6 h = 6 km MAG=5.0
	LmH	B	09.2	D = 16.55 Az = 319.6 (USCGS)
	LmV	B	10.9	XV:1.9s 41.7nm MXV=4.2
				LmH:13s 3.7/um MLH=5.3
				LmV:10s 3.1/um MLV=5.4

Day	Phase		h m s	Remarks
24.	e	A	08 17 04	Turkey 39.08 N 28.54 E
				H = 08 13 00.5 h = 7 km MAG=4.7
				D = 16.62 Az = 319.6 (USCGS)
24.	eP	A	09 38 20	North Atlantic Ocean 35.83 N 10.43 W
				H = 09 33 29.7 h = normal MAG=4.3
				D = 21.73 Az = 40.2 (USCGS)
24.	LmH	B	09 54.2	Probably Gulf of California (USCGS)
	LmV	B	55.0	LmH:16s 0.4/um
				LmV:19s 0.8/um
24.	eP	A	11 38 27.5	Turkey 39.20 N 28.63 E
	e	A	38 31.5	H = 11 34 31.2 h = 15 km MAG=4.6
	LmH	B	44.1	D = 16.57 Az = 319.2 (USCGS)
	LmV	B	46.0	PV:2.2s 43.6nm MPV=4.2
				LmH:15s 0.6/um MLH=3.9
				LmV:14s 0.3/um MLV=3.8
24.	+iP	A	12 00 13	United Arab Republic 27.53 N 33.83 E
	eS	C	04 55	H = 11 54 15.5 h = 21 km MAG=5.2
	e	C	05 15	D = 28.60 Az = 329.8 (USCGS)
	e	C	05 25	PV:2.0s 128.0nm MPV=5.4
	e	B	05 30	
24.	eP	A	12 56 46	United Arab Republic 27.57 N 33.79 E
				H = 12 50 50.5 h = normal MAG=4.8
				D = 28 55 Az = 329.8 (USCGS)
				PV:2.0s 55.5nm MPV=5.0
25.	eP	A	13 25 06	Turkey 39.03 N 28.50 E
	e	A	25 11	H = 13 21 10.4 h = 23 km
				D = 16.64 Az = 319.8 (USCGS)
				PV:1.5s 35.2nm MPV=4.3
25.	eP	A	13 25 22	Turkey 39.18 N 28.37 E
	iX	A	25 27	H = 13 21 32.4 h = 23 km MAG=5.6
	eiS	C	28 30	D = 16.46 Az = 319.6 (USCGS)

Day	Phase		h m s	Remarks
cont				
25.	ei	C	13 28 36	XV:1.8s 933.0nm MXV=5.6
	LmH	B	31.2	LmH:15s 56.8/um MLH=5.9
	LmV	B	34.9	LmV:10s 24.8/um MLV=5.9
25.	iPKHKP	A	13 32 23.7	South of Fiji Islands 23.54 S 177.78 W
	i	A	32 31	H = 13 13 01.4 h = 291 km MAG=5.4
	ipPKP	A	33 36.7	D = 151.97 Az = 347.2 (USCGS)
25.	eP	A	14 22 45	Turkey 39.17 N 28.38 E
	eiX	A	22 46	H = 14 18 50.8 h = 23 km MAG=4.9
				D = 16.47 Az = 319.6 (USCGS)
				XV:1.7s 84.8nm MXV=4.6
25.	eP	A	16 17 24	Turkey 39.06 N 28.30 E
	LmH	B	23.0	H = 16 13 27.2 h = 17 km MAG=4.7
	LmV	B	24.9	D = 16.52 Az = 320.0 (USCGS)
				PV:1.3s 26.2nm MPV=4.2
25.	LmH	B	21 08.4	Probably Off Coast of Central Mexico (USCGS)
	LmV	B	08.6	LmH:16s 0.2/um
				LmV:16s 0.3/um
26.	eP	A	03 35 21	Turkey 39.08 N 28.44 E
	LmH	B	41.0	H = 03 31 24.2 h = 23 km MAG=4.5
	LmV	B	42.9	D = 16.56 Az = 319.7 (USCGS)
				PV:1.6s 19.2nm MPV=4.0
				LmH:13s 0.5/um MLH=4.0
				LmV:10s 0.2/um MLV=3.8
26.	ePKHKP	A	09 44 12	South of Fiji Islands 24.58 S 176.16 W
	eX	A	44 20	H = 09 24 19.8 h = 50 km MAG=5.1
				D = 153.29 Az = 349.0 (USCGS)
				XV:2.0s 17.1nm
26.	LmH	B	16 24.5	Probably Luzon, Philippine Islands (USCGS)
	LmV	B	28.3	LmH:16s 0.6/um
				LmV:16s 0.8/um

Day	Phase		h m s	Remarks
26.	eP	A	17 18 01	Dodecanese Islands 35.15 N 27.71 E
	e	A	18 06.5	H = 17 13 35.7 h = normal MAG=4.3
	e	A	18 16.5	D = 19.39 Az = 327.9 (USCGS)
				PV:1.2s 20.4nm MPV=4.2
26.	eP	A	19 35 49.5	Philippine Islands 8.63 N 127.58 E
				H = 19 22 09.0 h = 31 km MAG=5.3
				D = 99.25 Az = 324.6 (USCGS)
27.	LmV	B	05 51.0	Probably North of Halmahera (USCGS)
	LmH	B	54.7	LmV:17s 2.4/um
				LmH:17s 2.7/um
27.	eP	A	06 21 25	United Arab Republic 27.53 N 33.94 E
				H = 06 15 30.0 h = normal MAG=4.7
				D = 28.65 Az = 329.7 (USCGS)
				PV:1.6s 16.5nm MPV=4.6
27.	eP	A	11 27 28	Tadzhik SSR 38.97 N 71.87 E
	ePP	A	29 18	H = 11 19 29.3 h = 37 km MAG=4.9
				D = 43.18 Az = 306.1 (USCGS)
27.	eP	A	12 55 30	Talaud Islands 4.77 N 127.51 E
	+iX	AB	55 32	H = 12 41 35.9 h = 32 km MAG=6.1
	e	A	55 36	D = 102.32 Az = 324.1 (USCGS)
	iPP	A	59 42.5	PV(A):1.6s 38.5nm MPV(A)=5.8
	e	C	13 06 48	XV(A):2.0s 136.0nm MXV(A)=6.7
	eS	B	07 15	PV(B):16s 3.5/um MPV=6.8
	ei	B	07 40	PPV(A):3.6s 1830.0nm MPPV=6.9
	eiPS	C	08 55	LmH:18.5s 28.1/um MLH=6.8
	ei	B	09 30	LmV:19.5s 21.8/um MLH=6.7
	eSS	C	14 00	
	e	B	14 40	
	LmH	B	49.5	
	LmV	B	49.7	
27.	eP	A	19 45 43	Tadzhik SSR 39.03 N 71.84 E
	e(PP)	A	47 35.5	H = 19 37 44.1 h = normal MAG=5.2
	e		47 54	D = 43.12 Az = 306.1 (USCGS)
				PPV:2.0s 17.1nm MPPV=4.5

Day	Phase		h m s	Remarks
28.	ePKP	A	01 39 23	Loyalty Islands 21.81 S 169.78 E
				H = 01 19 43.7 h = normal MAG=4.9
				D = 146.52 Az = 334.6 (USCGS)
				PKPV:0.7s 15.3nm
28.	-iP	AB	01 52 29	Turkey 38.59 N 28.45 E
	-i	A	52 31	H = 01 48 30.4 h = 9 km MAG=6.0
	+iX	A	53 35	D = 16.95 Az = 320.8 (USCGS)
	iS	B	55 43	XV:1.7s 1880.0nm MXV=5.9
	LmH	B	58.3	PV(B):10s 15.6/um MPV(B)=6.1
	LmV	B	02 02.4	LmH:17s 272/um MLH=6.6
				LmV:14s 102/um MLV=6.4
28.	eP	A	03 19 37	South of Honshu, Japan 33.34 N 140.33 E
	e	A	19 57	H = 03 07 09.6 h = 78 km MAG=4.8
				D = 84.92 Az = 330.1 (USCGS)
28.	eP	A	05 44 19	Turkey 38.23 N 28.97 E
	LmH	B	51.8	H = 05 40 10.0 h = 3 km MAG=4.6
	LmV	B	51.8	D = 17.48 Az = 320.8 (USCGS)
				PV:1.3s 13.1nm MPV=3.9
				LmH:10.5s 0.4/um MLH=3.9
				LmV:11s 0.3/um MLV=3.9
28.	ePP	A	09 41 15	Volcano Islands Region 22.6 N 142.9 E
				H = 09 24 15.8 h = 169 km MAG=5.0 (USCGS)
				D = 95.5
28.	+eiP	A	10 06 11	Turkey 39.11 N 28.44 E
	eS	B	09 28	H = 10 02 16.7 h = normal MAG=4.9
	LmH	B	11.8	D = 16.54 Az = 319.7 (USCGS)
	LmV	B	14.4	PV:2.0s 94.0nm MPV=4.6
				LmH:13s 2.2/um MLH=4.6
				LmV:11s 0.9/um MLV=4.4
28.	e	A	15 32 35	Gulf of California 31.50 N 114.28 W
				H = 15 19 40.4 h = normal MAG=5.0
				D = 85.29 Az = 31.2 (USCGS)
				PV:1.4s 9.3/um

Day	Phase		h m s	Remarks
28.	eSg	A	16 06 29	Mehrberg/Linz, explosion
				50°36.53' N 7°17.85' E
				H = 16 05 00.8 yield 3.9 to (Hannover)
28.	eP	A	23 01 35	North Atlantic Ocean 57.76 N 32.75 W
	eX	A	01 50	H = 22 55 59.1 h = normal MAG=4.6
	LmH	B	12.3	D = 26.50 Az = 86.2 (USCGS)
	LmV	B	12.5	XV:1.8s 27.0nm MXV=4.6
				LmH:15.5s 1.4/um MLH=4.6
				LmV:16s 1.6/um MLV=4.8
29.	eP	A	01 46 08.5	Southern Italy 40.04 N 15.17 E
	iX	A	46 12	H = 01 43 39.0 h = 310 km MAG=4.6
				D = 10.90 Az = 347.9 (USCGS)
				PV:1.1s 16.1nm
				XV:1.5s 75.4nm
29.	-eiP	A	09 24 11	Ethopia 11.97 N 41.18 E
	ePP	A	26 08	H = 09 15 54.1 h = normal MAG=5.8
	+iS	B	30 58	D = 45.51 Az = 333.9 (USCGS)
	eiSS	C	34 10	PV:2.3s 378.0nm MPV =6.0
	LmH	B	45.2	PPV:2.4s 580.0nm MPPV=6.1
	LmV	B	46.5	LmH:16s 28.2/um MLH=6.3
				LmV:14s 13.6/um MLV=6.1
29.	-iP	A	11 13 10.5	Ethopia 11.96 N 41.29 E
	+i	B	13 12	H = 11 04 47.9 h = 4 km MAG=5.6
	-i	A	13 18	D = 45.57 Az = 333.8 (USCGS)
	ePPP	B	15 48	PV:2.1s 211.0nm MPV=5.8
	e	B	17 47	LmH:17s 9.9/um MLH=5.8
	eS	B	19 56	LmV:14s 6.1/um MLV=5.8
	e	B	22 34	
	LmH	B	34.1	
	LmV	B	37.9	
29.	ePKP	A	12 53 52	Tonga Islands 20.94 S 174.09 W
				H = 12 34 03.3 h = 35 km MAG=4.5
				D = 150.01 Az = 352.7 (USCGS)
				PKPV:2.0s 34.2nm

Day	Phase		h m s	Remarks
29.	-iP	A	13 16 34.5	Ethopia 11.94 N 41.52 E
	+i	A	16 39	H = 13 08 11.4 h = 4 km MAG=5.1
	e	A	17 12	D = 45.69 Az = 333.7 (USCGS)
	e	A	18 25	PV:1.6s 60.5nm MPV=5.4
	LmH	B	39.5	
	LmV	B	42.4	
29.	+iP	AB	13 58 24	Carlsberg Ridge 10.43 N 56.84 E
	e	A	58 31	H = 13 48 57.6 h = normal MAG=5.6
	LmH	B	14 25.4	D = 54.56 Az = 326.3 (USCGS)
	LmV	B	25.4	PV(A):2s 150.0nm MPV=5.7
				PV(B):4.5s 1.1/um MPV=6.2
				LmH:19s 2.4/um MLH=5.3
				LmV:20s 2.0/um MLV=5.2
29.	e	A	18 39 08	Ethopia 12.00 N 41.38 E
				H = 18 30 42.2 h = normal MAG=4.6
				D = 45.57 Az = 333.7 (USCGS)
30.	eP	A	03 03 46	Central-Mid Atlantic Ridge
	e	A	03 56.5	8.09 N 38.81 W
	e	A	04 06.5	H = 02 53 41.2 h = normal MAG=4.6
	LmH	B	27.4	D = 59.37 Az = 34.8 (USCGS)
	LmV	B	27.4	
31.	eP	A	07 21 48	Red Sea 27.67 N 33.99 E
	-i	AB	21 50	H = 07 15 54.4 h = normal MAG=6.0
	+eiS	B	26 37	D = 28.55 Az = 329.5 (USCGS)
	-i	B	26 46	PV(A):1.7s 176.0nm MPV=6.6
	e	B	27 50	PV(B):11.5s 41.8/um MPV=7.2
	+i	B	28 32	LmH:16s 66.5/um MLH=6.3
	LmH	B	38.1	LmV:14s 58.0/um MLV=6.4
	LmV	B	41.9	
31.	eP	A	09 07 03.5	United Arab Republic 28.40 N 34.38 E
				H = 09 01 12.7 h = normal MAG=4.9
				D = 28.11 Az = 328.5 (USCGS)
				PV:1.4s 18.6nm MPV=4.7

Day	Phase		h m s	Remarks
31.	eP	A	11 35 57	Red Sea 27.59 N 34.15 E
	e	A	37 58	H = 11 29 59.5 h = 24 km MAG=4.6
				D = 28.70 Az = 329.5 (USCGS)
31.	eP	A	19 36 43.5	Sea of Japan 38.33 N 134.60 E
	-i	A	36 46	H = 19 25 27.2 h = 417 km MAG=5.9
	ipP	B	38 14	D = 78.25 Az = 326.9 (USCGS)
	i	A	38 23	PV:1.3s 575.0nm MPV=6.1
	isP	B	38 59	LmH:20s 6.9/um
	iPP	B	39 48	LmV:14.5 6.3/um
	i	A	45 10	
	-iS	B	46 05	
	eiPS	B	47 49	
	isS	B	48 42	
	eSS	B	51 08	
	ePKPPKP	A	20 03 43	
	eSKPPKP	A	06 32	
	e	A	06 39	
	LmH	B	12.3	
	LmV	B	17.3	
31.	iP	A	21 50 27.8	Red Sea 27.46 N 34.03 E
	e	A	50 52	H = 21 44 27.3 h = 6 km MAG=5.0
				D = 28.75 Az = 329.7 (USCGS)
				PV:1.6s 49.5nm MPV=5.1
31.	eP	A	22 46 44	Red Sea 27.43 N 34.07 E
	e	A	46 48.5	H = 22 40 47.0 h = normal MAG=4.7
				D = 28.80 Az = 329.7 (USCGS)
				PV:2.0s 51.3nm MPV=5.0

Day	Phase		h m s	Remarks
1.	eP	A	04 15 35.5	Iceland Region 66.38 N 17.75 W
	e	A	15 38	H = 04 10 45.8 h = normal MAG=4.5
	eS	C	19 44	D = 21.67 Az = 122.3 (USCGS)
	LmV	B	25.2	PV:1.0s 19.7nm MPV=4.5
	LmH	B	25.3	LmV:16s 0.6/um MLV=4.2
				LmH:16s 1.0/um MLV=4.3
1.	ePKP	A	05 01 57.5	Fiji Islands 17.75 S 178.89 W
				H = 04 43 22.6 h = 600 km MAG=4.4
				D = 146.12 Az = 348.0 (USCGS)
				PKPV:1.2s 8.1nm
1.	eP	A	16 44 48.5	West Pakistan 30.00 N 67.39 E
	LmH	B	17 11.0	H = 16 36 23.4 h = 20 km MAG=4.9
	LmV	B	11.0	D = 46.02 Az = 313.0 (USCGS)
				PV:1.2s 24.4nm MPV=4.7
				LmV:12s 0.4/um MLV=4.5
1.	eP	A	21 44 39	Alaska Peninsula 55.84 N 161.27 W
				H = 21 33 10.0 h = 58 km MAG=4.6
				D = 73.72 Az = 4.7 (USCGS)
				PV:0.8s 7.7nm MPV=4.7
2.	eiP	A	01 40 46.5	Southern Italy 39.03 N 15.35 E
	iX	A	40 48.7	H = 01 38 01.9 h = 258 km MAG=4.8
	+i	A	41 12	D = 11.91 Az = 348.4 (USCGS)
	e	A	43 05.5	XV:1.2s 244.0nm MXV=5.3
2.	iPKP	A	20 43 30	Fiji Islands 15.77 S 176.58 W
				H = 20 24 45.2 h = 462 km MAG=4.7
				D = 144.59 Az = 351.0 (USCGS)
				PKPV:1.3s 39.3nm
3.	eP	A	03 01 20	Kirgiz Sinkiang Border Region
				41.18 N 79.24 E
				H = 02 52 50.9 h = 40 km MAG=4.5
				D = 46.47 Az = 305.7 (USCGS)

Day	Phase		h m s	Remarks
3.	eP	A	20 12 10	Red Sea 27.44 N 33.97 E
	e	A	13 32	H = 20 06 13.6 h = normal MAG=4.5
	eS	C	17 02	D = 28.74 Az = 329.8 (USCGS)
3.	-eiP	A	22 15 06	Albania 40.74 N 19.89 E
	Pm	A	15 10	H = 22 12 23.8 h = normal MAG=5.1
	eS	C	17 36	D = 11.46 Az = 332.6 (USCGS)
	e	B	17 50	PV:1.0s 31.5nm
	i	B	18 49	PmV:0.9s 222.0nm
	LmH	B	20.3	LmH:17s 44.2/um MLH=5.4
	LmV	B	20.5	LmV:18s 32.8/um
3.	eP	A	23 47 58	Albania 40.59 N 19.88 E
	e	A	50 30	H = 23 45 09.9 h = normal MAG=4.6
	e	A	50 51	D = 11.60 Az = 332.9 (USCGS)
				PV:0.8s 7.7nm
3.	eP	A	23 54 36	Philippine Islands 8.61 N 127.16 E
				H = 23 40 55.3 h = normal
				D = 99.02 Az = 324.4 (USCGS)
4.	eP	A	04 23 30	Albania 40.61 N 19.79 E
	i	A	23 31.5	H = 04 20 46.8 h = normal MAG=4.3
	e	A	23 47	D = 11.54 Az = 333.1 (USCGS)
	e	A	25 41	
	e	A	26 39.5	
	e	A	26 51.5	
	LmH	C	29.0	
	LmV	B	29.0	
4.	-iP	A	08 57 12	Near Islands, Aleutian Islands
	e	A	57 16	51.17 N 173.72 E
	e	A	57 22	H = 08 45 18.7 h = normal MAG=5.6
	e	A	57 44	D = 77.43 Az = 348.4 (USCGS)
	LmH	B	09 35.4	PV:1.8s 94.5nm MPV=5.6
	LmV	B	37.5	LmH:19s 1.0/um MLH=5.2

Day	Phase		h m s	Remarks
4.	eP	A	12 24 42	Red Sea 27.68 N 34.07 E
	e	A	24 46.5	H = 12 18 47.3 h = normal MAG=4.7
	e	A	24 53.5	D = 28.58 Az = 329.4 (USCGS)
	e	A	25 08	PV:1.1s 10.1nm MPV=4.6
	eS	B	29 30	
4.	eP	A	14 08 28	Taiwan 22.91 N 120.04 E
	epP	A	08 40	H = 13 56 03.2 h = 46 km MAG=5.2
	LmH	B	44.5	D = 83.52 Az = 322.6 (USCGS)
	LmV	B	51.6	PV:2.2s 65.5nm MPV=5.5
				LmH:15.5s 1.4/um MLH=5.4
				LmV:17s 1.5/um MLV=5.5
4.	eP	A	16 29 10	Gulf of California 24.37 N 109.76 W
	eX	A	29 17	H = 16 16 17.2 h = 31 km MAG=5.6
	LmH	B	17 08.0	D = 89.20 Az = 32.9 (USCGS)
	LmV	B	10.0	PV:2.0s 42.7nm MPV=5.3
				XV:2.0s 51.3nm MXV=5.4
				LmH:18s 3.0/um MLH=5.8
				LmV:15.5s 2.3/um MLV=5.7
4.	+iP	A	23 08 49	Komandorsky Islands 54.53 N 169.43 E
	LmH	C	47.3	H = 22 57 16.8 h = 27 km MAG=5.4
				D = 73.56 Az = 345.5 (USCGS)
				PV:1.2s 40.6nm MPV=5.3
5.	eP	A	02 26 48	Ethiopia 12.15 N 41.20 E
	eiX	A	26 51.5	H = 02 18 29.9 h = 17 km MAG=6.2
	e	A	27 02.5	D = 45.35 Az = 333.8 (USCGS)
	e	A	28 40	PV:1.5s 25.2nm MPV=5.0
	ePP	A	28 43	XV:2.5s 784.0nm MXV=6.3
	+iS	C	33 34	LmH:15.5s 19.4/um MLH=6.1
	-iS	C	33 39	LmV:16s 11.6/um MLV=6.0
	iSS	C	36 53	
	iSS	B	36 55	
	LmH	B	47.8	
	LmV	B	52.4	

Day	Phase		h m s	Remarks
5.	ePKHKP	A	07 13 29	West of Maquarie Island 54.70 S 143.80 E
	e	A	13 35	H = 06 53 39.2 h = normal MAG=5.2
	ePKP2	A	13 39	D = 151.18 Az = 281.9 (USCGS)
	e	A	13 44	
	e	A	14 36	
5.	eP	A	17 57(07)	Red Sea 27.47 N 34.23 E
	e	A	57 12	H = 17 51 10.9 h = normal MAG=4.5
				D = 28.83 Az = 329.5 (USCGS)
5.	ePr	A	19 11 32	North Sea 57.10 N 7.24 E
	eSn	A	12 50	H = 19 09 49.2 h = normal MAG=4.5
	ei	A	12 57	D = 6.96 Az = 156.4 (USCGS)
				PV:0.6s 11.5nm
5.	eP	A	20 22 54	Ethiopia 12.03 N 41.47 E
				H = 20 14 35.9 h = normal MAG=4.9
				D = 45.59 Az = 333.7 (USCGS)
				PV:1.8s 33.8nm MPV=5.0
6.	eP	A	03 53 19	Aegean Sea 38.50 N 26.42 E
	eX	A	53 22.5	H = 03 49 33.5 h = 14 km MAG=5.5
	i	A	53 25	D = 16.05 Az = 324.0 (USCGS)
	-i	A	53 32	PV:1.7s 30.3nm MPV=4.2
	iS	C	56 20	XV:1.9s 1400.0nm MXV=5.8
	iS	B	56 30	LmH:11.5s 24.6/um MLH=5.6
	LmV	B	04 00.3	
	LmH	B	00.4	
6.	eP	A	12 54 14.5	Aegean Sea 38.40 N 26.75 E
				H = 12 50 27.5 h = 65 km MAG=4.2 (USCGS)
				D = 16.3
6.	eP	A	13 01 25	Crete 34.07 N 25.28 E
	e	A	03 51	H = 12 56 59.0 h = 30 km MAG=4.1 (USCGS)
				D = 19.3

Day	Phase		h m s	Remarks
6.	eP	A	17 00 04.5	Ethiopia 12.03 N 41.12 E
	ePP	A	01 42	H = 16 51 45.5 h = 20 km MAG=5.2
	eS	C	06 45	D = 45.43 Az = 333.9 (USCGS)
	eSS	C	10.5	LmH:18s 1.1/um MLH=4.8
	LmH	B	17 20.8	LmV:14s 0.9/um MLV=5.0
	LmV	B	25.8	
6.	eP	A	19 31 20	USSR-Mongolia Border Region
	e	A	31 31	50.32 N 91.22 E
	e	A	31 46	H = 19 22 39.4 h = 31 km MAG=4.8
	e	A	35 55	D = 48.28 Az = 303.0 (USCGS)
	LmH	C	53.4	LmH:12s 0.5/um MLH=4.7
	LmV	C	53.7	LmV:13s 0.5/um MLV=4.8
6.	e(Pdiff.)	A	20 23 02.5	Probably Sandwich Islands Region (USCGS)
6.	ePKIKP	A	23 38 31.5	Fiji Islands 20.85 S 178.54 W
	-iPKHKP	A	38 37	H = 23 19 46.2 h = 505 km MAG=4.8
	ePKP2	A	38 41	D = 149.21 Az = 347.3 (USCGS)
				PKHKPV:1.0s 39.4nm
				PKP2V: 1.1s 32.3nm
7.	eP	A	03 53 40	Talaud Islands 4.40 N 127.90 E
	ePP	A	57 50	H = 03 39 47.7 h = 70 km MAG=5.1
	LmH	C	04 43.0	D = 102.84 Az = 324.2 (USCGS)
	LmV	C	45.8	LmH:23s 0.6/um
				LmV:18s 0.5/um
7.	eP	A	06 32 15	Ethiopia 11.98 N 41.28 E
	LmH	C	53.0	H = 06 23 53.4 h = 33 km MAG=4.6
				D = 45.54 Az = 333.8 (USCGS)
				LmH:19s 0.4/um MPV=4.3
7.	eP	A	09 52 43	Near East Coast of Kamchatka
				54.70 N 162.31 E
				H = 09 41 23.5 h = 64 km MAG=4.9
				D = 72.20 Az = 340.9 (USCGS)
				PV:1.5s 12.6nm MPV=4.7

Day	Phase		h m s	Remarks
7.	eP	A	18 52 16	Hokkaido, Japan Region 42.18 N 142.37 E
				H = 18 40 19.4 h = normal MAG=4.7
				D = 78.06 Az = 330.5 (USCGS)
7.	eP	A	20 35 02.5	Laptev Sea 76.52 N 130.82 E
	eiX	A	35 07.5	H = 20 26 29.9 h = normal MAG=5.5
	ePP	C	36 50	D = 47 41 Az = 311.0 (USCGS)
	eS	C	42 00	PV:1.8s 128.0nm MPV=5.8
	eSS	C	45 15	XV:2.0s 248.0nm MXV=6.0
	LmH	B	55.7	LmH:18s 2.8/um MLH=5.3
	LmV	B	59.0	LmV:18s 3.1/um MLV=5.4
8.	eP	A	02 22 17	Ethiopia 11.93 N 41.37 E
				H = 02 13 58.7 h = 34 km MAG=4.8
				D = 45.63 Az = 333.8 (USCGS)
				PV:1.8s 27.0nm MPV=4.9
8.	eP	A	02 55 57.5	Andreanof Islands, Aleutian Is.
				51.27 N 179.25 W
				H = 02 44 00.8 h = 34 km MAG=4.8
				D = 78.04 Az = 353.0 (USCGS)
8.	e(P)	A	10 35 56	Molucca Passage 1.44 N 126.28 E
				H = 10 21 52.4 h = 69 km MAG=5.3
				D = 104.27 Az = 323.3 (USCGS)
8.	eiP	A	10 37 50	United Arab Republic 27.50 N 33.72 E
	eS	C	42 44	H = 10 31 52.2 h = 15 km MAG=5.2
	eS	B	42 50	D = 28.58 Az = 329.9 (USCGS)
	eSS	C	43 55	PV:1.8s 74.4nm MPV=5.2
8.	eiP	A	15 51 35	Albania 40.70 N 19.81 E
	Pm	A	51 37.5	H = 15 48 51.5 h = normal MAG=5.1
	i	A	51 43	D = 11.47 Az = 332.9 (USCGS)
	LmH	B	55.7	PV:1.1s 28.2nm
	LmV	B	56.9	PmV:0.8s 57.7nm
				LmH:16s 3.0/um MLH=4.3
				LmV:12s 2.2/um

Day	Phase		h m s	Remarks
9.	ePP	A	12 01 43	South of Africa 49.09 S 30.79 E
	LmH	C	42.5	H = 11 43 47.6 h = 23 km MAG=5.8 (USCGS)
	LmV	C	46.0	D = 100.8
				LmV:20s 0.6/um MLV=5.2
9.	-iP	A	13 09 31	Honshu, Japan 36.80 N 139.61 E
	-ipP	A	09 59	H = 12 57 24.8 h = 116 km MAG=5.5
	LmH	C	42.4	D = 81.64 Az = 329.5 (USCGS)
	LmV	B	45.2	PV:1.4s 51.2nm MPV=5.2
				LmH:19s 0.6/um
				LmV:7.5s 0.7/um
9.	ePKP	A	15 21 00	Fiji Islands 21.46 S 179.22 W
				H = 15 02 19.7 h = 651 km MAG=4.3
				D = 149.65 Az = 346.3 (USCGS)
				PKPV:0.8s 15.4nm
9.	eP	A	16 31 07	Greece 38.25 N 20.08 E
				H = 16 27 52.4 h = normal MAG=4.5
				D = 13.78 Az = 336.8 (USCGS)
10.	-iP	A	15 04 42.5	E.Russia-N.E.China Border Region
	e	A	06 38	41.98 N 130.95 E
	eiS	B	13 22	H = 14 54 03.9 h = 555 km MAG=5.6 (USCGS)
				D = 73.6
				PV:1.1s 38.3nm MPV=4.8
10.	eP	A	22 09 55	Northeast of Taiwan 25.77 N 128.85 E
				H = 21 57 40.4 h = 141 km MAG=5.3 (USCGS)
				D = 85.8
				PV:2.1s 134.0nm MPV=5.4
11.	ePg	A	15 05 21	Explosion Hilders/Rhön GDR
	iSg	A	05 36	50°32.51'N 10°02.42'E
				H = 15 05 00.7 (Hannover)
				D = 1.0

Day	Phase		h m s	Remarks
11.	eP	A	16 31 21	North Atlantic Ridge 52.16 N 29.93 W
				H = 16 25 52.4 h = normal MAG=4.2
				D = 25.72 Az = 76.7 (USCGS)
				PV:1.0s 9.8nm MPV=4.6
12.	eP	A	20 41 12	Rumania 45.25 N 25.02 E
	Pm	A	41 15	H = 20 38 39.6 h = 8 km MAG=5.2
	e	B	41 16	D = 10.48 Az = 305.8 (USCGS)
	e	A	41 20	PV:1.7s 36.4nm
	e	A	42 25	PmV:2.2s 218.0nm
	i	A	42 49	LmH:17.5s 13.4/um MLH=4.9
	e	B	43 33	LmV:12s 7.8/um
	LmH	B	44.9	
	LmV	B	46.1	
12.	eP	A	23 12 44.5	Turkey-USSR Border Region
				40.52 N 43.02 E
				H = 23 07 31.9 h = normal
				D = 24.03 Az = 305.4 (USCGS)
13.	eP	A	05 48 28	Sicily 38.84 N 14.83 E
				H = 05 45 43.2 h = 274 km MAG=4.1
				D = 12.02 Az = 350.1 (USCGS)
				PV:0.8s 17.3nm MPV=5.0
13.	ePKP	A	07 32 59	Fiji Islands 17.34 S 179.30 W
				H = 07 14 26.4 h = 616 km MAG=4.3
				D = 145.64 Az = 347.7 (USCGS)
13.	ePKP	A	07 52 33	Fiji Islands 20.94 S 178.80 W
				H = 07 33 49.4 h = 579 km MAG=4.3
				D = 149.24 Az = 347.0 (USCGS)
13.	eP	A	13 25 01	Ryukyu Islands 29.32 N 129.53 E
				H = 13 12 37.1 h = 41 km MAG=5.0
				D = 83.38 Az = 325.5 (USCGS)
				PV:1.6s 27.5nm MPV=5.2

Day	Phase		h m s	Remarks
13.	ePKP	A	13 26 33	Tonga Islands 17.65 S 173.08 W
				H = 13 06 50.8 h = normal MAG=4.7 (USCGS)
				D = 146.9
13.	eP	A	15 35 22	India 17.93 N 80.61 E
	Pm	A	35 28	H = 15 24 55.6 h = normal MAG=5.3
	iS	C	43 58	D = 63.05 Az = 318.2 (USCGS)
	eSS	C	48 12	PmV:1.4s 163.0nm MPV=6.0
	LmH	B	16 02.2	LmH:22s 8.9/um MLH=5.9
	LmV	B	07.4	LmV:14.5s 3.3/um MLV=5.7
13.	eP	A	16 21 08	United Arab Republic 27.62 N 33.84 E
	e	A	21 12.5	H = 16 15 11.3 h = 16 km MAG=4.8
	ePP	A	21 52	D = 28.53 Az = 329.7 (USCGS)
				PV:2.1s 67.0nm MPV=5.1
13.	ePKP	A	23 51 33	Banda Sea 6.13 S 129.92 E
	epPKP	A	52 13	H = 23 33 15.4 h = 152 km MAG=5.9
	ePP	C	52 30	D = 112.45 Az = 322.7 (USCGS)
	e	A	53 16	LmH:19s 2.0/um MLH=5.7
	esPP	C	53 24	LmV:18s 2.3/um MLV=5.8
	ei	C	24 00 55	
	+iSPP	C	02 46	
	eSS	C	08 15	
	eSSS	C	11 45	
	isSSS	C	12 07.5	
	LmH	B	36.0	
	LmV	B	43.5	
14.	e(P)	A	13 20 56.5	Southern Iran 27.78 N 54.67 E
	LmV	B	40.8	H = 13 13 21.8 h = 44 km MAG=5.0
	LmH	B	41.3	D = 39.68 Az = 317.1 (USCGS)
14.	eP	A	13 49 54	United Arab Republic 27.08 N 33.28 E
	e	A	49 58.5	H = 13 43 54.8 h = 16 km MAG=4.9
				D = 28.74 Az = 330.7 (USCGS)
				PV:1.6s 24.8nm MPV=4.8

Day	Phase		h m s	Remarks
14.	eP	A	20 10 09	Kurile Islands 46.78 N 152.57 E
				H = 19 58 19.7 h = 61 km MAG=4.5
				D = 77.27 Az = 335.7 (USCGS)
				PV:1.8s 23.6nm MPV=4.8
15.	eP	A	00 59 26	Tyrrhenian Sea 39.63 N 14.82 E
	e	A	59 28.5	H = 00 56 51.7 h = 299 km MAG=4.1
				D = 11.24 Az = 349.5 (USCGS)
15.	+iP	A	17 43 07.5	Off East Coast of Honshu, Japan
	ePP	B	46 13	39.83 N 143.41 E
	ePPP	B	48 00	H = 17 30 55.8 h = 20 km MAG=5.3
	eS	C	53 12	D = 80.49 Az = 331.2 (USCGS)
	LmH	B	18 17.9	PV:1.9s 72.9nm MPV=5.5
	LmV	B	25.4	LmH:18.5s 7.2/um MLH=6.1
				LmV:15s 3.7/um MLV=5.9
15.	ePKIKP	A	18 09 07	New Guinea 6.48 S 142.98 E
				H = 17 50 20.8 h = 31 km MAG=5.3 (USCGS)
				D = 118.7
				PV:1.4s 16.3nm
15.	ePKP	A	20 26(03)	Loyalty Islands 22.21 S 169.71 E
	e	A	26 07	H = 20 06 22.6 h = normal
				D = 146.84 Az = 334.3 (USCGS)
15.	eP	A	22 28 03.5	Java Sea 5.93 S 113.15 E
	epP	A	30 13	H = 22 15 09.6 h = 575 km MAG=5.6
	esP	A	31(20)	D = 101.88 Az = 320.4 (USCGS)
	e	A	31 35	PV:1.2s 20.3nm MPV=5.5
16.	ePKP	A	01 41 43	New Ireland Region 3.54 S 150.97 E
	e	A	41 46	H = 01 22 47.5 h = 39 km MAG=5.7
	e	B	42 32	D = 121.97 Az = 330.7 (USCGS)
	ePP	A	43 13	LmH:23s 13.4/um MLH=6.5
	iPP	B	43 16	LmV:19.5s 4.7/um MLV=6.1
	ePPP	B	45 28	
	eSP	B	53 00	
	eSS	C	59 40	

Day	Phase		h m s	Remarks
cont.				
16.	LmH	B	02 32.7	
	LmV	B	38.0	
16.	eP	A	02 11 36	Dodecanese Islands 35.24 N 27.93 E
				H = 02 07 12.0 h = 56 km MAG=4.5
				D = 19.42 Az = 327.5 (USCGS)
				PV:1.4s 16.3nm MPV=4.8
16.	+eiP	A	04 58 35	Dodecanese Islands 35.25 N 27.94 E
	eP	BC	58 36	H = 04 54 06.3 h = 8 km MAG=4.8
	i	A	58 46	D = 19.42 Az = 327.4 (USCGS)
	eS	C	05 02 08	PV:1.4s 69.7nm MPV=4.7
	LmV	B	07.2	LmV:12s 3.5/um MLV=5.1
	LmH	B	07.3	LmH:11.5s 3.9/um MLH=5.0
16.	eP	A	08 18 54	Red Sea 27.59 N 33.97 E
	e	A	18 58.5	H = 08 12 54.6 h = normal MAG=5.0
				D = 28.62 Az = 329.6 (USCGS)
				PV:1.8s 33.8nm MPV=4.9
16.	ePKIKP	A	12 38 47.5	New Hebrides Islands 13.55 S 166.85 E
	ePP	A	41 36	H = 12 19 40.1 h = 153 km MAG=5.7
	epPP	B	42 21	D = 137.88 Az = 336.6 (USCGS)
				PKIKPV:1.8s 60.9nm
16.	eP	A	22 52 21.5	Kurile Islands 44.39 N 149.45 E
				H = 22 40 22.1 h = normal MAG=4.2
				D = 78.51 Az = 334.1 (USCGS)
16.	iP	A	23 00 03.5	Dodecanese Islands 35.32 N 27.95 E
	Pm	A	00 07	H = 22 55 37.2 h = 25 km MAG=5.2
	eS	C	03 32	D = 19.36 Az = 327.3 (USCGS)
	LmH	B	07.4	PmV:1.7s 352.0nm MPmV=5.3
	LmV	B	08.8	LmH:15s 5.6/um MLH=5.0
				LmV:13s 4.4/um MLV=5.1

Day	Phase		h m s	Remarks
16.	eiP	A	23 25 28.5	Dodecanese Islands 35.34 N 27.77 E
	ei	A	25 34	H = 23 21 04.9 h = 45 km MAG=5.2
	eS	B	28 55	D = 19.26 Az = 327.5 (USCGS)
	LmH	B	32.8	PV:1.2s 89.4nm MPV=4.9
	LmV	B	34.4	LmH:15s 8.6/um MLH=5.2
				LmV:9s 5.8/um MLV=5.4
17.	eiP	A	00 59 01.5	Dodecanese Islands 35.06 N 27.70 E
	iX	A	59 06.5	H = 00 54 35.7 h = 54 km MAG=4.8
	eS	C	01 02 36	D = 19.47 Az = 328.0 (USCGS)
	eS	B	02 40	PV:1.6s 76.9nm MPV=4.7
	LmH	B	07.6	XV:1.4s 130.0nm MXV=5.0
	LmV	B	07.7	LmH:12s 3.5/um MLH=4.9
				LmV:12.5s 3.1/um MLV=5.0
17.	e	A	03 30 00	West Pakistan 30.07 N 69.92 E
				H = 03 21 16.4 h = 7 km MAG=4.5
				D = 47.60 Az = 312.8 (USCGS)
17.	eP	A	05 08 27	Off East Coast of Honshu, Japan
	LmH	B	43.2	39.52 N 143.43 E
	LmV	B	47.8	H = 04 56 15.9 h = 33 km MAG=5.0
				D = 80.77 Az = 331.3 (USCGS)
				PV:1.7s 54.5nm MPV=5.3
				LmH:19s 3.5/um MLH=5.8
				LmV:20s 1.9/um MLV=5.5
17.	eP	A	09 14 46	Southern Italy 41.57 N 13.85 E
	LmH	B	19.3	H = 09 12 28.9 h = 6 km MAG=4.6
	LmV	B	19.3	D = 9.21 Az = 351.1 (USCGS)
				LmH:12s 0.4/um MLH=3.5
				LmV:13s 0.6/um
17.	eP	A	12 43 05	Dodecanese Islands 35.13 N 27.83 E
	e	A	43 07	H = 12 38 35.6 h = normal MAG=4.7
				D = 19.46 Az = 327.8 (USCGS)

Day	Phase		h m s	Remarks
18.	eP	A	08 11 31	Off East Coast of Honshu, Japan
				39.77 N 143.39 E
				H = 07 59 20.3 h = normal MAG=4.5
				D = 80.53 Az = 331.2 (USCGS)
18.	LmH	C	08 46.3	Probably Red Sea (USCGS)
				LmH:18s 0.4/um
18.	eP	A	15 39 17	Northeast of Taiwan 26.19 N 125.41 E
				H = 15 26 54.3 h = 88 km MAG=4.9
				D = 83.82 Az = 324.1 (USCGS)
18.	LmH	B	18 37.5	Probably Gulf of California (USCGS)
	LmV	B	37.5	LmH:17s 0.4/um
				LmV:18s 0.5/um
19.	ePKP	A	06 26 37.5	Fiji Islands 17.68 S 178.71 W
				H = 06 08 02.7 h = 605 km MAG=4.7
				D = 146.09 Az = 348.2 (USCGS)
				PKPV:1.6s 16.5nm
19.	eP	A	08 25 10	North Atlantic Ridge 25.24 N 46.66 W
				H = 08 16 06.5 h = normal MAG=5.0
				D = 50.93 Az = 44.2 (USCGS)
19.	eP	A	08 58 42.5	Southwest of Sumatra 6.22 S 103.92 E
	epP	A	58 55	H = 08 45 16.0 h = 40 km MAG=5.7
	ePP	A	09 02 33	D = 96.22 Az = 320.2 (USCGS)
	eipPP	A	02 47.5	LmV:18s 0.4/um MLV=5.0
	LmV	B	46.9	LmH:18s 0.7/um MLH=5.2
	LmH	B	54.0	
19.	iP	A	19 37 15	Southern Alaska 60.34 N 146.04 W
	eipP	A	37 20	H = 19 26 17.3 h = 21 km MAG=5.1 (USCGS)
	LmV	B	20 11.0	D = 67.8
	LmH	B	11.3	PV:1.1s 30.2nm MPV=5.4
19.	LmH	B	23 01.3	Probably Northeast of Taiwan (USCGS)
	LmV	B	02.5	

Day	Phase		h m s	Remarks
20.	eP	A	16 16 55	North Atlantic Ocean 35.98 N 10.40 W
	e	A	17 02	H = 16 12 01.5 h = 29 km MAG=4.6
	LmH	B	25.7	D = 21.60 Az = 40.4 (USCGS)
	LmV	B	27.3	
21.	eP	A	02 31 45	Guatemala 14.10 N 91.02 W
	+ipP	A	32 02	H = 02 19 07.1 h = 82 km MAG=5.5
	eSKS	C	42 07	D = 87.04 Az = 38.5 (USCGS)
	e	B	42 14	PV:1.3s 26.2nm MPV=5.1
	eSS	C	48 00	pPV:1.7s 39.4nm
	LmH	B	03 10.8	LmH:21s 2.9/um
	LmV	B	13.5	LmV:18.5s 2.4/um
21.	+iP	AB	07 31 45	Kyushu, Japan 32.19 N 131.86 E
	e	B	32 05	H = 07 19 27.5 h = 41 km MAG=6.1
	ePP	B	34 49	D = 82.13 Az = 326.3 (USCGS)
	ePPP	B	36 39	PV(A):2.0s 847.0nm MPV=6.5
	ePPPP	B	38 23	PV(B):9s 4.64/um MPV=6.6
	eiS	B	41 57	LmH:15s 114.0/um MLH=7.4
	ePS	B	42 43	LmV:15s 138.0/um MLV=7.5
	LmH	B	08 12.6	
	LmV	B	13.2	
21.	eP	A	17 23 43	Iceland 61.94 N 26.68 W
	ei	A	23 46	H = 17 18 34.2 h = normal MAG=4.6
	LmV	B	34.5	D = 23.69 Az = 100.8 (USCGS)
	LmH	B	36.1	
21.	eP	A	18 11 07.5	Mid-Indian Rise 14.40 S 66.54 E
				H = 17 58 56.9 h = normal MAG=4.8
				D = 80.56 Az = 328.1 (USCGS)
				PV:1.4s 14.0nm MPV=4.8
21.	eP	A	20 40 09	Aegean Sea 39.47 N 25.20 E
	eiX	A	40 19.5	H = 20 36 43.3 h = normal MAG=4.8
	LmH	B	45.3	D = 40.70 Az = 323.9 (USCGS)
	LmV	A	46.5	XV:1.3s 34.9nm
				LmH:12s 4.4/um MLH=4.8
				LmV:9s 2.1/um

Day	Phase		h m s	Remarks
21.	eP	A	21 01 57.5	Dodecanese Islands 36.38 N 28.58 E
	i	A	02 01	H = 20 57 39.6 h = 36 km MAG=4.4
	i(pP)	A	02 11.5	D = 18.77 Az = 324.7 (USCGS)
	i(sP)	A	02 16.5	PV:1.2s 28.5nm MPV=4.4
21.	eP	A	22 33 09.5	Greenland Sea 74.20 N 9.67 E
	iX	A	33 11	H = 22 27 59.5 h = normal MAG=5.0
	e	B	33 14	D = 23.65 Az = 176.9 (USCGS)
	LmV	B	44.3	XV:1.6s 104.0nm MXV=5.1
	LmH	B	44.4	LmV:16s 0.8/um MLV=4.4
				LmH:18s 0.7/um MLH=4.2
22.	e	A	00 42 54	Probably Guatemala (USCGS)
22.	ePKIKP	A	06 51 14	Easter Island 26.77 S 114.13 W
	ePP	B	53 36	H = 06 31 57.5 h = normal MAG=5.6
	iPKS	B	54 47	D = 132.69 Az = 44.7 (USCGS)
	iSKKS	B	07 00 40	PKIKPV:1.8s 40.6nm
	eSS	C	11 10	LmV:22s 5.8/um
	eSSS	C	16 42	LmH:20.5s 5.1/um MLH=6.2
	eSSSS	C	20.0	
	LmV	B	40.2	
	LmH	B	40.3	
22.	iPKP	A	07 57 08	Tonga Islands 15.36 S 174.11 W
				H = 07 37 51.2 h = 164 km MAG=5.0
				D = 144.51 Az = 353.7 (USCGS)
				PKPV:1.3s 32.8nm
22.	+iP	A	08 23 30.8	Off East Coast of Honshu, Japan
	e	A	23 36	39.80 N 143.00 E
	LmH	B	59.0	H = 08 11 21.6 h = 36 km MAG=5.5
	LmV	B	09 05.0	D = 80.36 Az = 331.0 (USCGS)
				PV:1.8s 155.0nm MPV=5.7
				LmH:18s 6.6/um MLH=6.0
				LmV:14s 4.5/um MLV=6.0

Day	Phase		h m s	Remarks
22.	-iP	A	22 43 55.3	Arabian Sea 12.96 N 58.23 E
	ePP	A	45 56	H = 22 34 38.4 h = 33 km MAG=5.7
	eS	C	51 31	D = 53.26 Az = 324.7 (USCGS)
	eSS	C	55 10	PV:2.0s 179.0nm MPV=5.7
	eSSS	C	56 40	LmV:16s 1.2/um MLV=5.1
	LmV	B	23 10.9	LmH:14s 1.3/um MLH=5.1
	LmH	B	11.4	
23.	eP	A	13 43 16.9	United Arab Republic 27.59 N 33.94 E
				H = 13 37 21.0 h = 28 km MAG=5.0
				D = 28.60 Az = 329.7 (USCGS)
				PV:0.8s 11.5nm MPV=4.8
24.	eP	A	02 30 24	Andreanof Islands, Aleutian Is.
	e	A	30 58	52.78 N 172.51 W
	e	A	31 36.5	H = 02 18 44.3 h = 135 km MAG=5.2 (USCGS)
				D = 76.8
24.	ePKIKP	A	07 45 37	Fiji Islands 21.20 S 176.97 W
	+iPKHKP	A	45 42.7	H = 07 26 20.4 h = 250 km MAG=4.9
				D = 149.85 Az = 349.1 (USCGS)
				PKIKPV:1.4s 23.3nm
				PKHKPV:1.6s 181.0nm
24.	iP	A	14 50 06.8	Dodecanese Islands 36.36 N 28.67 E
	e	A	50 17	H = 14 45 48.0 h = 48 km MAG=4.7
	iS	B	53 40	D = 18.83 Az = 324.6 (USCGS)
	LmH	B	56.7	PV:1.5s 80.4nm MPV=4.7
	LmV	B	15 00.1	LmH:15s 1.7/um MLH=4.5
				LmV:11s 0.6/um MLV=4.4
25.	ePKHKP	A	01 51 13	South of Fiji Islands 22.21 S 179.55 W
	ePKP2	A	51 22	H = 01 32 22.9 h = 542 km MAG=4.6
				D = 150.30 Az = 345.6 (USCGS)
				PKIKPV:1.0s 11.8nm
25.	eP	A	03 47 01	South of Panama 7.45 N 82.08 W
	eX	A	47 03	H = 03 34 17.7 h = 25 km MAG=5.4
	eS	B	57 40	D = 86.64 Az = 39.5 (USCGS)

Day	Phase		h m s	Remarks
cont.				
25.	LmH	B	04 20.4	XV:1.6s 33.0nm MXV=5.3
	LmV	B	20.4	LmH:22s 3.7/um MLH=5.8
				LmV:22s 1.7/um MLV=5.4
25.	-eP	A	07 45 10.5	West Pakistan 30.83 N 70.33 E
	LmH	B	08 09.0	H = 07 36 36.2 h = 23 km MAG=4.9
	LmV	B	09.7	D = 47.34 Az = 312.3 (USCGS)
				PV:1.5s 37.7nm MPV=5.3
				LmV:16s 0.3/um MLV=4.4
25.	eP	A	09 25 03	Alaska Peninsula 56.64 N 156.70 W
	epP	A	25 17.5	H = 09 13 40.6 h = 64 km MAG=4.6
				D = 72.65 Az = 7.8 (USCGS)
				PV:1.0s 19.7nm MPV=5.0
25.	ePg	A	10 05 24	Böhmischbruck, explosion
	eSg	A	05 39	49°34.11'N 12°21.36'E
				H = 10 05 01.19 yield 3.5 to (München, ASFA)
				D = ca. 1.1
25.	eP	A	10 40 36.5	Costa Rica 8.05 N 83.16 W
				H = 10 27 55.8 h = 53 km MAG=4.5
				D = 86.86 Az = 39.5 (USCGS)
25.	ePKP2	A	13 36 16	South of Fiji Islands 24.89 S 179.77 E
				H = 13 16 58.9 h = 459 km MAG=4.7 (USCGS)
				D = 151.8
25.	eP	A	21 47 32	Off East Coast of Honshu, Japan
	LmH	B	22 27.6	39.72 N 143.18 E
	LmV	B	29.0	H = 21 35 23.8 h = 50 km MAG=4.4
				D = 80.50 Az = 331.1 (USCGS)
26.	eP	B	06 17 12	Near Coast of Central Chile
	e	A	17 38.5	30.58 S 71.37 W
	e	A	17 43	H = 05 58 49.0 h = 23 km MAG=5.6
	e	A	17 55	D = 108.86 Az = 41.9 (USCGS)
	ePP	A	21 40	LmH:20.5s 13.9/um MLH=6.5

Day	Phase		h m s	Remarks
cont.				
26.	e	B	06 27 16	LmV:18s 14.1/um MLV=6.6
	ePS	B	31 12	
	LmH	B	07 04.0	
	LmV	B	08.0	
26.	eP	A	08 29 30	Dodecanese Islands 36.66 N 28.49 E
				H = 08 25 14.5 h = normal MAG=4.3
				D = 18.50 Az = 324.4 (USCGS)
26.	eP	A	22 23 01	Fox Islands, Aleutian Is.
				52.73 N 168.67 W
				H = 22 11 09.9 h = 31 km MAG=4.3
				D = 77.60 Az = 359.8 (USCGS)
				PV:1.1s 10.1nm MPV=4.9
27.	ePP	A	01 55 22	Northern Celebes 0.86 N 120.05 E
	e	A	55 32.5	H = 01 37 14.5 h = 12 km MAG=5.4 (USCGS)
	eSKS	C	02 01 40	D = 100.8
	ePS	C	03 10	LmV:20s 0.5/um MLV=5.0
	eSS	C	09.7	LmH:18s 0.4/um MLH=5.0
	LmV	B	44.9	
	LmH	B	46.0	
27.	+iP	A	11 02 41	Dodecanese Islands 36.46 N 28.35 E
	e	A	02 52.5	H = 10 58 22.0 h = 15 km MAG=4.7
	eS	C	06 06	D = 18.60 Az = 324.9 (USCGS)
	LmH	B	10.7	PV:1.5s 106.0nm MPV=4.8
	LmV	B	10.8	LmH:11s 1.8/um MLH=4.6
				LmV:12s 2.0/um MLV=4.8
27.	LmH	B	14 01.4	Probably South Sandwich Islands Region
	LmV	B	01.9	(USCGS)
				LmH:20s 0.5/um
				LmV:20s 0.6/um
28.	eiPKIKP	A	07 44 42.5	South of Fiji Islands 22.36 S 177.66 W
	e	B	44 44	H = 07 25 30.0 h = 296 km MAG=5.9
	eiPKHKP	A	44 48	D = 150.85 Az = 347.8 (USCGS)

Day	Phase		h m s	Remarks
cont.				
28.	iPKP2	A	07 44 56.4	PKIKPV:1.1s 24.2nm PKP2V:1.2s 28.4nm
28.	-eP	A	13 01 01.5	Burma-India Border Region
	+iP	A	01 02	25.91 N 95.27 E
	e	A	01 20	H = 12 50 15.2 h = 50 km MAG=5.2
	e(PP)	A	02 19.5	D = 66.52 Az = 316.4 (USCGS) PV:1.3s 43.7nm MPV=5.5
28.	ePKP2	A	18 18 19.5	Kermadec Islands Region 30.27 S 177.84 W H = 17 57 51.4 h = 49 km MAG=4.9 (USCGS) D = 158.5
28.	ePKIKP	A	19 58 08	Solomon Islands 7.89 S 158.78 E
	epPKIKP	A	58 24.5	H = 19 39 05.5 h = 77 km MAG=5.7
	ePP	A	20 00(19)	D = 129.43 Az = 333.5
	eipPP	A	00 35	PKIKPV:1.7s 42.4nm
	LmH	B	59.6	LmH:20s 0.5/um
	LmV	B	59.6	LmV:20s 0.5/um
28.	+iP	A	23 33 22	Southern California 33.35 N 116.35 W
	i	A	33 51.5	H = 23 20 42.9 h = 20 km MAG=5.7
	eS	C	43 52	D = 84.60 Az = 30.3 (USCGS)
	LmH	B	00 09.5	H = 23 20 48 M = 5.4 33.4 N 117.3 W
	LmV	B	12.6	(AN USSR) D = 85.0 PV:1.9s 174.2nm MPV=6.0 LmH:20s 4.6/um MLH=5.8 LmV:17s 2.8/um MLV=5.7
29.	+iP	A	04 44 43.5	Southern Iran 29.57 N 51.48 E
	eS	C	50 19	H = 04 37 40.7 h = 36 km MAG=5.6
	LmV	B	05 03.1	D = 36.45 Az = 316.6 (USCGS)
	LmH	B	03.6	PV:1.4s 123.0nm MPV=5.5 LmV:20s 1.1/um MLV=4.7 LmH:19s 0.9/um MLH=4.6

Day	Phase		h m s	Remarks
29.	+eP	A	21 30 04.5	Kurile Islands 46.49 N 153.09 E
	e	A	30 10.5	H = 21 18 09.3 h = normal MAG=5.1
	LmH	B	22 06.0	D = 77.68 Az = 336.1 (USCGS)
	LmV	B	07.0	PV:1.6s 49.5nm MPV=5.4 LmH:15.5s 1.4/um MLH=5.4 LmV:18s 1.0/um MLV=5.2
30.	eP	A	17 12 18.5	Southern Nevada 37.09 N 116.01 W H = 17 00 00.0 h = 0 km MAG=5.3 D = 81.25 Az = 30.7 (USCGS) Nevada, underground explosion (UPP) PV:1.3s 26.2nm MPV=5.1
30.	eP	A	20 24 25	Turkey 39.16 N 28.59 E
	ei	A	24 29.5	H = 20 20 31.9 h = 9 km MAG=5.1
	ei	A	24 34	D = 16.58 Az = 319.4 (USCGS)
	eS	C	27 35	LmH:12s 9.0/um MLH=5.2
	LmH	B	30.2	LmV:11s 5.8/um MLV=5.2
	LmV	B	33.5	

Day	Phase		h m s	Remarks
1.	ePKP	A	03 04 41.5	Eastern Island Cordillera
	e	A	04 52.5	49.97 S 114.31 W
				H = 02 45 05.0 h = normal MAG=4.9
				D = 146.10 Az = 67.6 (USCGS)
1.	+iPKHKP	A	03 31 47.5	Tonga Islands 20.96 S 174.58 W
	LmV	B	04 05.5	H = 03 11 58.3 h = normal MAG=5.0
	LmH	B	06.0	D = 149.97 Az = 352.1 (USCGS)
				PKHKPV:1.3s 37.2nm
				LmV:20s 0.9/um
				LmH:20s 1.1/um MLH=5.6
1.	ePKHKP	A	05 25 44	Tonga Islands 21.41 S 174.57 W
				H = 05 05 55.8 h = 32 km MAG=5.0
				D = 150.42 Az = 352.0 (USCGS)
				PKHKPV:1.5s 30.2nm
1.	ePKP	A	13 36 51	Fiji Islands 18.03 S 178.42 W
				H = 13 18 12.2 h = 554 km MAG=4.2
				D = 146.49 Az = 348.4 (USCGS)
1.	eP1	A	18 06 36.5	Dodecanese Islands 35.36 N 27.72 E
	+iP2	A	06 39.5	H = 18 02 14.6 h = 37 km MAG=5.2
	eS	C	10 16	D = 19.22 Az = 327.6 (USCGS)
	LmV	B	15.2	P2V:1.4s 291.0nm MP2V=5.3
	LmH	B	15.3	LmV:12s 2.8/um MLV=4.9
				LmH:12s 3.1/um MLH=4.8
1.	-eiPKP	A	19 24 40	Tonga Islands 16.80 S 174.67 W
	-ipPKP	B	25 32	H = 19 05 24.7 h = 205 km MAG=6.0
	ePP	B	28 00	D = 145.86 Az = 352.9 (USCGS)
				PKPV:1.6s 1780.0nm
1.	LmV	B	19 32.5	Probably Northern Celebes (USCGS)
	LmH	B	43.5	LmV:12s 0.5/um
				LmH:16s 0.4/um

Day	Phase		h m s	Remarks
1.	eP	AB	20 11 05	Dodecanese Islands 35.32 N 27.64 E
	Pm	A	11 14.5	H = 20 06 40.9 h = 32 km MAG=4.7
	iS	B	14 48	D = 19.22 Az = 327.7 (USCGS)
	LmH	B	18.4	PV(B):8s 0.5/um MPV=4.8
	LmV	B	21.2	PmV(A):1.7s 169.0nm MPV=5.0
				LmH:18.5s 9.6/um MLH=5.2
				LmV:13s 3.4/um MLV=5.0
1.	eP	A	20 48 37.5	Dodecanese Islands 34.97 N 27.51 E
				H = 20 44 15.8 h = normal MAG=4.4 (USCGS)
				D = 19.5
				PV:1.3s 10.9nm MPV=3.9
2.	e	A	18 42 48.5	Crete 34.33 N 26.19 E
	eS	B	46 30	H = 18 38 13.0 h = 21 km MAG=4.3
	LmH	B	52.1	D = 19.47 Az = 331.3 (USCGS)
	LmV	B	52.2	LmH:13s 0.8/um MLH=4.2
				LmV:15s 0.8/um MLV=4.3
2.	eP	A	20 52 14.	Off East Coast of Honshu, Japan
	LmH	B	21 26.5	40.90 N 143.04 E
	LmV	B	31.0	H = 20 40 11.3 h = 54 km MAG=4.7
				D = 79.42 Az = 330.9 (USCGS)
				LmH:19s 0.6/um MLH=5.0
				LmV:18s 0.5/um MLV=5.0
2.	+iP	A	22 57 48	Near East Coast of Honshu, Japan
	e	A	58 04.5	40.14 N 142.29 E
				H = 22 45 44.0 h = 60 km MAG=4.8
				D = 79.80 Az = 330.6 (USCGS)
				PV:0.8s 11.5nm MPV=4.9
3.	eP	A	03 29 58	Dodecanese Islands 35.35 N 27.90 E
				H = 03 25 33.3 h = 45 km MAG=4.4
				D = 19.31 Az = 327.3 (USCGS)
				PV:1.4s 14.0nm MPV=4.0

Day	Phase		h m s	Remarks
3.	ePKHKP	A	13 12 18.5	South of Fiji Islands 23.49 S 179.99 E
	ePKP2	A	12 30.5	H = 12 53 25.5 h = 543 km MAG=4.8
	epPKHKP	A	14 28	D = 151.42 Az = 344.4 (USCGS)
3.	eP	A	20 35 38	Dodecanese Islands 35.24 N 27.81 E
	e	A	35 45	H = 20 31 13.6 h = 44 km MAG=4.6
	e	A	35 58	D = 19.36 Az = 327.6 (USCGS)
	LmH	B	44.4	PV:0.9s 7.8nm MPV=3.9
	LmV	B	44.4	LmH:9s 0.3/um MLH=3.9
				LmV:11s 0.2/um MLV=3.8
4.	eP	A	03 30 06	Afghanistan-USSR Border Region
				36.36 N 71.53 E
				H = 03 22 03.7 h = 126 km MAG=4.6
				D = 44.54 Az = 308.2 (USCGS)
4.	-ePKP	A	07 26 36.5	Fiji Islands 17.65 S 178.86 W
	eX	A	26 39	H = 07 08 01.4 h = 578 km MAG=5.0
	epPKP	A	28 55	D = 146.03 Az = 348.0 (USCGS)
				PXV:1.8s 128.0nm.
4.	ePKP	A	12 56 07	New Hebrides Islands 17.40 S 168.86 E
	ePP	B	59 15	H = 12 36 33.4 h = 11 km MAG=5.5
	e	B	59 50	D = 142.16 Az = 336.3 (USCGS)
	e	B	13 00 48	PKPV:1.6s 30.2nm
	e	B	02 16	LmH:21s 1.9/um MLH=5.8
	LmH	B	14 03.0	LmV:21s 2.2/um
	LmV	B	03.0	
4.	eP	A	13 57 34.5	Southern Sinkiang Prov., China
	eX	A	57 46	41.49 N 86.73 E
	eY	A	57 50	H = 13 48 33.6 h = 32 km MAG=4.7 (USCGS)
				D = 50.8
				XV:1.5s 12.6nm MXV=4.6
				YV:1.2s 16.3nm MYV=4.8
4.	eP	A	17 32 22.5	Northern Celebes 0.01 N 123.31 E
	ePP	A	36 54	H = 17 18 38.8 h = 165 km MAG=5.5
	epPP	A	37 33	D = 103.60 Az = 322.5 (USCGS)
				PV:1.2s 12.2nm MPV=5.7

Day	Phase		h m s	Remarks
4.	ePKP2	A	18 03 29.5	Kermadec Islands 29.17 S 179.15 W
				H = 17 43 38.9 h = 319 km MAG=4.2 (USCGS)
				D = 157.0
				PKP2V:1.1s 8.1nm
5.	ePKHKP	A	02 28 57	West of Macquarie Island
	ePKP2	A	29 10	57.82 S 147.63 E
				H = 02 08 57.2 h = normal MAG=4.9
				D = 153.71 Az = 273.3 (USCGS)
				PKHKPV:1.6s 27.5nm
5.	+eP	A	02 53 57.5	Ethiopia 11.94 N 41.29 E
	e	A	54 23.5	H = 02 45 38.9 h 3 35 km MAG=5.2
	eS	C	03 00 45	D = 45.58 Az = 333.8 (USCGS)
	LmV	B	52.0	PV:1.6s 33.0nm MPV=5.1
	LmH	B	53.0	LmV:20s 0.6/um MLV=4.6
				LmH:20s 0.4/um MLH=4.4
5.	ePKHKP	A	05 37 16	West of Macquarie Island
	eX	A	37 20	58.06 S 148.37 E
	e	A	37 33.5	H = 05 17 16.6 h = normal MAG=4.9
				D = 154.12 Az = 272.3 (USCGS)
				XV:1.3s 8.7nm
5.	+iP1	A	05 39 13.1	North Atlantic Ocean 36.02 N 10.39 W
	iP2	A	39 14.6	H = 05 34 23.6 h = 29 km MAG=5.5
	+eS	B	43 08	D = 21.56 Az = 40.5 (USCGS)
	LmH	B	46.5	P1V:1.4s 251.0nm MP1V=5.4
	LmV	B	49.8	P2V:1.5s 613.0nm MP2V=5.8
				LmH:20s 6.7/um MLH =5.1
				LmV:15.5s 4.0/um MLV =5.1
5.	e	A	14 11 34	Near Coast of Central Chile
	LmV	B	57.9	30.79 S 71.76 W
	LmH	B	58.1	H = 13 52 39.6 h = 38 km MAG=5.3
				D = 109.24 Az = 42.1 (USCGS)
				LmV:18s 2.1/um MLV=5.8
				LmH:19s 2.1/um MLH=5.7

Day	Phase		h m s	Remarks
5.	eP	A	14 23 23	Crete 34.67 N 23.45 E
				H = 14 19 14.6 h = 64 km MAG=4.3
				D = 18.15 Az = 335.2 (USCGS)
5.	ePKP	A	14 34 55	South of Australia 44.22 S 141.45 E
				H = 14 15 16.9 h = 25 km MAG=-
				D = 146.01 Az = 299.0 (USCGS)
5.	eP1	A	21 52 25	Iceland 66.78 N 18.24 W
	iP2	A	52 26	H = 21 47 31.7 h = normal MAG=5.2
	+eiP3	A	52 31	D = 22.05 Az = 122.4 (USCGS)
	+iS	B	56 32	P2V:1.6s 46.7nm MP2V=4.8
	eS	A	56 35	P3V:1.5s 88.0nm MP3V=5.0
	LmH	B	22 01.1	SH:16s 3.8/um MSH =5.6
	LmV	B	02.9	LmH:18s 7.7/um MLH =5.2
				LmV:16s 5.1/um MLV =5.2
6.	eP	A	22 23 44	Dodecanese Islands 35.18 N 27.73 E
	e	A	23 51	H = 22 19 19.0 h = 34 km MAG=4.4
	LmH	B	31.0	D = 19.38 Az = 327.8 (USCGS)
	LmV	B	33.8	PV:1.5s 20.1nm MPV=4.1
				LmH:17s 0.5/um MLH=3.9
				LmV:12s 0.3/um MLV=3.9
7.	eP	A	09 05 58	Samar, Philippine Islands
	ePP	A	09 50	12.06 N 124.60 E
				H = 08 52 50.8 h = 134 km MAG=5.2
				D = 94.77 Az = 324.0 (USCGS)
				PPV:1.7s 30.3nm
7.	ePKP2	A	09 41 35	Kermadec Islands 31.18 S 179.17 W
				H = 09 21 18.5 h = 158 km MAG=4.9 (USCGS)
				D = 158.8
				PKP2V:1.2s 22.4nm
7.	+iP	A	13 57 17.5	Southern Nevada 37.28 N 116.50 W
	ePP	A	14 00 23	H = 13 45 00.0 h = 0 km MAG=5.8
				D = 81.28 Az = 30.4 (USCGS)

Day	Phase		h m s	Remarks
cont. 7.				37°16'58"N 116°30'02"W
				Nevada test site "PURSE" (USAEC)
				PV:1.3s 56.8nm MPV=5.4
7.	ePKIKP	A	22 36 30	New Britain Region 52.39 S 152.72 E
	e(PP)	A	39 30.5	H = 22 17 35.4 h = 54 km MAG=5.1
				D = 124.29 Az = 331.1 (USCGS)
8.	ePKP	A	00 42 32	Loyalty Islands 20.42 S 168.37 E
	e	A	42 38.5	H = 00 22 56.2 h = 63 km MAG=4.3
				D = 144.69 Az = 334.2 (USCGS)
9.	eP	A	07 13 00.5	Greece 38.39 N 20.37 E
	e	A	13 03	H = 07 09 43.6 h = 13 km MAG=4.6
	e	A	13 10	D = 13.74 Az = 335.9 (USCGS)
9.	eP	A	17 11 27	Kurile Islands Region 47.73 N 155.56 E
				H = 16 59 34.0 h = normal (USCGS)
				D = 77.2
10.	e	A	07 27 39	France 45.4 N 6.5 E
	e	A	27 45	H = 07 24 26 (BCIS)
	e	A	27 50	D = 6.3
10.	eP	A	09 33 56	Red Sea 27.50 N 34.18 E
	e	A	34 00	H = 09 27 57.0 h = normal MAG=4.8
	e	A	34 07	D = 28.79 Az = 329.5 (USCGS)
	e	A	34 25	PV:1.4s 21.0nm MPV=4.8
	LmH	B	50.3	
	LmV	B	51.4	
10.	ePKP2	A	12 26 27.5	Kermadec Islands 28.15 S 178.11 W
				H = 12 06 27.3 h = 196 km MAG=4.7
				D = 156.35 Az = 344.4 (USCGS)
				PKP2V:1.4s 18.6nm

Day	Phase		h m s	Remarks
10.	eP	A	13 09 14.5	Kodiak Island 56.36 N 153.63 W
	e	A	09 21	H = 12 57 47.8 h = normal MAG=4.9
				D = 72.66 Az = 9.8 (USCGS)
				PV:1.2s 20.3nm MPV=5.1
10.	eP	A	13 36 08.5	North Atlantic Ocean 36.07 N 10.82 W
	LmH	B	44.0	H = 13 31 15.2 h = normal MAG=4.3 (USCGS)
	LmV	B	46.2	D = 31.8
				PV:1.2s 16.3nm MPV=4.3
10.	iPg	A	15 06 36.5	Explosion, yield 8 to (CLL)
	eSg	A	06 51	51°22.3'N 12°53.5'E
				D = 1.0
10.	eP	A	21 13 17	Albania 41.29 N 20.26 E
	e	A	13 27	H = 21 10 37.1 h = 42 km MAG=4.4
	e	A	14 37	D = 11.11 Az = 330.3 (USCGS)
	LmH	B	17.3	PV:1.4s 14.0nm
	LmV	B	18.2	LmH:7.5s 1.3/um MLH=4.3
11.	eP	A	00 27 45	Arabian Sea 14.34 N 56.75 E
				H = 00 18 41.9 h = 32 km MAG=5.1
				D = 51.31 Az = 324.7 (USCGS)
				PV:2.4s 76.0nm MPV=5.2
11.	eP1	A	00 46 53	Dodecanese Islands 35.24 N 27.81 E
	eP2	A	46 57	H = 00 42 28.8 h = 55 km
	LmV	B	55.6	D = 19.36 Az = 327.6 (USCGS)
	LmH	B	56.5	P2V:1.7s 21.2nm MPV=4.1
11.	ePKP2	A	00 59 40	Kermadec Islands Region 30.35 S 177.85 W
				H = 00 39 11.7 h = 35 km MAG=4.7 (USCGS)
				D = 158.4
11.	eP	A	10 54 33	Kurile Islands 44.97 N 148.58 E
	e	A	54 37.5	H = 10 42 46.6 h = 112 km MAG=4.7
				D = 77.71 Az = 333.6 (USCGS)

Day	Phase		h m s	Remarks
11.	ePKIKP	A	14 36 57.5	Tonga Islands 21.82 S 175.09 W
	ePKHKP	A	37 02.5	H = 14 17 11.9 h = normal MAG=5.1
	ePKP2	A	37 12	D = 150.75 Az = 351.2 (USCGS)
				PKHKPV:1.8s 71.0nm
11.	eP	A	15 36 30.5	Eastern Mediterranean Sea
	LmV	B	50.9	35.48 N 28.72 E
	LmH	B	53.0	H = 15 32 02.1 h = normal
				D = 19.57 Az = 326.0 (USCGS)
				LmH:18s 0.4/um MLH=3.9
11.	eP	A	16 27 35	Dodecanese Islands 35.21 N 27.83 E
				H = 16 23 03.8 h = 29 km MAG=4.1
				D = 19.40 Az = 327.6 (USCGS)
				PV:1.6s 19.2nm MPV=4.1
2.	ePKP	A	07 44 19	Tonga Islands 16.01 S 175.14 W
				H = 07 25 16.5 h = 302 km MAG=4.6
				D = 145.03 Az = 352.5 (USCGS)
12.	e	A	11 05 46	Chiapas, Mexico 16.98 N 94.69 W
				H = 10 52 58.0 h = 92 km MAG=3.7 (USCGS)
				D = 86.8
12.	eP	A	16 40 55	Southern Greece 37.74 N 22.70 E
	epP	A	41 11	H = 16 37 24.6 h = 86 km
				D = 15.13 Az = 332.0 (USCGS)
12.	ePKHKP	A	19 35 13	Tonga Islands 21.68 S 175.67 W
	ePKP2	A	35 24	H = 19 15 48.3 h = 260 km MAG=5.0
				D = 150.53 Az = 350.6 (USCGS)
				PKHKPV:1.8s 30.4nm
13.	eP	A	10 12 27	Tadzhik SSR 39.94 N 70.86 E
				H = 10 04 38.6 h = normal MAG=4.8
				D = 41.98 Az = 305.1 (USCGS)

Day	Phase		h m s	Remarks
13.	+eP	A	14 29 26	Near Coast of Nicaragua 11.47 N 86.36 W
	e	A	29 50	H = 14 16 52.8 h = 79 km MAG=5.6
	e	A	30 00	D = 86.23 Az = 39.2 (USCGS)
	ePP	A	33 08	PV:1.4s 23.3nm MPV=5.0
	eS	B	40 00	LmV:20s 20.9/um
	e(PKPPKS)	A	58 54.5	LmH:19.5s 19.2/um
	e	A	59 11	
	LmV	B	15 04.9	
	LmH	B	05.7	
13.	eiP	A	14 32 00	Near East Coast of Honshu, Japan
				36.40 N 140.49 E
				H = 14 19 44.8 h = 75 km MAG=5.4 (USCGS)
				D = 82.2
				PV:1.1s 28.2nm MPV=5.1
13.	e(PKP)	A	14 48 09	Flores Sea 7.20 S 120.88 E
	e(pPKP)	A	50 15	H = 14 30 19.6 h = 616 km MAG=5.6 (USCGS)
				D = 107.7
13.	eP	A	17 51 57	Turkey 39.13 N 28.51 E
				H = 17 48 02.4 h = 38 km MAG=4.5
				D = 16.57 Az = 319.6 (USCGS)
				PV:1.6s 27.5nm MPV=4.3
14.	eP	A	08 17 04.5	Dodecanese Island 35.23 N 27.73 E
				H = 08 12 38.0 h = 29 km MAG=4.4
				D = 19.33 Az = 327.7 (USCGS)
14.	eP1	A	10 09 39.5	Dodecanese Islands 35.34 N 27.81 E
	+iP2	AB	09 40.5	H = 10 05 15.8 h = 34 km MAG=5.1
	i	A	09 49	D = 19.28 Az = 327.5 (USCGS)
	eS	B	13 12	P1V(A):1.4s 226.0nm MP1V=5.2
	LmH	B	16.9	P2V(B):12s 1.1/um MP2V=5.0
	LmV	B	19.8	LmH:14.5s 4.0/um MLH =4.9
				LmV:14s 3.3/um MLV =5.0

Day	Phase		h m s	Remarks
14.	+iP	AB	19 44 52	Andreanof Islands, Aleutian Is.
	ePP	B	47 54	51.28 N 179.93 W
	ePPP	B	49 45	H = 19 32 54.2 h = 21 km MAG=6.2
	eiS	B	54 40	D = 77.98 Az = 352.5 (USCGS)
	eiSS	B	20 00 10	PV(E):12s 11.5/um MPV=6.9
	LmH	B	23.4	LmH:17.5s 56.2/um MLH=7.0
	LmV	B	28.4	LmV:18s 29.3/um MLV=6.7
14.	eP	A	20 22 38	Andreanof Islands, Aleutian Is.
				51.32 N 179.86 W
				H = 20 10 39.3 h = 15 km MAG=5.3
				D = 77.95 Az = 352.6 (USCGS)
				PV=1.0s 17.7nm MPV=5.2
14.	eP	A	20 46 09.5	Kurile Islands 43.25 N 146.50 E
	e	A	46 18	H = 20 34 09.7 h = normal MAG=5.0
				D = 78.57 Az = 332.6 (USCGS)
				PV:1.6s 27.5nm MPV=5.1
14.	eP	A	24 01 29.5	Turkey 39.16 N 28.35 E
				H = 23 57 34.8 h = 39 km MAG=4.6
				D = 16.46 Az = 319.7 (USCGS)
15.	eP	A	02 33 37	Andreanof Islands, Aleutian Is.
				51.32 N 179.94 W
				H = 02 21 40.6 h = 33 km MAG=4.6
				D = 77.94 Az = 352.5 (USCGS)
15.	eP	A	03 41 32.5	Kurile Islands 46.99 N 152.81 E
				H = 03 29 40.9 h = 37 km MAG=4.5
				D = 77.15 Az = 335.8 (USCGS)
15.	eP	A	12 10 21	Dodecanese Islands 35.37 N 27.83 E
	eS	B	13 52	H = 12 05 55.5 h = 32 km MAG=4.9
	e	B	14 07	D = 19.27 Az = 327.4 (USCGS)
	LmH	B	18.0	PV:1.2s 52.8nm MPV=4.6
	LmV	B	20.3	LmH:14.5s 1.4/um MLH=4.4
				LmV:15s 1.2/um MLV=4.5

Day	Phase		h m s	Remarks
15.	eP	A	13 59 36.5	Dodecanese Islands 35.25 N 27.68 E
				H = 13 55 12.3 h = 52 km MAG=4.5
				D = 19.30 Az = 327.8 (USCGS)
				PV:1.2s 16.3nm MPV=4.1
15.	eP	A	20 48 03.5	Afghanistan 34.61 N 70.90 E
	ei	A	48 16.5	H = 20 39 45.8 h = 22 km MAG=5.6
	e	A	48 32	D = 45.24 Az = 309.6 (USCGS)
	e(PP)	A	49 43	PV:2.0s 154.0nm MPV=5.6
	e(PPP)	A	50 16	
15.	eP1	A	20 54 19	Leeward Islands 16.75 N 61.34 W
	eP2	A	54 24	H = 20 43 33.4 h = 50 km MAG=5.7
	+iP3	A	54 29	D = 66.44 Az = 41.6 (USCGS)
	+eS	B	21 03 04	P3V:1.9s 235.0nm MPV=6.1
	LmH	B	17.5	SH:11s 1.2/um MSH=5.9
	LmV	B	17.9	LmH:22s 3.2/um MLH=5.5
				LmV:21s 3.2/um MLV=5.6
15.	e	A	22 56 05.5	Flores Sea 7.25 S 120.28 E
	e	A	56 22	H = 22 38 23.2 h = 463 km MAG=5.3
				D = 107.39 Az = 320.8 (USCGS)
				PV:1.7s 18.2nm
16.	+iP	A	04 10 46	Eastern Kazakh SSR 49.77 N 78.15 E
	ePn	A	12 18.5	H = 04 02 57.1 h = 0 km MAG=5.3
				D = 41.28 Az = 297.7 (USCGS)
				PV:0.8s 52.0nm MPV=5.3
				Probably underground explosion
16.	eP	A	05 13 45.5	Crete 34.89 N 24.36 E
				H = 05 09 32.7 h = 33 km MAG=4.6
				D = 18.27 Az = 333.4 (USCGS)
16.	-iP	A	07 08 24.5	South of Shikoku, Japan
				32.95 N 136.67 E
				H = 06 56 38.9 h = 405 km MAG=4.6
				D = 83.69 Az = 328.4 (USCGS)
				PV:1.4s 37.2nm MPV=5.0

Day	Phase		h m s	Remarks
16.	ePKIKP	A	07 23 11.5	Kermadec Islands 27.52 S 176.58 W
	ePKP2	A	23 38	H = 07 03 22.2 h = 50 km MAG=5.4
	e	A	23 51	D = 156.08 Az = 347.1 (USCGS)
	ePP	A	27 14	
16.	eP	A	07 30 12	Greece 39.16 N 21.77 E
	i	A	30 21	H = 07 26 58.7 h = 20 km MAG=5.2
	i	A	30 24	D = 13.54 Az = 331.3 (USCGS)
	LmH	B	36.1	PV:1.0s 25.6nm
	LmV	B	36.1	LmH:12.5s 5.4/um MLH=5.2
				LmV:13s 5.9/um MLV=5.3
16.	eP	A	16 31 38	Southern Sumatra 0.53 S 99.42 E
	epP	A	31 53.5	H = 16 18 46.8 h = 50 km MAG=5.1
	e	A	31 59	D = 89.00 Az = 320.5 (USCGS)
				PV:1.8s 33.8nm MPV=5.3
17.	e	A	06 03 51	South Atlantic Ridge 28.33 S 12.87 W
				H = 05 51 30.3 h = normal MAG=4.9
				D = 81.56 Az = 15.5 (USCGS)
18.	e(P)	A	00 34 50	Solomon Islands 9.00 S 158.45 E
	ePP	B	37 05	H = 00 15 31.5 h = 16 km MAG=5.6
				D = 130.27 Az = 332.8 (USCGS)
				PV:1.6s 16.5nm
18.	eiP1	A	08 55 04	Southern Alaska 60.28 N 146.00 W
	eP2	A	55 09	H = 08 44 03.6 h = 6 km MAG=5.4
	eS	B	09 04 05	D = 67.96 Az = 15.2 (USCGS)
	LmV	B	27.8	P1V:1.0s 67.0nm MP1V=5.8
	LmH	B	30.8	P2V:1.3s 101.0nm MP2V=5.9
				LmV:19s 0.7/um MLV =5.0
				LmH:14s 0.6/um MLH =4.9
18.	eP	A	13 42 27	Mascarene Islands 19.53 S 66.01 E
				H = 13 29 55.4 h = normal MAG=5.1
				D = 84.64 Az = 328.7 (USCGS)
				PV:1.4s 18.6nm MPV=5.1

Day	Phase		h m s	Remarks
18.	eP	A	21 08 22	Hokkaido, Japan 41.38 N 142.39 E
	LmH	C	45.9	H = 20 56 22.4 h = 52 km MAG=4.8
	LmV	C	45.9	D = 78.76 Az = 330.6 (USCGS)
19.	ePKHKP	A	05 57 11	Tonga Islands 21.09 S 174.65 W
	ePKP2	A	57 17	H = 05 37 21.9 h = normal MAG=4.8
				D = 150.10 Az = 352.0 (USCGS)
19.	eP	A	18 19 08.5	Turkey 37.79 N 35.10 E
	eS	C	23 10	H = 18 14 24.0 h = 34 km MAG=4.6
	LmH	C	28.6	D = 21.07 Az = 315.1 (USCGS)
				PV:1.6s 22.0nm MPV=4.2
				LmH(C):13s 0.2/um MLH=3.8
20.	e	A	01 21 49	Kermadec Islands Region 30.8 S 177.8 W
				H = 01 01 15.9 h = 9 km MAG=4.9 (USCGS)
				D = 159.0
20.	ePKIKP	A	03 28 14	South Pazific Cordillera
	e	A	28 22.5	54.60 S 130.92 W
				H = 03 08 21.2 h = normal MAG=5.2
				D = 157.10 Az = 84.4 (USCGS)
				PKIKPV:1.4s 16.3nm
20.	e(Sg)	A	11 20 33	Germany 49.1 N 6.8 E
				H = 11 18 37 (BCIS)
				D = 3.5
20.	eP	A	15 11 41	Kurile Islands 43.41 N 147.49 E
	LmH	B	51.3	H = 14 59 38.9 h = 25 km MAG=4.9
				D = 78.75 Az = 333.1 (USCGS)
				PV:1.5s 22.6nm MPV=5.1
				LmH:13.5s 0.4/um MLH=4.9
21.	eP	A	03 10 13	Samar, Philippine Islands
	e	A	10 23	11.75 N 125.76 E
	e	A	10 33	H = 02 56 49.2 h = 26 km MAG=5.2
	ePP	C	14 05	D = 95.68 Az = 324.3 (USCGS)
	e	A	14 15	PV:2.3s 61.0nm MPV=5.7

Day	Phase		h m s	Remarks
cont.				
21.	eSKS	C	03 20 48	LmH:15s 2.2/um MLH=5.8
	eS	C	21 32	LmV:15s 2.5/um MLV=5.8
	eSP	C	22 42	
	LmH	B	57.3	
	LmV	B	57.4	
21.	ePKP	A	10 13 55	New Hebrides Islands 18.91 S 168.99 E
				H = 09 54 48.4 h = 203 km MAG=3.5
				D = 143.59 Az = 335.6 (USCGS)
21.	ePKP	A	15 22 09	Tonga Islands 16.53 S 173.18 W
				H =15 02 29.6 h = 25 km MAG=4.5
				D = 145.75 Az = 354.6 (USCGS)
				PKPV:1.0s 11.8nm
21.	eP	A	15 39 43.5	Hindu Kush 36.42 N 70.17 E
				H = 15 32 00.0 h = 229 km MAG=5.0
				D = 43.64 Az = 308.1 (USCGS)
				PV:1.5s 15.1nm MPV=4.2
21.	ePKIKP	A	17 23 56	New Ireland 4.59 S 153.16 E
				H = 17 05 03.4 h = 65 km MAG=5.1
				D = 123.93 Az = 331.5 (USCGS)
21.	eP	A	21 57 20.5	Kurile Islands 43.98 N 149.59 E
	epP	A	57 33	H = 21 45 19.2 h = 40 km MAG=4.7
				D = 78.92 Az = 334.3 (USCGS)
				PV:1.2s 18.3nm MPV=5.0
22.	eP	A	09 49 00	Off East Coast of Honshu, Japan
	e	A	49 07.5	38.34 N 142.99 E
				H = 09 36 42.8 h = normal MAG=4.5
				D = 81.64 Az = 331.1 (USCGS)
22.	ePKHKP	A	12 40 12	South of Fiji Islands 23.45 S 179.89 W
	ePKP2	A	40 24	H = 12 21 24.1 h = 589 km MAG=4.3
				D = 151.41 Az = 344.6 (USCGS)

Day	Phase		h m s	Remarks
23.	eP	A	00 15 34	North Atlantic Ridge 26.59 N 44.63 W
	e	A	15 40	H = 00 06 51.3 h = normal MAG=4.8
				D = 48.70 Az = 44.8 (USCGS)
23.	-iP	A	13 16 23.2	South of Alaska 53.37 N 160.16 W
	i	B	16 24	H = 13 04 36.7 h = 32 km MAG=5.6
	e	A	16 27	D = 76.13 Az = 5.4 (USCGS)
	ipP	A	16 33	PV:2.0s 205.0nm MPV=5.9
	esP	A	16 37.5	LmV:16s 0.5/um MLV=4.9
	eS	B	26 08	LmH:16s 0.5/um MLH=4.9
	LmV	B	56.3	
	LmH	B	14 01.4	
23.	eP	A	17 20 07	Off W. Coast of Northern Sumatra
				3.68 N 95.68 E
				H = 17 07 42.2 h = 47 km MAG=5.2
				D = 83.40 Az = 320.4 (USCGS)
				PV:1.4s 14.0nm MPV=5.0
24.	eP	A	06 05 07	Egypt 27.4 N 33.9 E
				H = 05 59 11 (An USSR)
				D = 28.8
				PV:2.0s 34.2nm MPV=4.8
24.	ePKP2	A	10 45 34	Kermadec Islands Region 29.62 S 178.90 W
				H = 10 25 40.7 h = 294 km MAG=3.9 (USCGS)
				D = 157.4
24.	eP	A	11 54 18	Turkey 36.94 N 35.42 E
	e	A	54 32.5	H = 11 49 27.0 h = 43 km MAG=4.3
	e	A	54 40	D = 21.85 Az = 316.3 (USCGS)
	LmH	C	12 01.5	LmH:24s 0.3/um MLH=3.6
	LmV	C	03.5	
25.	eP	A	11 38 34	Red Sea 27.62N 33.98 E
	e	A	38 39	H = 11 32 38.6 h = normal MAG=4.8
	e	A	38 48	D = 28.59 Az = 329.6 (USCGS)
				PV:1.5s 25.1nm MPV=4.8

Day	Phase		h m s	Remarks
25.	+eP	A	15 11 11	Fox Islands, Aleutian Is.
				52.13 N 169.91 W
				H = 14 59 16.7 h = normal MAG=4.7
				D = 77.60 Az = 359.0 (USCGS)
				PV:1.6s 27.5nm MPV=5.1
25.	ePKIKP	A	20 38 21	South of Kermadec Islands
	ePKP2	A	39 00	32.04 S 178.85 W
	epPKP2	A	39 19	H = 20 18 30.0 h = 70 km MAG=5.4
				D = 159.85 Az = 340.4 (USCGS)
25.	LmH	C	23 30.0	Probably South Sandwich
	LmV	C	30.0	Islands Region (USCGS)
26.	eP	A	06 07 07.5	Near Coast of Oaxaca, Mexico
	epP	A	07 15	15.84 N 94.41 W
	e	A	07 20	H = 05 54 18.4 h = 34 km MAG=5.1
	LmH	B	47.0	D = 87.71 Az = 37.8 (USCGS)
	LmV	B	51.5	PV:1.3s 17.5nm MPV=5.2
				LmH:18s 0.5/um MLH=5.0
				LmV:18s 0.5/um MLV=5.0
26.	eP	A	15 50 44	Samar, Philippine Islands
	e	A	50 54	11.79 N 125.83 E
	eSKS	C	16 01 16	H = 15 37 16.8 h = 14 km MAG=5.2
	eS	C	02 00	D = 95.69 Az = 324.3 (USCGS)
	ePPS	C	03 23	PV:1.3s 17.5nm MPV=5.4
	eSS	C	08 40	LmH:17s 3.1/um MLH=4.8
	LmH	B	37.9	LmV:16s 2.5/um MLV=4.8
	LmV	B	38.0	
27.	iSg	A	01 42 13.5	Austria 47.9 N 14.3 E
				H = 01 40 29 (ECIS)
				D = 3.2
27.	eP	A	09 41 09	Molucca Sea 0.17 S 124.98 E
				H = 09 27 03.8 h = normal MAG=5.3
				D = 104.76 Az = 322.8 (USCGS)
				PV:1.2s 16.3nm MPV=5.4

Day	Phase		h m s	Remarks
27.	LmV	B	13 22.4	Probably South Sandwich
	LmH	B	24.0	Islands (USCGS)
				LmV:18s 0.8/um
				LmH:18s 0.6/um
27.	eP	A	14 27 19	Southern Nevada 37.08 N 116.00 W
				H = 14 15 00.0 h = 0 km MAG=5.0
				D = 81.25 Az = 30.7 (USCGS)
				37°04'30.4"N 115°59'43.1"W
				Nevada test site "Torrido" (USAEC)
27.	eP	A	16 39 22	Southeastern Alaska 60.40 N 140.72 W
				H = 16 28 25.7 h = 2 km MAG=4.3
				D = 67.08 Az = 18.7 (USCGS)
				PV:1.2s 12.2nm MPV=5.0
27.	ePP	A	16 48 42	Timor 8.8 S 124.1 E
				H = 16 29 30.5 h = 30 km MAG=5.3 (USCGS)
				D = 110.9
27.	eP	A	21 04 33.5	Kurile Islands 44.50 N 148.56 E
				H = 20 52 34.1 h = 18 km MAG=4.6
				D = 78.13 Az = 333.6 (USCGS)
28.	eP	A	03 40 40	Norwegian Sea 73.8 N 10.1 E
	e	A	40 45	H = 03 35 34.7 h = normal MAG=4.5 (USCGS)
				D = 23.3
28.	eP	A	03 54 30	Samar, Philippine Islands 11.8 N 125.8 E
	e	A	54 38	H = 03 41 01.8 h = 6 km MAG=5.3 (USCGS)
	ePP	A	58 20	D = 95.7
	e	A	58 30.5	PPV:1.5s 15.1nm MPPV=5.2
28.	+eP	A	04 02 21	Greenland Sea 73.47 N 8.19 E
	e	A	02 28	H = 03 57 19.4 h = normal MAG=4.9
	LmH	B	11.9	D = 22.96 Az = 174.4 (USCGS)
	LmV	B	11.9	PV:1.3s 48.0nm MPV=4.9
				LmH:16s 0.5/um MLH=4.0
				LmV:16s 0.5/um MLV=4.2

Day	Phase		h m s	Remarks
28.	+eiP	A	13 42 52.5	Peru-Ecuador Border Region
	ei	A	42 55	2.09 S 76.93 W
	ei	A	42 58.5	H = 13 30 08.9 h = 177 km MAG=5.5
	epP	B	43 25	D = 90.67 Az = 39.5 (USCGS)
	ePP	B	46 26	PV:2.2s 153.0nm MPV=5.6
	+iSKS	C	53 12	SH:10s 2.8/um MSH=6.3
	eiS	B	53 32	LmH:21s 1.2/um
	e	B	54 36	LmV:20s 0.6/um
	eSS	C	59 45	
	LmH	B	14 10.6	
	LmV	B	14.7	
29.	ePKP	A	07 37 05	Tonga Islands 14.99 S 173.35 W
				H = 07 17 26.8 h = 33 km MAG=4.9 (USCGS)
				D = 144.2
29.	ePKIKP	A	10 41 24	Fiji Islands 20.34 S 177.71 W
	iPKHKP	A	41 28.5	H = 10 22 38.0 h = 510 km MAG=4.6
	ePKP2	A	41 34	D = 148.87 Az = 348.5 (USCGS)
				PKHKPV:1.6s 44.0nm
29.	ePKIKP	A	11 41 20.5	Fiji Islands 20.22 S 177.75 W
	eiPKHKP	A	41 25	H = 11 22 35.0 h = 510 km MAG=4.5
	ePKP2	A	41 31	D = 148.75 Az = 348.5 (USCGS)
29.	ePKP2	A	16 37 28	Kermadec Islands Region 29.38 S 178.85 W
				H = 16 17 35.1 h = 306 km MAG=4.4 (USCGS)
				D = 157.3
29.	ePKP	A	17 12 20	Tonga Islands 19.89 S 174.69 W
	e	A	12 37	H = 16 52 32.1 h = normal MAG=4.9
				D = 148.91 Az = 352.2 (USCGS)
29.	eP	A	20 38 15	Guatemala 14.72 N 90.60 W
	epP	A	39 06.5	H = 20 25 56.2 h = 218 km MAG=4.8 (USCGS)
				D = 86.3
				pPV:1.5s 10.1nm

Day	Phase		h m s	Remarks
30.	ePKIKP	A	15 34(52)	Fiji Islands 21.09 S 178.84 W
	eX	A	34 55	H = 15 16 10.7 h = 583 km MAG=4.8
	iPKHKP	A	34 57	D = 149.38 Az = 346.9 (USCGS)
	ePKP2	A	35(04)	XV:0.6s 7.7nm
	e	A	35 07	PKHKPV:1.2s 28.5nm
30.	ePKIKP	B	16 15 32	South of Kermadec Islands
	ePKHKP	A	15 46	32.22 S 178.11 W
	epPKHKP	A	15 54	H = 15 55 37.1 h = 34 km MAG=5.2
	eiPKP2	A	16 13	D = 160.23 Az = 341.5 (USCGS)
	epPKP2	A	16 24	
30.	ePKIKP	A	16 42 44	South of Kermadec Islands
	ePKP2	B	43 20	32.33 S 178.09 W
	e	A	43 24	H = 16 22 47.8 h = normal MAG=5.5
	eiPP	A	47 05	D = 160.34 Az = 341.4 (USCGS)
	eSKKS	C	53 55	LmH:18s 3.3/um MLH=6.1
	ePPS	C	17 00 30	LmV:19s 5.2/um
	e	B	02 24	
	LmH	B	18 04.0	
	LmV	B	07.3	
31.	eP	A	11 20 03	Ecuador 1.75 S 77.74 W
	eSKS	C	30 23	H = 11 07 17.1 h = 172 km MAG=5.1 (USCGS)
	eS	C	30 44	D = 91.0
				PV:1.6s 33.0nm MPV=5.1
31.	ePKP	A	22 28 56	Tonga Islands 16.03 S 172.98 W
				H = 22 09 19.5 h = normal MAG=4.5
				D = 145.27 Az = 354.9 (USCGS)
				PKPV:1.6s 24.7nm
31.	ePKP	A	22 38 07.5	New Hebrides Islands 19.27 S 169.13 E
				H = 22 18 52.4 h = 161 km MAG=4.6
				D = 143.96 Az = 335.6 (USCGS)

Day	Phase		h m s	Remarks
31.	eiPKP	A	22 44 10.5	Samoa Islands 15.96 S 172.88 W
	ipPKP	A	44 15	H = 22 24 32.0 h = 15 km MAG=5.2
	e	A	44 20	D = 145.21 Az = 355.0 (USCGS)
	LmV	B	23 50.0	PKPV:1.7s 60.6nm
	LmH	B	50.5	LmV:20s 0.6/um
				LmH:20s 0.6/um MLH=5.3

Day	Phase		h m s	Remarks
1.	ePKIKP	A	00 14 35	Salomon Islands 4.88 S 154.22 E
	epPKIKP	A	16 29	H = 23 56 21.6 h = 403 km MAG=5.5 (USCGS)
				D = 124.6
				PKIKPV:1.4s 25.6nm
1.	eP	A	08 45 59	India-East Pakistan Border Region
				25.76 N 91.76 E
				H = 08 35 22.1 h = 20 km MAG=5.0 (USCGS)
				D = 64.5
				PV:1.2s 16.3nm MPV=5.1
1.	LmH	C	14 48.8	Probably Talaud Islands (USCGS)
	LmV	C	50.0	LmH(C):29s 0.4/um
				LmV(C):29s 0.3/um
1.	LmH	B	19 56.0	Probably Off Coast of Mexico (USCGS)
	LmV	B	56.0	LmH:15s 0.4/um
				LmV:15s 0.5/um
1.	ePKHKP	A	20 13 24.5	Kermadec Islands 31.73 S 178.17 W
	e	A	13 39	H = 19 53 12.4 h = 17 km MAG=5.0
	ePKP2	A	13 49	D = 159.76 Az = 341.8 (USCGS)
1.	e	A	21 45 43	Tonga Islands 15.86 S 173.35 W
				H = 21 26 24.5 h = 253 km MAG=4.1
				D = 145.07 Az = 354.5 (USCGS)
1.	-iPn	A	23 21 30	Austria 47.0 N 14.2 E
	iSn	A	22 17	H = 23 20 29 (BCIS)
	eiSg	A	22 30	D = 4.0
2.	-iPn	A	03 58 30	Austria 47.03 N 14.25 E
	i	A	58 33.5	H = 03 57 30.1 h = 29 km MAG=4.1
	i	A	58 43	D = 4.02 Az = 335.3 (USCGS)
	eSn	A	59 13	
	eiSg	A	59 31	

Day	Phase		h m s	Remarks
2.	eP1	A	09 59 02	Gulf of Alaska 59.45 N 144.67 W
	eiP2	A	59 04	H = 09 47 59.4 h = normal MAG=4.7
	eSKS	B	10 08 07	D = 68.58 Az = 16.0 (USCGS)
	LmH	B	34.5	P2V:1.3s 26.2nm MPV=5.3
	LmV	B	35.8	LmH:15s 1.0/um MLH=5.2
				LmV:14s 1.2/um MLV=5.3
3.	eP	A	00 37 47	Hokkaido, Japan 42.83 N 145.48 E
				H = 00 25 52.2 h = 73 km MAG=4.3
				D = 78.60 Az = 332.1 (USCGS)
3.	eP	A	19 06 27	Kurile Islands 49.10 N 156.21 E
				H = 18 54 41.7 h = 41 km MAG=4.9
				D = 76.11 Az = 337.7 (USCGS)
3.	eP	A	22 05 16	Off East Coast of Honshu, Japan
	e	A	08 20	40.16 N 143.66 E
	LmH	B	46.0	H = 21 53 06.5 h = normal MAG=4.8
	LmV	B	48.4	D = 80.29 Az = 331.3 (USCGS)
				LmH:15s 0.5/um MLH=5.0
				LmV:13s 0.4/um MLV=5.0
4.	eP	A	00 48 23	Kirgiz-Sinkiang Border Region
	e	A	48 29	41.37 N 79.46 E
				H = 00 39 57.5 h = normal MAG=4.9
				D = 46.49 Az = 305.6 (USCGS)
				PV:1.3s 17.5nm MPV=5.0
4.	eiPKP	A	14 36 00	Samoa Islands Region 16.27 S 172.71 W
	e	A	36 11.5	H = 14 16 26.0 h = 43 km MAG=4.9
				D = 145.54 Az = 355.1 (USCGS)
				PKPV:1.4s 34.8nm
4.	eiPKP	A	16 41 06	Tonga Islands 16.16 S 173.02 W
	e	A	41 12	H = 16 21 31.4 h = 42 km MAG=4.9
	e	A	41 18	D = 145.40 Az = 354.8 (USCGS)
	e	A	41 45	PKPV:1.8s 54.0nm

Day	Phase		h m s	Remarks
4.	ePKIKP	A	16 59 45.5	Banda Sea 6.97 S 129.91 E
				H = 16 41 16.8 h = 93 km MAG=5.1
				D = 113.11 Az = 322.4 (USCGS)
4.	eiP	A	20 45 10.5	North Atlantic Ridge 11.90 N 43.80 W
				H = 20 35 10.1 h = normal MAG=4.9
				D = 59.23 Az = 37.6 (USCGS)
				PV:1.4s 27.9nm MPV=5.1
5.	ePKP	A	00 42 22.5	Samoa Islands 16.21 S 172.89 W
				H = 00 22 45.9 h = normal MAG=4.8
				D = 145.46 Az = 354.9 (USCGS)
				PKPV:1.3s 30.6nm
5.	eP	A	10 58 06	Northern Sumatra 4.90 N 96.31 E
	e	A	58 11	H = 10 45 43.6 h = normal MAG=5.3
	e	A	58 36	D = 82.87 Az = 320.3 (USCGS)
	e	B	11 34 15	LmH:18s 0.3/um MLH=4.8
	LmH	B	41.0	LmV:18s 0.3/um MLV=4.8
	LmV	B	41.0	
5.	e	A	13 38 30	Denmark, near Ärhus 56.2 N 10.3 E
				H = 13 34 36 (UPP)
				D = 5.6
5.	ePP	A	17 38 35	Halmahera 1.89 N 127.42 E
				H = 17 20 16.4 h = 97 km MAG=5.2 (USCGS)
				D = 104.7
				PPV:1.7s 24.3nm
5.	eP	A	20 49 53.5	North Atlantic Ridge 10.72 N 41.02 W
	eS	B	58 00	H = 20 39 58.9 h = normal MAG=5.2
	LmH	B	21 15.0	D = 58.52 Az = 36.4 (USCGS)
	LmV	B	15.0	PV:1.8s 47.3nm MPV=5.2
				LmH:16s 1.1/um MLH=5.1
				LmV:16s 1.3/um MLV=5.2

Day	Phase		h m s	Remarks
6.	eP	A	04 30 41	Kodiak Island 56.64 N 152.45 W
	e	A	30 47	H = 04 19 15.2 h = 16 km MAG=4.8
	e	A	30 51	D = 72.27 Az = 10.6 (USCGS)
				PV:1.3s 35.0nm MPV=5.3
6.	ePg	A	05 28 23	Germany 48°17'N 9°05'E
	e	A	28 54	H = 05 27 23 (BCIS)
	eiSg	A	28 55	D = 2.9
6.	eP	A	07 11 16	Sakhalin Island 46.11 N 143.06 E
				H = 07 00 08.6 h = 326 km MAG=4.6
				D = 74.89 Az = 330.4 (USCGS)
				PV:1.4s 14.0nm MPV=4.6
6.	LmV	B	17 10.3	Probably Off Coast of Central America
	LmH	B	10.5	(USCGS)
				LmV:18s 0.3/um
				LmH:18s 0.2/um
6.	ePP	A	22 43 19	Northern Chile 22.55 S 68.42 W
				H = 22 25 37.3 h = 125 km MAG=5.0 (USCGS)
				D = 101.1
7.	ePKP2	A	05 44 55	East of North Island, N.Z.
				35.43 S 179.86 W
				H = 05 24 11.0 h = 46 km MAG=4.7 (USCGS)
				D = 162.7
7.	eP	A	15 34 30	Greece 38.04 N 20.13 E
	e	A	34 41	H = 15 31 12.5 h = 39 km MAG=4.6
	eS	A	36 58	D = 13.98 Az = 337.0 (USCGS)
	LmH	C	40.2	PV:1.0s 21.7nm
	LmV	C	41.3	LmH(C):13s 3.3/um MLH=4.6
				LmV(C):13s 2.5/um
7.	+iP	A	22 59 06.8	Fox Islands, Aleutian Islands
	e	A	59 24.5	52.49 N 169.06 W
	e	A	23 01 23	H = 22 47 15.4 h = 42 km MAG=5.2

Day	Phase		h m s	Remarks
cont.				
7.	LmH	C	23 34.0	D = 77.24 Az = 359.6 (USCGS)
	LmV	C	40.5	PV:1.2s 69.0nm MPV=5.7
				LmH(C):19s 0.2/um MLH=5.6
				LmV(C):20s 0.23/um MLV=5.5
8.	+iP1	A	15 00 56.5	Near East Coast of Kamchatka
	iP2	A	00 57	53.30 N 159.72 E
	e	A	01 14	H = 14 49 31.6 h = 60 km MAG=5.4
				D = 73.00 Az = 339.4 (USCGS)
				P1V:1.0s 35.4nm MP1V=5.5
				P2V:1.2s 77.1nm MP2V=5.7
				LmH(C):26s 0.5/um
				LmV(C):24s 0.4/um
8.	eP	A	17 02 39	Lake Tanganyika Region 6.11 S 30.80 E
				H = 16 52 39.8 h = normal MAG=4.7
				D = 58.91 Az = 345.9 (USCGS)
				PV:1.3s 13.1nm MPV=4.8
8.	ePKIKP	A	21 59 15	South of Fiji Islands 25.30 S 179.57 W
	ePKHKP	A	59 24	H = 21 40 13.4 h = 412 km MAG=5.0
	ePKP2	A	59 38	D = 153.26 Az = 344.1 (USCGS)
	epPKP	A	22 01 10	
9.	eP	A	02 07 25	Taiwan 23.74 N 120.89 E
	e	A	07 31	H = 01 55 00.4 h = 46 km MAG=5.0
	LmH	C	44.9	D = 83.33 Az = 322.8 (USCGS)
	LmV	C	50.0	PV:1.3s 10.9nm MPV=4.9
				LmH(C):15s 0.3/um MLH=4.8
				LmV(C):15s 0.2/um MLV=4.6
9.	ePKP	A	07 10 03	Near North Coast of New Guinea
	ePP	A	11 14	3.24 S 142.89 E
				H = 06 51 16.1 h = 17 km MAG=5.2
				D = 117.56 Az = 327.3 (USCGS)
9.	LmH	B	08 04.5	Probably Near North Coast of New Guinea
	LmV	B	05.0	LmH:20s 0.7/um
				LmV:18s 0.8/um

Day	Phase		h m s	Remarks
9.	eP	A	09 45 52	Ascension Island 7.03 S 12.69 W
	ei	A	45 58	H = 09 35 38.2 h = normal MAG=4.9
	e	A	48 12	D = 61.18 Az = 17.4 (USCGS)
				PV:1.8s 30.4nm MPV=5.2
9.	e	A	19 01 18	Northern Sinkiang Prov. China
				41.98 N 84.63 E
				H = 18 52 26.3 h = 36 km MAG=4.7
				D = 49.27 Az = 306.5 (USCGS)
9.	ePKIKP	A	22 12 49	Tonga Islands 23.48 S 174.98 W
	eX	A	12 50.5	H = 21 53 01.8 h = normal MAG=5.5
	iPKHKP	A	12 55.5	D = 152.40 Az = 350.9 (USCGS)
	e	A	13 13	XV:3.0s 145.0nm
	ePP	C	16 33	LmH:20s 1.0/um MLH=5.1
	eSKSP	C	26 55	LmV:20s 1.1/um
	LmH	B	23 24.4	
	LmV	B	24.6	
9.	eiP	A	23 21 41.5	Kurile Islands 44.03 N 148.87 E
	e	A	21 57	H = 23 09 43.6 h = 50 km MAG=5.1
	e	A	22 06.5	D = 78.65 Az = 333.8 (USCGS)
				PV:1.1s 28.2nm MPV=5.3
10.	LmH	B	18 12.8	Probably Mindoro, Philippine Islands
	LmV	B	12.8	(USCGS)
				LmH:17s 0.7/um
				LmV:17s 0.9/um
10.	+eP	A	23 00 00.5	Hindu Kush Region 36.41 N 70.74 E
	e	A	00 43	H = 22 52 12.1 h = 203 km MAG=5.4
	eipP	A	00 46	D = 44.00 Az = 308.1 (USCGS)
	esP	A	01 09	PV:1.6s 60.5nm MPV=4.8
	e	A	03 05	LmH:14s 0.7/um
	e	A	05 15	LmV:12s 0.5/um
	eS	C	06 20	
	esS	C	07 32	
	eSS	C	09.5	
	e	C	09 50	

Day	Phase		h m s	Remarks
cont.				
10.	LmH	B	23 44.4	
	LmV	B	48.3	
10.	eiP	A	23 38 40.6	Hindu Kush 36.33 N 70.45 E
	e	A	39 07	H = 23 30 53.7 h = 213 km MAG=5.2
	e	A	39 21	D = 43.87 Az = 308.2 (USCGS)
	esP	B	39 48	PV:1.4s 69.7nm MPV=4.9
	e	B	42 32	
11.	-iP	A	01 09 15	Gulf of Alaska 59.60 N 144.76 W
	ePP	B	11 48	H = 00 58 10.1 h = 5 km MAG=5.3
	eS	B	18 18	D = 68.46 Az = 15.9 (USCGS)
	eSKS	B	19 18	PV:1.0s 55.0nm MPV=5.7
	LmH	B	44.5	LmH:15s 0.8/um MLH=5.1
	LmV	B	46.0	LmV:16s 1.1/um MLH=5.2
11.	+eP	A	01 16 04.5	Gulf of Alaska 59.59 N 144.76 W
	e	A	16 09	H = 01 05 01.3 h = 12 km MAG=4.9
	e	A	16 11	D = 68.46 Az = 15.9 (USCGS)
	e	A	16 13	
11.	eP	A	05 01 03.5	Northern Sumatra 1.11 N 98.83 E
				H = 04 48 20.4 h = 53 km MAG=5.3
				D = 87.38 Az = 320.5 (USCGS)
				PV:1.3s 17.5nm MPV=5.2
11.	eP	A	07 00 52.5	North of Ascension Island
				2.46 S 12.24 W
				H = 06 51 10.9 h = normal MAG=5.0
				D = 56.71 Az = 17.9 (USCGS)
				PV:2.0s 29.9nm MPV=5.0
11.	+eP	A	15 23 23	Bonin Islands 27.38 N 139.91 E
	ePP	A	27 03	H = 15 11 17.4 h = 500 km MAG=4.8
	e	A	27 06	D = 89.89 Az = 330.0 (USCGS)
				PV:1.2s 32.6nm MPV=5.1

Day	Phase		h m s	Remarks
11.	ePKP	A	23 31 50	Fiji Islands 17.79 S 179.92 W
				H = 23 13 17.7 h = 609 km MAG=4.5
				D = 145.95 Az = 346.9 (USCGS)
				PKPV:1.5s 15.1nm
11.	ePKHKP	A	24 04 43	Tonga Islands 20.48 S 174.71 W
	eiPKP2	A	04 50.9	H = 23 44 57.9 h = normal MAG=4.6
	e	A	05 01.5	D = 149.48 Az = 352.1 (USCGS)
12.	+eP	A	07 53 33	Off East Coast of Honshu, Japan
	ei	A	53 42.5	40.26 N 143.68 E
	i	A	53 49.5	H = 07 41 25.1 h = normal MAG=5.1
	e	A	53 54	D = 80.21 Az = 331.3 (USCGS)
	ePP	A	56 25	PV:1.8s 67.5nm MPV=5.3
	e	A	56 41	LmH:14s 3.4/um MLH=5.8
	eS	B	08 03 35	LmV:13s 3.5/um MLV=5.9
	LmH	B	32.7	
	LmV	B	36.5	
12.	e	A	09 58 05	Ionian Islands (UPP)
12.	+iP	AB	15 17 51.5	Crete 34.41 N 25.06 E
	iS	B	21 24	H = 15 13 31.1 h = 25 km MAG=5.8
	i	B	21 35	D = 18.97 Az = 332.9 (USCGS)
	LmH	B	26.5	PV(A):1.2s 712.0nm MPV=5.8
	LmV	B	26.6	PV(B):10s 10.7/um MPV=6.0
				LmH:13s 59.3/um MLH=6.1
				LmV:14s 75.1/um MLV=6.3
12.	eP	A	18 04 50	Crete 34.21 N 25.23 E
				H = 18 00 29.6 h = 56 km MAG=4.5
				D = 19.20 Az = 332.9 (USCGS)
2.	eP	A	19 11 36.5	Taiwan 24.01 N 122.39 E
	LmV	B	53.3	H = 18 59 08.1 h = normal MAG=5.3

Day	Phase		h m s	Remarks
cont.				
12.	LmH	B	19 54.3	D = 83.94 Az = 323.2 (USCGS) LmV:15s 2.1/um MLV=5.7 LmH:18s 2.1/um MLH=5.6
13.	eP	A	01 27 34.5	Crete 34.3 N 25.1 E
	LmH	B	36.2	H = 01 23 13.8 h = 38 km MAG=4.4 (USCGS)
	LmV	B	36.2	D = 19.1 LmH:14s 0.4/um MLH=3.9 LmV:12s 0.6/um MLV=4.2
13.	+iP	AB	09 00 09	Kurile Islands 49.44 N 155.50 E
	eSS	B	09 40	H = 08 48 29.5 h = 64 km MAG=5.9
	LmH	B	35.4	D = 75.61 Az = 337.2 (USCGS)
	LmV	B	38.8	PV(A):1.4s 232.0nm MPV=6.1 PV(B):8s 2.3/um MPV=6.3 LmH:23s 26.2/um MLH=6.5 LmV:23s 23.2/um MLV=6.5
13.	e(Pg)	A	14 45 34	Adelebsen, explosion
	e(Sg)	A	45 50	51°36.55'N 09°44.67'E H = 14 45 00.93 yield 6.1 to (Hannover) D = 1.5
13.	ePKHKP	A	18 53 13	Fiji Islands 20.67 S 278.57 W
	ePKP2	A	53 19.5	H = 18 34 31.2 h = 600 km MAG=4.3 D = 149.03 Az = 347.4 (USCGS)
14.	eP	A	00 35 06.5	Andreanof Islands, Aleutian Is.
	epP	A	35 20	51.33 N 179.72 W H = 00 23 11.4 h = 38 km MAG=4.9 D = 77.95 Az = 352.7 (USCGS)
14.	eP	A	01 03 44	Crete 34.19 N 24.96 E H = 00 59 22.4 h = normal MAG=4.0 (USCGS) D = 19.5

Day	Phase		h m s	Remarks
14.	eP	A	03 38 48	Tibet 31.70 N 94.65 E
	e	A	38 52	H = 03 28 29.6 h = normal MAG=5.3
	e	A	39 30	D = 62.03 Az = 314.3 (USCGS)
14.	eiPKIKP	A	03 42 01.5	Salomon Islands 7.91 S 158.98 E
	epPKIKP	A	42 16	H = 03 22 56.8 h = 62 km MAG=6.0
	e	A	42 22	D = 129.54 Az = 333.6 (USCGS)
	ePP	A	44 11	LmH:22s 1.7/um
	LmH	B	04 39.3	LmV:22s 1.5/um
	LmV	B	39.3	
14.	+eP	AB	13 51 48	Crete 34.32 N 25.08 E
	e	A	52 07	H = 13 47 24.2 h = 9 km MAG=5.0
	eS	B	55 17	D = 19.04 Az = 333.0 (USCGS)
	e	B	55 24	PV(A):0.9s 109.0nm MPV=5.1
	e	B	55 34	PV(B):6s 0.37/um MPV=4.8
	e	A	57 17	LmH:14s 2.6/um MLH=4.7
	e	B	58 22	LmV:15s 2.9/um MLV=4.9
	eScP	A	59 46	
	LmH	B	14 00.5	
	LmV	B	00.5	
14.	eP	A	14 37 17	Crete 34.33 N 25.13 E
	e	A	37 30	H = 14 32 56.3 h = 36 km MAG=4.4
				D = 19.06 Az = 332.9 (USCGS)
14.	eP	A	17 50 13	Turkey-USSR Border Region
	e	A	50 30	41.37 N 43.19 E
	e	A	50 40	H = 17 45 01.8 h = 26 km MAG=4.7
	e	A	50 54	D = 23.65 Az = 303.8 (USCGS)
	e	C	54 36	LmH(C):18s 0.4/um MLH=3.9
	LmH	C	18 00.0	LmV(C):16s 0.3/um MLV=4.0
	LmV	C	01.2	
15.	eP	A	06 03 04	Crete 34.31 N 25.17 E
	LmV	B	11.7	H = 05 58 41.8 h = 24 km MAG=4.5
				D = 19.09 Az = 332.9 (USCGS)
				PV:0.8s 19.2nm MPV=4.4

Day	Phase		h m s	Remarks
15.	eP	A	17 09 48	Southern Sumatra 4.67 S 102.20 E
	e	A	10 02	H = 16 56 32.0 h = 38 km MAG=5.3
	ePP	A	13 32	D = 93.95 Az = 320.3 (USCGS)
	LmV	C	58.8	LmV(C):21s 0.4/um MLV=4.8
15.	eP	A	22 06 41	Gulf of Alaska 59.45 N 145.21 W
	e	A	06 48	H = 21 55 39.2 h = 32 km MAG=4.0
	e	A	06 53	D = 68.65 Az = 15.6 (USCGS)
16.	e	A	15 18 50	Greece 38.0 N 20.3 E
				H = 15 15 26 h = normal (BCIS)
				D = 14.1
16.	-eP	A	16 09 40	Greece 38.24 N 20.15 E
	e	A	09 54	H = 16 06 25.5 h = 42 km MAG=4.5
	e	A	10 08	D = 13.81 Az = 336.7 (USCGS)
	e	A	13 18	PV:2.0s 34.1nm
	LmH	B	15.4	LmH:10.5s 3.1/um MLH=4.7
	LmV	B	16.3	LmV:11s 2.9/um
17.	eP	A	05 22 00	Greece 38.48 N 20.20 E
				H = 05 18 46.5 h = normal MAG=4.5
				D = 13.61 Az = 336.2 (USCGS)
				PV:2.0s 25.6nm
17.	+eP	AB	19 39 49.5	Mariana Islands 18.98 N 145.49 E
	epP	A	40 40	H = 19 26 28.9 h = 206 km MAG=5.8
	ePP	A	43 56	D = 99.69 Az = 332.2 (USCGS)
	ipPP	B	44 39	PV(A):3s 198.0nm MPV=6.1
	e	A	44 41	PV(B):9s 0.6/um MPV=6.1
	eisP	B	44 52	PPV(A):2.0s 19.1nm
	ePPP	B	46 20	PPV(B):10s 1.1/um
	ei	B	50 04	PKKP(A):1.6s 38.4nm
	e	B	51 38	LmH:16s 10.4/um
	eSP	C	52 26	LmV:16s 6.3/um
	e	A	52 28	
	ei(PPS)	C	53 40	
	ePKKP	A	56 10.5	
	LmH	B	20 23.9	
	LmV	B	30.8	

Day	Phase		h m s	Remarks
17.	eP	A	23 29 59	Eastern Caucasus 43.19 N 45.28 E
	eS	B	34 20	H = 23 24 41.7 h = 6 km MAG=5.1
	LmH	B	40.1	D = 24.01 Az = 299.9 (USCGS)
	LmV	B	41.8	PV:1.9s 90.9nm MPV=5.0
				LmH:16s 4.4/um MLH=5.0
				LmV:14s 3.5/um MLV=5.1
17.	ePKIKP	A	24 18 07.	Maquarie Islands 52.57 S 159.72 E
	ePKP2	B	19 41	H = 23 58 10.1 h = normal MAG=6.1
	i	B	20 00	D = 160.18 Az = 277.2 (USCGS)
	ePP	B	22 32	PKIKPV:2.5s 92.3nm
	e(SKSP)	B	33 00	LmH:21s 10.8/um MLH=6.6
	ePPS	B	35 55	LmV:21s 17.2/um
	eSS	B	42 40	
	eSSS	B	48 36	
	eSSSS	B	53 15	
	LmH	B	25 40.4	
	LmV	B	40.4	
18.	iP1	A	01 49 47.5	Gulf of Alaska 59.54 N 145.02 W
	iP2	A	49 50	H = 01 38 46.4 h = normal MAG=5.2
				D = 68.54 Az = 15.7 (USCGS)
				P2V:1.4s 88.2nm MPV=5.8
18.	eP	A	17 22 43.5	Carlsberg Ridge 1.63 N 66.72 E
				H = 17 11 48.0 h = 23 km MAG=5.0
				D = 67.30 Az = 325.5 (USCGS)
18.	ePP	A	21 01 53	Molucca Passage 0.5 N 126.1 E
				H = 20 43 19.2 h = 5 km MAG=5.3 (USCGS)
				D = 104.9
18.	+eP	A	23 56 04.5	Fox Islands, Aleutian Islands
	e	A	56 16	52.63 N 167.89 W
	eS	B	24 05 50	H = 23 44 11.2 h = 18 km MAG=5.4
	LmH	B	36.5	D = 77.10 Az = 0.3 (USCGS)
	LmV	B	41.0	PV:1.4s 100.0nm MPV=5.8
				LmH:19s 1.7/um MLH=5.4
				LmV:17s 2.1/um MLV=5.6

Day	Phase		h m s	Remarks
19.	eP	A	06 56 57	Crete 34.27 N 25.09 E H = 06 52 33.5 h = 16 km MAG=4.6 D = 19.10 Az = 333.0 (USCGS)
19.	eP	A	07 15 35	Ryukyu Islands 28.15 N 129.97 E
	epP	A	15 47	H = 07 03 04.9 h = 45 km MAG=5.5
	eSKS	B	25 55	D = 84.56 Az = 325.8 (USCGS)
	LmH	B	51.5	PV:1.6s 77.0nm MPV=5.7
	LmV	B	58.3	pPV:2.2s 131.0nm
				LmH:20s 1.3/um MLH=5.3
				LmV:16s 1.4/um MLV=5.5
19.	ePn	A	13 19 50	Austria 47.3 N 11.4 E
	e	A	20 33	H = 13 18 55 (BCIS)
				D = 3.4
19.	+ePKIKP	A	13 55 25	Fiji Islands 17.97 S 178.33 W
	-iPKHKP	A	55 27	H = 13 36 45.9 h = 545 km MAG=5.0
	iPKP2	A	55 29	D = 146.44 Az = 348.5 (USCGS)
				PKIKPV:1.4s 35.0nm
				PKHKPV:1.2s 85.2nm
				PKP2V:1.4s 97.6nm
19.	eP	A	18 26 49	Afghanistan-USSR Border Region
				38.49 N 70.97 E
				H = 18 18 59.8 h = 117 km MAG=4.8
				D = 42.89 Az = 306.4 (USCGS)
19.	+eP	A	19 08 14	Near East Coast of Kamchatka
	LmH	B	42.3	53.26 N 159.93 E
				H = 18 56 46.9 h = 41 km MAG=5.2
				D = 73.08 Az = 339.5 (USCGS)
				PV:1.5s 55.3nm MPV=5.5
19.	+iP	A	20 36 43.5	Unimak Island 54.18 N 164.05 W
				H = 20 24 59.6 h = 25 km MAG=5.0
				D = 75.48 Az = 2.9 (USCGS)
				PV:1.0s 17.7nm MPV=5.1

Day	Phase		h m s	Remarks
19.	+iP	A	20 36 43.5	Unimak Island 54.18 N 164.05 W H = 20 24 59.6 h = 25 km MAG=5.0 D = 75.48 Az = 2.9 (USCGS) PV:1.0s 17.7nm MPV=5.1
19.	eP	A	21 45 11	Fox Islands, Aleutian Islands
	e	A	45 21	52.75 N 167.83 W H = 21 33 16.6 h = 14 km MAG=5.0 D = 76.98 Az = 0.4 (USCGS)
20.	-iP	AB	02 49 38	South of Alaska 53.17 N 162.44 W
	i	A	49 47.5	H = 02 37 51.5 h = 44 km MAG=5.7
	+ipP	A	49 50	D = 76.43 Az = 3.9 (USCGS)
	-i	B	50 11	PV(A):1.4s 163.0nm MPV=6.0
	eS	B	59 22	PV(B):5s 0.8/um MPV=6.1
	LmV	B	03 30.2	LmV:17s 0.7/um MLV=5.1
	LmH	B	30.6	LmH:18s 0.8/um MLH=5.1
20.	eP	A	06 53 15	Near East Coast of Honshu, Japan
	epP	A	53 33	38.56 N 141.79 E
	pPm	A	53 35	H = 06 41 06.2 h = 86 km MAG=5.4
	esP	A	53 43	D = 80.99 Az = 330.5 (USCGS)
	e(PP)	A	55 53	pPmV:1.3s 65.5nm
20.	+iP	A	15 49 49.5	Near East Coast of Honshu, Japan
	ipP	A	50 05.5	40.76 N 142.09 E
	e	A	50 09	H = 15 37 50.2 h = 67 km MAG=5.4
	i	A	50 10	D = 79.19 Az = 330.5 (USCGS)
	LmH	B	16 23.5	PV:1.5s 70.3nm MPV=5.4
	LmV	B	27.7	LmH:16s 1.0/um
				LmV:19s 0.7/um
21.	eP	A	06 50 03	Samar, Philippine Islands
				11.33 N 125.34 E
				H = 06 36 43.1 h = 73 km MAG=5.3
				D = 95.78 Az = 324.1 (USCGS)
				PV:1.6s 19.2nm MPV=5.4

Day	Phase		h m s	Remarks
21.	eP	A	08 00 39.5	Luzon, Philippine Islands
	LmH	B	38.4	13.30 N 122.80 E
	LmV	B	49.0	H = 07 47 24.4 h = 23 km MAG=5.2
				D = 92.73 Az = 323.5 (USCGS)
				PV:1.6s 16.5nm MPV=5.2
				LmH:22s 1.5/um MLH=5.4
				LmV:17s 0.8/um MLV=5.3
21.	eP	A	15 24 53.5	Java Sea 5.46 S 109.65 E
	ePP	B	29 02	H = 15 12 10.0 h = 561 km MAG=5.6
				D = 99.29 Az = 320.3 (USCGS)
				PV:1.7s 36.4nm MPV=5.5
21.	eP	A	16 42 51	Southern Iran 27.36 N 57.51 E
	e	A	43 04	H = 16 35 08.3 h = 65 km MAG=5.3
	e	A	43 09	D = 41.70 Az = 316.6 (USCGS)
				PV:1.4s 18.6nm MPV=4.7
22.	+eiP	A	01 42 43	Tibet-India Border Region
	i	A	42 47	30.63 N 79.37 E
	LmH	B	02 07.7	H = 01 33 24.1 h = 19 km MAG=5.4
	LmV	B	07.7	D = 53.22 Az = 312.6 (USCGS)
				PV:1.6s 88.0nm MPV=5.5
				LmH:12s 0.5/um MLH=4.7
				LmV:13s 0.9/um MLV=5.1
22.	eP1	B	02 45 35	Kurile Islands 49.24 N 158.47 E
	-eP2	AB	45 40.5	H = 02 33 52.8 h = normal MAG=5.6
	LmV	B	03 25.4	D = 76.53 Az = 339.0 (USCGS)
	LmH	B	25.5	P1V(B):11s 0.7/um MPV=5.7
				P2V(A):1.4s 46.6nm MPV=5.4
				LmV:16s 1.6/um MLV=5.5
				LmH:15s 1.8/um MLH=5.5
22.	e	A	06 32 51	South of Kermadec Islands
	e(PKP2)	A	33 00	31.97 S 177.90 W
				H = 06 12 24.0 h = normal MAG=4.9 (USCGS)
				D = 160.0

Day	Phase		h m s	Remarks
22.	+iP	A	10 57 17.5	Andreanof Islands, Aleutian Is.
	i	A	57 29.5	51.48 N 179.95 W
	ePPP	B	11 02 00	H = 10 45 24.5 h = 56 km MAG=6.1
	ePPPP	B	03 20	D = 77.78 Az = 352.5 (USCGS)
	eS	B	07 12	PV:1.1s 423.0nm MPV=6.5
	eSPP	B	08 08	LmV:20s 1.5/um MLV=5.4
	eSS	B	12.7	LmH:20s 2.4/um MLH=5.5
	eSSS	B	16.5	
	LmV	B	35.3	
	LmH	B	35.4	
22.	eiP	A	14 42 38	Chiapas, Mexico 16.93 N 93.61 W
	epP	A	43 12.5	H = 14 30 10.7 h = 151 km MAG=5.1
	eiSKS	C	52 52	D = 86.38 Az = 38.0 (USCGS)
	eiS	C	53 05	PV:2.0s 34.2nm MPV=4.8
	e(SP)	C	53 52	
22.	eP	A	16 10 10	Andreanof Islands, Aleutian Is.
				51.58 N 179.97 W
				H = 15 58 18.0 h = 57 km MAG=4.9
				D = 77.67 Az = 352.5 (USCGS)
				PV:0.6s 9.6nm MPV=5.1
23.	ePKP2	A	00 38(44)	Auckland Islands Region 49.31 S 164.20 E
	e	A	38 48.5	H = 00 17 56.5 h = 27 km MAG=5.3 (USCGS)
				D = 162.4
23.	ePn	A	00 54 49	Germany 48.30 N 9.11 E
	ePb	A	54 55.5	H = 00 54 03.2 h = 9 km MAG=-
	iPg	A	55 01	D = 2.86 Az = 33.9 (USCGS)
	iSn	A	55 22	
	iSg	A	55 33	
23.	+iP	A	06 09 24.4	Near East Coast of Honshu, Japan
				37.42 N 141.51 E
				H = 05 57 06.9 h = normal MAG=5.0
				D = 81.86 Az = 330.4 (USCGS)
				PV:1.1s 22.2nm MPV=5.2

Day	Phase		h m s	Remarks
23.	eP1	A	07 21 32	Near Coast of Jalisco, Mexico
	eP2	A	21 35	18.37 N 104.55 W
	ePP	A	25 09	H = 07 08 27.7 h = 36 km MAG=5.3
	ePP	B	25 12	D = 91.43 Az = 34.9 (USCGS)
	eSKS	B	32 03	P1V:1.8s 20.3nm MPV=5.2
	eS	B	32 35	P2V:2.2s 109.0nm MPV=5.8
	LmH	B	08 06.0	LmH:16.5s 0.9/um MLH=5.3
	LmV	B	06.0	LmV:17s 1.1/um MLV=5.4
24.	iP	A	00 47 34.3	Nicaragua 11.66 N 85.72 W
	ePP	A	51 03	H = 00 35 05.5 h = 100 km MAG=5.3
	LmH	B	01 14.0	D = 85.69 Az = 39.3 (USCGS)
	LmV	B	22.0	PV:2.0s 34.2nm MPV=4.9
24.	ePKP	A	03 47 59.5	East New Guinea 5.82 S 146.77 E
	ePP	B	49 35	H = 03 29 17.3 h = 113 km MAG=5.6
	e	A	50 09	D = 121.79 Az = 328.1 (USCGS)
	e	B	50 32	PKPV:1.2s 12.2nm
	eSS	B	04 06 04	LmH:24s 2.3/um
	LmH	B	32.0	LmV:16s 0.5/um
	LmV	B	46.8	
24.	eP1	B	11 11(20)	Luzon, Philippine Islands
	eP2	A	12 08	13.31 N 123.03 E
	e	C	22 16	H = 10 58 07.3 h = 42 km MAG=5.1 (USCGS)
	e	B	23 31	D = 92.8
	eSP	B	23 40	P2V:2.0s 21.4nm MPV=5.2
	e	B	25 16	LmH:22s 2.6/um MLH=5.6
	eSS	B	28 48	LmV:18s 0.9/um MLV=5.3
	LmH	B	49.1	
	LmV	B	55.7	
24.	ePn	A	13 26 46	Northern Italy 44.90 N 10.18 E
	e	A	26 51	H = 13 25 20.3 h = 45 km MAG=4.2
	e	A	26 58	D = 5.83 Az = 9.0 (USCGS)
	e	A	27 08	LmH:11s 0.6/um
	ePg	A	27 12	LmV:11s 0.6/um
	iSn	A	27 51.7	
	eSg	A	28 26	

Day	Phase		h m s	Remarks
cont.				
24.	LmH	B	13 29.5	
	LmV	B	29.5	
25.	eP	A	00 21 57	Mindoro, Philippine Islands
	e	A	22 07	13.52 N 120.29 E
	ePP	A	25 32	H = 00 08 55.3 h = 53 km MAG=5.1
	eSKS	B	32 25	D = 91.10 Az = 322.9 (USCGS)
	eS	B	32 55	PV:2.0s 34.0nm MPV=5.3
	eSP	B	33 56	LmV:14s 1.3/um MLV=5.5
	LmV	B	01 10.0	LmH:14.5s 1.6/um MLH=5.6
	LmH	B	11.0	
25.	eP	A	04 51 06	Kirgiz-Sinkiang Border Region
				41.43 N 79.41 E
				H = 04 42 40.6 h = 35 km MAG=4.8
				D = 46.43 Az = 305.6 (USCGS)
25.	eP	A	06 16 09	Dodecanese Islands 35.92 N 27.53 E
	epP	A	16 15.5	H = 06 11 50.8 h = 38 km MAG=4.7
	LmV	B	24.3	D = 18.67 Az = 326.9 (USCGS)
	LmH	B	25.3	PV:1.5s 25.0nm MPV=4.2
				LmV:10s 0.4/um MLV=4.1
				LmH:16s 0.5/um MLH=3.9
25.	eP	A	07 37 14.5	Northern Sumatra 4.50 N 96.68 E
	LmH	B	08 20.5	H = 07 24 49.4 h = normal MAG=5.3
	LmV	B	21.5	D = 83.41 Az = 320.3 (USCGS)
				PV:1.7s 39.0nm MPV=5.4
				LmH:17s 0.7/um MLH=5.1
				LmV:16s 0.6/um MLV=5.1
25.	ePg	A	15 26 00.5	Explosion 51°22.3'N 12°53.5'E
	eSg	A	26 16.0	yield 4.56 to (CLL)
				D = ca. 1.1
25.	LmH	B	22 43.5	Probably Galapagos Islands Region
	LmV	B	44.5	(USCGS)
				LmH:21s 0.8/um
				LmV:22s 0.8/um

Day	Phase		h m s	Remarks
26.	ePP	B	02 48(30)	Galapagos Islands Region 2.01 N 90.49 W
	eX	A	48 40.5	H = 02 30 58.4 h = normal MAG=5.3 (USCGS)
	e	A	48 52.4	D = 96.2
	e	A	48 58.4	XV:1.7s 36.0nm
	ePS	B	57 08	LmH:22s 1.4/um MLH=5.4
	eSS	B	03 03 35	LmV:23s 1.2/um MLV=5.3
	e(SSS)	B	05 55	
	LmH	B	22.0	
	LmV	B	22.0	
26.	eP	A	15 57 12	E.Russia-N.E.China Border Region
				42.63 N 130.96 E
				H = 15 46 31.7 h = 495 km MAG=4.5
				D = 73.13 Az = 324.6 (USCGS)
27.	eP	A	02 27 43	Hokkaido, Japan 42.40 N 142.94 E
	e	A	28 04	H = 02 15 46.3 h = 32 km MAG=4.9
	e	A	28 14	D = 78.07 Az = 330.7 (USCGS)
	eS	B	37 30	PV:1.4s 32.5nm MPV=5.3
	LmH	B	03 01.4	LmH:18s 0.9/um MLH=5.1
	LmV	B	05.5	LmV:17s 0.6/um MLV=5.0
27.	ePKIKP	A	08 00 46	New Hebrides Islands 14.68 S 167.68 E
	e	A	00 53	H = 07 41 22.2 h = 39 km MAG=5.3
				D = 139.23 Az = 336.7 (USCGS)
				PKIKPV:1.8s 33.8nm
27.	eP	A	09 12 08	South Atlantic Ridge 21.05 S 11.65 W
	e	A	12 13	H = 09 00 32.7 h = normal MAG=5.0
	e	A	12 22	D = 74.27 Az = 15.1 (USCGS)
27.	ePKP	A	12 29 29	Samoa Islands 16.64 S 172.57 W
	i	A	29 29.5	H = 12 09 51.0 h = normal MAG=4.7
				D = 145.91 Az = 355.2 (USCGS)
				PKPV:1.4s 34.9nm
27.	iPg	A	15 05 20	Hilders, explosion 50°32.50'N 10°02.36'E
	eSg	A	05 34	H = 15 05 00.91 yield 11.955 to (Hannover)
				D = ca. 1.0

Day	Phase		h m s	Remarks
27.	ePKIKP	A	15 49 48	Fiji Islands 19.91 S 178.26 W
	-iPKHKP	A	49 52	H = 15 31 07.8 h = 562 km MAG=5.0
	ePKP2	A	49 57	D = 148.35 Az = 348.0 (USCGS)
				PKHKPV:1.1s 58.5nm
28.	eP	A	04 47 21	Off Coast of Central America
	eSKS	B	57 50	12.82 N 89.22 W
	LmH	B	05 25.0	H = 04 34 42.6 h = 69 km MAG=5.2
	LmV	B	26.0	D = 86.95 Az = 38.8 (USCGS)
				LmH:18s 0.4/um
				LmV:20s 0.6/um
28.	eP	A	14 35 50	Mindanao, Philippine Islands
	e	A	35 55	6.73 N 126.64 E
				H = 14 22 15.0 h = 114 km MAG=5.2
				D = 100.24 Az = 324.1 (USCGS)
28.	LmH	B	18 32.7	Probably Southern Alaska (USCGS)
	LmV	B	38.0	LmH:15.5s 0.9/um
				LmV:17s 1.1/um
28.	ePKHKP	A	21 44 32	Loyalty Islands 22.26 S 170.58 E
	ePKP2	A	44 34.5	H = 21 24 50.8 h = 33 km MAG=4.8
				D = 147.24 Az = 335.0 (USCGS)
				PKHKPV:0.9s 19.5nm
				PKP2V:1.1s 36.3nm
29.	ePKP	A	08 15 45	Fiji Islands 17.74 S 178.67 W
				H = 07 57 11.3 h = 585 km MAG=5.1
				D = 146.15 Az = 348.2 (USCGS)
29.	ePKIKP	A	10 53 58	Kermadec Islands 30.51 S 178.24 W
	ePKHKP	A	54 12	H = 10 34 06.5 h = 43 km MAG=5.6
	e	A	54 16	D = 158.57 Az = 342.6 (USCGS)
	e	A	54 24	PKIKPV:2.1s 63.3nm
	ePKP2	A	54 32	LmV:19s 1.2/um
	ePKP2	B	54 34	LmH:18s 1.2/um MLH=5.7
	i	A	54 36	
	ePP	B	58 10	

Day	Phase		h m s	Remarks
cont.				
29.	e(SKSP)	B	11 08 32	
	LmV	B	12 18.7	
	LmH	B	19.1	
29.	eiPKHKP	A	11 42 04.5	South of Fiji Islands 24.01 S 179.68 E
	epPKP	A	44 08	H = 11 23 11.6 h = 555 km MAG=4.7
				D = 151.85 Az = 343.8 (USCGS)
29.	ePKIKP	A	17 29 11	Balleny Islands 62.78 S 166.27 E
	e	B	29 18	H = 17 09 13.9 h = normal MAG=5.5
	ePKP2	A	29 56.5	D = 161.69 Az = 240.2 (USCGS)
	e	A	30 06.5	PKIKPV:1.3s 10.9nm
	e	A	30 10	LmH:18s 3.7/um MLH=6.1
	eSS	B	54 24	LmV:18s 4.3/um
	LmH	B	18 58.0	
	LmV	B	59.0	
29.	ePKP2	A	18 22 36.5	Balleny Islands Region 62.66 S 166.39 E
	e	A	22 43	H = 18 01 51.7 h = 41 km MAG=5.3 (USCGS)
				D = 162.0
				PKP2V:1.2s 4.1nm
30.	eP	A	09 02 27	Eastern India 26.89 N 92.63 E
				H = 08 51 56.7 h = 64 km MAG=5.1
				D = 64.17 Az = 315.7 (USCGS)
				PV:1.2s 16.3nm MPV=4.9
30.	eP	A	09 51 21.5	Kurile Islands 45.61 N 151.19 E
				H = 09 39 27.2 h = 48 km MAG=4.6
				D = 77.93 Az = 335.0 (USCGS)
				PV:1.0s 11.8nm MPV=5.0
30.	eP	A	18 47 10	North Atlantic Ocean 20.02 N 64.14 W
				H = 18 36 24.2 h = 17 km MAG=5.3
				D = 65.82 Az = 42.6 (USCGS)
				PV:2.0s 42.8nm MPV=5.3

Day	Phase		h m s	Remarks
1.	iPKP	A	18 41 59	Tonga Islands 15.86 S 175.11 W
	ipPKP	A	43 15	H = 18 22 52.8 h = 263 km MAG=4.8
				D = 144.88 Az = 352.6 (USCGS)
				PKPV:1.0s 29.5nm
2.	eP	A	00 20 37	Ascension Island 6.82 S 11.58 W
	e	A	20 50	H = 00 10 27.6 h = normal MAG=4.8
	e	A	20 57	D = 60.65 Az = 16.7 (USCGS)
	LmH	B	48.4	LmH:17s 0.5/um MLH=4.7
	LmV	B	48.4	LmV:18s 0.5/um MLV=4.8
2.	eP	A	00 38 25.5	Ascension Island 7.09 S 12.03 W
	e	A	38 38	H = 00 28 13.4 h = normal MAG=4.8
	e	A	38 47	D = 61.03 Az = 17.0 (USCGS)
	LmH	B	01 06.3	PV:1.4s 11.6nm MPV=4.8
	LmV	B	06.3	LmH:16s 0.4/um MLH=4.6
				LmV:16s 0.5/um MLV=4.8
2.	ePn	A	07 57 47.5	Central Italy 42.26 N 12.06 E
	ePg	A	58 27	H = 07 55 45.5 h = normal MAG=4.4
	LmH	B	08 02.1	D = 8.40 Az = 358.1 (USCGS)
	LmV	B	02.1	PV:1.0s 31.4nm
				LmH:14s 0.4/um MLH=3.3
				LmV:14s 0.5/um
2.	ePn	A	08 05 00.5	Central Italy 42.29 N 12.22 E
	ePg	A	05 40	H = 08 02 59.4 h = normal MAG=4.5
	LmH	B	09.3	D = 8.37 Az = 357.4 (USCGS)
	LmV	B	09.3	PV:1.1s 16.1nm
				LmH:12s 0.3/um MLH=3.2
				LmV:12s 0.3/um
2.	eP	A	10 11 20	Burma 20.71 N 99.37 E
	e	A	11 24	H = 09 59 53.4 h = normal MAG=5.0
				D = 72.88 Az = 318.3 (USCGS)
2.	eP	A	10 34 09	Southern Italy 39.67 N 16.66 E
	LmH	B	38.6	H = 10 31 22.0 h = normal MAG=4.3

Day	Phase		h m s	Remarks
cont.				
2.	LmV	B	10 40.3	D = 11.54 Az = 343.7 (USCGS) LmH:12s 0.3/um MPV=3.4 LmV:13s 0.3/um
2.	ePKP2	A	17 47 41	Kermadec Islands 28.26 S 176.55 W H = 17 27 15.7 h = 8 km MAG=4.8 D = 156.80 Az = 346.7 (USCGS) PKP2V:1.3s 17.5nm
2.	e	A	19 47 02	Northern Italy 45.0 N 7 1/2 E
	eSg	A	47 05	H = 19 43 38 (BCIS) D = 6.3
3.	eP	A	09 45 25	Greece 38.49 N 22.11 E
	e(pP)	A	45 34	H = 09 42 02.3 h = 26 km MAG=4.6
	e(sP)	A	45 38.5	D = 14.26 Az = 331.9 (USCGS)
	LmH	B	51.6	LmH:15s 1.5/um MLH=4.2
	LmV	B	51.6	LmV:14s 1.5/um
3.	ePKP	A	14 02 58	Tonga Islands 16.83 S 173.69 W
	e	A	03 03.5	H = 13 43 22.2 h = 50 km MAG=4.5
	e	A	03 29	D = 146.00 Az = 354.0 (USCGS) PKPV:1.1s 16.1nm
3.	eP	A	17 12 02.5	Near Coast of Guerrero, Mexico
	e	A	12 11	16.74 N 98.47 W
	LmV	B	54.7	H = 16 59 06.9 h = 26 km MAG=5.2
	LmH	B	55.5	D = 89.36 Az = 36.7 (USCGS) PV:1.2s 12.2nm MPV=5.0 LmV:18s 0.4/um MLV=4.9 LmH:18s 0.4/um MLH=4.9
3.	eP	A	18 13 35	Rat Islands, Aleutian Islands 51.75 N 177.99 E H = 18 01 48.5 h = 84 km MAG=5.1 D = 77.33 Az = 351.2 (USCGS) PV:1.9s 34.1nm MPV=4.9

Day	Phase		h m s	Remarks
4.	+iP	A	02 54 46.5	Eastern Kazakh SSR 49.75 N 78.19 E
	ePn	A	56 19	H = 02 46 57.0 h = 0 km MAG=5.3
	e	A	56 29	D = 41.32 Az = 297.8 (USCGS) PV:0.8s 57.7nm MPV=5.4 Probably underground explosion
4.	eP	A	06 46 05	Peru-Equador Border Region 4.09 S 80.92 W H = 06 32 43.4 h = normal MAG=4.5 D = 94.75 Az = 39.7 (USCGS)
4.	ePKIKP	A	07 08 07	Fiji Islands 19.96 S 178.59 W
	iPKHKP	A	08 11.5	H = 06 49 35.3 h = 650 km MAG=4.9
	ePKP2	A	08 16.5	D = 148.33 Az = 347.6 (USCGS)
4.	eP	A	10 18 17	Dodecanese Islands 35.28 N 27.76 E
	e	A	18 21	H = 10 13 51.8 h = normal MAG=4.3
	e	A	18 27	D = 19.31 Az = 327.6 (USCGS) PV:1.3s 21.8nm MPV=4.2
4.	eP	A	11 28 44	South of Panama 7.42 N 82.70 W
	e	A	28 56	H = 11 16 01.0 h = normal MAG=5.2
	eSKS	C	39 12	D = 87.06 Az = 39.5 (USCGS)
	eSS	C	45 20	PV:2.0s 51.3nm MPV=5.4
	LmH	B	12 06.5	LmH:16s 0.6/um MLH=5.1
	LmV	B	06.5	LmV:16s 0.6/um MLV=5.1
4.	ePKP2	A	23 14 28	West of Maquarie Island 55.86 S 147.24 E
	e	A	14 35	H = 22 54 18.1 h = normal MAG=4.9
	e	A	14 43	D = 153.31 Az = 277.5 (USCGS)
	LmV	B	24 31.0	PV:1.3s 30.6nm
	LmH	B	31.5	LmV:20s 0.8/um LmH:18s 0.8/um MLH=5.5
5.	ePKHKP	A	01 52 15	Tonga Islands 19.29 S 175.87 W
	e	A	53 17	H = 01 32 50.8 h = 187 km MAG=4.6 D = 148.15 Az = 351.0 (USCGS) PKHKPV:1.2s 24.4nm

Day	Phase		h m s	Remarks
5.	LmV	B	03 03.6	Probably West New Guinea Region (USCGS)
	LmH	B	05.5	LmV:16s 0.4/um
				LmH:18s 0.5/um
5.	eP	A	05 08 47	Northern Peru 5.64 S 77.16 W
	LmV	C	48.0	H = 04 55 33.7 h = 37 km MAG=5.2
	LmH	C	51.0	D = 93.54 Az =39.6 (USCGS)
				LmV(C):23s 0.3/um MLV=4.8
5.	ePKIKP	A	06 27 30	Fiji Islands 21.20 S 178.84 W
	iPKHKP	A	27 35.5	H = 06 08 42.4 h = 500 km MAG=4.7
	ePKP2	A	27 42	D = 149.48 Az = 346.9 (USCGS)
5.	eP	A	11 26 30	Mariana Islands 18.63 N 146.96 E
	ePP	A	30 38	H = 11 12 43.6 h = 57 km MAG=5.0
				D = 100.64 Az = 332.9 (USCGS)
				PV:1.4s 14.0nm MPV=5.3
5.	eP	A	15 34 08	Near East Coast of Kamchatka
				54.00 N 160.45 E
				H = 15 22 45.2 h = 48 km MAG=4.7
				D = 72.49 Az = 339.8 (USCGS)
				PV:1.6s 27.5nm MPV=5.1
6.	ePKHKP	A	11 09 29	South of Fiji Islands 25.41 S 179.57 E
	ePKP2	A	09 43.5	H = 10 50 30.5 h = 522 km MAG=4.8
				D = 153.15 Az = 342.9 (USCGS)
				PKHKPV:1.4s 7.0nm
6.	LmH	B	12 31.7	Probably Ryukyu Islands (USCGS)
	LmV	B	32.0	LmH:16s 0.5/um
				LmV:12s 0.6/um
6.	ePKP	A	14 47 55	Tonga Islands 15.32 S 173.13 W
	e	A	48 06	H = 14 28 21.9 h = normal MAG=5.0
				D = 144.56 Az = 354.8 (USCGS)
				PKPV:1.2s 14.2nm

Day	Phase		h m s	Remarks
6.	ePKP	A	14 50 50	Tonga Islands 15.29 S 173.43 W
	e	A	50 59	H = 14 31 16.7 h = normal MAG=5.3
	e	A	51 02	D = 144.50 Az = 354.5 (USCGS)
	e	A	51 08	PKPV:1.2s 30.5nm
	LmH	B	15 53.4	LmH:20s 0.6/um MLH=5.6
	LmV	B	56.6	LmV:20s 0.4/um
7.	eP	A	04 57 10	Mariana Islands 16.47 N 147.31 E
	ePP	A	05 01 24	H = 04 43 15.4 h = 38 km MAG=5.7
	e	A	01 31	D = 102.70 Az = 332.9 (USCGS)
	e	A	01 41.5	PV:1.2s 10.1nm MPV=5.4
	eSKS	C	07(32)	PPV:2.0s 68.4nm MPPV=5.7
	e	C	07 48	LmH:19s 3.7/um MLH=5.9
	eS	C	08 45	LmV:18.5s 4.0/um MLV=6.0
	eSP	C	10 26	
	eSS	C	15 55	
	LmH	B	47.5	
	LmV	B	47.5	
7.	ePn	A	17 39 04.5	Germany 48.9 N 9.0 E
	iSn	A	39 32.5	H = 17 38 20.4 (BCIS)
				D = 2.4
7.	eP	A	18 15 13	Albania 40.63 N 19.82 E
	LmH	B	19.4	H = 18 12 23.5 h = 2 km MAG=4.2
	LmV	B	20.7	D = 11.54 Az = 333.0 (USCGS)
				PV:0.8s 15.4nm
7.	ePn	A	18 29 02	Germany 48.9 N 9.0 E
	eSn	A	29 30	H = 18 28 18.6 (BCIS)
				D = 2.4
8.	eP	A	04 20 47	Molucca Passage 2.07 N 126.58 E
	ePP	A	25 07.5	H = 04 06 39.7 h = 16 km MAG=5.5
				D = 103.94 Az = 323.5 (USCGS)
				PV:1.2s 14.2nm MPV=5.7

Day	Phase		h m s	Remarks
8.	eX	A	07 31 03	South of Kermadec Islands
	ePKP2	A	31 07	34.13 S 179.17 W
	ePP	A	34 45	H = 07 10 33.5 h = 110 km MAG=4.5 (USCGS)
				D = 161.8
				XV:2.0s 42.7nm
8.	eP	A	08 12 37	Ionian Sea 37.56 N 20.28 E
	i	A	12 49.5	H = 08 09 17.5 h = normal MAG=5.4
	i	B	13 08	D = 14.47 Az = 337.4 (USCGS)
	eS	C	15 22	PV:2.0s 77.0nm
	LmH	B	17.9	LmH:16.5s 34.3/um MLH=5.5
	LmV	B	20.7	LmV:11s 13.8/um MLV=5.5
9.	+eP	A	02 07 33	Near Islands, Aleutian Islands
	e	A	07 37	51.55 N 174.81 E
	eS	C	17 24	H = 01 55 39.8 h = 22 km MAG=5.0
	eSS	C	22.4	D = 77.18 Az = 349.1 (USCGS)
	LmV	E	49.4	PV:1.0s 27.6nm MPV=5.3
	LmH	B	49.7	LmV:16s 0.5/um MLV=5.0
				LmH:16s 0.8/um MLH=5.1
9.	ePKHKP	A	03 23 12	South of Kermadec Islands
	eiPKP2	A	23 41	34.21 S 178.94 W
	LmH	C	04 52.5	H = 03 02 58.0 h = 37 km MAG=5.1 (USCGS)
	LmV	C	52.5	D = 161.9
				PKP2V:1.6s 49.5nm
				LmH:17s 0.4/um MLH=5.2
				LmV:17s 0.3/um
9.	ePKP2	A	05 50 29	South of Kermadec Islands
	e	A	50 35	34.14 S 178.83 W
	e	A	50 40	H = 05 29 46.9 h = normal MAG=5.6 (USCGS)
				D = 161.8
				PKP2V:1.4s 20.9nm
9.	eP	A	06 30 32	Hokkaido, Japan 44.33 N 141.04 E
				H = 06 19 01.3 h = 145 km MAG=4.5
				D = 75.71 Az = 329.5 (USCGS)

Day	Phase		h m s	Remarks
9.	eP	A	08 24 20	Kurile Islands 44.38 N 149.60 E
	LmH	B	59.0	H = 08 12 21.1 h = 37 km MAG=4.4
	LmV	B	09 03.0	D = 78.56 Az = 334.2 (USCGS)
				PV:1.4s 14.0nm MPV=4.8
9.	eP	A	17 30 42	Albania 40.55 N 19.76 E
	LmH	B	36.5	H = 17 27 55.9 h = normal MAG=4.5
	LmV	B	36.6	D = 11.58 Az = 333.3 (USCGS)
				LmH:12s 0.5/um MLH=3.7
				LmV:12s 0.5/um
10.	eP	A	19 25 04.5	Kurile Islands 49.28 N 155.34 E
	LmH	B	20 03.2	H = 19 13 20.9 h = 33 km MAG=5.2
	LmV	B	03.2	D = 75.72 Az = 337.1 (USCGS)
				LmH:16s 0.3/um MLH=4.7
				LmV:16s 0.3/um MLV=4.7
11.	eP	A	01 49 48	Dodecanese Islands 36.17 N 28.85 E
	LmH	C	57.0	H = 01 45 25.1 h = normal MAG=4.4
	LmV	C	57.5	D = 19.06 Az = 324.7 (USCGS)
12.	eP	A	00 22 52	Greece 38.8 N 21.5 E
				H = 00 19 36 (BCIS)
				D = 13.8
12.	eP	A	03 09 51	Western Caucasus 44.85 N 37.14 E
	LmV	C	18.3	H = 03 05 44.6 h = 39 km MAG=4.4
	LmH	C	18.4	D = 18.07 Az = 297.8 (USCGS)
				LmV(C):16s 0.4/um MLV=4.0
				LmH(C):16s 0.3/um MLH=3.7
12.	-iP1	A	06 08 58	Chagos Archipelago 6.00 S 71.38 E
	eP2	A	09 07	H = 05 57 11.1 h = normal MAG=5.3
	eP3	A	09 10	D = 76.19 Az = 325.5 (USCGS)
	eS	C	18 40	P1V:1.2s 28.4nm MP1V=5.3
	e	C	21 50	P2V:1.5s 50.3nm MP2V=5.4
	eSS	C	22 28	P3V:1.2s 24.4nm MP3V=5.2
	LmH	C	50.0	

Day	Phase		h m s	Remarks
12.	eP1	A	13 12 35	Kurile Islands 46.46 N 153.27 E
	iP2	A	12 36	H = 13 00 36.9 h = 12 km MAG=5.3 (USCGS)
	ePP	C	15 28	D = 77.5
	eS	C	22 23	P2V:0.8s 100.0nm MPV=6.0
	e	C	22 37	LmV(C):18s 3.0/um MLV=5.7
	eSS	C	27 55	LmH(C):17s 4.3/um MLH=5.9
	LmV	C	49.5	
	LmH	C	50.2	
12.	ePKIKP	A	13 35(39)	South of Fiji Islands 26.07 S 178.33 E
	ePKHKP	A	35 47	H = 13 16 55.5 h = 603 km MAG=5.0
	ePKP2	A	35 59	D = 153.43 Az = 340.9 (USCGS)
	e	A	36 03	PKHKPV:1.4s 18.6nm
	e(pPKP)	A	38 08	
12.	eP	A	15 22 46	Kurile Islands 46.32 N 153.07 E
				H = 15 10 47.1 h = normal MAG=4.3
				D = 77.7 (USCGS)
12.	+eP1	AB	19 28 43	Off East Coast of Honshu, Japan
	eP2	A	28 52	39.73 N 143.52 E
	eP3	A	29 10	H = 19 16 31.6 h = normal MAG=5.2
	eP4	A	31 37	D = 80.3 (USCGS)
	ePP	AB	31 45	P1V(A):1.8s 43.9nm MP1V(A)=5.1
	e	A	31 53	P1V(B):7s 1.0/um MP1V(B)=5.9
	eS	C	38 48	P2V:2.0s 85.4nm MP2V(A)=5.4
	LmH	B	20 03.5	P3V:1.6s 49.5nm MP3V(A)=5.2
	LmV	B	10.9	PPV(B):11s 0.83/um MPPV(B)=5.8
				LmH:19s 13.9/um MLH =6.3
				LmV:16s 7.3/um MLV =6.2
12.	ePKP	A	20 29 49	Tonga Islands 15.30 S 173.87 W
				H = 20 10 18.0 h = 53 km MAG=4.0
				D = 144.47 Az = 354.0 (USCGS)
13.	eP	A	05 53 27	Kurile Islands 43.29 N 147.39 E
				H = 05 41 25.5 h = normal MAG=4.4
				D = 78.83 Az = 333.1 (USCGS)

Day	Phase		h m s	Remarks
13.	ePKP	A	22 38 38	Loyalty Islands 21.92 S 170.06 E
				H = 22 18 57.7 h = 26 km MAG=4.6
				D = 146.72 Az = 334.8 (USCGS)
				PKPV:1.0s 15.7nm
14.	eP	A	11 45 05	Kurile Islands 47.40 N 152.82 E
				H = 11 33 22.6 h = 91 km MAG=4.2
				D = 76.77 Az = 335.8 (USCGS)
14.	eP	A	14 27 40	Kurile Islands 44.10 N 149.53 E
				H = 14 15 40.3 h = 37 km MAG=4.3
				D = 78.79 Az = 334.2 (USCGS)
14.	e(pPKP)	A	14 40 44	South of Fiji Islands 23.30 S 179.81 E
				H = 14 19 45.9 h = 588 km MAG=4.7 (USCGS)
				D = 151.0
14.	eP	A	16 08 03.5	Off East Coast of Honshu, Japan
	LmH	B	42.4	39.72 N 143.58 E
	LmV	B	47.4	H = 15 55 55.3 h = 46 km MAG=4.7
				D = 80.65 Az = 331.3 (USCGS)
				PV:1.4s 9.3nm MPV=4.6
				LmH:19s 0.6/um MLH=5.2
				LmV:19s 0.4/um MLV=5.0
15.	ePKHKP	A	04 30 25	Fiji Islands 19.70 S 178.43 W
				H = 04 11 49.2 h = 546 km MAG=4.1
				D = 148.11 Az = 347.8 (USCGS)
				PKHKPV:1.0s 11.8nm
15.	eP	A	21 45 38	North Atlantic Ridge 14.52 N 45.08 W
				H = 21 35 46.9 h = normal MAG=4.7
				D = 57.94 Az = 38.9 (USCGS)
				PV:2.0s 25.6nm MPV=4.9
16.	eP	A	05 01 23	Mindanao, Philippine Islands
				5.28 N 126.81 E
				H = 04 47 37.2 h = 75 km MAG=5.4
				D = 101.50 Az = 324.0 (USCGS)
				PV:1.4s 23.3nm MPV=5.6

Day	Phase		h m s	Remarks
16.	+eP1	A	08 28 21.5	Off East Coast of Kamchatka
	iP2	A	28 23	52.20 N 158.98 E
	ipP	A	28 38	H = 08 16 53.3 h = 69 km MAG=5.8
	eiS	C	37 45	D = 73.87 Az = 339.1 (USCGS)
	LmH	B	59.1	P1V:0.8s 15.4nm MP1V=5.0
	LmV	B	09 06.2	P2V:1.1s 317.0nm MP2V=6.1
				LmH:21s 11.0/um
				LmV:15s 4.6/um
16.	ePKIKP	A	12 58 17	New Ireland 4.71 S 153.14 E
	epPKIKP	A	58 33	H = 12 39 26.2 h = 85 km MAG=4.6
	ePP	A	13 00 05	D = 124.03 Az = 331.4 (USCGS)
	LmH	B	56.0	LmH:19s 0.8/um
	LmV	B	56.3	LmV:20s 0.8/um
16.	eP	A	15 07 18	Southern Nevada 37.14 N 116.09 W
				H = 14 55 00.0 h = 0 km MAG=5.6
				D = 81.23 Az = 30.6 (USCGS)
				PV:1.2s 32.5nm MPV=5.2
				Nevada test site "Hutch" (USAEC)
16.	eP	A	22 11 56	South Atlantic Ridge 32.22 S 13.13 W
	LmH	B	47.3	H = 21 59 20.0 h = normal MAG=4.9
	LmV	B	49.3	D = 85.36 Az = 15.5 (USCGS)
17.	eP	A	04 15 32	Andreanof Islands, Aleutian Is.
				51.42 N 179.86 W
				H = 04 03 36.5 h = 34 km MAG=4.9
				D = 77.85 Az = 352.6 (USCGS)
				PV:0.8s 15.4nm MPV=5.2
17.	ePKP	A	09 37 40	Fiji Islands 20.94 S 178.19 W
	e	A	37 47.5	H = 09 18 17.8 h = 190 km MAG=4.5
				D = 149.36 Az = 347.7 (USCGS)
				PKPV:0.8s 11.5nm
17.	ePg	A	14 45 29.5	Adelebsen/GFR, explosion
	iSg	A	45 49.5	51°36.50'N 09°44.80'E

Day	Phase		h m s	Remarks
cont. 17.	e	A	14 45 50.5	H = 14 45 00.36 yield 6.4 to (Hannover)
				D = ca. 1.5
17.	eP	A	21 02 13	Central Alaska 64.08 N 147.60 W
				H = 20 51 37.5 h = 31 km MAG=4.9
				D = 64.47 Az = 14.5 (USCGS)
18.	eP	A	00 09 05	North Atlantic Ridge 29.71 N 42.93 W
	e	A	09 10	H = 00 00 47.4 h = normal MAG=5.0
	e	A	09 14	D = 45.45 Az = 46.7 (USCGS)
	e	A	09 18	LmH:21s 0.4/um MLH=4.3
	LmH	B	24.6	LmV:21s 0.4/um MLV=4.4
	LmV	B	24.6	
18.	+iP	A	05 36 05	Northeastern China 38.30 N 119.45 E
	Pm	A	36 19	H = 05 24 48.0 h = normal MAG=6.2
	eiP	C	37 05	D = 71.18 Az = 320.2 (USCGS)
	eiPP	C	38 48	PmV(A):2.0s 726.0nm MPV(A)=6.5
	eiPPP	C	40 32	PV(C):18s 6.3/um MPV(C)=6.4
	eiPPPP	C	41 16	SH(B):35s 2340/um MSH=8.8
	iS	BC	45 24	LmH(Ma):19s 555.0/um MLH(Ma)=7.8
	eiSS	C	49 48	LmV:17s 101.0/um MLV=7.2
	LmH	Ma	06 05.0	Ma=Mainka
	LmV	B	11.0	
18.	eP	A	13 20 07	Mongolia 43.32 N 97.05 E
				H = 13 10 32.0 h = normal MAG=4.6
				D = 55.66 Az = 309.8 (USCGS)
18.	e	A	13 45 16	Northeastern China 38.10 N 119.44 E
	LmH	B	14 13.8	H = 13 33 48.4 h = 32 km MAG=5.0
	LmV	B	19.7	D = 71.33 Az = 320.2 (USCGS)
				LmH:18s 3.3/um MLH=5.6
				LmV:14s 1.2/um MLV=5.4
18.	ePg	A	14 06 02	Eschenlohe/GFR, explosion
	eSg	A	06 40	47°37.91'N 11°08.80'E
				H = 14 05 00.6 yield 12.8 to (ASFA)
				D = ca 3.0

Day	Phase		h m s	Remarks
18.	ePg	A	16 05 27	Bransrode, Hoher Meißner/GFR, explosion
	iPg	A	05 28	51°13.93'N 09°51.59'E
	i	A	05 29	H = 16 05 02.97 yield 22.0 to (Hannover)
	iSg	A	05 45	D = ca. 1.2
18.	eP	A	23 30 32	Bolivia 18.24 S 63.31 W
	eS	C	42 00	H = 23 17 10.6 h = 19 km MAG=5.6
	ePS	C	43 12	D = 94.74 Az = 38.1 (USCGS)
	eSS	C	48.4	PV:1.8s 20.3nm MPV=5.2
	LmH	B	24 10.5	LmH:21s 0.7/um MLH=5.1
	LmV	B	10.5	LmV:20s 0.8/um MLV=5.2
19.	eP	A	02 03 24	Northeastern China 38.88 N 119.37 E
	LmH	B	32.0	H = 01 52 09.4 h = normal MAG=4.9
				D = 70.70 Az = 320.0 (USCGS)
				LmH:19.5s 1.1/um MLH=5.1
19.	ePKP	A	04 54 58.5	Loyalty Islands 20.57 S 168.60 E
	e	A	55 10.5	H = 04 35 27.0 h = 17 km
				D = 144.93 Az = 334.3 (USCGS)
19.	+eiP	A	05 08 32	Near Coast of Peru 17.25 S 72.52 W
	+ipP	A	08 48	H = 04 54 54.1 h = 54 km MAG=5.9
	e	A	08 59	D = 99.51 Az = 40.0 (USCGS)
	e	A	09 08.5	PV:1.8s 121.5nm MPV=6.4
	ePP	A	12 32	LmH:22.5s 16.6/um MLH=6.5
	eiSKS	B	19 12	LmV:22s 22.3/um MLV=6.8
	iSKKS	C	19 40	
	eS	B	20 02	
	e	B	21 20	
	eiPS	C	21 38	
	LmH	B	50.3	
	LmV	B	50.4	
19.	ePKIKP	A	05 30 16.5	Fiji Islands 21.51 S 179.55 W
	iPKHKP	A	30 22	H = 05 11 43.4 h = 659 km MAG=5.0
	iPKP2	A	30 30	D = 149.62 Az = 345.9 (USCGS)
	pPKP	A	32 45	PKHKPV:1.1s 84.7nm

Day	Phase		h m s	Remarks
19.	ePKHKP	A	18 16 27	Kermadec Islands 27.46 S 176.58 W
	ePKP2	A	16 43	H = 17 56 25.0 h = normal MAG=5.0
				D = 156.02 Az = 347.1 (USCGS)
				PKP2V:1.0s 15.7nm
20.	eP	A	04 42 40	Southern Sinkiang Prov. China
	eSS	C	52 55	39.81 N 77.80 E
	LmV	B	05 03.5	H = 04 34 14.9 h = normal MAG=5.0
	LmH	B	03.6	D = 46.38 Az = 306.4 (USCGS)
				LmV:16s 0.9/um MLV=4.9
				LmH:16s 0.8/um MLH=4.7
20.	eP	A	07 15 39	Afghanistan-USSR Border Region
				36.48 N 71.08 E
				H = 07 07 51.6 h = 220 km MAG=4.9
				D = 44.18 Az = 308.1 (USCGS)
				PV:1.5s 20.1nm MPV=4.3
20.	e	A	10 56 26	Central Mid-Atlantic Ridge
	eS	C	11 04 00	7.24 N 34.26 W
	LmH	B	12.0	H = 10 46 11.7 h = normal MAG=4.3
	LmV	B	17.0	D = 57.56 Az = 32.8 (USCGS)
				LmH:20s 0.5/um MLH=4.6
				LmV:22s 0.8/um MLV=4.8
20.	eP	A	15 55 14	Ionian Sea 37.95 N 20.21 E
	LmH	B	16 01.8	H = 15 51 54.1 h = 19 km MAG=4.7
	LmV	B	01.9	D = 14.10 Az = 337.0 (USCGS)
				LmH:12s 0.5/um MLH=3.8
				LmV:13s 0.7/um
20.	ePKP	A	20 09 28.5	Fiji Islands 19.24 S 176.42 W
	e	A	09 32.5	H = 19 49 42.0 h = 20 km MAG=5.2
	e	A	09 41	D = 148.02 Az = 350.3 (USCGS)
				PKPV:1.5s 30.1nm
20.	LmH	B	24 34.7	Probably Northeastern China (USCGS)
	LmV	B	40.5	LmH:18s 1.2/um
				LmV:16s 0.7/um

Day	Phase		h m s	Remarks
21.	ePKP	A	02 41 49	Fiji Islands 19.25 S 176.50 W
	e	A	41 59.5	H = 02 22 06.4 h = normal MAG=4.8
				D = 148.01 Az = 350.2 (USCGS)
21.	eP	A	07 19 39	North Atlantic Ridge 21.04 N 45.74 W
	e	A	19 45	H = 07 10 18.3 h = 22 km MAG=4.7
	e	A	19 50	D = 53.41 Az = 41.9 (USCGS)
	ePcP	A	20 47	LmV:19s 0.4/um MLV=4.5
	e	A	20 57	
	e	A	21 00	
	LmV	B	39.4	
21.	eP	A	17 45 42	North Atlantic Ridge 35.25 N 35.94 W
	e	B	45 43	H = 17 38 28.8 h = normal MAG=4.9
	ePP	C	47 03	D = 37.38 Az = 50.7 (USCGS)
	eS	C	51 30	PV:1.4s 16.3nm MPV=4.6
	eSSS	C	54 00	LmH:12.5s 1.7/um MLH=5.0
	LmH	B	59.4	LmV:15s 2.2/um MLV=5.2
	LmV	B	59.4	
21.	eP	A	19 56 25	Off East Coast of Honshu, Japan
	e	A	56 35	39.42 N 143.03 E
	LmH	B	20 36.3	H = 19 44 13.5 h = normal MAG=5.0
	LmV	B	36.4	D = 80.71 Az = 331.1 (USCGS)
				PV:1.0s 17.5nm MPV=5.0
				LmH:13s 0.4/um MLH=4.9
				LmV:14s 0.5/um MLV=5.0
21.	eP	A	22 20 27.5	Celebes Sea 2.90 N 124.75 E
	e	A	24 27	H = 22 06 56.9 h = 220 km MAG=5.6
	ePP	A	24 46	D = 102.18 Az = 323.2 (USCGS)
	LmV	B	23 13.3	PV:1.3s 21.8nm MPV=5.5
				PPV:1.9s 83.2nm
				LmV:14s 0.2/um
22.	ePKIKP	A	11 11 16.5	Fiji Islands 18.29 S 177.75 W
	iPKHKP	A	11 19	H = 10 52 40.8 h = 576 km MAG=4.5
				D = 146.86 Az = 349.1 (USCGS)
				PKIKPV:1.0s 19.7nm

Day	Phase		h m s	Remarks
22.	ePKP	A	14 08 16	Tonga Islands 18.13 S 172.49 W
	iX	A	08 18.5	H = 13 48 36.5 h = 30 km MAG=5.4
	LmH	C	15 05.0	D = 147.39 Az = 355.1 (USCGS)
	LmV	C	05.0	XV:1.4s 51.1nm
22.	ePKIKP	A	17 33 18	Santa Cruz Islands 11.84 S 166.48 E
	ePP	A	36 00	H = 17 14 13.0 h = 144 km MAG=5.4
	eipPP	A	36 40	D = 136.18 Az = 337.0 (USCGS)
				pPPV:1.0s 17.7nm
22.	ePKIKP	A	20 15 09	South of Fiji Islands 26.08 S 177.51 W
	e	A	15 16	H = 19 55 37.03 h = 180 km MAG=5.1
	e	A	16 09	D = 154.49 Az = 346.4 (USCGS)
	LmH	C	21 15.0	
	LmV	C	17.2	
22.	+iPKIKP	A	23 41 05	Fiji Islands 18.91 S 178.68 W
	ePKP2	A	41 11	H = 23 22 26.7 h = 562 km MAG=4.6
	e	A	41 18	D = 147.29 Az = 347.8 (USCGS)
				PKIKPV:1.0s 21.7nm
23.	ePKP	A	00 24 54.5	New Hebrides Islands 19.17 S 169.77 E
	e	A	25 10	H = 00 05 23.3 h = normal MAG=4.8
				D = 144.13 Az = 336.2 (USCGS)
23.	+iP	A	02 54 47.0	Eastern Kazakh SSR 49.87 N 78.32 E
	ePn	A	56 19	H = 02 46 58.1 h = 0 km MAG=5.5
	e	A	57 07	D = 41.33 Az = 297.7 (USCGS)
				PV:0.7s 134.0nm MPV=5.6
				Probably underground explosion
23.	ePKIKP	A	08 20 37	South of Fiji Islands 23.72 S 179.21 E
	eiPKHKP	A	20 43	H = 08 01 50.6 h = 545 km MAG=5.0
	ePKP2	A	20 54.5	D = 151.44 Az = 343.4 (USCGS)
	epPKP	A	22 53	PKHKPV:1.2s 61.0nm
				PKP2V:1.4s 37.2nm

Day	Phase		h m s	Remarks
23.	+eP	A	13 26 50.5	Near East Coast of Honshu, Japan
	epP	A	27 04	37.32 N 141.50 E
	LmV	B	14 05.2	D = 81.95 Az = 330.4 (USCGS)
	LmH	B	05.3	PV:1.4s 65.0nm MPV=5.6
				LmV:16s 1.0/um MLV=5.3
				LmH:16s 1.0/um MLH=5.2
24.	eP	A	01 37 59	Kurile Islands 45.56 N 152.11 E
	e	A	38 11	H = 01 26 01.0 h = 30 km MAG=4.7
				D = 78.25 Az = 335.6 (USCGS)
				PV:1.0s 13.6nm MPV=5.0
24.	eP	A	03 12 56	Peru 11.85 S 75.13 W
	ePP	A	16 53	H = 02 59 21.0 h = 1 km MAG=5.9
	eSKS	C	23 36	D = 97.01 Az = 39.8 (USCGS)
	e	B	23 41	PV:2.0s 68.5nm MPV=5.9
	eS	C	24 24	LmH:19s 4.1/um MLH=5.9
	ePS	C	25 40	LmV:17s 3.2/um MLV=5.9
	LmH	B	54.0	
	LmV	B	57.5	
24.	e(P)	A	05 17 33	Molucca Passage 1.62 N 126.50 E
				H = 05 03 26.7 h = 41 km MAG=5.4
				D = 104.25 Az = 323.4 (USCGS)
24.	ePP	B	12 59 16	Prince Edward Island Region
	ePPP	B	13 01 30	45.44 S 34.98 E
	ePPPP	B	03 00	H = 12 41 40.2 h = normal MAG=5.7 (USCGS)
	eSKS	C	05 52	D = 98.0
	ePS	C	08 05	LmH:18s 4.8/um MLH=6.0
	eSS	C	13 18	LmV:16s 3.9/um MLV=6.0
	LmH	B	36.5	
	LmV	B	40.0	
24.	ePKP	A	14 42 18	Tonga Islands 15.31 S 175.19 W
				H = 14 23 18.0 h = 310 km MAG=4.7
				D = 144.32 Az = 352.6 (USCGS)

Day	Phase		h m s	Remarks
24.	eP	A	16 30 51	Kurile Islands 49.48 N 155.66 E
				H = 16 19 07.4 h = normal MAG=5.3
				D = 75.62 Az = 337.3 (USCGS)
				PV:1.0s 15.8nm MPV=5.1
24.	eP	A	23 25 36	Crete 34.93 N 26.01 E
	e	A	25 41.5	H = 23 21 17.2 h = 41 km MAG=4.3
	e	C	29 20	D = 18.87 Az = 330.7 (USCGS)
	e	C	29 32	
25.	eP	A	01 11 55	Bonin Islands 28.20 N 139.80 E
				H = 00 59 47.7 h = 462 km MAG=4.2
				D = 89.14 Az = 330.0 (USCGS)
25.	eP	A	06 19 30	Salta Province Argentina
	epP	C	21 31	25.55 S 63.31 W
	esP	C	22 35	H = 06 06 42.4 h = 579 km MAG=5.5
	iPP	A	23 40	D = 100.44 Az = 38.7 (USCGS)
	e	A	23 50	PV:1.6s 38.5nm
	ePPP	C	25 32	
	isPPP	B	28 45	
	iSKS	C	29 15.5	
	eSKKS	C	29 50	
	eSP	B	31 45	
	ePS	C	33 00	
	esS	C	34 05	
	esSP	B	35 32	
	e	A	36 09.5	
	esSS	C	40 50	
	e	C	41 10	
	eSa	C	47 30	
25.	eP	A	09 18 32	Off East Coast of Kamchatka
				53.67 N 161.93 E
				H = 09 07 03.2 h = normal MAG=4.3
				D = 73.10 Az = 340.8 (USCGS)

Day	Phase		h m s	Remarks
25.	ePn	A	11 06 48	Peißenberg/Germany 47.50 N 11.06 E
	ePg	A	06 58	H = 11 06 06 (FUR)
	eSn	A	07 20	D = 2.8
	eSg	A	07 34	
	LmH	A	09 05	
	LmV	A	09 19	
25.	eP	A	13 06 14	Fox Islands, Aleutian Is.
	eS	C	14 55	53.30 N 167.01 W
	e	C	21.3	H = 12 54 27.6 h = 42 km MAG=5.0
	LmH	B	43.7	D = 76.42 Az = 0.9 (USCGS)
	LmV	B	44.7	PV:1.4s 23.2nm MPV=5.1
				LmH:20s 2.3/um MLH=5.2
				LmV:17s 1.0/um MLV=5.2
25.	eP	A	13 10 45	Philippine Islands 18.76 N 119.66 E
				H = 12 58 01.8 h = 30 km MAG=4.9
				D = 86.58 Az = 322.7 (USCGS)
25.	eP1	A	13 48 09	Molucca Passage 2.57 N 126.62 E
	eP2	A	48 12.5	H = 13 34 09.8 h = normal MAG=5.6
	ePP	A	52 27	D = 103.56 Az = 323.6 (USCGS)
				P1V:2.0s 34.2nm MPV=5.6
				P2V:1.2s 18.3nm MPV=5.7
25.	LmH	B	14 33.0	Probably Molucca Passage (USCGS)
	LmV	B	37.0	LmH:20s 0.8/um
				LmV:26s 1.6/um
25.	eP	A	21 40 21.5	North Atlantic Ocean 12.40 N 40.75 W
				H = 21 30 33.1 h = 9 km MAG=4.9
				D = 57.02 Az = 36.9 (USCGS)
				PV:1.0s 13.8nm MPV=4.9
25.	eiP	A	23 01 48.5	Eastern China 21.55 N 111.93 E
	eS	C	11 50	H = 22 49 41.3 h = normal MAG=5.4 (USCGS)
	e	C	11 55	D = 79.8
	eSS	C	17 08	PV:2.2s 316.0nm MPV=5.9

Day	Phase		h m s	Remarks
cont. 25.	LmH	B	38.5	LmH:14.5s 9.6/um MLH=6.3
	LmV	B	40.5	LmV:16s 9.3/um MLV=6.2
25.	+eP	A	23 10 34	Near East Coast of Kamchatka
				53.81 160.39 E
				H = 22 59 08.3 h = normal MAG=4.8
				D = 72.66 Az = 339.8 (USCGS)
				PV:1.1s 20.2nm MPV=5.2
26.	epP	A	07 33 51	Near Coast of Nicaragua
				12.63 N 87.80 W
				H = 07 21 00.2 h = 84 km MAG=4.8 (USCGS)
				D = 86.2
26.	eP	A	12 28 52	North Atlantic Ocean 43.67 N 14.60 W
	e	A	28 54	H = 12 24 29.5 h = normal MAG=4.8
	eS	C	32 30	D = 19.08 Az = 59.4 (USCGS)
	LmV	B	36.6	PV:2.4s 82.7nm MPV=4.5
	LmH	B	36.7	LmV:16s 0.6/um MLV=4.2
				LmH:16s 0.6/um MLH=4.0
27.	-iPKP	A	02 33 56.0	New Hebrides Islands 19.41 S 168.82 E
				H = 02 14 28.1 h = 70 km MAG=5.4 (USCGS)
				D = 143.9
				PKPV:1.3s 144.0nm
27.	ePKIKP	A	09 08 14	Fiji Islands 17.62 S 178.29 W
	ePKHKP	A	08 16.5	H = 08 49 37.6 h = 552 km MAG=4.0
	ePKP2	A	08 19.5	D = 146.11 Az = 348.7 (USCGS)
				PKIKPV:1.6s 15.4nm
27.	eP	A	17 22 13	East of Crete (UPP)
	e	A	22 26.5	PV:1.3s 17.5nm
27.	eP	A	19 38 20	Kodiak Islands 57.61 N 153.64 W
	epP	A	38 32.5	H = 19 27 03.9 h = 51 km MAG=4.6
				D = 71.43 Az = 9.8 (USCGS)
				PV:1.3s 15.3nm MPV=5.0

Day	Phase		h m s	Remarks
27.	eP1	AB	21 32 42.5	Gulf of Alaska 59.41 N 145.32 W
	iP2	A	32 44.5	H = 21 21 40.7 h = normal MAG=5.3
	ePP	C	35 16	D = 68.71 Az = 15.5 (USCGS)
	ePPP	C	37 06	P1V(A):1.2s 36.2nm MP1V(A)=5.6
	eS	C	41 48	P1V(B):10s 1.0/um MP1V(B)=6.0
	eSKS	C	42 40	P2V(A):1.2s 77.1nm MP2V(A)=5.8
	LmH	C	22 09.6	LmH(C):14s 3.4/um MLH(C)=5.7
	LmV	C	09.6	LmV(C):14s 5.3/um MLV(C)=6.0
27.	eP	A	22 39 11	Taiwan 24.87 N 122.53 E
				H = 22 26 54.2 h = 105 km MAG=5.4
				D = 83.34 Az = 323.5 (USCGS)
				PV:1.5s 25.1nm MPV=4.8
28.	eP1	A	06 41 14.5	Kodiak Island 57.46 N 153.94 W
	+iP2	A	41 16.5	H = 06 29 53.9 h = 28 km MAG=5.3
	+iP3	A	41 26	D = 71.60 Az = 9.6 (USCGS)
				P1V:1.4s 28.0nm MP1V=5.2
				P2V:0.8s 30.8nm MP2V=5.5
				P3V:1.0s 43.3nm MP3V=5.5
28.	eP1	A	13 15 46	South east of Shikoku, Japan
	eP2	A	15 56	30.73 N 132.46 E
	e	A	18 09	H = 13 03 17.6 h = 24 km MAG=5.6
	eS	C	26 06	D = 83.63 Az = 326.6 (USCGS)
	LmH	B	50.5	P1V:1.4s 107.0nm MP1V=5.9
	LmV	B	57.5	P2V:1.4s 88.4nm MP2V=5.8
				LmH:23s 2.3/um MLH =5.5
				LmV:17s 2.1/um MLV =5.6
28.	ePKHKP	A	14 23 33	Fiji Islands 21.84 S 179.64 W
				H = 14 04 48.8 h = 610 km MAG=4.5
				D = 149.92 Az = 345.6 (USCGS)
29.	eP	A	00 51 28	Virgin Islands 19.94 N 64.15 W
				H = 00 40 42.5 h = 32 km MAG=5.1 (USCGS)
				D = 65.8

Day	Phase		h m s	Remarks
29.	ePKIKP	A	02 14 12	Near North Coast of New Guinea
				3.38 S 144.84 E
				H = 01 55 20.4 h = 6 km MAG=5.5 (USCGS)
				D = 118.7
29.	ePKIKP	A	06 43 26	New Hebrides Islands 14.81 S 167.23 E
	e	A	43 30	H = 06 24 21.6 h = 124 km MAG=5.4
	e	A	43 38	D = 139.17 Az = 336.3 (USCGS)
	e	A	43 50	
	e	A	43 57	
29.	eSn	A	16 36 47.5	Germany 49.7 N 7.5 E
	e	A	36 56.5	H = 16 35 28 (BCIS)
	e	A	37 00.5	D = 2.8
29.	ePg	A	23 57 21.5	Germany 48.2 N 9.1 E
	e	A	57 53.5	H = 23 56 21 (BCIS)
	eiSg	A	57 54.5	D = 2.9
	ei	A	57 55.5	
30.	eP	A	03 37 02	Volcano Islands 22.39 N 142.78 E
	e	A	37 10	H = 03 23 37.6 h = 20 km MAG=5.3
	ePP	A	40 53	D = 95.50 Az = 331.2 (USCGS)
	LmH	B	04 23.5	PPV:1.6s 44.0nm MPPV=5.6
	LmV	B	23.5	LmH:16s 0.4/um MLH =5.0
				LmV:18s 0.3/um MLV =4.8
30.	eP	A	04 31 44	Bonin Islands Region 28.49 N 142.61 E
	ePP	A	35 16	H = 04 18 44.5 h = normal MAG=5.1 (USCGS)
	LmH	B	05 11.9	D = 90.0
	LmV	B	19.5	LmH:14s 0.5/um MLH=5.1
				LmV:14s 0.5/um MLV=5.1
30.	eP	A	17 21 13	Komandorsky Islands 55.48 N 164.04 E
	e	A	21 28	H = 17 09 50.3 h = normal MAG=4.5
				D = 71.77 Az = 341.9 (USCGS)

Day	Phase		h m s	Remarks
30.	ePKHKP	A	24 12 12.5	South of Fiji Islands 23.63 S 176.97 W
	e	A	12 21	H = 23 52 31.7 h = 137 km MAG=4.9
				D = 152.22 Az = 348.2 (USCGS)
31.	eP	A	05 18 09	South Indian Ocean 27.55 S 66.17 E
				H = 05 05 04.3 h = normal MAG=5.3
				D = 91.55 Az = 328.7 (USCGS)
				PV:1.6s 27.5nm MPV=5.3
31.	eP	A	11 34 49.5	Fox Islands, Aleutian Is.
	e	A	35 07	53.00 N 170.11 W
	i	A	35 11	H = 11 23 01.2 h = 37 km MAG=5.3
	LmH	B	12 12.5	D = 76.72 Az = 358.9 (USCGS)
	LmV	B	14.5	PV:1.4s 32.6nm MPV=5.3
				LmH:18.5s 1.6/um MLH=5.4
				LmV:18s 1.0/um MLV=5.2
31.	eP	A	12 17 16.5	Central Alaska 64.86 N 151.17 W
				H = 12 06 44.5 h = normal MAG=4.4
				D = 64.06 Az = 12.1 (USCGS)
				PV:1.0s 19.7nm MPV=5.3
31.	e	A	19 09 44	Southeast of Shikoku, Japan
				30.64 N 132.81 E
				H = 18 57 08.7 h = normal MAG=4.5
				D = 83.86 Az = 326.8 (USCGS)
				PV:1.4s 9.3nm

Day	Phase		h m s	Remarks
1.	ePKIKP	A	12 25 01	South of Fiji Islands 23.37 S 177.46 W
	iPKHKP	A	25 07.8	H = 12 05 34.6 h = 189 km MAG=5.0
	iX	A	25 14	D = 151.87 Az = 347.7 (USCGS)
	iPKP2	A	25 18	PKHKPV:1.2s 48.8nm
	e	A	25 54	XV:1.2s 65.0nm
1.	iP	AB	23 55 41	Kurile Islands 45.58 N 150.88 E
	i	A	55 44	H = 23 43 44.9 h = 38 km MAG=5.6
	iX	A	56 53	D = 77.87 Az = 334.9 (USCGS)
	eS	C	24 05 26	P1V(A):1.5s 302.0nm MP1V=6.2
	e	C	05 36	PV(E):11s 1.4/um MPV =6.0
	e	B	05 47	XV(A):1.8s 243.0nm
	ePS	C	06 05	LmH:19s 15.5/um MLH =6.4
	ei	C	06 18	LmV:19s 13.0/um MLV =6.3
	e	C	06 52	
	e	B	07 32	
	eSS	C	11 00	
	eSSS	C	14 05	
	LmH	B	33.3	
	LmV	B	33.5	
2.	+iP	A	00 46 16	Kurile Islands 45.30 N 151.12 E
	i	A	46 23.5	H = 00 34 17.0 h = 21 km MAG=5.3
	LmH	B	01 24.2	D = 78.20 Az = 335.0 (USCGS)
	LmV	B	24.2	PV:1.3s 74.0nm MPV=5.6
				LmH:19s 3.5/um MLH=5.7
				LmV:19s 3.1/um MLV=5.7
2.	eP	A	01 25 33	Kurile Islands 45.21 N 150.87 E
				H = 01 13 34.8 h = normal MAG=4.6
				D = 78.20 Az = 334.9 (USCGS)
2.	eP	A	02 52 03	Kurile Islands 45.22 N 150.88 E
				H = 02 40 04.9 h = normal MAG=4.8
				D = 78.19 Az = 334.9 (USCGS)
				PV:1.0s 11.6nm MPV=5.1

Day	Phase		h m s	Remarks
2.	ePKIKP	A	04 49(27)	East New Guinea Region 6.5 S 146.9 E
	LmH	B	05 41.4	H = 04 30 29.2 h = 17 km MAG=5.3 (USCGS)
	LmV	B	48.1	D = 122.5
				LmH:16s 0.5/um MLH=5.2
				LmV:16s 0.6/um MLV=5.3
2.	eP	A	06 16 07	Kurile Islands 45.17 N 150.94 E
				H = 06 04 08.5 h = normal MAG=4.7
				D = 78.26 Az = 334.9 (USCGS)
				PV:1.4s 23.2nm MPV=5.1
2.	eP	A	10 29 51	Kurile Islands 45.27 N 151.04 E
				H = 10 17 54.1 h = 38 km MAG=4.9
				D = 78.20 Az = 335.0 (USCGS)
				PV:1.2s 24.4nm MPV=5.2
2.	eP	A	17 50 37	Near East Coast of Kamchatka
				56.22 N 162.40 E
				H = 17 39 21.9 h = normal MAG=4.7
				D = 70.78 Az = 340.8 (USCGS)
				PV:1.2s 16.3nm MPV=5.0
3.	ePKIKP1	A	00 41 24	New Ireland Region 4.24 S 153.02 E
	eiPKIKP2	A	41 25.5	H = 00 22 32.0 h = 65 km MAG=5.3
	ePP	A	43 08	D = 123.56 Az = 331.5 (USCGS)
	ePPP	C	45 42	PKIKP1V:1.0s 17.7nm
	eSKS	B	48 23	PKIKP2V:1.1s 48.4nm
	e(SKSP)	B	52 50	PPV:1.5s 45.2nm MPPV=5.8
	eSPP	C	54 18	LmH:18.5s 1.7/um
	eSS	C	59 45	LmV:19s 1.3/um
	LmH	B	01 38.7	
	LmV	B	38.9	
3.	el	A	04 32 04	Southwestern Ryukyu Islands
	i	B	32 36	24.87 N 123.16 E
				H = 04 19 41.4 h = 62 km MAG=5.3
				D = 83.68 Az = 323.4 (USCGS)
				PV:1.4s 41.8nm MPV=5.5

Day	Phase		h m s	Remarks
3.	+iP	A	08 00 13	Kurile Islands 45.35 N 151.77 E
	ipP	A	00 25.5	H = 07 48 11.4 h = 13 km MAG=5.3
	e	A	00 35	D = 78.34 Az = 335.4 (USCGS)
	LmH	B	34.2	PV:1.4s 97.6nm MPV=5.7
	LmV	B	38.3	pPV:1.3s 135.7nm
				LmH:17.5s 1.7/um MLH=5.4
				LmV:18s 0.8/um MLV=5.1
3.	eP	A	23 57 05	United Arab Republic 27.55 N 33.91 E
				H = 23 51 10.2 h = normal MAG=4.5
				D = 28.62 Az = 329.7 (USCGS)
4.	ePKHKP	A	01 37 38	South of Fiji Islands 23.57 S 179.72 W
	ePKP2	A	37 49.5	H = 01 18 49.4 h = 590 km MAG=4.2
				D = 151.43 Az = 344.1 (USCGS)
				PKHKP:1.2s 8.1nm
4.	ePKHKP	A	03 15 38	South of Fiji Islands 23.93 S 177.36 W
				H = 02 56 11.9 h = 263 km MAG=3.9
				D = 152.44 Az = 347.6 (USCGS)
4.	eP	A	10 35 23.5	Andreanof Islands, Aleutian Is.
	eS	C	45 14	51.40 N 179.56 W
	ePS	C	46 15	H = 10 23 28.9 h = 41 km MAG=5.3
	eSS	C	50 40	D = 77.89 Az = 352.8 (USCGS)
	LmH	B	11 14.0	PV:1.3s 69.9nm MPV=5.6
	LmV	B	19.0	LmH:18.5s 1.5/um MLH=5.3
				LmV:16s 1.1/um MLV=5.3
4.	eP	A	17 32 51	Banda Sea 5.65 S 125.35 E
	epP	A	35 17	H = 17 19 19.6 h = 521 km MAG=6.2
	esP	A	36 07	D = 109.29 Az = 321.9 (USCGS)
	iPKIKP	A	36 51	
	e	B	37 18	
	ePP	C	37 35	
	epPP	B	39 20	
	e(Pa)	C	39 29	
	e(Pa)	B	39 40	
	esPP	C	40 14	

Day	Phase		h m s	Remarks
cont.				
4.	eSKS	C	17 42 35	
	eSKKS	C	43 35	
	eSdiff	C	44 12	
	iSdiff	B	44 14	
	eSP	C	45 51	
	iSPP	B	47 06	
	e(sS)	B	47 50	
	esSP	B	49 28	
	eSS	B	52 16	
	e(sSS)	B	56 19	
4.	eSKS	C	22 15 05	Near Coast of Northern Chile
	ePS	C	17 55	26.9 S 70.9 W
	LmV	B	54.0	H = 21 50 02.3 h = normal MAG=5.3
	LmH	B	55.3	D = 105.8
				LmV:18s 0.5/um MLV=5.2
				LmH:18s 0.7/um MLH=5.3
5.	eP1	AB	02 27 12	Molucca Passage 1.30 N 126.20 E
	eP2	A	27 20	H = 02 13 09.6 h = 34 km MAG=6.1
	eiP3	A	27 31	D = 104.33 Az = 323.3 (USCGS)
	e	B	30 30	P1V(A):2.0s 60.0nm MP1V=6.1
	ePP	B	31 27	PV(E):16s 3.5/um MPV =7.0
	ei	C	31 40	P3V(A):1.1s 141.0nm MP3V=6.7
	eiSKS	C	37 50	LmH:19.5s 50.5/um MLH=7.1
	eS	B	39 08	LmV:18s 58.2/um MLV=7.2
	eiSP	C	40 21	
	iPS	C	40 40	
	iPS	B	40 44	
	e	A	43 29	
	iSS	C	46 27	
	LmH	B	03 15.7	
	LmV	B	19.8	
5.	eS	B	14 29 15	Molucca Passage 1.29 N 126.43 E
	eSS	B	36 40	H = 13 03 23.3 h = 18 km MAG=5.2
				D = 104.47 Az = 323.4 (USCGS)

Day	Phase		h m s	Remarks
5.	ePKIKP	AB	16 51 19	New Ireland Region 5.25 S 153.78 E
	e	A	51 35	H = 16 32 25.8 h = 69 km MAG=5.4
	e	A	51 51	D = 124.80 Az = 331.6 (USCGS)
	ePP	B	53 09	PKIKPV(B):7.0s 0.5/um
	ePS	B	17 03 14	PKIKPV(A):1.9s 45.5nm
	e	B	04 57	PPV(B):9.0s 1.5/um MPPV=6.5
	e	B	08 24	LmH:21s 3.9/um
	eSS	B	10 00	LmV:19s 3.1/um
	LmH	B	36.1	
	LmV	B	50.2	
5.	+eiPKP	A	18 03 32	New Hebrides Islands 20.62 S 169.41 E
	+eipPKP	A	03 44	H = 17 44 01.1 h = 66 km MAG=4.7
				D = 145.30 Az = 335.0 (USCGS)
				PKPV:1.4s 74.5nm
				pPKPV:1.2s 48.8nm
5.	eP	A	18 46 37	Honshu, Japan 37.53 N 140.56 E
	epP	A	47 05	H = 18 34 33.3 h = 130 km MAG=5.0
				D = 81.40 Az = 329.9 (USCGS)
				h = 113 km
6.	eP	A	00 49 34	Southern Alaska 61.39 N 150.74 W
	e	A	49 41	H = 00 38 42.8 h = 53 km MAG=4.8
	e	A	49 52	D = 67.43 Az = 12.1 (USCGS)
				PV:1.0s 7.9nm MPV=4.9
6.	e(pP)	A	08 53 10	South of Honshu, Japan 32.50 N 140.65 E
				H = 08 40 32.2 h = 67 km MAG=4.9
				D = 85.78 Az = 330.3 (USCGS)
				pPV:1.2s 10.2nm
6.	e(PKHKP)	A	15 17 25	South Sandwich-Islands 57.97 S 25.36 W
				H = 14 59 23.8 h = 65 km MAG=4.6
				D = 112.42 Az = 24.5 (USCGS)

Day	Phase		h m s	Remarks
6.	eP1	A	15 51 53	North Atlantic Ridge 10.83 N 43.23 W
	eP2	A	51 56.5	H = 15 41 50.4 h = normal MAG=5.2
	ePP	C	54 05	D = 59.73 Az = 37.1 (USCGS)
	eS	C	16 00 05	P1V:1.5s 25.1nm MP1V=5.0
	eSS	C	03.8	P2V:1.0s 51.2nm MP2V=5.5
	eSSS	C	06 55	LmH:17s 1.1/um MLH=5.1
	LmH	B	14.3	LmV:20s 1.3/um MLV=5.1
	LmV	B	14.7	
7.	e	A	02 09 18	Solomon Islands 5.27 S 154.06 E
	ePP	C	10 11	H = 01 49 33.2 h = 116 km MAG=5.2
	ePS	C	20 00	D = 124.96 Az = 331.7 (USCGS)
	eSS	C	26 52	LmH:17s 1.0/um MLH=5.5
	LmH	B	56.0	LmV:17s 0.4/um MLV=5.1
	LmV	B	03 03.5	
7.	+iP	A	06 57 37.5	Near East Coast of Kamchatka
	e	A	57 45	52.21 N 158.94 E
	e	A	57 55	H = 06 46 08.3 h = 69 km MAG=5.1
				D = 73.85 Az = 339.0 (USCGS)
				PV:1.0s 59.1nm MPV=5.6
7.	ePKHKP	A	09 51 49	Fiji Islands 20.65 S 178.60 W
	ePKP2	A	51 55	H = 09 33 09.1 h = 630 km MAG=4.4
				D = 149.00 Az = 347.3 (USCGS)
				PKHKPV:1.2s 16.3nm
7.	eP	A	15 43 42	Kurile Islands 45.20 N 148.27 E
				H = 15 32 02.5 h = 152 km MAG=4.5
				D = 77.41 Az = 333.4 (USCGS)
8.	+iP	A	06 38 47	Hindu Kush Region 36.41 N 70.88 E
	i	A	39 07	H = 06 30 57.1 h = 198 km MAG=5.8
	e	A	39 14	D = 44.10 Az = 308.1 (USCGS)
	ipP	A	39 27	PV:2.0s 812.0nm MPV=5.9
	esP	A	39 48	pPV:1.8s 575.0nm
	i	A	39 51	sPV:1.6s 400.0nm
	e(PP)	B	40 44	
	e(pPP)	C	41 28	

Day	Phase		h m s	Remarks
cont.				
8.	eiS	C	06 45 04	
	esS	C	46 20	
	esS	B	46 25	
	eSS	C	48 20	
	e	B	48 47	
	e	B	53 34	
8.	eSKS	B	11 32 40	South Atlantic Ridge 47.73 S 15.78 W
	eS	B	33 44	H = 11 08 14.8 h = normal MAG=5.9 (USCGS)
	eSS	B	40 30	D = 100.8
	eSSS	B	44 35	LmH:19s 3.0/um MLH=5.8
	LmH	B	12 05.4	LmV:19s 3.1/um MLV=5.8
	LmV	B	05.5	
8.	e	C	20 59 21	Banda Sea 6.13 S 129.69 E
	e	C	21 03 08	H = 20 44 21.0 h = 196 km MAG=5.9 (USCGS)
	e	B	03 16	D = 112.2
	ePP	C	03 24	LmH:19s 6.5/um
	epPP	C	04 05	LmV:16s 4.5/um
	e(SKP)	B	05 34	
	e(pPPP)	B	06 28	
	esSKP	C	07 22	
	eiSKS	C	09 57	
	eSKKS	B	09 59	
	esSKS	B	10 41	
	ei	C	12 08	
	iSP	C	12 33	
	ePPS	B	14 32	
	eSS	B	18 33	
	e	B	24 28	
	LmH	B	47.8	
	LmV	B	51.3	
9.	e	B	09 24 12	Northern Italy 44.23 N 11.87 E
	eSg	B	24 35	H = 09 21 07.0 h = normal MAG=4.1 (USCGS)
	LmH	B	25.3	D = 6.5

Day	Phase		h m s	Remarks
9.	eP	A	13 50 24.5	Carlsberg Ridge 4.57 N 62.46 E
				H = 13 40 01.1 h = normal MAG=5.2
				D = 62.49 Az = 326.2 (USCGS)
9.	ePn	A	16 27 58.5	Yugoslavia 42.38 N 19.43 E
	iPg	A	28 54.9	H = 16 25 35.2 h = 25 km MAG=5.0
	eSn	A	29 43.5	D = 9.86 Az = 329.7 (USCGS)
	i	A	29 58.5	PnV:1.5s 45.2nm
	i	A	30 09.5	LmH:14s 4.8/um MLH=4.5
	i	A	30 36	LmV:14s 2.5/um
	eiSg	A	31 03.5	
	LmH	B	31.2	
	LmV	B	32.0	
9.	ePn	A	17 03 26	Yugoslavia. 42.22 N 19.26 E
	e	A	03 32	H = 17 01 01.3 h = 20 km MAG=4.6
	eSn	A	05 11	D = 9.93 Az = 330.6 (USCGS)
	e	A	05 13.5	LmH:9s 1.2/um MLH=4.1
	e	A	05 26	
	e	A	05 41.5	
	eSg	A	06 23	
	e	A	06 28	
	LmH	B	06.7	
	LmV	B	07.5	
10.	e	A	05 13 30	Probably Burma (USCGS)
10.	eP	A	15 51 33	Carlsberg Ridge 8.42 N 57.83 E
				H = 15 41 48.5 h = normal MAG=5.0
				D = 56.77 Az = 326.7 (USCGS)
				PV:1.4s 11.6nm MPV=4.7
10.	ePn	A	21 18 04	Northern Italy 43.99 N 12.10 E
	ePg	A	18 36	H = 21 16 24.7 h = 33 km MAG=4.0 (USCGS)
	eSn	A	19 17	D = 6.7
	e	A	20 11	
	e	A	20 17	
	e	A	20 22	

Day	Phase		h m s	Remarks
11.	ePn	B	13 57 02	Central Italy 43.21 N 12.45 E
	ePg	B	57 41	H = 13 55 12.3 h = normal MAG=4.6
	eSn	B	58 23	D = 7.46 Az = 355.9 (USCGS)
	e	B	59 01	LmH:10s 1.0/um MLH=3.8
	eSg	B	59 12	LmV:11s 1.3/um
	LmH	B	14 01.0	
	LmV	B	01.1	
11.	eP	A	20 18 39.5	South Atlantic Ridge 19.68 S 11.68 W
				H = 20 07 11.9 h = normal MAG=4.8
				D = 72.97 Az =15.3 (USCGS)
11.	e	A	21 20(00)	Kurile Islands 43.96 N 147.83 E
	e	A	20 03	H = 21 07 57.8 h = 20 km MAG=4.5
				D = 78.37 Az = 233.3 (USCGS)
11.	eP	A	21 33 49	Kurile Islands 43.38 N 147.62 E
				H = 21 21 47.4 h = 29 km MAG=4.5
				D = 78.83 Az = 333.2 (USCGS)
11.	+iP	AB	21 38 37.5	Kurile Islands 43.44 N 147.86 E
				H = 21 26 37.6 h = 43 km MAG=5.7
				D = 78.85 Az = 333.3 (USCGS)
				PV(A):2.2s 393.0nm MPV=6.1
				PV(B):4.8s 2.0/um MPV=6.4
11.	-iP	A	21 39 29	Kurile Islands 43.57 N 147.75 E
				H = 21 27 25.8 h = 14 km MAG=5.9
				D = 78.70 Az = 333.3 (USCGS)
11.	iP	A	21 39 37	Kurile Islands 43.50 N 147.82 E
	ePP	B	42 35	H = 21 27 36.0 h = 45 km MAG=6.2 (USCGS)
	iS	B	49 32	D = 78.7
	eiSS	St	54 44	LmH:21s 1020.0/um MLH=8.1
	LmH	B	22 23.2	St = strain seismograph
	LmV	B	24.6	

Day	Phase		h m s	Remarks
11.	iP	A	21 39 40	Kurile Islands 43.55 N 147.35 E H = 21 27 39.4 h = 28 km MAG=7.1 (USCGS) D = 78.5
11.	+iP	A	21 48 08	Kurile Islands
	ipP	A	48 18	H = 21 36 08 (UPP) D ca. 78.6 h = 37 km
11.	+i(P)	A	21 50 19.5	Kurile Islands
	i	A	50 23	H = 21 38 24 (UPP)
	e	A	50 29	
11.	eP	A	22 03 46	Probably Kurile Islands
	epP	A	03 59	h = 50 km
11.	eP	A	22 05 56.5	Probably Kurile Islands
11.	eP	A	22 07 28	Hokkaido, Japan Region 44.0 N 145.7 E
	e	A	07 34	H = 21 55 35.3 h = 66 km MAG=5.5 (USCGS) D = 77.7
11.	iP	A	22 13 18	Kurile Islands 43.5 N 147.3 E H = 22 01 17.9 h = normal MAG=5.3 (USCGS) D = 78.7
11.	iP	A	22 22 52	Kurile Islands 43.7 N 148.5 E H = 22 10 51.5 h = normal MAG=5.3 (USCGS) D = 78.8
11.	eP	A	22 27 45	Kurile Islands 44.2 N 148.4 E H = 22 15 43.9 h = normal MAG=4.8 (USCGS) D = 78.3
11.	eP	A	22 39 47.5	Off Coast of Hokkaido, Japan 42.7 N 147.4 E H = 22 27 44.7 h = normal MAG=5.0 (USCGS) D = 79.4

Day	Phase		h m s	Remarks
11.	eP	A	22 45 50	Kurile Islands H = 22 33 49 (UPP) D ca. 78.8
11.	e(pP)	A	22 47 12	Kurile Islands H = 22 35 01 (UPP)
11.	eP	A	22 54 03	Off Coast of Hokkaido, Japan 42.7 N 147.2 E H = 22 42 00.3 h = normal MAG=5.1 (USCGS) D = 79.4
11.	eP	A	23 01 33	Kurile Islands
	epP	A	01 45	H = 22 49 35 (UPP) D ca. 78.5 h = 45 km
11.	eP	A	23 04 18	Kurile Islands H = 22 52 20 (UPP) D ca. 78.2
11.	+iP	A	23 05 56	Kurile Islands 44.0 N 148.3 E H = 22 54 00.4 h = 59 km MAG=5.4 (USCGS) D = 78.3 PV:1.2s 162.5nm MPV=6.0
11.	eP	A	23 09 29.5	Kurile Islands H = 22 57 31 (UPP) D ca. 78.4
11.	eP	A	23 10 59	Kurile Islands
	epP	A	11 11	H = 22 59 00 (UPP) D ca. 78.8 h = 50 km
11.	e(pP)	A	23 12 07	Kurile Islands H = 22 59 58 (UPP)
11.	eP	A	23 13 00	Kurile Islands
	epP	A	13 10.5	H = 23 01 00 (UPP) D ca. 78.6 h = 40 km

Day	Phase		h m s	Remarks
11.	eP1	A	23 14 56	Kurile Islands 43.09 N 147.79 E
	iP2	A	14 58.5	H = 23 02 53.8 h = normal MAG=5.5
	epP	A	15 07	D = 79.14 Az = 333.3 (USCGS)
				P1V:1.2s 55.0nm MP1V=5.5
				P2V:1.4s 172.0nm MP2V=5.9
11.	eP	A	23 24 18	Kurile Islands
				H = 23 12 15 (UPP)
				D ca. 79.2
11.	eP	A	23 26 52	Kurile Islands 43.39 N 147.59 E
	e	A	27 04	H = 23 14 51.1 h = normal MAG=5.0
				D = 78.81 Az = 333.2 (USCGS)
				PV:1.4s 23.3nm MPV=5.0
11.	eP	A	23 31 03	Kurile Islands 43.42 N 148.34 E
	ipP	A	31 17	H = 23 19 00.2 h = normal MAG=5.1
				D = 79.03 Az = 333.6 (USCGS)
				h = 52 km
				PV:1.6s 33.0nm MPV=5.1
				pPV:1.4s 83.7nm
11.	eP	A	23 33 44	Kurile Islands 43.38 N 147.49 E
	eipP	A	33 55	H = 23 21 43.1 h = normal MAG=5.2
	eisP	A	33 59.5	D = 78.79 Az = 333.1 (USCGS)
				h = 40 km
				PV:2.2s 54.5nm MPV=5.2
11.	eP	A	23 36 32	Kurile Islands 43.0 N 147.3 E
	epP	A	36 44.5	H = 23 24 31.3 h = normal MAG=4.8 (USCGS)
				D = 79.1
11.	eP	A	23 46 10.5	Kurile Islands 43.33 N 147.96 E
	epP	A	46 22	H = 23 34 08.4 h = 32 km MAG=5.1
				D = 78.98 Az = 333.4 (USCGS)
				h = 43 km
				PV:1.2s 28.4nm MPV=5.2
				pPV:1.2s 52.8nm

Day	Phase		h m s	Remarks
11.	eP	A	23 48 10	Kurile Islands 44.53 N 147.38 E
	epP	A	48 21	H = 23 36 15.0 h = normal MAG=4.9
	esP	A	48 26	D = 77.72 Az = 333.0 (USCGS)
				h = 40 km
				PV:1.2s 24.4nm MPV=5.2
				pPV:1.8s 50.6nm
11.	eP	A	23 51 31	Off Coast of Hokkaido, Japan
	epP	A	51 41.5	42.88 N 146.71 E
				H = 23 39 29.0 h = normal MAG=5.0
				D = 78.97 Az = 332.7 (USCGS)
				PV:1.0s 15.8nm MPV=5.0
				pPV:1.2s 18.3nm
11.	eP	A	23 54 03	Kurile Islands 43.66 N 147.78 E
	epP	A	54 15	H = 23 42 03.5 h = 43 km MAG=5.6
				D = 78.63 Az = 333.3 (USCGS)
				PV:1.5s 108.0nm MPV=5.7
				pPV:1.5s 60.4nm
11.	eP	A	24 00 11	Kurile Islands
				H = 23 48 11
				D ca. 78.6
				PV:1.2s 16.3nm MPV=5.0
11.	eP	A	24 00 49	Kurile Islands 43.74 N 147.93 E
				H = 23 48 48.9 h = normal MAG=5.3
				D = 78.61 Az = 333.3 (USCGS)
				PV:1.0s 13.8nm MPV=5.0
11.	eP1	A	24 01 07	Kurile Islands
	eP2	A	01 19	H = 23 49 10 (UPP)
				D ca. 78.2
				P1V:1.7s 60.5nm MP1V=5.4
				P2V:1.4s 32.6nm MP2V=5.3
11.	eP	A	24 06 58	Molucca Passage 1.73 N 126.47 E
	e	A	09 55	H = 23 52 56.9 h = 34 km MAG=6.1

Day	Phase		h m s	Remarks
cont.				
11.	e	A	24 10 55	D = 104.15 Az = 323.4 (USCGS) PV:2.0s 136.9nm MPV=6.4
12.	eP	A	00 23 23	Kurile Islands H = 00 11 25 (UPP) D ca. 78.2
12.	eP	A	00 27 28	Kurile Islands 43.68 N 147.72 E
	epP	A	27 39	H = 00 15 28.4 h = 29 km MAG=5.3 D = 78.59 Az = 333.2 (USCGS) h = 40 km
12.	eP	A	00 31 07	Kurile Islands 43.06 N 146.72 E H = 00 19 09.3 h = 63 km MAG=4.5 D = 78.81 Az = 332.7 (USCGS)
12.	eP	A	00 37 43	Kurile Islands 44.46 N 148.66 E
	epP	A	37 56	H = 00 25 45.4 h = 36 km MAG=5.1 D = 78.20 Az = 333.7 (USCGS) PV:1.0s 33.5nm MPV=5.4 pPV:1.8s 40.5nm
12.	eP	A	00 41 28	Kurile Islands 43.71 N 147.18 E H = 00 29 29.5 h = normal MAG=4.8 D = 78.39 Az = 332.9 (USCGS)
12.	eP	A	00 49 43	Kurile Islands H = 00 37 43 (UPP) D ca. 78.8
12.	eP	A	00 51 25	Kurile Islands H = 00 39 25 (UPP) D ca. 78.6
12.	e(pP)	A	00 53 18	Kurile Islands H = 00 41 07 (UPP)
12.	e	A	00 59 30	Probably Kurile Islands

Day	Phase		h m s	Remarks
12.	eP	A	01 03 10	Tibet 32.31 N 83.01 E
	epP	A	03 17	H = 00 53 45.0 h = 39 km MAG=4.7 D = 54.39 Az = 312.1 (USCGS) PV:1.1s 8.1nm MPV=4.7
12.	eP	A	01 05 36.5	Kurile Islands 43.36 N 147.30 E
	epP	A	05 47	H = 00 53 36.0 h = 30 km MAG=5.0 D = 78.74 Az = 333.0 (USCGS) PV:1.6s 27.4nm MPV=5.0 pPV:1.2s 32.5nm
12.	eP	A	01 07 31.5	Kurile Islands H = 00 55 33 (UPP) D ca. 78.3 PV:1.4s 14.0nm MPV=4.9
12.	eP	A	01 13 43	Kurile Islands H = 01 01 42 (UPP) D ca. 79.0
12.	eP	A	01 15 07	Kurile Islands 43.55 N 147.22 E
	epP	A	15 18	H = 01 03 07.3 h = normal MAG=4.8 D = 78.54 Az = 333.0 (USCGS) h = 40 km PV:1.5s 25.1nm MPV=5.1
12.	eiP	A	01 15 28	Kurile Islands
	epP	A	15 36	H = 01 03 27 (UPP)
	e	A	15 44	D ca. 78.8 h = 30 km
	e	A	15 49	PV:1.4s 32.6nm MPV=5.2
12.	eP	A	01 24 24	Kurile Islands 43.98 N 148.08 E H = 01 12 24.7 h = normal MAG=4.5 D = 78.44 Az = 333.4 (USCGS)
12.	e(P)	A	01 24 46	Kurile Islands H = 01 12 52 (UPP)

Day	Phase		h m s	Remarks
12.	eP	A	01 40 26	Kurile Islands 42.95 N 147.69 E
	e	A	40 30	H = 01 28 22.0 h = normal MAG=4.8
	epP	A	40 38	D = 79.23 Az = 333.3 (USCGS)
				h = 45 km
				PV:1.2s 12.2nm MPV=4.8
12.	eP	A	01 46 58	Kurile Islands 43.65 N 147.49 E
	epP	A	47 07.5	H = 01 34 57.4 h = normal MAG=4.2
	e	A	47 22	D = 78.54 Az = 333.1 (USCGS)
				h = 37 km
12.	eP	A	01 54 49	Kurile Islands
	epP	A	55 01.5	H = 01 42 50 (UPP)
				D ca. 78.6 h = 46 km
12.	eP	A	02 06 37	Kurile Islands 43.47 N 148.05 E
				H = 01 54 34.9 h = normal MAG=4.4
				D = 78.88 Az = 333.4 (USCGS)
12.	e(pP)	A	02 08 07	Kurile Islands 43.66 N 148.26 E
				H = 01 55 56.0 h = normal MAG=4.7
				D = 78.78 Az = 333.5 (USCGS)
12.	eP	A	02 18 43	Kurile Islands 43.3 N 147.4 E
				H = 02 06 41.7 h = normal MAG=4.4 (USCGS)
				D = 78.7
12.	eP	A	02 31 22	Kurile Islands 43.80 N 148.37 E
	epP	A	31 30	H = 02 19 21.8 h = 38 km MAG=4.7
				D = 78.69 Az = 333.6 (USCGS)
				h = 30 km
12.	eP	A	02 35 52	Molucca Passage 1.7 N 126.3 E
				H = 02 51 53.0 h = 67 km MAG=5.0 (USCGS)
				D = 104.1
12.	eP	A	02 43 17	Kurile Islands
				H = 02 31 17 (UPP)
				D = 78.6

Day	Phase		h m s	Remarks
12.	eP	A	02 46 40	Kurile Islands 43.0 N 147.2 E
	epP	A	46 54	H = 02 34 42.1 h = normal MAG=4.3 (USCGS)
				D = 79.1 h = 50 km
12.	eP	A	02 48 51	Kurile Islands 43.94 N 148.32 E
	epP	A	49 02	H = 02 36 51.5 h = normal MAG=5.1
				D = 78.56 Az = 333.5 (USCGS)
				h = 40 km
				PV:1.6s 32.9nm MPV=5.2
12.	eiP	A	03 21 06	Kurile Islands 44.57 N 148.47 E
				H = 03 09 08.7 h = normal MAG=5.0
				D = 78.04 Az = 333.6 (USCGS)
				PV:1.2s 22.3nm MPV=5.2
12.	eP	A	03 30 41	Kurile Islands 44.71 N 148.17 E
				H = 03 18 45.7 h = normal MAG=4.2
				D = 77.82 Az = 333.4 (USCGS)
12.	eP	A	03 31 16.5	Kurile Islands
	epP	A	31 25	H = 03 19 16 (UPP)
				D ca. 78.6 h = 35 km
12.	eP	A	03 42 23	Kurile Islands 43.6 N 148.1 E
	epP	A	42 35	H = 03 30 22.5 h = normal MAG=4.2 (USCGS)
				D = 78.6 h = 45 km
12.	+iP	AB	03 45 40	Kurile Islands 43.08 N 147.63 E
	epP	A	45 51	H = 03 33 37.2 h = normal MAG=5.5
	eX	B	46 00	D = 79.10 Az = 333.2 (USCGS)
	eS	B	55 39	h = 40 km
	LmH	B	04 25.5	PV(A):2.1s 115.5nm MPV=5.5
	LmV	B	32.8	PV(B):9s 1.6/um MPV=6.0
				XV(A):3.0s 631.0nm
				XV(B):3.5s 0.7/um
				SH(B):8s 1.4/um MSH =6.1
				LmH:14s 8.2/um MLH =6.2
				LmV:16s 4.9/um MLV =6.0

Day	Phase		h m s	Remarks
12.	eP	A	04 01 11.5	Kurile Islands 43.56 N 148.10 E
				H = 03 49 09.6 h = normal MAG=4.4
				D = 78.82 Az = 333.5 (USCGS)
12.	eP	A	04 10 27	Kurile Islands 43.1 N 148.7 E
	epP	A	10 41	H = 03 58 19.9 h = normal MAG=4.5 (USCGS)
				D = 79.4 h = 50 km
12.	eP	A	04 24 46	Kurile Islands 43.3 N 146.7 E
				H = 04 12 52.2 h = 86 km MAG=4.8
				D = 76.5
				PV:0.8s 13.4nm MPV=5.1
12.	e(P)	A	04 33 15	Kurile Islands
				H = 04 21 09 and H = 04 21 16 (UPP)
12.	eP	A	04 38 51	Kurile Islands 43.62 N 147.68 E
	epP	A	39 04	H = 04 26 55.0 h = 66 km MAG=4.2
				D = 78.63 Az = 333.2 (USCGS)
				h = 50 km
12.	eP	A	04 41 09	Kurile Islands 43.78 N 147.90 E
	epP	A	41 21	H = 04 29 08.7 h = normal MAG=4.4
				D = 78.56 Az = 333.3 (USCGS)
				h = 45 km
12.	e	A	05 00 24	Kurile Islands 42.96 N 147.80 E
	e	A	00 42	H = 04 48 25.1 h = normal MAG=5.0
				D = 79.26 Az = 333.3 (USCGS)
12.	-iP	A	05 05 38	Kurile Islands 43.31 N 147.51 E
	ipP	A	05 50	H = 04 53 36.5 h = normal MAG=5.7
	isP	A	05 55.5	D = 78.85 Az = 333.2 (USCGS)
				h = 37 km
				PV:1.4s 121.0nm MPV=5.7
				pPV:1.7s 115.0nm
				sPV:1.8s 155.5nm

Day	Phase		h m s	Remarks
12.	+iP	A	05 15 28	Kurile Islands 43.60 N 148.00 E
	+i	C	15 30	H = 05 03 26.9 h = normal MAG=6.0
	-ipP	A	15 41.5	D = 78.75 Az = 333.4 (USCGS)
	-i	A	16 03.5	h = 50 km
	eS	C	25 20	PV(A):1.4s 433.0nm MPV=6.3
	iSKS	E	25 32	PV(E):10s 7.8/um MPV=6.7
	eiPS	E	26 09	pPV:1.6s 632.0nm
	eSS	C	30 32	LmH:20s 105.0/um MLH=7.2
	LmH	E	48.1	LmV:16s 45.5/um MLV=6.9
	LmV	E	55.3	
12.	eP	A	05 21 01	Kurile Islands 43.21 N 147.04 E
				H = 05 08 59.0 h = normal MAG=5.4
				D = 78.78 Az = 332.9 (USCGS)
				PV:1.3s 43.7nm MPV=5.4
12.	+eP1	A	06 05 29	Kurile Islands 43.6 N 148.0 E
	iP1	A	05 29.3	H = 05 03 26.9 h = normal MAG=6.0 (USCGS)
	iP2	A	05 31.5	D = 78.7
	epP1	A	05 41	P1V:1.2s 42.7nm MP1V=5.4
	ipP2	A	05 43.5	P2V:1.0s 157.4nm MP2V=6.1
	ei	A	05 51	pP1V:1.2s 81.3nm
	eS	A	06 15 26	pP2V:1.7s 418.0nm
	LmH	B	38.5	SH(A):3.0s 937.0/um MSH(A)=6.3
	LmV	B	44.9	LmH:19.5s 61.0/um MLH=7.0
				LmV:17s 26.6/um MLV=6.7
12.	eP	A	06 12 18	Kurile Islands 43.23 N 147.28 E
				H = 06 00 16.4 h = normal MAG=4.4
				D = 78.85 Az = 333.0 (USCGS)
				PV:1.4s 14.0nm MPV=4.8
12.	eP	A	06 50 51.5	Kurile Islands 43.10 N 147.46 E
				H = 06 38 49.0 h = normal MAG=5.3
				D = 79.02 Az = 333.1 (USCGS)
				PV:1.2s 36.6nm MPV=5.0
12.	e(P)	A	06 54 53.5	Kurile Islands 43.13 N 147.00 E
				H = 06 42 55.5 h = normal MAG=4.6
				D = 78.84 Az = 332.9 (USCGS)

Day	Phase		h m s	Remarks
12.	eP	A	07 01 32	Off Coast of Hokkaido, Japan
	e	A	01 42	42.94 N 146.67 E
				H = 06 49 30.3 h = normal MAG=4.6 (USCGS)
				D = 79.0
				PV:1.2s 12.2nm MPV=4.8
12.	eP	A	07 15 47.5	Kurile Islands 43.25 N 147.56 E
	epP	A	16 00.5	H = 07 03 45.2 h = normal MAG=4.8
				D = 78.92 Az = 333.2 (USCGS)
				h = 50 km
				PV:1.4s 23.2nm MPV=5.0
				pPV:1.5s 40.2nm
12.	eP	A	07 18 59	
	e(pP)	A	19 08.5	Kurile Islands
				H = 07 06 58 (UPP)
				D ca. 78.8
12.	-iP	A	07 22 42	Kurile Islands 43.65 N 147.94 E
	e	A	22 55.5	H = 07 10 41.4 h = normal MAG=5.3
	e	A	22 58	D = 78.69 Az = 333.4 (USCGS)
				PV:1.2s 61.0nm MPV=5.6
12.	eP	A	07 50 10	Kurile Islands 43.90 N 147.70 E
				H = 07 38 10.7 h = normal MAG=4.9
				D = 78.39 Az = 333.2 (USCGS)
				PV:1.0s 23.6nm MPV=5.3
12.	eP	A	08 06 51	Off Coast of Hokkaido, Japan
	e	A	07 03	42.57 N 146.62 E
				H = 07 54 51.0 h = 62 km MAG=4.7
				D = 79.21 Az = 332.7 (USCGS)
12.	eP	A	08 14 57.5	Kurile Islands
				H = 08 02 57 (UPP)
				D ca. 78.6
12.	eP	A	08 16 57	Kurile Islands 43.81 N 148.54 E
				H = 08 04 58.5 h = 50 km MAG=4.6
				D = 78.74 Az = 333.7 (USCGS)

Day	Phase		h m s	Remarks
12.	eP	A	08 53 50.5	Kurile Islands 43.70 N 148.36 E
				H = 08 41 50.0 h = 33 km MAG=4.5
				D = 78.78 Az = 333.6 (USCGS)
12.	eP	A	09 27 50.5	Kurile Islands
				H = 09 15 52 (UPP)
				D c. 78.2
12.	eP	A	09 33 10	Kurile Islands 43.13 N 147.34 E
				H = 09 21 07.8 h = 32 km MAG=4.5
				D = 78.95 Az = 333.1 (USCGS)
12.	eP	A	09 35 39	Kurile Islands
				H = 09 23 38 (UPP)
				D c. 78.8
12.	+eP	A	09 37 41	Kurile Islands 43.11 N 147.56 E
	Pm	A	37 44	H = 09 25 38.7 h = normal MAG=5.3
	epP	A	37 52.5	D = 79.04 Az = 333.2 (USCGS)
	eS	B	47 34	PmV:1.5s 161.0nm MPV=5.8
	eSKS	B	47 50	LmH:21s 9.8/um MLH=6.1
	LmH	B	10 10.2	LmV:18s 4.5/um MLV=5.9
	LmV	B	17.4	
12.	-iP	A	09 45 43	Kurile Islands 43.56 N 147.49 E
	-ipP	A	45 52	H = 09 33 43.2 h = 34 km MAG=5.6
				D = 78.62 Az = 333.1 (USCGS)
				PV:2.0s 205.0nm MPV=5.9
				pPV:1.2s 89.5nm
12.	eP	A	10 06 38	Kurile Islands 43.04 N 147.46 E
				H = 09 54 34.6 h = normal MAG=4.3
				D = 79.07 Az = 333.1 (USCGS)
12.	e(P)	A	10 34 47.5	Kurile Islands 42.99 N 147.49 E
				H = 10 22 41.2 h = normal MAG=4.4
				D = 79.13 Az = 333.2 (USCGS)

Day	Phase		h m s	Remarks
12.	e(P)	A	10 35(27)	Kurile Islands
				H = 10 23 27 (UPP)
				D ca.78.6
12.	eP	A	11 33 22.5	Kurile Islands 43.94 N 148.74 E
	iP	B	33 24	H = 11 21 21.6 h = 29 km MAG=5.4
	Pm	A	33 26	D = 78.69 Az = 333.8 (USCGS)
	e	A	33 28	PmV(A):1.8s 378.0nm MPV=6.2
	e	A	33 33	PV(B):12s 4.5/um MPV=6.4
	eS	C	43 15	LmH:20s 64.0/um MLH=7.0
	eSKS	B	43 20	LmV:16s 25.2/um MLV=6.7
	eSP	B	44 05	
	eSS	C	48 32	
	LmH	B	12 06.3	
	LmV	B	12.7	
12.	eP	A	11 40 13	Kurile Islands
				H = 11 28 14 (UPP)
				D ca. 78.4
12.	eP1	A	11 44 30.5	Kurile Islands 43.18 N 147.55 E
	eP2	A	44 33	H = 11 32 24.3 h = 10 km MAG=5.2
	epP	A	44 40.5	D = 78.98 Az = 333.2 (USCGS)
				h = 40 km
				P2V:1.6s 49.4nm MPV=5.3
12.	eP	A	11 46 03	Kurile Islands 44.02 N 148.99 E
	epP	A	46 13	H = 11 34 02.0 h = normal MAG=5.1
				D = 78.70 Az = 333.9 (USCGS)
				h = 37 km
				PV:1.2s 16.3nm MPV=5.0
12.	+eiP	A	12 08 54	Kurile Islands 43.89 N 147.67 E
				H = 11 56 54.9 h = normal MAG=5.0
				D = 78.39 Az = 333.2 (USCGS)
				PV:1.1s 36.3nm MPV=5.4

Day	Phase		h m s	Remarks
12.	e(P)	A	12 19(13)	Kurile Islands
	e	A	19 19	H = 12 07 08 (UPP)
				(D ca. 79.5)
12.	eP	A	12 35 21	Molucca Passage 1.74 N 126.32 E
				H = 12 21 19.0 h = 30 km MAG=5.8
				D = 104.05 Az = 323.4 (USCGS)
				PV:1.6s 16.5nm MPV=5.6
12.	eP	A	12 43 52	Off Coast of Hokkaido, Japan
	ePm	A	43 54.5	42.93 N 147.77 E
	epP	A	44 01	H = 12 31 48.2 h = 40 km MAG=5.0
				D = 79.27 Az = 333.3 (USCGS)
				h = 33 km
				PmV:1.7s 54.5nm MPV=5.3
				pPV:1.6s 55.0nm
12.	eP	A	12 50 54	Kurile Islands
				H = 12 38 55 (UPP)
				D ca. 78.4
12.	eP	A	12 56 40.5	Kurile Islands 43.2 N 147.5 E
				H = 12 44 37.4 h = normal MAG=4.2 (USCGS)
				D = 78.8
12.	eP	A	13 24 29	Kurile Islands 43.39 N 147.96 E
				H = 13 12 26.0 h = normal MAG=4.0
				D = 78.93 Az = 333.4 (USCGS)
12.	-iP	A	13 28 39	Kurile Islands 43.46 N 148.44 E
	e(pP)	A	28 50	H = 13 16 35.5 h = 33 km MAG=4.7
	e	A	28 52	D = 79.02 Az = 333.7 (USCGS)
				PV:1.4s 18.6nm MPV=4.9
12.	+iP1	A	13 30 09	Kurile Islands 43.49 N 148.01 E
	+iP2	A	30 17	H = 13 18 08.2 h = normal MAG=5.6
	e	A	30 20	D = 78.85 Az = 333.4 (USCGS)
	Pm	A	30 23	P1V:1.5s 111.0nm MP1V=5.7
	eS	B	40 05	P2V:1.5s 131.0nm MP2V=5.7

Day	Phase		h m s	Remarks
cont. 12.	LmH	B	14 08.7	P3m:1.4s 280.0nm MP3mV=6.1
	LmV	B	09.7	LmH:14.5s 3.0/um MLH=5.8
				LmV:16s 2.5/um MLV=5.7
12.	eP	A	13 35 18	Kurile Islands
				H = 13 23 17 (UPP)
				D ca. 78.8
12.	e	A	13 37 17	Kurile Islands
				H = 13 25 06 (UPP)
12.	eP	A	14 45 04	Kurile Islands 43.68 N 148.26 E
	epP	A	45 16	H = 14 33 03.1 h = normal MAG=4.5
				D = 78.77 Az = 333.5 (USCGS)
				h = 45 km
12.	e	A	14 46 10	Probably Kurile Islands
12.	eP	A	15 12 28	Kurile Islands 43.85 N 148.84 E
				H = 15 00 26.1 h = normal MAG=4.3
				D = 78.80 Az = 333.8 (USCGS)
12.	eP	A	15 24 25	Kurile Islands 43.19 N 147.46 E
	epP	A	24 36	H = 15 12 22.1 h = normal MAG=4.4
	e	A	24 39	D = 78.94 Az = 333.1 (USCGS)
	e	A	24 43	h = 40 km
12.	eP	A	15 37 56	Kurile Islands 43.25 N 147.60 E
				H = 15 25 53.3 h = normal MAG=4.3
				D = 78.93 Az = 333.2 (USCGS)
				PV:1.5s 12.6nm MPV=4.7
12.	eP	A	15 40 00	Kurile Islands 44.54 N 148.98 E
	e	A	40 09.5	H = 15 28 01.4 h = normal MAG=4.7
	epP	A	40 13.5	D = 78.22 Az = 333.9 (USCGS)
				PV:1.2s 18.3nm MPV=5.1
				pPV:1.1s 24.2nm

Day	Phase		h m s	Remarks
12.	eP	A	16 01(26)	Kurile Islands
				H = 15 49 27 (UPP)
				(D ca. 78.4)
12.	eP	A	16 01 56	Kurile Islands
	epP	A	02 07	H = 15 49 56 (UPP)
				D ca. 78.6 h = 40 km
				PV:1.1s 16.1nm MPV=5.0
				pPV:1.2s 18.3nm
12.	eP	A	16 55 39	Kurile Islands 43.69 N 147.86 E
	e	A	55 52	H = 16 43 36.8 h = 24 km MAG=4.8
	e	A	55 57	D = 78.63 Az = 333.3 (USCGS)
				PV:1.4s 18.6nm MPV=5.0
12.	eP	A	17 12 27	Kurile Islands 43.91 N 148.11 E
				H = 17 00 27.9 h = normal MAG=4.4
				D = 78.51 Az = 333.4 (USCGS)
				PV:1.4s 16.3nm MPV=4.9
12.	eP	A	17 20 39	Kurile Islands 43.47 N 148.22 E
	e	A	20 40	H = 17 08 37.3 h = normal MAG=4.8
	epP	A	20 51	D = 78.94 Az = 333.5 (USCGS)
				pPV:2.0s 34.2nm
12.	e	A	17 47 20	Kurile Islands 43.37 N 147.47 E
				H = 17 35 04.2 h = normal MAG=4.2
				D = 78.79 Az = 333.1 (USCGS)
12.	e	A	19 02 05	Kurile Islands
				H = 18 49 54 (UPP)
12.	eP	A	19 30 11	Kurile Islands 44.10 N 148.70 E
	e	A	30 25	H = 19 18 10.8 h = normal MAG=4.1
				D = 78.53 Az = 333.7 (USCGS)
12.	eP	A	20 30 47	Kurile Islands 43.13 N 147.66 E
				H = 20 18 40.9 h = normal MAG=4.2 (USCGS)
				D = 79.0

Day	Phase		h m s	Remarks
12.	+iP	A	21 28 13.5	Off Coast of Hokkaido, Japan
	epP	A	28 23	42.87 N 146.55 E
	e	A	28 41	H = 21 16 11.3 h = normal MAG=5.4
	e	C	38 07	D = 78.92 Az = 332.7 (USCGS)
	eSS	C	44 00	h = 37 km
	LmH	B	22 07.5	PV:1.4s 74.4nm MPV=5.5
	LmV	B	07.5	LmH:15s 1.4/um MLH=5.4
				LmV:16s 1.2/um MLV=5.4
12.	eP	A	22 08 35	Kurile Islands 43.27 N 147.42 E
	Pm	A	08 38	H = 21 56 31.4 h = 14 km MAG=4.8
				D = 78.86 Az = 333.1 (USCGS)
				PmV:1.6s 30.2nm MPV=5.1
12.	e	A	22 34 07.5	Off East Coast of Kamchatka
				51.53 N 159.55 E
				H = 22 22 16.5 h = normal MAG=4.5
				D = 74.62 Az = 339.5 (USCGS)
12.	eP	A	23 17 59	Kurile Islands 43.28 N 147.75 E
	Pm	A	18 02	H = 23 05 57.1 h = normal MAG=5.0
	eS	C	27 50	D = 78.95 Az = 333.3 (USCGS)
	e	B	28 00	PmV:1.3s 30.6nm MPV=5.2
	eSS	C	33 00	LmH:20s 4.6/um MLH=5.8
	LmH	B	50.6	LmV:16s 4.1/um MLV=5.9
	LmV	B	57.7	
12.	eP	A	23 27 52	Kurile Islands 43.34 N 147.83 E
	e	A	27 54	H = 23 15 48.9 h = normal MAG=4.8
	epP	A	28 04.5	D = 78.93 Az = 333.3 (USCGS)
				h = 50 km
				PV:1.1s 16.1nm MPV=5.0
				pPV:1.2s 24.4nm
12.	e(pP)	A	23 52 51	Kurile Islands 43.23 N 147.45 E
				H = 23 40 37.8 h = normal MAG=4.0
				D = 78.90 Az = 333.1 (USCGS)

Day	Phase		h m s	Remarks
12.	eP	A	24 01 28	Kurile Islands 44.29 N 147.07 E
				H = 23 49 31.8 h = normal MAG=4.5
				D = 77.84 Az = 332.8 (USCGS)
13.	eP	A	00 19 10	Kurile Islands
				H = 00 07 06 (UPP)
13.	i(P)	A	01 14 10	Kurile Islands 43.78 N 148.54 E
	e	A	14 23	H = 01 02 15.1 h = 39 km MAG=4.6
	e	A	14 25	D = 78.77 Az = 333.7 (USCGS)
13.	e(P)	A	01 49(28)	Kurile Islands 42.96 N 147.68 E
				H = 01 37 29.1 h = normal MAG=4.0
				D = 79.22 Az = 333.3 (USCGS)
13.	eP	A	02 19 08	Kurile Islands 43.78 N 148.72 E
	-i	A	19 10	H = 02 07 07.3 h = 35 km MAG=4.8
	epP	A	19 22	D = 78.82 Az = 333.8 (USCGS)
	eSKS	C	29 18	(h = 50 km)
	LmH	B	51.7	PV:1.8s 74.3nm MPV=5.4
	LmV	B	58.4	pPV:1.8s 60.8nm
				LmH:20s 1.9/um MLH=5.4
				LmV:16s 1.7/um MLV=5.5
13.	iP	A	03 41 15	Kurile Islands 43.48 N 147.36 E
	e	A	41 19.5	H = 03 29 14.1 h = normal MAG=5.5
	e	A	41 28	D = 78.65 Az = 333.1 (USCGS)
	e	A	41 57	PV:1.2s 61.0nm MPV=5.6
	eS	C	51 08	LmH:15.5s 1.7/um MLH=5.5
	LmH	B	04 14.3	LmV:16s 1.5/um MLV=5.5
	LmV	B	20.7	
13.	eP	A	03 59 15	Kurile Islands 43.84 N 148.50 E
	e	A	59 30	H = 03 47 14.2 h = normal MAG=4.6
				D = 78.70 Az = 333.7 (USCGS)
				PV:1.3s 13.1nm MPV=4.9
13.	e(P)	A	04 02 52	Kurile Islands 43.14 N 147.05 E
				H = 03 50 54.5 h = normal MAG=4.2
				D = 78.85 Az = 332.9 (USCGS)

Day	Phase		h m s	Remarks
13.	eP	A	04 09 24	Greece 38.57 N 21.75 E
	e	A	09 39	H = 04 06 03.8 h = normal MAG=4.5
	e	A	09 47	D = 14.05 Az = 332.5 (USCGS)
13.	iP	A	04 40 20	Kurile Islands 43.51 N 148.02 E
	epP	A	40 32.5	H = 04 28 18.0 h = normal MAG=5.2
	LmH	B	05 19.0	D = 78.84 Az = 333.4 (USCGS)
	LmV	B	19.9	h = 45 km
				LmH:14s 1.2/um MLH=5.4
				LmV:15s 1.2/um MLV=5.4
13.	ePKP	A	05 03 06.5	South of Fiji Islands
	e	A	03 20	23.88 S 177.04 W
				H = 04 43 48.7 h = 380 km MAG=4.3
				D = 152.44 Az = 348.1 (USCGS)
				PKPV:1.2s 14.2nm
13.	eP	A	06 06 52	Kurile Islands 43.88 N 147.75 E
				H = 05 54 53.1 h = 34 km MAG=4.8
				D = 78.42 Az = 333.2 (USCGS)
				PV:1.1s 24.2nm MPV=5.2
13.	eP	A	06 17 15	Kurile Islands
				H = 06 05 15 (UPP)
				D ca. 78.6
13.	eP	A	06 22 23	Kurile Islands 43.76 N 147.66 E
				H = 06 10 27.3 h = 63 km MAG=4.7
				D = 78.50 Az = 333.2 (USCGS)
				PV:1.1s 24.2nm MPV=5.2
13.	eP	A	07 36 06.5	Kurile Islands 43.06 N 146.99 E
	epP	A	36 17	H = 07 24 05.1 h = normal MAG=4.7
				D = 78.90 Az = 332.9 (USCGS)
				h = 40 km
				PV:1.3s 10.9nm MPV=4.7
				pPV:1.3s 24.0nm

Day	Phase		h m s	Remarks
13.	+iP	AB	08 43 30	Kurile Islands 43.99 N 147.72 E
	-i	A	43 32.5	H = 08 31 32.2 h = normal MAG=5.6
	Pm	A	43 34	D = 78.32 Az = 333.2 (USCGS)
	i	A	43 44	PV(A):1 2s 97.5nm MPV=5.8
	e	B	44 40	PV(B):6.5s 1.4/um MPV=6.2
	eSKS	B	53 20	PmV(A):1.1s 294.0nm MPmV=6.3
	eS	B	53 40	LmH:15s 5.8/um MLH=6.0
	eSS	C	58 18	LmV:16s 5.9/um MLV=6.1
	ei	C	59 00	
	LmH	B	09 22.1	
	LmV	B	22.8	
13.	e	A	09 32 38	Kurile Islands 43.86 N 148.43 E
				H = 09 20 34.0 h = normal MAG=4.4
				D = 78.66 Az = 333.6 (USCGS)
13.	eP	A	10 19 16	Kurile Islands 43.56 N 147.53 E
				H = 10 07 13.9 h = normal MAG=4.0
				D = 78.64 Az = 333.1 (USCGS)
13.	eP	A	12 25 11.5	Kurile Islands 43.22 N 147.91 E
	epP	A	25 24	H = 12 13 07.0 h = 14 km MAG=4.8
	LmH	B	57.5	D = 79.06 Az = 333.4 (USCGS)
	LmV	B	13 04.7	h = 50 km
				PV:1.5s 20.1nm MPV=4.9
				LmH:20s 0.6/um MLH=4.9
				LmV:16s 0.3/um MLV=4.8
13.	eP	A	12 40 45	Kurile Islands
				H = 12 28 46 (UPP)
				D ca. 78.4
13.	eP	A	12 42 50.5	Kurile Islands 43.29 N 147.76 E
	epP	A	43 02.5	H = 12 30 48.3 h = normal MAG=4.8
	LmH	B	13 15.7	D = 78.95 Az = 333.3 (USCGS)
	LmV	B	22.4	h = 45 km
				PV:1.2s 18.3nm MPV=5.0
				LmH:20s 0.7/um MLH=5.0
				LmV:17s 0.6/um MLV=5.0

Day	Phase		h m s	Remarks
13.	e	A	12 43 38	Probably Kurile Islands
	e	A	43 45	H = 12 31 27 (UPP)
13.	e	A	14 40 51	Kurile Islands 44.12 N 148.55 E
				H = 14 28 46.5 h = normal MAG=4.8
				D = 78.46 Az = 333.7 (USCGS)
13.	+iP	A	14 41 11	Kenai Peninsula, Alaska
				60.07 N 151.80 W
				H = 14 30 14.6 h = 69 km MAG=4.5 (USCGS)
				D = 68.7
				PV:0.8s 26.9nm MPV=5.5
13.	eP	A	15 25 27	Kurile Islands
				H = 15 13 28 (UPP)
				D ca. 78.4
13.	eP	A	16 23 57	Vancouver Island 48.48 N 126.47 W
				H = 16 12 16.9 h = normal MAG=4.6
				D = 74.90 Az = 26.1 (USCGS)
				PV:0.8s 7.7nm MPV=4.8
13.	+eP1	A	17 19 16.5	Off Coast of Hokkaido, Japan
	eP2	A	19 28	42.77 N 146.62 E
	e	A	19 45	H = 17 07 13.8 h = normal MAG=4.7
	eS	C	29 12	D = 79.03 Az = 332.7 (USCGS)
	LmH	B	57.3	P1V:1.5s 25.1nm MP1V=5.0
	LmV	B	58.8	P2V:1.4s 18.6nm
				LmH:16.5s 1.2/um MLH=5.3
				LmV:16s 1.2/um MLV=5.4
13.	eP	A	17 54 14	Kurile Islands 43.95 N 148.39 E
				H = 17 42 14.7 h = normal MAG=4.5
				D = 78.56 Az = 333.6 (USCGS)
13.	eP	A	18 21 00.5	Kurile Islands 44.15 N 148.98 E
	e	A	21 12	H = 18 09 01.6 h = 40 km MAG=4.5
	e	A	21 16.5	D = 78.57 Az = 333.9 (USCGS)

Day	Phase		h m s	Remarks
13.	+eP	A	19 45 35.5	Kurile Islands 43.92 N 147.84 E
				H = 19 33 41.21 h = 73 km MAG=5.1
				D = 78.42 Az = 333.3 (USCGS)
				PV:1.2s 55.1nm MPV=5.5
13.	eP	A	20 21 17.5	Kurile Islands Region 43.58 N 148.09 E
	epP	A	21 28	H = 20 09 15.8 h = normal MAG=4.6 (USCGS)
				D = 78.8 h = 40 km
13.	eP	A	21 24 54	Kurile Islands 43.62 N 148.36 E
	epP	A	25 04	H = 21 12 50.8 h = normal MAG=4.8
				D = 78.85 Az = 333.6 (USCGS)
13.	eP	A	22 54 08	Kurile Islands 44.22 N 149.18 E
	e	A	54 23.5	H = 22 42 07.9 h = 32 km MAG=4.8
	e	A	54 29	D = 78.58 Az = 334.0 (USCGS)
				PV:2.2s 43.7nm MPV=5.2
13.	+iP1	AB	23 09 06.5	Kurile Islands 44.03 N 148.14 E
	iP2	A	09 10	H = 22 57 07.5 h = normal MAG=5.6
	ipP	B	09 16	D = 78.41 Az = 333.4 (USCGS)
	e	B	10 52	P1V(A):1.6s 220.0nm MP1V=6.0
	eS	C	18 55	P1V(B):2.5s 1.0/um MP1V=6.5
	e	B	19 00	P2V(A):1.4s 577.0nm MP2V=6.5
	eSKS	B	19 18	LmH:20s 16.6/um MLH=6.4
	eSS	C	24 00	LmV:20s 15.6/um MLV=6.3
	LmH	B	42.0	
	LmV	B	48.5	
13.	eP	A	23 24 56	Kurile Islands 43.87 N 148.54 E
				H = 23 12 57.9 h = 40 km MAG=4.7
				D = 78.69 Az = 333.7 (USCGS)
				PV:1.0s 13.8nm MPV=5.0
14.	eP	A	00 24 36	Off Coast of Hokkaido, Japan
				42.94 N 147.23 E
				H = 00 12 31.5 h = normal MAG=4.2
				D = 79.09 Az = 333.0 (USCGS)

Day	Phase		h m s	Remarks
14.	e	A	00 43 42	Molucca Passage 1.60 N 126.26 E
				H = 00 29 32.3 h = normal MAG=5.4
				D = 104.12 Az = 323.4 (USCGS)
14.	e	A	01 59 38	Kurile Islands 43.63 N 148.57 E
				H = 01 47 25.9 h = normal MAG=4.3
				D = 78.91 Az = 333.7 (USCGS)
14.	eP	A	03 19 32	Kurile Islands 43.01 N 147.54 E
	epP	A	19 44	H = 03 07 29.5 h = normal MAG=4.7
				D = 79.13 Az = 333.2 (USCGS)
				h = 45 km
				PV:1.2s 8.5nm MPV=4.7
				pPV:1.0s 19.7nm
14.	eP	A	04 59 54	Kurile Islands 43.35 N 147.75 E
	e	A	05 00 02.5	H = 04 47 54.3 h = 48 km MAG=4.6
	e	A	00 07	D = 78.90 Az = 333.3 (USCGS)
	e	A	00 11	PV:1.1s 12.1nm MPV=4.8
	LmH	B	32.5	LmH:20s 0.3/um MLH=4.7
	LmV	B	39.5	LmV:16s 0.3/um MLV=4.8
14.	eP	A	05 53(32)	Kurile Islands 43.24 N 147.84 E
	epP	A	53 45	H = 05 41 29.1 h = normal MAG=4.0
				D = 79.02 Az = 333.3 (USCGS)
				h = 45 km
				pPV:1.0s 11.8nm
14.	eP	A	06 18 43	Kurile Islands 43.64 N 148.95 E
	e	A	18 56	H = 06 06 39.9 h = normal MAG=4.7
	LmH	B	55.0	D = 79.02 Az = 333.9 (USCGS)
	LmV	B	58.3	h = 50 km
				PV:1.1s 16.1nm MPV=5.0
				LmV:16s 0.2/um MLV=4.6
14.	eP	A	09 11 52.5	Kurile Islands 43.08 N 147.54 E
	e	A	11 20.5	H = 08 59 49.6 h = normal MAG=4.7
	LmH	B	44.4	D = 79.06 Az = 333.2 (USCGS)

Day	Phase		h m s	Remarks
cont. 14.	LmV	B	09 51.5	PV:1.5s 25.1nm MPV=5.0
				LmH:20s 0.3/um MLH=4.6
				LmV:16s 0.3/um MLV=4.8
14.	ePKIKP	A	11 16 58	New Britain 5.37 S 152.02 E
	ePS	C	28 35	H = 10 58 01.7 h = normal MAG=5.6
	e	C	28 45	D = 124.06 Az = 330.7 (USCGS)
	eSS	C	36 00	PKIKPV:(2.0s) 34.2nm
	e	C	36 20	LmV:20s 0.8/um MLV=5.4
	LmV	B	12 16.3	LmH:20s 0.8/um MLH=5.4
	LmH	B	16.4	
14.	eP	A	12 03 14	Kurile Islands 43.08 N 147.49 E
	epP	A	03 25	H = 11 51 12.5 h = normal MAG=4.7
				D = 79.05 Az = 333.2 (USCGS)
				pPV:1.2s 18.3nm
14.	e(pP)	A	12 28 26	Kurile Islands 43.45 N 148.20 E
				H = 12 16 14.6 h = normal MAG=4.3
				D = 78.95 Az = 333.5 (USCGS)
14.	eP	A	13 29 28	Kurile Islands
				H = 13 17 29 (UPP)
				D ca. 78.4
14.	eP	A	13 43 46	Off Coast of Hokkaido, Japan
				42.83 N 147.06 E
				H = 13 31 43.9 h = normal MAG=4.1 (USCGS)
				D = 79.3
14.	+iP	AB	14 31 04.3	Kurile Islands 43.08 N 147.50 E
	Pm	AB	31 07	H = 14 19 01.6 h = normal MAG=6.1
	i	A	31 25	D = 79.05 Az = 333.2 (USCGS)
	e	B	31 35	PmV(A):1.8s 1150.0nm MPmV=6.6
	e	B	34 28	PmV(B):12s 6.6/um MPmV=6.6
	iS	B	41 00	LmH:16s 86.7/um MLH=7.2
	eSS	C	45 20	LmV:16s 67.6/um MLV=7.1
	e	C	45 48	

Day	Phase		h m s	Remarks
cont.				
14.	e	C	14 46 48	
	eSSS	C	49 30	
	LmH	B	15 10.8	
	LmV	B	11.0	
14.	e	A	14 50 32.5	Kurile Islands 43.05 N 147.92 E
	e	A	50 35	H = 14 38 16.4 h = 15 km MAG=4.8
				D = 79.22 Az = 333.4 (USCGS)
				PV:1.2s 18.3nm
14.	eP	A	15 11 40	Kurile Islands
				H = 14 59 41 (UPP)
				D ca. 78.4
14.	e(pP)	A	15 23 38	Kurile Islands
				H = 15 11 27 (UPP)
14.	eP	A	15 25 53	Kurile Islands 43.05 N 147.62 E
	epP	A	26 06	H = 15 13 49.8 h = normal MAG=4.4
				D = 79.12 Az = 333.2 (USCGS)
				PV:1.0s 15.7nm MPV=5.0
14.	eP	A	15 31 34	Kurile Islands 44.06 N 147.80 E
	epP	A	31 43.5	H = 15 19 34.7 h = normal MAG=4.4
				D = 78.28 Az = 333.2 (USCGS)
				h = 35 km
				PV:1.0s 5.9nm MPV=4.7
14.	eP	A	15 39 45	Kurile Islands 43.62 N 147.61 E
				H = 15 27 53.2 h = 106 km MAG=3.9
				D = 78.61 Az = 333.2 (USCGS)
14.	eP	A	15 50 23	Kurile Islands 42.99 N 147.69 E
	e	A	50 37.5	H = 15 38 18.2 h = normal MAG=4.9
	e	A	50 42	D = 79.20 Az = 333.3 (USCGS)
				PV:1.2s 12.2nm MPV=4.8

Day	Phase		h m s	Remarks
14.	eP	A	15 56 13	Kurile Islands
				H = 15 44 08 (UPP)
14.	eP	A	16 39 37.5	Kurile Islands 43.91 N 148.40 E
	epP	A	39 51	H = 16 27 37.8 h = normal MAG=5.2
				D = 78.60 Az = 333.6 (USCGS)
				h = 50 km
				PV:1.2s 24.4nm MPV=5.2
14.	eP	A	17 10 44	Kurile Islands 43.08 N 147.64 E
	epP	A	10 57	H = 16 58 40.1 h = normal MAG=4.8
				D = 79.10 Az = 333.2 (USCGS)
				PV:1.1s 18.1nm MPV=5.0
14.	eP	A	17 17 54.5	Kurile Islands 43.03 N 147.62 E
	epP	A	18 08	H = 17 05 51.8 h = normal MAG=4.7
				D = 79.14 Az = 333.2 (USCGS)
				h = 50 km
				PV:1.7s 36.4nm MPV=5.1
14.	eP	A	17 24 57.5	Kurile Islands 44.01 N 147.93 E
	epP	A	25 08	H = 17 12 58.7 h = normal MAG=4.1
				D = 78.36 Az = 333.3 (USCGS)
				h = 40 km
14.	eP	A	18 03 23	Off Coast of Hokkaido, Japan
				42.92 N 147.72 E
				H = 17 51 18.5 h = normal MAG=4.7
				D = 79.27 Az = 333.3 (USCGS)
				PV:1.0s 11.8nm MPV=4.9
14.	eP	A	18 33 39.5	Kurile Islands 42.99 N 147.62 E
	e	A	33 49	H = 18 21 36.5 h = normal MAG=4.7
	e	A	33 58.5	D = 79.17 Az = 333.2 (USCGS)
				PV:1.6s 27.5nm MPV=5.0

Day	Phase		h m s	Remarks
14.	eP	A	20 27 43.5	Off Coast of Hokkaido, Japan
	epP	A	27 55	42.94 N 147.50 E
	esP	A	28 02.5	H = 20 15 41.8 h = 46 km MAG=4.6
				D = 79.18 Az = 333.2 (USCGS)
				PV:1.5s 20.1nm MPV=4.9
14.	eP	A	21 22 58	Kurile Islands 43.50 N 148.10 E
				H = 21 10 56.2 h = normal MAG=4.4
				D = 78.87 Az = 333.5 (USCGS)
14.	+iP	A	21 54 55.5	Turkey 39.56 N 27.83 E
	LmV	B	22 03.1	H = 21 51 04.1 h = 21 km MAG=4.6
	LmH	B	03.4	D = 15.89 Az = 319.5 (USCGS)
				PV:1.8s 47.4nm
				LmV:13s 0.7/um MLV=4.2
				LmH:13s 1.2/um MLH=4.3
14.	+iP	A	22 24 22.5	Kurile Islands 43.86 N 148.58 E
	e	A	24 28	H = 22 12 22.0 h = normal MAG=5.2
	LmH	B	57.0	D = 78.70 Az = 333.7 (USCGS)
	LmV	B	23 03.4	PV:1.5s 70.4nm MPV=5.5
				LmH:19s 1.1/um MLH=5.2
				LmV:15s 0.9/um MLV=5.2
14.	+eP	A	24 00 11.5	Off East Coast of Kamchatka
	e	A	00 14.5	52.17 N 160.54 E
	e	A	00 24.5	H = 23 48 36.0 h = normal MAG=4.8 (USCGS)
	LmH	B	33.5	D = 74.2
	LmV	B	39.2	PV:1.1s 24.2nm MPV=5.1
				LmH:16s 0.6/um MLH=5.0
				LmV:15s 0.5/um MLV=5.0
15.	e	A	01 19 23	Kurile Islands 43.08 N 147.36 E
				H = 01 07 15.8 h = normal MAG=4.2 (USCGS)
				D = 79.0
15.	eP	A	01 55 57	Costa Rica 9.47 N 83.86 W
	LmH	B	02 30.0	H = 01 43 11.6 h = 9 km MAG=4.4
	LmV	B	35.0	D = 86.21 Az = 39.4 (USCGS)
				PV:1.3s 12.1nm MPV=4.9

Day	Phase		h m s	Remarks
15.	ePKIKP	A	03 56 44	Near North Coast of New Guinea
	ePP	B	58 00	3.51 S 144.39 E
	LmH	B	04 40.5	H = 03 37 52.8 h = 22 km MAG=5.4
				D = 118.59 Az = 327.8 (USCGS)
				LmH:21.5s 1.6/um MLH=5.6
15.	+iP1	A	04 44 03.5	Kurile Islands 43.03 N 147.90 E
	iP2	A	44 06.5	H = 04 32 00.4 h = normal MAG=5.6
	e	A	44 13	D = 79.23 Az = 333.4 (USCGS)
	e	A	44 18	P1V:1.3s 135.3nm MP1V=5.8
	ei	A	44 33	P2V:1.3s 178.0nm MP2V=5.9
	ei	A	44 37	LmH:20s 11.8/um MLH =6.2
	e	A	50 13.5	LmV:15s 10.9/um MLV =6.3
	LmH	B	05 16.8	
	LmV	B	23.9	
15.	eP	A	04 52 20	Kurile Islands
	epP	A	52 30	H = 04 40 15 (UPP)
				D ca. 79.5 h = 37 km
15.	eP	A	07 26 05	Tibet 30.21 N 95.04 E
				H = 07 15 37.0 h = normal MAG=5.2 (USCGS)
				D = 63.3
				PV:1.6s 19.2nm MPV=5.0
15.	eP	A	06 30 37	Kurile Islands 43.26 N 147.78 E
	e	A	30 45	H = 06 18 36.5 h = 42 km MAG=4.8
	e	A	30 49	D = 78.98 Az = 333.3 (USCGS)
	e	A	30 55.5	PV:1.4s 18.6nm MPV=4.9
	e	A	31 52	LmH:20s 1.0/um MLH=5.2
	LmH	B	07 03.2	LmV:17s 0.9/um MLV=5.2
	LmV	B	10.2	
15.	eP	A	07 33 50	Kurile Islands 43.56 N 148.49 E
	epP	A	34 01	H = 07 21 47.6 h = 21 km MAG=4.9
				D = 78.95 Az = 333.7 (USCGS)
				h = 40 km
				PV:1.3s 20.1nm MPV=5.0

Day	Phase		h m s	Remarks
15.	+iP	A	08 54 48	Mariana Islands 21.62 N 143.05 E
	e	A	55 03	H = 08 41 54.9 h = 319 km MAG=6.1
	esP	C	56 20	D = 96.29 Az = 331.3 (USCGS)
	e	A	58 40	PV:1.6s 280.0nm MPV=6.2
	ePP	B	58 44	PPV:1.8s 405.0nm
	iPP	A	58 46	PKKPV:1.2s 24.4nm
	esPP	B	09 00 20	LmH:18s 2.4/um
	eSKS	B	04 56	LmV:13s 1.7/um
	eS	B	05 38	
	eSP	B	06 58	
	ePS	C	07 40	
	ePPS	B	08 22	
	ePKKP	A	11 34	
	eSS	C	11 57	
	e	B	12 15	
	e	B	12 35	
	esSS	C	14 08	
	ePKPPKP	A	19 47	
	LmH	B	34.8	
	LmV	B	41.3	
15.	eP	A	09 59 58	Kurile Islands 43.93 N 147.54 E
	epP	A	10 00 10	H = 09 48 00.1 h = normal MAG=4.8
				D = 78.31 Az = 333.1 (USCGS)
				PV:1.2s 24.4nm MPV=5.2
				pPV:1.2s 32.5nm
15.	eP1	AB	10 14 22	Kurile Islands 43.11 N 148.27 E
	eP2	A	14 25	H = 10 02 17.9 h = normal MAG=4.7
	eP3	A	14 36	D = 79.28 Az = 333.6 (USCGS)
	eP4	AB	14 47	P1V(A):1.6s 22.0nm MP1V=4.9
	P4m	A	14 51	P1V(B):9s 0.7/um MP1V=5.6
	eS	C	24 20	P2V(A):1.6s 33.0nm MP2V=5.1
	LmH	B	53.8	P3V(A):1.5s 47.8nm MP3V=5.3
	LmV	B	54.8	P4V(B):12s 1.2/um MP4V=5.8
				P4mV(A):1.9s 91.0nm MP4mV=5.5
				LmH:14.5s 7.4/um MLH=6.2
				LmV:15s 6.3/um MLV=6.1

Day	Phase		h m s	Remarks
15.	eP	A	10 46 12	Kurile Islands 43.61 N 148.07 E
				H = 10 34 11.6 h = 111 km MAG=4.2
				D = 78.77 Az = 333.4 (USCGS)
15.	eP	A	11 41 54	Kurile Islands 43.24 N 147.83 E
	e	A	42 02.5	H = 11 29 53.1 h = 43 km MAG=4.4
	epP	A	42 06	D = 79.02 Az = 333.3 (USCGS)
				h = 45 km
				PV:1.3s 13.1nm MPV=4.8
				pPV:1.2s 16.2nm
15.	eP	A	11 59 40	Kurile Islands 43.17 N 147.32 E
				H = 11 47 35.7 h = normal MAG=4.1 (USCGS)
				D = 78.8
15.	e(P)	A	14 21 58	Kurile Islands 43.32 N 147.50 E
				H = 14 09 53.1 h = 25 km MAG=4.2
				D = 78.84 Az = 333.1 (USCGS)
15.	eP	A	17 08 24	Kurile Islands 43.10 N 147.68 E
	epP	A	08 34	H = 16 56 18.8 h = normal MAG=4.3 (USCGS)
				D = 79.1 h = 37 km
				h = 37 km
15.	eP	A	17 12 49	Kurile Islands 43.73 N 147.84 E
	e	A	12 51.5	H = 17 01 02.7 h = 147 km MAG=4.1
				D = 78.58 Az = 333.3 (USCGS)
15.	ePKHKP	A	19 23 04.5	South of Fiji Islands 23.53 S 179.99 W
	ePKP2	A	23 16	H = 19 04 09.5 h = 518 km MAG=5.0
	epPKP	A	25 08	D = 151.46 Az = 344.4 (USCGS)
	e	A	25 14	h = 520 km
15.	eP	A	20 18 18.5	Kurile Islands 43.90 N 147.77 E
	epP	A	18 31	H = 20 06 23.1 h = 62 km MAG=4.4
	LmH	B	51.0	D = 78.41 Az = 333.2 (USCGS)
	LmV	B	58.0	PV:1.2s 8.1nm MPV=4.7
				LmH:20s 0.4/um MLH=4.7
				LmV:15s 0.2/um MLV=4.6

Day	Phase		h m s	Remarks
15.	eP	A	20 59 45	Kurile Islands 43.25 N 147.07 E
				H = 20 47 47.1 h = 51 km MAG=5.0
				D = 78.76 Az = 332.9 (USCGS)
15.	eP	A	21 00 06	Kurile Islands
				H = 20 48 07 (UPP)
				D ca. 78.4
15.	eP	A	21 03 47	Kurile Islands
				H = 20 51 46 (UPP)
				D ca. 78.8
15.	eP	A	21 05 14	Kurile Islands 43.53 N 147.59 E
				H = 20 53 13.9 h = normal MAG=4.2 (USCGS)
				D = 78.7
15.	eP1	A	22 55 48	Off Coast of Hokkaido, Japan
	+iP2	A	56 01	42.93 E 147.55 E
	eS	C	23 05 40	H = 22 43 45.5 h = normal MAG=5.1 (USCGS)
	eSS	C	11.4	D = 79.2
	eSSS	C	14.8	P1V:1.4s 37.2nm MP1V=5.2
	LmH	B	28.0	P2V:1.4s 46.5nm
	LmV	B	34.5	LmH:20s 0.9/um MLH=5.1
				LmV:16s 0.6/um MLV=5.0
15.	epP	A	23 09 19	Kurile Islands 43.20 N 148.07 E
				H = 22 57 07.2 h = normal MAG=4.0 (USCGS)
				D = 79.1
16.	eP	A	01 39 05	Kurile Islands 44.0 N 148.1 E
				H = 01 27 07.2 h = 45 km MAG=4.4 (USCGS)
				D = 78.3
16.	eP	A	03 26 38	Kurile Islands
	epP	A	26 51	H = 03 14 37 (UPP)
				D ca. 78.8 h = 48 km

Day	Phase		h m s	Remarks
16.	eP	A	03 40 06	Kurile Islands 43.37 N 147.50 E
	epP	A	40 18.5	H = 03 28 05.9 h = 40 km MAG=4.6
	LmH	C	04 12.4	D = 78.79 Az = 333.1 (USCGS)
	LmV	C	18.0	PV:1.2s 16.3nm MPV=4.9
				LmH(C):22s 0.3/um MLH=4.6
16.	eP	A	06 36 33	Kurile Islands
				H = 06 24 32 (UPP)
				D ca. 78.8
				PV:1.2s 16.3nm MPV=4.9
16.	+eP	A	08 59 50.5	Kurile Islands 43.20 N 147.62 E
	epP	A	09 00 02	H = 08 47 51.0 h = 48 km MAG=4.9
	e	A	00 10	D = 78.98 Az = 333.2 (USCGS)
	e	A	00 25	h = 45 km
				PV:1.3s 26.2nm MPV=5.1
				pPV:1.2s 22.4nm
16.	eP1	A	09 15 13	Kurile Islands 43.94 N 148.46 E
	eP2	A	15 14.5	H = 09 03 13.9 h = 40 km MAG=5.2
	epP	A	15 23	D = 78.60 Az = 333.6 (USCGS)
	e	A	15 34	h = 37 km
	e(S)	B	25(20)	P1V:1.1s 36.3nm MP1V=5.4
	LmH	B	47.8	P2V:1.4s 32.6nm MP2V=5.1
	LmV	B	54.2	LmH:18s 1.2/um MLH=5.2
				LmV:16s 0.9/um MLV=5.2
16.	epP	A	10 15 06	Kurile Islands 43.85 N 147.67 E
				H = 10 02 57.3 h = 61 km MAG=4.2
				D = 78.42 Az = 333.2 (USCGS)
				h = 50 km
16.	eP1	A	10 18 06	Mid-Indian Rise 24.03 S 69.61 E
	eP2	A	18 12	H = 10 05 07.4 h = normal MAG=5.5
	e	A	18 16	D = 90.21 Az = 327.3 (USCGS)
				P1V:2.2s 38.2nm MP1V=5.3
				P2V:1.5s 17.6nm MP2V=5.1

Day	Phase		h m s	Remarks
16.	-iP	A	12 56 05.5	Kurile Islands 43.98 N 148.22 E
	LmV	B	13 35.0	H = 12 44 07.8 h = 45 km MAG=4.7
				D = 78.49 Az = 333.5 (USCGS)
				PV:1.4s 32.6nm MPV=5.2
				LmV:18s 0.2/um MLV=4.5
16.	+iP1	A	15 27 30.8	Kurile Islands 43.31 N 147.61 E
	-iP2	AB	27 33	H = 15 15 32.8 h = 60 km MAG=5.7
	eipP	A	27 43	D = 78.89 Az = 333.2 (USCGS)
	eS	B	37 24	P1V(A):1.5s 181.0nm MP1V=5.9
	eSKS	B	37 40	P2V(A):1.4s 316.0nm MP2V=6.2
	eSS	C	43 00	P2V(B):7s 0.9/um MP2V=5.9
	eSSS	C	47 15	pPV(A):1.3s 152.5nm
	LmH	B	16 02.3	LmH:16.5s 3.7/um MLH=5.8
	LmV	B	06.4	LmV:16s 2.5/um MLV=5.7
16.	+iP	A	17 25 43.5	Kurile Islands 43.19 N 147.68 E
	Pm	A	25 45	H = 17 13 44.0 h = 53 km MAG=5.4
	+epP	A	25 56.5	D = 79.01 Az = 333.3 (USCGS)
	eS	C	35 38	h = 48 km
	eSS	C	41.5	PV:1.4s 72.0nm MPV=5.5
	LmH	B	18 00.4	PmV:1.2s 158.5nm MPmV=5.9
	LmV	B	05.5	pPV:1.5s 126.0nm
				LmH:17s 0.9/um MLH=5.2
				LmV:15s 0.7/um MLV=5.1
16.	e(P)	A	21 46 28	Kurile Islands
				H = 21 34 21 (UPP)
16.	LmH	B	23 32.9	Kirgiziya 42.0 N 72.1 E
	LmV	B	34.2	H = 23 09 13 MAG=4.5 (ANUSSR)
				D = 41.5
				LmH:15s 0.3/um MLH=4.3
17.	eP	A	06 04 20	Kurile Islands 43.39 N 147.47 E
	epP	A	04 32	H = 05 52 21.2 h = 48 km MAG=4.4 (USCGS)
	e	A	04 38	D = 78.8

Day	Phase		h m s	Remarks
17.	eP	A	08 36 49	Unimak Island 54.20 N 164.28 W
				H = 08 25 08.1 h = 50 km MAG=4.4
				D = 75.47 Az = 2.7 (USCGS)
17.	ePKIKP	A	10 29 29	Solomon Islands 7.02 S 155.62 E
				H = 10 10 29.8 h = 66 km MAG=5.1
				D = 127.22 Az = 332.0 (USCGS)
				PKIKPV:1.4s 18.6nm
17.	eP1	A	11 48 45	Kurile Islands 43.35 N 147.98 E
	iP2	A	48 47.5	H = 11 36 45.3 h = 50 km MAG=4.6
	e	A	48 57	D = 78.97 Az = 333.4 (USCGS)
				h = 45 km
				P2V:1.2s 20.4nm MP2V=5.0
				pPV:1.5s 25.1nm
17.	+iP	A	12 06 36	Hokkaido, Japan 42.66 N 141.37 E
	epP	A	07 07	H = 11 54 54.9 h = 130 km MAG=5.6
	eS	C	16 14	D = 77.28 Az = 329.9 (USCGS)
	LmH	B	27.7	h = 127 km
	LmV	B	28.6	PV:1.4s 93.0nm MPV=5.7
				pPV:2.0s 111.0nm
				LmH:16s 0.6/um
				LmV:16s 0.6/um
17.	ePKP	A	14 17 16	New Hebrides Islands 18.59 S 169.06 E
	e	A	17 27	H = 13 58 08.8 h = 214 km MAG=4.7
	e	A	17 30	D = 143.32 Az = 335.9 (USCGS)
				PKPV:1.4s 27.9nm
17.	eP	A	15 01 08	Kurile Islands
	epP	A	01 21	H = 14 49 09 (UPP)
				D = 78.4 h = 48 km
17.	+ePKP	A	16 26 18.5	Fiji Islands 17.97 S 178.55 W
	e	A	26 20.5	H = 16 07 43.7 h = 610 km MAG=4.9 (USCGS)
				D = 146.4
				PKPV:1.0s 19.7nm

Day	Phase		h m s	Remarks
17.	eP1	A	18 21 21	Kurile Islands 43.55 N 147.48 E
	eP2	A	21 26.5	H = 18 09 11.5 h = 45 km MAG=4.6
				D = 78.63 Az = 333.1 (USCGS)
				P1V:1.0s 11.8nm MP1V=4.9
				P2V:1.1s 12.1nm MP2V=4.9
17.	ePKP	A	18 46 21	Loyalty Islands 22.18 S 170.28 E
				H = 18 26 38.8 h = 28 km MAG=5.2
				D = 147.05 Az = 334.8 (USCGS)
17.	eP1	A	20 25 57.5	Gulf of California 25.28 N 109.19 W
	eP2	A	26 03.5	H = 20 13 08.2 h = normal MAG=5.7
	ePP	B	29 31	D = 88.15 Az = 33.2 (USCGS)
	eSKS	C	36 25	P1V:1.6s 16.5nm MP1V=5.1
	e	B	36 28	P2V:1.7s 36.4nm MP2V=5.4
	eS	C	36 47	PPV(B):8s 1.5/um MPPV(B)=6.5
	ePS	C	37 45	
	eSS	C	42 25	
	eSSS	C	46 00	
17.	eP1	A	20 27 49	Gulf of California 25.02 N 109.53 W
	eP2	AB	27 51	H = 20 14 58.9 h = normal MAG=6.1 (USCGS)
	ePP	B	31 16	D = 88.5
	e	C	31 18	P1V(A):1.6s 22.0nm MP1V=5.2
	eS	B	38 36	P2V(A):2.0s 102.5nm MP2V=5.8
	e	C	38 38	P2V(B):7.5s 1.5/um MP2V=6.4
	eSS	C	44 15	PPV(B):10s 2.8/um MPPV=6.6
	LmH	B	21 04.5	LmH:17.5s 64.3/um MLH=7.1
	LmV	B	05.6	LmV:18s 65.8/um MLV=7.1
17.	eP	A	20 40 15.5	Gulf of California 25.35 N 109.17 W
				H = 20 27 25.2 h = 18 km MAG=5.4
				D = 88.08 Az = 33.2 (USCGS)
				PV:1.6s 27.5nm MPV=5.3
18.	ePKIKP	B	01 23 52	Eastern Island Cordillera
	ePKHKP	A	24 01	56.02 S 123.37 W
	e	A	24 05	H = 01 04 04.7 h = normal MAG=5.1
	e	A	24 09	D = 152.98 Az = 82.3 (USCGS)

Day	Phase		h m s	Remarks
cont.				
18.	ePP	C	01 27 39	PKHKPV:1.3s 21.8nm
	e	C	28 25	LmH:21.5s 3.1/um MLH=6.0
	eSS	B	47 15	LmV:18s 3.0/um
	LmH	B	02 25.9	
	LmV	B	29.8	
18.	eP	A	03 10 39	Gulf of California 25.2N 109.8 W
				H = 02 57 43.0 h = normal MAG=4.6 (USCGS)
				D = 88.5
18.	ePKHKP	A	03 15 24	Eastern Island Cordillera
				56.00 S 122.67 W
				H = 02 55 31.1 h = normal MAG=5.2
				D = 152.58 Az = 81.8 (USCGS)
18.	eP	A	03 34 45	Gulf of California 24.88 N 109.01 W
	Pm	A	34 52	H = 03 21 54.0 h = 22 km MAG=5.3
	LmH	B	04 15.4	D = 88.39 Az = 33.2 (USCGS)
	LmV	B	18.0	PmV:2.5s 76.9nm MPmV=5.6
				LmH:16s 4.3/um MLH=6.0
				LmV:15s 5.4/um MLV=6.1
18.	eP1	A	04 07 41	Gulf of California 24.83 N 109.06 W
	eP2	A	07 47	H = 03 54 49.8 h = normal MAG=5.3
	LmH	B	48.3	D = 88.46 Az = 33.2 (USCGS)
	LmV	B	48.3	P2V:1.4s 18.6nm MP2V=5.6
				LmH:16s 3.5/um MLH=5.9
				LmV:16s 3.7/um MLV=5.9
18.	eP	A	04 17 17	Panama 7.53 N 80.65 W
				H = 04 04 37.4 h = normal MAG=4.4 (USCGS)
				D = 85.7
18.	eP	A	05 38 17	Near East Coast of Honshu, Japan
	epP	A	38 28	34.19 N 140.68 E
	e	A	38 43	H = 05 25 48.8 h = 46 km MAG=4.8 (USCGS)
				D = 84.3 h = 40 km
				PV:1.4s 20.9nm MPV=5.2

Day	Phase		h m s	Remarks
18.	-eP	A	07 03 15.5	Kurile Islands 44.01 N 148.26 E
	e	A	03 29	H = 06 51 19.3 h = 60 km MAG=4.6 (USCGS)
				D = 78.4 h = 52 km
				PV:1.6s 27.3nm MPV=5.1
18.	ePKIKP	A	07 56 56	New Hebrides Islands 14.81 S 167.32 E
				H = 07 37 41.4 h = 140 km MAG=5.0 (USCGS)
				D = 139.2
18.	e	A	08 04 09	Gulf of California 24.75 N 109.10 W
	LmH	B	44.4	H = 07 51 06.9 h = 29 km MAG=4.8 (USCGS)
	LmV	B	47.2	D = 88.5
				LmH:15s 1.1/um MLH=5.4
				LmV:15s 1.3/um MLV=5.5
18.	eP	A	11 01 44.5	Kurile Islands 43.56 N 147.89 E
	epP	A	01 57	H = 10 49 44.2 h = normal MAG=4.5 (USCGS)
				D = 78.7 h = 48 km
				PV:1.2s 12.2nm MPV=4.8
18.	+iP1	A	11 55 30.5	Kurile Islands 43.82 N 148.57 E
	-iP2	A	55 32.5	H = 11 43 30.5 h = 39 km MAG=5.4 (USCGS)
	e	A	55 39.5	D = 78.7
	eS	C	12 05 23	P1V:1.4s 65.0nm MP1V=5.5
	LmH	B	34.5	P2V:1.3s 87.2nm MP2V=5.7
	LmV	B	34.5	LmH:16s 1.9/um MLH=5.5
				LmV:16s 1.9/um MLV=5.6
18.	ePKIKP	A	14 29 35	Kermadec Islands 29.12 S 177.61 W
	ePKHKP	A	29 46	H = 14 09 45.9 h = 60 km MAG=5.3 (USCGS)
	eiPKP2	A	30 07	D = 157.3
				PKP2V:1.2s 24.4nm
18.	+eP	A	15 06 23	West Pakistan 29.95 N 67.54 E
	e	A	06 30	H = 14 57 57.1 h = 15 km MAG=5.0 (USCGS)
	e	A	06 38	D = 46.2
				PV:1.3s 65.5nm MPV=5.5

Day	Phase		h m s	Remarks
18.	eP	A	16 41 30	Kurile Islands 44.48 N 148.06 E
				H = 16 29 34.0 h = normal MAG=4.4 (USCGS)
				D = 77.8
18.	eP	A	18 41 25	Kurile Islands 43.98 N 148.37 E
				H = 18 29 27.6 h = 50 km MAG=4.7 (USCGS)
				D = 78.5
19.	ePKHKP	A	01 24 10	Fiji Islands 21.78 S 179.66 W
	ePKP2	A	24 18	H = 01 05 29.9 h = 649 km MAG=4.4 (USCGS)
				D = 149.8
				PKHKPV:0.8s 19.2nm
				PKP2V:1.2s 16.3nm
19.	e	A	01 52 40	Sunda Strait 6.12 S 105.32 E
	e	A	52 44.5	H = 01 39 08.3 h = 50 km MAG=5.1 (USCGS)
	e	A	53 03.5	D = 96.4
	LmH	B	02 38.7	LmH:21s 1.9/um MLH=0.7
	LmV	B	46.4	LmV:16s 0.7/um MLV=5.3
19.	e(PKP)	A	02 32 04	Solomon Islands 10.39 S 161.53 E
	e	A	32 16	H = 02 12 48.5 h = 70 km MAG=5.0 (USCGS)
				D = 132.8
				PKPV:1.0s 17.7nm
19.	ePKHKP	A	08 12 46.5	Fiji Islands 20.37 S 177.85 W
				H = 07 53 59.3 h = 549 km MAG=4.7 (USCGS)
				D = 148.9
				PKHKPV:1.1s 20.2nm
19.	-iP1	AB	09 01 54.5	Kurile Islands 43.77 N 148.17 E
	+eiP2	A	01 59.5	H = 08 49 54.8 h = 39 km MAG=5.7 (USCGS)
	+iP3	A	02 03.8	D = 78.8
	-iP4	A	02 07.5	P1V(A):1.9s 265.0nm MP1V=5.9
	e(pP)	C	02 11	P1V(B):5s 2.5/um MP1V=6.5
	ePP	C	04 50	P2V(A):1.9s 250.0nm MP2V=5.9
	e	B	04 54	P3V(A):1.2s 167.0nm MP3V=5.9
	eiS	C	11 47	P4V(A):1.7s 363.0nm MP4V=6.2
	iSKS	C	11 59	LmH:15s 19.8/um MLH=6.6

Day	Phase		h m s	Remarks
cont.				
19.	eSS	C	09 17 00	LmV:15s 18.9/um MLV=6.6
	LmH	B	40.6	
	LmV	B	41.5	
19.	eiP	A	09 06 33.5	Kurile Islands
	ipP	A	06 45	H = 08 54 34 (UPP)
				D ca. 78.5
				PV:1.2s 20.3nm MPV=5.1
				pPV:1.0s 27.6nm
19.	eP	A	09 42 15.5	Kurile Islands 43.56 N 148.22 E
	epP	A	42 24	H = 09 30 13.5 h = 45 km MAG=4.6 (USCGS)
				D = 78.8 h = 32 km
				epPV:1.8s 33.8nm
19.	eP	A	10 30 49	Kurile Islands 43.80 N 148.06 E
				H = 10 18 50.7 h = 45 km MAG=4.5
				D = 78.59 Az = 333.4 (USCGS)
19.	eP	A	12 19 00	Kurile Islands 44.09 N 148.84 E
				H = 12 06 59.6 h = 43 km MAG=4.6 (USCGS)
				D = 78.5
19.	e(pP)	A	15 12 26.5	Kurile Islands 43.57 N 148.14 E
				H = 15 00 16.8 h = 64 km MAG=4.4 (USCGS)
				D = 78.7
19.	ePKHKP	A	17 46 20	South Pacific Cordillera
	e	A	46 28	56.67 S 142.05 W
	ePKP2	A	46 50	H = 17 26 07.3 h = normal MAG=4.4 (USCGS)
	ePP	B	50 48	D = 163.3
	e	B	51 11	PKHKPV:1.6s 21.9nm
	LmH	B	18 50.5	LmH:22s 1.2/um MLH=5.6
	LmV	B	50.5	LmV:22s 0.7/um
19.	eP	A	23 48 34	Kurile Islands 43.17 N 147.28 E
	LmH	C	24 24.0	H = 23 36 34.2 h = 50 km MAG=4.3 (USCGS)
	LmV	C	28.4	D = 78.8

Day	Phase		h m s	Remarks
20.	eP	A	01 39 49	Kurile Islands 44.03 N 148.60 E
				H = 01 27 49.9 h = 43 km MAG=4.2 (USCGS)
				D = 78.5
20.	eP	A	05 46(23)	Kurile Islands 43.44 N 147.45 E
	epP	A	46 36	H = 05 34 23.2 h = 54 km MAG=4.2 (USCGS)
				D = 78.7 h = 48 km
20.	+iP1	A	08 01 49	Kurile Islands 47.92 N 153.63 E
	+iP2	AB	01 51	H = 07 50 05.5 h = 73 km MAG=5.8 (USCGS)
	ei	C	02 15	D = 76.5
	e	B	02 29	P1V(A):1.5s 527.0nm MP1V=6.2
	ePP	A	04 40	P2V(A):1.5s 1530.0nm MP2V=6.7
	eS	C	11 22	P2V(B):2.0s 3.1/um MP2V=6.8
	eSKS	B	11 55	LmH:18s 4.6/um MLH=5.8
	ePS	B	12 15	LmV:16s 2.3/um MLV=5.6
	e	B	12 35	
	e	C	22.0	
	LmH	B	35.8	
	LmV	B	41.2	
20.	e(pP)	A	10 24 13	Kurile Islands 43.8 N 147.7 E
				H = 10 12 05.9 h = 50 km MAG=4.4 (USCGS)
				D = 78.3
20.	ePP	A	17 42 47.5	New Britain Region 5.3 S 149.7 E
	LmV	B	18 34.6	H = 17 22 13.7 h = 27 km MAG=4.8 (USCGS)
	LmH	B	35.0	D = 122.8
				LmV:23s 0.8/um MLV=5.3
				LmH:21s 1.1/um MLH=5.5
21.	eP1	A	00 40 38	Kurile Islands 43.21 N 148.20 E
	eP2	A	40 39.5	H = 00 28 36.9 h = 50 km MAG=4.8 (USCGS)
	epP1	A	40 49	D = 79.2 h = 40 km
	epP2	A	40 51	P1V:1.2s 24.4nm MP1V=5.1
	eS	C	50 40	P2V:1.2s 32.5nm MP2V=5.2
	LmV	B	01 21.5	pP1V:1.0s 25.6nm
	LmH	B	21.6	pP2V:1.4s 41.9nm
				LmV:16s 1.2/um MLV=5.4
				LmH:16s 1.4/um MLH=5.4

Day	Phase		h m s	Remarks
21.	e(pP)	A	02 08 28	Crete 35.05 N 26.64 E
	e	A	08 47	H = 02 03 54.2 h = 55 km MAG=4.4
				D = 19.03 Az = 329.6 (USCGS)
21.	eP1	A	02 56 03.5	Kurile Islands 43.03 N 147.32 E
	eP2	A	56 05.5	H = 02 44 01.3 h = 36 km MAG=5.0 (USCGS)
	epP	A	56 14	D = 79.0
	LmV	B	03 35.7	P1V:1.2s 20.3nm MP1V=5.0
	LmH	B	36.6	P2V:1.4s 30.2nm MP2V=5.1
				pPV:1.3s 39.4nm
				LmV:16s 0.6/um MLV=5.1
				LmH:17s 0.7/um MLH=5.1
21.	eP	A	03 44 12.5	Kurile Islands 43.19 N 147.02 E
	epP	A	44 24	H = 03 32 11.5 h = 35 km MAG=5.1 (USCGS)
	ePP	A	47 08	D = 78.7 h = 45 km
	eS	C	54 08	PV:1.4s 23.2nm MPV=5.1
	LmH	B	04 16.5	PPV:2.0s 38.5nm MPPV=5.2
	LmV	B	24.0	LmH:23s 3.2/um MLH=5.6
				LmV:16s 2.1/um MLV=5.6
21.	eP	A	04 59 29	Off Coast of Hokkaido, Japan
	epP	A	59 40	42.88 N 147.23 E
				H = 04 47 27.2 h = 39 km MAG=4.6 (USCGS)
				D = 79.2 h = 40 km
				PV:1.4s 23.2nm MPV=5.0
				pPV:1.3s 13.1nm
21.	eP	A	05 22 35	Kurile Islands 43.14 N 147.28 E
	epP	A	22 46.5	H = 05 10 34.0 h = normal MAG=4.5 (USCGS)
				D = 79.0 h = 40 km
21.	eP	A	07 33(08)	Near Islands, Aleutian Is.
	e	A	33 19.5	51.61 N 174.34 E
				H = 07 21 21.7 h = 87 km MAG=4.4
				D = 77.07 Az = 348.8 (USCGS)

Day	Phase		h m s	Remarks
21.	-eiP	A	08 03 28	Kurile Islands 43.83 N 147.06 E
	e	A	03 45	H = 07 51 30.2 h = 39 km MAG=4.8 (USCGS)
				D = 78.2
				PV:1.2s 28.5nm
21.	eP	A	13 36 01.5	Kurile Islands 43.64 N 148.06 E
	epP	A	36 10.5	H = 13 24 01.9 h = 44 km MAG=5.5
	eS	C	45 56	D = 78.74 Az = 333.4 (USCGS)
	LmH	B	14 14.8	PV:2.3s 170.5nm MPV=5.7
	LmV	B	15.6	pPV:2.0s 188.0nm
				LmH:16s 2.0/um MLH=5.6
				LmV:16s 2.2/um MLV=5.6
21.	eP	A	13 58 57	Near East Coast of Kamchatka
				54.13 N 160.58 E
				H = 13 47 35.7 h = 75 km MAG=5.2 (USCGS)
				D = 72.4
21.	eP	A	14 38 54	Baja California 23.17 N 110.64 W
	eS	C	49 56	H = 14 25 51.5 h = 15 km MAG=5.3 (USCGS)
	ePS	C	50 51	D = 90.5
	LmH	B	15 20.6	PV:2.0s 25.6nm MPV=5.2
	LmV	B	20.7	LmH:16.5s 3.9/um MLH=5.9
				LmV:17s 4.0/um MLV=5.9
21.	ePKIKP	A	19 41 19.5	Fiji Islands 18.14 S 177.73 W
	ePKHKP	A	41 21.5	H = 19 22 20.9 h = 385 km MAG=4.0 (USCGS)
	epPKP	A	42 55	D = 146.7 h = 390 km
21.	LmH	B	22 04.4	Off W. Coast of Baja California
	LmV	B	04.4	22.9 N 110.8 W
				H = 21 09 45.6 h = normal MAG=4.7 (USCGS)
				D = 90.9
				LmH:16s 0.7/um MLH=5.2
				LmV:17s 0.8/um MLV=5.3
22.	eP1	A	04 52 27	Kurile Islands 43.08 N 148.28 E
	eP2	A	52 30	H = 04 40 26.1 h = 60 km MAG=4.8 (USCGS)

Day	Phase		h m s	Remarks
cont.				
22.	e	A	04 52 40	D = 79.3
	eS	B	05 02 25	P1V:1.6s 16.5nm MP1V=4.8
	LmH	B	31.8	P2V:1.2s 22.4nm MP2V=5.1
	LmV	B	32.9	LmH:13.5s 2.0/um MLH=5.6
				LmV:16s 2.3/um MLV=5.6
22.	eP	A	05 42 17.5	Kurile Islands 43.57 N 147.59 E
	eipP	A	42 31	H = 05 30 19.2 h = 50 km MAG=4.3 (USCGS)
				D = 78.6 h = 50 km
22.	eP	A	07 24 25	Kurile Islands 43.78 N 146.92 E
				H = 07 12 30.9 h = 59 km MAG=4.9 (USCGS)
				D = 78.1
22.	ePKHKP	A	08 00 00	Fiji Islands 20.86 S 178.74 W
	ePKP2	A	00 07	H = 07 41 17.3 h = 592 km MAG=4.8 (USCGS)
	e	A	00 13	D = 149.3
				PKHKPV:1.2s 26.4nm
				PKP2V:1.0s 11.8nm
22.	eS	C	10 28 36	Baja California 23.3 N 110.4 W
	ePS	C	29 40	H = 10 04 36.4 h = 11 km MAG=5.1 (USCGS)
	LmH	B	59.2	D = 90.3
	LmV	B	59.3	LmH:16s 4.2/um MLH=6.0
				LmV:16s 4.7/um MLV=6.0
22.	eP	A	10 33 25	Ascension Island 6.84 S 12.24 W
	e	A	33 34	H = 10 23 14.9 h = normal MAG=4.7
	eX	A	33 39	D = 60.86 Az = 17.1 (USCGS)
				XV:1.4s 32.6nm
22.	ePKIKP	A	16 04 04	Solomon Islands 7.55 S 156.01 E
	e	A	04 19	H = 15 45 04.7 h = 80 km MAG=5.1
	LmH	B	17 03.6	D = 127.87 Az = 332.0 (USCGS)
	LmV	B	04.0	LmH:20s 0.4/um
				LmV:20s 0.4/um

Day	Phase		h m s	Remarks
22.	+iPKP	A	17 53 41	Tonga Islands 16.10 S 174.13 W
	ei	A	53 44.5	H = 17 34 20.1 h = 152 km MAG=4.9 (USCGS)
	e	A	53 48.5	D = 145.3 h = 153 km
	e	A	53 51.5	PV:1.1s 88.7nm
	e	A	54 12	pPV:1.3s 26.2nm
	epP	A	54 22	
22.	eP	A	23 41 46	Kurile Islands
				H = 23 29 46 (UPP)
				D ca. 78.5
				PV:1.5s 15.1nm MPV=4.9
22.	ePKP	A	24 13 39	New Hebrides Islands 18.36 S 168.41 E
				H = 23 54 11.9 h = 41 km MAG=4.7
				D = 142.86 Az = 335.4 (USCGS)
23.	ePKP	A	02 02 26	Tonga Islands 15.50 S 173.04 W
				H = 01 42 52.8 h = normal MAG=5.0 (USCGS)
				D = 144.8
23.	eP	A	03 06 32	Off East Coast of Honshu, Japan
	epP	A	06 42	39.72 N 144.26 E
	e	A	06 51	H = 02 54 18.9 h = 37 km MAG=5.4
				D = 80.90 Az = 331.7 (USCGS)
				PV:0.8s 9.6nm MPV=4.9
				pPV:1.2s 14.2nm
23.	-eP	A	06 51 36.5	Off East Coast of Honshu, Japan
	epP	A	51 48.5	39.78 N 144.23 E
	LmV	B	07 24.3	H = 06 39 24.5 h = 33 km MAG=5.2 (USCGS)
	LmH	B	27.6	D = 80.8 h = 45 km
				PV:1.4s 39.5nm MPV=5.3
				pPV:1.3s 30.6nm
				LmV:17s 0.5/um MLV=5.0
				LmH:17s 0.8/um MLH=5.2
23.	eP1	A	06 59 50	Kurile Islands 43.97 N 148.22 E
	eP2	A	59 54	H = 06 47 49.7 h = 35 km MAG=4.8 (USCGS)
	eP3	A	07 00 00	D = 78.5

Day	Phase		h m s	Remarks
cont.				
23.	e	A	07 00 17	P1V:0.7s 11.5nm MP1V=5.1 P2V:1.0s 15.8nm MP2V=5.1 P3V:1.5s 55.3nm MP3V=5.4
23.	eP	A	13 39 40	Kurile Islands 43.74 N 147.58 E H = 13 27 42.2 h = 51 km MAG=4.0 D = 78.49 Az = 333.2 (USCGS)
23.	epP	A	15 05 13	Kurile Islands 43.39 N 147.67 E H = 14 53 01.5 h = 60 km MAG=4.0 D = 78.83 Az = 333.2 (USCGS)
23.	eP	A	19 23 36.5	Iran 33.95 N 58.90 E H = 19 16 17.7 h = 32 km MAG=5.1 D = 38.04 Az = 310.6 (USCGS)
23.	eSS	C	19 38 25	South of Africa 53.5 S 25.9 E
	LmV	B	20 07.3	H = 19 05 11.8 h = normal MAG=5.2 (USCGS) D = 104.4 LmV:18s 0.4/um MLV=5.0
23.	eP	A	20 09 00.5	Off East Coast of Honshu, Japan 39.68 N 144.31 E H = 19 56 47.0 h = 35 km MAG=5.0 (USCGS) D = 80.9
24.	eP1	A	03 45 57.5	Kurile Islands 43.38 N 147.45 E
	eP2	A	45 58.5	H = 03 33 58.6 h = 60 km MAG=4.6 (USCGS)
	epP	A	46 09	D = 78.8 h = 43 km P2V:1.2s 18.3nm MP2V=5.0 pPV:1.0s 18.7nm
24.	ePKP2	A	09 51 51	Balleny Islands Region 61.3 S 154.2 E H = 09 31 26.2 h = 15 km MAG=5.1 (USCGS) D = 156.8 PKP2V:1.5s 10.0nm

Day	Phase		h m s	Remarks
24.	-eP	A	22 15 16	Off East Coast of Honshu, Japan
	LmH	B	51.4	39.80 N 144.27 E
	LmV	B	54.3	H = 22 03 03.8 h = 32 km MAG=5.4 (USCGS) D = 80.8 PV:1.8s 81.0nm MPV=5.4 LmH:18s 1.1/um MLH=5.3 LmV:16s 0.8/um MLV=5.3
25.	eP	A	01 18 34.5	Off East Coast of Honshu, Japan
	epP	A	18 44	39.69 N 144.44 E H = 01 06 20.1 h = 35 km MAG=4.9 (USCGS) D = 81.0 h = 35 km PV:1.6s 16.5nm MPV=4.8
25.	eP	A	01 24 19	Off East Coast of Honshu, Japan
	epP	A	24 29	39.56 N 144.52 E H = 01 12 05.1 h = 35 km MAG=4.7 (USCGS) D = 81.1 h = 37 km PV:1.5s 12.6nm MPV=4.7 pPV:1.4s 18.6nm
25.	e	A	18 19 33	Kurile Islands 43.89 N 148.37 E H = 18 07 31.1 h = 65 km MAG=4.4 D = 78.61 Az = 333.6 (USCGS)
25.	eP	A	20 53 41	Off East Coast of Honshu, Japan 39.54 N 144.36 E H = 20 41 27.0 h = normal MAG=4.6 D = 81.10 Az = 331.8 (USCGS)
25.	LmH	C	22 36.3	Molucca Passage 0.4 N 126.0 E
	LmV	C	36.5	H = 21 32 13.5 h = normal MAG=5.1 (USCGS) D = 105.0 LmH(C):28s 0.4/um MLH=4.8 LmV(C):24s 0.7/um MLV=5.2
26.	eP1	A	02 18 11	Albania 41.77 N 20.09 E
	eP2	A	18 16.5	H = 02 15 38.8 h = 42 km MAG=4.9
	e	A	18 22	D = 10.64 Az = 329.5 (USCGS)

Day	Phase		h m s	Remarks
cont.				
26.	e	A	02 18 36.5	P1V:1.0s 23.6nm
	eSn	A	20 09	P2V:1.4s 51.5nm
	i	A	20 38	LmH:14s 4.4/um MLH=4.3
	i	A	20 45	LmV:9s 2.1/um
	e(Sg)	A	21 25	
	LmH	B	21.8	
	LmV	B	22.8	
26.	eP	A	03 31 28	Tadzhik SSR 37.11 N 72.70 E
				H = 03 23 19.2 h = 65 km MAG=4.7
				D = 44.81 Az = 307.8 (USCGS)
26.	ePKP	A	09 46 21	Fiji Islands 18.03 S 176.25 W
	eiX	A	46 24	H = 09 26 39.8 h = normal MAG=4.8
				D = 146.86 Az = 350.8 (USCGS)
				PKPV:1.6s 38.5nm
				XV:1.4s 32.5nm
26.	ePKIKP	A	17 16 55.5	New Britain 5.81 S 151.19 E
	epPKIKP	A	17 07	H = 16 58 02.3 h = 59 km MAG=5.6
	LmH	B	18 09.5	D = 124.04 Az = 330.1 (USCGS)
	LmV	B	13.4	h = 41 km
				PKIKPV:1.6s 71.5nm
				pPKIKPV:1.4s 41.8nm
				LmH:24s 2.0/um MLH=5.7
				LmV:19s 1.2/um MLV=5.6
26.	ePKP	A	20 47 37	Tonga Islands 15.41 S 173.30 W
	LmH	C	21 34.7	H = 20 28 05.6 h = 55 km MAG=5.4
	LmV	C	34.7	D = 144.63 Az = 354.6 (USCGS)
				PKPV:2.0s 34.2nm
				LmH(C):16s 0.3/um MLH=5.1
				LmV(C):17s 0.5/um
26.	eP	A	20 55 07.5	Kurile Islands 43.51 N 147.69 E
	e(pP)	A	55 20	H = 20 43 04.1 h = 21 km MAG=4.6
				D = 78.73 Az = 333.2 (USCGS)

Day	Phase		h m s	Remarks
26.	eP1	A	22 45 43	Iceland 66.53 N 17.87 W
	eP2	A	45 45	H = 22 40 47.9 h = 3 km MAG=4.3
				D = 21.79 Az = 122.4 (USCGS)
				P2V:1.4s 14.0nm MP2V=4.2
26.	+eP	A	22 52 14.8	Iceland 66.32 N 17.73 W
	e	A	52 17	H = 22 47 25.9 h = normal MAG=4.8
	e	A	52 19	D = 21.63 Az = 122.2 (USCGS)
	LmH	B	23 00.6	PV:1.2s 36.6nm MPV=4.6
	LmV	B	03.7	LmH:19s 1.0/um MLH=4.3
				LmV:12s 0.8/um MLV=4.5
26.	eP1	A	23 54 01	Iceland 66.40 N 18.33 W
	eP2	A	54 03	H = 23 49 08.8 h = normal MAG=4.5
				D = 21.88 Az = 121.5 (USCGS)
				P2V:1.4s 23.3nm MP2V=4.4
27.	eP	A	00 22 18	Kurile Islands 43.56 N 147.51 E
	epP	A	22 28.5	H = 00 10 16.9 h = normal MAG=4.6
				D = 78.63 Az = 333.1 (USCGS)
				h = 40 km
27.	eP1	A	01 22 27.5	Kurile Islands 43.62 N 147.46 E
	eP2	A	22 30.5	H = 01 10 30.1 h = 60 km MAG=5.0
	epP	A	22 39	D = 78.55 Az = 333.1 (USCGS)
	LmH	B	54.9	h = 43 km
	LmV	B	02 01.4	P1V:1.5s 30.2nm MP1V=5.1
				P2V:1.0s 19.6nm MP2V=5.1
				pPV:1.8s 50.6nm
				LmH:20s 2.4/um MLH=5.5
				LmV:15s 1.1/um MLH=5.3
27.	eP	A	01 24 53.5	Kurile Islands 43.39 N 147.73 E
	epP	A	25 06	H = 01 12 55.2 h = 60 km MAG=5.1
				D = 78.85 Az = 333.3 (USCGS)
				PV:1.3s 24.0nm MPV=5.1
				pPV:1.4s 20.9nm

Day	Phase		h m s	Remarks
27.	eP	A	01 40 34.5	Kurile Islands 43.62 N 147.63 E
	epP	A	40 47	H = 01 28 34.1 h = normal MAG=4.7
				D = 78.62 Az = 333.2 (USCGS)
				h = 45 km
				PV:1.4s 18.6nm MPV=5.0
				pPV:1.1s 14.1nm
27.	eP	A	02 43 20	Kurile Islands 43.66 N 147.49 E
	e	A	43 41	H = 02 31 20.7 h = 40 km MAG=4.6
				D = 78.53 Az = 333.1 (USCGS)
				PV:1.3s 15.3nm MPV=4.9
27.	eP1	A	03 38 13.5	Kurile Islands 43.74 N 147.60 E
	+iP2	A	38 14.5	H = 03 26 16.1 h = 50 km MAG=5.0
	epP	A	38 27	D = 78.50 Az = 333.2 (USCGS)
	LmH	B	04 10.8	h = 50 km
	LmV	B	17.8	P2V:1.4s 60.5nm MP2V=5.5
				pPV:1.4s 41.8nm
				LmH:21s 2.9/um MLH=5.6
				LmV:14s 1.0/um MLV=5.4
27.	e(pP)	A	03 39 07	Kurile Islands
				H = 03 26 56 (UPP)
27.	+eP1	A	03 44 36	Kurile Islands 43.71 N 147.44 E
	eP2	A	44 44	H = 03 32 37.7 h = 50 km MAG=4.9
	eP3	A	44 48.5	D = 78.47 Az = 333.1 (USCGS)
				P1V:1.3s 30.6nm MPV=5.3
				P2V:1.5s 30.2nm
				P3V:1.5s 35.2nm
27.	eP	A	19 36 12	Bonin Islands 28.68 N 143.81 E
	LmH	B	20 27.0	H = 19 23 10.6 h = 20 km MAG=5.4
	LmV	B	27.0	D = 90.43 Az = 331.9 (USCGS)
				PV:1.6s 24.7nm MPV=5.1
				LmH:15s 0.5/um MLH=5.1
				LmV:14s 0.5/um MLV=5.1

Day	Phase		h m s	Remarks
27.	eP	A	20 03 26	Off East Coast of Honshu, Japan
				34.90 N 141.11 E
				H = 19 51 02.7 h = 67 km MAG=5.0
				D = 83.90 Az = 330.4 (USCGS)
				PV:1.6s 27.5nm MPV=5.2
28.	eP	A	04 06 47.5	Tadzhik-Sinkiang Border Region
	ePP	A	08 35	39.06 N 73.62 E
	e	C	08 38	H = 03 58 34.8 h = 20 km MAG=5.1
	eS	C	13 20	D = 44.23 Az = 306.3 (USCGS)
	eSS	C	16 38	PV:1.6s 52.1nm MPV=5.0
	LmH	B	24.2	LmH:16s 9.7/um MLH=5.8
	LmV	B	28.5	LmV:14s 3.8/um MLV=5.5
28.	eP	A	04 14 35	Tadzhik-Sinkiang Border Region
				39.23 N 73.94 E
				H = 04 06 21.9 h = 26 km MAG=5.1
				D = 44.33 Az = 306.2 (USCGS)
				PV:1.6s 16.5nm MPV=4.5
28.	eP	A	04 56 19	Kurile Islands
				H = 04 44 19 (UPP)
				D ca. 78.6
28.	ePKIKP	A	14 14 11	Kermadec Islands 31.47 S 177.88 W
	ePKHKP	A	14 19	H = 13 54 11.0 h = 29 km MAG=5.3
	e	C	14 30	D = 159.58 Az = 342.5 (USCGS)
	ePKP2	A	14 55	LmV:16s 2.7/um
	e	A	14 58	LmH:17s 3.8/um MLH=6.2
	e	C	18 28	
	ePP	C	18 50	
	e(SKSP)	C	29 10	
	eSS	C	30 40	
	LmV	B	15 42.0	
	LmH	B	50.9	
28.	e(pP)	A	15 05 57.5	Kurile Islands
				H = 14 53 50 (UPP)
				pPV:1.0s 11.8nm

Day	Phase		h m s	Remarks
28.	e	A	16 28 00	Kurile Islands 43.66 N 147.66 E
				H = 16 15 47.2 h = normal MAG=4.1
				D = 78.59 Az = 333.2 (USCGS)
28.	ePKHKP	A	17 10 14	Kermadec Islands 31.75 S 177.75 W
	eiPKP2	A	10 34	H = 16 49 56.9 h = 23 km MAG=5.1
	e	A	10 47.5	D = 159.88 Az = 342.5 (USCGS)
	LmH	C	18 38.6	PKP2V:1.6s 55.0nm
	LmV	C	43.0	LmH(C):16s 0.6/um MLH=5.4
				LmV(C):19s 0.6/um
28.	eP	A	21 47 23	Kurile Islands 43.47 N 147.66 E
	epP	A	47 35	H = 21 35 23.4 h = 52 km MAG=4.9
	eS	C	57 16	D = 78.75 Az = 333.2 (USCGS)
	LmH	B	22 19.9	PV:1.5s 50.1nm MPV=5.4
	LmV	B	27.0	SH(C):14s 0.7/um MSH=5.5
				LmH:21s 4.5/um MLH=5.8
				LmV:17s 1.6/um MLV=5.4
29.	eP	A	01 14 05	Kurile Islands 43.62 N 147.48 E
	epP	A	14 15.5	H = 01 02 02.8 h = 35 km MAG=4.0
				D = 78.57 Az = 333.1 (USCGS)
				pPV:1.0s 12.3nm
29.	ePl	A	03 21 08	Kurile Islands 43.40 N 147.59 E
	eP2	A	21 10.5	H = 03 09 10.4 h = 65 km MAG=4.6
	epP	A	21 21	D = 78.79 Az = 333.2 (USCGS)
	ei	A	21 33	P1V:1.4s 20.9nm MP1V=5.0
	LmH	B	53.5	P2V:1.2s 28.5nm MP2V=5.2
	LmV	C	04 00.8	pPV:1.2s 36.6nm
				LmH(B):20s 0.6/um MLH=5.0
				LmV(C):18s 0.5/um MLV=4.9
29.	eP	A	10 13 35	Burma 26.32 N 96.14 E
	e	A	13 52.5	H = 10 02 49.6 h = 73 km MAG=5.4
	e	A	13 57	D = 66.77 Az = 316.4 (USCGS)
	e	A	14 09	PV:0.8s 11.5nm
	e	A	14 13	

Day	Phase		h m s	Remarks
29.	ePKIKP	A	17 43 08.5	Tonga Islands 17.9 S 175.2 W
	e	A	43 17	H = 17 24 04.9 h = 270 km MAG=4.5 (USCGS)
				D = 142.6
30.	LmV	C	02 27.5	Galapagos Islands 1.1 S 90.8 W
	LmH	C	27.7	H = 01 26 29.5 h = normal MAG=5.5 (USCGS)
				D = 98.7
				LmV(C):17s 0.2/um MLV=4.8
				LmH(C):17s 0.2/um MLH=4.8
30.	eP	A	07 04 34	Kurile Islands 43.62 N 147.86 E
	epP	A	04 42	H = 06 52 34.7 h = 38 km MAG=5.0
	e	A	04 46	D = 78.69 Az = 333.3 (USCGS)
				h = 45 km
				PV:1.4s 23.3nm MPV=5.1
				pPV:1.3s 17.5nm
30.	eP1	AB	07 23 40	Kurile Islands 43.69 N 147.76 E
	eiP2	B	23 49	H = 07 11 39.5 h = normal MAG=5.4
	ipP	A	23 51	D = 78.59 Az = 333.3 (USCGS)
	eS	C	33 35	h = 40 km
	eSS	C	38 50	P1V(A):1.2s 89.5nm MP1V=5.8
	e	C	39 24	P1V(B):4s 2.5/um MP1V=6.7
	LmH	B	08 03.3	P2V(B):8s 2.8/um MP2V=6.3
	LmV	B	03.3	LmH:16s 19.0/um MLH=6.5
				LmV:16s 12.0/um MLV=6.4
30.	eP	A	07 34 11	Kurile Islands 43.63 N 147.72 E
	epP	A	34 21.5	H = 07 22 10.9 h = 45 km MAG=4.6
				D = 78.63 Az = 333.2 (USCGS)
				h = 40 km
				pPV:1.3s 19.7nm
30.	epP	A	07 40 17	Kurile Islands
				H = 07 28 07 (UPP)

Day	Phase		h m s	Remarks
30.	+eP	A	07 53 43	Kurile Islands 43.66 N 147.94 E
	epP	A	53 55	H = 07 41 43.4 h = normal MAG=5.0
				D = 78.68 Az = 333.4 (USCGS)
				h = 45 km
				PV:1.3s 34.9nm MPV=5.3
				pPV:1.4s 32.6nm
30.	+iP	A	08 06 27.5	Kurile Islands 43.39 N 146.53 E
	i	A	06 30.5	H = 07 54 29.6 h = 43 km MAG=5.5
	ipP	A	06 37.5	D = 78.45 Az = 332.6 (USCGS)
				PV:1.0s 63.0nm MPV=5.7
				pPV:1.2s 40.6nm
30.	+iP1	A	08 40 06.7	Kurile Islands 43.60 N 147.82 E
	eiP2	A	40 08.5	H = 08 28 06.5 h = normal MAG=5.4
	ipP	A	40 18	D = 78.69 Az = 333.3 (USCGS)
	eS	C	50 00	P1V:1.5s 65.3nm MP1V=5.5
	LmH	B	09 12.7	P2V:2.0s 137.0nm MP2V=5.7
	LmV	B	18.8	LmH:21s 14.2/um MLH=6.2
				LmV:15s 5.0/um MLV=6.0
30.	eP	A	08 49 21.5	Kurile Islands 43.84 N 147.96 E
				H = 08 37 21.0 h = normal MAG=4.7
				D = 78.53 Az = 333.4 (USCGS)
30.	eP	A	08 57 04.5	Kurile Islands
	epP	A	57 14	H = 08 45 05 (UPP)
				D ca. 78.6 h = 37 km
30.	eP	A	09 00 06	Kurile Islands 43.99 N 147.86 E
	epP	A	01 18	H = 08 48 08.2 h = 40 km MAG=4.6
				D = 78.36 Az = 333.3 (USCGS)
				PV:1.3s 13.1nm MPV=4.9
				pPV:1.2s 16.3nm
30.	eP	A	09 00 36	Kurile Islands
				H = 08 48 39 (UPP)

Day	Phase		h m s	Remarks
30.	epP	A	10 14 14	Kurile Islands 43.89 N 147.97 E
				H = 10 02 01.6 h = 39 km MAG=4.5
				D = 78.49 Az = 333.4 (USCGS)
30.	eP	A	10 23 41	Kurile Islands
				H = 10 11 42 (UPP)
				D ca. 78.4
30.	epP	A	11 38 17	Kurile Islands
				H = 11 26 06 (UPP)
30.	ePKIKP	A	13 10 34	New Britain 5.66 S 148.26 E
				H = 12 51 58.0 h = 167 km MAG=5.2
				D = 122.43 Az = 328.8 (USCGS)
30.	eP	A	18 52 53	Kurile Islands 43.81 N 147.88 E
	epP	A	53 04	H = 18 40 52.1 h = 25 km MAG=4.5
				D = 78.53 Az = 333.3 (USCGS)
				h = 40 km
31.	LmH	C	10 54.0	South Sandwich Islands Region
	LmV	C	55.0	55.2 S 24.9 W
				H = 09 52 56.8 h = 43 km MAG=4.3 (USCGS)
				D = 109.7
				LmV(C):18s 0.2/um MLV=4.6
31.	ePKP	A	11 12 03.5	New Hebrides Islands 18.77 S 169.00 E
	ePP	A	15 25	H = 10 52 55.3 h = 207 km MAG=5.0
				D = 143.47 Az = 335.7 (USCGS)
				PKPV:1.4s 65.0nm
31.	eP	A	13 18 20.5	Southern Sumatra 4.51 S 102.33 E
				H = 13 05 08.6 h = 64 km MAG=5.5
				D = 93.91 Az = 320.3 (USCGS)
				PV:1.2s 16.3nm MPV=5.2

Day	Phase		h m s	Remarks
31.	ePKHKP	A	21 07 23.5	Fiji Islands 19.78 S 177.86 W
	ePKP2	A	07 27	H = 20 48 22.6 h = 400 km MAG=4.5
				D = 148.29 Az = 348.5 (USCGS)
				PKHKPV:1.5s 10.0nm
				PKP2V:1.3s 17.5nm
31.	eP	A	22 29 01	Kurile Islands 43.40 N 146.73 E
	epP	A	29 11.5	H = 22 17 04.7 h = 59 km MAG=4.7
				D = 78.51 Az = 332.7 (USCGS)
				PV:0.7s 17.2nm MPV=5.2
				pPV:1.6s 22.0nm

Day	Phase		h m s	Remarks
1.	ePP	C	00 03 00	Near Coast of Guerrero, Mexico
	LmV	B	42.8	17.7 N 101.5 W
				H = 23 46 33.4 h = 72 km MAG=5.0 (USCGS)
				D = 90.3
				LmV:18s 0.4/um MLV=4.9
1.	ePKP	A	05 42 13	Tonga Islands 20.45 S 174.40 W
	e	A	42 23	H = 05 22 25.9 h = normal MAG=4.3
				D = 149.50 Az = 352.5 (USCGS)
				eV(A):1.6s 19.2nm
1.	ePKP2	A	08 35 09	West of Macquarie Islands
	e	A	35 13.5	58.89 S 149.06 E
	LmH	B	09 58	H = 08 14 55.1 h = normal MAG=5.1
				D = 154.49 Az = 270.0 (USCGS)
				eV(A):1.4s 32.6nm
				LmH:16s 1.2/um MLH=5.7
1.	eP	A	09 58 05	Off East Coast of Honshu, Japan
				40.46 N 143.79 E
				H = 09 45 57.6 h = normal MAG=5.0
				D = 80.08 Az = 331.4 (USCGS)
1.	eP	A	10 01 54	Kurile Islands 43.11 N 147.63 E
	ipP	A	02 06	H = 09 49 52.0 h = normal MAG=5.3
	LmH	C	41.7	D = 79.07 Az = 333.2 (USCGS)
	LmV	C	40.2	h = 45 km
				PV:1.7s 66.6nm MPV=5.4
				pPV:1.3s 74.2nm
				LmH:19s 0.9/um MLH=5.3
				LmV:16s 1.1/um MLV=5.3
				From 01 d 10^h 04^{min} to 02 d 05^h 35^{min} clock of the station out of operation
2.	eP	A	07 35 18	Kyushu, Japan 30.3 N 131.0 E
	LmH	C	08 17.3	H = 07 22 49.4 h = 15 km MAG=4.8 (USCGS)

Day	Phase		h m s	Remarks
cont. 2.	LmV	C	08 17.3	D = 83.2 LmH:16s 0.5/um MLH=5.0 LmV:16s 0.9/um MLV=5.3
2.	-eP	A	11 52 00.8	Ascension Island 7.12 S 13.14 W
	epP	A	52 08.5	H = 11 41 46.0 h = 32 km MAG=4.9
				D = 61.40 Az = 17.7 (USCGS)
				PV:1.1s 16.1nm MPV=5.1
2.	eP	A	12 19 34	Honshu, Japan 36.34 N 137.73 E
	e	A	19 41	H = 12 07 16.5 h = 10 km MAG=4.5
				D = 81.26 Az = 328.6 (USCGS)
2.	e	A	13 38 05	Iran 30.20 N 57.65 E
	LmH	C	14 00.4	H = 13 30 03.5 h = 20 km MAG=5.3
	LmV	C	13 55.5	D = 39.77 Az = 314.2 (USCGS)
				LmH:14s 0.3/um MLH=4.3
				LmV:24s 0.5/um MLV=4.4
2.	eP	A	15 32 06	Kurile Islands 43.36 N 147.27 E
				H = 15 20 02.8 h = normal MAG=4.6
				D = 78.73 Az = 333.0 (USCGS)
				PV:1.0s 9.8nm MPV=4.8
3.	eP	A	04 31 28	Kurile Islands 43.29 N 146.50 E
				H = 04 19 26.8 h = normal MAG=4.3
				D = 78.53 Az = 332.6 (USCGS)
3.	eP	A	16 33 07	South of Honshu, Japan 31.48 N 140.24 E
	ePP	A	36 28	H = 16 20 21.5 h = 16 km MAG=5.3
	eS	B	43 42	D = 86.50 Az = 330.1 (USCGS)
	e	B	47 00	PV:2.0s 55.5nm MPV=5.4
	LmH	B	17 14.9	PPH(A):2.2s 112.5nm MPPH(A)=6.2
	LmV	B	17.9	PPV(A):2.0s 85.5nm MPPV(A)=5.9
				LmH:17s 2.4/um MLH=5.7
				LmV:14s 2.2/um MLV=5.7

Day	Phase		h m s	Remarks
3.	eP	A	22 13 35	Kurile Islands 43.11 N 147.48 E
				H = 22 01 31.4 h = normal MAG=4.8
				D = 79.02 Az = 333.2 (USCGS)
3.	eP	A	23 46 15	Iran 34.27 N 58.26 E
	LmH	B	24 07.5	H = 23 39 03.0 h = normal MAG=4.8
	LmV	B	09.3	D = 37.42 Az = 310.4 (USCGS)
4.	eP	A	03 05 06	Hindu Kush Region 36.51 N 70.90 E
				H = 02 57 18.8 h = 221 km MAG=4.8
				D = 44.05 Az = 308.1 (USCGS)
4.	+iP	AB	03 20 47	Kurile Islands 46.63 N 153.51 E
	e	B	21 15	H = 03 08 52.0 h = normal MAG=5.4
	ePP	B	23 40	D = 77.67 Az = 336.3 (USCGS)
	eS	B	30 36	PV(A):1.4s 51.2nm MPV(A)=5.5
	LmH	B	57.0	PV(B):7.5s 2.2/um MPV(B)=6.0
	LmV	B	58.4	PmV(A):1.1s 133.0nm MPmV(A)=6.0
				SH: 14s 6.0/um MSH=6.0
				LmH: 15.5s 7.6/um MLH=6.1
				LmV: 17.5s 5.2/um MLV=5.9
4.	eP	A	04 42 20	Kurile Islands 42.96 N 146.79 E
	e	A	42 32	H = 04 30 17.5 h = normal MAG=4.7
				D = 78.92 Az = 332.8 (USCGS)
4.	eP	A	04 46 46.5	Kurile Islands 46.40 N 153.73 E
				H = 04 34 46.2 h = 7 km MAG=4.3
				D = 77.94 Az = 336.4 (USCGS)
4.	eP	A	05 50 49.5	Kurile Islands 45.52 N 150.73 E
				H = 05 38 53.6 h = normal MAG=4.8
				D = 77.88 Az = 334.8 (USCGS)
				PV:1.4s 18.6nm MPV=5.0
4.	eP	A	11 45 56	Kurile Islands 43.21 N 147.49 E
				H = 11 33 53.3 h = normal MAG=4.1
				D = 78.93 Az = 333.1 (USCGS)

Day	Phase		h m s	Remarks
4.	eiP	A	17 24 13	Jordan-Syria Region 35.34 N 39.13 E
	eS	BC	28 45	H = 17 18 48.8 h = normal MAG=4.7
	LmH	B	35.7	D = 25.08 Az = 316.1 (USCGS)
	LmV	B	35.8	PV:1.4s 34.9nm MPV=4.9
				LmH:13s 0.3/um MLH=4.0
				LmV:15s 0.3/um MLV=4.1
4.	eP	A	19 29 49.5	Dodecanese Islands 35.13 N 27.18 E
	eS	BC	33 20	H = 19 25 26.0 h = normal MAG=4.9
	LmH	B	38.2	D = 19.18 Az = 328.1 (USCGS)
	LmV	B	38.5	PV:1.8s 53.0nm MPV=4.5
				LmH:10.5s 0.9/um MLH=4.4
				LmV:13s 0.7/um MLV=4.3
4.	+iP	AB	21 24 35.2	Kurile Islands 43.84 N 147.38 E
	epP	AB	24 44	H = 21 12 39.5 h = 60 km MAG=5.6
	eS	BC	34 25	D = 78.34 Az = 333.0 (USCGS)
	eSKS	BC	34 40	PV:1.6s 169.5nm MPV=5.9
	eSS	C	40 10	pPV:1.5s 97.0nm MpPV=5.7
	LmH	B	22 03.9	LmH:17s 2.3/um MLH=5.6
	LmV	B	03.9	LmV:18s 2.3/um MLV=5.6
4.	eP	A	23 58 44	Kurile Islands 43.49 N 146.51 E
				H = 23 46 51.4 h = 87 km MAG=4.6
				D = 78.36 Az = 332.6 (USCGS)
5.	ePKP	A	00 45 40.5	Tonga Islands 18.06 S 173.23 W
				H = 00 25 58.9 h = normal MAG=4.9
				D = 147.26 Az = 354.3 (USCGS)
				PKPV:1.2s 6.1nm
5.	+eiP	AB	11 54 45	Taiwan 22.72 N 121.65 E
	eS	BC	12 05 11	H = 11 42 14.0 h = 33 km MAG=5.6
	LmH	B	37.5	D = 84.56 Az = 323.1 (USCGS)
	LmV	B	37.7	PV:1.7s 69.7nm MPV=5.6
				LmH:15s 4.1/um MLH=5.9
				LmV:15s 5.7/um MLV=6.1

Day	Phase		h m s	Remarks
5.	eP	A	17 58 35	Turkey 38.91 N 37.12 E
	LmH	B	18 09.0	H = 17 53 49 h = 53 km MAG=4.4
	LmV	B	09.5	D = 21.45 Az = 311.5 (USCGS)
5.	ePKP	A	20 08 22.5	Fiji Islands 15.81 S 176.71 W
				H = 19 49 36.7 h = 458 km MAG=4.4
				D = 144.61 Az = 350.8 (USCGS)
5.	eP	A	22 18 33	East China Sea 28.99 N 128.88 E
				H = 22 06 16.9 h = 107 km MAG=4.9
				D = 83.32 Az = 325.3 (USCGS)
				PV:0.8s 15.4nm MPV=5.0
6.	+iP	AB	07 55 28.7	Kurile Islands 43.75 N 147.30 E
	ipP	AB	55 40.2	H = 07 43 29.8 h = normal MAG=5.5
	i	A	55 44.2	D = 78.39 Az = 333.0 (USCGS)
	e	A	58 12	PV:2.1s 144.0nm MPV=5.7
	eS	BC	08 05 18	pPV:1.6s 118.0nm
	LmH	B	34.8	LmH:17s 1.9/um MLH=5.5
	LmV	B	34.9	LmV:18s 2.0/um MLV=5.5
6.	eP	AB	11 53 15	Kurile Islands 49.45 N 153.34 E
	epP	A	54 02	H = 11 41 50.6 h = 170 km MAG=4.9
				D = 75.04 Az = 335.9 (USCGS)
				h = 200 km
				PV:1.6s 44.0nm MPV=4.9
				pPV:1.9s 34.1nm
6.	+iP1	AB	14 35 29.2	Northers Atlantic Ocean
	iP2	AB	35 32.5	36.94 N 11.89 W
	ePP	B	35 50	H = 14 30 39.5 h = normal MAG=5.7
	iS	BC	39 29	D = 21.69 Az = 43.4 (USCGS)
	LmH	B	43.4	P1V:1.4s 358.0nm MP1V=5.6
	LmV	B	44.5	P2V:1.5s 1080.0nm MP2V=6.0
				LmH:16s 21.2/um MLH=5.7
				LmV:16s 13.0/um MLV=5.6

Day	Phase		h m s	Remarks
6.	ePKIKP	A	15 09 06.5	Solomon Islands 8.84 S 157.81 E
	eX	A	09 13	H = 14 49 56.0 h = 15 km MAG=5.8
	e	A	09 18	D = 129.83 Az = 332.5 (USCGS)
				PKIKPV:1.4s 18.6nm
				XV:2.4s 180.0nm
6.	eP	A	16 29 56	South of Honshu, Japan 30.04 N 140.63 E
	ePP	A	33 24	H = 16 17 15.5 h = 89 km MAG=5.3
				D = 87.91 Az = 330.3 (USCGS)
				PV:1.8s 44.0nm MPV=5.5
				PPV:15s 25.1nm MPPV=5.4
6.	-ePKIKP	A	17 27 15	Solomon Islands 8.90 S 157.86 E
	eX	A	27 18.5	H = 17 08 03.2 h = 10 km MAG=5.8
				D = 129.91 Az = 332.5 (USCGS)
				PKIKPV:1.9s 75.9nm
				XV:1.8s 44.0nm
6.	eP	A	19 10 39	Kurile Islands 43.26 N 146.70 E
	epP	A	10 50	H = 18 58 39.1 h = normal MAG=4.3
				D = 78.63 Az = 332.7 (USCGS)
				h = 40 km
6.	+iP	AB	20 34 51.2	Dodecanese Islands 36.75 N 28.36 E
	-i	A	34 57.2	H = 20 30 39.6 h = 67 km MAG=5.1
	e	BC	35 13	D = 18.36 Az = 324.4 (USCGS)
	eS	BC	38 16	PV:1.5s 397.0nm MPV=5.4
	LmH	B	40.5	
	LmV	B	40.5	
6.	ePKP	A	22 28 36	New Hebrides Islands 18.74 S 169.21 E
				H = 22 09 30.6 h = 233 km MAG=4.9
				D = 143.52 Az = 335.9 (USCGS)
				PKPV:1.2s 28.5nm
7.	eP	A	00 35 49	Kyushu, Japan 33.61 N 131.49 E
	epP	A	36 16.5	H = 00 23 44.8 h = 91 km MAG=5.2
	eS	C	45 55	D = 80.78 Az = 326.0 (USCGS)

Day	Phase		h m s	Remarks
cont. 7.	esS	C	00 46 28	h = 111 km
	LmH	C	01 08	PV:1.4s 27.9nm MPV=5.1
	LmV	C	08	
7.	ePKIKP	A	03 25 10	Solomon Islands 8.89 S 157.71 E
	e	A	25 15	H = 03 06 02.2 h = normal MAG=5.6
	LmH	B	04 19.5	D = 129.83 Az = 332.5 (USCGS)
	LmV	B	25.6	PKIKPV:2.0s 51.3nm
7.	eP	A	06 52 42	Kurile Islands 43.12 N 147.72 E
	e	A	52 55	H = 06 40 38.4 h = normal MAG=4.5
				D = 79.09 Az = 333.3 (USCGS)
7.	ePKIKP	A	08 59 20	Solomon Islands 6.56 S 155.77 E
				H = 08 40 34.3 h = 173 km MAG=5.3
				D = 126.89 Az = 332.2 (USCGS)
				PKIKPV:1.4s 32.6nm
7.	eP	A	12 45 53	Kurile Islands 42.98 N 146.77 E
				H = 12 33 51.2 h = normal MAG=4.4
				D = 78.89 Az = 332.8 (USCGS)
7.	e	A	15 22 52.5	Yougoslavia 44.6 N 17.4 E
	e	A	23 10	H = 15 19 49 (BCIS)
				D = 7.2
7.	ePKP	A	15 31 37	Tonga Islands 17.61 S 175.46 W
				H = 15 12 31.9 h = 328 km MAG=4.2
				D = 146.55 Az = 351.8 (USCGS)
7.	eP	A	18 55 40	Kurile Islands 43.44 N 148.14 E
	epP	A	55 53	H = 18 43 37.8 h = normal MAG=4.9
	LmH	B	19 28.3	D = 78.94 Az = 333.5 (USCGS)
	LmV	B	35.4	PV:1.4s 18.6nm MPV=4.9
				pPV:1.3s 30.6nm
				LmH:20s 0.8/um MLH=5.1
				LmV:16s 0.6/um MLV=5.1

Day	Phase		h m s	Remarks
7.	eP	A	20 16 07	Kurile Islands 43.39 N 147.52 E
	epP	A	16 20	H = 20 04 11.2 h = 84 km MAG=4.0
				D = 78.78 Az = 333.1 (USCGS)
				h = 48 km
8.	epP	A	02 50 14	Kurile Islands 43.11 N 147.27 E
				H = 02 37 59.2 h = normal MAG=4.2
				D = 78.95 Az = 333.0 (USCGS)
8.	eP	A	05 05 33	Ural Mountains Region 57.37 N 55.11 E
	e	A	13 55	H = 04 59 56.1 h = 0 km MAG=4.9
	e	A	14 16	D = 26.05 Az = 273.9 (USCGS)
	LmH	B	17.1	PV:1.2s 24.4nm MPV=4.7
	LmV	B	16.9	LmH:8s 0.4/um MLH=4.3
				LmV:8s 0.5/um MLV=4.5
8.	ePKIKP	A	13 04 30	New Ireland Region 5.10 S 153.42 E
	iX	A	04 32.5	H = 12 45 34.6 h = 47 km MAG=5.2
	eSS	C	23 05	D = 124.50 Az = 331.5 (USCGS)
	ePSPS	C	23 50	PKIKPV:1.3s 26.2nm
	LmH	B	14 04.6	XV:1.2s 44.6nm
	LmV	B	04.5	LmH:18.5s 1.1/um MLH=5.6
				LmV:19s 1.2/um MLV=5.6
8.	eP	A	21 09 37	Kurile Islands 43.63 N 147.86 E
	e	A	09 40	H = 20 57 36.4 h = normal MAG=4.8
	epP	A	09 49.5	D = 78.68 Az = 333.3 (USCGS)
				h = 48 km
9.	eP	A	05 27 53	Honshu, Japan 35.75 N 136.98 E
	i	A	27 59.5	H = 05 15 37.7 h = 29 km MAG=5.5
	eS	C	38 00	D = 81.44 Az = 328.3 (USCGS)
	eSS	C	43 28	LmH(C):19s 60.1/um MLH(C)=7.0
	LQ	C	48 39	LmV(C):18s 17.8/um MLV(C)=6.5
	LmH	C	06 01.8	
	LmV	C	04.5	

Day	Phase		h m s	Remarks
9.	LmH	C	16 22.8	Northern Easter I. Cordillera
	LmV	C	22.8	4.4 S 105.9 W
				H = 15 23 10.8 h = normal MAG=5.2 (USCGS)
				D = 110.6
				LmH:20s 0.5/um MLH=5.1
				LmV:21s 0.8/um MLV=5.3
10.	ePg	A	03 28 30	Switzerland 46.4 N 8.2 E
	eSg	A	29 32	H = 03 26 58 (BCIS)
	e	A	29 36	D = 4.8
10.	eP1	A	07 58 55	Kurile Islands 44.01 N 148.06 E
	eP2	A	58 56.5	H = 07 46 58.0 h = 54 km MAG=4.9
	LmH	C	08 00	D = 78.11 Az = 333.4 (USCGS)
				PV2:1.4s 41.9nm MPV2=5.4
				LmH:16s 0.3/um MLH=4.8
10.	eiP1	A	12 19 10	Turkey 39.19 N 41.43 E
	eiP2	A	19 17	H = 12 14 00.5 h = 50 km MAG=5.2
	eS1	BC	23 34	D = 23.85 Az = 308.5 (USCGS)
	+iS2	B	23 44	P1V:2.0s 175.0nm MP1V=5.2
	e	B	24 04	P2V:1.9s 151.5nm MP2V=5.2
	e	B	24 44	S1H:16s 3.2/um MS1H=5.5
	LmH	B	31.3	LmH:13s 2.9/um MLH =4.9
	LmV	B	31.4	LmV:15s 3.1/um MLV =5.0
10.	LmH	C	16 49	Honshu, Japan 35.7 N 137.1 E
				H = 16 02 51.5 h = normal MAG=3.8 (USCGS)
10.	eP	A	21 11 48	Colorado 39.41 N 107.95 W
				H = 21 00 00.1 h = 0 km MAG=5.3
				D = 75.87 Az = 34.8 (USCGS)
				Underground Explosion "Rulison"
				39°24'21" N 107°56'53" W
				H = 21 00 00.11 h = 8443 feet MB≈5.0
				yield:40kt (USAEC)
				PV:1.1s 10.1nm MPV=4.9

Day	Phase		h m s	Remarks
11.	eiP	AB	03 29 38	Ryukyu Islands 26.12 N 128.71 E
	epP	AB	29 47.5	H = 03 17 00.1 h = 25 km MAG=5.3
	eS	C	40 08	D = 85.48 Az = 325.3 (USCGS)
	eSS	C	45 50	h = 35 km
	eSSS	C	50.0	PV:2.0s 72.7nm MPV=5.5
	LmH	B	04 05.5	pPV:1.8s 87.8nm
	LmV	B	13.0	LmH:19s 2.8/um MLH =5.7
				LmV:19s 2.7/um MLV =5.7
11.	eP	A	04 09 46.5	Eastern Kazakh SSR 49.70 N 78.11 E
				H = 04 01 57.2 h = 0 km MAG=5.0
				D = 41.29 Az = 297.8 (USCGS)
				PV:0.8s 17.3nm MPV=4.8
				Underground explosion
11.	e(pP)	A	06 33 08	Near East Coast of Honshu, Japan
				38.2 N 141.7 E
				H = 06 20 39.8 h = 94 km MAG=4.1 (USCGS)
				D = 81.3
11.	ePKP	A	12 50 48.5	Tonga Island 18.66 S 175.80 W
				H = 12 31 32.4 h = 250 km MAG=4.4
				D = 147.54 Az = 351.2 (USCGS)
12.	eP	A	02 27 28	Kurile Islands 43.45 N 146.43 E
	epP	A	27 38	H = 02 15 32.1 h = 62 km MAG=4.8
	e(sP)	A	27 43	D = 78.37 Az = 332.5 (USCGS)
11.	eP	A	02 37 24	Fiji Islands 17.89 S 178.51 W
				H = 02 18 48.6 h = 597 km MAG=4.2
				D = 146.33 Az = 348.4 (USCGS)
				PV:1.0s 5.9nm
12.	ePKIKP	A	03 34 12.5	Tonga Islands 18.62 S 174.86 W
	-iPKHKP	A	34 15.5	H = 03 14 44.9 h = 134 km MAG=5.1
	epPKP	A	34 58.5	D = 147.64 Az = 352.3 (USCGS)
				PKHKPV:1.4s 70.0nm

Day	Phase		h m s	Remarks
12.	-eP	A	05 15 52	Hindu Kush 36.41 N 70.86 E
	epP	A	16 35	H = 05 08 01.6 h = 198 km MAG=5.1
				D = 44.08 Az = 308.1 (USCGS)
				h = 200 km
12.	-eP	A	07 27 46	Andreanof Islands, Aleutian Is.
	e	A	27 52.5	51.26 N 179.20 W
	e	A	28 00	H = 07 15 50.2 h = 44 km MAG=5.0
				D = 78.06 Az = 353.0 (USCGS)
				PV:1.3s 39.4nm MPV=5.4
12.	eP	A	07 54 39	Andreanof Islands, Aleutian Is.
	e	A	54 44	51.10 N 179.14 W
				H = 07 42 43.7 h = 48 km MAG=5.0
				D = 78.23 Az = 353.0 (USCGS)
				PV:1.1s 20.2nm MPV=5.2
12.	+eP	A	08 12 13	Andreanof Islands, Aleutian Is.
	e	A	12 26.5	51.09 N 179.32 W
	eS	BC	22 12	H = 08 00 16.8 h = 49 km MAG=5.2
	LmH	B	47.0	D = 78.22 Az = 352.9 (USCGS)
	LmV	B	54.4	PV:1.0s 29.5nm MPV=5.4
				LmH:20s 0.9/um MLH=5.1
				LmV:17s 1.0/um MLV=5.3
12.	eP	A	08 18 04	Andreanof Islands, Aleutian Is.
				51.08 N 179.25 W
				H = 08 06 08.8 h = 55 km MAG=5.0
				D = 78.24 Az = 353.0 (USCGS)
				PV:1.0s 19.7nm MPV=5.2
12.	+iP	A	08 21 20.5	Andreanof Islands, Aleutian Is.
	e	A	21 30	51.10 N 179.20 W
	e	A	21 36	H = 08 09 24.4 h = 46 km MAG=5.1
				D = 78.22 Az = 353.0 (USCGS)
				PV:1.0s 31.5nm MPV=5.4

Day	Phase		h m s	Remarks
12.	+iP1	AB	09 09 02.8	Andreanof Islands, Aleutian Is.
	iP2	A	09 04.5	51.22 N 179.15 W
	e	B	11 03	H = 08 57 07.3 h = 48 km MAG=6.0
	ePP	BC	12 00	D = 78.10 Az = 353.0 (USCGS)
	ePPP	BC	13 52	P1V(A):1.3s 78.5nm MP1V(A)=5.7
	eS	C	18 45	P1V(B):12s 5.2/um MP1V(B)=6.5
	e	C	23 30	P2V(A):1.2s 224.0nm MP2V(A)=6.2
	iSS	C	24 16	LmH:20s 31.1/um MLH =6.6
	LmH	B	44.5	LmV:16.5s 21.3/um MLV =6.6
	LmV	B	51.6	
12.	e(P)	A	11 59 46.5	Kurile Islands 43.28 N 147.78 E
				H = 11 47 39.9 h = normal MAG=4.3
				D = 78.97 Az = 333.3 (USCGS)
				PV:0.7s 13.4nm MPV=5.1
12.	+iP	AB	15 12 13.2	Andreanof Islands, Aleutian Is.
	e	A	12 23	51.31 N 179.16 W
	eSS	C	22 10	H = 15 00 18.8 h = 53 km MAG=5.6
	eSSS	C	27 15	D = 78.01 Az = 353.0 (USCGS)
	LmH	B	47.6	PV:1.0s 67.0nm MPV=5.7
	LmV	B	49.8	LmH:20s 0.9/um MLH=5.1
				LmV:18s 0.4/um MLV=4.9
13.	ePKIKP	A	00 53 23	South of Fiji Islands 24.47 S 179.86 E
	eiPKHKP	A	53 31	H = 00 34 38.4 h = 579 km MAG=4.9
	ePKP2	A	53 43.5	D = 152.32 Az = 343.8 (USCGS)
				PKIKPV:1.3s 24.0nm
				PKP2V:1.2s 32.5nm
13.	eP	A	11 31 37	Off East Coast of Honshu, Japan
	e	A	31 42	33.81 N 141.61 E
	e	A	31 53	H = 11 19 03.0 h = 35 km MAG=5.0
				D = 85.05 Az = 330.7 (USCGS)
				PV:1.3s 17.5nm MPV=5.1

Day	Phase		h m s	Remarks
13.	+iP1	AB	12 04 13.8	Kurile Islands 43.55 N 147.58 E
	iP2	A	04 16.4	H = 11 52 15.3 h = 52 km MAG=5.5
	ipP	AB	04 26	D = 78.66 Az = 333.2 (USCGS)
	isP	AB	04 33	P1V:1.4s 65.0nm MP1V=5.5
	e	A	04 39.5	P2V:1.6s 132.0nm MP2V=5.8
	eS	C	13 52	pPV:1.3s 74.3nm
	LmH	C	36.1	sPV:1.5s 90.5nm
	LmV	B	44.0	LmH:23s 1.7/um MLH=5.3
				LmV:16s 0.9/um MLV=5.2
13.	eP	A	20 12 28.4	Hokkaido, Japan 41.58 N 143.68 E
	LmH	C	46.9	H = 20 00 28.3 h = 52 km MAG=4.6
	LmV	C	49.8	D = 79.06 Az = 331.2 (USCGS)
				LmH:19s 0.3/um MLH=4.6
				LmV:20s 0.2/um MLV=4.5
13.	eP	A	23 13 21.5	Andreanof Islands, Aleutian Is.
				51.36 N 179.27 W
				H = 23 01 26.1 h = 36 km MAG=4.6 (USCGS)
				D = 77.9
14.	eP	A	01 27 15	Kurile Islands 47.03 N 153.59 E
				H = 01 15 22.8 h = normal MAG=4.5
				D = 77.32 Az = 336.3 (USCGS)
				PV:1.0s 15.8nm MPV=5.1
14.	eP	AB	06 24 00	Kurile Islands 43.49 N 147.75 E
	e	A	24 12	H = 06 11 55.8 h = normal MAG=4.4 (USCGS)
	e	A	24 23.5	D = 78.8
	eS	BC	33 58	LmH:15s 1.2/um MLH=5.4
	LmH	B	07 02.3	LmV:17s 0.9/um MLV=5.2
	LmV	B	03.9	
14.	eP	A	11 01 42.5	Andreanof Islands, Aleutian Is.
				51.22 N 179.24 W
				H = 10 49 46.7 h = 42 km MAG=4.5
				D = 78.09 Az = 353.0 (USCGS)
				PV:0.7s 9.6nm MPV=5.0

Day	Phase		h m s	Remarks
14.	eP	A	12 28 44	Lake Baikal Region 54.0 N 109.3 E
	LmH	C	54.7	H = 12 19 11 h = 15 km
	LmV	C	54.7	D = 55.1 (ANUSSR)
				PV:1.3s 19.7 nm MPV=5.0
				LmH:17.5s 0.5/um MLH=4.7
				LmV:17s 0.6/um MLV=4.8
14.	eP1	A	13 01 11	Kurile Islands 43.48 N 147.57 E
	eiP2	A	01 13	H = 12 49 12.2 h = 53 km MAG=4.9
	epP	A	01 23	D = 78.72 Az = 333.2 (USCGS) h = 45 km
	LmH	C	33.5	P1V:1.2s 22.4nm MP1V=5.1
	LmV	C	40	P2V:1.2s 44.7nm MP2V=5.4
				LmH:22s 0.3/um MLH=4.4
14.	ePKHKP	A	14 46 40.5	South of Fiji Islands 22.15 S 179.75 W
				H = 14 27 55.1 h = 600 km MAG=4.7
				D = 150.20 Az = 345.4 (USCGS)
				PKHKPV:0.8s 9.6nm
14.	eP1	AB	14 54 32	Southern Sinkiang Prov.,China
	eP2	A	54 34.5	39.64 N 74.87 E
	e	A	54 38.5	H = 14 46 21.1 h = normal MAG=5.1
	ei	A	54 44	D = 44.66 Az = 306.0 (USCGS)
	ei	A	54 48.5	P2V:1.6s 33.0nm MP2V=4.9
	ePP	A	56 28	PmV:2s 77nm MPV =5.2
	eS	BC	15 01 12	PPV(A):3s 289.0nm MPPV=5.7
	eSa	BC	04 35	LmH:15s 3.5/um MLH =5.4
	LmH	B	11.8	LmV:12.5s 3.5/um MLV =5.6
	LmV	B	14.8	
14.	eP1	ABC	16 23 35	Southern Sinkiang Prov., China
	iP2	A	23 39.5	39.69 N 74.86 E
	iP3	A	23 41	H = 16 15 24.8 h = normal MAG=5.5
	ePP	AC	25 22	D = 44.63 Az = 306.0 (USCGS)
	ePa	B	25 30	P1V(A):1.5s 57.8nm MP1V(A)=5.2
	e	C	25 33	P1V(B):5s 1.12/um MP1V(B)=6.0
	eS	CE	30 05	P2V(A):1.0s 70.8nm MP2V(A)=5.5
	e	CN	30 10	P3V(A):1.6s 121.0nm MP3V(A)=5.5
	eSa	BC	33 28	LmH:16s 9.9/um MLH =5.8

Day	Phase		h m s	Remarks
cont. 14.	LmH	B	16 40.8	LmV:14s 5.9/um MLV=5.8
	LmV	B	43.8	
14.	LmH	C	19 18	Gulf of California 24.0 N 108.7 W
	LmV	C	20.7	H = 18 25 51.6 h = normal MAG=4.5 (USCGS)
				D = 88.9
				LmH:19s 0.2/um MLH=4.5
				LmV:15s 0.3/um MLV=4.8
15.	LmH	C	13 43.7	Near Coast of Guerrero, Mexico
	LmV	C	43.7	17.4 N 101.4 W
				H = 12 47 22.4 h = normal MAG=4.9 (USCGS)
				D = 90.5
				LmH:20s 0.2/um MLH=4.6
				LmV:19s 0.2/um MLV=4.7
15.	eP	A	14 41 40	Kurile Islands 45.42 N 151.45 E
				H = 14 29 41.2 h = 22 km MAG=4.7
				D = 78.19 Az = 335.2 (USCGS)
				PV:1.6s 16.5nm MPV=4.9
15.	+eP	ABC	14 57 30.5	Rat Islands, Aleutian Is.
	e	A	57 55	51.89 N 175.54 E
	eS	C	15 07 15	H = 14 45 42.0 h = 50 km MAG=5.2
	ePS	BC	08 00	D = 76.93 Az = 349.6 (USCGS)
	eSS	C	12 20	PV(A):1.4s 46.5nm MPV(A)=5.4
	LmH	C	33.6	LmH(C):21s 0.9/um MLH(C)=5.1
	LmV	B	40.8	LmV(B):18s 0.5/um MLV(B)=5.0
				e(A) 58 36 e(A) 00 29
15.	+iP	AB	18 59 37.5	Kurile Islands 45.54 N 151.58 E
	epP	A	59 47	H = 18 47 41.3 h = 44 km MAG=5.3
	esP	A	59 53	D = 78.11 Az = 335.3 (USCGS)
	LmH	B	19 33.6	h(pP)=35 km h(sP)=37 km
	LmV	B	38.7	PV(A):1.5s 105.0nm MPV(A)=5.8
				pPV:1.4s 23.3nm
				sPV:1.5s 30.2nm
				LmH:18s 1.0/um MLH=5.2
				LmV:18s 0.7/um MLV=5.0

Day	Phase		h m s	Remarks
16.	+eP1	A	01 29 08	Kurile Islands 45.59 N 151.58 E
	eiP2	A	29 09.5	H = 01 17 14.6 h = 60 km MAG=5.0
	eS	C	38 59	D = 78.07 Az = 335.3 (USCGS)
	LmH	B	02 03.1	P1V:1.2s 12.2nm MP1V=4.9
	LmV	B	08.3	P2V:1.2s 36.6nm MP2V=5.4
				LmH:18s 1.7/um MLH =5.4
				LmV:18s 0.8/um MLV =5.1
16.	eP	A	02 34 33.5	Kurile Islands 45.71 N 151.57 E
				H = 02 22 36.4 h = normal MAG=4.6
				D = 78.70 Az = 333.4 (USCGS)
16.	eiP	AB	08 12 56.5	Ryukyu Islands 27.23 N 127.27 E
				H = 08 00 35.8 h = 94 km MAG=5.1
				D = 83.95 Az = 324.8 (USCGS)
				PV:1.5s 57.8nm MPV=5.3
16.	iP	AB	14 42 17.5	Southern Nevada 37.32 N 116.46 W
	e	ABC	42 38	H = 14 30 00.0 h = 0 km MAG=6.2
	e	CB	43 30	D = 81.23 Az = 30.5 (USCGS)
	ePP	AB	45 22	Nuclear Explosion "JORUM"
	eS	BC	52 32	H = 14 30 00.4 h = 0 km
	LmH	B	15 20.3	37°18'51" N 116°27'38" W (USAEC)
	LmV	B	20.3	PV:1.5s 231.0nm MPV=5.9
				PPV:1.6s 143.0nm MPPV=6.0
				LmH:15.5s 2.5/um MLH=5.7
				LmV:16s 3.7/um MLV=5.9
16.	eP	A	21 27 39.5	Southern Sinkiang Prov., China
				39.84 N 75.10 E
				H = 21 19 26.5 h = 19 km MAG=4.9
				D = 44.69 Az = 305.9 (USCGS)
16.	eP	A	22 55 16	Southern Alaska 60.31 N 153.01 W
	epP	A	55 41.5	H = 22 44 23.2 h = 110 km MAG=4.7
				D = 68.70 Az = 10.4 (USCGS)
				h = 104 km

Day	Phase		h m s	Remarks
17.	eP	A	02 26 51	Near East Coast of Kamchatka
				53.09 N 160.06 E
				H = 02 15 20.1 h = 22 km MAG=4.5
				D = 73.27 Az = 339.6 (USCGS)
				PV:1.0s 15.8nm MPV=5.1
17.	LmV	C	02 29	South Sandwich Islands Region
				59.0 S 24.8 W
				H = 01 23 54.1 h = normal MAG=5.1 (USCGS)
				D = 113.2
17.	ePn	A	11 47 12	Germany (Peisenberg) 47.8 N 11.1 E
	iPb	A	47 17.5	H = 11 46 26 (BCIS) D = 2.9
	e	A	47 20	H = 11 46 25 h = 0 km 47.90 N 11.3 E
	ePg	A	47 22	D = 2.76 (ISC)
	iSn	A	47 44.5	
	eSg	A	47 56.5	
17.	eSn	A	13 00 25	Germany 49.5 N 7.8 E
	e	A	00 26.5	H = 12 59 04 (BCIS) D = 2.7
				H = 12 59 06 h = 0 km 49.2 N 7.2 E
				D = 3.19 (ISC)
17.	ePKP	A	18 16 22	Loyalty Islands 22.54 S 173.44 E
	e	A	16 32	H = 17 56 45.9 h = 104 km MAG=4.2
				D = 148.56 Az = 337.6 (USCGS)
17.	+eiP	A	18 53 11.5	Kyushu, Japan 31.12 N 131.31 E
	+i	BC	53 12	H = 18 40 45.8 h = 8 km MAG=6.2
	-iX	ABC	53 22.5	D = 82.76 Az = 326.1 (USCGS)
	ePP	BC	56 24	PV(A):2.5s 906.0nm MPV(A)=6.6
	eS	B	19 03 30	PV(B):5.5s 2.4/um MPV(B)=6.6
	eSS	BC	09 00	XV(A):2.1s 520.0nm
	e	B	09 15	LmH:17s 55.6/um MLH=7.0
	Lg1	B	23.0	LmV:16s 69.7/um MLV=7.2
	ePKPPKS	A	23 02	
	Lg2	B	25 25	
	LmH	B	34.9	
	LmV	B	34.3	

Day	Phase		h m s	Remarks
17.	eP	A	19 03 31	Kyushu, Japan 31.16 N 131.41 E
	eX	A	03 42	H = 18 51 07.8 h = 23 km MAG=5.5
				D = 82.77 Az = 326.2 (USCGS)
				PV:2.2s 131.0nm MPV=5.8
				XV:2.0s 59.8nm
18.	eP	A	03 18 10	Portugal 39.91 N 8.47 W
	LmH	B	25.0	H = 03 14 02.5 h = 23 km MAG=4.0
	LmV	B	25.9	D = 17.69 Az = 46.0 (USCGS)
				LmH:12s 0.6/um MLH=4.0
				LmV:9s 0.5/um MLV=4.2
18.	ePKHKP	A	05 26 34	South of Fiji Islands 25.28 S 179.59 E
	ePKP2	A	26 48	H = 05 07 36.1 h = 525 km MAG=4.1
				D = 153.03 Az = 343.0 (USCGS)
18.	eP	A	12 04 36.5	Kurile Islands 43.26 N 146.90 E
	epP	A	04 44.5	H = 11 52 37.6 h = 50 km MAG=4.9
	LmH	B	39.3	D = 78.69 Az = 332.8 (USCGS)
	LmV	B	43.9	h = 30 km
				PV:1.0s 11.8nm MPV=4.9
				pPV:1.7s 30.3nm
				LmH:16s 0.5/um MLH=4.9
				LmV:16s 0.5/um MLV=5.9
18.	iPg	A	16 14 48	Czechoslovakia 50.45 N 13.03 E
	iSg	A	15 00.5	H = 16^h 14^m h = 0 km
				D = 0.92 Az = 283 (ISC)
19.	ePKP	A	01 07 23.5	Fiji Islands 17.00 S 177.03 W
	eX	A	07 27	H = 00 47 44.7 h = 45 km MAG=4.3
				D = 145.73 Az = 350.2 (USCGS)
				XV:2.3s 42.6nm
19.	eP	A	01 43 13	Mindanao, Philippine Is. 6.06 N 125.36 E
	epP	AB	43 34.5	H = 01 29 37.4 h = 95 km MAG=5.7
	ePP	A	47 26	D = 100.02 Az = 323.7 (USCGS)
	epPP	B	47 40	pPV:2.0s 42.7nm
	ePPP	B	49 33	LmH:19s 3.5/um MLH=5.9

Day	Phase		h m s	Remarks
cont. 19.	e(sPPP)	B	01 50 00	LmV:14s 1.2/um MLV=5.6
	eS	BC	54 35	
	eSS	BC	02 01 20	
	eSSS	B	05 00	
	LmH	B	26.8	
	LmV	B	34.7	
19.	ePKP	A	07 09 11	Fiji Islands 17.40 S 177.21 W
				H = 06 49 48.9 h = 206 km MAG=4.2
				D = 146.09 Az = 349.9 (USCGS)
				PKPV:(1.3)s 13.1nm
19.	ePKP	A	11 27 23.5	New Hebrides Islands 19.50 S 169.60 E
				H = 11 08 18.3 h = 256 km MAG=4.3
				D = 144.36 Az = 335.8 (USCGS)
				PKPV:1.0s 11.8nm
19.	ep	A	12 23 38.5	Kurile Islands 43.67 N 147.95 E
	epP	A	23 50	H = 12 11 37.9 h = normal MAG=4.5
				D = 78.67 Az = 333.4 (USCGS)
				h = 43 km
				pPV:1.4s 18.6nm
19.	ePKHKP	A	12 42 31.5	South of Fiji Islands 22.54 S 179.77 W
				H = 12 23 46.1 h = 600 km MAG=4.7
				D = 150.57 Az = 345.2 (USCGS)
				PKHKPV:1.2s 10.2nm
19.	ePKP2	A	14 48 55	South of Kermadec Islands
				34.43 S 178.97 W
				H = 14 28 13.1 h = 46 km MAG=4.4 (USCGS)
				D = 162°
				PKP2V:1.5s 25.1nm
19.	eP	A	20 52 08.5	Kurile Islands 48.23 N 153.41 E
				H = 20 40 34.3 h = 140 km MAG=5.1
				D = 76.17 Az = 336.1 (USCGS)
				PV:0.9s 11.7nm

Day	Phase		h m s	Remarks
19.	eP	A	20 59 46	North Atlantic Ocean 58.43 N 32.26 W
	eX	A	59 48.5	H = 20 54 12.4 h = normal MAG=4.5
	LmH	B	21 10.6	D = 26.20 Az = 88.0 (USCGS)
	LmV	B	10.6	PV:0.8s 11.5nm MPV=4.6
				XV:1.5s 20.1nm
				LmH:15s 0.8/um MLH=4.4
				LmV:15s 0.8/um MLV=4.5
19.	eP	A	21 29 22	North Atlantic Ocean
	e	A	29 24	H = 21 23 49 (UPP)
	LmH	B	40.3	D = ca. 26°
	LmV	B	40.3	PV:1.5s 22.6nm MPV=4.6
				LmH:12s 0.7/um MLH=4.4
				LmV:14s 0.8/um MLV=4.5
19.	eP	A	23 27 30	North Atlantic Ocean 58.37 N 32.35 W
	LmH	B	38.4	H = 23 21 59.1 h = normal MAG= 4.6
	LmV	B	38.5	D = 26.25 Az = 87.8 (USCGS)
				PV:1.6s 22.0nm MPV=4.5
				LmH:14s 0.7/um MLH=4.3
				LmV:14s 0.6/um MLV=4.4
20.	eP	A	00 03 43	North Atlantic Ocean
	LmH	B	14.5	H = 23 58 12 (UPP)
	LmV	B	14.5	D = ca. 26°
				LmH:15s 0.4/um MLH=4.1
				LmV:15s 0.4/um MLV=4.2
20.	eP	A	00 26 21	North Atlantic Ocean 58.36 N 32.11 W
	e	A	26 25	H = 00 20 50.4 h = normal MAG=4.4
	LmH	C	36.9	D = 26.13 Az = 88.0 (USCGS)
	LmV	B	37.3	LmH:16s 0.3/um MLH=4.0
				LmV:15s 0.5/um MLV=4.3
20.	e(P)	A	00 48 49	Probably North Atlantic Ocean
	LmH	B	59.4	D = ca. 26°
	LmV	B	59.4	LmH:17s 0.9/um MLH=4.4
				LmV:17s 0.8/um MLV=4.4

Day	Phase		h m s	Remarks
20.	eP	A	01 02 25	North Atlantic Ocean 58.15 N 32.22 W
	+iX	A	02 29	H = 00 56 51.3 h = normal MAG=5.0
	LmH	B	13.2	D = 26.19 Az = 87.5 (USCGS)
	LmV	B	13.1	PV:1.4s 30.2nm MPV=4.7
				XV:1.4s 46.5nm (MXV=4.9)
				LmH:14s 2.3/um MLH=4.9
				LmV:16s 2.5/um MLV=5.0
20.	eP	A	01 13 11	North Atlantic Ocean 58.22 N 32.08 W
	eiX	A	13 14	H = 01 07 38.4 h = normal MAG=5.0
	LmH	B	24.0	D = 26.11 Az = 87.7 (USCGS)
	LmV	B	24.0	PV:1.5s 60.4nm MPV=5.0
				XV:1.6s 93.5nm (MPV=5.2)
				LmH:14.5s 5.9/um MLH=5.3
				LmV:15s 6.3/um MLV=5.4
20.	eP	A	01 18 36.5	North Atlantic Ocean 58.13 N 32.07 W
	LmH	B	28.8	H = 01 13 04.6 h = normal MAG=5.2
	LmV	B	29.2	D = 26.11 Az = 87.5 (USCGS)
				PV:1.4s 41.8nm MPV=4.9
				LmH:16.5s 2.8/um MLH=4.9
				LmV:16s 2.8/um MLV=5.0
20.	eP	A	03 30 00	North Atlantic Ocean 58.27 N 32.27 W
	LmH	B	40.8	H = 03 24 28.8 h = normal MAG=4.4 (USCGS)
	LmV	B	40.7	D = 26.2
				LmH:14s 0.7/um MLH=4.3
				LmV:14s 0.7/um MLV=4.4
20.	eP	A	04 57 16	West Pakistan 29.67 N 68.65 E
	epP	A	57 24.5	H = 04 48 45.5 h = 40 km MAG=5.2
				D = 47.06 Az = 313.1 (USCGS)
				h = 37 km
				PV:1.3s 13.1nm MPV=4.9
20.	+eP1	ABC	05 14 29.8	North Atlantic Ocean 58.30 N 32.19 W
	+iP2	AB	14 31.8	H = 05 08 57.6 h = normal MAG=5.6
	e	C	15 00	D = 26.17 Az = 87.8 (USCGS)

Day	Phase		h m s	Remarks
cont.				
20.	e(PP)	BC	05 15 09	P1V(A):1.5s 135.6nm MP1V(A)=5.4
	e	BC	18 20	P2V(A):2.0s 726.0nm MP2V(A)=6.0
	eS	BC	18 57	P1V(B):3s 2.24/um MP1V(B)=6.3
	e	BC	19 08	P2V(B):9s 5.7/um MP2V(B)=6.2
	eiSa	BC	19 30	LmH:16s 91.0/um MLH=6.4
	LmH	B	25.3	LmV:16s 96.0/um MLV=6.6
	LmV	B	25.3	
20.	ePKIKP	A	09 15 27.5	Near North Coast of New Guinea
				3.13 S 142.03 E
				H = 08 56 44.9 h = 38 km MAG=5.1
				D = 117.00 Az = 327.0 (USCGS)
20.	eP	A	14 15 46.5	Tadzhik SSR 34.44 N 69.77 E
	epP	A	15 52.5	H = 14 07 57.8 h = 52 km MAG=5.1
	ePP	A	17 33	D = 42.16 Az = 306.3 (USCGS)
	e	A	17 36	PV:1.0s 13.8nm MPV=4.6
	LmH	C	35.7	pPV:1.4s 23.1nm
	LmV	C	35.5	PPH:1.3s 15.3nm MPPH=4.7
				LmH:18s 0.3/um MLH=4.2
				LmV:18s 0.4/um MLV=4.4
20.	e	C	15 44 20	East Central Pacific Ocean
	e	C	44 44	1.79 N 101.03 W
	eS	BC	51 16	H = 15 26 41.5 h = normal MAG=5.5 (USCGS)
	LmH	B	16 27.6	D = 94.8
	LmV	B	28	LmH:20s 1.3/um MLH=5.4
				LmV:20s 0.9/um MLV=5.3
21.	ePKIKP	AB	07 31 06.5	Tonga Islands 17.48 S 174.72 W
	+iPKHKP	AB	31 08.8	H = 07 11 53.6 h = 235 km MAG=5.5
	+iPKP2	A	31 10.5	D = 146.52 Az = 352.7 (USCGS)
	epPKP	AB	32 06.5	h = 236 km
	eiX	A	32 08.5	PKIKP V(A):1.4s 23.3nm
	e	A	32 09	PKHKP V(A):1.5s 181.0nm
	e	A	34 16	PKP2 V(A):1.4s 135.0nm
				pPKP V(A):1.4s 41.8nm
				XV (A) :1.4s 102.3nm
				PKHKP (B):4s 0.84/um

Day	Phase		h m s	Remarks
21.	LmH	B	12 29.7	Near Coast of Peru 15.8 S 74.7 W
	LmV	B	33.0	H = 11 28 25.0 h = 59 km MAG=4.7 (USCGS)
				D = 99.8
				LmH:20s 0.7/um MLH=5.1
				LmV:18s 0.4/um MLV=5.0
21.	LmH	C	22 32.7	Probably Hindu Kush Region
				36.0 N 69.3 E
				H = 19 09 53.6 h = 72 km MAG=4.7 (USCGS)
				D = 43.3
22.	eP	A	01 51 58	Chagos Archipelago 5.63 S 68.15 E
	eX	A	52 05.5	H = 01 40 20.8 h = 14 km MAG=5.1
				D = 74.08 Az = 326.5 (USCGS)
				PV:0.9s 13.6nm MPV=5.0
				XV:0.8s 15.4nm
22.	eP	AB	01 58 42	Off West Coast of Northern Sumatra
	e	A	59 07.5	2.95 N 95.91 E
	e	AB	59 32.5	H = 01 46 13.5 h = normal MAG=5.3
	eS	BC	02 09 00	D = 84.11 Az = 320.4 (USCGS)
	ePS	BC	09 55	PV(A):2.0s 94.0nm MPV(A)=5.7
	eSSS	BC	18 30	XV(A):1.6s 49.4nm
	LmH	B	39.3	PV(B):12s 0.74/um MPV(B)=5.8
	LmV	B	44.6	LmH:21s 4.5/um MLH=5.8
				LmV:17s 2.4/um MLV=5.7
22.	eP	A	02 47 44	Kurile Islands 43.56 N 147.52 E
	epP	A	47 56	H = 02 35 44.5 h = 42 km MAG=5.0
				D = 78.63 Az = 333.1 (USCGS)
				h = 45km
				PV:1.2s 22.4nm MPV=5.1
				pPV:1.8s 67.5nm
22.	eP	A	02 52 27	Kurile Islands 43.31 N 147.44 E
	epP	A	52 58.5	H = 02 40 27.0 h = 40 km MAG=4.2
				D = 78.83 Az = 333.1 (USCGS)
				h = 43 km

Day	Phase		h m s	Remarks
22.	eP	A	04 05 06.5	Off W. Coast of Northern Sumatra
	e	A	05 43	2.92 N 95.86 E
	LmH	B	05 08.9	H = 03 52 37.4 h = normal MAG=5.3
	LmV	B	08.8	D = 84.10 Az = 320.4 (USCGS)
				PV:1.8s 33.8nm MPV=5.3
				LmH:16s 0.9/um MLH=5.2
				LmV:16s 0.8/um MLV=5.2
22.	eP	A	08 21 52.5	Dodecanese Islands 36.61 N 28.06 E
				H = 08 17 43.7 h = 92 km MAG=4.6
				D = 18.34 Az = 325.1 (USCGS)
				PV:1.3s 52.4nm MPV=4.7
22.	eP1	AB	13 57 48	Central Mid-Atlantic Ridge
	iP2	AB	57 50	4.98 N 32.63 W
	eX1	A	58 03	H = 13 47 52.2 h = normal MAG=5.7
	eX2	A	58 12	D = 58.61 Az = 31.4 (USCGS)
	eX3	A	58 24	P2V(A):2.4s 346nm MP2V(A)=6.0
	eX4	A	58 42	X1V:2.0s 128.2nm
	eS	C	14 05 55	X2V:2.2s 163.5nm
	e(SS)	C	09 50	X3V:2.2s 240.0nm
	LmH	C	19.3	X4V:2.4s 290.0nm
	LmV	B	21.0	LmH:19s 1.2/um MLH=5.1
				LmV:19s 1.4/um MLV=5.2
22.	eP	A	16 24 11	Southern Sinkiang Prov., China
				41.39 N 88.30 E
				H = 16 14 58.8 h = 0 km MAG=5.1
				D = 51.81 Az = 308.0 (USCGS)
				Underground Explosion (UPP)
22.	eP	A	22 12 10	Central Mid-Atlantic Ridge
	e	A	12 16	0.49 N 26.19 W
	eS	C	20 16	H = 22 02 08.8 h = normal MAG=4.8
	LmH	B	31.3	D = 59.37 Az = 27.0 (USCGS)
	LmV	B	36.8	LmH:20s 1.1/um MLH=5.0
				LmV:16s 0.7/um MLV=4.9

Day	Phase		h m s	Remarks
22.	ePn	A	23 23 14.5	Germany 48.2 N 8.9 E
	e	A	23 49	H = 23 22 21 h = 0 km
				D = 3.02 Az = 36 (ISC)
22.	ePg	A	23 46 12	Germany, Swabian Jura Region
	i	A	46 16	48.2 N 9.1 E
	iSg	A	46 49.5	H = 23 45 17 (BCIS)
				D = 2.9
23.	eSS	C	02 01 55	Easter Island Region 27.3 S 113.4 W
	LmH	B	47.0	H = 01 22 03.3 h = normal MAG=5.3 (USCGS)
	LmV	B	49.0	D = 132.6
				LmH:16s 0.7/um
				LmV:16s 0.5/um
23.	eP	A	02 35 36	Kurile Islands 45.46 N 151.98 E
				H = 02 23 39.3 h = 45 km MAG=4.5
				D = 78.31 Az = 335.5 (USCGS)
				PV:1.2s 12.2nm MPV=4.9
23.	e(P)	A	14 49 48	Northern Columbia 6.86 N 72.98 W
	e	A	50 07	H = 14 37 42.9 h = 155 km MAG=3.8
				D = 81.31 Az = 39.9 (USCGS)
23.	ePP	C	22 54 30	Off Coast of Jalisko, Mexico
	eS	BC	23 01 40	18.66 N 107.07 W
	ePS	BC	02 52	H = 22 37 22.5 h = normal MAG=4.9 (USCGS)
	eSS	BC	07 40	D = 92.5
	LmH	B	33.5	LmH:17s 4.5/um MLH=6.0
	LmV	B	33.5	LmV:16s 2.8/um MLV=5.8
24.	eP1	AB	04 04 34	North Atlantic Ridge 52.50 N 31.85 W
	eiP2	A	04 35.5	H = 03 58 56.6 h = normal MAG=5.1
	iP3	A	04 38	D = 26.78 Az = 76.4 (USCGS)
	ePP	B	05 20	P3V:1.6s 143.0nm MP3V=5.5
	ei	A	05 22	LmH:16s 12.4/um MLH =5.6
	eS	B	09 12	LmV:12s 5.9/um MLV= 5.5
	LmH	B	13.8	
	LmV	B	15.6	

Day	Phase		h m s	Remarks
24.	+iP1	A	04 26 30.8	North Atlantic Ridge 52.56 N 31.84 W
	+iP2	A	26 33	H = 04 20 52.9 h = normal MAG=5.2
	LmH	B	35.9	D = 26.76 Az = 76.5 (USCGS)
	LmV	B	37.5	P1V:1.2s 69.1nm MP1V=5.3
				P2V:1.3s 36.4nm MP2V=5.3
				LmH:14s 4.5/um MLH =5.2
				LmV:11s 3.2/um MLV =5.3
24.	eiP1	AB	18 13 09	North Atlantic Ridge 15.24 N 45.78 W
	iP2	A	13 14.2	H = 18 03 19.0 h = normal MAG=5.8
	eiP3	A	13 17.5	D = 57.82 Az = 39.3 (USCGS)
	iP4	A	13 20	P1V(A):1.6s 242.0nm MP1V(A)=6.0
	eiP5	A	13 24	P2V: 1.6s 197.5nm
	iPcP	B	14 00	P3V: 2.0s 411.0nm
	ei	BC	14 40	P4V: 1.8s 473.0nm
	eiS	B	21 12	P5V: 2.0s 615.0nm MP5V =6.3
	eSS	B	24 45	PV(B): 9s 4.15/um MPV(B) =6.5
	LmH	B	39.6	LmH:16s 34.2/um MLH =6.6
	LmV	B	41.7	LmV:17s 51.2/um MLV =6.8
	ePKPPKP	A	43 07	
24.	eP	A	19 10 49	North Atlantic Ridge 15.27 N 45.69 W
	e	A	10 55	H = 19 00 57.1 h = normal MAG=4.7
				D = 57.74 Az = 39.3 (USCGS)
24.	eP	A	19 16 53	Central Mid-Atlantic Ridge
				0.79 N 27.17 W
				H = 19 06 51.5 h = normal MAG=4.7
				D = 59.56 Az = 27.6 (USCGS)
24.	ePKP	A	20 40 04.5	Fiji Islands 18.17 S 177.99 W
				H = 20 21 14.6 h = 475 km MAG=4.7
				D = 146.71 Az = 348.8 (USCGS)
25.	eP	A	00 54 20	North Atlantic Ridge 15.27 N 45.50 W
				H = 00 44 30.7 h = normal MAG=4.5
				D = 57.62 Az = 39.3 (USCGS)

Day	Phase		h m s	Remarks
25.	ePKP	A	07 24 02	New Hebrides Islands 19.33 S 169.22 E
				H = 07 04 46.0 h = 167 km MAG=4.6
				D = 144.06 Az = 335.6 (USCGS)
25.	eP	A	11 49 09	Ionian Sea 37.2 N 20.1 E
	e	A	49 17	H = 11 45 34.3 h = 33 km MAG=4.2
				D = 14.92 Az = 338 (ISC)
				PV:0.9s 9.7nm MPV= ca. 4 1/2
25.	eP	A	21 45 15	Fox Islands, Aleutian Is.
				52.24 N 169.37 W
				H = 21 33 16.9 h = 5 km MAG=4.5
				D = 77.49 Az = 359.4 (USCGS)
				PV:1.2s 10.3nm MPV=4.9
26.	e	A	01 21 50	Fox Islands, Aleutian Is.
				52.32 N 169.26 W
				H = 01 09 40.3 h = 8 km MAG=4.6
				D = 77.41 Az = 359.4 (USCGS)
26.	eP	A	05 02 22.5	Red Sea 16.43 N 40.98 E
	e	A	02 26	H = 04 54 35.7 h = 25 km MAG=5.1
	e	A	02 30	D = 41.48 Az = 331.9 (USCGS)
	eS	C	08 38	PV:1.8s 67.6nm MPV=5.1
	eSS	C	11 44	LmH:12s 0.9/um MLH=4.8
	LmH	B	24.4	LmV:12s 1.0/um MLV=5.0
	LmV	B	27.2	
26.	+iP	AB	07 04 43.5	Southwestern Russia 45.89 N 42.47 E
	e	A	06 33	H = 06 59 55.8 h = 0 km MAG=5.6 (USCGS)
				D = 21.0
				PV:1.3s 229.0nm MPV=5.4
26.	eP	A	11 36 12.5	Southern Alaska 60.12 N 152.99 W
				H = 11 25 17.6 h = 97 km MAG=4.7
				D = 68.89 Az = 10.4 (USCGS)
				PV:0.7s 19.2nm MPV=5.1

Day	Phase		h m s	Remarks
26.	+ePKP	A	20 47 14.5	Loyalty Islands 22.29 S 171.13 E
	epPKP2	A	47 53.5	H = 20 27 44.7 h = 120 km MAG=4.7
				D = 147.47 Az = 335.5 (USCGS)
				h = 147 km
				PV:1.1s 48.4nm
26.	ePn	A	23 42 48	Probably Middle-Italy ca. 43° N ca. 13° E
	e	A	43 07	D = ca. 8.1°
	eSn	A	44 10	LmH:12s 0.6/um
	e	A	44 18	LmV:12s 0.7/um
	LmH	B	46.8	
	LmV	B	46.8	
27.	+eP	AB	04 14 12	Kurile Islands 43.89 N 146.96 E
	esP	A	14 37	H = 04 02 16.3 h = 47 km MAG=5.4
	e	A	16 24	D = 78.15 Az = 332.8 (USCGS)
				PV:1.1s 60.5nm MPV=5.6
27.	eP	A	09 02 17.5	Kurile Islands 49.62 N 155.95 E
	esP	A	02 36	H = 08 50 38.4 h = 50 km MAG=4.9
				D = 75.56 Az = 337.5 (USCGS)
27.	ePKIKP	A	09 22 57	South Shetland Islands 60.88 S 55.96 W
	eipPKP	A	23 08.5	H = 09 04 02.8 h = normal MAG=5.8
	ePP	A	24 38	D = 123.63 Az = 45.0 (USCGS)
	LmH	B	10 12.8	PKIKPV:1.1s 14.1nm
	LmV	B	13.5	pPKPV: 1.1s 40.3nm
				LmH:20s 2.0/um MLH=5.8
				LmV:19s 2.6/um MLV=5.9
27.	eP	A	17 02 55	Turkey 40.1 N 41.0 E
	LmH	B	13.8	H = 16 57 48 MAG=4.4
	LmV	B	14.7	D = 23.03 Az = 307 (LAO)
				LmH:19s 1.2nm MLH=4.3
				LmV:16s 0.8nm MLV=4.4

Day	Phase		h m s	Remarks
27.	ePKHKP	A	20 50 38	Fiji Islands 20.30 S 177.99 W
				H = 20 31 49.3 h = 525 km MAG=4.3
				D = 148.78 Az = 348.2 (USCGS)
				PKHKPV:1.5s 40.2nm
28.	ePKIKP	A	10 36 49	South of Fiji Islands 23.82 S 176.66 W
	iPKHKP	A	36 56.5	H = 10 17 08.3 h = 78 km MAG=5.0
	ePKP2	A	37 04	D = 152.46 Az = 348.6 (USCGS)
	e	A	37 08	PKIKPV:1.7s 24.3nm
	e	A	37 18.5	PKHKPV:1.5s 60.3nm
28.	LmV	C	18 58	Molucca Passage 1.9 N 126.4 E
				H = 17 58 41.7 h = normal MAG=5.1 (USCGS)
				D = 104.1
				LmV:30s 0.8/um MLV=5.1
28.	iP	A	19 01 32	Tadzhik-Sinkiang Border Region
	e	A	01 36	39.26 N 73.55 E
	e	A	01 57	H = 18 53 28.6 h = 62 km MAG=5.0
	ePP	A	03 15.5	D = 44.06 Az = 306.1 (USCGS)
				e(A) 02 12 e(A) 03 21
28.	+eP1	AB	22 58 28.5	Crete 34.33 N 25.11 E
	iP2	A	58 30.5	H = 22 54 06.6 h = 19 km MAG=5.4
	iP3	A	58 32.5	D = 19.05 Az = 332.9 (USCGS)
	iP4	A	58 36.5	P2V:1.0s 53.2nm MP2V=4.7
	i	A	58 45	P3V:1.2s 159.0nm MP3V=5.1
	iS	BC	23 02 03	P4V:(3.0)s 184.0nm MP4V=5.8
	LmH	B	07.2	LmH:13s 22.2/um MLH =5.7
	LmV	B	07.3	LmV:13s 27.9/um MLV =5.9
29.	LmV	B	09 13.1	Southern Sinkiang Prov., China
				40.72 N 89.30 E
				H = 08 40 26.2 (h = 33 km) (ISC)
				MAG=4.7 (USCGS)
				D = 52.8°
				Atmospheric Nuclear Explosion (UPP)

Day	Phase	h m s	Remarks
29.	eP A	10 31 26	Norwegian Sea 65.06 N 6.55 E
	eS A	34 14	H = 10 27 49.1 h = 6 km MAG=4.8
			D = 14.69 Az = 167.2 (USCGS)
			PV:1.4s 27.9nm
29.	eP A	12 16 54	Crete 34.33 N 24.96 E
			H = 12 12 33.4 h = normal MAG=4.5
			D = 18.99 Az = 333.2 (USCGS)
29.	ePKIKP A	16 38 21	Banda Sea 7.20 S 128.75 E
	e A	38 54	H = 16 20 00.4 h = 145 km MAG=5.7
	epPKP AB	39 06	D = 112.59 Az = 322.1 (USCGS)
	ePP A	39 15	PKIKPV:1.9s 30.3nm
			pPKPV: 1.9s 53.1nm
			PPV: 2.0s 214.0nm MPPV=6.4
29.	eP AB	18 10 40	Kurile Islands 43.42 N 147.69 E
	epP A	10 52	H = 17 58 38.8 h = 32 km MAG=5.4
	LmH B	43.0	D = 78.82 Az = 333.2 (USCGS)
	LmV B	50.2	PV:1.5s 82.9nm MPV=5.5
			LmH:22s 3.7/um MLH=5.7
			LmV:16s 2.0/um MLV=5.6
29.	e(pP) A	18 15 52.5	Kurile Islands 43.49 N 147.33 E
			H = 18 03 39.6 h = normal MAG=4.4
			D = 78.63 Az = 333.0 (USCGS)
29.	eP A	20 08 34	Burma 24.77 N 95.33 E
			H = 19 57 50.3 h = 119 km MAG=4.9
			D = 67.38 Az = 316.7 (USCGS)
29.	eP1 ABC	20 15 58	Republic of South Africa
	eiP2 A	16 00	32.91 S 19.66 E
	eiX A	16 13	H = 20 03 32.8 h = normal MAG=5.9
	ePP C	19 08	D = 83.49 Az = 354.9 (USCGS)
	e C	20 40	P1V(A):1.6s 22.0nm MP1V(A)=5.1
	e C	22 30	P2V:2.0s 94.0nm MP2V =5.7
	eS C	26 24	XV:2.2s 229.0nm MXV =6.0
	eSP C	27 10	PV(B):16s 1.4/um MPV(B) =6.0

Day	Phase	h m s	Remarks
cont.			
29.	eSS C	20 31 50	LmH:20.5s 21.4/um MLH=6.5
	LmH B	51.3	LmV:18.5s 19.0/um MLV=6.5
	LmV B	53.8	
29.	ePg A	22 00 29	Germany Swabian Jura 48.3 N 9.1 E
	eSg A	01 00.5	H = 21 59 30 (BCIS)
			D = 2.8
			H = 21 59 30 h = 0 km 48.0 N 8.8 E
			D = 3.22 Az = 34 (ISC)
29.	eP A	23 53 39	Crete 34.1 N 25.1 E
			H = 23 49 13 (BCIS)
			D = 19.26 Az = 333 h = 0 km (ISC)
30.	eP A	02 44 09	Crete 34.21 N 25.24 E
			H = 02 39 45.2 h = 14 km MAG=4.5
			D = 19.20 Az = 332.9 (USCGS)
30.	iPKP2 A	04 31 53	Kermadec Islands 31.95 S 177.88 W
	e A	31 56.3	H = 04 11 16.1 h = normal MAG=5.4 (USCGS)
	e A	32 03.5	D = 160.0
			PKP2V:1.5s 57.8nm
30.	ePKIKP AB C	18 11 38	Kermadec Islands 31.93 S 178.02 W
	ePKP2 ABC	12 17	H = 17 51 41.8 h = normal MAG=5.4
	ei A	12 31	D = 159.98 Az = 341.9 (USCGS)
	ePP BC	15 56	PKIKPV(A):1.9s 98.5nm
	ePS BC	26 25	LmH:16s 3.2/um MLH=6.2
	ePPS BC	29 25	LmV:15.5s 3.1/um
	LmH B	19 47.8	
	LmV B	47.0	
30.	ePKP A	19 12 23	Samoa Islands 16.13 S 172.58 W
			H = 18 52 52.4 h = 75 km MAG=5.1
			D = 145.41 Az = 355.3 (USCGS)
			PKPV:1.6s 65.9nm

Day	Phase		h m s	Remarks
30.	e(pP)	A	23 24 29	Burma-India Border Region 25.64 N 94.71 E H = 23 13 28.8 h = 20 km MAG=5.4 D = 66.37 Az = 316.4 (USCGS)
30.	ePKP2	A	24 18 12	South of Kermadec Islands 32.23 S 177.64 W H = 23 57 36.4 h = 37 km MAG=5.3 (USCGS) D = 160.2 PKP2V:1.8s 47.3nm
	e	A	18 33	

Day	Phase		h m s	Remarks
1.	+iP	A	04 10 16.5	Eastern Kazakh SSR 49.82 N 78.21 E
	ePn	A	12 19.5	H = 04 02 57.6 h = 0 km MAG=5.3 D = 41.30 Az = 297.7 (USCGS) PV:0.7s 72.9nm MPV=5.5 Probably underground explosion
1.	eP	A	05 19 18	Peru 11.88 S 75.13 W
	Pm	A	19 24	H = 05 05 43.2 h = 4 km MAG=5.9
	eiSKS	C	30 00	D = 97.02 Az = 39.8 (USCGS)
	eS	C	30 44	PV:1.2s 57.5nm MPV=5.8
	iSP	C	32 00	PmV:2.4s 228.0nm MPmV=6.4
	eiSPP	C	32 44	LmH:20s 11.1/um MLH=6.4
	eS	C	37 30	LmV:16.5s 12.8/um MLV=6.5
	eSSS	C	40 45	
	LmH	B	06 00.3	
	LmV	B	03.9	
1.	eP	A	08 41 49	Peru 11.78 S 75.05 W
				H = 08 28 14.0 h = 3 km MAG=5.8 D = 96.90 Az = 39.8 (USCGS)
1.	eP	A	17 22 53	Vancouver Island 48.51 N 126.49 W
				H = 17 11 11.3 h = 23 km MAG=4.7 (USCGS) D = 74.9 PV:0.9s 13.6nm MPV=5.0
1.	eP1	A	17 24 11	Off Coast of Ecuador 0.84 N 85.01 W
	eP2	A	24 13	H = 17 10 56.5 h = normal MAG=5.5
	Pm	A	24 13.5	D = 93.56 Az = 39.3 (USCGS)
	?	B	24 14	P2V:1.8s 50.7nm MP2V=5.6
	ePP	C	27 50	PmV:2.2s 92.5nm MPmV=5.8
	eSKS	B	34 35	LmH:22s 8.0/um MLH=6.1
	eS	C	35 15	LmV:23s 8.2/um MLV=6.1
	ePS	C	36 32	
	eSS	C	41 45	
	eSSS	C	45.2	
	LmH	B	18 00.0	
	LmV	B	00.2	

Day	Phase		h m s	Remarks
1.	eP	A	17 56 08	North of Ascension Island
				0.02 N 17.35 W
				H = 17 46 29.4 h = normal MAG=5.0
				D = 56.13 Az = 21.8 (USCGS)
				PV:1.8s 40.5nm MPV=5.2
1.	eP	A	20 38 44.5	Turkey 39.24 N 40.45 E
	e	A	38 57.5	H = 20 33 39.3 h = 39 km MAG=4.8
				D = 23.23 Az = 308.9 (USCGS)
				PV:1.4s 14.0nm MPV=4.3
1.	ePKP2	A	20 50 40	Kermadec Islands 27.28 S 176.48 W
				H = 20 30 22.5 h = normal MAG=5.2
				D = 155.87 Az = 347.3 (USCGS)
				PKP2V:0.7s 19.2nm
1.	eP	A	22 55 59.5	Hindu Kush Region 36.48 N 70.87 E
				H = 22 48 12.8 h = 230 km MAG=4.9
				D = 44.04 Az = 308.1 (USCGS)
				PV:1.4s 25.6nm MPV=4.5
2.	e	A	05 09 24	Northern California 38.49 N 122.70 W
	LmH	B	44.3	H = 04 56 45.5 h = 2 km MAG=5.2
	LmV	B	50.0	D = 82.59 Az = 27.3 (USCGS)
				LmH:19s 0.9/um MLH=5.1
				LmV:16s 1.0/um MLV=5.3
2.	-iPKHKP	A	04 19 02.3	Fiji Islands 21.78 S 179.43 W
	eiPKP2	A	19 09.8	H = 04 00 17.7 h = 599 km MAG=4.9
				D = 149.91 Az = 345.9 (USCGS)
				PKHKPV:1.3s 41.5nm
2.	+iP	A	22 17 55.5	Rat Islands, Aleutian Is.
	ePKPPKP	A	44 46	51.42 N 179.18 E
	LmV	C	52.7	H = 22 06 00.0 h = 1 km MAG=6.5
	LmH	C	54.9	D = 77.77 Az = 351.9 (USCGS)
				51°25'01.6" N 179°10'56.3"E (USAEC)
				PV:1.4s 288.0nm MPV=6.2
				LmH(C):18s 1.2/um MLH=5.3

Day	Phase		h m s	Remarks
2.	eP	A	23 17 06	Greece 38.51 N 22.47 E
				H = 23 13 41.1 h = 59 km MAG=4.5
				D = 14.36 Az = 331.1 (USCGS)
				PV:1.5s 20.1nm
3.	ePKIKP	A	01 53 18	South of Kermadec Islands
	ePKHKP	A	53 39	32.85 S 178.03 W
	eiPKP2	A	54 01	H = 01 33 19.8 h = 26 km MAG=5.7
	e	A	54 08	D = 160.85 Az = 341.0 (USCGS)
	LmH	C	02 29.5	PKP2V:1.6s 71.8nm
				LmH(C):40s 0.6/um MLH=5.0
3.	-eiP	A	02 03 21.5	Near East Coast of Kamchatka
	LmH	C	59.9	51.93 N 157.76 E
	LmV	C	03 00.3	H = 01 51 55.4 h = 91 km MAG=5.3
				D = 73.85 Az = 338.3 (USCGS)
				PV:1.2s 65.0nm MPV=5.0
				LmH(C):28s 0.6/um
				LmV(C):28s 0.7/um
3.	eP	A	15 12 56.5	Kodiak Island 56.64 N 152.27 W
				H = 15 01 32.4 h = normal MAG=4.8
				D = 72.25 Az = 10.7 (USCGS)
				PV:1.5s 17.6nm MPV=5.0
3.	ePKP	A	15 39 13	New Hebrides Islands 19.16 S 168.76 E
	e	A	39 25	H = 15 19 43.9 h = 43 km MAG=4.8
				D = 143.72 Az = 335.3 (USCGS)
				PKPV:1.3s 10.9nm
3.	eP	A	15 52 48	Southern Sumatra 3.69 S 101.85 E
				H = 15 39 43.5 h = 95 km MAG=5.6
				D = 92.97 Az = 320.4 (USCGS)
				PV:1.4s 18.6nm MPV=5.2
4.	eP	A	04 09 10	Kurile Islands 47.96 N 156.92 E
				H = 03 57 16.8 h = normal MAG=4.8
				D = 77.35 Az = 338.2 (USCGS)

Day	Phase		h m s	Remarks
4.	eP	A	10 19 34	South of Honshu, Japan 32.48 N 141.22 E
				H = 10 06 56.6 h = 42 km MAG=4.5
				D = 86.04 Az = 330.5 (USCGS)
				PV:1.4s 18.6nm MPV=5.0
4.	eSg	A	10 52 42	France 46.6 N 4.5 E
	e	A	52 49	H = 10 49 13 (BCIS)
				D = 6.2
5.	+iPKHKP	A	13 29 30	Fiji Islands 20.91 S 178.73 W
				H = 13 10 42.6 h = 550 km MAG=4.6
				D = 149.23 Az = 347.1 (USCGS)
				PKHKPV:1.8s 47.3nm
5.	iP1	A	16 47 52	Mindanao, Philippine Islands
	eP2	A	48 01	7.10 N 123.68 E
				H = 16 34 15.8 h = 33 km MAG=5.4
				D = 98.21 Az = 323.4 (USCGS)
				P1V:1.4s 51.2nm MP1V=6.1
				P2V:2.0s 34.2nm MP2V=5.7
5.	iPKP	A	21 06 03.5	Loyalty Islands 21.79 S 170.67 E
	eX	A	06 28	H = 20 46 32.5 h = 107 km MAG=5.3
				D = 146.84 Az = 335.4 (USCGS)
				PKPV:1.3s 153.0nm
				XV:3.0s 254.0nm
5.	eP	A	23 18 05	South of Honshu, Japan
				32.46 N 141.22 E
				H = 23 05 26.7 h = 43 km MAG=4.7 (USCGS)
				D = 86.0
6.	e	A	00 57 28	Central Mid-Atlantic Ridge
				7.40 N 35.65 W
				H = 00 47 25.5 h = normal MAG=4.6
				D = 58.19 Az = 33.4 (USCGS)
				PV:1.4s 14.0nm

Day	Phase		h m s	Remarks
6.	e	A	04 06 22	Samoa Islands 15.36 S 172.92 W
				H = 03 46 39.0 h = 43 km MAG=4.5
				D = 144.61 Az = 355.0 (USCGS)
6.	+iP	A	13 00 58.5	Luzon, Philippine Islands
	LmH	C	43.5	14.97 N 120.06 E
	LmV	B	43.5	H = 12 48 05.0 h = 59 km MAG=5.6
				D = 89.82 Az = 322.8 (USCGS)
				PV:1.2s 75.2nm MPV=5.8
				LmH(C):19s 1.2/um MLH=5.3
				LmV:18s 1.1/um MLV=5.4
6.	eP	A	20 32 42.5	Kurile Islands 43.84 N 148.15 E
				H = 20 20 42.9 h = normal MAG=4.8
				D = 78.59 Az = 333.5 (USCGS)
				PV:1.0s 15.7nm MPV=5.0
6.	eP1	A	22 00 08	Mindanao, Philippine Islands
	eP2	A	00 16	7.22 N 123.75 E
	e	A	04 17	H = 21 46 32.7 h = normal MAG=5.2
				D = 98.15 Az = 323.4 (USCGS)
				P2V:1.5s 40.2nm MPV=5.9
7.	e	A	04 01 39	Sunda Strait 6.08 S 104.20 E
				H = 03 47 51.8 h = 15 km MAG=5.2
				D = 96.30 Az = 320.2 (USCGS)
7.	eP1	A	05 13 05	Turkey 39.19 N 28.37 E
	eiP2	A	13 08.5	H = 05 09 11.3 h = 14 km MAG=5.0
	iP3	A	13 13	D = 16.45 Az = 319.6 (USCGS)
	LmH	B	18.6	P1V:1.5s 22.6nm MP1V=5.1
	LmV	B	22.6	P2V:1.5s 106.0nm MP2V=5.8
				P3V:1.3s 78.5nm MP3V=5.7
				LmH:16s 4.3/um MLH=4.7
				LmV:12s 3.0/um MLV=4.9
7.	eP	A	18 52 56	Turkey 39.16 N 28.67 E
				H = 18 49 02.2 h = 39 km MAG=4.5
				D = 16.62 Az = 319.2 (USCGS)

Day	Phase		h m s	Remarks
7.	eP	A	22 24 34	Andreanof Islands, Aleutian Is. 51.22 N 179.64 W H = 22 12 39.1 h = 45 km MAG=4.8 D = 78.07 Az = 352.7 (USCGS) PV:0.8s 15.4nm MPV=5.2
8.	ePP	A	03 00 54	Chile-Bolivia Border Region 20.04 S 68.95 W H = 02 43 24.7 h = 120 km MAG=4.9 (USCGS) D = 99.3
8.	+eP	A	14 42 18	Southern Nevada 37.26 N 116.45 W H = 14 30 00.0 h = 0 km MAG=5.5 D = 81.28 Az = 30.5 (USCGS) Nevada test site "Pipkin" 37°15'24" N 116°26'27" W (USAEC) PV:1.2s 40.6nm MPV=5.4
8.	ePKHKP	A	16 00 13	Fiji Islands 21.29 S 179.52 W H = 15 41 33.4 h = 639 km MAG=4.7 D = 149.42 Az = 346.0 (USCGS) PKHKPV:1.1s 22.2nm
8.	ePKHKP	A	22 17 48	West of Macquarie Island 55.79 S 147.45 E H = 21 57 51.9 h = normal MAG=5.2 D = 153.42 Az = 277.5 (USCGS) PKHKPV:1.2s 14.2nm
9.	e	A	03 33 27	Northern Italy 45.02 N 7.72 E
	e	A	33 32	H = 03 31 35.5 h = normal MAG=4.2
	eiPg	A	33 35	D = 6.21 Az = 23.6 (USCGS)
	iSn	A	34 15	
	iSg	A	35 00	
9.	eSg	A	07 41 24	Yugoslavia 45.8 N 14.1 E H = 07 38 38 (BCIS) D = 5.1

Day	Phase		h m s	Remarks
9.	eP1	A	08 11 37	Fox Islands, Aleutian Is.
	eiP2	A	11 38	52.32 N 169.51 W
	e	A	11 51	H = 07 59 41.3 h = 22 km MAG=5.1 (USCGS)
	LmH	C	58.6	D = 77.5
	LmV	C	59.4	P2V:1.8s 71.0nm MPV=5.5 LmH(C):16.5s 1.2/um MLH=5.3 LmV(C):18s 0.9/um MLV=5.2
9.	eP1	A	14 19 41.5	Kurile Islands 43.47 N 147.47 E
	eP2	A	19 53.5	H = 14 07 40.7 h = 30 km MAG=4.8
	e	A	20 00	D = 78.69 Az = 333.1 (USCGS)
	LmH	C	52.0	P1V:1.3s 24.0nm MP1V=5.1
	LmV	C	59.0	P2V:1.4s 34.9nm MP2V=5.2 LmH(C):22s 0.6/um MLH=4.9
9.	eP	A	24 09 11	Kurile Islands 43.97 N 148.64 E H = 23 57 10.7 h = normal MAG=4.6 D = 78.62 Az = 333.7 (USCGS) PV:1.4s 16.3nm MPV=4.9
10.	eP	A	00 25 42.5	Kurile Islands 44.0 N 149.0 E
	e	A	26 15	H = 00 13 42.3 h = 43 km MAG=4.8 (USCGS)
	LmH	C	01 04.5	D = 78.5
	LmV	C	05.0	PV:2.1s 38.3nm MPV=5.1 LmH(C):14s 0.7/um MLH=5.1 LmV(C):16s 0.5/um MLV=5.0
10.	eP	A	04 19 04.5	El Salvador 13.20 N 89.72 W
	e	A	19 13	H = 04 06 24.2 h = 71 km MAG=4.6
	LmV	C	05 03.1	D = 86.96 Az = 38.7 (USCGS) LmV(C):16s 0.3/um
10.	eP	A	17 22 28	Ryukyu Islands 29.32 N 130.30 E
	LmV	B	18 04.0	H = 17 09 57.5 h = 15 km MAG=4.9
	LmH	B	04.7	D = 83.75 Az = 325.8 (USCGS) PV:1.8s 23.6nm MPV=5.1 LmV:18s 0.8/um MLV=5.1 LmH:14s 0.8/um MLH=5.3

Day	Phase		h m s	Remarks
11.	e(PKP2)	A	11 32 50	Kermadec Islands 27.02 S 176.50 W
				H = 11 12 34.9 h = 83 km MAG=4.6 (USCGS)
				D = 155.6
12.	ePKHKP	A	06 03 44	Tonga Islands 20.96 S 174.62 W
	e	A	03 50	H = 05 43 55.0 h = normal MAG=4.4
				D = 149.97 Az = 352.1 (USCGS)
12.	eP1	A	13 37 16	Greece-Albania Border Region
	eiP2	A	37 21	39.74 N 20.44 E
	LmH	B	41.8	H = 13 34 15.8 h = 14 km MAG=5.1
	LmV	B	42.9	D = 12.55 Az = 333.3 (USCGS)
				P1V:0.8s 34.6nm
				P2V:0.9s 54.6nm
				LmH:10s 3.4/um MLH=4.6
				LmV:14s 3.4/um
12.	-eP	A	14 33 27	Near East Coast of Kamchatka
				55.24 N 161.94 E
				H = 14 22 11.6 h = 69 km MAG=4.6
				D = 71.62 Az = 340.6 (USCGS)
				PV:1.4s 21.0nm MPV=5.1
12.	ePKP	A	16 23 50	Loyalty Islands 21.00 S 169.95 E
				H = 16 04 13.5 h = normal MAG=4.7
				D = 145.85 Az = 335.2 (USCGS)
12.	e(P)	A	18 57 11	Southern Italy 39.89 N 15.01 E
	e	A	57 21	H = 18 54 34.7 h = 288 km MAG=4.0
				D = 11.01 Az = 348.6 (USCGS)
				PV:1.0s 11.8nm
13.	+eP	A	01 05 29.5	Greece-Albania Border Region
	e	A	05 31	39.86 N 20.64 E
	i	A	05 40	H = 01 02 28.5 h = 8 km MAG=5.6
	eS	C	08 16	D = 12.51 Az = 332.6 (USCGS)
	e	B	08 40	PV:1.0s 98.5nm
	LmH	B	10.0	LmH:9.5s 30.7/um MLH=5.6
	LmV	B	11.2	LmV:14s 28.6/um

Day	Phase		h m s	Remarks
13.	e	A	01 45 38	Greece-Albania
	e	A	47 49	H = 01 42 00 (UPP)
	e	A	47 59	
13.	e(P)	A	01 52 56	Greece-Albania
	e	A	52 57	H = 01 49 50 (UPP)
13.	+iPKP	A	07 15 06	New Hebrides Islands 18.85 S 169.31 E
	+i	B	15 09	H = 06 56 01.6 h = 246 km MAG=5.9
	epPKP	B	16 12	D = 143.66 Az = 335.9 (USCGS)
	ePP	B	18 20	PKPV:1.3s 96.0nm
	eiSS	C	36 45	LmH:18.5s 3.5/um
	esSS	C	38 22	LmV:19s 1.7/um
	eSSS	C	41 50	
	LmH	B	08 09.6	
	LmV	B	16.5	
13.	ePKP	A	09 48 14	Tonga Islands 18.80 S 173.43 W
	i	A	48 17	H = 09 28 33.0 h = 33 km MAG=5.0
	e	A	48 24	D = 147.98 Az = 353.9 (USCGS)
				PKPV:1.8s 33.8nm
14.	ePKP	A	00 52 34	Loyalty Islands 21.86 S 170.50 E
				H = 00 33 00.6 h = 79 km MAG=4.8
				D = 146.84 Az = 335.2 (USCGS)
				PKPV:1.1s 24.2nm
14.	e	A	04 24 20	Probably Kermadec Islands
14.	eP	A	04 37 54	South Indian Ocean 25.07 S 67.77 E
				H = 04 24 55.6 h = normal MAG=4.9
				D = 90.19 Az = 328.1 (USCGS)
14.	+iP	A	07 06 11.5	Novaya Zemlya 73.40 N 54.81 E
	LmH	B	18.2	H = 07 00 06.2 h = 0 km MAG=6.1
	LmV	B	21.6	D = 29.31 Az = 242.9 (USCGS)
				LmH:12s 3.7/um MLH=5.2
				LmV: 8s 1.8/um MLV=5.2
				Probably underground explosion

Day	Phase		h m s	Remarks
14.	LmH	B	13 20.0	Probably, North Atlantic Ridge (USCGS)
14.	eP	A	20 50 35.5	Sea of Japan 37.91 N 135.06 E H = 20 39 11.6 h = 371 km MAG=4.7 D = 78.80 Az = 327.2 (USCGS) PV:1.4s 37.2nm MPV=5.0
14.	-iP	A	22 57 58.5	South of Alaska 52.62 N 162.73 W H = 22 46 04.8 h = 15 km MAG=5.1 D = 77.00 Az = 3.7 (USCGS) PV:1.1s 30.2nm MPV=5.3
14.	ePKIKP	A	24 19 13	Kermadec Islands 26.97 S 176.46 W H = 23 59 26.0 h = 61 km MAG=5.3 D = 155.57 Az = 347.5 (USCGS)
	ePKHKP	A	19 23	
	ePKP2	A	19 39	
	ePKP2	C	19 40	
	e	A	19 50	
	ePP	A	23 17	
15.	ePKP2	A	01 28 29	Kermadec Islands 27.24 S 176.48 W H = 01 08 14.9 h = 58 km MAG=4.9 D = 155.83 Az = 347.4 (USCGS)
16.	eP	A	18 55 32	Arctic Ocean 80.77 N 112.08 W H = 18 47 15.9 h = normal MAG=4.5 D = 45.26 Az = 48.2 (USCGS)
16.	ePKHKP	A	21 04 55	Tonga Islands 19.66 S 174.63 W H = 20 45 09.8 h = normal MAG=4.8 D = 148.68 Az = 352.3 (USCGS)
17.	-eiP	A	01 36 00	Burma-India Border Region
	-ipP	A	36 29.5	23.05 N 94.70 E
	ei	A	36 46	H = 01 25 12.4 h = 134 km MAG=6.0
	eiPP	A	38 32	D = 68.23 Az = 317.1 (USCGS)
	+ipP	C	39 00	PV:2.0s 795.0nm MPV=6.2
	ePPP	C	40 13	LmV:12s 2.8/um
	-iS	C	44 44	LmH:16s 5.9/um
	-iS	B	44 47	

Day	Phase		h m s	Remarks
cont.				
17.	isS	C	01 45 42	
	iSSS	B	52 28	
	e(SKKS)	A	02 02 36	
	LmV	B	04.2	
	LmH	B	04.5	
18.	+iP	A	01 25 59.7	Honshu, Japan 39.30 N 141.40 E
	epP	A	26 26	H = 01 13 59.7 h = 107 km MAG=5.3
	e	A	28 42	D = 80.19 Az = 330.2 (USCGS)
	e	A	28 47.5	LmH:16s 0.6/um
	e	A	29 00	LmV:13s 0.4/um
	eS	C	35 52	
	esS	C	36 46	
	LmH	B	02 00.0	
	LmV	B	06.0	
18.	+iP	A	08 55 47	Near Islands, Aleutian Is.
	e(PPS)	C	09 06 16	52.49 N 173.48 E
	LmV	B	30.4	H = 08 44 00.0 h = 24 km MAG=5.6
	LmH	B	31.4	D = 76.10 Az = 348.2 (USCGS)
				PV:1.4s 102.0nm MPV=5.8
				LmV:20s 1.1/um MLV=5.2
				LmH:18s 0.9/um MLH=5.1
19.	eP	A	09 17 09	Andreanof Islands, Aleutian Is.
				51.31 N 178.53 W
				H = 09 05 13.2 h = 41 km MAG=4.8
				D = 78.06 Az = 353.4 (USCGS)
19.	eP	A	12 39 21	Mindanao, Philippine Islands
	ePP	A	43 25	7.71 N 125.99 E
				H = 12 25 45.1 h = 60 km MAG=5.4 (USCGS)
				D = 99.2
				PV:1.4s 23.3nm MPV=5.5
19.	LmH	C	20(30)	Probably Prince Edward Islands
	LmV	C	31.0	Region (USCGS)
				LmV(C):24s 0.5/um

Day	Phase		h m s	Remarks
20.	ePKHKP	A	10 59 22	Fiji Islands 20.51 S 176.53 W
				H = 10 40 02.6 h = 260 km MAG=4.3
				D = 149.25 Az = 349.8 (USCGS)
				PKHKPV:1.5s 12.6nm
20.	eP	A	13 23 27.5	Venezuela 10.84 N 72.42 W
				H = 13 11 33.5 h = 55 km MAG=5.1
				D = 77.93 Az = 40.4 (USCGS)
20.	iP	A	13 23 32.5	Venezuela 10.80 N 72.48 W
	eS	C	33 25	H = 13 11 37.0 h = 40 km MAG=5.7 (USCGS)
	LmH	B	58.5	D = 78.0
	LmV	B	58.5	PV:1.5s 126.0nm MPV=5.8
				LmH:20s 0.7/um MLH=5.0
				LmV:20s 0.9/um MLV=5.1
20.	+ipP	B	15 33 39	Oaxaca, Mexico 17.30 N 95.19 W
	eiPP	B	36 36	H = 15 20 36.5 h = 87 km MAG=5.4
	eS	B	43 31	D = 87.01 Az = 37.6 (USCGS)
	eiSKS	B	43 44	LmH:20s 0.6/um
	LmH	B	16 13.0	LmV:20s 0.6/um
	LmV	B	14.2	
21.	eP	A	11 29 10	Central Mid-Atlantic Ridge
	e	A	29 20	0.77 N 27.94 W
				H = 11 19 05.5 h = normal MAG=4.7
				D = 59.93 Az = 27.9 (USCGS)
21.	eP	A	20 02 46	North Atlantic Ridge 11.98 N 43.75 W
	e	A	02 56.5	H = 19 52 46.8 h = normal MAG=4.8
				D = 59.13 Az = 37.6 (USCGS)
				PV:1.4s 14.0nm MPV=4.8
21.	+iP	A	21 05 42.3	Andreanof Islands, Aleutian Is.
	ePS	B	16(10)	51.31 N 179.24 W
	eSS	B	21 00	H = 20 53 47.5 h = 48 km MAG=5.9
	LmH	B	42.0	D = 78.01 Az = 353.0 (USCGS)
	LmV	B	48.2	PV:1.3s 214.0nm MPV=6.1
				LmH:19s 1.9/um MLH=5.4
				LmV:16s 1.4/um MLV=5.4

Day	Phase		h m s	Remarks
22.	eP	A	03 22 25	Fox Islands, Aleutian Is.
	e	A	22 36	52.34 N 169.44 W
				H = 03 10 30.0 h = 24 km MAG=4.3
				D = 77.39 Az = 359.3 (USCGS)
				PV:1.0s 11.8nm MPV=5.0
22.	ePKIKP	A	06 17 04.5	Solomon Islands 4.92 S 154.21 E
				H = 05 58 48.8 h = 390 km MAG=4.8
				D = 124.73 Az = 331.9 (USCGS)
				PKIKPV:1.2s 10.2nm
22.	ePKIKP	A	07 30 59	New Britain Region 4.79 S 152.51 E
	epPKIKP	A	31 17.5	H = 07 12 07.7 h = 71 km MAG=5.3
	e	A	31 21	D = 123.80 Az = 331.1 (USCGS)
				PKIKPV:1.3s 21.8nm
22.	+eP	A	09 27 15.5	Near East Coast of Kamchatka
				52.61 N 158.87 E
				H = 09 15 48.3 h = 63 km MAG=4.8
				D = 73.46 Az = 338.9 (USCGS)
				PV:0.9s 15.6nm MPV=4.9
22.	ePKP	A	10 27 10	Fiji Islands 17.81 S 178.73 W
				H = 10 08 28.2 h = 550 km MAG=4.3
				D = 146.21 Az = 348.1 (USCGS)
22.	eP	A	10 35 34.5	Off East of Northern Chile
	e	A	35 43.5	18.09 S 71.54 W
	LmH	B	11 23.4	H = 10 21 52.1 h = 23 km MAG=5.4
	LmV	B	23.4	D = 99.54 Az = 39.9 (USCGS)
				LmH:16s 0.5/um MLH=5.1
				LmV:16s 0.5/um MLV=5.1
22.	eiP	A	12 23 16	Fox Islands, Aleutian Is.
	ei	A	23 26.5	52.21 N 169.45 W
	LmH	B	13 10.4	H = 12 11 21.3 h = normal MAG=5.1
	LmV	B	10.8	D = 77.52 Az = 359.3 (USCGS)
				PV:1.4s 72.0nm MPV=5.6
				LmH:16s 0.8/um MLH=5.1
				LmV:16s 0.6/um MLV=5.0

Day	Phase		h m s	Remarks
22.	eP	A	13 03 36.5	Near Coast of Venezuela 10.92 N 62.55 W
	eipP	A	03 56.0	H = 12 52 22.0 h = 79 km MAG=5.4
				D = 71.59 Az = 40.2 (USCGS)
				PV:0.8s 19.3nm MPV=5.0
				pPV:1.1s 24.2nm
22.	e(pP)	A	20 56 38	Dodecanese Islands 36.32 N 28.47 E
				H = 20 52 06.5 h = 48 km MAG=-
				D = 18.77 Az = 325.0 (USCGS)
22.	eP	A	23 04 11.5	Off Coast of California 34.83 N 121.34 W
	ePP	B	07 28	H = 22 51 33.5 h = 15 km MAG=5.9
	e	C	14 50	D = 85.32 Az = 27.9 (USCGS)
	eSS	C	20 40	PV:2.0s 282.0nm MPV=6.2
	LmV	B	44.7	LmV:16s 5.0/um MLV=6.0
	LmH	B	44.8	LmH:15.5s 4.9/um MLH=6.0
23.	eP	A	02 15 36	Southern Italy 38.98 N 14.97 E
	+i	A	15 40	H = 02 12 53.4 h = 273 km MAG=4.0
				D = 11.91 Az = 349.6 (USCGS)
				PV:1.1s 28.2nm MPV=4.3
23.	ePKP	A	03 12(24)	New Hebrides Islands 14.92 S 166.85 E
				H = 02 52 54.7 h = 28 km MAG=4.8
				D = 139.13 Az = 335.9 (USCGS)
24.	ePKIKP	A	00 45 50	South of Fiji Islands 25.21 S 178.43 E
	ePKHKP	A	45 57.5	H = 00 27 08.8 h = 620 km MAG=4.8
	ePKP2	A	46 12	D = 152.64 Az = 341.6 (USCGS)
24.	eP	A	00 58 07.5	Fox Islands, Aleutian Is. 52.47 N 168.62 W
	e	A	58 14	H = 00 46 14.6 h = normal MAG=5.2
	e	A	58 19.5	D = 77.26 Az = 359.8 (USCGS)
				PV:1.3s 102.5nm MPV=5.8
24.	e(P)	A	08 42 00	Southern California 33.29 N 119.19 W
	LmH	B	09 21.5	H = 08 29 12.1 h = 10 km MAG=5.1
	LmV	B	22.4	D = 85.83 Az = 28.9 (USCGS)

Day	Phase		h m s	Remarks
cont. 24.				PV:2.7s 163.0nm MPV=5.7
				LmH:15s 2.7/um MLH=5.8
				LmV:16s 3.4/um MLV=5.9
24.	eP	A	10 21 15	Western Gulf of Aden 11.87 N 44.86 E
				H = 10 12 41.8 h = 25 km MAG=4.8
				D = 47.25 Az = 331.6 (USCGS)
				PV:1.3s 13.1nm MPV=4.9
24.	eP	A	11 55 10	Northern India 24.79 N 72.36 E
	e	A	55 17	H = 11 45 52.7 h = 15 km MAG=5.3
	e	A	55 20	D = 52.81 Az = 315.8 (USCGS)
				PV:1.3s 17.5nm MPV=4.8
24.	ePg	A	14 05 54	Eschenlohe/GFR,
	+iSg	A	06 39.5	47°37.901' N 11°8.742' E
	i	A	06 41.5	explosion
				H = 14 04 59.86 yield 21.7 to (ASFA)
				D = 3.0
24.	-eiPKHKP	A	22 50 45.5	Tonga Islands 20.50 S 172.83 W
				H = 22 30 57.7 h = normal MAG=5.3
				D = 149.71 Az = 354.4 (USCGS)
				PV:1.5s 57.7nm
25.	+iP	A	12 15 44.8	Kurile Islands 44.09 N 147.77 E
	LmH	C	54.0	H = 12 03 47.6 h = 38 km MAG=5.3
	LmV	C	55.0	D = 78.24 Az = 333.2 (USCGS)
26.	ePKIKP	A	04 04 42	Kermadec Islands 27.04 S 176.51 W
	ePKHKP	A	04 53	H = 03 44 50.4 h = 30 km MAG=5.3
	eiPKP2	A	05 09.5	D = 155.62 Az = 347.4 (USCGS)
	ei	A	05 18	
	ePP	A	08 48	
26.	ePKP	A	04 35 28	Loyalty Islands 21.69 S 169.86 E
	e	A	37 48	H = 04 15 49.7 h = normal MAG=4.8
				D = 146.44 Az = 334.7 (USCGS)
				PKPV:1.0s 29.5nm

Day	Phase		h m s	Remarks
26.	ePKP	A	05 10 44	South of Fiji Islands
				21.97 S 178.82 W
				H = 04 51 47.9 h = 450 km MAG=4.3
				D = 150.23 Az = 346.6 (USCGS)
26.	+iPKP	A	06 57 28	Tonga Islands 16.17 S 173.95 W
	iX	A	57 29.5	H = 06 38 03.4 h = 127 km MAG=5.8
	ei	A	57 58.3	D = 145.32 Az = 353.8 (USCGS)
				PKPV:1.4s 46.5nm
				XV:1.2s 313.0nm
26.	-iP	A	15 38 31.4	Jugoslavia 44.87 N 17.29 E
	eS	C	39 45	H = 15 36 51.8 h = normal MAG=5.3
	LmH	B	40.8	D = 6.92 Az = 328.5 (USCGS)
	LmV	B	41.3	LmH:11s 438.0/um MLH=6.3
				LmV: 8s 141.0/um
26.	+iP	A	19 27 52	Kurile Islands 43.59 N 148.15 E
	eipP	A	28 05.5	H = 19 15 51.2 h = 37 km MAG=5.0
				D = 78.82 Az = 333.5 (USCGS)
				PV:1.6s 41.2nm MPV=5.2
26.	ePKHKP	A	21 45 35	Kermadec Islands 27.10 S 176.63 W
	ePKP2	A	45 54	H = 21 25 32.2 h = 44 km MAG=5.2
	ePP	A	49 32	D = 155.66 Az = 347.2 (USCGS)
26.	e	A	21 53 28.5	South of Africa 53.39 S 23.51 E
	ePP	A	57 38	H = 21 39 20.8 h = normal MAG=5.9
	eS	C	22 05 26	D = 104.14 Az = 352.2 (USCGS)
	ePS	C	07 00	LmH:20s 9.8/um MLH=6.3
	eiSS	C	12 28	LmV:18s 11.0/um MLV=6.5
	eSSS	C	16 45	
	LmH	B	40.8	
	LmV	B	45.8	
27.	eiPn	A	02 57 14	Jugoslavia 44.96 N 16.96 E
	eiPg	A	57 48	H = 02 55 35.5 h = normal MAG=4.9
	eiSn	A	58 28	D = 6.73 Az = 329.6 (USCGS)
	eiSg	A	59 10	PV:1.6s 121.0nm

Day	Phase		h m s	Remarks
cont.				
27.	LmH	B	02 59.5	LmH:9.0s 13.4/um MLH=4.8
	LmV	B	03 00.0	LmV:10s 11.9/um
27.	ePn	A	08 12 36.5	Jugoslavia 44.92 N 17.23 E
	iPn	A	12 37	H = 08 10 58.3 h = normal MAG=5.3
				D = 6.86 Az = 328.6 (USCGS)
27.	eiP	A	08 45 15.5	Greece-Albania Border Region
				39.77 N 20.49 E
				H = 08 42 17.5 h = 40 km MAG=4.5
				D = 12.54 Az = 333.1 (USCGS)
				PV:0.7s 21.1nm
27.	-iPn	A	08 55 21.5	Jugoslavia 44.91 N 16.99 E
	iSn	A	56 57	H = 08 53 42.7 h = normal MAG=4.8
				D = 6.79 Az = 329.7 (USCGS)
27.	ePn	A	11 09 38	Jugoslavia 45.15 N 16.76 E
	ePg	A	10 04.5	H = 11 08 00.6 h = normal MAG=4.1
	e	A	11 02	D = 6.49 Az = 329.7 (USCGS)
	e	A	11 25	
	eSg	A	11 33	
	e	A	11 40.5	
28.	+iP	A	18 52 57.5	Hindu Kush Region 36.47 N 70.86 E
	epP	A	53 45	H = 18 45 10.6 h = 229 km MAG=5.0
	esP	A	54 10	D = 44.04 Az = 308.1 (USCGS)
	ePP	A	54 42.5	PV:1.3s 34.9nm MPV=4.6
	eScP	A	58 08	
28.	e	A	19 36 40	Kurile Islands 43.67 N 146.86 E
				H = 19 24 41.3 h = 55 km MAG=4.3
				D = 78.32 Az = 332.8 (USCGS)
29.	e(pP)	A	04 49 04	Kurile Islands 43.76 N 146.35 E
				H = 04 36 58.6 h = 42 km MAG=4.3
				D = 78.07 Az = 332.5 (USCGS)

Day	Phase		h m s	Remarks
29.	ePKP	A	07 17 07	Tonga Islands 15.36 S 173.59 W H = 06 57 34.3 h = 50 km MAG=4.7 D = 144.56 Az = 354.3 (USCGS)
29.	ePKP	A	12 17 08	Fiji Islands 14.94 S 177.50 W H = 11 58 12.2 h = 309 km MAG=4.3 D = 143.63 Az = 350.2 (USCGS)
29.	eP	A	22 14 09	Southern Nevada 37.14 N 116.06 W H = 22 01 51.4 h = 0 km MAG=5.7 D = 81.22 Az = 30.7 (USCGS) 37°08'35.9" N 116°03'49.8" W Nevada test site "Calabash" (USAEC) PV:1.6s 60.4nm MPV=5.4
30.	eiP	A	00 17 39	Honshu, Japan 37.59 N 140.06 E H = 00 05 39.4 h = 151 km MAG=5.0 D = 81.15 Az = 329.7 (USCGS) PV:1.6s 77.0nm MPV=5.2
	epP	A	18 17	
30.	eP	A	01 00 29.5	Taiwan 22.43 N 121.42 E H = 00 47 59.8 h = 48 km MAG=4.4 D = 84.67 Az = 323.0 (USCGS) LmH(C):16s 1.2/um MLH=5.4 LmV(C):16s 0.8/um MLH=5.2
	LmH	C	43.4	
	LmV	C	43.5	
30.	LmH	B	08 53.4	Probably Hokkaido, Japan Region (USCGS) LmH:16s 2.0/um LmV:16s 2.2/um
	LmV	B	53.5	
30.	eiP	A	12 26 12	Central Russia 52.33 N 95.79 E H = 12 17 22.3 h = normal MAG=4.8 D = 49.57 Az = 303.7 (USCGS) PV:1.5s 57.7nm MPV=5.4 LmH:12.5s 0.9/um MLH=5.0 LmV:12.5s 1.4/um MLV=5.2
	ei	A	26 17	
	LmH	B	49.6	
	LmV	B	49.6	

Day	Phase		h m s	Remarks
31.	+iP	A	06 55 15.5	Kurile Islands 45.80 N 150.72 H = 06 43 17.5 h = 9 km MAG=5 D = 77.62 Az = 334.7 (USCGS) PV:1.3s 109.2nm MPV=5.8
31.	e(P)	A	07 12 30	Off East Coast of Honshu, Japan 37.13 N 142.04 E H = 07 00 13.4 h = 40 km MAG= D = 82.33 Az = 330.7 (USCGS) LmH:16s 2.3/um MLH=5.6 LmV:15s 3.0/um MLV=5.8
	e	A	12 32.5	
	epP	A	12 45	
	LmH	B	52.4	
	LmV	B	54.3	
31.	ePKP	A	07 47 25	Fiji Islands 17.28 S 174.24
	epPKP	A	47 41	H = 07 27 55.9 h = 56 km MAG= D = 143.92 Az = 341.2 (USCGS)
31.	e	A	07 54 04.5	Fiji Islands 17.27 S 174.28
				H = 07 34 15.9 h = 57 km MAG= D = 143.93 Az = 341.2 (USCGS)
31.	eP	A	08 59 46.5	Western Iran 33.24 N 47.85 E H = 08 53 26.3 h = 51 km MAG= D = 31.67 Az = 314.2 (USCGS)
	e	A	59 50	
31.	+iP	AB	11 45 00	Andreanof Islands, Aleutian Is 51.32 N 179.01 W H = 11 33 04.83 h = 49 km MA D = 78.02 Az = 353.1 (USCGS) PV(B):10s 4.7/um MPV=6.6 LmH:18s 15.5/um MLH=6.4 LmV:17s 16.9/um MLV=6.5
	ePP	C	47 58	
	ePPP	C	49 50	
	iS	C	54 51	
	LmH	B	12 27.5	
	LmV	B	27.5	
31.	+iP	A	11 59 28.5	Andreanof Islands, Aleutian Is 51.21 N 178.99 W H = 11 47 32.1 h = 48 km MAG= D = 78.13 Az = 353.1 (USCGS)

Day	Phase		h m s	Remarks
1.	eP	A	04 26 23	Andreanof Islands, Aleutian Is. 51.17 N 179.05 W H = 04 14 27.7 h = 47 km MAG=4.5 D = 78.16 Az = 353.1 (USCGS)
1.	eP1	AB	11 21 24	Gulf of California 23.15 N 107.93 W
	eP2	A	21 35	H = 11 08 20.9 h = normal MAG=5.6
	ePP	B	24 52	D = 89.29 Az = 33.6 (USCGS)
	eiS	B	32 05	P1V(A):1.4s 34.8nm MP1V=5.4
	i	B	32 21	P1V(B):6s 0.8/um MP1V=6.1
	eiSS	B	37 50	P2V(A):2.5s 231.0nm MP2V=6.0
	LmH	B	12 01.5	LmH:18s 71.6/um MLH=7.1
	LmV	B	03.6	LmV:15.5s 75.0/um MLV=7.2
2.	iPKHKP	A	02 52 16	South of Fiji Islands 22.11 S 179.80 W
	iPKP2	A	52 25	H = 02 33 34.6 h = 640 km MAG=4.7
				D = 150.15 Az = 345.3 (USCGS)
2.	ePKP .	A	16 45 35	Tonga Islands 17.27 S 173.66 W
	e	A	45 46.5	H = 16 25 54.0 h = normal MAG=4.6
				D = 146.44 Az = 353.9 (USCGS)
				PKPV:2.0s 34.2nm
2.	LmH	C	19 52.8	Probably Java (USCGS)
				LmH(C):24s 1.0/um
3.	ePKP	A	03 49 24	South of Australia 45.81 S 123.18 E
				H = 03 30 19.3 h = normal MAG=5.2
				D = 135.63 Az = 302.1 (USCGS)
4.	eSg	A	03 28 34	Jugoslavia 45.2 N 17.9 E
	e	A	28 40	H = 03 24 51 (BCIS)
				D = 6.9
4.	eP	A	12 17 19	Andreanof Islands, Aleutian Is.
				51.12 N 179.11 W
				H = 12 05 23.9 h = 45 km MAG=4.7
				D = 78.21 Az = 353.0 (USCGS)
				PV:1.2s 18.3nm MPV=5.1

Day	Phase		h m s	Remarks
4.	e	A	20 24 00	Caspian Sea 40.27 N 50.28 E
	LmH	C	35.0	H = 20 17 47.7 h = 29 km MAG=5.0
				D = 28.74 Az = 304.2 (USCGS)
				LmH:42s 5.5/um MLH=4.9
4.	eP	A	22 18 16	Molucca Sea 0.11 S 124.99 E
	LmH	C	23 05.4	H = 22 04 11.9 h = normal MAG=5.4
				D = 104.72 Az = 322.8 (USCGS)
				PV:1.4s 23.2nm MPV=5.8
				LmH(C):25s 0.9/um MLH=5.1
4.	ePKIKP	A	23 59 01	South of Fiji Islands 22.18 S 179.73 W
	-iPKHKP	A	59 07	H = 23 40 22.7 h = 610 km MAG=5.1
	ePKP2	A	59 14	D = 150.23 Az = 345.4 (USCGS)
	epPKIKP	A	24 01 18	PKHKPV:1.4s 79.0nm
	epPKHKP	A	01 25	
	esPKP2	A	01 30	
5.	e	A	07 52(20)	North Pacific Ocean 36.0 N 9.3 W
	e	A	52 30	H = 07 47 43 (BCIS)
	e	A	52 39	D = 21.0
5.	+eP	A	18 06 49	Off Coast of California
	+i	C	06 50	34.83 N 121.20 W
	+iPP	C	10 08	H = 17 54 13.6 h = normal MAG=5.8
	ePPP	C	12 00	D = 85.27 Az = 27.9 (USCGS)
	eS	C	17 20	PV:1.8s 118.0nm MPV=5.8
	i	C	17 28	LmH:16.5s 12.2/um MLH=6.4
	ePS	B	18 10	LmV:17s 13.6/um MLV=6.4
	eSS	C	23 00	
	LmH	B	47.5	
	LmV	B	47.5	
5.	eP	A	19 01 24.5	Off Coast of California
				34.78 N 121.15 W
				H = 18 48 48.9 h = normal MAG=5.1
				D = 85.29 Az = 28.0 (USCGS)
				PV:1.6s 24.7nm MPV=5.2

Day	Phase		h m s	Remarks
5.	eP	A	20 35 36	Bhutan 27.70 N 90.22 E
				H = 20 25 13.8 h = 13 km MAG=5.0
				D = 62.09 Az = 315.1 (USCGS)
				PV:0.8s 11.5nm MPV=5.2
5.	LmH	B	21 41.0	Probably Szechwan Province, China (USCGS)
	LmV	B	41.4	LmH:13s 0.5/um
				LmV:13s 0.6/um
6.	eP	A	02 07 43.5	Kurile Islands 43.63 N 147.87 E
	e	A	07 52	H = 01 55 43.0 h = normal MAG=4.5
	e	A	07 56	D = 78.69 Az = 333.3 (USCGS)
	LmH	B	47.4	LmH:14s 0.6/um MLH=5.1
	LmV	B	47.5	LmV:15s 0.9/um MLV=5.2
6.	eP	A	13 26 32	Near Coast of Chiapas, Mexico
	e	A	27 17	15.74 N 93.51 W
				H = 13 13 56.5 h = 114 km MAG=4.6
				D = 87.26 Az = 38.0 (USCGS)
6.	eP	A	13 31 22	Central Mid-Atlantic Ridge
	+e	A	31 31	3.90 N 32.44 W
				H = 13 21 21.0 h = normal MAG=5.0
				D = 59.43 Az = 30.9 (USCGS)
				PV:1.9s 45.5nm MPV=5.2
6.	eP	A	14 45 58	Greenland Sea 73.47 N 8.03 E
	e	A	46 02	H = 14 40 55.5 h = normal MAG=4.7
	LmH	B	55.5	D = 22.96 Az = 174.1 (USCGS)
	LmV	B	55.6	LmH:15s 0.6/um MLH=4.1
				LmV:14s 0.5/um MLV=4.2
6.	iP1	A	20 32 14	Andreanof Islands, Aleutian Is.
	iP2	A	32 15.3	51.47 N 178.91 W
	iP3	A	32 17.5	H = 20 20 18.5 h = 36 km MAG=5.5
	eS	C	42 18	D = 77.88 Az = 353.2 (USCGS)
	eSS	C	47 20	P1V:0.7s 15.3nm MP1V=5.2
	ei	C	47 32	P2V:1.0s 44.3nm MP2V=5.5

Day	Phase		h m s	Remarks
cont. 6.	LmH	B	21 17.1	P3V:1.0s 84.5nm MP3V=5.8
	LmV	B	17.1	LmH:15s 3.0/um MLH=5.8
				LmV:16s 3.0/um MLV=5.8
7.	eP	A	01 40 04.5	Gulf of Campeche 18.09 N 94.50 W
				H = 01 27 26.9 h = 46 km MAG=4.6
				D = 85.99 Az = 37.8 (USCGS)
				PV:1.3s 17.5nm MPV=5.0
7.	eP	A	12 21 31	North of Ascension Island
				3.08 S 11.99 W
				H = 12 11 46.5 h = normal MAG=4.9
				D = 57.22 Az = 17.7 (USCGS)
				PV:1.8s 37.2nm MPV=5.1
7.	eP	A	12 55 20	North of Ascension Island
	e	A	55 25.5	2.95 S 12.04 W
	LmH	C	13 20.4	H = 12 45 35.3 h = normal MAG=5.2
	LmV	C	20.4	D = 57.11 Az = 17.7 (USCGS)
				PV:2.6s 147.0nm MPV=5.6
				LmV(C):16s 1.8/um MLV=5.3
7.	eP	A	13 14 10	North of Ascension Island
	e	A	14 16	2.94 S 12.01 W
				H = 13 04 24.9 h = normal MAG=5.0
				D = 57.10 Az = 17.7 (USCGS)
				PV:1.6s 35.8nm MPV=5.2
7.	+iP	A	13 53 31.4	Ryukyu Islands 26.59 N 126.28 E
				H = 13 41 13.4 h = 123 km MAG=5.3
				D = 83.95 Az = 324.4 (USCGS)
				PV:1.4s 62.7nm MPV=5.3
7.	eP	A	16 50 52	North of Ascension Island
				2.82 S 12.09 W
				H = 16 41 06.7 h = normal MAG=5.3
				D = 57.01 Az = 17.8 (USCGS)
				PV:2.5s 177.0nm MPV=5.7

Day	Phase		h m s	Remarks
7.	eP	A	18 30 20	North of Ascension Island
				2.90 S 12.02 W
				H = 18 20 35.8 h = normal MAG=5.2
				D = 57.06 Az = 17.7 (USCGS)
				PV:2.0s 81.2nm MPV=5.4
7.	ePg	A	18 35 50	Bernburg, GDR, rock burst
	eSg	A	36 06.5	51°46' N 11°46' E
				D = 1.0 (Jena)
				PV:1.2s 18.3nm
7.	+eiP1	A	18 41 56	Southern Iran 27.85 N 60.06 E
	iP2	A	41 58	H = 18 33 59.9 h = 35 km MAG=6.1
	+i	B	42 24	D = 42.92 Az = 315.6 (USCGS)
	ePP	C	43 38	P2V:1.4s 97.7nm MPV=5.3
	eS	C	47 47	LmH:24s 35.4/um MLH=6.2
	i	C	48 06	LmV:21s 29.0/um MLV=6.2
	i	C	48 19	
	+iSS	C	51 10	
	-i	C	51 47	
	LmH	B	59.5	
	LmV	B	19 04.3	
7.	+iPg	A	19 05 06.5	Bernburg, GDR, rock burst (Jena)
	iSg	A	05 23	PV:1.0s 63.0nm
8.	ePKIKP	A	02 01 10	New Hebrides Islands 16.18 S 167.49 E
	LmH	C	03 05.6	H = 01 41 41.3 h = 23 km MAG=5.7
	LmV	C	06.0	D = 140.52 Az = 335.8 (USCGS)
				PKIKPV:2.3s 140.0nm
				LmH(C):22s 1.5/um MLH=5.5
				LmV(C):20s 1.5/um
8.	eP	A	07 33 22.5	Kurile Islands 45.54 N 150.09 E
	e(pP)	A	33 40	H = 07 21 29.7 h = 52 km MAG=5.3
				D = 77.67 Az = 334.4 (USCGS)
				PV:1.1s 26.2nm

Day	Phase		h m s	Remarks
8.	e(P)	A	12 29 18	Kurile Islands 48.76 N 155.95 E
				H = 12 17 30.2 h = normal MAG=4.5
				D = 76.36 Az = 337.5 (USCGS)
8.	eP	A	15 48 59	North of Ascension Island
				2.81 S 11.86 W
				H = 15 39 13.2 h = normal MAG=4.7
				D = 56.93 Az = 17.6 (USCGS)
8.	eP	A	20 38 09	North of Ascension Island
				3.00 S 12.14 W
				H = 20 28 23.9 h = normal MAG=5.2
				D = 57.19 Az = 17.8 (USCGS)
				PV:1.8s 30.4nm MPV=5.0
8.	ePKIKP	A	21 18 55.5	South of Fiji Islands 22.10 S 179.67 W
	+iPKHKP	A	19 01.5	H = 21 00 16.1 h = 600 km MAG=4.6
	ePKP2	A	19 09	D = 150.17 Az = 345.5 (USCGS)
				PKIKPV:1.0s 23.6nm
8.	eP	A	22 13 30	Halmahera 1.13 S 127.00 E
	e	A	13 53	H = 21 55 09.2 h = normal MAG=5.9
	e	A	14 02	D = 106.74 Az = 323.1 (USCGS)
	LmH	C	58.3	LmH(C):20s 2.3/um MLH=5.7
	LmV	C	23 04.5	LmV(C):18s 1.4/um MLV=5.6
8.	e	A	23 44 52.5	Halmahera 1.03 S 127.00 E
				H = 23 26 00.1 h = 55 km MAG=5.3
				D = 106.7 (USCGS)
9.	ePKIKP	A	09 26 54	New Hebrides Islands 16.25 S 167.92 E
	e	A	27 11	H = 09 07 50.9 h = 185 km MAG=5.3
	epPKIKP	A	27 49	D = 140.76 Az = 336.1 (USCGS)
	ePP	A	29 57	
	eSKP	A	30 19	
	LmH	C	10 14.0	

Day	Phase		h m s	Remarks
10.	ePKP	A	00 50 07.5	Tonga Islands 15.27 S 173.28 W H = 00 30 28.7 h = normal MAG=4.7 D = 144.50 Az = 354.6 (USCGS)
10.	ePKP	A	09 32 28.5	Samoa Islands Region 15.19 S 172.49 W H = 09 12 50.0 h = 65 km MAG=4.6 D = 144.48 Az = 355.5 (USCGS) PKPV:1.4s 20.9nm
10.	ePKP	A	09 38 36	Tonga Islands 16.13 S 173.13 W H = 09 19 01.7 h = normal MAG=4.5 D = 145.36 Az = 354.7 (USCGS)
10.	eP	A	18 21 36	Svalbard Region 77.13 N 13.86 E H = 18 15 59.6 h = normal MAG=4.6 D = 26.61 Az = 183.2 (USCGS)
10.	epP	A	19 25 19	Kurile Islands 43.74 N 147.66 E H = 19 13 06.5 h = normal MAG=4.9 D = 78.52 Az = 333.2 (USCGS)
11.	e	A	00 40 31.5	Iran 33.44 N 54.98 E H = 00 30 35.3 h = normal MAG=5.0 (USCGS) D = 36.0
11.	ePg	A	00 58 49	Bernburg, GDR, rock burst (Jena)
	iSg	A	59 05.5	
11.	ePKIKP	A	15 42 51	New Britain Region 5.68 S 151.38 E
	epPKIKP	A	43 07	H = 15 23 59.2 h = 73 km MAG=5.3
	LmH	C	16 35.0	D = 124.02 Az = 330.3 (USCGS) PKIKPV:1.3s 13.1nm
12.	eP	A	01 39 03	Kurile Islands 43.59 N 146.68 E H = 01 27 04.2 h = normal MAG=4.4 D = 78.33 Az = 332.7 (USCGS)

Day	Phase		h m s	Remarks
12.	+iP	A	12 41 43.0	Hokkaido, Japan Region 42.44 N 144.94 E
	e	A	41 48.5	H = 12 29 42.5 h = normal MAG=5.2
	e	A	41 57	D = 78.75 Az = 331.8 (USCGS)
	LmH	B	13 20.4	PV:1.5s 30.2nm MPV=5.1
	LmV	B	20.7	
12.	LmH	C	16 50.0	Probably New Britain Region (USCGS)
	LmV	B	55.3	
12.	eP	A	18 35 47	Near East Coast of Honshu, Japan 35.35 N 140.67 E H = 18 23 25.8 h = 69 km MAG=4.7 D = 83.32 Az = 330.1 (USCGS)
12.	+iP	A	19 20 49	Fox Islands, Aleutian Is.
	eS	C	30 35	52.96 N 168.28 W
	eSS	C	35 45	H = 19 09 02.0 h = 53 km MAG=5.4
	e	C	36 20	D = 76.76 Az = 0.1 (USCGS)
	e	C	41 15	PV:1.2s 87.4nm MPV=5.8
	e	C	42 40	LmH:18s 2.0/um MLH=5.9
	LmH	B	20 03.0	LmV:16s 1.5/um MLV=5.4
	LmV	B	05.6	
13.	ePKHKP	A	05 17 26	South of Fiji Islands 23.74 S 179.93 E
	ePKP2	A	17 36	H = 04 58 31.0 h = 540 km MAG=5.0
	e	A	17 48	D = 151.65 Az = 344.2 (USCGS)
	epPKP	A	19 35	
	e	A	20 12	
13.	e	A	08 10 19	Near Coast of Northern Chile
	e	C	17 55	27.79 S 71.65 W
	LmH	B	59.5	H = 07 51 29.5 h = normal MAG=5.8 (USCGS)
	LmV	B	09 01.5	D = 106.8
				LmH:16s 0.8/um MLH=5.4
				LmV:16s 1.0/um MLV=5.5
14.	eP	A	06 50 35	Southern Italy 40.69 N 15.70 E
				H = 06 48 04.4 h = 15 km MAG=4.7
				D = 10.36 Az = 345.4 (USCGS)

Day	Phase		h m s	Remarks
14.	ePKIKP	A	07 57 04.5	Tonga Islands 19.67 S 175.85 W
	-iPKHKP	A	57 09	H = 07 37 45.7 h = 209 km MAG=5.5
	e	A	57 19	D = 148.53 Az = 350.9 (USCGS)
	-ipPKP	A	58 01.5	PKIKPV:2.0s 111.0nm
	esPKP	B	58 26	PKHKPV:1.8s 453.0nm
	eSS	C	08 19 23	
	esSS	C	20 40	
15.	eP1	A	02 58 53	Turkey 37.77 N 29.81 E
	eP2	A	58 56	H = 02 54 37.4 h = 6 km MAG=4.6
	LmH	B	03 06.5	D = 18.26 Az = 320.6 (USCGS)
	LmV	B	07.8	P2V:2.0s 51.2nm MPV=4.3
15.	LmH	B	04 22.9	Probably Off East Coast of Honshu, Japan
	LmV	B	30.2	(USCGS)
15.	eP	A	24 06 22	Southern Iran 26.77 N 53.55 E
	e	A	06 24	H = 23 58 52.1 h = 42 km MAG=4.9
				D = 39.75 Az = 318.3 (USCGS)
16.	eP	A	08 01 45	Central Alaska 64.07 N 147.51 W
	e	A	02 06	H = 07 51 11.0 h = 34 km MAG=4.4
				D = 64.47 Az = 14.6 (USCGS)
				PV:1.4s 13.9nm MPV=5.0
16.	eP	A	10 42 39	El Salvador 13.35 N 89.65 W
	LmH	B	11 26.9	H = 10 30 01.7 h = 79 km MAG=4.9
	LmV	B	27.0	D = 86.80 Az = 38.7 (USCGS)
				PV:1.2s 18.3nm MPV=5.1
				LmH:16s 0.5/um
				LmV:18s 1.1/um
16.	eP	A	20 08 15.5	Central Alaska 64.07 N 147.53 W
				H = 19 57 40.3 h = 30 km MAG=4.4
				D = 64.47 Az = 14.5 (USCGS)
16.	LmH	C	21 21.0	Probably East New Guinea Region (USCGS)
	LmV	C	23.3	LmH(C):20s 0.3/um

Day	Phase		h m s	Remarks
17.	iPKP2	A	01 03 06.5	Kermadec Islands 28.93 S 179.09 W
				H = 00 43 19.6 h = 344 km MAG=4.9
				D = 156.85 Az = 342.5 (USCGS)
				PKP2V:1.2s 40.6nm
17.	LmH	C	13 35.5	Probably Kurile Islands (USCGS)
				LmH(C):20s 0.6/um
17.	eiPKP	A	13 45 11	Tonga Islands 17.38 S 173.59 W
	+iX	A	45 27.5	H = 13 25 31.1 h = normal MAG=4.8
	e	A	45 40	D = 146.55 Az = 354.0 (USCGS)
				PKPV:1.4s 39.6nm
				XV:1.2s 76.9nm
17.	eP	A	18 08 48	Kurile Islands 43.24 N 146.68 E
	epP	A	09 02	H = 17 56 51.1 h = 60 km MAG=4.3
				D = 78.64 Az = 332.7 (USCGS)
				pPV:1.6s 22.0nm
17.	ePKP	A	18 14 37	New Hebrides Islands 20.80 S 168.96 E
	e	A	14 57.5	H = 17 55 01.1 h = normal MAG=4.9
				D = 145.28 Az = 334.5 (USCGS)
17.	eiP	A	21 36 51.5	Southern Sinkiang Prov. China
				39.89 N 76.92 E
				H = 21 28 34.7 h = 70 km
				D = 45.79 Az = 306.2 (USCGS)
				PV:0.8s 13.5nm MPV=4.9
17.	eP	A	22 40 37	Kurile Islands Region 43.95 N 148.28 E
	LmH	C	23 13.0	H = 22 28 39.2 h = 51 km MAG=4.6
				D = 78.53 Az = 333.5 (USCGS)
18.	ePn	A	07 34 23	Jugoslavia 45.1 N 18.0 E
	e	A	36 18	H = 07 32 56 (BCIS)
	e	A	36 22	D = 7.0
	e	A	36 45	

Day	Phase		h m s	Remarks
18.	LmV	C	14 44.5	Probably Near Coast of Chiapas, Mexico
	LmH	C	46.5	(USCGS)
				LmV:18s 0.3/um
				LmH:18s 0.5/um
18.	eiPKHKP	A	21 05 33	Tonga Islands 22.32 S 175.32 W
	ePKP2	A	05 44	H = 20 45 41.6 h = normal MAG=4.9
	e	A	05 51.5	D = 151.21 Az = 350.8 (USCGS)
	LmH	C	22 23.0	PKP2V:1.2s 32.5nm
19.	-eiP	A	08 56 01	Sea of Japan 41.84 N 133.70 E
	e	A	56 46.5	H = 08 45 03.3 h = 423 km MAG=5.0
	epP	A	57 40	D = 74.95 Az = 326.0 (USCGS)
				PV:1.3s 50.2nm MPV=5.0
19.	eP	A	13 24 29	Northern Sumatra 0.94 N 97.79 E
				H = 13 11 45.8 h = 33 km MAG=5.3
				D = 86.85 Az = 320.5 (USCGS)
				PV:1.3s 17.5nm MPV=5.1
20.	ePKP2	A	17 42 32	South Pacific Cordillera
				54.38 S 133.92 W
				H = 17 21 59.3 h = normal MAG=5.0 (USCGS
				D = 158.9
20.	eP1	A	21 12 28	Kurile Islands 43.31 N 147.91 E
	eP2	A	12 31.5	H = 21 00 29.0 h = 53 km MAG=5.1
	epP	A	12 40	D = 78.98 Az = 333.4 (USCGS)
	e	A	12 42.5	P1V:1.2s 22.4nm MP1V=5.1
	LmH	C	44.6	P2V:1.0s 21.6nm MP2V=5.1
	LmV	C	52.2	pP2V:1.1s
				LmH(C):23s 1.9/um MLH=5.4
				LmV(C):16s 1.7/um MLV=5.5
20.	eiP1	A	23 57 36	Kodiak Island Region 56.62 N 153.16 W
	iP2	A	57 40	H = 23 46 11.6 h = normal MAG=5.1
	iP3	A	57 45	D = 72.37 Az = 10.1 (USCGS)
	iP4	A	57 51.5	P1V:1.2s 34.6nm MP1V=5.4
	eS	C	24 07 00	P2V:1.0s 62.1nm MP2V=5.7

Day	Phase		h m s	Remarks
cont. 20.	eSS	C	24 12 00	P3V:1.2s 65.0nm MP3V=5.6
	LmH	C	25.7	P4V:1.1s 96.7nm MP4V=5.8
	LmV	C	25.7	LmH(C):26s 1.9/um MLH=5.2
				LmV(C):26s 2.0/um MLV=5.3
21.	+eP	A	00 25 39	Kodiak Island 56.33 N 153.39 W
	e	A	25 46	H = 00 14 12.6 h = normal MAG=5.1
	e	A	25 49	D = 72.67 Az = 9.9 (USCGS)
				PV:1.0s 29.5nm MPV=5.4
21.	+eP	A	00 41 19	Kodiak Island Region 56.37 N 153.60 W
	e	A	41 29.5	H = 00 29 50.1 h = 12 km MAG=5.2
				D = 72.65 Az = 9.8 (USCGS)
				PV:1.0s 25.6nm MPV=5.3
21.	-iP1	AB	02 18 05	Off W.Coast of Northern Sumatra
	+eiP2	A	18 08	2.07 N 94.64 E
	+iP3	AB	18 12.3	H = 02 05 35.3 h = 20 km MAG=6.4
	P3m	A	18 16	D = 83.98 Az = 320.5 (USCGS)
	iP4	B	18 18	P1V(A):1.3s 91.7nm MP1V=5.9
	P4m	B	18 24	P2V(A):1.6s 630.0nm MP2V=6.6
	eiS	B	28 25	P3mV(A):1.9s 2650.0nm MP3mV=7.2
	ePS	B	29 20	P4mV(B):12s 29.0/um MP4mV=7.4
	eSS	B	34 12	LmH:20s 292.0/um MLH=7.6
	eSSS	B	37 40	LmV:17s 159.0/um MLV=7.5
	LmH	B	58.8	
	LmV	B	03 04.8	
21.	eP	A	02 41 57	Off W.Coast of Northern Sumatra
				1.69 N 94.52 E
				H = 02 29 27.0 h = normal (USCGS)
				D = 84.2
				PV:1.4s 23.3nm MPV=5.2
21.	eP	A	02 44 13.5	Kodiak Island Region 56.51 N 153.09 W
				H = 02 32 49.2 h = 37 km MAG=5.1
				D = 72.46 Az = 10.1 (USCGS)
				PV:1.0s 21.6nm MPV=5.2

Day	Phase		h m s	Remarks
21.	eP1	A	08 24 30	Kurile Islands 43.74 N 147.85 E
	eP2	A	24 33	H = 08 12 31.6 h = 63 km MAG=4.7
	e	A	24 43	D = 78.58 Az = 333.3 (USCGS)
	LmH	B	09 02.0	P2V:1.6s 24.7nm MP2V=5.0
	LmV	B	04.3	LmH:17.5s 2.4/um MLH=5.6
				LmV:16s 2.7/um MLV=5.7
21.	eP	A	09 09 17	Kurile Islands 43.36 N 147.86 E
	e	A	09 28.5	H = 08 57 15.2 h = 40 km MAG=4.7
	LmV	B	49.1	D = 78.92 Az = 333.3 (USCGS)
	LmH	B	49.2	LmV:15s 0.7/um MLV=5.2
				LmH:14s 1.0/um MLH=5.3
21.	eP1	A	11 32 40	Kurile Islands 43.55 N 147.52 E
	eP2	A	32 52	H = 11 20 39.3 h = normal MAG=4.5
				D = 78.64 Az = 333.1 (USCGS)
				P2V:1.1s 16.1nm MP2V=5.0
21.	eP	A	15 04 18	Southern Nevada 37.01 N 116.01 W
				H = 14 52 00.0 h = 0 km MAG=5.0
				D = 81.31 Az = 30.7 (USCGS)
				Nevada test site "Piccalilly"
				37°01'52" N 116°00'07" W (USAEC)
21.	eP	A	17 33 29	Kurile Islands 43.98 N 147.71 E
				H = 17 21 31.7 h = 40 km MAG=4.2
				D = 78.32 Az = 333.2 (USCGS)
				PV:1.0s 13.8nm MPV=5.0
22.	ePKP2	A	05 20 56.5	Kermadec Islands 28.21 S 177.17 W
				H = 05 00 39.7 h = 65 km MAG=5.2
				D = 156.62 Az = 345.8 (USCGS)
				PKP2V:0.5s 15.4nm
22.	eP	A	06 31 03.5	Kurile Islands (UPP)
				PV:1.5s 15.1nm
22.	eP	A	06 51 12	Kurile Islands (UPP)

Day	Phase		h m s	Remarks
22.	e	A	07 51 28	France 44.3 N 6.8 E
	ePg	A	51 33	H = 07 49 15 (BCIS)
	e	A	53 06	D = 7.2
	e	A	53 09	
	eSg	A	53 19	
22.	eP	A	11 35 10	Kurile Islands 47.10 N 154.20 E
	e	A	35 15	H = 11 23 18.4 h = 60 km MAG=4.6
	e	A	35 20	D = 77.43 Az = 336.7 (USCGS)
22.	+ePKHKP	A	19 47 37.5	Tonga Islands Region 22.33 S 174.90 W
	ei	A	47 40	H = 19 27 45.9 h = normal MAG=5.3
	ePKP2	A	47 49.5	D = 151.28 Az = 351.4 (USCGS)
	e	A	47 56.5	PKHKPV:1.6s 49.5nm
	LmH	C	20 56.5	LmH(C):18s 0.7/um MLH=5.4
	LmV	C	21 03.3	LmV(C):18s 0.5/um
22.	+eiP1	AB	23 20 44	Near East Coast of Kamchatka
	+iP2	A	20 44.5	57.76 N 163.54 E
	P2m	A	20 46.5	H = 23 09 37.2 h = normal MAG=6.3
	+iP3	A	20 48.5	D = 69.52 Az = 341.3 (USCGS)
	P3m	A	21 06	P1V(B):14s 36.3/um MP1V=7.4
	ePP	B	23 20	P2mV(A):1.5s 487.0nm MP2mV=6.5
	eiS	B	29 55	P3mV(A):2.1s 2120.0nm MP3mV=7.0
	eSS	B	34 18	LmV:16s 187.0/um MLV=7.5
	ePKPPKP	A	48 51	LmH:14s 242.0/um MLH=7.6
23.	eP	A	00 59 51	Near East Coast of Kamchatka
				57.30 N 163.11 E
				H = 00 48 40.3 h = 33 km MAG=4.8
				D = 69.88 Az = 341.1 (USCGS)
23.	ePKIKP	A	04 29 06.5	Kermadec Islands 27.01 S 176.35 W
	ePKHKP	A	29 16.5	H = 04 09 17.4 h = 50 km MAG=4.9 (USCGS)
	e	A	29 39	D = 155.6

Day	Phase		h m s	Remarks
23.	eP	A	07 20 45.5	Kurile Islands 43.52 N 147.72 E
	epP	A	20 57.5	H = 07 08 45.4 h = 45 km MAG=4.5
	LmH	C	53.0	D = 78.74 Az = 333.2 (USCGS)
	LmV	C	08 00.4	LmH(C):21s 0.8/um MLH=5.0
				LmV(C):16s 0.7/um MLV=5.2
23.	eP1	A	11 47 19.5	Iran-USSR Border Region
	+iP2	A	47 22.5	38.32 N 55.46 E
	LmH	C	12 03.3	H = 11 40 45.1 h = 38 km MAG=4.9
				D = 33.14 Az = 306.2 (USCGS)
				P2V:1.3s 52.4nm MPV=5.3
23.	eP	A	18 56 42	Kamchatka 58.17 N 163.31 E
	LmH	C	19 30.0	H = 18 45 36.6 h = normal MAG=4.5 (USCGS)
				D = 68.8
				PV:1.3s 13.1nm MPV=5.0
24.	LmH	C	02 40.0	Probably Tibet (USCGS)
				LmH(C):23s 0.2/um
24.	eSg	A	10 57 43	Pyrenees 43.4 N 0.6 W
				H = 10 51 52 (BCIS)
				D = 11.0
24.	eP	A	11 36 09.5	Kodiak Island Region 56.14 N 153.38 W
				H = 11 24 39.1 h = 2 km MAG=4.4
				D = 72.85 Az = 9.9 (USCGS)
24.	eP	A	15 50 56	Iran-USSR Border Region
				38.37 N 55.21 E
				H = 15 44 23.2 h = 49 km MAG=4.8
				D = 32.95 Az = 306.2 (USCGS)
24.	-iP	A	17 31 18.5	Afghanistan-USSR Border Region
	ipP	A	31 46	37.18 N 71.67 E
	isP	B	31 58.5	H = 17 23 20.2 h = 123 km MAG=5.6
	ePP	C	33 06	D = 44.13 Az = 307.6 (USCGS)
	epPP	C	33 26	PV:1.6s 385.0nm MPV=5.9
	iScP	C	36 42	

Day	Phase		h m s	Remarks
cont. 24.	eS	C	17 37 44	
	esS	C	38 30	
	eSS	C	40 48	
24.	+iP	A	21 21 40	Davis Strait 60.56 N 58.76 W
	LmH	B	40.0	H = 21 14 13.7 h = normal MAG=5.0
	LmV	B	40.0	D = 39.09 Az = 72.0 (USCGS)
				PV:1.1s 44.3nm MPV=5.0
24.	eiPKIKP	A	21 49 51.4	Fiji Islands Region 17.99 S 178.40 W
	iPKHKP	A	49 54	H = 21 31 17.6 h = 593 km MAG=5.4
	iPKP2	A	49 56.5	D = 146.45 Az = 348.4 (USCGS)
	epPKIKP	B	52 08	PKIKPV:1.3s 104.5nm
				PKHKPV:1.3s 297.0nm
24.	+iP	A	23 03 17.5	Kodiak Island Region 56.20 N 153.56 W
	i	A	03 26	H = 22 51 50.1 h = normal MAG=5.5
	i	A	03 30	D = 72.82 Az = 9.8 (USCGS)
	i	A	03 34.5	PV:1.8s 81.0nm MPV=5.6
	eS	C	12 38	LmH:18s 3.7/um MLH=5.7
	i	C	12 45	LmV:19s 4.7/um MLV=5.8
	eSS	C	17 38	
	LmH	B	41.1	
	LmV	B	41.1	
25.	iPKIKP	A	01 51 29	Fiji Islands 18.03 S 178.37 W
	iPKHKP	A	51 30.5	H = 01 32 54.0 h = 587 km MAG=4.6
				D = 146.46 Az = 348.5 (USCGS)
				PKIKPV:0.6s 23.0nm
25.	ePKP2	A	05 08 11	Kermadec Islands 30.46 S 177.87 W
	LmH	C	06 14.0	H = 04 47 41.4 h = 30 km MAG=5.0 (USCGS)
	LmV	C	14.0	D = 158.7
				PKP2V:1.5s 35.2nm
				LmH(C):24s 0.4/um MLH=5.1
				LmV(C):24s 0.3/um

Day	Phase		h m s	Remarks
25.	eP	A	09 22 43.5	Iran-USSR Border Region
				38.26 N 55.50 E
				H = 09 16 07.3 h = normal MAG=4.8
				D = 33.20 Az = 306.3 (USCGS)
25.	eSn	A	16 48 36	Yougoslavia 44.7 N 17.1 E
	eSg	A	49 18.5	H = 16 45 36 (BCIS)
				D = 7.0
25.	eP	A	19 45 00.5	Kurile Islands 43.45 N 147.75 E
	LmH	C	20 17.4	H = 19 32 59.2 h = normal MAG=4.8
	LmV	C	24.3	D = 78.81 Az = 333.3 (USCGS)
				PV:1.3s 19.7nm MPV=5.0
				LmH(C):21s 0.5/um MLH=4.8
				LmV(C):18s 0.3/um MLV=4.7
26.	ePKP	A	13 03 33	New Hebrides Islands 16.79 S 167.69 E
	eX	A	03 37	H = 12 44 04.7 h = 33 km MAG=5.4
	eSS	C	25 15	D = 141.15 Az = 335.7 (USCGS)
	LmV	B	14 22.4	XV:1.5s 25.1nm
	LmH	B	22.5	LmV:19s 2.2/um
				LmH:20s 2.2/um MLH=5.9
26.	ePS	C	18 55 10	South Sandwich Islands Region
	ePPS	C	56 30	58.84 S 24.71 W
	eSS	C	19 01 30	H = 18 26 08.9 h = normal MAG=5.4 (USCGS)
	LmH	B	28.0	D = 113.1
	LmV	B	28.0	LmH:20s 1.9/um MLH=5.7
				LmV:20s 2.8/um MLV=5.9
26.	e	A	22 50 23	Mascarene Islands Region
				17.92 S 65.37 E
				H = 22 37 56.0 h = 27 km MAG=5.0
				D = 82.96 Az = 328.8 (USCGS)
27.	+iPKP	A	03 27 02.4	New Hebrides Islands 19.62 S 169.30 E
	e	A	27 15	H = 03 07 42.4 h = 135 km MAG=5.0
	epPKP	A	27 37.5	D = 144.35 Az = 335.5 (USCGS)
				PKPV:1.0s 55.1nm

Day	Phase		h m s	Remarks
27.	eP	A	15 31 08	Kamchatka 58.03 N 163.08 E
	e	A	31 12.5	H = 15 20 04.7 h = normal MAG=4.4
	LmH	C	16 04.0	D = 69.19 Az = 341.0 (USCGS)
29.	eP	A	16 23 20	Kurile Islands Region 46.63 N 154.10 E
	epP	A	23 32	H = 16 11 25.9 h = 53 km MAG=4.7
				D = 77.83 Az = 336.6 (USCGS)
29.	e	A	16 55 50.5	Shikoku, Japan 33.35 N 132.32 E
				H = 16 43 15.7 h = 48 km MAG=5.1
				D = 81.38 Az = 326.4 (USCGS)
29.	eiP	A	20 52 33	Fiji Islands Region 16.45 S 176.59 W
				H = 20 33 43.3 h = 424 km MAG=4.6
				D = 145.26 Az = 350.8 (USCGS)
				PV:1.1s 14.1nm
30.	+iP	A	03 40 49.4	Eastern Kazakh SSR 49.92 N 79.00 E
	ePn	A	42 21	H = 03 32 57.2 h = 0 km MAG=6.0
	i	A	42 28	D = 41.70 Az = 297.9 (USCGS)
	ei	B	55 02	PV:1.0s 295.0nm MPV=6.0
	eS	B	55 12	LmV:8s 0.6/um MLV=4.9
	e	B	55 45	LmH:8s 0.6/um MLH=4.9
	LmV	B	04 00.1	Probably underground explosion
	LmH	B	00.2	

Day	Phase		h m s	Remarks
1.	-iPKHKP	A	02 35 20	Fiji Islands 18.37 S 178.02 W
	ePKP2	A	35 23	H = 02 16 42.7 h = 600 km MAG=4.9
				D = 146.89 Az = 348.7 (USCGS)
				PKHKPV:1.0s 35.4nm
1.	eP	A	11 36 41	North Atlantic Ridge 12.11 N 43.80 W
				H = 11 26 42.2 h = normal MAG=4.7
				D = 59.06 Az = 37.7 (USCGS)
1.	eP	A	13 12 09	Southern Iran 26.49 N 53.52 E
				H = 13 04 34.1 h = normal MAG=4.7
				D = 39.93 Az = 318.5 (USCGS)
1.	ePKP	A	14 30 54	Easter Island Cordillera 49.77 S 115.11 W
				H = 14 11 14.6 h = normal MAG=4.8
				D = 146.51 Az = 67.6 (USCGS)
1.	ePKP	A	19 30 11	Easter Island Cordillera 49.70 S 114.03 W
				H = 19 10 33.5 h = normal MAG=4.5
				D = 145.83 Az = 67.1 (USCGS)
				PKPV:1.3s 8.7nm
1.	eiP	A	20 09 44.5	Kodiak Island 56.45 N 153.56 W
				H = 19 58 18.2 h = normal MAG=4.7
				D = 72.57 Az = 9.8 (USCGS)
				PV:1.1s 22.2nm MPV=5.2
1.	eiP	A	20 22 16.5	Crete 34.99 N 24.27 E
	LmH	B	29.0	H = 20 18 06.3 h = 53 km MAG=5.0
				D = 18.15 Az = 333.4 (USCGS)
				PV:0.8s 28.9nm MPV=4.5
1.	eP	A	20 42 33	Kodiak Island 56.48 N 153.23 W
				H = 20 31 08.8 h = 39 km MAG=4.6
				D = 72.51 Az = 10.0 (USCGS)

Day	Phase		h m s	Remarks
1.	ePKHKP	A	20 48 13	Tonga Islands 20.14 S 175.01 W
				H = 20 28 27.2 h = 38 km MAG=4.9
				D = 149.11 Az = 351.8 (USCGS)
1.	eP1	A	22 24 39	Leeward Islands 16.68 N 60.75 W
	eP2	C	24 42	H = 22 13 53.4 h = 41 km MAG=5.6
	eiP3	A	24 54	D = 66.12 Az = 41.6 (USCGS)
	eS	C	33 28	P1V:0.7s 7.7nm MP1V=5.0
	eSSS	C	41 00	P3V:2.0s 141.0nm MP3V=5.8
	LmH	B	48.3	LmH:20s 4.9/um MLH =5.7
	LmV	B	48.4	LmV:20s 4.4/um MLV =5.7
2.	e	A	04 23 49	Near East Coast of Kamchatka
	LmH	B	57.0	57.43 N 163.44 E
				H = 04 12 34.6 h = normal MAG=5.1
				D = 69.82 Az = 341.3 (USCGS)
2.	+eP	A	18 10 35	Mindanao, Philippine Islands
	eSKS	C	20 58	8.23 N 126.25 E
	iS	C	21 55	H = 17 57 04.3 h = 102 km MAG=5.7
	ePPS	C	24 00	D = 98.80 Az = 324.2 (USCGS)
	ePKKP	A	27 04	PV:1.3s 39.3nm MPV=5.9
	eSS	C	28.7	LmH:18s 2.6/um
	ePKPPKP	A	35 17	LmV:17s 2.1/um
	LmH	B	54.6	
	LmV	B	19 01.1	
2.	eP	A	19 13 49	Off East Coast of Honshu, Japan
				40.21 N 143.92 E
				H = 19 01 39.4 h = 37 km MAG=4.5
				D = 80.35 Az = 331.5 (USCGS)
				PV:1.4s 16.3nm
3.	e	A	02 40 37	Near Coast of West Pakistan
	e	A	40 43	24.66 N 65.37 E
	e	A	40 52	H = 02 31 47.5 h = normal MAG=4.9
	eS	C	47 38	D = 48.51 Az = 316.7 (USCGS)
	LmH	C	03 05.0	

Day	Phase		h m s	Remarks
3.	ePKP	A	05 22 38	Loyalty Islands 20.60 S 168.77 E
	e	A	22 59	H = 05 03 01.9 h = 30 km MAG=4.4
				D = 145.02 Az = 334.5 (USCGS)
3.	+iP	A	12 46 14.5	Near East Coast of Kamchatka
	epP	A	46 24.5	54.66 N 161.43 E
	e	A	46 29.5	H = 12 34 52.4 h = 35 km MAG=4.9
				D = 72.07 Az = 340.3 (USCGS)
				PV:1.0s 43.3nm MPV=5.5
4.	eP	A	00 46 41	Andaman Islands 12.42 N 93.73 E
				H = 00 34 58.6 h = normal MAG=5.3
				D = 75.5 (USCGS)
				PV:0.8s 15.4nm MPV=5.2
4.	-eP1	A	09 02 32	Off East Coast of Honshu, Japan
	+iP2	A	02 32.9	40.71 N 144.65 E
	-iP3	A	02 47.5	H = 08 50 21.7 h = 20 km MAG=5.7
	eS	C	12 32	D = 80.17 Az = 331.8 (USCGS)
	LmH	B	38.9	P2V:1.4s 125.5nm MP2V=5.7
	LmV	B	43.9	P3V:1.7s 139.2nm
				LmH:15s 1.9/um MLH=5.6
				LmV:16s 1.6/um MLV=5.5
4.	e	A	18 19 03.5	West of Gibraltar 36.23 N 8.52 W
	LmH	B	26.3	H = 18 14 23.1 h = normal MAG=4.3
	LmV	B	28.3	D = 20.44 Az = 38.9 (USCGS)
				PV:1.4s 27.9nm MPV=4.3
				LmH:12s 1.3/um MLH=4.5
				LmV:9s 1.2/um MLV=4.7
5.	eP	A	11 47 29	Arabian Sea 14.46 N 53.26 E
				H = 11 38 40.3 h = normal MAG=4.8
				D = 49.29 Az = 326.1 (USCGS)

Day	Phase		h m s	Remarks
5.	eP	A	17 12 18	Southern Nevada 37.18 N 116.21 W
				H = 17 00 00.0 h = 0 km MAG=5.0
				D = 81.25 Az = 30.6 (USCGS)
				37°10'47.9" N 116°12'39.1" W
				W. Nevada Test site "Diesel Train" MAG=5.1
				(USAEC)
5.	-iP	A	18 54 47	Nepal-India Border Region
				29.66 N 80.77 E
				H = 18 45 17.4 h = normal MAG=4.9
				D = 54.77 Az = 313.2 (USCGS)
				PV:1.0s 17.7nm MPV=5.1
6.	ePKP	A	03 13 55.5	Tonga Islands 15.31 S 173.73 W
				H = 02 54 39.7 h = 206 km MAG=4.9
				D = 144.50 Az = 354.1 (USCGS)
6.	eP	A	04 41 14.5	Tadzhik SSR 37.95 N 72.98 E
				H = 04 33 14.8 h = 131 km MAG=4.9
				D = 44.48 Az = 307.1 (USCGS)
6.	+iP	A	07 09 07.2	Western Kazakh SSR 43.83 N 54.78 E
				H = 07 02 57.4 h = 0 km MAG=5.8
				D = 29.75 Az = 298.6 (USCGS)
				Underground explosion (UPP)
6.	LmH	C	15 55.0	Probably South Sandwich Islands
	LmV	C	55.0	Region (USCGS)
				LmH(C):21s 0.5/um
				LmV(C):21s 0.4/um
7.	ePKP	A	04 14 55.5	New Hebrides Islands 18.09 S 168.18 E
				H = 03 55 31.1 h = 49 km MAG=5.2
				D = 142.52 Az = 335.4 (USCGS)
				PV:1.2s 22.4nm
7.	e	A	21 59 53	Mindanao, Philippine Is.
	LmH	C	22 39.0	9.61 N 125.65 E

Day	Phase		h m s	Remarks
cont.				
7.	LmV	C	22 40.0	H = 21 46 15.1 h = 51 km MAG=5.2
				D = 97.35 Az = 324.1 (USCGS)
				PV:1.5s 12.6nm MPV=5.4
				LmH(C):27.5s 2.2/um MLH=5.4
				LmV(C):32s 0.6/um MLV=4.9
8.	eP	A	05 29 40.5	Near East Coast of Kamchatka
				57.24 N 162.30 E
				H = 05 18 34.8 h = 54 km MAG=4.6
				D = 69.79 Az = 340.6 (USCGS)
9.	eP	A	19 06 00	Kurile Islands 47.55 N 156.13 E
	LmH	C	36.7	H = 18 54 06.0 h = normal MAG=4.8
				D = 77.52 Az = 337.8 (USCGS)
				LmH(C):26s 0.9/um MLH=5.0
9.	eP	A	22 11 11.5	Kurile Islands 43.99 N 148.37 E
	epP	A	11 23.5	H = 21 59 11.9 h = normal MAG=5.1 (USCGS)
				D = 78.5
				PV:1.0s 13.8nm MPV=5.0
				pPV:1.2s 16.2nm
10.	ePKHKP	A	20 13 20.5	New Hebrides Islands 14.81 S 163.97 E
	ePKIKP	A	13 26	H = 19 53 58.2 h = 21 km MAG=5.4
	ePP	C	16 24	D = 139.07 Az = 336.1 (USCGS)
	ePS	C	26 42	PKHKPV:1.3s 13.1nm
	ePPS	C	28 42	LmH:20s 7.4/um MLH=6.4
	e	C	30 00	LmV:21s 5.8/um
	eSS	C	34 38	
	ePSPS	C	35 40	
	eSSS	C	40 00	
	LmH	B	21 16.9	
	LmV	B	17.0	
10.	e	A	24 04 47	Probably Solomon Islands (USCGS)

Day	Phase		h m s	Remarks
11.	ePKP	A	10 52 48	Easter Island Cordillera
	LmH	C	11 50.5	50.02 S 114.89 W
	LmV	C	50.5	H = 10 33 07.6 h = normal MAG=4.7
				D = 146.46 Az = 67.9 (USCGS)
				PKPV:1.6s 27.5nm
				LmH:20s 0.6/um MLH=5.3
				LmV:20s 0.7/um
12.	+eP	A	01 25 24.5	Off East Coast of Honshu, Japan
	+eipP	A	25 34.8	40.13 N 143.81 E
	e(sP)	A	25 38.5	H = 01 13 11.4 h = 11 km MAG=5.0
	e	A	25 48	D = 80.38 Az = 331.4 (USCGS)
	e	A	25 56	PV:1.6s 41.2nm MPV=5.2
	ePP	A	28 23	LmH:17.5s 2.4/um MLH=5.6
	LmH	B	02 00.3	LmV:18s 1.5/um MLV=5.4
	LmV	B	02.0	
12.	eP	A	04 13 34.5	North Atlantic Ridge 52.84 N 31.90 W
				H = 04 07 57.3 h = normal MAG=4.6
				D = 26.73 Az = 77.0 (USCGS)
13.	eP	A	03 16 48	Central Mid-Atlantic Ridge
	eS	C	25 00	0.97 N 27.95 W
				H = 03 06 40.0 h = normal MAG=4.8
				D = 59.75 Az = 28.0 (USCGS)
13.	+iP	A	03 30 02	Central Mid-Atlantic Ridge
	eS	C	38 16	1.02 N 28.03 W
	LmH	B	52.4	H = 03 19 58.3 h = normal MAG=5.6
	LmV	B	53.3	D = 59.75 Az = 28.0 (USCGS)
				PV:1.5s 101.0nm MPV=5.6
				LmH:20s 1.4/um MLH=5.1
				LmV:16s 1.1/um MLV=5.2
13.	eP	A	03 52 21	Near S. Coast of Honshu, Japan
				33.99 N 136.98 E
				H = 03 40 34.8 h = 358 km MAG=5.1
				D = 82.94 Az = 328.5 (USCGS)
				PV:1.2s 36.6nm MPV=5.1

Day	Phase		h m s	Remarks
13.	eP	A	13 40 34	Kurile Islands 46.47 N 152.59 E
				H = 13 28 39.5 h = normal MAG=4.8 (USCGS)
				D = 77.4
13.	eP	A	21 49 49.5	Ryukyu Islands 23.87 N 126.51 E
	epP	A	49 54	H = 21 37 06.0 h = 20 km MAG=5.4
	e	A	50 06	D = 86.28 Az = 324.6 (USCGS)
	e	A	50 17.5	LmH:16s 1.8/um MLH=5.6
	LmH	B	22 33.6	LmV:15.5s 2.1/um MLV=5.7
	LmV	B	33.6	
13.	eP	A	22 20 47.5	Talaud Islands 4.23 N 126.31 E
				H = 22 06 55.3 h = 42 km MAG=5.6
				D = 102.1 (USCGS)
				PV:1.3s 10.9nm MPV=5.3
14.	eP	A	02 56 10	Molucca Passage 2.03 N 126.93 E
	e	A	56 37	H = 02 42 09.4 h = 42 km MAG=6.0
	ePP	C	03 00 33	D = 104.18 Az = 323.6 (USCGS)
	iSKS	C	06 44	LmH:18.5s 7.8/um MLH=6.3
	iS	C	07 55	LmV:16s 4.0/um MLV=6.1
	e	A	09 23	
	ePS	C	09 45	
	eiPPS	C	10 40	
	eSS	C	15 05	
	LmH	B	41.1	
	LmV	B	49.3	
14.	eP	A	16 15 47	Hokkaido, Japan 43.58 N 145.87 E
				H = 16 03 53.9 h = 68 km MAG=4.6
				D = 78.06 Az = 332.2 (USCGS)
				PV:1.4s 14.0nm
14.	+iP	AB	18 46 55.5	Carlsberg Ridge 8.19 N 58.46 E
	-iS	B	54 48	H = 18 37 09.5 h = normal MAG=6.0
	i	C	54 50	D = 57.30 Az = 326.5 (USCGS)
	iScS	C	56 44	PV(A):1.9s 379.0nm MPV=6.1
	iSS	C	58 50	PV(B):4.0s 1.58/um MPV=6.4

Day	Phase		h m s	Remarks
cont. 14.	LmH	B	19 21.3	SH(B):8.5s 3.8/um MSH=6.3
	LmV	B	27.7	LmH:17s 1.5/um MLH=5.2
				LmV:15s 2.0/um MLV=5.4
15.	eP	A	00 26 18	Andreanof Islands, Aleutian Is.
				51.44 N 179.47 W
				H = 00 14 23.2 h = 35 km MAG=4.6
				D = 77.86 Az = 352.8 (USCGS)
16.	e(P)	A	11 50 35	Greece-Albania Border Region
				39.34 N 20.57 E
				H = 11 47 31.6 h = 64 km MAG=4.5
				D = 12.95 Az = 333.8 (USCGS)
				PV:0.7s 11.5nm
16.	+iPn	A	18 21 48.7	Explosion, D ca. 3.6
	e	A	22 10	PnV:0.6s 21.1nm
	eSn	A	22 30	
	eiSg	A	22 48	
17.	+eP	A	02 42 21.5	Northern Sumatra 2.92 N 98.63 E
	e	A	42 24.5	H = 02 29 42.0 h = 52 km MAG=4.9
				D = 85.86 Az = 320.4 (USCGS)
17.	ePKP	A	07 49 36	New Hebrides Islands 15.35 S 167.57 E
				H = 07 30 22.4 h = 134 km MAG=4.9
				D = 139.80 Az = 336.3 (USCGS)
				PKPV:1.6s 33.0nm
17.	eP	A	08 12 18	Hainan Island 18.03 N 110.64 E
				H = 08 00 01.0 h = normal MAG=4.9
				D = 81.83 Az = 320.6 (USCGS)
17.	eP	A	15 12 18	Southern Nevada 37.08 N 116.00 W
				H = 15 00 00.0 h = 0 km MAG=5.5
				D = 81.25 Az = 30.7 (USCGS)
				37°05'01.6" N 116°00'05.6" W
				Nevada Test Site "Grape A" (USAEC)
				PV:1.2s 28.5nm MPV=5.2

Day	Phase		h m s	Remarks
17.	ePKHKP	A	21 01 26.5	Kermadec Islands Region 30.90 S 179.91 W
	ePKP2	A	02 00	H = 20 42 13.9 h = 407 km MAG=4.4 (USCGS)
				D = 158.4
				PKP2V:1.3s 30.6nm
18.	ePKHKP	A	06 29 55	Kermadec Islands 27.05 S 176.31 W
	LmH	B	07 51.0	H = 06 09 56.2 h = 49 km MAG=4.9
	LmV	B	54.0	D = 155.67 Az = 347.7 (USCGS)
				LmH:16s 0.5/um MLH=5.3
				LmV:18s 0.7/um
18.	-eP1	A	13 43 08	Sakhalin Island 46.3 N 142.50 E
	eiP2	A	43 09.5	H = 13 32 05.2 h = 344 km MAG=5.9
	-i	A	43 13.2	D = 74.53 Az = 330.0 (USCGS)
	esP	C	44 57	P1V:1.0s 35.4nm MP1V=5.1
	ePPP	C	47 42	P2V:1.4s 260.0nm MP2V=5.8
	eS	C	52 12	
	i	B	52 18	
	eiSKS	C	52 44	
	ePS	C	53 36	
	esS	C	54 33	
	esSSS	C	14 02 00	
18.	eP	A	19 05 33	Jan Mayen Island 71.67 N 2.70 W
	e	A	05 39.5	H = 19 00 39.9 h = normal MAG=4.6
				D = 22.07 Az = 155.2 (USCGS)
				PV:1.3s 21.8nm MPV=4.4
18.	eP	A	19 12 18.5	Southern Nevada 37.12 N 116.03 W
				H = 19 00 00.0 h = 0 km MAG=5.2
				D = 81.23 Az = 30.7 (USCGS)
				37°07'14.1" N 116°01'53.1" W
				Nevada Test Site "Terrine" (USAEC)
				PV:1.3s 17.5nm MPV=5.0
19.	eP	A	04 42 04	Kurile Islands 43.23 N 147.71 E
	e	A	42 15	H = 04 29 59.7 h = 29 km MAG=4.7

Day	Phase		h m s	Remarks
cont.				
19.	LmH	B	05 14.5	D = 78.99 Az = 333.3 (USCGS)
	LmV	B	21.8	PV:1.8s 43.9nm MPV=5.2
				LmH:20s 1.7/um MLH=5.4
				LmV:15s 1.3/um MLV=5.4
19.	eiP	A	13 41 55.5	Southern Alaska 60.23 N 146.95 W
	e	A	42 00	H = 13 30 54.6 h = 14 km MAG=5.2
				D = 68.13 Az = 14.5 (USCGS)
				PV:1.3s 52.4nm MPV=5.6
19.	e	A	23 57 58.5	Greece 39.22 N 22.26 E
				H = 23 54 39.3 h = 65 km MAG=4.5
				D = 13.67 Az = 330.2 (USCGS)
20.	eP	A	07 10 32	Andreanof Islands, Aleutian Is.
				51.69 N 173.53 W
				H = 06 58 36.5 h = 38 km MAG=4.0
				D = 77.95 Az = 356.7 (USCGS)
20.	ePn	A	08 37 12.5	Germany 47.7 N 11.1 E
	i	A	37 19.5	H = 08 36 25 (BCIS)
	ePg	A	37 23.5	D = 3.0
	eSn	A	37 47	
	eSg	A	38 01	
20.	-eP	A	17 44 24	Southern Greece 36.62 N 23.50 E
				H = 17 40 36.3 h = 88 km MAG=4.6
				D = 16.42 Az = 332.4 (USCGS)
				PV:1.8s 54.0nm MPV=4.4
21.	ePKIKP	A	00 49 16.5	Kermadec Islands 29.68 S 179.14 W
	+iPKP2	A	49 48	H = 00 29 50.0 h = 268 km MAG=4.9 (USCGS)
				D = 157.5
				PKP2V:1.2s 57.0nm
21.	eP	A	10 30 36.5	Ryukyu Islands 28.16 N 130.59 E
	LmH	B	11 06.9	H = 10 18 02.4 h = 28 km MAG=5.6
	LmV	C	14.5	D = 84.85 Az = 326.0 (USCGS)

Day	Phase		h m s	Remarks
cont.				
21.				PV:1.4s 20.9nm MPV=5.2
				LmH(B):16s 1.5/um MLH=5.5
				LmV(C):14.5s 1.3/um MLV=5.5
21.	eP	A	12 32 16.5	Hokkaido, Japan 42.47 N 144.94 E
	e	A	32 29.5	H = 12 20 14.8 h = 28 km MAG=4.9
				D = 78.72 Az = 331.8 (USCGS)
21.	eP	A	19 09 06.5	Rumania 45.56 N 26.93 E
	LmH	B	14.8	H = 19 06 22.2 h = 34 km MAG=4.6
	LmV	B	15.0	D = 11.43 Az = 301.9 (USCGS)
				PV:1.8s 27.0nm
				LmH:14s 1.6/um MLH=4.1
				LmV:15s 1.7/um
21.	eP	A	22 05 19	Dodecanese Islands 36.69 N 28.39 E
				H = 22 01 06.7 h = 68 km MAG=4.7
				D = 18.42 Az = 324.5 (USCGS)
				PV:1.2s 20.3nm MPV=4.2
22.	e(pP)	A	01 27 14	Kurile Islands 43.61 N 147.69 E
				H = 01 15 03.3 h = normal MAG=4.2
				D = 78.65 Az = 333.2 (USCGS)
22.	ePKP	A	08 33 18	Tonga Islands 16.04 S 173.13 W
				H = 08 13 42.3 h = normal MAG=4.8
				D = 145.26 Az = 354.7 (USCGS)
				PV:1.0s 7.9nm
22.	+eiP	A	11 31 12.5	Fox Islands, Aleutian Is.
	e	A	31 24.5	52.47 N 168.14 W
	LmH	B	12 12.8	H = 11 19 19.3 h = normal MAG=5.2
	LmV	B	16.4	D = 77.27 Az = 0.2 (USCGS)
				PV:1.4s 69.7nm MPV=5.6
				LmH:17s 1.7/um MLH=5.4
				LmV:16s 1.1/um MLV=5.3

Day	Phase		h m s	Remarks
22.	e(PKP2)	A	21 12 14	Kermadec Islands 20.01 S 176.62 W
				H = 20 51 41.4 h = 31 km MAG=4.9 (USCGS)
				D = 157.4
23.	eP	A	13 34 03	Near East Coast of Kamchatka
	e	A	34 08	57.36 N 163.11 E
	+iS	C	43 16	H = 13 22 54.2 h = normal MAG=5.4
	+i	B	43 24	D = 69.83 Az = 341.1 (USCGS)
	eSS	B	47 46	PV:1.5s 45.2nm MPV=5.4
	e	C	47 56	LmH:16s 5.0/um MLH=5.9
	e	B	48 04	LmV:14s 2.7/um MLV=5.9
	LmH	B	14 07.8	
	LmV	B	12.6	
23.	eP	A	14 20 53	Mindoro, Philippine Islands
	epP	A	21 24.5	13.82 N 120.64 E
	e	A	21 30	H = 14 08 00.6 h = 118 km MAG=5.3
				D = 91.07 Az = 323.0 (USCGS)
				PV:2.0s 77.0nm MPV=5.5
23.	eP	A	16 02 05	Kurile Islands 44.54 N 147.34 E
				H = 15 50 16.7 h = 90 km MAG=4.5
				D = 77.70 Az = 332.9 (USCGS)
24.	+eP1	A	05 09 34	North Atlantic Ocean 35.95 N 10.40 W
	eP2	A	09 36.5	H = 05 04 44.5 h = normal MAG=5.1
	e	A	09 51.5	D = 21.62 Az = 40.4 (USCGS)
	e(PP)	A	09 55	P1V:1.1s 36.3nm MP1V=4.7
				P2V:1.4s 93.0nm MP2V=5.0
24.	eP	A	18 44 38	Fox Islands, Aleutian Is.
				52.59 N 168.36 W
				H = 18 32 45.0 h = 24 km MAG=4.5
				D = 77.14 Az = 0.0 (USCGS)
24.	ePKP	A	20 55 41	Fiji Islands 15.57 S 177.82 W
				H = 20 36 56.3 h = 455 km MAG=4.6
				D = 144.19 Az = 349.7 (USCGS)
				PKPV:1.4s 16.3nm

Day	Phase		h m s	Remarks
25.	eP	A	02 12 29	Turkey 38.97 N 42.61 E
				H = 02 07 12.1 h = 65 km MAG=4.9
				D = 24.71 Az = 308.3 (USCGS)
				PV:1.2s 18.3nm MPV=4.5
25.	eP	A	16 42 04	Loyalty Islands 21.21 S 170.22 E
				H = 16 22 36.9 h = 124 km MAG=4.8
				D = 146.15 Az = 335.4 (USCGS)
				PV:1.0s 23.6nm
25.	eP1	AB	21 43 16.5	Leeward Islands 15.77 N 59.65 W
	eP2	A	43 19.3	H = 21 32 27.3 h = 7 km MAG=6.4
	ei	B	43 32	D = 66.10 Az = 41.3 (USCGS)
	e	B	47 32	P1V(B):19s 23/um MP1V=7.1
	eS	B	52 06	P2V(A):2.2s 824.0nm MP2V=6.6
	ei	B	52 20	LmV:18.5s 189.0/um MLV =7.4
	ei	B	52 44	LmH:18.5s 143.0/um MLH =7.2
	iSS	B	56 52	
	eiSSS	B	59 40	
	i	B	22 01 52	
	LmV	B	08.5	
	LmH	B	08.6	
	ePKPPKP	A	11 46	
	e	A	11 57	
	e	A	12 05	
25.	eP	A	22 37 01	Leeward Islands 15.83 N 59.69 W
				H = 22 26 11.8 h = 15 km MAG=5.5
				D = 66.08 Az = 41.3 (USCGS)
25.	eP1	A	22 41 51	Leeward Islands 16.08 N 59.77 W
	eP2	A	41 53.5	H = 22 31 02.3 h = 8 km MAG=6.0
	e	A	42 06	D = 65.94 Az = 41.4 (USCGS)
	ePKPPKP	A	23 10 18	P1V:1.6s 44.0nm MP1V=5.4
	e	A	10 35	P2V:2.0s 316.0nm MP2V=6.2
	e	A	10 46	

Day	Phase		h m s	Remarks
26.	+iP	A	00 29 58	Alaska Peninsula 55.18 N 160.40 W
	ei	A	30 10	H = 00 18 21.0 h = 25 km MAG=5.3
	ei	A	30 14.5	D = 74.34 Az = 5.3 (USCGS)
	+ei	A	30 21	PV:2.0s 154.0nm MPV=5.7
26.	eP	A	08 57 02	Leeward Islands 15.79 N 59.56 W
	e	A	57 20	H = 08 46 15.2 h = 22 km MAG=5.2
				D = 66.02 Az = 41.3 (USCGS)
26.	eP	A	10 44 47	Leeward Islands 16.15 N 59.76 W
	LmH	C	11 13.5	H = 10 33 59.8 h = 16 km MAG=5.4
	LmV	C	13.5	D = 65.89 Az = 41.4 (USCGS)
				LmH(C):18s 0.5/um MLH=4.8
				LmV(C):16s 0.7/um MLV=5.0
26.	eP	A	20 14 13.5	Leeward Islands 15.84 N 59.58 W
	e	A	14 28	H = 20 03 28.8 h = normal MAG=5.4
	e	A	14 31	D = 66.00 Az = 41.3 (USCGS)
				PV:1.2s 20.3nm MPV=5.2
27.	eP	A	07 35 16	Aegean Sea 39.15 N 23.91 E
	LmH	B	41.1	H = 07 31 52.1 h = 31 km MAG=4.6
	LmV	B	42.6	D = 14.40 Az = 327.0 (USCGS)
				PV:1.2s 8.1nm
				LmH:15s 1.2/um MLH=4.1
27.	e	A	09 30 50	Probably South of Sumbawa Islands (USCGS)
27.	eP	A	10 06 21	Leeward Islands 16.25 N 59.61 W
	e	A	06 31	H = 09 55 35.5 h = normal MAG=5.0
				D = 65.72 Az = 41.4 (USCGS)
27.	eP	A	14 13 48	Leeward Islands 16.22 N 59.62 W
	LmH	C	35.5	H = 14 03 04.4 h = normal MAG=5.5
	LmV	B	43.0	D = 65.75 Az = 41.4 (USCGS)
				PV:1.6s 27.5nm MPV=5.2
				LmV:16s 0.8/um MLV=5.1

Day	Phase		h m s	Remarks
27.	eP	A	15 54 38	Leeward Islands 16.17 N 59.67 W
				H = 15 43 54.7 h = normal MAG=5.4
				D = 65.81 Az = 41.4 (USCGS)
28.	eP	A	01 31 12.5	Kurile Islands 43.56 N 147.77 E
	epP	A	31 25	H = 01 19 13.5 h = 47 km MAG=4.8
	LmH	C	02 03.5	D = 78.71 Az = 333.3 (USCGS)
	LmV	C	10.7	PV:1.4s 23.3nm MPV=5.0
				LmH(C):20s 0.8/um MLH=5.1
				LmV(C):18s 0.5/um MLV=4.9
28.	+iP	A	03 54 44	Eastern Kazakh SSR 50.00 N 77.82 E
	ePn	A	56 16	H = 03 46 58.0 h = 0 km MAG=5.7
				D = 40.99 Az = 297.4 (USCGS)
				PV:0.7s 142.0nm MPV=5.8
				Probably underground explosion
28.	eP	A	04 36 41	Kurile Islands 43.77 N 147.74 E
	epP	A	36 53	H = 04 24 41.1 h = 30 km MAG=4.5
				D = 78.51 Az = 333.2 (USCGS)
28.	+eP	A	05 05 11.5	Kurile Islands 43.54 N 147.87 E
	i	A	05 24.5	H = 04 53 09.2 h = 26 km MAG=5.3
	LmH	B	37.7	D = 78.76 Az = 333.3 (USCGS)
	LmV	B	44.8	PV:1.3s 43.7nm MPV=5.4
				LmH:21s 2.9/um MLH=5.6
				LmV:16s 2.2/um MLV=5.6
28.	eP	A	05 18 52	Kurile Islands 43.62 N 147.65 E
	epP	A	19 04	H = 05 06 52.7 h = 45 km MAG=4.4 (USCGS)
				D = 78.6
28.	eP	A	14 50 00	Kurile Islands 43.59 N 147.77 E
	epP	A	50 18	H = 14 37 58.7 h = normal MAG=4.6
	esP	A	50 28	D = 78.68 Az = 333.3 (USCGS)
	LmH	C	15 22.0	LmH(C):22s 0.6/um MLH=4.9
	LmV	C	29.5	LmV(C):16s 0.5/um MLV=5.0

Day	Phase		h m s	Remarks
28.	ePKHKP	A	21 44 23	South of Fiji Islands 22.32 S 179.38 W
				H = 21 25 28.2 h = 485 km MAG=4.5
				D = 150.44 Az = 345.8 (USCGS)
28.	eP	A	22 05 20.5	Albania 40.67 N 19.85 E
	e	A	09 05	H = 22 02 34.3 h = normal MAG=4.6
	e	A	09 40	D = 11.51 Az = 332.8 (USCGS)
	LmH	B	11.1	LmH:12s 1.0/um MLH=4.0
	LmV	B	11.2	LmV:11s 1.0/um
29.	eP	A	01 02 34	Leeward Islands 16.16 N 59.67 W
	e	A	02 46	H = 00 51 47.2 h = 17 km MAG=5.6
	e	A	04 12	D = 65.82 Az = 41.4 (USCGS)
	eS	C	11 30	PV:1.7s 33.4nm MPV=5.3
	e(ScS)	B	12 32	LmH:20s 2.6/um MLH=5.4
	LmH	B	24.5	LmV:17s 2.4/um MLV=5.5
	LmV	B	24.5	
29.	e	A	14 06 39.5	Leeward Islands 16.12 N 59.67 W
	LmV	C	53.2	H = 13 55 49.87 h = normal MAG=5.4 (USCGS)
				D = 65.9
				LmV(C):16s 0.7/um MLV=4.9
30.	+iP	A	05 16 01.5	United Arab Republic 27.50 N 33.88 E
				H = 05 10 03.3 h = 16 km MAG=4.9
				D = 28.66 Az = 329.8 (USCGS)
				PV:1.8s 44.0nm MPV=5.0
31.	eP	A	05 41 29	Crete 34.36 N 26.13 E
	LmH	B	50.5	H = 05 37 02.5 h = 27 km MAG=5.0
	LmV	B	50.5	D = 19.42 Az = 331.3 (USCGS)
				LmH:14.5s 1.5/um MLH=4.4
				LmV:17s 1.1/um MLV=4.4
31.	ipP	A	05 51 20.5	Kurile Islands 43.13 N 147.52 E
				H = 05 39 06.2 h = 50 km MAG=4.9
				D = 79.01 Az = 333.2 (USCGS)

Day	Phase		h m s	Remarks
31.	eP	A	13 20 13	Yugoslavia 44.86 N 17.16 E
	i	A	20 14	H = 13 18 32.8 h = normal MAG=5.1
	eiS	A	21 29	D = 6.89 Az = 329.2 (USCGS)
	LmH	B	22.5	P2V:1.2s 204.0nm
	LmV	B	23.2	LmH:12s 40.1/um MLH=5.2
				LmV:6s 8.0/um
31.	eP	ABC	19 14 22	Ryukyu Islands 28.51 N 129.13 E
	ei	A	14 26	H = 19 01 56.1 h = 44 km MAG=5.9
	-i	A	14 29	D = 83.84 Az = 325.4 (USCGS)
	ei	C	15 12	PV(A):1.8s 325.0nm MPV=6.4
	e	B	17 04	PV(B):10s 4.67/um MPV=6.7
	ePP	C	17 36	PV(C):14s 3.34/um MPV=6.4
	eS	B	24 40	LmH:14s 78.4/um MLH=7.2
	eiPS	C	25 42	LmV:14s 93.4/um MLV=7.3
	eSS	C	30 16	
	i	C	30 38	
	ePKKP	A	32 36	
	eSSS	C	34 00	
	e	C	34 30	
	LmH	B	56.4	
	LmV	B	56.4	
31.	eP	A	20 54 38	Alaska Peninsula. 55.18 N 160.52 W
				H = 20 43 01.8 h = normal MAG=4.7
				D = 74.34 Az = 5.2 (USCGS)
				PV:1.0s 11.8nm MPV=4.9
31.	e	A	23 58 19	Probably Bali Sea
	e	A	58 21.5	
	e	C	59 00	
	e	C	24 05 05	
	e	C	06 08	