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Behandelte Themen (in englischer Sprache): Satellitengeodäsie; neutrale Erdatmosphäre, besonders Temperatur- und Windverhältnisse in Stratosphäre, Mesosphäre und Thermosphäre, Dichteverhältnisse und Zusammensetzung der Thermosphäre und Absorption der ultravioletten Sonnenstrahlung; die Ionosphäre (Elektronengehalt, Auswirkungen neutraler Winde, Effekte in hohen und niederen Breiten); die Magnetosphäre (Zusammensetzung, Erscheinungen in hohen Breiten und in niedrigen Frequenzbereichen); die Sonne einschließlich Röntgenstrahleneruptionen, Gammastrahlen, solarer Partikel und Ultraviolett-astronomie; Geologie, Chemie, Magnetismus, Schwerkraft und Radioaktivität des Mondes; Zusammensetzung der Venus. Zur Veröffentlichung gelangen Übersichtsarbeiten zu Beacon-Satelliten-Messungen von A. V. da Rosa, zu den Eigenschaften der kosmischen Quellen von Röntgenstrahlen von S. Hayakawa sowie zur Kometenphysik und Kometenchemie von L. Biermann. Der Band schließt mit Zusammenfassungen mehrerer auf dem Symposium über leuchtende Nachtwolken und interplanetaren Staub gehaltener Vorträge.

Bestellungen durch eine Buchhandlung erbeten



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AKADEMIE DER WISSENSCHAFTEN DER DDR

Zentralinstitut für Physik der Erde (ZIPE)

Seismological Bulletin 1970 Station Moxa (MOX)

By

Johannes Stelzner, Dorothea Güth,
and Joachim Weyrauch



AKADEMIE-VERLAG · BERLIN

1976

Zentralinstitut
Physik der Erde
Station Moxa
Jena, GDR

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With 4 Figures



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PREFACE

The annual Seismological Bulletin 1970 for the Station Moxa (MOX) continues the series of publications about seismological records at the Central Station Moxa edited by the Central Earth Physics Institute of the Academy of Sciences of the German Democratic Republic.

The provisional analysis of the records of station Moxa was performed in the Seismological Service under the direction of JOHANNES STELZNER by JOACHIM WEYRAUCH and BRIGITTE HÄNSCH.

The annual Bulletin 1970 was prepared by JOHANNES STELZNER and DOROTHEA GÜTH with the technical assistance of URSULA DÖRING.

Control of the instruments of the station Moxa was carried out under the direction of CHRISTIAN TEUPSER.

There is added to the Bulletin a scientific contribution concerning „Distribution of Azimuth and Epizentral Distance of Earthquakes Relative to Moxa (MOX).“

H. KAUTZLEBEN
Director

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Preliminary notes for the interpretation of seismograms

In the Bulletin the international code is used:

1. Phase interpretation

- Pg \neq direct longitudinal wave in near epicentral distances ($D < 10^\circ$)
- Pb, Pn — guided longitudinal head waves along the CONRAD- or MOHORovičić-discontinuity ($D < 10^\circ$)
- 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 ($D < 10^\circ$)
- Sb, Sn — guided transversal head waves along the CONRAD- or MOHORovičić-discontinuity ($D < 10^\circ$)
- 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, ... S1, S2, ... — multiple onsets of body waves
- Pn, Sn — teleseismic Pn and Sn waves in the epicentral distances $23^\circ < D < 40^\circ$ 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. 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 ($^{\circ}$), calculated according to geocentric coordinates, the maximum error of the own calculations amounts to $\pm 0,1^{\circ}$
- 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
- USNOAA - United States National Oceanic and Atmospheric Administration, Boulder
- HAN- - Niedersächsisches Landesamt für Bodenforschung Hannover-Buchholz, FRG

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 earth's center. *Bull. Seism. Soc. Am.* **54** (1964) 1, 191-208.
- [2] BÄTH, 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: $\varphi = 50^{\circ}38'46''N$ $\lambda = 11^{\circ}36'58''E$

Address: Central Earth Physics Institute (since February 1969)
Seismological Service
GDR-69, Jena, Burgweg 11
German Democratic Republic
Telex: 05886275 seis dd

Seismographs and their parameters 1970

- 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	0.23	0.054	0.35	1.1	300000	0.56
VSJ-II	Z	1.0	1.0	0.5	0.5	47200	
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	0.074
B SSJ-I	N	20	1.13	0.50	8.87	109	
	E	20	1.14	0.50	8.79	1110	
	E	20	1.13	0.49	8.85	103	
	Z	20	1.16	0.49	8.61	1050	
	Z	20	1.13	0.48	8.82	108	0.048
	Z	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	4	40	

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

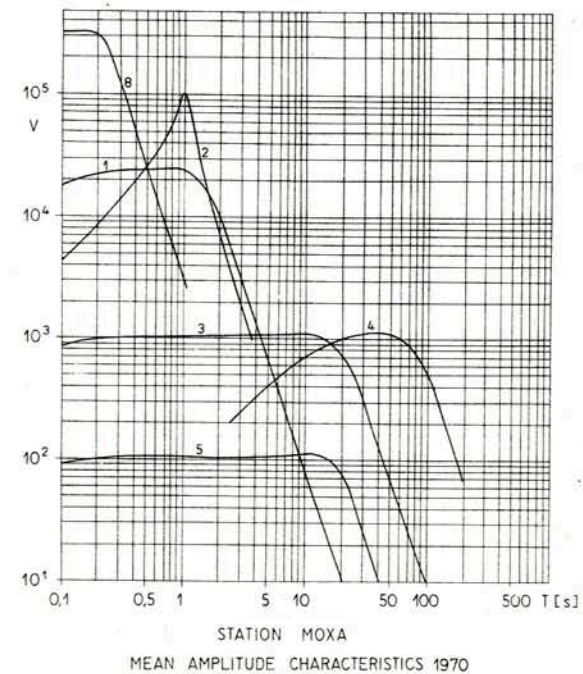
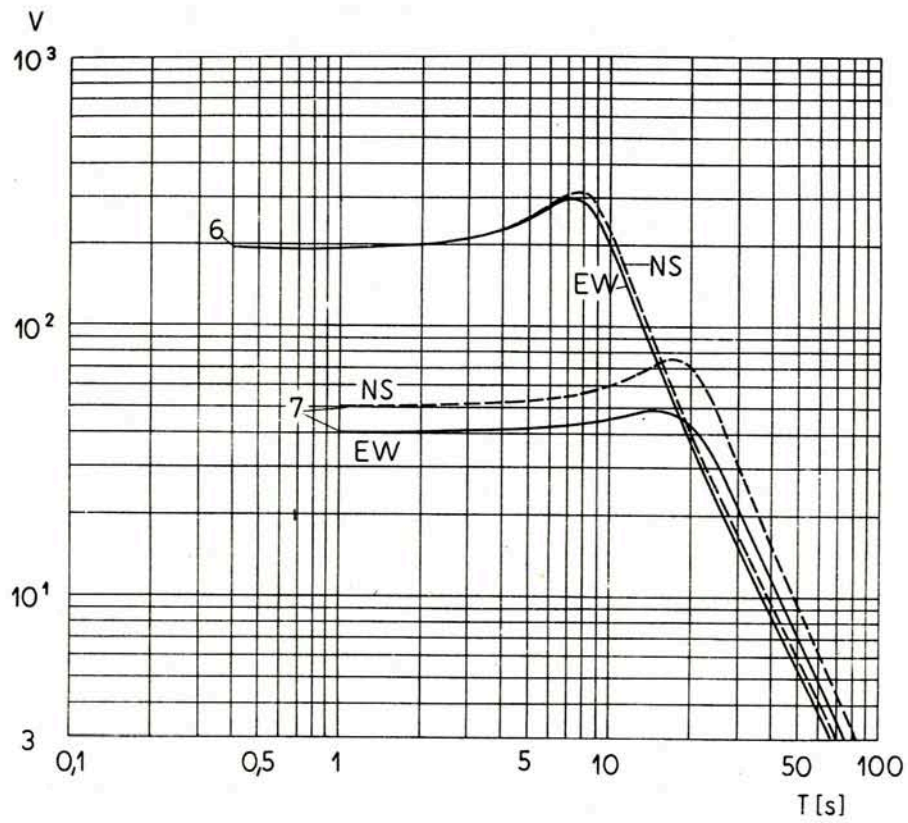


Fig. 1. Station Moxa, mean amplitude characteristics 1970

- 1 — Seismograph Kirnos Modified-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 Jena I/100 (SSJ-I/100) (NS-, EW- and Z-component)
- 8 — Seismograph Type Jena II (Z-component)



Seismological Recordings at Station Moxa 1970

Fig. 2. Station Moxa, mean amplitude characteristic of mechanical seismographs 1970

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

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

Day	Phase	h m s	Remarks
1.	eP1	A 01 56 26.5	<u>Costa Rica</u> 8.60 N 83.53 W
	eiP2	A 56 33	H = 01 43 46.7 h = 48 km MB = 5.2
	eiP3	A 56 41.5	D = 86.67 Az = 39.4 (USCGS)
	e	A 58 35	P2V(A):1.8s 81.0nm
	eSKS	C 02 06 52	P3V(A):1.6s 55.0nm
	eS	C 07 05	
	eSS	C 13 00	
	LmH	B 37.6	
	LmV	B 44.5	
1.	+eiP	A 02 02 22.5	<u>Ryukyu Islands</u> 28.62 N 129.31 E
	e	A 02 26	H = 01 49 55.6 h = 39 km MB = 5.2
	e	A 02 33	D = 83.84 Az = 325.5 (USCGS)
	e	A 02 44	PV(A):1.0s 11.8nm MPV(A)=5.1
	LmH	B 37.6	
	LmV	B 44.5	
1.	iP	A 10 06 00.5	<u>Kurile Islands</u> 45.78 N 154.37 E
	ePcP	A 06 06.5	H = 09 53 59.9 h = normal MB = 5.3
	epP	A 06 11	D = 78.69 Az = 336.9 (USCGS)
	LmH	B 45	PV(A):1.3s 69.8nm MPV(A)=5.6
	LmV	B 47.4	PcPV(A):1.4s 37.2nm
			pPV(A):1.3s 43.6nm
		LmH(B):15s 0.69/um MLH(B)=5.1	
		LmV(B):15s 0.48/um MLV(B)=5.0	
1.	e(PKP2)	A 10 29 09	<u>Loyalty Islands</u> 21.06 S 168.88 E
	eX	A 29 16	H = 10 09 28.5 h = 35 km MB = 4.7
			D = 145.48 Az = 334.3 (USCGS)
			PKP2V(A):1.4s 11.6nm
			XV(A):1.8s 27.1nm
1.	ePKP	A 12 59 06.5	<u>Loyalty Islands Region</u> 21.10 S 169.01 E
			H = 12 39 28.2 h = 0 km
			D = 145.57 Az = 334 (ISC)
			MAG=4.5 (NOU)
1.	ePKIKP	A 17 30 52.5	<u>Kermadec Islands</u> 29.36 S 177.50 W
	ePKHKP	A 31 05	H = 17 11 00.6 h = 44 km MB = 5.4(USCGS)

Day	Phase	h m s	Remarks
cont.			
1.	eiPKP2 A	17 31 25	D = 157.7 PKIKPV(A):1.5s 79.2nm PKHKPV(A):1.5s 20.1nm PKP2V(A): 1.3s 34.9nm
1.	ePKIKP A	22 27 41	<u>New Ireland</u> 4.04 S 153.92 E
	LmH C	23 11	H = 22 09 28.6 h = 404 km MB = 5.2
	LmV C	12	D = 123.82 Az = 332.1 (USCGS) PKIKPV(A):1.2s 16.3nm
2.	eP A	01 30 33	<u>Leeward Islands</u> 16.06 N 59.69 W H = 01 19 46.1 h = normal MB = 5.1(USCGS)
2.	eP A	07 34 14.5	<u>Rumania</u> 45.46 N 26.31 E H = 07 31 37.9 h = 134 km MB = 4.4 D = 11.11 Az = 303.1 (USNOAA) PV(A):1.5s 20.1nm
2.	eP A	19 46 58.5	<u>Yugoslavia</u> 44.75 N 17.09 E
	e A	47 19	H = 19 45 16.5 h = 24 km MB = 4.4
	e A	47 21.5	D = 6.96 Az = 329.9 (USCGS)
	eSn A	48 18	PV(A):0.8s 15.4nm
	ei A	48 27	LmH(B):12s 1.2/um
	eSg A	49(02)	
	LmH B	49.2	
	LmV B	55.2	
2.	LmH B	22 15.0	LmH:16s 0.7/um
	LmV B	21.0	LmV:16s 0.5/um
3.	iP AB	06 59 54	<u>Turkey-USSR Border Region</u>
	e A	59 58.5	41.77 N 43.24 E
	iS B	07 04 16	H = 06 54 49.4 h = 68 km MB = 5.1
	ei B	04 29	D = 23.47 Az = 303.0 (USCGS)
	LmH B	11.2	PV(A):1.8s 67.6nm MPV(A)=4.9
	LmV B	13.2	LmH(B):11s 0.8/um MLH(B)=4.4 LmV(B):20s 1.3/um MLV(B)=4.5

Day	Phase	h m s	Remarks
3.	e A	13 42 13	<u>Leeward Islands</u> 15.83 N 59.58 W H = 13 31 17.7 h = 34 km MB = 4.9 D = 66.01 Az = 41.3 (USCGS)
3.	LmH B	15 56.6	LmH:18s 0.8/um
	LmV B	56.8	LmV:20s 0.6/um
3.	e(P) A	16 42 24	<u>Western Iran</u> 32.64 N 48.77 E
	LmH B	57.8	H = 16 35 48.4 h = 32 km MB = 5.0
	LmV B	17 00.0	D = 32.64 Az = 314.5 (USCGS) PV(A):1.5s 15.1nm MPV(A)=4.7 LmH:14s 0.5/um MLH(B)=4.4 LmV:15s 0.9/um MLV(B)=4.7
4.	eP A	08 45 01	<u>Northern Celebes</u> 0.34 N 121.94 E
	ePP A	49 17	H = 08 31 23.1 h = 168 km MB = 5.4
	eSS C	09 03 40	D = 102.51 Az = 322.3 (USCGS)
	LmH B	25	e(A) 49 22 e(A) 49 40.5
4.	-eP1 A	17 12 04.5	<u>Yunnan Province, China</u> 24.14 N 102.50 E
	iP2 A	12 09	H = 17 00 40.2 h = 31 km MB = 5.9
	iP3 A	12 12.5	D = 72.27 Az = 318.1 (USCGS)
	ePP B	14 44	P1V(A):1.2s 26.4nm MP1V(A)=5.1
	e B	16 48	P2V(A):1.6s 341.0nm MP2V(A)=6.1
	iS B	21 28	P3V(A):2.1s 940.0nm MP3V(A)=6.5
	ePS B	22 00	PV(B):5s 3.2/um MPV(B)=6.7
	e B	23 38	PPV(B):10s 3.5/um MPPV(B)=6.6
	eSS B	26 00	SH(B):14s 22.7/um MSH(B)=7.2
	LmH B	43.7	LmH:19s 292.0/um MLH =7.6
	LmV B	48.7	LmV:16s 172.0/um MLV =7.5
4.	eP A	17 44 03.5	<u>Yunnan Province, China</u> 24.20 N 102.47 E H = 17 32 40.2 h = normal MB = 5.2 D = 72.20 Az = 318.0 (USCGS)
4.	eP A	18 43 32	<u>Yunnan Province, China</u> 24.27 N 102.30 E H = 18 32 09.5 h = normal MB = 4.9 D = 72.04 Az = 318.0 (USCGS)

Day	Phase	h m s	Remarks	
4.	eiP1 eP2	A A	21 55 57.5 56 00	<u>Yunnan Province, China</u> 24.15 N 102.48 E H = 21 44 32.8 h = normal MB = 5.0 D = 72.25 Az = 318.1 (USCGS) P2V(A):1.2s 22.3nm MP2V(A)=5.2
5.	eP1 eP2 eP3 eiS ePS eSS LmH LmV	ABC A A BC BC C B B	00 32 57 33 02 33 16.5 43 20 44 25 49 20 01 15.6 16.9	<u>Philippine Islands</u> 19.19 N 121.20 E H = 00 20 15.0 h = 53 km MB = 5.4 D = 87.12 Az = 323.1 (USCGS) P1V(A):1.8s 47.3nm MP1V(A)=5.5 P2V(A):1.9s 75.8nm MP2V(A)=5.6 SH:15s 1.62/um MSH =5.8 LmH:18s 5.0/um MLH =6.0 LmV:17.5s 6.2/um MLV =6.1
5.	iP	A	04 26 25.5	<u>North of Svalbard</u> 81.58 N 4.39 W H = 04 20 04.9 h = normal MB = 4.3 D = 31.47 Az = 160.3 (USCGS) PV(A):1.0s 17.7nm MPV(A)=5.0
5.	eP	A	09 20 34	<u>Leeward Islands</u> 16.05 N 59.61 W H = 09 09 47.8 h = 20 km MB = 5.3 D = 65.87 Az = 41.3 (USCGS) PV(A):2.4s 41.4nm MPV(A)=5.3
5.	eP LmH LmV	A B B	12 00 35 31.0 37.4	<u>Yunnan Province, China</u> 23.92 N 102.84 E H = 11 49 10.7 h = 33 km MB = 4.8 D = 72.64 Az = 318 (ISC) MS = 5.6 (USCGS) LmH:18s 2.9/um MLH=5.6 LmV:16s 1.4/um MLV=5.3
5.	e(P)	A	14 33 13	<u>Yunnan Province, China</u> 23.93 N 102.20 E H = 14 21 35.3 h = normal MB = 4.8 D = 72.24 Az = 318.0 (USCGS)
5.	eP	A	19 50 20	<u>North Atlantic Ocean</u> 35.96 N 10.46 W H = 19 45 30.4 h = normal MB = 4.2 D = 21.65 Az = 40.4 (USCGS)

Day	Phase	h m s	Remarks	
6.	ePKP	A	00 56 14	<u>Loyalty Islands Region</u> 21.7 S 170.1 E H = 00 36 27 h = 0 km (ISC) D = 146.6 PV(A):1.1s 14.1nm
6.	ePKIKP ePP e e LmH LmV	AB AB A A B B	05 54 59 57 00 55 03.5 55 07.5 06 52.0 52.0	<u>Dentrecasteaux Islands Region</u> 9.63 S 151.46 E H = 05 35 51.8 h = 8 km MB = 5.7 D = 127.44 Az = 328.9 (USCGS) PKIKPV(A):1.5s 55.2nm LmH:20s 5.6/um MLH=6.3 LmV:21s 4.6/um MLV=(6.1) e(A) 56 41 e(A) 56 49
6.	eP e	A A	06 09 30 09 35	<u>Sakhalin Island</u> 49.68 N 142.15 E H = 05 58 09.3 h = 37 km MB = 4.9 D = 71.49 Az = 329.3 (USCGS) PV(A):0.9s 7.8nm MPV(A)=4.8
6.	eP	A	07 23 56	<u>Sakhalin Island</u> 49.61 N 142.33 E H = 07 12 38.5 h = normal MB = 4.8(USCGS) D = 71.5 traces
6.	eP e eS e(PSS) LmH LmV	A A BC BC B B	13 06 54.5 06 58 15 40 16 18 33.0 33.0	<u>Leeward Islands</u> 15.82 N 59.71 W H = 12 56 05.9 h = normal MB = 5.3 D = 66.10 Az = 41.3 (USCGS) PV(A):1.2s 12.2nm MPV(A)=5.0 LmH:18s 1.1/um MLH =5.1 LmV:18s 1.5/um MLV =5.3
7.	eP	A	01 22 26.5	<u>Yunnan Province, China</u> 24.26 N 102.36 E H = 01 11 03.6 h = normal MB = 4.8 D = 72.09 Az = 318.0 (USCGS)
7.	ePKP2	A	04 04 49	<u>South of Fiji Islands</u> 26.57 S 178.68 W H = 03 45 12.2 h = 359 km MB = 4.5 D = 154.70 Az = 344.6 (USCGS) PKP2V(A):0.7s 13.4nm

Day	Phase	h m s	Remarks
7.	iPKP A	05 12 46.7	<u>New Hebrides Islands</u> 18.85 S 169.18 E H = 04 53 42.7 h = 249 km MB = 4.9 D = 143.61 Az = 335.8 (USCGS)
7.	iP ABC iS BC eSSS BC eLR C LmH B LmV B	08 06 58.7 15 48 23 20 27 10 35.0 34.6	<u>Leeward Islands</u> 15.88 N 59.73 W H = 07 56 11.1 h = 25 km MB = 5.7 D = 66.07 Az = 41.3 (USCGS) PV(A):2.1s 91.0nm MPV(A)=5.6 SH:10s 1.3/um MSH =6.0 LmH:16s 3.0/um MLH =5.6 LmV:18s 4.1/um MLV =5.7
7.	ePKIKP A	09 13 36.5	<u>East New Guinea</u> 5.40 S 146.96 E H = 08 55 04.7 h = 190 km MB = 5.0 D = 121.54 Az = 328.3 (USCGS) PKIKPV(A):1.0s 13.8nm
7.	e(pP) A	14 07 03	<u>Southern Sumatra</u> 1.85 S 100.40 E H = 13 53 52.4 h = 40 km MB = 5.2 D = 90.64 Az = 320.5 (USCGS)
8.	ePKP A	08 52 20	<u>Tonga Islands</u> 15.23 S 174.86 W H = 08 32 49.3 h = 64 km MB = 5.1 D = 144.29 Az = 352.9 (USCGS)
8.	iPKIKP ABC ipPKIKP AB epPKP2 A ePP C iPP B e(pPP) C e(sPP) C ePPP C ePcPPK2 C eiSS C iPSS C F C	17 32 16.2 33 03.7 33 52 36 40 36 44 37 28 38 00 40 25 42 24 56 40 58 11 19 35	<u>South of Kermadec Islands</u> 34.74 S 178.57 E H = 17 12 39.1 h = 179 km MB = 6.1 D = 161.48 Az = 333.1 (USCGS) PKIKPV(A):2.0s 398.0nm pPKIKPV(A):1.7s 309.0nm

Day	Phase	h m s	Remarks
8.	eP A	21 27 09	<u>Hindu Kush</u> 36.30 N 70.95 E H = 21 19 10.4 h = 135 km MB = 5.0 D = 44.20 Az = 308.2 (USCGS)
8.	eP A	23 18 34.5	<u>Honshu, Japan</u> 40.87 N 140.30 E H = 23 06 36.3 h = 46 km MB = 4.9 D = 78.41 Az = 329.5 (USCGS)
9.	eP A	05 59 55	<u>Carlsberg Ridge</u> 9.26 N 58.08 E H = 05 50 15.7 h = normal MB = 4.6 D = 56.21 Az = 326.3 (USCGS)
9.	eP A	09 29 42	<u>Iran-USSR Border Region</u> 38.50 N 55.38 E H = 09 23 05.4 h = 23 km MB = 4.8 D = 32.98 Az = 306.0 (USCGS) PV(A):1.3s 30.6nm MPV(A)=5.1
9.	eP A	19 35 52	<u>Carlsberg Ridge</u> 9.20 N 58.10 E H = 19 26 12.3 h = normal MB = 4.5 D = 56.27 Az = 326.3 (USCGS)
9.	iPKP A ePKP2 A	20 17 26.5 17 30	<u>Fiji Islands</u> 15.20 S 178.67 W H = 19 58 42.7 h = 435 km MB = 5.1 D = 143.68 Az = 348.9 (USCGS)
9.	e(pF) A	23 34 59	<u>Sumbawa Island</u> 9.28 S 117.35 E H = 23 16 21.7 h = 64 km MB = 5.7 D = 107.09 Az = 320.1 (USCGS)
10.	LmH C LmV C	00 14.0 14.4	LmH:36s 1.4/um LmV:40s 1.2/um
10.	iP A epP A	04 32 45.5 32 50.5	<u>Gulf of Alaska</u> 59.45 N 144.97 W H = 04 21 42.7 h = normal MB = 4.9 D = 68.63 Az = 15.8 (USCGS) PV(A):1.2s 34.6nm MPV(A)=5.5 pPV(A):1.5s 55.1nm

Day	Phase	h m s	Remarks
10.	eP A	04 58 29.5	<u>Tadzhik-Sinkiang Border Region</u> 38.14 N 73.68 E H = 04 50 28.6 h = 146 km MB = 5.0 D = 44.81 Az = 307.0 (USCGS) PV(A):0.7s 9.6nm MPV(A)=4.8
10.	e(Sn) A eSg A	12 11 30 11 42	<u>Belgium</u> 50.97 N 5.45 E H = 12 09 39 (BCIS) h = 0 km MAG=4.8 (ISC) D = 3.9
10.	+iP1 AB +iP2 A -iP3 A ePP B eiSKS B eS B eiPSS B LmH B LmV B	12 20 48.5 20 50 20 53 25 00 31 28 32 23 39 40 13 10.6 10.9	<u>Mindanao, Philippine Islands</u> 6.83 N 126.74 E H = 12 07 08.6 h = 73 km MB = 6.1 D = 100.22 Az = 324.1 (USCGS) P1V(A):1.8s 47.3nm MP1V(A)=5.8 P2V(A):1.8s 154.0nm MP2V(A)=6.3 P3V(A):1.4s 186.0nm MP3V(A)=6.5 PV(B):16s 6.23/um MPV(B)=7.0 PPV(B):12s 5.35/um MPPV(B)=6.8 LmH:20.5s 145.0/um MLH= 7.5 LmV:21s 228.0/um MLV= 7.7
10.	eP A	14 13 19	<u>Mindanao, Philippine Islands</u> 6.78 N 126.84 E H = 13 59 38.1 h = 67 km MB = 5.4 D = 100.31 Az = 324.2 (USCGS)
10.	eP A	14 30 10.5	<u>Mindanao, Philippine Islands</u> 6.76 N 126.92 E H = 14 16 29.1 h = 62 km MB = 5.6 D = 100.38 Az = 324.2 (USCGS) PV(A):1.3s 17.5nm MPV(A)=5.5
10.	eP A	15 55 21	<u>Ryukyu Islands</u> 28.74 N 128.99 E H = 15 43 00.7 h = 94 km MB = 4.8 D = 83.58 Az = 325.3 (USCGS)

Day	Phase	h m s	Remarks
11.	ePKHKP A esPKP A	01 35 59 36 09.5	<u>Tonga Islands</u> 20.42 S 174.89 W H = 01 16 12.1 h = normal MB = 4.8 D = 149.40 Az = 351.8 (USCGS) PKHKPV(A):1.7s 36.4nm
11.	eP A ePcP A	03 26 10 26 16	<u>Chagos Archipelago</u> 6.07 S 71.22 E H = 03 14 23.6 h = normal MB = 4.9 D = 76.15 Az = 325.6 (USCGS) PV(A):1.0s 7.9nm MPV(A)=4.8
11.	eP A epP A	05 15 44 16 01	<u>Mindanao, Philippine Islands</u> 7.32 N 126.82 E H = 05 02 05.8 h = 70 km MB = 5.5 D = 99.86 Az = 324.2 (USCGS) PV(A):2.4s 90.0nm (MPV(A)=6.0)
11.	eiPKHKP ABC eiPKP2 A	05 39 18.5 39 23	<u>Loyalty Islands</u> 22.63 S 171.49 E H = 05 19 37.0 h = 43 km MB = 5.2 D = 147.92 Az = 335.6 (USCGS) PKHKPV(A):1.8s 154.0nm PKP2V(A):1.5s 58.0nm
11.	ePKHKP A	24 00 41.5	<u>Tonga Islands</u> 20.04 S 173.70 W H = 23 40 54.0 h = normal MB = 4.3 D = 149.17 Az = 353.4 (USCGS)
12.	eP A	02 09 08.5	<u>Chile-Bolivia Border Region</u> 21.6 S 67.7 W H = 01 55 48 h = 133 km D = 99.89 Az = 39 (ISC)
12.	eP A	04 38 47	<u>Mindanao, Philippine Islands</u> 6.81 N 126.97 E H = 04 25 01.1 h = 70 km MAG=5.1 D = 100.36 Az = 324 (ISC)

Day	Phase	h m s	Remarks
13.	e(PKP) A	11 08 21.5	<u>New Hebrides Islands</u> 19.78 S 169.86 E H = 10 48 51.0 h = 34 km MB = 4.4 D = 144.71 Az = 335.9 (USCGS)
13.	eP A	17 08 53	<u>Philippine Islands</u> 8.57 N 127.33 E H = 16 55 20.4 h = 80 km MB = 5.1(USCGS) D = 99.1
13.	eP A	21 02 06	<u>Mindanao, Philippine Islands</u>
	LmH C	50.6	7.08 N 126.83 E
	LmV C	50.5	H = 20 48 26.1 h = 65 km MB = 5.4 D = 100.07 Az = 324.2 (USCGS) PV(A):1.5s 20.1nm MPV(A)=5.5 LmH(C):20s 0.5/um MLH(C)=5.0 LmV(C):20s 0.8/um MLV(C)=5.2
13.	ePKHKP A	22 51 49	<u>South of Fiji Islands</u> 23.36 S 179.87 W
	epPKP2 A	54 00	H = 22 32 55.3 h = 531 km MB = 4.8 D = 151.33 Az = 344.7 (USCGS) PKHKPV(A):1.0s 9.8nm
14.	eP A	02 35 43.5	<u>Taiwan Region</u> 23.97 N 122.36 E H = 02 23 14.5 h = normal MB = 4.9 D = 83.96 Az = 323.2 (USCGS) PV(A):0.6s 13.4nm MPV(A)=5.4
14.	LmH B	03 30.8	<u>Timor</u> 10.34 S 123.15 E
	LmV B	38.6	H = 02 22 34.6 h = 26 km MAG=5.1 (ISC) D = 111.5 LmH:18.5s 2.3/um MLH=5.8 LmV:16s 1.6/um MLV=5.7
14.	eP A	10 25 45	<u>Yunnan Province, China</u> 24.35 N 102.21 E
	esP A	25 52	H = 10 14 22.3 h = 39 km MB = 5.2
	LmH E	57.3	D = 71.94 Az = 318.0 (USCGS)
15.	+iP A	08 54 57	<u>Kuril Islands</u> 43.56 N 146.77 E H = 08 42 59.6 h = 47 km MB = 4.9 D = 78.39 Az = 332.7 (USCGS) PV(A):1.0s 15.8nm MPV(A)=5.1

Day	Phase	h m s	Remarks
15.	LmH B	17 43.0	LmH:18s 1.3/um
	LmV B	43.2	LmV:18s 0.9/um
16.	iPg A	07 59 32	<u>Czechoslovakia</u> 49.72 N 13.44 E
	iSg A	59 51	H = 7 ⁿ 59 ^m explosion of 13 tons (PRU) D = 1.5
16.	-iP ABC	08 16 34.8	<u>Southern Alaska</u> 60.31 N 152.72 W
	-sP B	17 04	H = 08 05 39.6 h = 91 km MB = 5.6(USCGS)
	+iS BC	25 28	D = 68.6
	i BC	25 32	PV(A):0.8s 107.5nm MPV(A)=6.1
	ePPS C	26 20	SH(B):10s 2.9/um MSH(B)=6.4
	eScS B	26 22	
	eSS BC	30 00	
16.	ePKHKP A	11 05 11	<u>Fiji Islands</u> 21.13 S 179.08 W H = 10 46 30.1 h = 638 km MB = 4.7 D = 149.37 Az = 346.6 (USCGS)
16.	eP A	22 46 03	<u>Crete</u> 34.97 N 23.85 E H = 22 41 53.5 h = 72 km MAG=4.3 D = 18.01 Az = 334 (ISC)
17.	iPg A	03 06 39	<u>Bernburg (GDR), rockburst</u>
	e A	06 51.5	51°46'N 11°46'E
	iSg A	06 55	
17.	eP A	08 00 56.5	<u>Kuril Islands</u> 49.55 N 158.53 E H = 07 49 02.6 h = normal MB = 4.6 D = 76.25 Az = 339.0 (USCGS)
18.	+iP A	00 31 58	<u>Mariana Islands</u> 21.38 N 146.65 E
	e A	35 55	H = 00 18 23.9 h = 39 km MB = 5.7
	iPP A	35 58.5	D = 98.07 Az = 333.0 (USCGS)
	ePPS C	45 35	PV(A):2s 64.1nm MPV(A)=6.0
	iSS C	50 38	PPV(A):1.8s 87.8nm MPPV(A)=5.9
	LmH B	01 15.2	LmH:17s 2.4/um MLH = 5.8
	LmV B	21.3	LmV:16s 1.7/um MLV = 5.6

Day	Phase	h m s	Remarks
18.	ePKP	A 04 30 26.5	<u>Fiji Islands</u> 15.60 S 179.90 W H = 04 10 42.0 h = 20 km MB = 5.1 D = 143.82 Az = 347.6 (USCGS)
18.	-iPKP	A 07 13 46	<u>Fiji Region</u> 21.2 S 177.9 W H = 06 54 05.7 h = 33 km MAG = 4.6 D = 149.7 Az = 348 (ISC) PKPV(A):0.8s 15.4nm
18.	eP	A 13 25 36.5	<u>Kurile Islands</u> 44.17 N 147.87 E H = 13 13 37.6 h = normal MB = 4.7 D = 78.20 Az = 333.3 (USCGS) PV(A):1.0s 11.8nm MPV(A)=4.9
19.	eP	A 00 39 27	<u>Kirgiz SSR</u> 41.07 N 69.27 E H = 00 31 52.6 h = 43 km MB = 5.0 D = 40.34 Az = 303.8 (USCGS)
19.	ePKP	A 09 41 59	<u>New Hebrides Islands</u> 19.30 S 169.13 E H = 09 22 38.0 h = 113 km MB = 4.3 D = 143.99 Az = 335.5 (USCGS) PKP(A):0.7s 15.3nm
19.	e(P)	A 13 08 23	<u>Burma-India Border Region</u> 27.03 N 96.96 E H = 12 57 28.4 h = 45 km MB = 4.6 D = 66.75 Az = 316.3 (USCGS)
20.	eiP epP	A 00 50 09.5 A 50 20	<u>Unimak Islands</u> 53.78 N 163.53 W H = 00 38 24.3 h = normal MB = 5.1 D = 75.87 Az = 3.2 (USCGS) PV(A):1.3s 54.6nm MPV(A)=5.5
20.	eP	A 03 32 29.5	<u>Santa Cruz Islands</u> 12.51 S 167.03 E H = 03 13 35.0 h = 234 km MB = 5.1 D = 137.00 Az = 337.1 (USCGS)

Day	Phase	h m s	Remarks
20.	iP	A 06 44 30	<u>Unimak Islands</u> 53.69 N 163.61 W H = 06 32 43.5 h = normal MB = 4.1 D = 75.96 Az = 3.1 (USCGS) PV(A):0.5s 23.0nm MPV(A)=5.6
20.	iPKIKP ABC isPKP B epPKP2 B eiPP BZ iPP BN eSKKS B eSS BN eSS BE	07 39 34 40 10 40 24 43 25 43 30 50 10 08 02 56 03 00	<u>South of Fiji Islands</u> 25.80 S 177.35 W H = 07 19 51.2 h = 80 km MB = 6.5 D = 154.25 Az = 346.8 (USCGS) e(B) 50 38 e(B) 54 08 PKIKPV(A):1.5s 126.0nm
20.	eP epP	A 08 40 25 A 40 48	<u>Near Coast of Nicaragua</u> 11.48 N 86.35 W H = 08 27 48.0 h = 46 km MB = 5.4 D = 86.22 Az = 39.2 (USCGS)
20.	+ePKIKP +ePKHKP +iPKP2 epPKHKP +ePPKP2	A 08 57 19 A 57 27.5 A 57 42 A 57 54 A 58 09.5	<u>South of Fiji Islands</u> 25.96 S 177.39 W H = 08 37 37.6 h = 100 km MB = 5.1 D = 154.40 Az = 346.7 (USCGS)
20.	ePKP2	A 14 06 17.5	<u>South of Fiji Islands</u> 25.9 S 177.2 W H = 13 46 07.6 h = 85 km MB = 4.5(USCGS) D = 154.3 PKP2V(A):1.3s 10.9nm
20.	ePKIKP ePP	A 15 31 29.5 A 33 23	<u>Solomon Islands</u> 5.42 S 154.32 E H = 15 12 51.0 h = 196 km MB = 5.4 D = 125.21 Az = 331.8 (USCGS) PPV(A):1.8s 81.0nm
20.	ePKHKP ePKP2 eipPKP	A 17 27 22.5 A 27 35 A 27 42	<u>South of Fiji Islands</u> 26.03 S 177.23 W H = 17 07 31.2 h = 105 km MB = 5.4 D = 154.50 Az = 346.9 (USCGS) PKHKPV(A):2.2s 65.4nm

Day	Phase	h m s	Remarks
20.	iP ABC	17 45 01	<u>Hokkaido, Japan</u> 42.52 N 142.97 E
	isP B	45 11	H = 17 33 05.4 h = 46 km MB = 6.3
	ei A	45 14	D = 77.98 Az = 330.7 (USCGS)
	iS B	54 52	PV(A):2.0s 770.0nm MPV(A)=6.5
	ePKPPKP A	18 12 01	LmH:16.5s 33.5/um MLH =6.8
	LmH B	18.6	LmV:13s 19.1/um MLV =6.7
	LmV B	24.6	
21.	ePKP2 A	00 45 54	<u>South of Fiji Islands</u> 26.21 S 177.02 W H = 00 25 48.0 h = 95 km MB = 4.3 D = 154.72 Az = 347.1 (USCGS)
21.	iP A	00 57 10	<u>Unimak Island Region</u> 54.01 N 163.56 W H = 00 45 21.0 h = 0 km MAG=4.3 D = 75.64 Az = 3 (ISC)
21.	ePKP2 A	03 19 27	<u>South of Fiji Islands</u> 26.25 S 177.14 W H = 02 59 25.8 h = 112 km MB = 4.5 D = 154.73 Az = 346.9 (USCGS)
21.	e(P) A	10 44 42.5	<u>Northern Norway</u> 66.5 N 11.9 E H = 10 39 50 D = 15.90 Az = 181 (UPP)
21.	e(pP) A	13 11 32.5	<u>Hokkaido, Japan</u> 42.52 N 143.01 E
	e A	11 46.5	H = 12 59 32.8 h = 51 km MB = 4.7 D = 77.99 Az = 330.8 (USCGS)
21.	eP ABC	18 05 23.5	<u>Off Coast of Mexico</u> 7.02 N 104.30 W
	eiPP BC	09 35	H = 17 51 38.5 h = normal MB = 6.2
	eiSKS BC	16 12	D = 100.52 Az = 35.6 (USCGS)
	eiPS BC	18 14	PV(A):2.4s 166.0nm MPV(A)=6.2
	eiPPS B	19 11	PV(B):8s 1.48/um MPV(B)=6.6
	ePKKP A	21 46	PPV(B):12s 4.15/um MPPV(B)=6.7
	e A	22 12	LmH:24s 39.2/um MLH =6.8
	eSS C	23 45	LmV:23s 33.8/um MLV =6.8
	i BC	24 00	e(A) 05 30 e(B,C) 07 28 e(B,C) 08 20
	LQ C	33 33	
	LmH B	45.0	
	LmV B	45.2	

Day	Phase	h m s	Remarks
21.	eP A	21 48 19	<u>Dodecanese Islands</u> 36.46 N 26.70 E H = 21 44 17.8 h = 140 km D = 17.86 Az = 327.3 (USCGS)
22.	ePKHKP A	00 04 03	<u>South of Fiji Islands</u> 26.23 S 177.11 W
	ePKP2 A	04 15	H = 23 44 09.8 h = 95 km MB = 5.0 D = 154.71 Az = 346.9 (USCGS) PKHKPV(A):0.8s 42.3nm PKP2V(A):1.5s 45.2nm
22.	ePKP A	03 46 59	<u>South of Fiji</u> 25.6 S 176.8 W H = 03 27 10 h = 71 km D = 154.19 Az = 348 (ISC) PKPV(A):0.6s 9.6nm
22.	+eP AC	04 07 27.5	<u>Rat Islands, Aleutian Is.</u>
	e A	10 38.5	51.18 N 177.28 E
	eS C	17 20	H = 03 55 32.7 h = 38 km MB = 5.3
	eScS C	17 48	D = 77.82 Az = 350.7 (USCGS)
	eSS C	22 48	PV(A):1.6s 49.5nm MPV(A)=5.4
	LmH B	49.5	LmH:16s 2.0/um MLH =5.5
LmV B	48.0	LmV:16s 1.4/um MLV =5.4	
22.	iPn A	15 26 01.9	<u>Federal Rep. Germany</u> 48.33 N 9.09 E
	iPg AB	26 08	H = 15 25 17.0 h = 16 km MB = 4.5
	iSn B	26 36	D = 2.84 Az = 34.4 (USCGS)
	iSg B	26 45	LmH:6.0s 90.0/um MLH=5.2
	i B	26 48	LmV:5.0s 43.8/um
	LmH B	27.0	LmH:5.5s 66.0/um MLH=5.1 (Wiechert)
	LmV B	27.1	M (nach Iida) = 5.5 bei $\tau = 34$ sec. Swabian Jura Region/FRG 48°21'N 0°08.5'E (STU)
22.	ePn A	15 46 42	<u>Swabian Jura Region/FRG</u> 48.3 N 9.0 E
	ePg A	46 53	H = 15 45 56 (BCIS)
	iSg A	47 28.5	D = 2.9 Az = 35 (ISC)

Day	Phase		h m s	Remarks
23.	eiP	A	03 43 14.5	<u>Unimak Island</u> 53.76 N 163.58 W
	epP	A	43 23.5	H = 03 31 29.0 h = normal MB = 5.1
	esP	A	43 26	D = 75.89 Az = 3.2 (USCGS) PV(A):1.4s 76.7nm MPV(A)=5.6
23.	eP	A	03 56 01	<u>Unimak Island</u> 53.86 N 163.56 W
				H = 03 44 16.2 h = normal MB = 4.0
				D = 75.79 Az = 3.2 (USCGS)
23.	eP	A	07 07 32	<u>Unimak Island</u> 53.81 N 163.52 W
				H = 06 55 45.9 h = 16 km MB = 4.4
				D = 75.83 Az = 3.2 (USCGS)
23.	ePKIKP	A	09 51 28.5	<u>South of Fiji</u> 26.49 S 177.0 W
	ePKP2	A	51 46	H = 09 31 38 h = 61 km MAG=4.9
				D = 154.99 Az = 347 (ISC)
23.	eiP	A	22 34 08	<u>Kurile Islands</u> 49.78 N 154.87 E
	epP	A	34 27	H = 22 22 38.7 h = 130 km MB = 5.3
				D = 75.14 Az = 336.8 (USCGS) PV(A):1.4s 102.0nm
24.	eiSg	A	04 18 29	<u>Federal Rep. Germany</u> 48.3 N 9.0 E
				H = 04 16 55 (BCIS)
				D = 2.90 Az = 35 (ISC)
24.	ePKP2	A	08 43 30	<u>South of Fiji</u> 26.0 S 177.0 W
				H = 08 23 18 h = 39 km MAG=4.6
				D = 154.52 Az = 347 (ISC)
24.	eP	A	15 47 34	<u>Southern Greece</u> 37.29 N 23.43 E
				H = 15 43 55.2 h = 110 km MB = 4.3
				D = 15.80 Az = 331.4 (USCGS)
24.	eP	A	19 12 50	<u>Luzon, Philippine Islands</u>
	e	A	13 01.5	17.40 N 122.13 E
	epP	A	13 06.5	H = 19 00 00.3 h = 63 km MB = 5.1
	LmV	B	56.3	D = 89.08 Az = 323.4 (USCGS)

Day	Phase		h m s	Remarks
cont. 24.	LmH	B	20 00.2	pPV(A):1.8s 50.6nm MPV(A)=5.5 LmH:16s 1.2/um MLH =5.4 LmV:12s 0.9/um MLV =5.4
24.	ePn	A	21 15 18.5	<u>Federal Rep. Germany</u> 48.0 N 9.1 E
	ePg	A	15 22.5	H = 21 14 26 h = 0 km
	eSn	A	15 44	D = 3.09 Az = 31 (ISC)
	eSg	A	15 56	
24.	ePKP	A	22 15 05	<u>New Hebrides Islands</u> 19.12 S 168.87 E
				H = 21 55 39.0 h = 70 km MB = 4.7
				D = 143.73 Az = 335.4 (USCGS) PKPV(A):1.2s 12.2nm
24.	ePKP	A	23 57 20	<u>Fiji Islands</u> 15.29 S 177.11 W
	ePKP2	A	57 22.5	H = 23 38 34.4 h = 410 km MB = 4.5
				D = 144.04 Az = 350.5 (USCGS)
26.	eiP	A	00 49 35	<u>Near East Coast of Kamchatka</u>
				54.20 N 160.33 E
				H = 00 38 11.5 h = normal MB = 4.9
				D = 72.28 Az = 339.7 (USCGS) PV(A):1.1s 22.2nm MPV(A)=5.2
26.	ePKIKP	A	10 20 40	<u>Santa Cruz Islands</u> 12.58 S 166.37 E
	iPP	B	23 20	H = 10 01 20.5 h = 50 km MB = 5.7
	LmH	B	11 27.0	D = 136.81 Az = 336.6 (USCGS)
	LmV	B	27.4	LmH:18s 6.2/um MLH=6.4 LmV:17.5s 5.8/um
26.	ePKHKP	A	14 34 36	<u>Fiji Islands</u> 20.79 S 178.59 W
				H = 14 15 50.6 h = 570 km MB = 4.4
				D = 149.14 Az = 347.3 (USCGS) PKHKPV(A):0.9s 9.7nm
26.	eP	A	16 46 18	<u>Hindu Kush Region</u> 36.51 N 70.44 E
	e	A	46 45.5	H = 16 38 31.7 h = 224 km MB = 4.7
	eipP	A	47 05	D = 43.75 Az = 308.0 (USCGS)

Day	Phase	h m s	Remarks
26.	eP A	19 22 17.5	<u>Unimak Island</u> 53.86 N 163.55 W H = 19 10 32.7 h = normal MB = 3.9 D = 75.79 Az = 3.2 (USCGS)
26.	eP A	24 03 26.5	<u>Fox Islands Aleutian Is.</u> 53.84 N 165.50 W H = 23 51 44.1 h = 51 km MB = 4.4 D = 75.86 Az = 1.9 (USCGS)
27.	eP A	07 18 46	<u>Mongolia</u> 45.78 N 94.20 E H = 09 09 31.2 h = normal MB = 4.5 D = 52.53 Az = 307.3 (USCGS)
27.	ePKIKP A	09 22 07	<u>Santa Cruz Islands</u> 10.87 S 165.90 E H = 09 02 51.8 h = 50 km MB = 5.5 D = 135.07 Az = 337.0 (USCGS)
27.	+eP A ePcP A	09 41 54 41 59	<u>Northern Colombia</u> 7.48 N 72.15 W H = 09 29 43.1 h = 22 km MB = 5.7 D = 80.31 Az = 39.9 (USCGS) PV(A):1.8s 47.3nm MPV(A)=5.2
27.	eP A	11 00 02	<u>Tsinghai Province, China</u> 34.90 N 101.32 E H = 10 49 31.4 h = normal MB = 5.1 D = 63.78 Az = 314.8 (USCGS) PV(A):1.2s 12.2nm MPV(A)=5.0
27.	eP A	11 28 36	<u>Near East Coast of Kamchatka</u> 57.72 N 163.58 E H = 11 17 29.4 h = 41 km MB = 5.1 D = 69.56 Az = 341.4 (USCGS) PV(A):1.2s 22.4nm MPV(A)=5.2
28.	eP A	08 51 46.5	<u>Off East Coast of Honshu, Japan</u> 40.23 N 143.60 E H = 08 39 36.1 h = 20 km MB = 4.8 D = 80.81 Az = 331.3 (USCGS) PV(A):1.1s 12.1nm MPV(A)=4.8

Day	Phase	h m s	Remarks
28.	-iPKIKP ABC +iPKHKP A iPKP2 A epPKIKP BC esPKIKP BC ePSKS BC eSPP BC ePPS BC eSS BC	23 24 38.5 24 43 24 48.5 26 55 27 55 38 25 40 10 41 40 46 40	<u>Fiji Islands</u> 20.68 S 178.85 W H = 23 06 01.7 h = 608 km MB = 5.6 D = 148.97 Az = 347.0 (USCGS) PKIKPV(A):2.0s 316.0nm PKHKPV(A):1.4s 815.0nm PKP2V(A):1.0s 252.0nm e(C) 31 18 e(B,C) 45 30 e(C) 51 30
29.	ePKP A eiPKP2 A ei A epPKP B esPKP A e BC LmH C LmV C	03 12 34.5 12 37.5 12 39 12 46 12 49 13 05 04 20.5 26.5	<u>Tonga Islands</u> 19.92 S 173.77 W H = 02 52 50.0 h = 32 km MB = 5.2 D = 149.05 Az = 353.3 (USCGS) PKP2V(A):2.1s 96.2nm LmH(C):18s 0.7 μ m MLH(C)=5.4 LmV(C):18s 0.7 μ m
29.	eP A ePcP A e A	06 15 39 15 47 18 39.5	<u>Near East Coast of Honshu, Japan</u> 35.91 N 140.41 E H = 06 03 21.7 h = 70 km MB = 5.1 D = 82.74 Az = 330.0 (USCGS) PV(A):1.0s 27.6nm MPV(A)=5.2
29.	+iP A e A	07 10 46.5 12 19	<u>Eastern Kazakh SSR</u> 49.80 N 78.21 E H = 07 02 57.5 h = 0 km MB = 5.6 D = 41.30 Az = 297.7 (USCGS) PV(A):0.7s 161.0nm MPV(A)=5.9 Underground explosion (UPP)
29.	eiP A	11 12 09.5	<u>Sicily</u> 38.76 N 14.88 E H = 11 09 24.1 h = 280 km MB = 4.7 D = 12.11 Az = 350.1 (USCGS) PV(A):1.3s 74.2nm MPV(A)=4.8
29.	e A	12 09 44	<u>Tonga Islands</u> 20.07 S 173.53 W H = 11 49 47.8 h = 50 km MB = 4.7 D = 149.22 Az = 353.6 (USCGS)

Day	Phase	h m s	Remarks
29.	ePKHKP A	13 16 44	<u>Fiji Islands</u> 20.53 S 176.83 W H = 12 57 28.3 h = 285 km MB = 4.9 D = 149.21 Az = 349.5 (USCGS) PKHKPV(A):0.8s 15.4nm
30.	ePKIKP BC epPKIKP BC eiPP BC eiSKP BC	08 47 20 48 12 50 22 50 50	<u>New Hebrides Islands</u> 14.59 S 167.33 E H = 08 28 22.7 h = 172 km MB = 5.7 D = 139.02 Az = 336.5 (USCGS) i(B) 47 30 e(B,C) 51 45 e(B,C) 52 08 e (B,C) 53 05
30.	eP A	17 22 21	<u>Kurile Islands</u> 43.52 N 147.01 E H = 17 10 23 h = 48 km MAG=4.9 D = 78.50 Az = 333 (ISC)
31.	eP A	01 30 04	<u>Greece</u> 38.93 N 21.23 E H = 01 26 52.6 h = normal MB = 4.3 D = 13.54 Az = 333.0 (USCGS)
31.	eP A	04 28 38	<u>North Atlantic Ridge</u> 52.32 N 31.73 W H = 04 23 00.2 h = normal MB = 4.5 D = 26.75 Az = 76.1 (USCGS) PV(A):0.8s 9.6nm MPV(A)=4.4
31.	eP A	08 09 24.5	<u>Philippine Islands</u> 6.85 N 127.08 E H = 07 55 41.8 h = 63 km MB = 5.2 D = 100.39 Az = 324.2 (USCGS)
31.	eP A epP A	11 54 16.5 54 31	<u>Northern Sumatra</u> 4.14 N 96.09 E H = 11 41 53.6 h = 56 km MB = 5.3 D = 83.31 Az = 320.4 (USCGS) pPV(A):2.4s 83.0nm MPV(A)=5.3
31.	eP AB Pm A ePP B eS BC e C	16 40 59 41 03 41 38 45 44 48 25	<u>North Atlantic Ocean</u> 53.88 N 35.48 W H = 16 35 03.9 h = normal MB = 5.1 D = 28.59 Az = 77.0 (USCGS) PmV(A):2.2s 76.3nm MPmV(A)=5.0 LmH:16s 4.3/um MLH =5.2

Day	Phase	h m s	Remarks
cont. 31.	LmH B LmV B	16 52.0 54.0	LmV:15.5s 4.5/um MLV=5.3 e(C) 41 32
31.	eP A	19 05 22.5	<u>Ascension Island</u> 7.13 S 12.91 W H = 18 55 08.5 h = normal MB = 4.9 D = 61.33 Az = 17.5 (USCGS) PV(A):1.4s 27.9nm MPV(A)=5.2
31.	ePKP2 A	20 57 21.5	<u>Kermadec Islands</u> 28.02 S 176.93 W H = 20 37 00.8 h = normal MB = 4.8 D = 156.49 Az = 346.3 (USCGS)
31.	eP A esP A	21 20 53 21 10	<u>Kuril Islands Region</u> 49.68 N 158.99 E H = 21 09 06.6 h = 40 km MB = 5.1 D = 76.23 Az = 339.3 (USCGS) PV(A):1.2s 12.2nm MPV(A)=4.8
31.	eP A	22 36 05	<u>Honduras</u> 15.73 N 88.75 W H = 22 23 37.1 h = 46 km MB = 5.0 D = 84.41 Az = 39.0 (USCGS)

Day	Phase	h m s	Remarks	
1.	eP eX	A A	03 09 23.5 09 28	<u>Cyprus</u> 34.43 N 32.62 E H = 03 04 26.8 h = 33 km MB = 4.4 D = 22.29 Az = 323.0 (USCGS) PV(A):1.2s 18.3nm MPV(A)=4.4 XV(A):1.2s 19.2nm
1.	ePn e e ePg iSn e eiSg	A A A A A A A	16 28 50 28 56 28 58 29 02 29 24.4 29 31.5 29 35	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 16 28 05 (BCIS) D = 2.8
2.	eP e e e	A A A A	15 49 26 49 28 49 37 49 44	<u>Kurile Islands</u> 43.65 N 145.96 E H = 15 37 31.5 h = 60 km MB = 5.1 D = 78.03 Az = 332.3 (USCGS)
2.	+iP eipP LmH LmV	A A B B	17 34 08.7 37 21.5 18 09.6 13.7	<u>Kurile Islands</u> 43.51 N 147.48 E H = 17 22 08.0 h = normal MB = 5.5 D = 78.66 Az = 333.1 (USCGS) PV(A):1.2s 93.5nm MPV(A)=5.7 pPV(A):1.5s 115.0nm LmH(B):16s 2.5/um MLH(B)=5.6 LmV(B):15s 1.8/um MLV(B)=5.6
2.	eiP epP e	A A A	17 38 20 38 32 38 46	<u>Kurile Islands</u> 43.57 N 147.53 E H = 17 26 18.7 h = normal MB = 5.1 D = 78.63 Az = 333.1 (USCGS) PV(A):1.2s 38.6nm MPV(A)=5.4
2.	+iP eipP LmH LmV	A A B B	18 01 52.2 02 05 37.2 48.9	<u>Kurile Islands</u> 43.49 N 147.42 E H = 17 49 51.9 h = normal MB = 5.5 D = 78.67 Az = 333.1 (USCGS) PV(A):1.3s 183.5nm MPV(A)=6.0 pPV(A):1.5s 226.0nm LmH(B):16s 4.3/um MLH(B)=5.9 LmV(B):12s 3.0/um MLV(B)=5.9

Day	Phase	h m s	Remarks	
2.	eiP epP	A A	18 17 51.5 18 04	<u>Kurile Islands</u> 43.29 N 147.54 E H = 18 05 49.6 h = normal MB = 5.2 D = 78.88 Az = 333.2 (USCGS) PV(A):1.2s 50.8nm MPV(A)=5.4 pPV(A):1.5s 57.8nm
3.	eP	A	06 09 49	<u>Kurile Islands</u> 43.55 N 147.42 E H = 05 57 47.9 h = normal MB = 4.7 D = 78.60 Az = 333.1 (USCGS) PV(A):1.3s 21.8nm MPV(A)=5.1
3.	eP	A	10 13 11	<u>Kurile Islands</u> 43.38 N 147.53 E H = 10 01 12.8 h = 60 km MB = 4.3 D = 78.80 Az = 333.2 (USCGS)
3.	ePKP	A	19 14 36	<u>New Hebrides Islands</u> 17.53 S 167.69 E H = 18 55 06.2 h = 39 km MB = 5.2 D = 141.83 Az = 335.3 (USCGS)
3.	eP e LmH LmV	A A B B	19 29 18 29 29.5 20 08.9 08.9	<u>Kurile Islands</u> 43.65 N 147.73 E H = 19 17 16.2 h = 26 km MB = 5.3 D = 78.62 Az = 333.2 (USCGS) PV(A):1.3s 52.4nm MPV(A)=5.4 LmH(B):13s 1.7/um MLH(B)=5.6 LmV(B):13s 1.6/um MLV(B)=5.6
4.	eP1 eP2 ePP e eSKS iS eiSS LmH LmV	A A B A B B B B B	05 21 51 21 56.5 25 22 25 30.5 32 28 33 00 38 56 06 05.3 09.3	<u>Off Coast of Guerrero, Mexico</u> 15.53 N 99.48 W H = 05 08 48.0 h = 21 km MB = 6.0 D = 90.90 Az = 36.4 (USCGS) P2V(A):1.8s 74.4nm MP2V(A)=5.7 PPV(B):7s 1.67/um MPPV(B)=6.6 LmH(B):18.5s 13.4/um MLH(B)=6.4 LmV(B):17.0s 12.6/um MLV(B)=6.4

Day	Phase	h m s	Remarks
4.	iP A	10 30 03	<u>Near East Coast of Honshu, Japan</u> 36.53 N 140.63 E H = 10 17 46.2 h = 59 km MB = 4.8 D = 82.29 Az = 330.1 (USCGS) PV(A):0.7s 11.5nm MPV(A)=4.9
4.	eP A	13 19 13	<u>Kurile Islands</u> 43.54 N 147.78 E
	epP A	19 25	H = 13 07 12.1 h = normal MB = 5.1
	esP A	19 31.5	D = 78.73 Az = 333.3 (USCGS)
	LmH P	58.9	PV(A):1.2s 32.5nm MPV(A)=5.3
	LmV B	58.9	pPV(A):1.3s 39.3nm sPV(A):1.4s 44.1nm LmH(B):13.5s 1.6/um MLH(B)=5.5 LmV(B):13.5s 1.2/um MLV(B)=5.4
4.	eiP A	17 12 18	<u>Southern Nevada</u> 37.10 N 116.03 W H = 17 00 00.0 h = 0 km MB = 5.6 D = 81.24 Az = 30.7 (USCGS) PV(A):1.5s 65.3nm MPV(A)=5.4 Nevada test site "Grape B" 37°05'51.3" N 116°01'35.4" W (USAEC)
4.	ePKHKP A	23 05 38	<u>Loyalty Islands</u> 22.85 S 171.39 E H = 22 45 58.2 h = 57 km MB = 5.2 D = 148.08 Az = 335.4 (USCGS) PKHKPV(A):1.1s 16.2nm
5.	+iP A	03 51 26	<u>Yunnan Province, China</u>
	e A	51 33	24.34 N 102.33 E
	LmH B	04 21.6	H = 03 40 03.1 h = normal MB = 5.2
	LmV B	28.2	D = 72.01 Az = 318.0 (USCGS) PV(A):1.6s 60.5nm MPV(A)=5.5 LmH(B):18s 2.0/um MLH(B)=5.4 LmV(B):14s 1.3/um MLV(B)=5.4
5.	ePg A	04 11 37.5	rockburst near <u>Bernburg, GDR</u>
	iPg A	11 39.5	51°46' N 11°46' E
	eSg A	11 55	D = 1.0 (MOX)
	iSg A	11 56	

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Day	Phase	h m s	Remarks
5.	eP1 AB	12 58 32	<u>Kurile Islands</u> 47.02 N 154.20 E
	iP2 A	58 33.4	H = 12 46 38.2 h = normal MB = 5.5
	eS BC	13 08 24	D = 77.50 Az = 336.7 (USCGS)
	LmH B	32.7	P1V(B):7s 1.39/um MP1V(B)=6.2
	LmV B	42.6	P1V(A):0.8s 26.9nm MP1V(A)=5.4 P2V(A):2.2s 453.0nm MP2V(A)=6.2 SH(B):9.5s 1.29/um MSH(B)=6.0 LmH(B):17.5s 6.7/um MLH(B)=6.0 LmV(B):15s 3.1/um MLV(B)=5.8
5.	eP A	13 51 44	<u>Kurile Islands</u> 47.07 N 154.16 E H = 13 39 49.4 h = normal MB = 4.7 D = 77.44 Az = 336.6 (USCGS) PV:1.0s 15.7nm MPV(A)=5.1
5.	+iP1 A	14 53 34.5	<u>Kurile Islands</u> 47.07 N 154.10 E
	iP2 A	53 35.7	H = 14 41 41.0 h = normal MB = 5.4 D = 77.43 Az = 336.6 (USCGS) P1V(A):0.9s 23.4nm MP1V(A)=5.3 P2V(A):1.0s 94.5nm MP2V(A)=5.9
5.	e(P) A	16 08 55	<u>South of Alaska</u> 52.93 N 164.85 W H = 15 57 03.4 h = normal MB = 4.3 D = 76.76 Az = 2.3 (USCGS) PV(A):0.6s 9.6nm MPV(A)=5.1
5.	eP1 A	22 19 12.5	<u>Luzon, Philippine Islands</u>
	iP2 ABC	19 16.6	12.60 N 122.12 E
	e BC	21 32	H = 22 05 58.3 h = 11 km MB = 6.0
	eiPP BC	22 56	D = 92.90 Az = 323.3 (USCGS)
	eiSKS BC	29 44	P1V(A):2.0s 154.0nm MP1V(A)=6.1
	eiS C	30 18	P2V(A):1.6s 192.0nm MP2V(A)=6.3
	eiSS C	36 30	P2V(B):7s 2.77/um MP2V(B)=6.8
	LmH B	58.8	PPV(B):11s 3.0/um MPPV(B)=6.6
	LmV B	23 05.9	SH(C):14s 8.1/um MSH(C)=6.7 LmH(B):21.5s 62.0/um MLH(B)=7.0 LmV(B):16s 39.2/um MLV(B)=7.0

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Day	Phase	h m s	Remarks
5.	eP A	22 58 55.5	<u>Luzon, Philippine Islands</u> 12.72 N 122.12 E H = 22 45 39.9 h = 20 km MB = 5.0 D = 92.80 Az = 323.3 (USCGS) PV(A):1.6s 22.0nm MPV(A)=5.3
6.	eiP1 A eP2 A epP A	00 23 13.5 23 18.5 23 26.5	<u>Off East Coast of Kamchatka</u> 54.64 N 163.56 E H = 00 11 49.6 h = 43 km MB = 5.6 D = 72.49 Az = 341.7 (USCGS) P1V(A):1.0s 47.2nm MP1V=5.6 P2V(A):1.4s 86.0nm MP2V=5.7
6.	eP A e A e A e A eS C LmH B LmV B	02 30 44 30 47.5 30 53 31 05 41 40 03 14.2 17.2	<u>Mindoro, Philippine Islands</u> 12.55 N 121.85 E H = 02 17 30.1 h = 18 km MB = 5.4 D = 92.78 Az = 323.3 (USCGS) LmH(B):18s 1.8/um MLH(B)=5.6 LmV(B):17s 1.3/um MLV(B)=5.5
6.	ePKP A	09 00 53	<u>Tonga Islands</u> 16.00 S 175.18 W H = 08 41 50.5 h = 301 km MB = 4.6 D = 145.01 Az = 352.5 (USCGS) PKPV(A):1.6s 27.5nm
6.	+iP A	14 09 08.5	<u>Kurile Islands</u> 43.93 N 147.91 E H = 13 57 14.3 h = 78 km MB = 5.0 D = 78.43 Az = 333.3 (USCGS) PV(A):1.0s 35.4nm MPV(A)=5.2
6.	eP A e C eSS C eSSS C LmH B LmV B	22 22 07 31 30 36 16 39 32 56.1 56.7	<u>Yunnan Province, China</u> 23.10 N 100.78 E H = 22 10 41.6 h = normal MB = 5.4 D = 71.98 Az = 318.0 (USCGS) PV(A):1.6s 55.0nm MPV(A)=5.4 LmH(B):16s 5.9/um MLH(B)=6.0 LmV(B):12s 3.8/um MLV(B)=5.9

Day	Phase	h m s	Remarks
6.	eP A	22 44 04.5	<u>Yunnan Province, China</u> 22.98 N 100.83 E H = 22 32 41.3 h = normal MB = 4.8 D = 72.09 Az = 318.0 (USCGS) PV(A):1.2s 14.2nm MPV(A)=5.0
7.	eiP AB eS B LmH B LmV B	10 12 58 22 58 47.2 57.0	<u>Kurile Islands</u> 47.22 N 154.10 E H = 10 01 05.4 h = normal MB = 5.4 D = 77.29 Az = 336.6 (USCGS) PV(A):1.8s 122.0nm MPV(A)=5.7 LmH(B):17.5s 6.1/um MLH(B)=6.0 LmV(B):14s 3.0/um MLV(B)=5.8
7.	-iP A	10 15 48	<u>Kurile Islands</u> 48.2 N 152.2 E H = 10 03 59.1 h = 0 km MB = 5.5 D = 75.89 Az = 325 (ISC) PV(A):1.4s 69.7nm MPV(A)=5.6
7.	eP A	10 28 38	<u>Kurile Islands</u> 47.25 N 153.99 E H = 10 16 44.3 h = normal MB = 4.5 D = 77.23 Az = 336.5 (USCGS)
7.	eiP A	12 19 08.5	<u>Kurile Islands</u> 47.02 N 154.07 E H = 12 07 14.4 h = normal MB = 5.0 D = 77.46 Az = 336.6 (USCGS) PV(A):0.9s 31.1nm MPV(A)=5.4
7.	eP AB LmH B LmV B	12 19 28 53.5 13 01.2	<u>Kurile Islands</u> 47.27 N 154.03 E H = 12 07 35.8 h = normal MB = 5.5 D = 77.23 Az = 336.5 (USCGS) PV(A):1.2s 102.0nm MPV(A)=5.8 LmH(B):18s 6.2/um MLH(B)=6.0 LmV(B):15s 2.7/um MLV(B)=5.7
7.	eP A	12 31 43	<u>Kurile Islands</u> 47.02 N 153.76 E H = 12 19 47.8 h = normal MB = 4.4 D = 77.38 Az = 336.4 (USCGS) PV(A):0.6s 15.3nm MPV(A)=5.3

Day	Phase	h m s	Remarks
7.	+eP A	15 05 50.5	<u>Kurile Islands</u> 47.1 N 154.1 E H = 14 53 56.1 h = normal MB = 4.7 (USCGS) D = 77.4 PV(A):1.0s 23.6nm MPV(A)=5.3
7.	eP e A A	15 07 52 07 54	<u>Kurile Islands</u> 47.07 N 154.29 E H = 14 55 58.1 h = normal MB = 4.9 D = 77.48 Az = 336.7 (USCGS) PV(A):0.8s 9.6nm MPV(A)=5.0
7.	+iP +eX A A	21 27 52 28 05.5	<u>Kurile Islands</u> 47.12 N 154.11 E H = 21 15 59.0 h = normal MB = 5.0 D = 77.38 Az = 336.6 (USCGS) PV(A):1.6s 82.4nm MPV(A)=5.6 XV(A):1.8s 81.4nm
7.	e(P) A	21 36 54	<u>Kurile Islands</u> 47.26 N 154.05 E H = 21 24 59.9 h = normal MB = 4.6 D = 77.24 Az = 336.5 (USCGS)
7.	+iP A	23 48 47	<u>Kurile Islands</u> 47.32 N 154.02 E H = 23 36 53.3 h = normal MB = 5.0 D = 77.18 Az = 336.5 (USCGS) PV(A):1.2s 28.5nm MPV(A)=5.3
8.	ePKP A	07 18 20	<u>Fiji Region</u> 18.11 S 177.52 W H = 06 58 44.2 h = 33 km MB = 4.5 D = 146.73 Az = 349 (ISC)
8.	eP A	08 08 24	<u>Hokkaido, Japan</u> 41.97 N 140.57 E H = 07 56 25.2 h = 8 km MB = 5.1 D = 77.56 Az = 329.5 (USCGS)
8.	e(P) A	11 22 08	<u>Iceland</u> 65.09 N 17.05 W H = 11 17 28.4 h = normal MB = 4.0 D = 20.74 Az = 120.4 (USCGS) PV(A):0.8s 7.7nm MPV(A)=4.1

Day	Phase	h m s	Remarks
8.	eiP A	19 29 16.5	<u>Andreanof Islands, Aleutian Is.</u> 50.58 N 172.37 W H = 19 17 11.0 h = 15 km MB = 5.0 D = 79.10 Az = 357.4 (USCGS) PV(A):0.8s 25.0nm MPV(A)=5.3
8.	eiP A	22 20 13.5	<u>Nicobar Islands</u> 6.70 N 93.55 E H = 22 08 07.3 h = normal MB = 5.2 D = 79.74 Az = 320.2 (USCGS) PV:1.2s 24.4nm MPV(A)=5.0
9.	eP A	02 07 13.5	<u>Greece-Albania Border Region</u> 39.99 N 20.80 E H = 02 04 17.1 h = 53 km MB = 4.1 D = 12.45 Az = 331.9 (USCGS)
9.	e A	06 19 07	<u>Northern Italy</u> 44.12 N 11.85 E H = 06 17 10.3 h = 0 km D = 6.53 Az = 359 (ISC)
9.	e A	06 44 32	<u>Central Italy</u> 43.6 N 12.6 E H = 06 41 22 h = 10 km D = 7.11 Az = 355 (ISC)
9.	e ei ePg ei iSn A A A A	07 40 51 41 03.5 41 16 41 22.5 41 58	<u>Northern Italy</u> 44.31 N 11.71 E H = 07 39 12.7 h = normal MB = 4.4 D = 6.35 Az = 359.5 (USCGS) PV(A):0.5s 11.5nm
9.	ePn ePg eSn eSg A A A A	08 52 49.5 53 18 54 00 54 49	<u>Northern Italy</u> 44.31 N 11.58 E H = 08 51 15.6 h = normal MB = 4.2 D = 6.34 Az = 0.2 (USCGS) PV(A):0.6s 9.6nm
9.	e A	09 54 52	<u>Central Italy</u> 43.5 N 10.5 E H = 09 52 55 D = 7.19 Az = 6 (ISC)

Day	Phase	h m s	Remarks
10.	-eiPKIKP A	02 47 36	<u>New Hebrides Islands</u> 15.34 S 167.57 E H = 02 28 22.7 h = 141 km MB = 5.0 D = 139.79 Az = 336.3 (USCGS) PKIKPV(A):1.4s 25.6nm
10.	eP A	10 52 55	<u>Near East Coast of Honshu, Japan</u> 36.18 N 139.99 E H = 10 40 39.0 h = 67 km MB = 4.9 D = 82.33 Az = 329.8 (USCGS)
10.	eP A	17 17 55	<u>Greenland Sea</u> 73.30 N 6.25 E H = 17 12 53.4 h = normal MB = 4.7 D = 22.86 Az = 171.2 (USCGS) PV(A):1.8s 33.8nm MPV(A)=4.5
10.	ePKP A	18 04 08	<u>Fiji Islands</u> 17.25 S 178.55 W H = 17 45 29.2 h = 553 km MB = 4.8 D = 145.70 Az = 348.5 (USCGS) PKPV(A):2.0s 47.0nm
10.	ePKIKP A epPKIKP A	19 52 28 53 17.5	<u>Banda Sea</u> 5.92 S 130.69 E H = 19 34 05.7 h = 136 km MB = 5.7 D = 112.75 Az = 322.9 (USCGS) PKIKPV(A):1.8s 16.9nm pPKIKPV(A):1.6s 33.0nm
11.	eiPKHKP A +iPKP2 A +iX A i A LmH C LmV C	02 19 43 19 48 19 54 19 59 03 29.4 32.4	<u>Tonga Islands</u> 20.88 S 174.32 W H = 01 59 53.5 h = normal MB = 5.1 D = 149.93 Az = 352.5 (USCGS) PKHKPV(A):1.2s 48.7nm PKP2V(A):1.5s 93.0nm XV(A):1.5s 115.5nm LmH(C):20s 0.4/um MLH(C)=5.2 LmV(C):20s 0.3/um
11.	eX A LmH B LmV B	19 04 53 10.5 12.7	<u>Southern Greece</u> 37.62 N 22.65 E H = 19 01 17.5 h = 66 km MB = 5.0 D = 15.22 Az = 332.4 (USCGS) XV(A):0.7s 42.2nm

Day	Phase	h m s	Remarks
11.	e A e A LmH B LmV B	21 11 51 12 04 21.2 21.7	<u>Turkey</u> 40.8 N 34.2 E H = 21 07 22 (BCIS) D = 18.5
12.	eP A	02 01 24.5	<u>Nepal</u> 29.36 N 81.64 E H = 01 51 51.4 h = 44 km MB = 5.4 D = 55.53 Az = 313.5 PV(A):1.0s 27.6nm MPV(A)=5.2
13.	eP A LmH B LmV B	03 25 45 04 07.3 10.0	<u>Volcano Islands</u> 24.48 N 141.07 E H = 03 12 52.4 h = 187 km MB = 5.6 D = 92.92 Az = 330.5 (USCGS) PV(A):1.2s 16.3nm MPV(A)=5.3 LmH(B):16.5 1.8/um
13.	e A e A	12 28 18 28 24	<u>Taiwan Region</u> 21.15 N 121.13 E H = 12 15 18.4 h = 71 km MB = 4.8 (ISC) D = 85.6
13.	eSg A	14 54 57	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 14 53 27 (BCIS) D = 2.9
13.	iP AB eiPP ABC esPP BC eiSKS BC eiS BC esSS BC eisSP BC esSS BC LmH B LmV B	15 56 17.8 16 00 36.5 03 40 05 48 07 02 11 00 12 37 17 55 16 47.5 48.6	<u>Java Sea</u> 5.95 S 113.03 E H = 15 43 28.7 h = 636 km MB = 5.8 D = 101.81 Az = 320.4 (USCGS) PV(A):1.6s 82.4nm MPV(A)=6.0 PV(B):4.5s 1.2/um MPV(B)=6.7 PPV(A):1.2s 93.5nm MPPV(A)=5.9 PPV(B):5.5s 2.0/um MPPV(B)=6.5 SH(B):9.5s 1.7/um MSH(B)=6.1 LmH(B):16s 2.2/um LmV(B):14s 1.5/um
13.	eP A e A e A	16 51(31) 51 35 51 42.5	<u>Off East Coast of Kamchatka</u> 54.70 N 163.54 E H = 16 40 05.2 h = normal MB = 4.7 D = 72.43 Az = 341.7 (USCGS)

Day	Phase	h m s	Remarks
13.	eiSg A	17 09 50.5	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 17 08 17 (BCIS) D = 2.9
13.	eP A	17 39 38.5	<u>Southern Peru</u> 15.94 S 71.67 W H = 17 26 16.9 h = 141 km MB = 5.4 D = 97.98 Az = 39.7 (USCGS)
14.	eP A	11 30 41	<u>Peru</u> 9.88 S 75.57 W H = 11 17 16.1 h = 35 km MB = 5.9 D = 95.78 Az = 39.7 (USCGS)
	e A	30 48	
	e A	34 46	
	e(SP) BC	43 15	PV(A):1.4s 23.2nm MPV(A)=5.4
	LmH B	12 11.5	LmH(B):20s 2.4/um MLH(B)=5.6
	LmV B	11.5	LmV(B):20s 1.8/um MLV(B)=5.6
15.	eSg A	01 10 21	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 01 08 47 (BCIS) D = 2.9
15.	eP A	07 13 36.5	<u>Off Coast of Central America</u> 12.86 N 90.21 W H = 07 00 54.0 h = 70 km MB = 4.5 D = 87.52 Az = 38.6 (USCGS)
15.	+eP A	09 06 00	<u>Sea of Okhotsk</u> 48.29 N 146.48 E H = 08 55 09.0 h = 444 km MB = 4.8 D = 74.10 Az = 332.0 (USCGS) PV(A):1.5s 32.7nm MPV(A)=4.7
15.	eSg A	12 05 34	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 12 04 00 (BCIS) D = 2.9
15.	eP A	12 50 21	<u>Northern Celebes</u> 0.01 S 122.94 E H = 12 36 36.7 h = 154 km MB = 5.7 D = 103.40 Az = 322.4 (USCGS)
	eX A	54 29	
	ePP A	54 43	PV(A):1.2s 14.2nm MPV(A)=5.6
	e A	55 14	XV(A):1.5s 22.6nm
	ePKKP A	13 06 15	PPV(A):1.3s 45.8nm MPPV(A)=5.7

Day	Phase	h m s	Remarks
16.	eiSg A	10 40 23	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 10 38 57 (BCIS) D = 2.9
16.	ePP A	16 13 11.5	<u>Northern Celebes</u> 1.12 N 120.21 E H = 15 55 04.9 h = 50 km MB = 5.4 D = 100.83 Az = 322.1 (USCGS) PPV(A):1.4s 23.3nm MPPV(A)=5.4 LmH(B):15s 0.6/um MLH(B)=5.2 LmV(B):15s 0.6/um MLV(B)=5.2
	LmH B	17 03.7	
	LmV B	04.0	
16.	ePKIKP A	21 55 07	<u>South of Fiji Islands</u> 25.15 S 178.29 E H = 21 36 22.5 h = 582 km MB = 5.3 (USCGS) D = 152.3
	+iPKHKP A	55 15.8	
	-iPKP2 A	55 29.5	
	epPKIKP A	57 26	PKIKPV(A):1.5s 50.2nm PKHKPV(A):1.4s 74.5nm PKP2V(A):1.6s 110.0nm
17.	eP A	00 19 31	<u>Greece-Albania Border Region</u> 39.38 N 20.50 E H = 00 16 25.4 h = 23 km MB = 4.7 D = 12.89 Az = 333.8 (USCGS) PV(A):0.7s 19.2nm
	LmH C	25.6	
	LmV C	25.7	
17.	eP A	03 05 19	<u>Turkey</u> 38.63 N 43.23 E H = 02 59 54.9 h = 35 km MB = 4.9 D = 25.30 Az = 308.7 (USCGS) LmH(B):14s 0.7/um MLH(B)=4.3 LmV(B):12s 0.7/um MLV(B)=4.6
	eS BC	10 06	
	e C	10 12	
	LmH B	16.6	
	LmV B	18.1	
17.	eP A	04 54 26	<u>Greece-Albania Border Region</u> 38.8 N 21.5 E H = 04 51 12 (BCIS) D = 13.8
	e A	54 38	
	LmH B	05 01.0	
	LmV B	01.0	
17.	+iP AB	05 59 29.5	<u>Mindanao, Philippine Islands</u> 9.85 N 125.97 E
	LmH B	06 47.3	

Day	Phase	h m s	Remarks
cont. 17.	LmV B	06 48.7	H = 05 46 02.4 h = 72 km MB = 5.9 D = 97.34 Az = 324.2 (USCGS) PV(A):1.3s 56.7nm MPV(A)=5.9 LmH(B):13s 0.7 μ m MLH(B)=5.3 LmV(B):18s 0.6 μ m MLV(B)=5.1
17.	eP iX A	07 34 36 34 42	<u>Southern Italy</u> 39.74 N 16.09 E H = 07 32 00.9 h = 262 km MB = 4.4 D = 11.35 Az = 345.4 (USCGS) H = 07 32 2.6 39.83 N 15.92 E h = 273 km MB = 4.1 D = 11.23 Az = 346 (ISC) XV(A):0.8s 44.2nm
17.	e A	09 10 54.5	<u>Haiti Region</u> 18.4 N 73.5 W H = 08 59 37.8 h = 77 km D = 72.95 Az = 42 (ISC)
17.	e(P) A	16 22 22	<u>Turkey</u> 38.60 N 43.11 E H = 16 16 47.7 h = 9 km MB = 4.7 D = 25.24 Az = 308.8 (USCGS)
17.	ePKP +iX A	17 44 41.5 44 43	<u>Loyalty Islands Region</u> 22.24 S 170.44 E H = 17 25 01.0 h = 46 km MB = 4.9 D = 147.17 Az = 334.9 (USCGS) XV(A):1.7s 60.6nm
17.	ePKP ABC e A e BC e BC LmH C LmV B	19 34 02 34 10 34 24 34 55 20 48.6 51.6	<u>Loyalty Islands Region</u> 22.20 S 170.51 E H = 19 14 21.3 h = 40 km MB = 5.6 D = 147.16 Az = 335.0 (USCGS) PKPV(A):1.3s 30.6nm LmH(C):20s 0.4 μ m MLH(C)=5.1 LmV(B):18s 0.7 μ m
18.	e(P) A	02 19 18.5	<u>Vancouver Island</u> 50.25 N 129.79 W H = 02 07 40.3 h = 28 km MB = 4.7 D = 74.23 Az = 24.4 (USCGS)

Day	Phase	h m s	Remarks
18.	ePKIKP A iPKHKP A	07 18 23 18 27	<u>Fiji Islands</u> 19.53 S 177.84 W H = 06 59 47.2 h = 598 km MB = 4.5 D = 148.06 Az = 348.6 (USCGS) PKHKPV(A):1.2s 32.5nm
18.	eP A	13 07 46.5	<u>Rat Islands, Aleutian Is.</u> 52.06 N 175.50 E H = 12 56 00.0 h = 59 km MB = 5.0 D = 76.77 Az = 349.5 (USCGS) PV(A):1.2s 20.3nm MPV(A)=5.1
18.	ePKP2 A	13 39 55	<u>Loyalty Islands</u> 22.29 S 170.56 E H = 13 20 08.1 h = normal D = 147.26 Az = 335.0 (USCGS)
18.	-iPKIKP ABC iPKHKP A eipPKP AB +sPKP C +i B e BC epPP C eSKSP BC eSS C e C e C	15 42 48 42 53 43 56 44 20 44 22 45 58 47 40 56 26 16 05 22 06 16 06 52	<u>Fiji Islands</u> 20.75 S 176.88 W H = 15 23 33.7 h = 259 km MB = 5.8 D = 149.42 Az = 349.3 (USCGS) PKIKPV(A):1.5s 226.0nm PKHKPV(A):1.7s 1408.0nm
18.	ePKIKP A eiPKHKP A ePKP2 A	16 43 13.5 43 20 43 29	<u>South of Fiji Islands</u> 22.94 S 176.21 W H = 16 23 36.2 h = 100 km MB = 5.2 D = 151.68 Az = 349.5 (USCGS) PKIKPV(A):2.0s 51.3nm PKHKPV(A):1.4s 88.5nm PKP2V(A):1.6s 82.5nm
18.	eP A	19 53 22	<u>Dodecanese Islands</u> 36.47 N 27.80 E H = 19 49 10.4 h = normal MB = 4.3 D = 18.34 Az = 325.7 (USCGS) PV(A):1.6s 22.0nm MPV(A)=4.1

Day	Phase	h m s	Remarks
19.	eP A	01 57 35	<u>South Indian Ocean</u> 36.21 S 53.11 E H = 01 44 18.3 h = normal MB = 5.4 D = 93.89 Az = 335.0 (USCGS) PV(A):1.2s 26.4nm MPV(A)=5.4
19.	eP A	01 58 38.5	<u>Kurile Islands</u> 47.27 N 153.90 E H = 01 46 45.7 h = normal MB = 4.7 (USCGS) D = 77.0 PV(A):1.0s 21.6nm MPV(A)=5.2
19.	eP1 A iP2 A eiP3 A eS C eSS C LmH B LmV B	07 20 39.5 20 42 20 46 29 15 33 32 51.4 52.3	<u>Eastern India</u> 27.40 N 93.99 E H = 07 10 01.8 h = 18 km MB = 5.5 D = 64.66 Az = 315.7 (USCGS) P2V(A):1.9s 197.0nm MP2V(A)=6.0 P3V(A):1.6s 110.0nm MP3V(A)=5.8 LmH(B):11.5s 2.9/um MLH(B)=5.7 LmV(B):11s 3.2/um MLV(B)=5.8
19.	ePKIKP A ePKHKP A iPKP2 A eX A	11 07 31 07 44 08 05.5 08 15	<u>Kermadec Islands</u> 30.20 S 178.02 W H = 10 47 34.4 h = 18 km MB = 5.6 D = 158.33 Az = 343.2 (USCGS) PKIKPV(A):1.8s 47.3nm PKHKPV(A):1.8s 27.0nm PKP2V(A):1.2s 77.2nm XV(A):1.5s 50.2nm
19.	eP A iX A	11 24 11.5 24 17	<u>North of Severnaya Zemlya</u> 83.48 N 115.05 E H = 11 16 23.5 h = normal MB = 4.8 D = 41.48 Az = 290.8 (USCGS) PV(A):1.0s 19.7nm MPV(A)=4.8 XV(A):1.1s 28.2nm
19.	ePKIKP A ePP A	23 13 49.5 15 12	<u>West New Guinea</u> 4.50 S 140.11 E H = 22 55 03.5 h = 26 km MB = 5.7 D = 117.08 Az = 326.0 (USCGS) PPV(A):1.7s 36.4nm MPPV(A)=5.8

Day	Phase	h m s	Remarks
20.	+iP A	10 10 23	<u>Dodecanese Islands</u> 36.56 N 27.33 E H = 10 06 11.8 h = normal MB = 4.6 D = 18.05 Az = 326.2 (USCGS) PV(A):0.7s 19.2nm MPV(A)=4.3
20.	ePKHKP A ePKP2 A	10 53 15.5 53 23	<u>Tonga Islands</u> 21.17 S 174.33 W H = 10 33 25.4 h = normal MB = 4.9 D = 150.21 Az = 352.4 (USCGS) PKP2V(A):2.0s 76.9nm
20.	eP A	13 00 05	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 12 56 40.7 h = 0 km D = 14.19 Az = 332 (ISC)
20.	ePn A e A iPg A eiSg A	13 10 02 10 11 10 15 10 48	<u>Federal Rep. Germany</u> 48.3 N 9.0 E H = 13 09 17 (BCIS) D = 2.9
20.	eP A	20 23 43	<u>Dodecanese Islands</u> 36.56 N 27.18 E H = 20 19 30.3 h = 9 km MB = 4.8 D = 17.98 Az = 326.4 (USCGS)
21.	e A e A	07 15 42 21 10.5	<u>Ural Mountains Region</u> 59.61 N 59.24 E H = 07 09 19.6 h = 1 km MB = 4.3 D = 28.09 Az = 272.8 (USCGS)
21.	ePn A iPg A e A iSg A	11 15 38 15 41 15 57.5 15 59	explosion 50°35.2' N 14°03.2' E (PRU) D = 1.5
21.	e A e A	17 10 49.5 11 07.5	<u>Timor</u> 8.62 S 124.06 E H = 16 52 00.4 h = 75 km MB = 5.3 D = 110.80 Az = 321.0 (USCGS)
21.	ePKP A	22 12 03	<u>Samoa Region</u> 15.84 S 172.00 W H = 21 52 28.7 h = 33 km MB = 4.5 D = 145.16 Az = 356 (ISC)

Day	Phase	h m s	Remarks
22.	e A	15 52 49.8	<u>Crete</u> 35.38 N 25.30 E H = 15 48 31.4 h = 42 km MB = 4.6 D = 18.20 Az = 331.2 (USCGS)
22.	e A	15 56 35	<u>Crete</u> 35.41 N 25.08 E H = 15 52 16.8 h = 37 km MB = 4.7 D = 18.09 Az = 331.5 (USCGS)
22.	eP A	20 19 33.3	<u>Kurile Islands</u> 45.70 N 151.58 E H = 20 07 36.5 h = 44 km MB = 4.1 D = 77.97 Az = 335.2 (USCGS)
22.	eiP A	22 41 39.3	<u>Southwestern Ryukyu Is.</u> 24.95 N 124.02 E H = 22 29 18.8 h = 114 km MB = 5.1 D = 84.08 Az = 323.7 (USCGS) PV(A):0.7s 15.3nm MPV(A)=5.0
22.	+iP AB	23 46 08.3	<u>Jan Mayen Island</u> 71.12 N 8.63 W H = 23 41 10.8 h = normal MB = 5.2 D = 22.54 Az = 144.9 (USCGS) PV(A):1.6s 264.0nm MPV(A)=5.5
	+i A	46 14.3	
	eS BC	50 14	LmH(B):13.5s 4.1/um MLH(B)=5.0
	e C	51 50	LmV(B):13s 2.7/um MLV(B)=5.0
	LmH B	56.8	
	LmV B	57.7	
23.	eP A	11 29 57.5	<u>Southern Iran</u> 27.82 N 54.53 E H = 11 22 26.2 h = 20 km MB = 5.5 D = 39.56 Az = 317.1 (USCGS)
	eS C	36 15	LmH(B):14s 4.6/um MLH(B)=5.5
	e C	39 01	LmV(B):16s 4.0/um MLV(B)=5.5
	LmH B	49.7	
	LmV B	50.4	
23.	eP A	13 01 04.5	<u>South of Alaska</u> 55.00 N 156.88 W H = 12 49 29.1 h = normal MB = 5.1 D = 74.29 Az = 7.6 (USCGS)
	epP A	01 15.5	
23.	ePg A	14 44 04	<u>France</u> 49.08 N 6.46 E H = 14 42 53 (BCIS) D = 3.5
	e A	44 43	
	eSg A	44 49	

Day	Phase	h m s	Remarks
23.	ePKP A	17 59 53	<u>Fiji Islands</u> 17.62 S 178.53 W H = 17 41 16.7 h = 579 km MB = 5.1 D = 146.07 Az = 348.4 (USCGS)
	ei A	59 54	
	epPKP A	18 02 07	
23.	LmH B	21 45.6	Probably <u>Philippine Islands Region</u> (USCGS)
	LmV B	45.6	LmH(B):15s 1.1/um
24.	eP A	00 44 49	<u>North Atlantic Ocean</u> 53.4 N 35.29 W H = 00 38 56 h = 32 km MB = 4.6 (ISC) D = 28.6
24.	+iPKHKP A	00 56 15	<u>Tonga Islands</u> 22.46 S 174.42 W H = 00 36 24.3 h = 50 km MB = 5.3 D = 151.47 Az = 351.9 (USCGS)
	ePKP2 A	56 25	
24.	-eP AB	02 18 34	<u>Szechwan Province, China</u> 30.58 N 103.03 E H = 02 07 36.8 h = normal MB = 5.9 D = 67.87 Az = 316.6 (USCGS)
	eS C	27 45	PV(B):4.5s 1.4/um MPV(B)=6.5
	eSS C	32 15	LmH(B):16s 4.8/um MLH(B)=5.8
	eSSS BC	35 08	LmV(B):12s 5.1/um MLV(B)=6.0
	LmH B	50.9	
	LmV B	51.3	
24.	eP A	06 52 34.5	<u>Andaman Islands</u> 13.40 N 93.31 E H = 06 40 58.5 h = 36 km MB = 5.1 D = 74.51 Az = 319.2 (USCGS)
24.	eP1 AB	08 16 44	<u>Gulf of Alaska</u> 59.57 N 143.87 W H = 08 05 39.6 h = 15 km MB = 5.0 D = 68.36 Az = 16.5 (USCGS)
	+iP2 A	16 48.7	P1V(A):1.0s 11.8nm MP1V(A)=5.1
	ei A	17 32	P2V(A):1.1s 24.2nm MP2V(A)=5.3
	eS BC	26 00	LmV(B):14s 3.7/um MLV(B)=5.8
	e BC	26 15	LmH(B):13.5s 2.5/um MLH(B)=5.6
	eSS C	31 20	
	LmV B	53.9	
	LmH B	54.2	
24.	-iPKIKP A	15 27 37.8	<u>Salomon Islands</u> 7.07 S 155.61 E H = 15 08 55.5 h = 42 km MB = 5.3 D = 127.26 Az = 331.9 (USCGS)
	e A	27 45.5	PKIKPV(A):1.1s 26.2nm

Day	Phase	h m s	Remarks
24.	+iP A	17 43 40.9	<u>Unimak Island</u> 53.81 N 163.09 W H = 17 31 55.7 h = 25 km MB = 4.4 D = 75.82 Az = 3.5 (USCGS) PV(A):0.7s 15.3nm MPV(A)=5.2
25.	eP A LmH C	08 09 05.7 44.0	<u>Near East Coast of Honshu, Japan</u> 39.96 N 142.76 E H = 07 56 59.3 h = 57 km MB = 5.0 D = 80.14 Az = 330.9 (USCGS) PV(A):1.2s 20.3nm MPV(A)=4.9
25.	+eP A e A e A eS BC eSS C LmV B LmH B	10 33 25.2 34 00 36 36.2 36 39.7 43 45 49 30 11 15.1 15.2	<u>Taiwan Region</u> 24.06 N 122.25 E H = 10 20 59.4 h = 49 km MB = 5.2 D = 83.82 Az = 323.2 (USCGS) PV(A):1.8s 74.3nm MPV(A)=5.6 LmV(B):14s 5.1/um MLV(B)=6.1 LmH(B):15.5s 4.9/um MLH(B)=6.0
25.	eP A	14 40 56.6	<u>Southern Nevada</u> 37.04 N 116.00 W H = 14 28 38.0 h = 0 km MB = 5.2 D = 81.29 Az = 30.7 (USCGS) Nevada test site "Cummarin" 37°02'12.0" N 115°59'58.5" W (USAEC)
25.	eP A e A eS C LmH C	23 19 26.5 19 40.5 26 20 35.5	<u>North Atlantic Ridge</u> 28.81 N 43.27 W H = 23 11 01.9 h = normal MB = 4.7 D = 46.29 Az = 46.1 (USCGS)
26.	eP A	03 17 06.5	<u>Peru</u> 13.65 S 74.01 W H = 03 03 40.7 h = 95 km MB = 5.4 (USCGS) D = 97.6 PV(A):1.8s 30.4nm MPV(A)=5.6
26.	eP A epP A	06 10 18 10 28.5	<u>Fox Islands, Aleutian Islands</u> 51.21 N 170.00 W H = 05 58 18.5 h = normal MB = 4.4 D = 78.51 Az = 359.0 (USCGS)

Day	Phase	h m s	Remarks
26.	iPn A iPg A iSn A iSg A	14 45 39.5 45 42 45 59.5 46 02.5	<u>Adelebsen/Solling, Fed.Rep.Germany</u> 51°37.00' N 9°45.00' E explosion, yield 5.850 to (Hannover) D = 1.5
26.	eP A	15 42 18.5	<u>Southern Nevada</u> 37.12 N 116.07 W H = 15 30 00.0 h = 0 km MB = 5.3 D = 81.24 Az = 30.7 (USCGS) Nevada test site "Yannigan" 37°06'58.9" N 116°03'59.2" W (USAEC) PV(A):1.2s 24.4nm MPV(A)=5.1
26.	eP A ePP AB eS C eSS C LmH B LmV B	16 03 09.5 06 53.5 14(00) 20(15) 45.9 50.8	<u>Baguio</u> 13.61 N 120.59 E H = 15 50 11.0 h = 74 km MB = 5.3 D = 91.20 Az = 323.0 (USCGS) PV(A):1.4s 55.8nm MPV(A)=5.7 LmH(B):16s 1.1/um MLH(B)=5.4 LmV(B):16s 0.6/um MLV(B)=5.1
26.	eP A LmH C LmV C	19 40 09.5 20 03.5 08.4	<u>Nepal</u> 27.67 N 85.92 E H = 19 30 07.7 h = normal MB = 5.2 D = 59.40 Az = 314.6 (USCGS) PV(A):1.2s 28.4nm MPV(A)=5.2 LmH(C):24s 0.5/um MLH(C)=4.6 LmV(C):14s 0.3/um MLV(C)=4.6
26.	+iP ABC +ipP ABC eS C eSS C LmH B LmV B	23 18 00.5 18 07.5 27 52 33 35 50.5 57.2	<u>Kurile Islands</u> 43.49 N 147.71 E H = 23 06 00.0 h = 36 km MB = 5.4 D = 78.76 Az = 333.2 (USCGS) PV(A):1.4s 65.1nm MPV=5.5 pPV(A):1.4s 172.0nm LmH(B):20s 6.4/um MLH(B)=6.0 LmV(B):17s 5.7/um MLV(B)=5.7
26.	eP A	23 31 25.5	<u>Nepal</u> 27.3 N 85.9 E H = 23 21 20 h = 31 km MB = 4.7 D = 59.68 Az = 315 (ISC)

Day	Phase	h m s	Remarks
26.	+iP AB	23 41 05.5	<u>Kurile Islands</u> 43.65 N 147.82 E
	ipP A	41 18	H = 23 29 02.7 h = 15 km MB = 5.6
	LmH B	24 13.9	D = 78.65 Az = 333.3 (USCGS)
	LmV B	20.9	PV(A):1.2 83.3nm MPV(A)=5.7 pPV(A):1.1s 92.6nm LmH(B):19.5s 9.0/um MLH(B)=6.1 LmV(B):15s 4.5/um MLV(B)=6.0
26.	+iP ABC	23 41 24.5	<u>Kurile Islands</u>
	ipP A	41 38	H = 23 29 22 (UPP) PV(A):1.6s 159.5nm pPV(A):1.2s 81.2nm
26.	eP A	24 01 18.5	<u>Kurile Islands</u> 43.48 N 147.60 E H = 23 49 17.1 h = 35 km MB = 4.6 D = 78.73 Az = 333.2 (USCGS)
27.	eP A	01 47 10.5	<u>Kurile Islands</u> 43.40 N 147.61 E H = 01 35 07.2 h = 20 km MB = 4.9 D = 78.80 Az = 333.2 (USCGS) PV(A):1.2s 16.3nm MPV(A)=4.9
27.	eP A	01 57 13.5	<u>Kurile Islands</u> 43.44 N 147.70 E
	e A	57 25	H = 01 45 10.8 h = 15 km MB = 5.2
	e A	57 45	D = 78.80 Az = 333.2 (USCGS) PV(A):1.5s 60.3nm MPV(A)=5.4
27.	eP A	02 06 42	<u>Kurile Islands</u> 43.37 N 147.56 E H = 01 54 41.0 h = normal MB = 4.5 D = 78.81 Az = 333.2 (USCGS) PV(A):1.0s 9.8nm MPV(A)=4.8
	eP A	02 11 46.5	<u>Kurile Islands</u> 43.42 N 147.63 E
27.	epP A	11 59	H = 01 59 44.8 h = 23 km MB = 4.6
	e A	12 13	D = 78.79 Az = 333.2 (USCGS) PV(A):1.4s 18.6nm MPV(A)=4.9
	eP A	02 12 31	<u>Kurile Islands</u>
27.	epP A	12 44	H = 02 00 29 (UPP)

Day	Phase	h m s	Remarks
27.	eP A	03 02 56.5	<u>Kurile Islands</u> 43.35 N 147.68 E
	eX AB	03 16.5	H = 02 50 55.6 h = 38 km MB = 5.0
	LmH B	35.4	D = 78.87 Az = 333.2 (USCGS)
	LmV B	41.9	PV(A):1.6s 38.5nm MPV(A)=5.2 XV(A):1.5s 55.3nm LmH(B):21s 2.3/um MLH(B)=5.5 LmV(B):15s 0.7/um MLV(B)=5.2
27.	ePKHKP A	03 27 28	<u>South of Fiji Islands</u> 24.13 S 179.77 E H = 03 08 33.0 h = 545 km MB = 4.8 D = 151.97 Az = 343.8 (USCGS) PKHKP(A):1.2s 24.4nm
27.	eP A	03 53 16	<u>Kurile Islands</u> 43.37 N 147.66 E H = 03 41 15.2 h = 37 km MB = 4.7 D = 78.85 Az = 333.2 (USCGS) PV(A):1.3s 17.5nm MPV(A)=5.0
27.	ePKHKP A	05 05 03.5	<u>Tonga Islands</u> 22.16 S 174.86 W
	ePKP2 A	07 14.5	H = 04 45 12.4 h = 40 km MB = 4.7 D = 151.12 Az = 351.5 (USCGS) PKHKPV(A):0.7s 13.4nm
27.	eP A	06 05 31.5	<u>Kurile Islands</u> 43.41 N 147.59 E
	epP A	05 44.5	H = 05 53 28.6 h = normal MB = 4.8 D = 78.79 Az = 333.2 (USCGS) PV(A):1.3s 17.5nm MPV(A)=4.9
27.	e A	07 18 50	<u>Kurile Islands</u> 4.33 N 147.71 E H = 05 53 25 h = 11 km MB = 4.9 D = 78.90 Az = 333 (ISC)
27.	-eP ABC	07 20 02.5	<u>Andreanof Islands, Aleutian Is.</u>
	ePP BC	23 06	50.13 N 179.56 W
	ePPP BC	24 56	H = 07 07 58.1 h = 20 km MB = 6.0
	ePPPP BC	26 28	D = 79.15 Az = 352.8 (USCGS)
	eiS C	30 02	LmH(B):20s 5.1/um MLH(B)=5.9
	e B	30 04	LmV(B):16.5s 2.8/um MLV(B)=5.7
27.	ePS B	30 48	

Day	Phase	h m s	Remarks
cont.			
27.	eISP	B 07 31 00	
	eSS	C 35 08	
	e	B 35 32	
	e(PKPPKP)	A 46 47	
	LmH	B 56.7	
	LmV	B 08 02.0	
27.	eP	A 07 29 56	<u>Andreanof Islands, Aleutian Is.</u> 50.12 N 179.78 W H = 07 17 51.7 h = 25 km MB = 5.0 D = 79.14 Az = 352.6 (USCGS)
27.	eP	A 08 02 32	<u>Andreanof Islands, Aleutian Is.</u> 50.02 N 179.66 W H = 07 50 28.7 h = 35 km MB = 4.8 (USCGS) D = 79.2
27.	eP	A 08 30 06	<u>Andreanof Islands, Aleutian Is.</u> 50.08 N 179.60 W H = 08 18 02.0 h = 18 km MB = 4.6 (USCGS) D = 79.2
27.	eP1	A 09 48 05	<u>Kurile Islands</u> 43.09 N 147.72 E H = 09 36 00.8 h = 21 km MB = 5.0 D = 79.11 Az = 333.3 (USCGS) P2V(A):1.6s 27.5nm MP2V(A)=5.0 pPV(A):1.2s 24.4nm
	eP2	A 48 08	
	eipP	A 48 19	
27.	eP	A 09 51 24	<u>Northwest of Kurile Islands</u> 50.99 N 155.52 E H = 09 40 00.9 h = 130 km MB = 5.2 D = 74.19 Az = 337.1 (USCGS) PV(A):1.5s 22.6nm MPV(A)=4.7
27.	eP	A 10 01 23	<u>Kurile Islands</u> 43.38 N 147.54 E H = 09 49 21.7 h = normal MB = 4.7 D = 78.80 Az = 333.2 (USCGS) PV(A):1.4s 14.0nm MPV(A)=4.8 pPV(A):1.2s 20.3nm
	epP	A 01 35	

Day	Phase	h m s	Remarks
27.	eP	A 10 03 06 03 17	<u>Kurile Islands</u> 43.51 N 147.66 E H = 09 51 05.2 h = 37 km MB = 5.1 D = 78.72 Az = 333.2 (USCGS) PV(A):1.3s 15.3nm MPV(A)=4.9
27.	eP	A 10 03 24	<u>Kurile Islands</u> H = 09 51 25 (UPP) PV(A):1.2s 16.2nm
27.	eP	A 10 17 50	<u>Andreanof Islands, Aleutian Is.</u> 50.04 N 179.83 W H = 10 05 45.7 h = 24 km MB = 4.5 D = 79.22 Az = 352.6 (USCGS)
27.	eP	A 10 25 54	<u>Near West Coast of Honshu, Japan</u> 36.99 N 137.55 E H = 10 13 42.0 h = 25 km MB = 5.1 D = 80.62 Az = 328.5 (USCGS) PV(A):0.7s 11.5nm MPV(A)=5.0
	e	A 26 40	
27.	eP	A 10 29 50	<u>Kurile Islands</u> 43.35 N 147.73 E H = 10 17 45.7 h = normal MB = 4.9 (USCGS) D = 78.8
27.	eP diff	A 11 01 52	<u>Flores Sea</u> 7.98 S 119.76 E H = 10 47 53.6 h = 183 km MB = 5.5 D = 107.62 Az = 321 (ISC)
27.	ePKIKP	A 12 02 48	<u>New Hebrides Islands</u> 15.02 S 167.34 E H = 11 43 35.3 h = 130 km MB = 5.0 D = 139.41 Az = 336.3 (USCGS)
27.	eP	A 13 12 43	<u>South of Honshu, Japan</u> 31.79 N 141.63 E H = 12 59 57.1 h = 13 km MB = 5.1 D = 86.81 Az = 330.8 (USCGS) LmH(B):14.5s 1.9/um MLH(B)=5.6 LmV(B):13s 1.6/um MLV(B)=5.6
	eS	BC 23 16	
	e	C 23 20	
	eSS	BC 29 00	
	LmH	B 59.5	
	LmV	B 59.6	

Day	Phase	h m s	Remarks
27.	eiPn	A 13 12 43	explosion D = ca. 5.8
	ePg	A 13 06	
	iSn	A 13 48	
	eSg	A 14 21	
27.	ePg	A 16 00 44	explosion, yield 29 to 49°35.7' N 13°40.2' E (PRU) D = 1.7
	iSg	A 01 06.4	
	e	A 01 0.7	
27.	eP	A 17 13 54	<u>Kurile Islands</u> 43.74 N 147.96 E H = 17 01 52.2 h = normal MB = 4.8 D = 78.62 Az = 333.4 (USCGS)
	epP	A 13 05	
28.	-iPKP	AC 05 17 47.4	<u>Samoa Islands</u> 16.30 S 171.93 W H = 04 58 10.4 h = normal MB = 5.5 D = 145.62 Az = 356.0 (USCGS)
	e	A 17 58	
28.	-iP1	AB 11 04 06.8	<u>Andreanof Islands, Aleutian Is.</u> 52.71 N 175.10 W H = 10 52 31.2 h = 162 km MB = 6.1 D = 76.86 Az = 355.6 (USCGS) P2mV(A):1.7s 2270.0nm MP2mV(A)=6.6 LmH(B):16.5s 16.0 μ m LmV(B):14.5s 10.8 μ m
	iP2	AB 04 10	
	P2m	A 04 13	
	i	B 04 14	
	ipP	B 04 52	
	iPP	B 07 07	
	ePPP	A 08 57.3	
	iPPP	B 09 00	
	eS	A 13 42	
	-iS	B 13 46	
	e	B 14 50	
	-isS	B 14 57	
	iSS	C 18 30	
	eSSS	C 24 00	
	e	A 11 30 55	
	ePKPPKP	A 31 02	
e	A 31 15		
LmH	B 45.3		
LmV	B 45.5		

Day	Phase	h m s	Remarks
28.	e	A 14 04 10	<u>El Salvador</u> 13.1 N 89.3 W H = 13 51 23 h = 33 km MB = 4.2 D = 86.78 Az = 39 (ISC)
	eP	A 20 06 26.5	
28.	e	A 06 30	<u>Southern Iran</u> 27.83 N 56.32 E H = 19 58 48.1 h = 35 km MB = 5.5 D = 40.64 Az = 316.6 (USCGS) PV(A):1.4s 23.2nm MPV(A)=4.7 LmH(B):20s 1.2 μ m MLH(B)=4.8 LmV(B):11s 0.7 μ m MLV(B)=4.9
	e	A 07 14.5	
	eS	C 12 28	
	LmH	B 23.6	
	LmV	B 30.4	

Day	Phase	h m s	Remarks
1.	eP A	20 20 00	<u>Iran</u> 33.96 N 58.91 E H = 20 12 44.8 h = 39 km MB = 5.2 D = 38.03 Az = 310.6 (USCGS)
1.	eP A	21 26 54.5	<u>Central Mid-Atlantic Ridge</u> 0.81 N 26.79 W H = 21 16 53.9 h = normal MB = 4.7 D = 59.36 Az = 27.4 (USCGS)
2.	ePKP A e A	01 16 20 16 24	<u>New Hebrides Islands</u> 15.29 S 167.60 E H = 00 57 12.6 h = 151 km MB = 4.9 D = 139.76 Az = 336.4 (USCGS) PKIKPV(A):1.3s 13.1nm
2.	ePKHKP A ePKP2 A	02 10 50 11 01	<u>Tonga Islands</u> 22.53 S 174.40 W H = 01 50 57.7 h = normal MB = 4.9 D = 151.54 Az = 351.9 (USCGS) PKHKPV(A):0.9s 23.4nm
2.	e A	02 18 25	Probably <u>Tonga Region</u> (ISC)
2.	e A	03 03 18	Probably <u>Tonga Region</u> (ISC)
2.	eP A	05 09 33.5	<u>Fox Islands, Aleutian Is.</u> 52.78 N 167.45 W H = 04 57 42.4 h = normal MB = 4.3 D = 76.94 Az = 0.6 (USCGS) PV(A):1.5s 15.1nm MPV(A)=4.9
2.	eP A	11 16 37.5	<u>North of Ascension Island</u> 3.17 S 12.20 W H = 11 06 45.1 h = normal MB = 5.0 D = 57.37 Az = 17.8 (USCGS) PV(A):1.4s 25.6nm MPV(A)=5.2

Day	Phase	h m s	Remarks
2.	ePKIKP A +iPKHKP A ePKP2 A	15 45 09.5 45 15 45 24.5	<u>South of Fiji Islands</u> 22.04 S 179.85 W H = 15 26 31.8 h = 623 km MB = 4.4 D = 150.07 Az = 345.3 (USCGS) PKHKPV(A):1.0s 27.6nm
3.	eP A	15 03 33	<u>South of Honshu, Japan</u> 32.28 N 140.71 E H = 14 50 58.9 h = 62 km MB = 4.7 D = 95.91 Az = 330 (ISC)
3.	eP A	16 39 03	<u>Greece</u> 38.26 N 20.59 E H = 16 35 44.8 h = 39 km MB = 4.5 D = 13.93 Az = 335.6 (USCGS) PV(A):0.7s 7.7nm
4.	e A	01 06 02	Probably <u>South of Fiji Islands</u>
4.	iP A epP A	01 30 45 30 57.5	<u>Mindoro, Philippine Islands</u> 13.45 N 120.38 E H = 01 17 44.5 h = 61 km MB = 5.2 D = 91.20 Az = 322.9 (USCGS) PV(A):1.4s 32.6nm MPV(A)=5.5
4.	eP A	01 55 56.5	<u>Crete</u> 34.47 N 26.36 E H = 01 51 30.1 h = 41 km MB = 4.5 D = 19.42 Az = 330.8 (USCGS) PV(A):0.8s 11.5nm MPV(A)=4.2
4.	eP A e A e A ePP BC eSKS BC ePS BC eSS BC LmH B LmV B	03 44 43 48 05 48 56 49 16 55 18 58 10 04 03 50 34.1 37.1	<u>South of Mariana Islands</u> 12.13 N 143.71 E H = 03 30 35.4 h = normal MB = 6.2 D = 104.85 Az = 330.7 (USCGS) PV(A):2.0s 42.7nm MPV(A)=6.0 LmH(B):16s 6.6 μ m MLH(B)=6.1 LmV(B):18s 7.4 μ m MLV(B)=6.2

Day	Phase	h m s	Remarks
4.	ePKIKP		
	ABC	06 50 30.5	<u>Fiji Islands</u> 19.76 S 178.64 W
	-iPKHKP	A 50 35	H = 06 31 56.2 h = 624 km MB = 5.5 (USCGS)
	+iX	A 50 36	D = 148.3
	iPKP2	AC 50 40.5	XV(A):1.4s 214.0nm
	ipPKP	C 52 52	
	+i	A 52 56	
	esPKP	C 53 52	
	ePKKP	B 59 28	
	e	C 07 03 06	
	ePSKS	C 04 16	
	eSPP	C 06 00	
	e	B 06 18	
	eSS	B 12 16	
	eSS	C 12 18	
+i	B 12 28		
esSS	C 16 18		
4.	ePKP2	A 08 43 20.5	<u>Fiji Islands</u> 19.89 S 178.61 W H = 08 24 37.5 h = 625 km MB = 4.6 D = 148.26 Az = 347.6 (USCGS)
4.	LmH	B 15 30.2	Probably <u>Philippine Islands</u> (USCGS)
	LmV	B 30.3	LmH(B):18s 3.6/um LmV(B):18s 3.4/um
5.	eP	A 05 00 53.5	<u>North Atlantic Ocean</u> 53.92 N 19.71 W
	i	A 00 55	H = 04 56 25.1 h = normal MB = 4.6
	eS	BC 04 32	D = 19.36 Az = 86.9 (USCGS)
	LmH	B 08.3	PV(A):1.2s 20.3nm MPV(A)=4.2
	LmV	B 08.9	
5.	iPg	A 15 05 30.5	<u>Dorheim/Hessen, explosion</u>
	eP	A 05 32.5	50°57.87' N 09°13.11' E
	eSg	A 05 51	H = 15 05 01.11 yield 7.0 to (Hannover-Buchholz) D = 1.5

Day	Phase	h m s	Remarks
6.	ePn	A 01 55 32.5	<u>Federal Rep. Germany</u> 47.8 N 11.1 E
	ePg	A 55 39	H = 01 54 47 (BCIS)
	eSn	A 56 07	D = 2.9
	eSg	A 56 20	
6.	ePKP2	A 22 00 31	<u>Fiji Islands</u> 20.98 S 176.43 W H = 21 41 08.2 h = 293 km MB = 4.4 D = 149.72 Az = 349.8 (USCGS)
7.	ePn	A 08 02 14	<u>Switzerland</u> 46.3 N 7.5 E
	e	A 02 28.5	H = 08 01 07 (BCIS)
	ePg	A 02 43	D = 5.1
	i	A 02 46	
	i	A 02 51	
	e	A 03 07	
7.	eSg	A 03 52.5	
7.	eP	A 12 06 57.5	<u>Central Mid-Atlantic Ridge</u> 0.47 S 19.67 W H = 11 57 09.4 h = normal MB = 4.6 D = 57.47 Az = 23.1 (USCGS) PV(A):1.6s 30.2nm MPV(A)=5.1
7.	ePKHKP	A 17 19 49	<u>Tonga Islands</u> 22.57 S 175.17 W H = 16 59 57.9 h = normal MB = 5.1 D = 151.48 Az = 350.9 (USCGS) PKHKPV(A):1.6s 27.5nm
7.	ePKHKP	A 17 31 45	<u>Tonga Islands</u> 22.43 S 174.41 W
	ePKP2	A 31 57	H = 17 11 52.3 h = normal MB = 5.2 D = 151.45 Az = 352.0 (USCGS) PKHKPV(A):1.3s 35.0nm
7.	eP	A 19 04 39	<u>Near East Coast of Honshu, Japan</u> 37.06 N 141.38 E H = 18 52 23.5 h = 60 km MB = 4.7 D = 82.13 Az = 330.4 (USCGS)

Day	Phase	h m s	Remarks
8.	e A	03 28 56	Probably <u>Northwest Russia</u> , explosion 67.6 N 32.8 E H = 03 23 42 (UPP) D = 20.0
8.	eP A ePP A	12 05 22.5 09 40	<u>Molucca Passage</u> 1.80 N 126.60 E H = 11 51 21.8 h = 50 km MB = 5.6 (USCGS) D = 104.2 PV(A):1.0s 7.9nm MPV(A)=5.5
8.	ePKP A	18 20 09.5	<u>Fiji Islands</u> 17.88 S 178.60 W H = 18 01 39.5 h = 640 km MB = 4.8 D = 146.30 Az = 348.3 (USCGS) PKPV(A):1.3s 13.1nm
8.	eP A	19 03 04	<u>Alberta Province, Canada</u> 55.04 N 116.62 W H = 18 52 13.9 h = 9 km MB = 5.1 D = 66.19 Az = 33.1 (USCGS)
8.	eP A	19 12 24.5	<u>Fox Islands, Aleutian Is.</u> 52.24 N 169.65 W H = 19 00 31.0 h = 32 km MB = 4.4 (USCGS) D = 77.3 PV(A):1.3s 13.1nm MPV(A)=4.8
9.	eP AB eS BC LmH E LmV B	01 02 17 12 24 43.7 44.0	<u>Off East Coast of Honshu, Japan</u> 39.57 N 143.43 E H = 00 50 03.2 h = 14 km MB = 5.3 (USCGS) D = 80.7 PV(A):1.7s 57.5nm MPV(A)=5.3 LmH(B):14s 3.6/um MLH(B)=5.9 LmV(B):13s 2.4/um MLV(B)=5.7
9.	-eiPKIKP ABC +iX A -i B ePP B	16 20 39 20 42 21 13 24 00	<u>New Hebrides Islands</u> 19.01 S 168.60 E H = 16 01 10.5 h = 41 km MB = 6.1 (USCGS) D = 143.6 XV(A):1.3s 698.0nm

Day	Phase	h m s	Remarks
cont. 9.	eSKKS B ePKKS B e BC ePFS C e A eSS BC LmH B LmV B	16 30 40 32 40 34 18 36 26 39 12 42 30 17 28.8 28.8	LmH(B):20s 19.3/um MLH(B)=6.8 LmV(B):20s 11.9/um
9.	ePKIKP A	16 46 32.5	<u>New Hebrides Islands</u> H = 16 27 03 (UPP) PKIKPV(A):1.3s 54.6nm
9.	+eiPKIKP A	18 50 25.5	<u>New Hebrides Islands</u> 19.09 S 168.47 E H = 18 30 55.7 h = 33 km MB = 5.3 D = 143.55 Az = 335.1 (USCGS) PKIKPV(A):1.5s 62.8nm
10.	+iP ABC eiS BC LmH B LmV B	05 10 22.7 20 08 43.3 49.4	<u>Kurile Islands</u> 44.80 N 148.87 E H = 04 58 26.3 h = 40 km MB = 6.0 (USCGS) D = 77.8 PV(A):1.6s 960.0nm MPV(A)=6.7 PV(B):4s 5.0/um MPV(B)=7.0 SH(B):6.5s 2.8/um MSH(B)=6.5 LmH(B):19s 10.2/um MLH(B)=6.2 LmV(B):16s 6.7/um MLV(B)=6.1
10.	eiP A	05 31 02	<u>Burma</u> 26.80 N 97.05 E H = 05 20 10.3 h = normal MB = 5.4 (USCGS) D = 67.0
10.	eP A epP A LmH B LmV B	06 25 07 25 11 07 04.7 16.3	<u>Luzon, Philippine Islands</u> 12.60 N 122.13 E H = 06 11 56.4 h = 30 km MB = 5.7 (USCGS) D = 92.9 PV(A):1.3s 32.8nm MPV(A)=5.6 pPV(A):1.7s 84.8nm LmH(B):21s 1.9/um MLH(B)=5.5 LmV(B):13s 0.9/um MLV(B)=5.5

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Moxa

Day	Phase	h m s	Remarks
10.	ePKP2 A	07 40 10.5	<u>Tonga Islands</u> 19.77 S 174.90 W H = 07 20 18.3 h = normal MB = 4.9 (USCGS) D = 148.6
10.	-iP A ei A e A	08 31 11 31 15.5 31 21	<u>Mid-Indian-Rise</u> 15.36 S 67.24 E H = 08 18 53.8 h = normal MB = 5.3 D = 81.73 Az = 327.9 (USCGS)
11.	-iP ABC +ipP AB e A eS AB eSS BC e C LmH B LmV B	22 49 54.5 50 05 59 09 59 13 23 03 50 08 40 20.6 20.6	<u>Kodiak Island</u> 57.47 N 153.92 W H = 22 38 34.6 h = 29 km MB = 6.0 (USCGS) D = 71.5 h = 39 km PV(A):1.6s 830.0nm MPV(A)=6.5 PV(B):3.5s 2.4/um MPV(B)=6.8 pPV(A):1.8s 858.0nm SH(B):10s 4.2/um MSH(B)=6.6 LmH(B):23s 5.3/um MLH(B)=5.7 LmV(B):23s 3.8/um MLV(B)=5.6
12.	ePKHKP A	16 49 20	<u>Fiji Islands</u> 20.68 S 179.19 W H = 16 30 40.14 h = 615 km MB = 4.7 D = 148.90 Az = 346.6 (USCGS) PKHKPV(A):0.8s 26.9nm
12.	eP A	18 21 21	<u>Yunnan Province, China</u> 24.19 N 102.79 E H = 18 09 53.6 h = normal MB = 5.2 D = 72.40 Az = 318.1 (USCGS) PV(A):1.5s 32.2nm MPV(A)=5.3
13.	iPg A i A iSg A	15 05 20 05 20.8 05 35	<u>Hilders/Rhön</u> 50°32.71'N 10°02.44'E H = 15 05 00.6 yield 21.8 to (Hannover) D = 1.0
13.	ePKP A	18 30 03	<u>New Hebrides Islands</u> 19.02 S 168.39 E H = 18 10 30.3 h = 17 km MB = 4.8 D = 143.45 Az = 335.1 (USCGS) PKPV(A):1.5s 20.1nm

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Day	Phase	h m s	Remarks
13.	eiP A	18 35 39	<u>Burma-India-Border-Region</u> 24.90 N 93.94 E H = 18 24 54.0 h = 62 km MB = 4.9 D = 66.42 Az = 316.5 (USCGS) PV(A):1.0s 15.8nm MPV(A)=4.9
14.	eP1 ABC eP2 A eS BC LmH B LmV B	01 57 19.5 57 22 02 01 52 10.8 10.8	<u>Turkey-Iran Border Region</u> 38.60 N 44.71 E H = 01 51 44.4 h = 23 km MB = 5.3 D = 26.23 Az = 308.1 (USCGS) P1V(B):10.5s 0.6/um MP1V(B)=5.0 P2V(A):1.5s 22.6nm MP2V(A)=4.6 SH(B):16s 1.8/um MSH(B)=5.3 LmH(B):14s 2.7/um MLH(B)=4.9 LmV(B):13.5s 4.0/um MLV(B)=5.2
14.	eP A eS BC LmH B LmV B	07 42 13.5 49 09 59.0 59.0	<u>North Atlantic Ridge</u> 28.31 N 43.79 W H = 07 33 43.2 h = normal MB = 5.2 D = 46.96 Az = 45.8 (USCGS) PV(A):2.0s 59.8nm MPV(A)=5.3 SH(B):14s 0.5/um MSH(B)=5.1 LmH(B):18s 0.8/um MLH(B)=4.7 LmV(B):16s 1.0/um MLV(B)=5.1
14.	eP A	08 23 46	<u>North Atlantic Ridge</u> 28.39 N 43.84 W H = 08 15 16.3 h = normal MB = 4.9 D = 46.94 Az = 45.9 (USCGS) PV(A):2.0s 42.7nm MPV(A)=5.1
14.	eP A e A LmH B LmV B	13 03 23 03 27 41.0 41.0	<u>Kurile Islands</u> 45.52 N 150.94 E H = 12 51 26.5 h = normal MB = 5.3 D = 77.95 Az = 334.9 (USCGS) PV(A):1.2s 48.7nm MPV(A)=5.4 LmH(B):20s 1.2/um MLH(B)=5.2 LmV(B):20s 0.8/um MLV(B)=5.1
14.	e A e A eSg A LmV B	15 51 26 51 29.5 53 56 55.0	<u>Pyrenees</u> 42.46 N 1.90 E H = 15 48 10.2 h = normal MB = 4.3 (USCGS) D = 10.6 LmV(B):4.5s 0.9/um

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Day	Phase	h m s	Remarks
14.	ePKHKP A	21 08 25	<u>Fiji Islands</u> 19.61 S 178.19 W H = 20 49 46.1 h = 610 km MB = 5.1 D = 148.07 Az = 348.2 (USCGS) PKHKP(A):1.3s 65.5nm
15.	e LmH B LmV B	05 42 46 06 18.5 25.2	<u>Ryukyu Islands</u> 26.36 N 129.48 E H = 05 29 56.1 h = 37 km MB = 5.3 D = 85.78 Az = 325.6 (USCGS) LmH(B):18s 0.9/um MLH(B)=5.2 LmV(B):15s 1.1/um MLV(B)=5.4
15.	eP diff A ePKP A ePP ABC epP B e A esPP B e AC eSKKS BC e BC e BC ePKKP A epPKKP A eSS BC LmH B LmV B	12 53 22 57 31.5 57 46 58 14 58 18 58 26 58 30 13 04 50 06 16 07 40 09 01.5 09 34 13 38 42.0 42.0	<u>Chile-Argentina Border Region</u> 29.65 S 69.50 W H = 12 39 17.8 h = 119 km MB = 6.0 D = 107.10 Az = 41.2 (USCGS) PV(A):1.8s 30.4nm MPV(A)=6.1 LmH(B):19s 0.4/um LmV(B):19s 0.4/um
15.	ePKP2 A e A	17 52 46 52 51.5	<u>Fiji Region</u> 21.4 S 179.62 W H = 17 32 57.5 h = 33 km MB = 4.9 (ISC) D = 149.8
16.	eP A	03 56 38.5	<u>Tibet</u> 33.86 N 86.30 E H = 03 47 06.4 h = 52 km MB = 4.9 D = 55.42 Az = 311.8 (USCGS)
16.	e A eSg A	06 29 58 32 24	<u>Pyrenees</u> 42.4 N 1.7 E H = 06 26 43 (BCIS) D = 10.8

Day	Phase	h m s	Remarks
16.	ePKP A e A LmH B LmV B	16 44 56.5 45 01 17 42.2 18 00.2	<u>New Hebrides Islands</u> 19.22 S 168.50 E H = 16 25 22.1 h = 8 km MB = 4.9 D = 143.67 Az = 335.0 (USCGS) PKPV(A):1.5s 22.6nm LmH(B):21s 1.0/um MLH=5.5 LmV(B):17s 0.5/um
17.	ePKP2 A	01 37 54	<u>South of Fiji Islands</u> 26.27 S 177.07 W H = 01 17 47.7 h = 85 km MB = 4.9 D = 154.76 Az = 347.0 (USCGS) PV(A):1.2s 18.3nm
17.	e A e A LmH B LmV B	17 03 45 03 48 07.5 08.4	<u>Yugoslavia</u> 41.21 N 20.96 E H = 17 00 55.1 h = normal MB = 4.6 D = 11.45 Az = 328.6 (USCGS)
17.	eP A	17 19 22.5	<u>Kyushu, Japan</u> 31.43 N 130.64 E H = 17 07 14.1 h = 129 km MB = 5.1 D = 82.18 Az = 325.8 (USCGS) PV(A):1.8s 40.6nm MPV(A)=4.9
17.	eX A LmH C	22 11 29 37	<u>Gulf of Alaska</u> 59.20 N 147.90 W H = 22 00 12.4 h = 47 km MB = 5.1 D = 69.25 Az = 13.8 (USCGS) XV(A):1.1s 52.4nm
17.	eP A LmH B LmV B	23 27 07.5 47.0 50.5	<u>Iran</u> 33.88 N 59.72 E H = 23 19 42.3 h = 19 km MB = 5.0 D = 38.60 Az = 310.6 (USCGS) PV(A):1.3s 43.7nm MPV(A)=5.0
18.	eP A LmH C LmV C	17 23 25 39.7 42.0	<u>Cyprus</u> 34.49 N 32.50 E H = 17 18 29.0 h = 33 km MB = 4.5 D = 22.18 Az = 323.0 (USCGS) PV(A):1.2s 32.5nm MPV(A)=4.6

Day	Phase	h m s	Remarks
19.	eP A	15 33 01	<u>Andreanof Islands, Aleutian Is.</u> 50.02 N 179.65 W H = 15 20 54.6 h = 15 km MB = 5.4 D = 79.25 Az = 352.7 (USCGS) PV(A):1.0s 27.6nm MPV(A)=5.3
19.	eP1 ABC iP2 A iP3 A ePP B eS BC eScS C e BC eSS BC e A e A e A LmH B LmV B	23 45 23.5 45 26 45 28.5 48 16 55 16 55 44 58 08 24 00 12 12 13 12 18 12 27 32.9 35.4	<u>Near Islands, Aleutian Is.</u> 51.32 N 173.76 E H = 23 33 29.1 h = 16 km MB = 5.8 D = 77.28 Az = 348.5 (USCGS) P1V(A):1.4s 51.2nm MP1V(A)=5.3 P1V(B):11s 6.0/um MP1V(B)=6.6 P2V(A):1.3s 132.0nm MP2V(A)=5.8 P3V(A):1.2s 212.0nm MP3V(A)=6.1 PPV(B):12s 2.5/um MPPV(B)=6.2 LmH(B):15s 10.2/um MLH(B)=6.3 LmV(B):14.5s 6.1/um MLV(B)=6.1
20.	eP A	06 04 58	<u>Kodiak Island</u> 56.73 N 151.68 W H = 05 53 33.3 h = 18 km MB = 4.4 D = 72.11 Az = 11.1 (USCGS) PV(A):1.1s 16.1nm MPV(A)=5.1
20.	eP A LmH C LmV B	11 21 18 12 09.3 10.3	<u>Mindanao, Philippine Islands</u> 5.00 N 125.22 E H = 11 07 35.6 h = 65 km MB = 5.7 D = 100.79 Az = 323.6 (USCGS) PV(A):1.2s 16.3nm MPV(A)=5.6 LmH(C):20.5s 1.1/um LmV(B):16s 0.5/um
20.	ePKP A	11 37 26.5	<u>New Hebrides Islands</u> 18.57 S 169.10 E H = 11 18 22.7 h = 247 km MB = 4.7 D = 143.32 Az = 335.9 (USCGS) PKPV(A):1.3s 32.8nm

Day	Phase	h m s	Remarks
20.	e(PKP) A LmV B LmH B	22 53 08 23 48.4 48.8	<u>Off Coast of Southern Chile</u> 44.99 S 80.29 W H = 22 34 16.9 h = normal MB = 5.1 D = 123.94 Az = 50.1 (USCGS) LmV(B):18s 1.6/um MLV(B)=5.7 LmH(B):17s 1.4/um MLH(B)=5.7
21.	e A LmV B LmH B	02 52 45 03 33.0 33.2	<u>Gulf of California</u> 25.61 N 109.67 W H = 02 39 46.6 h = 5 km MB = 5.0 D = 88.11 Az = 33.0 (USCGS) LmV(B):16s 0.9/um MLV(B)=5.3 LmH(B):16s 0.8/um MLH(B)=5.2
21.	eiPKHKP A ePKP2 A	04 32 04 32 09.5	<u>Fiji Islands</u> 20.23 S 176.75 W H = 04 12 55.2 h = 350 km MB = 4.6 D = 148.93 Az = 349.7 (USCGS) PKHKPV(A):1.7s 66.7nm
21.	e A LmH B	10 23 17 11 06.8	<u>Volcano Islands</u> 24.05 N 142.70 E H = 10 09 55.4 h = normal MB = 5.4 D = 94.02 Az = 331.2 (USCGS) LmH(B):15s 0.8/um MLH(B)=5.4
21.	e(PKP) A	15 08 06.5	<u>New Hebrides</u> 19.1 S 168.7 E H = 14 48 26 h = 0 km MB = 4.7 D = 78.70 Az = 334 (ISC) PKPV(A):1.2s 14.2nm
21.	eP A	17 45 54	<u>Kurile Islands</u> 44.17 N 149.09 E H = 17 33 54.8 h = 45 km MB = 4.6 D = 78.59 Az = 334.0 (USCGS)
21.	iPn A iPg A iSg A LmH B LmV B	20 41 04 41 14.5 41 51 42.1 42.1	<u>Federal Rep. Germany</u> 48.46 N 9.15 E H = 20 40 21.3 h = 14 km MB = 4.1 D = 2.72 Az = 35.3 (USCGS) LmH(B):6s 3.6/um MLH(B)=3.8 LmV(B):5s 2.1/um

Day	Phase	h m s	Remarks
21.	ePKHKP A	22 52 12.5	<u>Tonga Islands</u> 21.04 S 174.00 W H = 22 32 23.7 h = normal MB = 5.0 D = 150.12 Az = 352.8 (USCGS) PKHKPV(A):1.2s 20.3nm
22.	eiPKHKP A e A	08 44 23.5 44 34	<u>Fiji Islands</u> 21.59 S 176.12 W H = 08 24 52.9 h = 190 km MB = 4.7 D = 150.37 Az = 350.0 (USCGS) PKHKPV(A):1.3s 26.2nm
22.	eP A	10 07 53	<u>Morocco</u> 34.3 N 3.7 W H = 10 03 21 (BCIS) D = 19.7
22.	eP A	10 53 03	<u>Szechwan Province, China</u> 31.69 N 103.81 E H = 10 42 05.8 h = 16 km MB = 5.0 D = 67.52 Az = 316.5 (USCGS) PV(A):1.2s 14.2nm MPV(A)=5.1
22.	ePKIKP A e A	23 21 15.5 21 32	<u>West of Macquarie Island</u> 53.13 S 140.83 E H = 23 01 33.2 h = normal MB = 5.0 D = 149.09 Az = 286.2 (USCGS) PKIKPV(A):1.8s 27.0nm
23.	eP1 AB iP2 A -ipP ABC e A iS ABC eSS C eSSS C LmH B LmV B	00 32 43.5 32 45 33 21 35 30 42 29 47 35 50 58 01 05.3 15.0	<u>Honshu, Japan</u> 40.14 N 140.19 E H = 00 20 54.7 h = 146 km MB = 5.7 D = 79.00 Az = 329.5 (USCGS) P2V(A):1.5s 77.9nm MPV(A)=5.2 SH(B):8s 1.5/um MSH(B)=6.1 LmH(B):16s 2.1/um LmV(B):11s 0.7/um

Day	Phase	h m s	Remarks
23.	+eP ABC e A e A e A eS C eSS C LmH C LmV C	02 02 38 02 44 02 50.5 02 55.5 10 25 14 35 28.0 33.0	<u>India</u> 21.68 N 73.02 E H = 01 52 59.3 h = 3 km MB = 5.4 D = 55.49 Az = 317.3 (USCGS) PV(A):1.2s 85.4nm MPV(A)=5.7 LmV(C):12s 0.7/um MLV(C)=5.0
23.	eiP ABC i A ePP BC e BC eS C ePS B ePS C LmH B LmV B	12 27 02.5 27 14 30 16 31 02 37 10 38 19.5 38 20 13 10.3 11.1	<u>Ryukyu Islands</u> 29.81 N 129.26 E H = 12 14 53.5 h = 148 km MB = 5.8 D = 82.84 Az = 325.4 (USCGS) PV(A):1.6s 314.0nm MPV(A)=5.8 PV(B):5s 1.5/um MPV(B)=6.0 LmH(B):16s 1.0/um LmV(B):13s 0.7/um
23.	iP A LmH B LmV B	20 59 10 21 05.4 05.5	<u>Greece-Albania Border Region</u> 39.12 N 20.48 E H = 20 56 00.7 h = 10 km MB = 4.9 D = 13.12 Az = 334.4 (USCGS) PV(A):0.8s 28.8nm MPV(A)=5.0 LmH(B):12s 2.7/um LmV(B):12s 2.9/um
23.	eP A	23 17 18	<u>Southern Nevada</u> 37.08 N 116.02 W H = 23 05 00.0 h = 0 km MB = 5.5 D = 81.26 Az = 30.7 (USCGS) 37°05'10.4" N 116°01'15.9" W Nevada test site "Shaper" (USAEC) PV(A):1.2s 28.4nm MPV(A)=5.4
24.	ePKIKP1 ABC ePKIKP2 A ePP ABC ePKKP A	10 54 15.5 54 18 55 54 11 04 11	<u>Western Australia</u> 21.98 S 126.68 E H = 10 35 22.1 h = normal MB = 6.2 D = 122.50 Az = 316.9 (USCGS) PKIKP1V(A):1.7s 60.6nm

Day	Phase	h m s	Remarks
cont. 24.	ePcPPKP A	11 08 09	PKIKP2V(A):1.6s 98.8nm
	e B	11 35	PKKPV(A):2.0s 42.7nm
	LmH B	48.5	LmH(B):19s 1.2 μ m MLH(B)=5.6
	LmV B	12 04.5	LmV(B):19s 1.1 μ m MLV(B)=5.5
24.	ePKHKP A	13 24 25	<u>Fiji Islands</u> 20.68 S 178.73 W
	ePKP2 A	24 31.5	H = 13 05 43.8 h = 610 km MB = 4.1 D = 149.00 Az = 347.2 (USCGS) PKHKPV(A):1.2s 20.4nm
24.	eP A	23 58 28	<u>Eastern China</u> 26.20 N 104.87 E H = 23 47 00.7 h = 8 km MB = 4.9 D = 72.18 Az = 318.1 (USCGS) PV(A):1.8s 20.3nm MPV(A)=5.0
25.	eP A	12 32 38.5	<u>Kodiak Island</u> 56.67 N 152.08 W
	e A	32 44	H = 12 21 11.7 h = 11 km MB = 4.9 D = 72.21 Az = 10.8 (USCGS) PV(A):0.6s 15.3nm
25.	eP A	17 19 04	<u>Mediterranean Sea</u> 34.8 N 25.0 E H = 17 14 48 (BCIS) D = 18.5
26.	eP A	15 33 00	<u>Andreanof Islands, Aleutian Is.</u> 50.71 N 175.00 W H = 15 20 53.7 h = 4 km MB = 4.7 (USCGS) D = 78.5
26.	+iP AB	19 12 17.5	<u>Southern Nevada</u> 37.30 N 116.53 W
	+iPP AB	15 23	H = 19 00 00.2 h = 0 km MB = 6.5 (USCGS)
	LmV B	50.4	37°18'01.7" N 116°32'02.8" W
	LmH B	50.5	Nevada test site "Handley" (USAEC) D = 81.3 PV(A):1.3s 299.0nm MPV(A)=6.3 LmV(B):15s 3.2 μ m MLV(B)=5.8 LmH(B):17s 2.5 μ m MLH(B)=5.4

Day	Phase	h m s	Remarks
27.	eX A	03 19 21	<u>Norwegian Sea</u> 72.85 N 3.8 E H = 03 14 13.2 h = 0 km (ISC) D = 22.3 XV(A):1.2s 14.2nm
27.	eP A	04 39 18.5	<u>Near West Coast of Colombia</u>
	e A	39 24	5.57 N 77.63 W H = 04 26 42.3 h = 28 km MB = 5.2 (USCGS) D = 84.3 PV:1.3s 39.3nm MPV(A)=5.5
27.	ePKP A	04 53 37	<u>New Hebrides Islands</u> 19.11 S 168.50 E H = 04 34 03.4 h = 16 km MB = 4.4 D = 143.57 Az = 335.1 (USCGS) PKPV(A):1.3s 39.3nm
27.	eP A	05 10 45.5	<u>Eastern Kazakh SSR</u> 49.76 N 78.01 E
	e A	12 28	H = 05 02 56.8 h = 0 km MB = 5.2 (USCGS) D = 41.3 Probably underground explosion PV(A):0.9s 19.5nm MPV(A)=4.8
27.	ePKP A	05 26 40	<u>New Hebrides Islands</u> 19.09 S 168.51 E H = 05 07 06.6 h = 11 km (USCGS) D = 143.6
27.	ePn A	14 05 14	explosion yield 18.2 to (PRU)
	iPg A	05 15	49°27.7' N 13°22.6' E
	eSn A	05 37	D = 1.6
	iSg A	05 37.5	
27.	eP1 A	18 50 37	<u>Northern Celebes</u> 0.37 N 119.35 E
	eP2 A	50 48.5	H = 18 36 45.8 h = 8 km MB = 6.2 (USCGS)
	eP3 A	50 52.5	D = 99.3
	ePP B	54 52	P1V(A):1.6s 27.5nm MP1V(A)=5.5
	iSKS BC	19 01 15	P2V(A):1.3s 30.5nm MP2V(A)=5.7
	eS B	02 12	P3V(A):1.8s 94.6nm MP3V(A)=6.0
	eSP BC	03 40	PPV(B):12s 3.1 μ m MPPV(B)=6.6

Day	Phase	h m s	Remarks
cont. 27.	iPPS	B 19 04 20	LmH(B):20s 37.0 μ m MLH(B)=6.9
	e	A 07 21.5	LmV(B):17s 19.3 μ m MLV(B)=6.7
	eiSS	BC 09 32	
	LmH	B 39.8	
	LmV	B 49.5	
27.	e	A 23 52 22	<u>Dodekanese Islands</u> 36.03 N 28.36 E H = 23 47 51.3 h = 0 km (ISC) D = 18.9
28.	eP	A 05 29 31.5	<u>South Indian Ocean</u> 35.27 S 53.99 E H = 05 16 16.7 h = 21 km MB = 5.1 (USCGS) D = 93.3
28.	ePKIKP	A 08 04 55.5	<u>Solomon Islands</u> 6.26 S 154.63 E
	e	A 05 02	H = 07 45 59.9 h = 64 km MB = 5.9 (USCGS)
	ePP	A 06 52	D = 126.2
	eSKKP	A 17 54	PKIKPV(A):1.5s 30.2nm
	eSS	C 24 05	SKKPV(A):2.0s 51.3nm
	eSSS	C 28 55	
	LmH	B 51.4	
	LmV	B 05.6	
28.	eP	A 09 54 25.5	<u>Lake Baikal Region</u> 52.23 N 105.80 E
	e	A 54 33.5	H = 09 44 57.8 h = normal MB = 5.2
	e	A 55 30	D = 54.59 Az = 308.8 (USCGS)
	i	BC 10 14 58	LmH(B):14.5s 10.7 μ m MLH(B)=6.1
	LmH	B 20.7	LmV(B):12s 9.1 μ m MLV(B)=6.1
	LmV	B 21.0	
28.	ePKP	A 10 17 41	<u>Loyalty Islands</u> 22.36 S 170.36 E H = 09 57 52.8 h = 4 km (USCGS) D = 147.3
28.	e	A 16 44 59	<u>Yugoslavia</u> 43.3 N 19.0 E
	e	A 46 29	H = 16 42 51 h = 44 km (ISC)
	e	A 46 32	D = 9.7

Day	Phase	h m s	Remarks
28.	eP	A 18 00 57	<u>Unimak Island Region</u> 53.71 N 163.65 W H = 17 49 10.2 h = 23 km MB = 4.5 (USCGS) D = 75.8 PV(A):1.2s 12.7nm MPV(A)=4.9
28.	-eP1	ABC 21 06 21.5	<u>Turkey</u> 39.18 N 29.49 E
	iP2	AB 06 25	H = 21 02 23.4 h = 20 km MB = 6.0 (USCGS)
	eS	B 09 24	D = 17.0
	LmV	B 14.0	P1V(A):2.4s 525.0nm MP1V(A)=5.2
	LmH	B 14.1	P2V(A):1.6s 1485.0nm MP2V(A)=5.9
			LmV(B):14s 924.0 μ m MLV(B)=7.3
			LmH(B):15s 1262.0 μ m MLH(B)=7.3
28.	eP	A 21 45 18	<u>Turkey</u> 38.99 N 29.26 E H = 21 41 18.6 h = normal MB = 4.6 (USCGS) D = 17.1 PV(A):1.8s 54.0nm MPV(A)=4.4
28.	eP	A 22 03 08	<u>Turkey</u> 39.23 N 29.29 E H = 21 59 10.9 h = 17 km MB = 4.8 D = 16.89 Az = 318.3 (USCGS)
28.	eP	A 22 11 50	<u>Turkey</u> H = 22 07 48 (UPP) PV(A):1.8s 47.3nm
28.	eP	A 22 09 34	<u>Turkey</u> 38.78 N 29.79 E H = 22 05 27.8 h = 7 km MB = 4.6 (USCGS) D = 17.5 PV(A):1.6s 35.7nm MPV(A)=5.3
28.	eP	A 22 44 14	<u>Turkey</u> 39.13 N 29.29 E
	e	A 44 21.5	H = 22 40 14.9 h = normal MB = 4.4 D = 16.96 Az = 318.5 (USCGS) PV(A)=1.8s 33.8nm MPV(A)=4.2

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Day	Phase	h m s	Remarks
28.	eP1 iP2 e	A A A 23 15 40.5 15 44 19 27	<u>Turkey</u> 39.22 N 29.52 E H = 23 11 44.0 h = 37 km MB = 5.2 (USCGS) D = 17.0 P2V(A):2.7s 959.0nm MPV(A)=5.5
28.	eP eX	A A 23 32(15) 32 27	<u>Turkey</u> 39.35 N 29.34 E H = 23 28 26.6 h = 39 km MB = 4.5 D = 16.83 Az = 318.0 (USCGS) XV(A):2.0s 85.5nm
28.	eP e e	A A A 23 48 02.5 48 08.5 48 28	<u>Turkey</u> 39.09 N 29.78 E H = 23 43 58.6 h = 22 km MB = 5.1 (USCGS) D = 17.2 PV(A):2.2s 284.0nm MPV(A)=5.0
29.	eP	A 01 32 57	<u>Turkey</u> 39.02 N 29.79 E H = 01 28 52.6 h = normal MB = 4.3 (USCGS) D = 17.2
29.	eP	A 01 51 25	<u>Turkey</u> H = 01 47 17 (UPP)
29.	e(P)	A 02 09 26	<u>Turkey</u> 39.26 N 29.17 E H = 02 05 25.0 h = 22 km MB = 4.7 (USCGS) D = 16.9
29.	eP	A 02 30 53.5	<u>Mindoro, Philippine Islands</u> 13.90 N 120.68 E H = 02 18 01.2 h = 118 km MB = 5.3 D = 91.02 Az = 323.0 (USCGS) PV(A):1.5s 35.2nm MPV(A)=5.3
29.	e	A 02 44 46	<u>Turkey</u> 38.95 N 29.46 E H = 02 40 34.0 h = normal MB = 4.5 (USCGS) D = 17.1
29.	eP	A 02 49 47	<u>Turkey</u> 39.29 N 29.34 E H = 02 45 50.3 h = normal MB = 4.5 (USCGS) D = 16.9

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Day	Phase	h m s	Remarks
29.	eP	A 02 58 52	<u>Turkey</u> 39.14 N 29.76 E H = 02 54 50.8 h = 25 km MB = 4.3 (USCGS) D = 17.2 PV(A):1.8s 33.8nm MPV(A)=4.2
29.	eP	A 03 14 48	<u>Turkey</u> 39.09 N 30.09 E H = 03 10 45.0 h = normal MB = 4.4 D = 17.41 Az = 317.6 (USCGS) PV(A):1.8s 33.8nm MPV(A)=4.2
29.	eP LmH LmV	A B B 03 57 01 04 14.3 17.0	<u>Southern Sinkiang, Prov. China</u> 39.56 N 75.37 E H = 03 48 47.4 h = normal MB = 5.1 D = 45.03 Az = 306.2 (USCGS) PV(A):1.2s 20.3nm MPV(A)=4.9 LmH(B):15s 2.1/um MLH(B)=5.2 LmV(B):11s 1.4/um MLV(B)=5.2
29.	eP1 iP2 iS LmH LmV	AB AB BC B B 07 00 26 00 30 03 48 06.4 08.3	<u>Turkey</u> 39.02 N 29.73 E H = 06 56 21.9 h = 15 km MB = 5.3 (USCGS) D = 17.2 P1V(A):1.5s 100.0nm MP1V(A)=4.7 P2V(A):2.0s 299.0nm MP2V(A)=5.1 P2V(B):8s 2.2/um MP2V(B)=5.3 LmH(B):16s 9.6/um MLH(B)=5.1 LmV(B):12s 9.6/um MLV(B)=5.3
29.	eP	A 09 56 14	<u>Turkey</u> 39.19 N 29.20 E H = 09 52 14.9 h = 23 km MB = 4.4 D = 16.88 Az = 318.5 (USCGS)
29.	ePKP iX epPKP e iPP iSKP eSKKS eSS	A AB BC BC ABC A BC C 10 27 21.5 27 26 28 18 29 47 30 42 30 57 37 04 48 50	<u>New Hebrides Islands</u> 17.07 S 168.51 E H = 10 08 20.3 h = 232 km MB = 6.0 D = 141.73 Az = 336.2 (USCGS) PKPV(A):1.2s 28.5nm XV(A):1.5s 120.5nm PPV(A):2.0s 535.0nm MPPV(A)=6.2 SKPV(A):1.8s 311.0nm

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Day	Phase	h m s	Remarks
29.	e	A 12 18 53	<u>Flores Sea</u> 7.24 S 120.59 E H = 12 00 32.6 h = 480 km MB = 5.3 (USCGS) D = 107.5
29.	+iP e LmH LmV	A 14 41 11.8 A 41 16 B 46.9 B 48.3	<u>Turkey</u> 38.87 N 27.92 E H = 14 37 16.6 h = 27 km MB = 4.6 D = 16.47 Az = 320.9 (USCGS) PV(A):1.4s 69.7nm MPV(A)=4.6
29.	eP1 eP2 LmH LmV	A 14 44 20 A 44 23 B 50.2 B 50.5	<u>Turkey</u> 28.73 N 28.00 E H = 14 40 26.6 h = 47 km MB = 4.5 D = 16.62 Az = 321 (ISC) P1V(A):1.4s 11.6nm MP1V(A)=3.8 P2V(A):1.7s 60.6nm MP2V(A)=4.5 LmH(B):12s 1.6/um MLH(B)=4.5 LmV(B):12s 1.8/um MLV(B)=4.6
29.	eP1	A 18 09 51.5	<u>Ionian Sea</u> 37.66 N 20.09 E H = 18 06 23.1 h = 41 km MB = 4.4 D = 14.32 Az = 337.7 (USCGS)
29.	eP PmV LmH	AB 19 15 42.5 A 15 48 B 23.0	<u>Turkey</u> 39.12 N 29.33 E H = 19 11 39.6 h = 6 km MB = 4.8 D = 16.99 Az = 318.5 (USCGS) PmV(A):1.7s 121.0nm MPmV(A)=4.8 LmH(B):15s 1.0/um MLH(B)=4.2
29.	eP e eS LmH LmV	A 19 43 21 A 43 29 BC 53 42 B 20 24.8 B 24.9	<u>Ryukyu Islands</u> 28.84 N 129.94 E H = 19 30 51.4 h = 23 km MB = 5.4 D = 83.98 Az = 325.7 (USCGS) PV(A):1.8s 47.3nm MPV(A)=5.4 LmH(B):17s 2.6/um MLH(B)=5.7 LmV(B):16s 2.3/um MLV(B)=5.7
29.	eP epP LmH	A 22 16 12 A 16 38.5 B 23 00.0	<u>Talaud Islands</u> 4.92 N 125.97 E H = 22 02 28.0 h = 97 km MB = 5.2 D = 101.30 Az = 323.7 (USCGS) h = 100 km

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Day	Phase	h m s	Remarks
30.	eP	A 00 19 44	<u>Turkey</u> 38.96 N 29.73 E H = 00 15 44.5 h = 55 km D = 17.31 Az = 318 (ISC) PV(A):2.3s 61.0nm MPV(A)=4.3
30.	e(P)	A 01 27 44	<u>Turkey</u> 39.18 N 29.6 E H = 01 23 37.2 h = 0 km MB = 4.1 D = 17.09 Az = 318 (ISC)
30.	eP	A 06 50 21	<u>Turkey</u> 38.97 N 28.80 E H = 06 46 24.4 h = 23 km MB = 4.5 D = 16.83 Az = 319.5 (USCGS) PV(A):1.6s 16.5nm MPV(A)=3.9
30.	eP1 iP2 LmH LmV	A 06 52 58.5 A 53 02.5 B 58.8 B 07 01.2	<u>Turkey</u> 39.30 N 29.26 E H = 06 49 04.2 h = normal MB = 4.7 D = 16.81 Az = 308.2 (USCGS) P1V(A):0.7s 11.5nm MP1V(A)=4.1 P2V(A):2.0s 102.5nm MP2V(A)=4.6 LmH(B):14.5s 1.4/um MLH(B)=4.3 LmV(B):11s 1.3/um MLV(B)=4.6
30.	eP1 eP2 eS eS LmH LmV	ABC 08 03 46 A 03 51 B 06 56 C 07 00 B 09.6 B 11.8	<u>Turkey</u> 39.32 N 29.22 E H = 07 59 50.7 h = 17 km MB = 5.2 D = 16.79 Az = 318.2 (USCGS) P1V(A):1.4s 14.0nm MP1V(A)=3.9 P1V(B):9s 1.0/um MP1V(B)=5.0 P2V(A):2.8s 300.0nm MP2V(A)=4.9 LmH(B):15.5s 9.3/um MLH(B)=5.1 LmV(B):10s 5.5/um MLV(B)=5.2
30.	eP	A 08 34 53	<u>Hokkaido, Japan</u> 43.23 N 145.70 E H = 08 22 57.4 h = 60 km MB = 4.8 D = 78.31 Az = 332.2 (USCGS)
30.	eP e e	A 08 39 10 A 39 14.5 A 39 19	<u>Turkey</u> 39.15 N 28.88 E H = 08 35 16.2 h = 27 km MB = 4.6 D = 16.74 Az = 319.0 (USCGS)

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Day	Phase	h m s	Remarks	
cont. 30.	LmV LmH	B B	08 47.2 47.3	LmV(B):13s 1.1/um MLV(B)=4.5 LmH(B):13s 1.7/um MLH(B)=4.6
30.	e	A	09 30 24	<u>Turkey</u> 39.01 N 29.39 E H = 09 26 09.4 h = 21 km MB = 4.5 (USCGS) D = 17.1
30.	e	A	13 52 17	<u>Turkey</u> 39.26 N 29.12 E H = 13 48 05.4 h = normal MB = 4.5 D = 16.78 Az = 318.4 (USCGS)
30.	eP1 eiP2 eS LmH LmV	A ABC B B B	16 36 36 36 37.5 40 00 42.5 44.5	<u>Turkey</u> 39.09 N 29.62 E H = 16 32 33.4 h = 11 km MB = 4.9 D = 17.16 Az = 318.2 (USCGS) P2V(A):3.2s 645.0nm MP2V(A)=5.2 LmH(B):16s 8.4/um MLH(B)=5.1 LmV(B):13s 5.4/um MLV(B)=5.1
30.	eP1 iP2 ePP iSKS eS i -iSP eSS +iPSPS iSSS LmH LmV	ABC A B BC B C BC C BC C B B	17 00 24.5 00 26 04 44 10 56 11 52 12 16 13 18 18 44 19 24 23 09 49.9 54.3	<u>Mindanao, Philippine Islands</u> 6.80 N 126.65 E H = 16 46 45.6 h = 76 km MB = 5.9 D = 100.19 Az = 324.1 (USCGS) P1V(A):2.0s 77.0nm MPV(A)=5.9 P1V(B):12s 4.3/um MP1V(B)=6.9 P2V(A):1.2s 114.0nm MP2V(A)=6.4 PPV(B):14s 3.8/um MPPV(B)=6.8 SH(B):12s 6.1/um MSH(B)=6.9 LmH(B):22s 47.6/um MLH(B)=7.0 LmV(B):20s 28.8/um MLV(B)=6.8
30.	eX LmH LmV	A B B	20 42 09 50.8 51.0	<u>Turkey</u> 38.98 N 29.62 E H = 20 38 00.9 h = 5 km MB = 4.5 D = 17.25 Az = 308.4 (USCGS) XV(A):1.7s 42.4nm LmH(B):8.5s 1.0/um MLH(B)=4.4 LmV(B):8s 0.7/um MLV(B)=4.4

Day	Phase	h m s	Remarks	
30.	ePKP2	A	21 01 48.5	<u>Auckland Islands Region</u> 49.62 S 164.31 E H = 20 40 50.1 h = normal MB = 5.4 (USCGS) D = 162.8 PKP2V(A):1.3s 13.1nm
30.	eP	A	21 03 22	<u>Turkey</u> 39.23 N 29.28 E H = 20 59 30.3 h = normal MB = 4.7 (USCGS) D = 16.8
31.	eP LmH LmV	A B B	00 24 00.5 01 17.6 19.9	<u>Southwestern Ryukyu Islands</u> 24.35 N 123.08 E H = 00 11 36.5 h = 70 km MB = 5.0 D = 84.05 Az = 323.4 (USCGS) LmH(B):12.5s 0.8/um LmV(B):12s 0.6/um
31.	eP	A	00 55 36	<u>Turkey</u> 39.37 N 29.33 E H = 00 51 35.6 h = 14 km MB = 4.7 D = 16.80 Az = 317.9 (USCGS)
31.	eP e LmH LmV	AB B B B	03 50 53.5 54 37 56.8 58.7	<u>Turkey</u> 39.06 N 29.95 E H = 03 46 48.3 h = 15 km MB = 4.8 D = 17.36 Az = 317.8 (USCGS) PV(A):2.3s 183.0nm MPV(A)=4.8 LmH(B):16s 2.7/um MLH(B)=4.6 LmV(B):12s 2.4/um MLV(B)=4.8
31.	eP	A	04 14 04	<u>Turkey</u> 39.02 N 29.09 E H = 04 10 07.3 h = normal MB = 4.3 D = 16.94 Az = 319.0 (USCGS) PV(A):1.7s 21.2nm MPV(A)=4.0
31.	eP	A	12 02 02	<u>Turkey</u> 38.98 N 29.68 E H = 11 57 58.0 h = 26 km MB = 4.7 D = 17.28 Az = 318.3 (USCGS) PV(A):2.5s 107.6nm MPV(A)=4.5

Day	Phase	h m s	Remarks
31.	ePKIKP A	15 45 52	<u>Fiji Islands</u> 21.20 S 178.60 W
	ePKHKP A	45 57.5	H = 15 27 09.5 h = 550 km MB = 5.0
	iPKP2 A	46 05	D = 149.53 Az = 347.1 (USCGS) PKIKPV(A):1.6s 19.2nm PKHKPV(A):1.4s 116.0nm PKP2V(A):1.5s 55.3nm
31.	eP A	18 29 57	<u>Chagos Archipelago Region</u>
	e A	30 14.5	3.82 S 69.72 E
	e A	30 28	H = 18 18 25.2 h = normal MB = 5.5
	eS C	39 20	D = 73.46 Az = 325.7 (USCGS)
	eSS C	43 59	PV(A):1.4s 32.6nm MPV(A)=5.2
	LmH B	55.0	LmH(B):30s 3.1/um MLH(B)=5.4

Day	Phase	h m s	Remarks	
1.	eP A	03 32 06.5	<u>Gulf of Alaska</u> 59.44 N 144.70 W H = 03 20 57.0 h = normal MB = 4.2 (USCGS) D = 68.7 PV(A):1.0s 7.9nm MPV(A)=4.9	
	LmH B	11 53.3	Probably <u>Atlantik</u> (USCGS)	
	LmV B	53.9	LmH(B):16s 0.4/um LmV(B):18s 0.4/um	
1.	eiP AB	14 35 27	<u>Honshu, Japan</u> 39.77 N 141.79 E	
	ipP A	35 46	H = 14 23 25.1 h = 81 km MB = 5.8	
	esP A	35 57	D = 79.93 Az = 330.4 (USCGS)	
	eS BC	45 24	PV(A):1.4s 111.8nm MPV(A)=5.6	
	LmH B	15 14.7	LmH(B):13.5s 1.6/um MLH(B)=5.5	
	LmV B	17.8	LmV(B):11s 0.9/um MLV(B)=5.7 pPV(A):2.0s 102.5nm sPV(A):1.2s 40.7nm	
	1.	eP A	16 00 00	<u>Turkey</u> 39.39 N 29.24 E
		LmH B	05.7	H = 15 56 02.1 h = 16 km MB = 4.8
		LmV B	09.3	D = 16.74 Az = 318.0 (USCGS) PV(A):2.1s 105.0nm MPV(A)=4.6 LmH(B):17s 1.3/um MLH(B)=4.2 LmV(B):8s 0.6/um MLV(B)=4.4
	1.	e A	24 01 39.5	<u>Southern Iran</u> 28.00 N 56.74 E H = 23 54 05.6 h = 62 km MB = 5.1 D = 40.77 Az = 316.3 (USCGS)
2.	eP A	00 32 31.5	<u>Turkey</u> 39.15 N 29.40 E	
	LmH B	40.2	H = 00 28 32.2 h = 28 km MB = 4.4	
	LmV B	41.8	D = 17.00 Az = 318.3 (USCGS) PV(A):1.8s 33.8nm MPV(A)=4.2	
2.	eiPKIKP ABC	11 31 30	<u>Tonga Islands</u> 20.36 S 173.91 W	
	LmH B	12 40.7	H = 11 11 42.0 h = normal MB = 5.7	

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Day	Phase	h m s	Remarks
cont. 2.	LmV B	12 46.5	D = 149.47 Az = 353.1 (USCGS) PKIKPV(A):2.0s 184.0nm LmH(B):21s 1.1/um MLH(B)=5.6 LmV(B):18s 0.9/um
2.	eP A LmH B LmV B	20 39 10 45.2 47.1	<u>Turkey</u> 39.05 N 29.12 E H = 20 35 09 h = 35 km MB = 4.4 D = 17.24 Az = 318 (ISC) PV(A):1.2s 12.2nm MPV(A)=3.9 LmH(B):16s 1.3/um MLH(B)=4.2 LmV(B):12s 1.0/um MLV(B)=4.4
2.	eP A	21 29 33	<u>Sicily</u> 38.29 N 14.28 E H = 21 26 39.5 h = 226 km MB = 4.6 (ISC) D = 12.6
3.	ePKP AB eX A LmH B LmV B	07 12 20 12 23 08 29.3 28.0	<u>Tonga Islands</u> 20.51 S 174.05 W H = 06 52 33.8 h = 39 km MB = 5.7 (USCGS) D = 149.7 XV(A):1.7s 69.7nm LmH(B):17s 1.7/um MLH(B)=5.8 LmV(B):19s 1.9/um
3.	eP A	07 20 33	<u>Mid-Indian Rise</u> 20.54 S 67.89 E H = 07 07 51.1 h = normal MB = 5.1 (USCGS) D = 86.3 PV(A):1.6s 22.0nm MPV(A)=5.1
3.	eP A	12 20 47.5	<u>Turkey</u> 38.95 N 29.5 E H = 12 16 45.8 h = 0 km MB = 4.2 D = 17.21 Az = 319 (ISC) PV(A):1.5s 20.1nm MPV(A)=4.0
3.	eP A	14 10 54	<u>Andreanof Islands, Aleutian Is.</u> 51.91 N 175.32 W H = 13 59 02.5 h = 57 km MB = 5.0 D = 77.65 Az = 355 (ISC) PV(A):1.0s 11.8nm MPV(A)=5.0

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Day	Phase	h m s	Remarks
3.	eP A eipP A LmH B LmV B	21 00 32.5 00 38.5 17.0 17.0	<u>Iran-USSR Border Region</u> 37.07 N 54.58 E H = 20 53 54.5 h = 43 km MB = 5.2 (USCGS) D = 33.3 PV(A):2.0s 42.7nm MPV(A)=5.0 pPV(A):1.7s 69.7nm
3.	eP A	23 23 44	<u>Turkey</u> 38.90 N 29.70 E H = 23 19 38 h = 3 km MB = 4.3 D = 17.35 Az = 318 (ISC) PV(A):1.8s 20.3nm MPV(A)=4.0
4.	eP A eX A LmH B LmV B	11 05 16.5 05 20.5 23.3 26.2	<u>Iran-USSR Border Region</u> 37.00 N 59.42 E H = 10 58 08.9 h = 8 km MB = 4.8 (USCGS) D = 36.4 PV(A):1.1s 22.2nm MPV(A)=4.9 XV(A):1.1s 26.2nm LmH(B):16s 0.8/um MLH(B)=4.6 LmV(B):12s 0.3/um MLV(B)=4.4
4.	eP A	13 11 30.5	<u>Off W. Coast of Northern Sumatra</u> 2.33 N 95.12 E H = 12 59 00.2 h = 29 km MB = 5.1 (USCGS) D = 84.1 PV(A):1.0s 11.8nm MPV(A)=5.1
4.	iPKP ABC	23 05 45	<u>Fiji Islands</u> 16.58 S 177.32 W H = 22 46 51.8 h = 394 km MB = 5.2 (USCGS) D = 145.27 PKPV(A):1.4s 112.0nm
5.	eP A e A LmH C LmV C	04 59 56 05 00 14 06.3 08.5	<u>Crete</u> 34.75 N 25.24 E H = 04 55 40.2 h = 54 km MB = 4.5 (USCGS) D = 18.8 LmH(C):20s 0.8/um MLH(C)=5.7
5.	eP A LmH C	05 51 31 57.6	<u>Turkey</u> 38.87 N 29.79 E H = 05 47 24.8 h = 16 km MB = 4.5 (USCGS) D = 17.4 PV(A):2.3s 79.1nm MPV(A)=4.4

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Day	Phase	h m s	Remarks
5.	e	A 06 53 15.5	<u>Pyrenees</u> 42.5 N 1.6 E
	eSg	A 55 43	H = 06 50 02 (BCIS)
	e	A 55 45	D = 10.7
	LmV	B 56.8	LmV(B):7s 0.6/um
	LmH	B 57.2	LmH(B):11.5s 0.4/um MLH(B)=3.6
5.	ePKP	A 11 29 58	<u>New Hebrides Islands</u> 17.69 S 167.82 E
			H = 11 10 31.2 h = 27 km MB = 5.0
			D = 142.02 Az = 335.3 (USCGS)
6.	e(P)	A 12 33 49	<u>Turkey</u> 39.31 N 29.18 E
			H = 12 29 47.7 h = 0 km MB = 4.3
			D = 16.77 Az = 318 (ISC)
			PV(A):2.2s 65.4nm MPV(A)=4.4
6.	+iP	AB 01 07 27.5	<u>Mindoro, Philippine Islands</u>
	eS	C 18 16	13.86 N 120.18 E
	LmH	C 50.0	H = 00 54 30.8 h = 75 km MB = 5.4
			D = 90.77 Az = 322.9 (USCGS)
			PV(A):1.6s 60.4nm MPV(A)=5.6
6.	ePKP	A 06 27 59.5	<u>Fiji Islands</u> 17.84 S 178.37 W
	e	A 28 02	H = 06 09 18.2 h = 543 km MB = 4.4
			D = 146.31 Az = 348.5 (USCGS)
			PKPV(A):1.4s 16.3nm
6.	ePKP	A 12 42 52.5	<u>New Hebrides Islands</u> 20.09 S 174.03 E
	e	A 42 59	H = 12 23 13.3 h = 31 km MB = 4.5
	e	A 43 03	D = 146.49 Az = 339.6 (USCGS)
6.	eP	A 13 32 14	<u>Sea of Okhotsk</u> 46.93 N 144.79 E
			H = 13 21 12.0 h = 369 km MB = 4.3
			D = 74.75 Az = 331.2 (USCGS)
6.	ePn	A 21 55 52	<u>Yugoslavia</u> 45.43 N 17.29 E
	eSn	A 57 09	H = 21 54.13.8 h = 0 km
	e	A 57 40	D = 6.46 Az = 326 (ISC)

Day	Phase	h m s	Remarks
7.	eP	A 04 16 32	<u>Turkey</u> 39.29 N 29.07 E
	LmH	B 22.2	H = 04 12 33.4 h = normal MB = 4.7 (USCGS)
	LmV	B 24.5	D = 17.0
			PV(A):2.0s 42.7nm MPV(A)=4.2
			LmH(B):12s 0.6/um MLH(B)=4.1
			LmV(B):12s 0.5/um MLV(B)=4.1
7.	+eP1	ABC 05 47 03.5	<u>Luzon, Philippine Islands</u>
	+iP2	A 47 05.5	15.76 N 121.71 E
	ePP	BC 50 35	H = 05 34 05.6 h = 37 km MB = 6.4
	eS	B 57 22	D = 90.15 Az = 323.3 (USCGS)
	e	B 57 38	P2V(A):1.7s 370.0nm MP2V(A)=6.3
	i	C 57 44	PPV(B):15s 23.7/um MPPV(B)=7.4
	eSP	B 58 52	LmH(B):16s 157.0/um MLH(B)=7.5
	eSS	B 06 04 08	LmV(B):20s 162.0/um MLV(B)=7.5
	ePKKP	A 04 39	
	eSSSS	B 10 52	
	LmH	B 33.8	
	LmV	B 34.5	
7.	eiP	A 06 06 53.5	<u>Luzon, Philippine Islands</u>
			15.5 N 122.4 E
			H = 05 53 48.6 h = 47 km MB = 5.6
			D = 90.70 Az = 323 (ISC)
			PV(A):1.5s 97.4nm MPV(A)=5.9
7.	eP	A 06 17 37	<u>Luzon, Philippine Islands</u>
			15.40 N 121.84 E
			H = 06 04 39 h = 48 km MB = 5.1
			D = 90.50 Az = 323 (ISC)
7.	eP	A 06 24 54	<u>Luzon, Philippine Islands</u>
			15.68 N 121.85 E
			H = 06 11 52.8 h = 22 km MB = 5.5
			D = 90.29 Az = 323 (ISC)
			PV(A):1.6s 44.0nm MPV(A)=5.4

Day	Phase	h m s	Remarks
7.	eP	A 06 47 19.5	<u>Luzon, Philippine Islands</u> 15.49 N 121.87 E H = 06 34 18.6 h = normal MB = 5.5 D = 90.45 Az = 323.3 (USCGS)
7.	eP	A 08 12 57	<u>Luzon, Philippine Islands</u> 15.44 N 121.79 E H = 07 59 57.1 h = normal MB = 5.2 D = 90.44 Az = 323.3 (USCGS) PV(A):1.2s 20.3nm MPV(A)=5.3
7.	eP e	A 09 20 39 A 20 50	<u>Morocco</u> 34.84 N 3.90 W H = 09 16 13.9 h = normal MB = 4.9 D = 19.41 Az = 30.8 (USCGS) PV(A):2.0s 68.4nm MPV(A)=4.5
7.	eP1 +iX	A 09 23 08 A 23 15.5	<u>Crete</u> 34.57 N 26.14 E H = 09 18 44 h = 20 km MB = 4.9 D = 19.24 Az = 331 (ISC) P1V(A):1.8s 40.6nm MP1V(A)=4.4 XV(A):0.7s 53.6nm
7.	eP +iX	A 09 38 32.5 A 38 39.5	<u>Central Mid-Atlantic Ridge</u> 0.36 S 24.68 W H = 09 28 31.1 h = normal MB = 5.0 D = 59.45 Az = 26.0 (USCGS) XV(A):1.0s 17.7nm
7.	LmH LmV	B 11 04.4 B 04.7	Probably <u>Luzon,</u> <u>Philippine Islands</u> (USCGS) LmH(B):13s 8.7/um LmV(B):14s 0.4/um
7.	eP	A 14 58 03.5	<u>Sea of Okhotsk</u> 49.22 N 147.21 E H = 14 47 25.9 h = 560 km MB = 4.5 D = 73.49 Az = 332.3 (USCGS) PV(A):1.0s 9.8nm MPV(A)=4.3

Day	Phase	h m s	Remarks
7.	eP1 eP2 eS LmH LmV	ABC 15 46 20.5 A 46 27 BC 55 35 B 16 13.8 B 20.5	<u>Central Mid-Atlantic Ridge</u> 0.27 S 24.76 W H = 15 36 19.2 h = normal MB = 5.2 D = 59.41 Az = 26.0 (USCGS) P1V(A):2.0s 59.8nm MP1V(A)=5.3 P2V(A):2.0s 98.2nm MP2V(A)=5.5 LmH(B):17s 0.7/um MLH(B)=4.9 LmV(B):12s 0.4/um MLH(V)=4.8
7.	eP	A 16 25 03	<u>Kodiak Islands Region</u> 57.2 N 154.9 W H = 16 13 37 h = 68 km MB = 4.3 (ISC) D = 71.8 PV(A):1.1s 12.1nm MPV(A)=4.9
7.	eP eX eS LmH LmV	ABC 17 09 08 A 09 14 B 12 26 B 14.9 B 17.1	<u>Turkey</u> 39.38 N 29.15 E H = 17 05 11.9 h = 33 km MB = 5.1 D = 16.70 Az = 318.1 (USCGS) PV(A):1.7s 54.5nm MPV(A)=4.4 XV(A):1.7s 87.8nm LmH(B):15s 8.4/um MLH(B)=5.1 LmV(B):11s 6.8/um MLV(B)=5.3
7.	eP	A 19 24 16	<u>Luzon, Philippine Islands</u> 15.31 N 121.86 E H = 19 11 15.7 h = 33 km MB = 4.7 D = 90.59 Az = 323 (ISC)
8.	eiP	A 00 53 23	<u>Near East Coast of Kamchatka</u> 54.06 N 160.77 E H = 00 41 59.5 h = 45 km MB = 4.7 D = 72.50 Az = 340 (ISC) PV(A):1.1s 22.2nm MPV(A)=5.2
8.	eP	A 09 02 16.5	<u>Luzon, Philippine Islands</u> 15.31 N 121.63 E H = 08 49 16.6 h = normal MB = 5.2 D = 90.45 Az = 323.3 (USCGS) PV(A):1.5s 25.1nm MPV(A)=5.3

Day	Phase	h m s	Remarks
8.	e	A 10 06 07	<u>Luzon, Philippine Islands</u> 15.36 N 121.73 E H = 09 52 58.0 h = 13 km MB = 4.9 D = 90.47 Az = 323.3 (USCGS)
8.	+eP eiX	A 11 10 49 A 10 56.5	<u>Mid-Indian Rise</u> 11.08 S 65.90 E H = 10 58 54.6 h = normal MB = 5.1 D = 77.43 Az = 328.0 (USCGS) PV(A):2.2s 54.5nm MPV(A)=5.3 XV(A):1.6s 32.9nm
8.	eP1 eiP2 Pm eS LmH LmV	AB 13 53 52 A 53 57.5 A 54 31 B 56 28 B 14 00.8 B 00.8	<u>Greece</u> 38.43 N 22.66 E H = 13 50 27.2 h = 17 km MB = 5.8 D = 14.51 Az = 330.9 (USCGS) P1V(A):1.8s 54.1nm P2V(A):1.5s 100.5nm PmV(A):1.5s 502.0nm LmH(B):12s 136.0/um MLH(B)=6.3 LmV(B):14s 171.5/um
8.	ePKIKP epPKIKP ePP	A 15 00 27 A 00 41 A 03 12	<u>New Hebrides Islands</u> 13.77 S 166.79 E H = 14 41 08.4 h = 64 km MB = 5.5 (USCGS) D = 138.2 PKIKPV(A):1.3s 30.6nm
8.	eP ePP	A 18 07 30 A 11 03.5	<u>Luzon, Philippine Islands</u> 15.57 N 21.72 E H = 17 54 29.5 h = 22 km MB = 5.3 D = 90.30 Az = 323.3 (USCGS) PV(A):1.6s 22.0nm MPV(A)=5.2
8.	eP	A 20 03 01	<u>Alaska Peninsula</u> 56.26 N 156.53 W H = 19 51 32 h = 30 km MB = 4.9 D = 73.01 Az = 8 (ISC) PV(A):1.1s 20.2nm MPV(A)=5.2
8.	eP1 iP2 iX	AB 21 36 57 A 37 00 A 37 14	<u>Luzon, Philippine Islands</u> 15.43 N 121.80 E H = 21 23 56.6 h = normal MB = 5.7 (USCGS)

Day	Phase	h m s	Remarks
cont.			
8.	iPP eiS eSS eSSSS LmV LmH	AB 21 40 37 BC 47 48 C 54 56 C 22 00 28 B 23.9 B 24.4	D = 90.4 P1V(B):7.5s 2.3/um MP1V(B)=6.5 P2V(A):1.6s 132.0nm MP2V(A)=6.0 XV(A):1.6s 110.0nm PPV(B):11.5s 1.4/um MPPV(B)=6.3 SH(B):15s 4.5/um MSH(B)=6.3 LmV(B):16s 25.8/um MLV(B)=6.8 LmH(B):16s 16.7/um MLH(B)=6.6
8.	eP	A 21 59 40	<u>Luzon, Philippine Islands</u> 15.41 N 121.93 E H = 21 46 40.0 h = 36 km MB = 5.1 D = 90.55 Az = 323.3 (USCGS)
8.	eP	A 23 46 45.5	<u>Luzon, Philippine Islands</u> 15.54 N 121.74 E H = 23 33 46.2 h = normal MB = 5.2 D = 90.33 Az = 323.3 (USCGS) PV(A):1.8s 33.8nm MPV(A)=5.3
9.	iP -i	A 00 12 02.2 AB 12 02.5	<u>Kurile Islands</u> 45.30 N 149.02 E H = 00 00 14.7 h = 100 km MB = 5.4 D = 77.56 Az = 333.8 (USCGS) PV(A):1.1s 129.0nm MPV(A)=5.7
9.	e iSg	A 08 27 35 A 27 43	<u>Austria</u> 47.8 N 16.2 E H = 08 25 31 (BCIS) D = 4.1
9.	eP1 eiP2 LmH	A 10 16 27 A 16 30 C 24.0	<u>Turkey</u> 39.20 N 29.53 E H = 10 12 29.8 h = 33 km MB = 4.8 D = 17.04 Az = 318.1 (USCGS) P2V(A):1.8s 57.4nm MP2V(A)=4.4
9.	eP e	A 16 37 22 A 37 30.5	<u>Off Coast of Chiapas, Mexico</u> 13.21 N 92.26 W

Day	Phase	h m s	Remarks
cont. 9.	LmH C	17 17.3	H = 16 24 31.0 h = 41 km MB = 5.3 D = 88.49 Az = 38.2 (USCGS) PV(A):1.2s 16.3nm MPV(A)=5.2 LmH(C):19s 1.1/um MLH(C)=5.3
9.	eP A LmH C	21 55 21.5 22 41.8	<u>Atlantic-Indian Rise</u> 40.89 S 43.26 E H = 21 41 52.3 h = normal MB = 5.3 D = 95.27 Az = 340.4 (USCGS) LmH(C):20s 0.4/um MLH(C)=4.8
10.	eP A eX A	01 18 37.5 18 42	<u>Turkey</u> 39.4 N 29.3 E H = 01 14 43 D = 16.8 (ANUSSR) PV(A):1.5s 17.6nm MPV(A)=4.0 XV(A):2.6s 130.0nm
10.	epP A	08 31 41	<u>Afghanistan-USSR Border Region</u> 36.36 N 71.10 E H = 08 22 59.6 h = 125 km MB = 4.7 (USCGS) D = 44.2 h = 123 km pPV(A):1.3s 8.7nm
10.	e A	09 10 56	<u>Kurile Islands</u> 50.02 N 154.74 E H = 09 10 00.1 h = 152 km MB = 4.4 D = 74.89 Az = 336.7 (USCGS)
10.	eP A eX1 A eX2 A LmH C	10 32 43 32 49.5 32 56 56.0	<u>West Pakistan</u> 25.29 N 66.66 E H = 10 23 58.2 h = normal MB = 5.1 D = 48.87 Az = 316.1 (USCGS) PV(A):1.5s 37.7nm MPV(A)=5.2 X1V(A):1.2s 24.4nm X2V(A):1.2s 18.4nm LmH(C):21s 0.4/um MLH(C)=4.4
10.	ePKIKP AB ePKHKP A iPKP2 AB epPKP2 A	14 28 52 29 02 29 19 29 59	<u>Kermadec Islands</u> 27.46 S 177.91 W H = 14 09 16.0 h = 158 km MB = 5.5 D = 155.73 Az = 345.1 (USCGS) PKHKPV(A):1.6s 27.5nm

Day	Phase	h m s	Remarks
cont. 10.	ePP AB epPP B e(SKSP) C eSS C esSS C LmH C	14 32 54 33 42 43 15 52 25 53 28 15 20.0	PKP2V(A):1.6s 71.5nm LmH(C):37s 0.4/um
10.	iPn A iPg A iSn A iSg A LmH B LmV B	20 19 50 19 57 20 25 20 36 20.8 20.9	<u>Federal Rep. Germany</u> 48.55 N 8.94 E H = 20 19 07.6 h = 17 km D = 2.73 Az = 39 (ISC) LmH(B):6.5s 2.1/um MLH(B)=3.6 LmV(B):4.5s 0.8/um
11.	eP A LmH C	01 06 38 11.6	<u>Greece</u> 38.24 N 23.06 E H = 01 03 11.2 h = 70 km MB = 4.5 D = 14.84 Az = 330.4 (USCGS)
11.	eP1 AB iP2 A ePP BC eS BC eSKS BC eSS BC ei BC LmH B LmV B	04 16 43 16 46 19 18 25 44 26 45 30 00 30 41 49.3 51.5	<u>Gulf of Alaska</u> 59.71 N 142.74 W H = 04 05 41.1 h = 7 km MB = 5.2 D = 68.05 Az = 17.3 (USCGS) P1V(B):14s 1.5/um MP1V(B)=6.0 P2V(A):1.2s 85.4nm MP2V(A)=5.9 SH(B):15.5s 2.3/um MSH(B)=6.1 LmH(B):20s 10.3/um MLH(B)=6.0 LmV(B):16s 6.6/um MLV(B)=6.0
11.	ePKHKP ABC e A LmV B LmH B	06 41 02 41 20 07 48.3 51.5	<u>Tonga Islands</u> 19.33 S 173.57 W H = 06 21 16.3 h = normal MB = 5.3 D = 148.48 Az = 353.1 (USCGS) PKHKPV(A):2.0s 59.9nm LmV(B):20s 1.0/um LmH(B):20s 1.4/um MLH(B)=5.7
11.	eP A	10 10 46.5	<u>Gulf of Alaska</u> 59.51 N 142.75 W H = 09 59 46.3 h = normal MB = 4.6 D = 68.24 Az = 17.3 (USCGS) PV(A):1.4s 23.3nm MPV(A)=5.2

Day	Phase	h m s	Remarks
11.	eP A	13 06 36	<u>Gulf of Alaska</u> 59.77 N 142.66 W H = 12 55 37.9 h = normal MB = 4.5 D = 67.98 Az = 17.3 (USCGS) PV(A):0.6s 9.6nm MPV(A)=5.2
11.	eP A	17 28 30	<u>Turkey</u> 39.09 N 29.76 E H = 17 24 25 h = 22 km (ISC) D = 17.2 LmH(B):16s 0.6/um MLH(B)=3.9 LmV(B):12s 0.5/um MLV(B)=4.0
	LmH B	34.4	
	LmV B	36.4	
11.	e A	19 51 24	Probably <u>Greece</u> (ISC)
12.	eP A	02 22 30.5	<u>Andreanof Islands, Aleutian Is.</u> 51.52 N 178.50 W H = 02 10 36.0 h = 47 km MB = 5.2 D = 77.85 Az = 353.4 (USCGS)
12.	eP1 ABC	04 14 46.5	<u>Philippine Islands</u> 15.06 N 122.05 E
	eiP2 A	14 53.5	H = 04 01 44.0 h = 24 km MB = 5.9
	eX A	15 10.5	D = 90.89 Az = 323.4 (USCGS)
	ePP A	18 25	P1V(A):2.0s 111.0nm MP1V(A)=5.8
	e A	18 30	P1V(B):12s 5.4/um MP1V(B)=6.7
	e A	18 34	P2V(A):1.9s 170.0nm MP2V(A)=6.0
	iSKS BC	25 20	XV(A):1.9s 288.0nm MPmV(A)=6.3
	iS BC	25 43	SH(B):12s 18.2/um MSH(B)=7.1
	eiSS C	31 35	LmH(B):19s 89.9/um MLH(B)=7.2
	LmH B	54.0	LmV(B):16s 126.0/um MLV(B)=7.5
	LmV B	05 02.3	
12.	eiP A	04 29 59	<u>Philippine Islands</u> 15.17 N 122.03 E
	eX A	30 06.5	H = 04 16 57.2 h = normal MB = 5.5 D = 90.80 Az = 323.4 (USCGS) PV(A):1.2s 24.4nm MPV(A)=5.4 XV(A):2.0s 51.3nm
12.	eP A	04 39 48.5	<u>Philippine Islands</u> 15.11 N 122.08 E H = 04 26 38.5 h = normal MB = 5.2 (USCGS) D = 90.9 PV(A):1.0s 9.8nm MPV(A)=5.1

Day	Phase	h m s	Remarks
12.	eP A	05 31 11.5	<u>Philippine Islands Region</u>
	ePP A	34 47	15.17 N 122.51 E
	e A	34 52	H = 05 18 09.1 h = 32 km MB = 5.4 D = 91.07 Az = 323 (ISC) PV(A):1.7s 39.4nm MPV(A)=5.5
12.	e A	06 43 22.5	Probably <u>Luzon, Philippine Islands</u> (USCGS)
12.	eP A	11 01 46.5	<u>Philippine Islands</u> 15.08 N 122.04 E
	LmH B	49.0	H = 10 48 42.9 h = 22 km MB = 5.2
	LmV B	49.0	D = 90.87 Az = 323.4 (USCGS) PV(A):1.8s 27.0nm MPV(A)=5.3 LmH(B):16s 0.5/um MLH(B)=5.1 LmV(B):16s 0.3/um MLV(B)=4.8
12.	eP A	14 35 42	<u>Philippine Islands</u> 15.06 N 122.54 E
	e A	35 46	H = 14 22 38.9 h = normal MB = 5.4
	e A	39 16	D = 91.18 Az = 323.5 (USCGS)
	ePP A	39 20	PV(A):1.3s 21.8nm MPV(A)=5.3
	LmH B	15 23.3	PPV(A):1.6s 22.0nm MPPV(A)=5.3
	LmV B	23.5	LmH(B):15.5s 1.0/um MLH(B)=5.4 LmV(B):16s 1.0/um MLV(B)=5.4
12.	eX A	19 59 35	<u>Turkey</u> 38.90 N 29.41 E H = 19 55 25.0 h = 15 km MB = 4.3 D = 17.20 Az = 318.8 (USCGS) XV(A):2.2s 43.6nm
12.	eX A	24 05 17	<u>Philippine Islands</u> 15.07 N 122.41 E
	LmV (B)	52.4	H = 23 52 07.6 h = normal MB = 5.0 D = 91.09 Az = 323.5 (USCGS) XV(A):1.2s 16.3nm LmV(B):13s 0.5/um MLV(B)=5.1
13.	e A	05 20 00	<u>Turkey</u> 39.29 N 29.11 E H = 05 15 58.3 h = 8 km MB = 4.5 D = 16.75 Az = 318.4 (USCGS)

Day	Phase	h m s	Remarks	
13.	eX1 eX2 LmH LmV	A A B B	08 41 31 41 35 09 23.0 28.8	<u>Philippine Islands</u> 15.19 N 122.17 E H = 08 28 21.8 h = 5 km MB = 5.2 D = 90.86 Az = 323.4 (USCGS) X2V(A):1.1s 16.1nm LmH(B):20s 1.2/um MLH(B)=5.3 LmV(B):15s 1.0/um MLV(B)=5.4
14.	iSg	A	03 37 18	<u>Federal Rep. Germany</u> 48.3 N 9.1 E H = 03 35 45 (BCIS) D = 2.8 SgV(A):0.6s 11.5nm
14.	eP	A	06 41 01	<u>Off East Coast of Honshu, Japan</u> 40.26 N 143.51 E H = 06 28 55.1 h = 62 km MB = 4.6 (USCGS) D = 80.0
14.	ePKIKP iPKHKP ePKP2 epPKP	A AB A A	14 06 16.5 06 19.3 06 25 06 30	<u>Tonga Islands</u> 21.08 S 174.41 W H = 13 46 34 h = 64 km MB = 5.4 D = 150.11 Az = 352 (ISC) PKHKPV(A):1.4s 93.0nm
14.	eP eS ePS eSS eSSS LmH LmV	A C C C C B B	19 20 49 31 16 32 05 37 20 40 10 55.2 20 01.7	<u>Republic of South Africa</u> 33.30 S 19.22 E H = 19 08 21.3 h = normal MB = 5.7 (USCGS) D = 83.8 PV(A):1.4s 20.9nm MPV(A)=5.2 LmH(B):21s 2.9/um MLH(B)=5.6 LmV(B):14s 1.1/um MLV(B)=5.4
14.	eP	A	24 02 29.5	<u>Southwestern Ryukyu Islands</u> 24.33 N 125.18 E H = 23 49 59.5 h = 79 km MB = 4.9 D = 85.19 Az = 324.2 (USCGS) PV(A):1.2s 12.2nm MPV(A)=4.8
15.	ePKP	A	05 20 09	<u>Tonga Islands</u> 19.05 S 175.77 W H = 05 00 43.4 h = 215 km MB = 4.4 D = 147.94 Az = 351.1 (USCGS)

Day	Phase	h m s	Remarks	
15.	+iP ePP eSKS eiS eSS eSSS LmH LmV	ABC A BC BC C C B B	13 27 28.2 31 01 37 57 38 22 44 34 48 05 14 16.4 16.4	<u>Philippine Islands</u> 15.07 N 122.67 E H = 13 14 21.4 h = 12 km MB = 5.7 D = 91.24 Az = 323.5 (USCGS) PV(A):1.5s 65.4nm MPV(A)=5.7 PV(B):13s 0.9/um MPV(B)=6.0 SH(B):13s 2.1/um MSH(B)=6.1 LmH(B):16.5s 11.0/um MLH(B)=6.4 LmV(B):16s 12.5/um MLV(B)=6.5
15.	eP eS LmH LmV	A C B B	16 33 55 37 15 39.6 41.9	<u>Turkey</u> 39.26 N 29.27 E H = 16 29 56.0 h = 18 km MB = 4.6 D = 16.85 Az = 318.2 (USCGS) PV(A):2.0s 68.4nm MPV(A)=4.5 LmH(B):15s 2.8/um MLH(B)=4.6 LmV(B):12s 1.8/um MLV(B)=4.6
16.	eP	A	01 11 (02)	<u>Turkey</u> 39.25 N 29.36 E H = 01 07 00.8 h = 15 km MB = 4.4 D = 16.91 Az = 318.2 (USCGS)
16.	eP epP eS LmH LmV	AC A BC B B	02 08 26.5 08 37 18 13 49.7 53.2	<u>Off East Coast of Honshu, Japan</u> 34.47 N 141.57 E H = 01 55 56.4 h = 35 km MB = 5.2 D = 84.45 Az = 330.6 (USCGS) PV(A):1.4s 37.2nm MPV(A)=5.4 LmH(B):15s 2.6/um MLH(B)=5.8 LmV(B):14s 1.7/um MLV(B)=5.7
16.	eP	A	05 17 20.5	<u>Costa Rica</u> 9.60 N 84.24 W H = 05 04 41.7 h = 50 km MB = 4.3 D = 86.35 Az = 39.4 (USCGS)
16.	eP ePP e eS +i +i eSS	AB B B B B B B	05 44 19 46 58 47 00 53 24 53 26 53 38 57 50	<u>Gulf of Alaska</u> 59.77 N 142.60 W H = 05 33 17.5 h = 7 km MB = 5.5 D = 67.97 Az = 17.4 (USCGS) PV(A):1.6s 96.2nm MPV(A)=5.8 PV(B):15s 6.6/um MPV(B)=6.6 PPV(B):16s 3.6/um MPPV(B)=6.4 SH(B):16s 16.9/um MSH(B)=6.9

Day	Phase	h m s	Remarks
cont. 16.	e(PKPPKP) A	06 12 33	LmH(B):17s 46.7/um MLH(B)=6.8 LmV(B):14s 33.9/um MLV(B)=6.8
	LmH B	17.1	
	LmV B	18.8	
16.	eP A	06 18 47	<u>Kodiak Island Region</u> 57.6 N 151.2 W H = 06 07 25 h = 0 km MB = 4.6 D = 71.23 Az = 11 (ISC)
	e A	18 55.5	
16.	ePKP2 A	08 09 14	<u>South of Kermadec Islands</u> 33.42 S 179.92 E H = 07 48 41.8 h = 76 km MB = 4.6 (USCGS) D = 160.3 PKP2V(A):1.1s 10.1nm
16.	eP1 ABC +iP2 A eS BC LmH C LmV C	10 46 22.5 46 25.5 49 36 52.5 54.2	<u>Turkey</u> 39.03 N 30.60 E H = 10 42 18.8 h = 9 km MB = 5.5 D = 17.40 Az = 317.8 (USCGS) P1V(A):1.7s 30.3nm MP1V(A)=4.2 P2V(A):2.1s 460.0nm MP2V(A)=5.2 SH(B):8s 1.7/um MSH(B)=5.9 LmH(C):15s 11.9/um MLH(C)=5.2 LmV(C):12s 10.6/um MLV(C)=5.5
16.	eP A	11 47 23	<u>Turkey</u> 39.02 N 30.10 E H = 11 43 19.2 h = 20 km MB = 4.6 D = 17.47 Az = 317.7 (USCGS) PV(A):1.8s 60.8nm MPV(A)=4.4
16.	eX A	13 03 18	<u>Turkey</u> 38.99 N 29.5 E H = 12 59 18 h = 67 km MB = 4.3 (ISC) D = 17.2 XV(A):1.5s 15.1nm
16.	eP A	18 30 39	<u>Gulf of Alaska</u> 59.85 N 142.56 W H = 18 19 37.5 h = 16 km MB = 4.1 D = 67.89 Az = 17.4 (USCGS)

Day	Phase	h m s	Remarks
16.	eP AB eS BC LmH B LmV B	22 42 35.5 45 05 47.0 47.9	<u>Greece</u> 40.70 N 23.48 E H = 22 39 28.3 h = 4 km MB = 5.1 D = 12.93 Az = 324.2 (USCGS) PV(A):1.4s 20.9nm LmH(B):9.5s 11.6/um MLH(B)=5.3 LmV(B):10.5s 7.9/um
16.	LmH B LmV B	23 19.3 20.0	<u>Greece</u> 40.7 N 23.9 E H = 23 11 47.7 h = normal MB = 4.2 (USCGS) D = 13.2 LmH(B):10s 1.0/um MLH(B)=4.2
17.	eP A LmH (B) LmV B	01 35 42 42.6 43.1	<u>Turkey</u> 37.06 N 27.00 E H = 01 31 38.1 h = normal D = 17.49 Az = 325.8 (USCGS) LmH(B):10s 0.6/um MLH(B)=4.1 LmV(B):8s 0.6/um MLV(B)=4.4
17.	eP A	15 42 49	<u>Gulf of Alaska</u> 59.55 N 142.70 W H = 15 31 47.3 h = 15 km MB = 4.3 D = 68.20 Az = 17.3 (USCGS) PV(A):1.0s 9.8nm MPV(A)=5.0
17.	e A	20 31 25	<u>Turkey</u> 39.06 N 29.72 E H = 20 27 20.3 h = normal MB = 4.5 D = 17.23 Az = 318.1 (USCGS)
18.	eP A LmH C	05 41 23 47.0	<u>Turkey</u> 39.38 N 29.28 E H = 05 37 26.9 h = normal MB = 4.5 D = 16.77 Az = 310.0 (USCGS) LmH(C):18s 0.5/um MLH(C)=3.8
18.	LmH C	06 02.5	Probably <u>Turkey</u> (ISC) LmH(C):16.5s 0.8/um
18.	-iP AB eipP AB isP AB is BC	09 01 38.3 02 03.5 02 12 10 35	<u>Southern Alaska</u> 59.86 N 152.82 W H = 08 50 40.8 h = 94 km MB = 5.7 D = 69.14 Az = 10.5 (USCGS) PV(A):1.0s 130.0nm MPV(A)=5.8

Day	Phase	h m s	Remarks
cont. 18.	ePS BC eSS C	09 11 20 15 00	pPV(A):1.3s 157.3nm sPV(A):1.3s 153.0nm
18.	eP A	19 34 45.5	<u>Fox Islands, Aleutian Is.</u> 53.61 N 166.07 W H = 19 23 01.2 h = 50 km MB = 4.7 D = 76.10 Az = 1.5 (USCGS) PV(A):1.3s 13.1nm MPV(A)=4.9
18.	eP A LmH B LmV B	20 33 07 21 09.5 13.0	<u>Off Coast of Hokkaido, Japan</u> 42.84 N 147.27 E H = 20 21 03.9 h = 39 km MB = 4.5 D = 79.19 Az = 333.1 (USCGS) PV(A):1.4s 9.3nm MPV(A)=4.6 LmH(B):14s 0.5/um MLH(B)=5.0 LmV(B):18s 0.5/um MLV(B)=5.0
18.	eP A	23 10 36	<u>Turkey</u> 39.01 N 29.95 E H = 23 06 31.0 h = normal MB = 4.1 D = 17.40 Az = 317.9 (USCGS)
18.	eP AB ipP A ePP B eS BC eSS C eSSS B LmV B LmH B	23 37 37.5 37 49.6 40 28 47 24 52 50 56 20 24 17.5 17.8	<u>Kurile Islands</u> 43.25 N 147.23 E H = 23 25 35.5 h = 38 km MB = 5.2 D = 78.81 Az = 333.0 (USCGS) PV(A):1.8s 54.0nm MPV(A)=5.3 PV(B):10s 1.0/um MPV(B)=5.8 pPV(A):1.1s 36.3nm PPV(B):8s 0.4/um MPPV(B)=5.6 SH(B):13.5s 1.1/um MSH(B)=5.9 LmV(B):18s 6.6/um MLV(B)=6.1 LmH(B):15s 5.6/um MLH(B)=6.0
18.	eP A	23 47 32	<u>Kurile Islands</u> 43.39 N 147.18 E H = 23 35 30.6 h = normal MB = 4.4 D = 78.67 Az = 333.0 (USCGS) FV(A):1.6s 16.5nm MPV(A)=4.8

Day	Phase	h m s	Remarks
19.	iP1 AB +iP2 A eiX A e B e B e B eS B ePKPPKP A LmH B LmV B	01 26 47.1 26 49.4 26 52 27 24 27 54 29 54 35 48 55 05 59.6 02 02.9	<u>Gulf of Alaska</u> 59.64 N 142.83 W H = 01 15 46.8 h = 20 km MB = 5.8 D = 68.13 Az = 17.2 (USCGS) P1V(A):0.9s 27.3nm MP1V(A)=5.5 P1V(B):8s 0.7/um MP1V(B)=5.9 P2V(A):1.6s 126.0nm MP2V(A)=5.9 XV(A):1.5s 120.8nm PKPPKP(A):1.4s 18.6nm LmH(B):16s 7.7/um MLH(B)=6.0 LmV(B):16s 5.8/um MLV(B)=6.0
19.	eP A ePP A	04 53 02.5 56 06	<u>Near East Coast of Kamchatka</u> 51.81 N 157.11 E H = 04 41 37.8 h = 105 km MB = 5.1 D = 73.82 Az = 337.9 (USCGS) PV(A):1.4s 25.6nm MPV(A)=4.9 PPV(A):2.0s 25.6nm MPPV(A)=5.2
19.	eP A	05 41 40	<u>Tadzhik SSR</u> 38.99 N 70.76 E H = 05 33 46.2 h = normal MB = 4.7 D = 42.46 Az = 305.9 (USCGS)
19.	eP A	10 23 25	<u>Kurile Islands</u> 43.41 N 147.71 E H = 10 11 24.2 h = 40 km MB = 4.7 D = 78.83 Az = 333.3 (USCGS) PV(A):1.3s 10.9nm MPV(A)=4.7
19.	eiP A e A e A	11 38 46.5 38 50 38 54.5	<u>North Atlantic Ridge</u> 12.80 N 44.60 W H = 11 28 48.0 h = normal MB = 4.8 D = 59.00 Az = 38.1 (USCGS) PV(A):1.2s 24.4nm MPV(A)=5.1
19.	eP1 ABC iP2 A iP3 A eS B	13 33 37.5 33 41.5 33 46 36 54	<u>Turkey</u> 39.07 N 29.79 E H = 13 29 36.4 h = 20 km MB = 5.4 D = 17.27 Az = 318.0 (USCGS) P1V(A):1.5s 17.6nm MP1V(A)=4.0

Day	Phase	h m s	Remarks
cont. 19.	LmH B LmV B	13 39.6 41.5	P1V(B):10s 6.9/um MP1V(B)=5.7 P2V(A):1.6s 264.0nm MP2V(A)=5.1 P3V(A):2.2s 1550.0nm MP3V(A)=5.8 SH(B):12s 6.7/um LmH(B):16.5s 38.2/um MLH(B)=5.7 LmV(B):13s 39.6/um MLV(B)=6.0
19.	eP1 ABC eP2 A iP3 A eiS B LmH B LmV B ePKKP A	13 51 36.5 51 39 51 46 55 00 57.7 59.5 14 19 35	<u>Turkey</u> 39.06 N 29.83 E H = 13 47 35.2 h = 26 km MB = 5.5 D = 17.29 Az = 318.0 (USCGS) P1V(A):1.4s 27.9nm MP1V(A)=4.2 P2V(A):2.5s 815.0nm MP2V(A)=5.4 P3V(A):2.2s 1090.0nm MP3V(A)=5.6 LmH(B):16s 34.2/um MLH(B)=5.7 LmV(B):13s 27.9/um MLV(B)=5.9 PKKP(A):0.8s 7.7nm
19.	ePKIKP A +iPKHKP A ePKP2 A epPKIKP A epPKHKP A	17 21 34.5 21 39 21 43 23 55.5 23 58	<u>Fiji Islands</u> 19.59 S 177.68 W H = 17 02 59.4 h = 609 km MB = 5.0 D = 148.15 Az = 348.8 (USCGS) PKHKPV(A):0.7s 28.3nm pPKHKPV(A):1.5s 35.2nm
19.	ePn A iPg A iSn A iSg A LmV B LmH B	18 17 47.5 18 09 18 46 19 16.5 19.9 20.0	<u>Northern Italy</u> 45.55 N 10.39 E H = 18 16 30.8 h = 0 km D = 5.17 Az = 9 (ISC) LmV(B):7s 1.3/um LmH(B):7.5s 1.0/um MLH(B)=3.6
20.	eP AB LmH B	02 27 30.5 33.5	<u>Turkey</u> 38.96 N 30.10 E H = 02 23 26.7 h = normal MB=4.5 D = 17.51 Az = 317.9 (USCGS) LmH(B):16s 1.0/um MLH(B)=4.2
20.	ePKIKP A e(PKP2) A	02 28 15 28 56	<u>South of Kermadec Islands</u> 32.05 S 179.32 W

Day	Phase	h m s	Remarks
cont. 20.	e(pPKP2) A	02 29 38	H = 02 08 33.3 h = 137 km MB = 5.4 D = 159.73 Az = 340 (ISC) (PKP2)V(A):1.4s 32.6nm (pPKP2)V(A):1.7s 42.4nm
20.	eX A	04 01 00.5	<u>Tonga Islands</u> 15.05 S 173.86 W H = 03 41 14.0 h = normal MB = 4.8 D = 144.23 Az = 354.0 (USCGS) XV(A):1.5s 15.1nm
20.	ePKP A	07 04 31	<u>New Hebrides Islands</u> 20.80 S 172.15 E H = 06 44 45.8 h = 20 km MB = 4.2 D = 146.50 Az = 337.4 (USCGS)
20.	eP A	07 23 07	<u>Turkey</u> 39.06 N 28.86 E H = 07 19 05.3 h = normal MB = 4.4 D = 16.79 Az = 319.2 (USCGS)
20.	+iPKP ABC -iX A epPKP B esPKP B ePP BC epPP B eScPPKP A e BC e B e B eSS B esSS B eSSS B eScPPKP A	10 58 17 58 20.7 59 18 11 00 00 01 32 02 32 09 38.5 09 50 11 48 16 35 19 50 21 32 24 50 11 09 38.5	<u>New Hebrides Islands</u> 18.83 S 169.30 E H = 10 39 12.5 h = 246 km MB = 6.3 D = 143.63 Az = 335.9 (USCGS) PKPV(A):1.2s 447.0nm XV(A):1.2s 711.0nm ScPPKP(A):1.9s 45.5nm
20.	eP1 AB eiP2 A eiP3 A eS B	15 43 01 45 05 45 07.5 46 00	<u>Greece</u> 38.41 N 22.79 E H = 15 39 29.2 h = 20 km MB = 5.2 D = 14.58 Az = 330.7 (USCGS) P2V(A):0.8s 38.5nm

Day	Phase	h m s	Remarks
cont. 20.	LmH B	15 49.3	P3V(A):1.5s 95.4nm
	LmV B	49.3	LmH(B):13.5s 12.2/um MLH(B)=5.2 LmV(B):12s 11.5nm MLV(B)=5.3
20.	LmH B	18 12.5	Probably <u>Turkey</u> (USCGS)
	LmV B	12.5	LmH(B):10s 0.6/um LmV(B):11s 0.7/um
20.	eP A	18 37 23	<u>Turkey</u> 38.90 N 30.66 E
	LmH B	45.2	H = 18 33 13.3 h = normal MB = 4.5
	LmV B	45.2	D = 17.85 Az = 317.3 (USCGS) LmH(B):10s 0.5/um MLH(B)=4.0 LmV(B):11s 0.6/um MLV(B)=4.2
20.	e A	22 01 41	<u>Sumba Island</u> 9.82 S 119.34 E
	ePP A	02 00.5	H = 21 43 00.5 h = normal MB = 5.6
	LmH B	52.0	D = 108.77 Az = 320.2 (USCGS)
	LmV B	52.6	PPV(A):1.3s 21.8nm MPPV(A)=5.6 LmH(B):20s 1.0/um MLH(B)=5.4 LmV(B):21s 0.5/um MLV(B)=5.1
21.	+iPKHKP A	03 39 25	<u>Fiji Islands</u> 20.49 S 178.30 W
	ePKP2 A	39 30.5	H = 03 20 37.5 h = 550 km MB = 4.5 D = 148.90 Az = 347.7 (USCGS) PKHKPV(A):1.0s 27.6nm
21.	eP A	04 55 39	<u>Kurile Islands</u> 43.41 N 147.49 E
			H = 04 43 37.3 h = normal MB = 5.1 D = 78.76 Az = 333.1 (USCGS) PV(A):1.3s 30.6nm MPV(A)=5.2
21.	eP A	06 55 28.5	<u>Gulf of Alaska</u> 59.62 N 142.65 W
			H = 06 44 24.8 h = 1 km MB = 4.9 D = 68.13 Az = 17.3 (USCGS) PV(A):1.7s 42.4nm MPV(A)=5.4

Day	Phase	h m s	Remarks
21.	ePKP2 A	07 24 00	<u>South of Fiji Islands</u> 26.06 S 177.21 W H = 07 03 55.3 h = 90 km MB = 4.6 D = 154.54 Az = 346.9 (USCGS) PKP2V(A):1.3s 10.9nm
21.	+eP A	07 41 02	<u>Turkey</u> 39.19 N 29.75 E H = 07 36 58.7 h = 25 km MB = 4.7 D = 17.15 Az = 317.8 (USCGS)
21.	ePKP A	10 56 25	<u>New Hebrides Islands</u> 20.70 S 172.45 E H = 10 36 45.9 h = 33 km MB = 4.7 D = 146.51 Az = 337.7 (USCGS) PKPV(A):1.2s 16.2nm
21.	eP A	14 24 45	<u>North of Ascension Island</u>
	eX A	24 50.5	3.33 S 12.14 W
	LmH B	50.0	H = 14 14 57.4 h = normal MB = 5.3
	LmV B	50.6	D = 57.51 Az = 17.7 (USCGS) PV(A):2.2s 87.2nm MPV(A)=5.4 XV(A):1.4s 55.8nm LmV(B):15s 0.6/um MLV(B)=4.9
22.	eP A	14 57 04	<u>Turkey</u> 39.22 N 41.4 E H = 14 51 53 h = 28 km MB = 4.4 D = 23.81 Az = 308 (ISC)
22.	+iP AB	05 28 08	<u>Turkey</u> 39.08 N 29.83 E
	e A	28 17.5	H = 05 24 05.7 h = normal MB = 5.1
	e B	31 36	D = 17.28 Az = 317.9 (USCGS)
	LmH B	34.0	PV(A):2.0s 154.0nm MPV(A)=4.8
	LmV B	35.9	LmH(B):16s 3.1/um MLH(B)=4.6 LmV(B):12s 3.2/um MLV(B)=5.0
22.	ePP A	11 57 10.5	<u>South of Sumbia Island</u>
	e A	57 20	11.22 S 120.01 E H = 11 38 03.7 h = normal MB = 5.6 (USCGS) D = 110.2

Day	Phase	h m s	Remarks
22.	ePKIKP A	12 24 35	<u>Banda Sea</u> 6.29 S 128.72 E H = 12 06 31.5 h = 295 km MB = 5.1 (USCGS) D = 111.8
22.	eP A	14 01 54	<u>Luzon, Philippine Islands</u> 15.31 N 121.82 E H = 13 48 53.5 h = 28 km MB = 5.0 D = 90.56 Az = 323.3 (USCGS) PV(A):1.8s 23.7nm MPV(A)=5.2
22.	ePKP A e(pPKP) A	15 59 32 16 00 07	<u>Tonga Islands</u> 16.85 S 174.11 W H = 15 40 02.1 h = 98 km MB = 4.1 D = 145.97 Az = 353.5 (USCGS)
22.	eP1 A eP2 A LmH B LmV B	18 42 47.5 42 52 48.7 51.0	<u>Turkey</u> 39.15 N 29.78 E H = 18 38 48.6 h = 41 km MB = 4.6 D = 17.20 Az = 317.8 (USCGS) P1V(A):1.3s 21.8nm MPV1(A)=4.1 P2V(A):1.5s 40.2nm MPV2(A)=4.3
23.	-eiP AB eipP A esP A eS C eSS C LmH B LmV B	01 03 50.5 03 58.5 04 02.5 10 20 13.4 24.9 26.7	<u>East of Severnaya Zemlya</u> 80.66 N 121.99 E H = 00 55 48.2 h = normal MB = 5.1 D = 43.56 Az = 300.0 (USCGS) h = 36 km PV(A):1.4s 102.3nm MPV(A)=5.4 pPV(A):1.4s 114.0nm sPV(A):1.2s 48.7nm LmH(B):14s 0.8/um MLH(B)=4.8 LmV(B):14s 1.0/um MLV(B)=5.0
23.	eP A LmH A	04 33 24 39	<u>Southern Greece</u> 37.58 N 22.87 E H = 04 29 50.2 h = 92 km MB = 4.8 D = 15.34 Az = 332.0 (USCGS) PV(A):1.0s 33.5nm MPV(A)=4.5
23.	eP1 A iP2 A	07 22 35 22 37	<u>Turkey</u> 38.97 N 30.11 E H = 07 18 29.2 h = 15 km MB = 5.0

Day	Phase	h m s	Remarks
cont. 23.	eX A LmH B LmV B	07 22 43.5 28.6 30.5	D = 17.51 Az = 317.8 (USCGS) P2V(A):2.0s 120.0nm MPV(A)=4.7 XV(A):2.2s 120.0nm LmH(B):16s 2.1/um MLH(B)=4.5 LmV(B):13s 1.4/um MLV(B)=4.6
23.	eP1 AB eP2 A +iP3 A eS B LmH B LmV B	09 05 19 05 23 05 28 08 28 11.2 12.8	<u>Turkey</u> 39.13 N 28.70 E H = 09 01 24.7 h = 18 km MB = 5.2 D = 16.66 Az = 319.3 (USCGS) P1V(A):1.5s 35.2nm MP1V(A)=4.3 P1V(B):10s 1.6/um MP1V(B)=5.1 P2V(A):2.4s 415.0nm MP2V(A)=5.1 P3V(A):1.5s 186.0nm MP3V(A)=5.0 LmH(B):12.5s 17.9/um MLH(B)=5.5 LmV(B):10s 8.4/um MLV(B)=5.4
23.	eP A LmH B LmV B	15 49 29 16 02.5 02.5	<u>North Atlantic Ocean</u> 55.56 N 35.04 W H = 15 43 38.6 h = normal MB = 4.5 D = 28.01 Az = 80.4 (USCGS) LmH(B):13s 0.4/um MLH(B)=4.2 LmV(B):13s 0.5/um MLV(B)=4.4
23.	eP A	18 10 28	<u>Tadzhik SSR</u> 37.46 N 72.63 E H = 18 02 18.8 h = 46 km MB = 5.1 D = 44.56 Az = 307.5 (USCGS) PV(A):1.0s 19.7nm MPV(A)=4.9
24.	eP A	00 30 31	<u>Leyte, Philippine Islands</u> 10.47 N 125.33 E H = 00 17 09.3 h = 80 km MB = 5.1 D = 96.47 Az = 324.1 (USCGS) PV(A):1.6s 38.4nm MPV(A)=5.7
24.	+eP AB LmH B LmV B	00 44 04.5 50.0 51.9	<u>Turkey</u> 39.06 N 29.91 E H = 00 40 01.7 h = 38 km MB = 4.8 D = 17.34 Az = 317.9 (USCGS) PV(A):1.6s 71.4nm MPV(A)=4.6 PV(B):8s 0.5/um MPV(B)=4.7 LmH(B):16s 2.7/um MLH(B)=4.6 LmV(B):12s 2.9/um MLV(B)=4.9

Day	Phase	h m s	Remarks
24.	eP A	01 27 09	<u>North Atlantic Ocean</u> 55.59 N 35.35 W H = 01 21 16.7 h = normal MB = 4.6 D = 28.18 Az = 80.2 (USCGS)
24.	+eP ABC eS BC LmH B LmV B	01 29 04.5 33 48 40.3 41.6	<u>North Atlantic Ocean</u> 55.68 N 34.99 W H = 01 23 12.0 h = 10 km MB = 5.4 D = 27.96 Az = 80.6 (USCGS) PV(A):1.7s 115.0nm MPV(A)=5.4 SH(B):8s 1.6/um MSH(B)=5.6 LmH(B):15.5s 5.2/um MLH(B)=5.2 LmV(B):14s 6.9/um MLV(B)=5.5
24.	eP A	01 53 04	<u>North Atlantic Ocean</u> 55.48 N 35.08 W H = 01 47 13.7 h = normal MB = 4.9 D = 28.05 Az = 80.2 (USCGS) PV(A):1.3s 19.7nm MPV(A)=4.8
24.	eP A	01 57 11	<u>North Atlantic Ocean</u> 55.38 N 35.18 W H = 01 51 18.9 h = normal MB = 4.8 D = 28.12 Az = 79.9 (USCGS) PV(A):1.5s 22.6nm MPV(A)=4.8
24.	eP A eX A	02 44 09 44 14.5	<u>Turkey</u> 39.06 N 28.64 E H = 02 40 11.3 h = 5 km MB = 4.5 D = 16.69 Az = 319.5 (USCGS) XV(A):1.2s 16.3nm
24.	ePKHKP A	03 17 08	<u>Tonga Islands</u> 18.56 S 174.55 W H = 02 57 37.6 h = 133 km MB = 4.6 D = 147.61 Az = 352.7 (USCGS) PKHKPV(A):1.4s 14.0nm
24.	eP A	11 20 03	<u>Greece-Albania Border Region</u> 39.87 N 19.47 E H = 11 17 10.3 h = 23 km MB = 4.5 D = 12.10 Az = 335.5 (USCGS)

Day	Phase	h m s	Remarks
24.	eP A eX A	14 41 36 41 41	<u>Dodecanese Islands</u> 36.78 N 28.84 E H = 14 37 19.2 h = 33 km MB = 4.6 D = 18.56 Az = 323.7 (USCGS) PV(A):0.9s 17.5nm MPV(A)=4.2 XV(A):1.2s 24.4nm
25.	eP A eX1 A eX2 A	03 55 13.5 55 17 55 22.5	<u>Chagos Archipelago Region</u> 6.41 S 69.81 E H = 03 43 30.3 h = normal MB = 5.1 D = 75.64 Az = 326.0 (USCGS) PV(A):1.2s 16.3nm MPV(A)=5.0 X1V(A):1.6s 38.5nm X2V(A):0.8s 29.9nm
25.	e A	12 12 53	<u>Hokkaido, Japan</u> 41.54 N 141.87 E H = 12 00 54.2 h = 79 km MB = 4.6 D = 78.43 Az = 330.3 (USCGS)
25.	eP A	19 38 18	<u>Off Coast of Ecuador</u> 2.68 S 81.98 W H = 19 24 57.0 h = 20 km MB = 5.1 D = 94.34 Az = 39.6 (USCGS) PV(A):1.6s 27.5nm MPV(A)=5.4
25.	ePKHKP A	20 49 34	<u>Fiji Islands</u> 20.54 S 178.20 W H = 20 30 50.7 h = 595 km MB = 4.7 D = 148.97 Az = 347.8 (USCGS) PKHKPV(A):1.3s 48.0nm
26.	eP A eS BC LmV B LmH B	06 45 41.5 50 25 58.3 58.7	<u>North Atlantic Ocean</u> 55.52 N 35.12 W H = 06 39 50.9 h = normal MB = 5.0 D = 28.06 Az = 80.3 (USCGS) PV(A):2.8s 193.0nm MPV(A)=5.4 LmV(B):13s 2.6/um MLV(B)=5.1 LmH(B):13s 2.4/um MLH(B)=5.0
26.	+iP ABC eipP A ePP BC	14 32 11.6 32 25 35 00	<u>Near Islands, Aleutian Islands</u> 52.97 N 171.46 E H = 14 20 30.6 h = 41 km MB = 5.8

Day	Phase	h m s	Remarks
cont. 26.	eS BC	14 41 50	D = 75.36 Az = 346.9 (USCGS)
	ePS BC	42 22	h = 52 km
	eSS B	46 45	PV(A):1.5s 176.0nm MPV(A)=5.9
	LmV B	15 11.8	PV(B):14s 1.2/um MPV(B)=5.8
	LmH B	12.0	pPV(A):2.0s 188.0nm
			PPV(B):14s 0.8/um MPPV(B)=5.6
			SH(B):16s 0.7/um MSH(B)=5.5
			LmV(B):16s 1.6/um MLV(B)=5.5
			LmH(B):17.5s 3.0/um MLH(B)=5.6
26.	eiPKHKP A	15 59 44.5	<u>Fiji Islands</u> 21.69 S 176.19 W
	epPKHKP A	16 00 22	H = 15 40 06.9 h = 131 km MB = 5.2 (USCGS)
			D = 150.4 h = 142 km
			PKHKPV(A):0.8s 34.6nm
			pPKHKPV(A):0.9s 33.1nm
26.	eP A	23 19 08	<u>Turkey</u> 38.85 N 29.91 E
	LmH B	25.2	H = 23 15 02.7 h = normal MB = 4.4
			D = 17.49 Az = 318.3 (USCGS)
			PV(A):1.8s 20.3nm MPV(A)=4.0
27.	+iP A	01 58 15.8	<u>Turkey</u> 38.99 N 30.13 E
	LmH B	02 06.0	H = 01 54 10.5 h = 25 km MB = 4.6
	LmV B	06.0	D = 17.50 Az = 317.8 (USCGS)
			PV(A):1.1s 20.2nm MPV(A)=4.2
			LmH(B):12s 0.4/um MLH(B)=3.9
			LmV(B):10s 0.5/um MLV(B)=4.2
27.	+iP A	04 08 20.5	<u>Near East Coast of Kamchatka</u>
	epP A	08 30	54.68 N 161.61 E
	esP A	08 34	H = 03 56 59.6 h = 51 km MB = 5.2
			D = 72.09 Az = 340.5 (USCGS)
			h = 37 km
			PV(A):1.0s 37.4nm MPV(A)=5.5
27.	eP A	08 16 52	<u>Kurile Islands</u> 43.59 N 146.51 E
	epP A	17 08.5	H = 08 04 55.7 h = 52 km MB = 4.7
			D = 78.27 Az = 332.6 (USCGS)
			h = 63 km

Day	Phase	h m s	Remarks
27.	eP AB	09 38 38	<u>Turkey</u> 38.99 N 30.02 E
			H = 09 34 34.3 h = normal MB = 4.5
			D = 17.45 Az = 317.9 (USCGS)
			PV(A):1.7s 30.3nm MPV(A)=4.2
27.	eP1 AB	09 39 14.5	<u>Turkey</u> 39.04 N 29.51 E
	eP2 A	39 17.5	H = 09 35 12.9 h = normal MB = 4.9 (USCGS)
	eS C	42 32	D = 17.2
	e B	42 37	P1V(A):1.6s 38.5nm MP1V(A)=4.3
	e B	44 27	P2V(A):1.8s 81.1nm MP2V(A)=4.6
	e A	45 19.5	LmH(B):10.5 2.0/um MLH(B)=4.7
	LmH B	46.8	LmV(B):9s 1.6/um MLV(B)=4.8
	LmV B	47.2	
27.	ePKP A	12 38 22	<u>New Hebrides Islands</u> 19.12 S 168.46 E
			H = 12 18 43.2 h = 22 km MB = 4.4
			D = 143.56 Az = 335.1 (USCGS)
			PKPV(A):0.9s 9.7nm
27.	ePKP A	22 11 07.5	<u>Samoa Islands</u> 15.67 S 172.65 W
	eX A	11 30	H = 21 51 32.3 h = normal MB = 5.0
			D = 144.94 Az = 355.3 (USCGS)
			PKPV(A):1.1s 16.1nm
			XV(A):1.6s 22.0nm
27.	eP AB	22 28 47	<u>Turkey</u> 39.04 N 29.48 E
	e B	34 10	H = 22 24 45.0 h = normal MB = 4.7
	LmH B	36.7	D = 17.13 Az = 318.5 (USCGS)
	LmV B	36.7	PV(A):1.5s 42.8nm MPV(A)=4.4
			LmH(B):9s 1.1/um MLH(B)=4.4
			LmV(B):9s 0.9/um MLV(B)=4.5
28.	ePKIKP A	00 48 33	<u>Salomon Islands</u> 8.10 S 156.41 E
	ePP B	50(30)	H = 00 29 21.0 h = 3 km MB = 5.2
	ePKS BC	50 55	D = 128.54 Az = 332.0 (USCGS)
	eSS C	01 07 50	PKIKPV(A):1.5s 30.2nm
	LmH B	39.6	LmH(B):17s 0.6/um MLH(B)=5.4

Day	Phase	h m s	Remarks
28.	ePKIKP A	01 31 25	<u>Salomon Islands</u> 8.12 S 156.39 E H = 01 12 14.4 h = 5 km MB = 5.6 D = 128.54 Az = 332.0 (USCGS) PKIKPV(A):1.2s 18.3nm
28.	eP A	03 26 33	<u>United Arab Republic</u> 27.67 N 33.63 E H = 03 20 34.7 h = 5 km MB = 4.9 D = 28.40 Az = 329.9 (USCGS) PV(A):1.9s 60.5nm MPV(A)=5.1 XV(A):1.5s 45.2nm
28.	LmH B	21 09.4	<u>North of Halmahera</u> 4.0 N 128.6 E H = 20 11 12.5 h = 46 km MB = 5.3 (USCGS) D = 103.7 LmH(B):18s 0.5/um MLH(B)=5.1 LmV(B):18s 0.4/um MLV(B)=5.0
29.	+iP A	06 06 59.3	<u>Kurile Islands</u> 43.47 N 146.44 E H = 05 55 02.4 h = 50 km MB = 5.3 D = 78.35 Az = 332.5 (USCGS) pPV(A):1.5s 55.2nm sPV(A):1.5s 75.4nm LmH(B):17s 0.6/um MLH(B)=5.0 LmV(B):19s 0.6/um MLV(B)=5.0
29.	eP B	11 35 21	<u>Near Coast of Chiapas, Mexico</u> 14.62 N 92.69 W H = 11 22 36.4 h = 41 km MB = 5.6 D = 87.64 Az = 38.1 (USCGS) LmH(B):17s 24.6/um MLH(B)=6.7 LmV(B):17s 24.5/um MLV(B)=6.7
29.	eP A	12 12(30)	<u>Rat Islands, Aleutian Is.</u> 51.76 N 177.00 E H = 12 00 39.5 h = 52 km MB = 5.0 D = 77.22 Az = 350.5 (USCGS)

Day	Phase	h m s	Remarks
29.	eP A	14 14 05.5	<u>Near Coast of Chiapas, Mexico</u> 14.58 N 92.75 W H = 14 01 19.1 h = normal MB = 5.6 D = 87.71 Az = 38.1 (USCGS) PV(A):1.7s 30.3nm MPV(A)=5.3
29.	eiP1 AB	14 14 20	<u>Near Coast of Chiapas, Mexico</u> 14.52 N 92.60 W H = 14 01 32.8 h = normal MB = 5.8 D = 87.67 Az = 38.1 (USCGS) P1V(A):2.0s 145.2nm MP1V(A)=5.9 P2V(A):2.0s 222.0nm MP2V(A)=6.1 P3V(A):3.5s 2210.0nm MP3V(A)=6.9 P3V(B):10s 26.6/um MP3V(B)=7.5 SH(B):17s 35.1/um MSH(B)=7.1 LmH(B):19s 144.0/um MLH(B)=7.4 LmV(B):19s 138.0/um MLV(B)=7.4
29.	e A	14 52 22	<u>Dodekanese Islands</u> 36.3 N 26.6 E H = 14 48 15 D = 17.95 Az = 328
29.	ePKIKP A	18 21 17	<u>Easter Island Cordillera</u> 55.48 S 124.37 W H = 18 01 29.6 h = normal MB = 5.6 D = 153.46 Az = 82.0 (USCGS) PKIKPV(A):1.8s 40.5nm PKHKPV(A):1.6s 121.0nm PKP2V(A):1.3s 48.0nm
29.	eP A	19 42 42.5	<u>Near Coast of Chiapas, Mexico</u> 14.67 N 93.50 W H = 19 29 52.3 h = 29 km MB = 5.2 D = 88.09 Az = 38.0 (USCGS) PV(A):2.0s 68.4nm MPV(A)=5.6 LmV(B):19s 1.1/um MLV(B)=5.3 LmH(B):19s 1.2/um MLH(B)=5.3

Day	Phase	h m s	Remarks
29.	eP AB	21 33 14	<u>Near Coast of Chiapas, Mexico</u>
	eX A	33 21	14.57 N 93.57 W
	eSKS B	43 53	H = 21 20 24.1 h = 35 km MB = 5.3
	LmV B	22 13.3	D = 88.21 Az = 37.9 (USCGS)
	LmH B	13.6	PV(A):2.8s 150.0nm MPV(A)=5.8 XV(A):2.8s 129.0nm LmV(B):18s 2.3/um MLV(B)=5.6 LmH(B):18s 2.0/um MLH(B)=5.6
29.	eP A	22 01 51	<u>Near Coast of Chiapas, Mexico</u> 14.19 N 93.38 W H = 21 49 00.7 h = normal MB = 5.1 D = 88.40 Az = 38.0 (USCGS)
30.	eP AB	08 45 50	<u>Near Coast of Chiapas, Mexico</u>
	Pm A	45 58	14.70 N 93.19 W
	ePP C	49 08	H = 08 32 59.1 h = 19 km MB = 5.6
	eiS BC	56 28	D = 87.88 Az = 38.0 (USCGS)
	ePS C	57 38	PV(B):14s 5.3/um MPV(B)=6.7
	eSSS C	09 06 00	PmV(A):3.2s 710.0nm MPmV(A)=6.3
	LmH B	28.2	SH(B):12s 5.7/um MSH(B)=6.5
	LmV B	28.5	LmH(B):16s 21.5/um MLH(B)=6.7 LmV(B):17s 23.8/um MLV(B)=6.7
30.	eP AB	13 04 28	<u>Near Coast of Chiapas, Mexico</u>
	eSKS B	15 00	14.45 N 93.43 W
	eS B	15 20	H = 12 51 36.3 h = 24 km MB = 5.3
	LmH B	45.0	D = 88.22 Az = 38.0 (USCGS)
	LmV B	47.4	PV(A):1.8s 37.2nm MPV(A)=5.4 LmH(B):17s 2.8/um MLH(B)=5.7 LmV(B):16s 2.5/um MLV(B)=5.7
30.	eP A	13 33 55	<u>Near Coast of Chiapas, Mexico</u>
	e A	34 01	14.48 N 93.50 W
	LmH B	14 14.8	H = 13 21 03.2 h = 22 km MB = 5.4
	LmV B	17.6	D = 88.24 Az = 37.9 (USCGS) PV(A):2.0s 59.8nm MPV(A)=5.6 LmH(B):16.5s 1.7/um MLH(B)=5.5 LmV(B):15s 1.6/um MLV(B)=5.6

Day	Phase	h m s	Remarks
30.	eP1 AB	14 52 35	<u>Northeast of Taiwan</u> 27.17 N 125.20 E
	iP2 A	52 36.5	H = 14 40 33.4 h = 220 km MB = 5.1 D = 82.93 Az = 324.0 (USCGS) P2V(A):1.6s 82.5nm MPV(A)=5.7
30.	eP A	15 02 19.5	<u>Turkey</u> 39.34 N 29.34 E H = 14 58 21.8 h = 25 km MB = 4.6 D = 16.84 Az = 318.0 (USCGS)
30.	eP A	16 48 45	<u>Turkey</u> 39.39 N 29.07 E
	LmV B	56.6	H = 16 14 45.9 h = 23 km MB = 4.8
	LmH B	56.8	D = 16.66 Az = 318.2 (USCGS) PV(A):1.8s 47.3nm MPV(A)=4.3 LmV(B):10s 1.5/um MLV(B)=4.7 LmH(B):10s 1.8/um MLH(B)=4.6
30.	eP A	18 22 33	<u>Taiwan</u> 24.10 N 121.74 E
	eX A	22 51	H = 18 10 08.7 h = 59 km MB = 5.1 D = 83.51 Az = 323.0 (USCGS) XV(A):2.0s 25.6nm
30.	eP A	19 43 20	<u>Near Coast of Oaxaca, Mexico</u>
	eX A	43 30	15.05 N 93.99 W H = 19 30 28.7 h = 23 km MB = 5.1 D = 88.08 Az = 37.8 (USCGS) PV(A):1.8s 27.0nm MPV(A)=5.3 XV(A):2.0s 34.2nm
30.	+eP A	24 03 11	<u>Turkey</u> 39.17 N 29.38 E
	LmH B	10.9	H = 23 59 10.7 h = normal MB = 4.6
	LmV B	10.9	D = 16.98 Az = 318.3 (USCGS) PV(A):2.3s 91.4nm MPV(A)=4.5

Day	Phase	h m s	Remarks
1.	eP	AB 03 35 13	<u>Luzon, Philippine Islands</u>
	e	A 37 50	15.67 N 121.83 E
	e	A 38 22	H = 03 22 13.4 h = 29 km MB = 5.5 (USCGS)
	eSKS	BC 45 40	D = 90.2
	eS	C 46 00	PV(A):2.0s 55.5nm MPV(A)=5.5
	eSS	C 52 00	LmH(B):18s 2.9/um MLH(B)=5.7
	LmH	B 04 19.4	LmV(B):18s 2.2/um MLV(B)=5.7
	LmV	B 19.4	
1.	eP	A 03 55 29.5	<u>Kazakh-Sinkiang Border Region</u>
			47.62 N 82.68 E
			H = 03 47 15.7 h = normal MB = 4.9
			D = 44.96 Az = 301.5 (USCGS)
1.	eP	A 04 20 56.5	<u>Near Coast of Chiapas, Mexico</u>
			14.61 N 93.55 W
			H = 04 08 07.2 h = 35 km MB = 5.1
			D = 88.17 Az = 37.9 (USCGS)
1.	eP1	A 08 48 10.5	<u>Near Coast of Chiapas, Mexico</u>
	eP2	A 48 15	14.64 N 93.16 W
			H = 08 35 24.2 h = 44 km MB = 5.4
			D = 87.91 Az = 38.0 (USCGS)
			P2V(A):1.6s 22.0nm MPV(A)=5.2
1.	eP	AB 20 16 16	<u>Near Coast of Chiapas, Mexico</u>
	eSKS	B 26 52	14.62 N 93.61 W
	eS	B 27 05	H = 20 03 27.9 h = 38 km MB = 5.0
	ePS	B 28 04	D = 88.19 Az = 37.9 (USCGS)
	eSSS	C 36 40	PV(A):2.8s 150.0nm MPV(A)=5.8
	LmH	B 56.5	PV(B):8s 0.7/um MPV(B)=6.0
	LmV	B 56.5	SH(B):11s 0.7/um MSH(B)=5.6
			LmH(B):20s 1.8/um MLH(B)=5.5
			LmV(B):20s 1.2/um MLV(B)=5.3
1.	eP	A 20 47 44	<u>Off Coast of Hokkaido, Japan</u>
	epP	A 47 55.5	42.90 N 147.34 E
			H = 20 35 38.4 h = 15 km MB = 5.1
			D = 79.16 Az = 333.1 (USCGS)
			PV(A):1.6s 38.5nm MPV(A)=5.2

Day	Phase	h m s	Remarks
1.	eP	A 22 08 49	<u>USSR-Mongolia Border Region</u>
			51.3 N 93.2 E
			H = 22 00 06 D = 48.8 (ANUSSR)
2.	eiP	ABC 02 19 45.5	<u>Near Coast of Chiapas, Mexico</u>
	eS	BC 30 25	14.72 N 93.71 W
	ePS	BC 31 33	H = 02 06 56.3 h = 32 km MB = 5.4
	eSSS	C 40 00	D = 88.17 Az = 37.9 (USCGS)
	LmH	B 03 00.2	PV(A):2.6s 211.0nm MPV(A)=6.0
	LmV	B 00.3	PV(B):7.5s 0.8/um MPV(B)=6.1
			SH(B):10s 0.9/um MSH(B)=5.7
			LmH(B):18s 1.7/um LmH(B)=5.5
			LmV(B):18s 1.2/um LmV(B)=5.4
2.	e	A 06 19 03.5	Probably <u>Adriatic Sea</u> (ISC)
	e	A 19 45	
3.	ePn	A 04 19 05	<u>Italy</u> 44.9 N 10.4 E
	ePg	A 19 33.5	H = 04 17 41 (BCIS)
	iSn	A 20 13.5	D = 5.85
	eSg	AB 20 59.5	
3.	eP	A 04 31 36.5	<u>Kurile Islands</u> 43.61 N 146.59 E
	epP	A 31 54	H = 04 19 40.8 h = 57 km MB = 4.8
			D = 78.28 Az = 332.6 (USCGS)
			PV(A):1.2s 16.3nm MPV(A)=4.8
3.	e	A 11 04 25	<u>Greenland Sea</u> 79.68 N 3.54 E
			H = 10 58 03.5 h = normal MB = 4.1
			D = 29.29 Az = 169.5 (USCGS)
3.	eP	A 12 24 55	<u>Northeast of Taiwan</u> 26.6 N 125.9 E
			H = 12 12 36 h = 112 km (ISC)
			D = 83.7
4.	eP	A 07 19 03	<u>Andreanof Islands, Aleutian Is.</u>
			51.40 N 179.22 W
			H = 07 07 08.0 h = 44 km MB = 5.2
			D = 77.91 Az = 353.0 (USCGS)
			PV(A):1.3s 21.8nm MPV(A)=5.1

Day	Phase	h m s	Remarks	
4.	ePKP ePKP e ePP LmH LmV	B A B A B B	08 00 35 00 39 01 35 04 18 09 04.5 04.5	<u>New Hebrides Islands</u> 20.69 S 173.49 E H = 07 40 52.3 h = 14 km MB = 5.2 D = 146.86 Az = 338.8 (USCGS) PKPV(A):2.5s 46.1nm LmV(B):22s 0.9 μ m
4.	ePKIKP -iPKHKP epPKHKP	A A A	11 44 07.5 44 10 44 45	<u>Loyalty Islands</u> 21.53 S 170.51 E H = 11 24 42.6 h = 135 km MB = 5.2 D = 146.55 Az = 335.4 (USCGS) PKHKPV(A):1.0s 65.0nm pPKHKPV(A):1.9s 53.0nm
4.	eP	A	12 22 06.5	<u>Luzon, Philippine Islands</u> 14.62 N 124.23 E H = 12 08 57.0 h = normal MB = 4.9 D = 92.50 Az = 324.0 (USCGS) PV(A):1.2s 10.2nm
4.	ePP e eSS LmH LmV	ABC B B B B	19 12 24 19 55 27 50 20 06.5 07.7	<u>Mid-Indian Rise</u> 41.57 S 80.09 E H = 18 53 19.7 h = normal MB = 5.3 (USCGS) D = 109.6 PPV(A):2.0s 25.6nm MPPV(A)=6.2 LmV(B):16s 1.2 μ m MLV(B)=5.6
4.	+iPKP	A	20 40 34	<u>Fiji Islands</u> 20.29 S 177.90 W H = 20 21 35.3 h = 438 km MB = 4.2 D = 148.79 Az = 348.3 (USCGS) PKPV(A):1.3s 26.2nm
5.	eP e	A A	01 34 41 34 54.5	<u>South of Honshu, Japan</u> 32.33 N 141.58 E H = 01 22 00.3 h = normal MB = 4.9 D = 86.32 Az = 330.7 (USCGS) PV(A):1.4s 9.3nm MPV(A)=4.8
5.	ePn e eiSn ei eSg	A A A A A	12 51 25 51 43.5 52 32 52 44 53 16	<u>Italy</u> 44.8 N 10.2 E H = 12 49 56 (BCIS) D = 5.95

Day	Phase	h m s	Remarks	
5.	eP	A	15 42 19	<u>Southern Nevada</u> 37.22 N 116.18 W H = 15 30 00.2 h = 0 km MB = 5.2 D = 81.21 Az = 30.6 (USCGS) Nevada test site "Mint Leaf" 37°12'59.52" N 116°11'02.64" W (USAEC) PV(A):1.2s 12.2nm MPV(A)=4.8
5.	eiPKP eiX	AB A	20 25 44 25 47.5	<u>New Hebrides Islands</u> 20.16 S 170.23 E H = 20 06 08.5 h = 36 km MB = 5.3 D = 145.20 Az = 336.0 (USCGS) PKPV(A):1.1s 64.5nm XV(A):1.5s 45.2nm
6.	eP	A	02 48 15.5	<u>Luzon, Philippine Islands</u> 15.70 N 121.75 E H = 02 35 17.2 h = 39 km MB = 5.2 D = 90.22 Az = 323.3 (USCGS)
6.	eP LmH LmV	A B B	12 33 46 43.3 43.7	<u>North Atlantik Ridge</u> 49.95 N 29.02 W H = 12 28 16.0 h = normal MB = 4.8 D = 25.74 Az = 72.7 (USCGS) PV(A):1.5s 30.1nm MPV(A)=4.7 LmH(B):18s 2.2 μ m MLH(B)=4.7 LmV(B):18s 1.1 μ m MLV(B)=4.6
6.	eP e eX1 eX2 LmH LmV	A A A A B B	15 33 47 33 58 34 00 34 09.5 16 12.3 12.3	<u>Nicobar Islands</u> 9.84 N 92.95 E H = 15 21 55.1 h = normal MB = 5.3 D = 76.97 Az = 319.8 (USCGS) PV(A):1.4s 34.9nm MPV(A)=5.2 X1V(A):1.5s 40.2nm X2V(A):1.9s 72.0nm LmH(B):20s 0.8 μ m MLH(B)=5.0 LmV(B):17s 0.7 μ m MLV(B)=5.1
6.	eP LmH LmV	A B B	21 06 08 12.2 15.0	<u>Turkey</u> 39.03 N 30.04 E H = 21 02 05.7 h = 42 km MB = 4.5 D = 17.42 Az = 317.8 (USCGS)

Day	Phase	h m s	Remarks
7.	ePKP A	06 58 56.5	<u>Loyalty Islands</u> 22.37 S 170.25 E H = 06 39 07.6 h = 37 km MB = - D = 147.20 Az = 334.6 (USCGS) PKPV(A):1.6s 27.5nm
7.	e A	19 35 15	<u>Halmahera</u> 1.65 N 127.05 E H = 19 17 00.8 h = 106 km MB = 5.5 (USCGS) D = 104.6
8.	eP LmH LmV	A 02 53 20 B 59.3 B 03 01.2	<u>Turkey</u> 38.90 N 29.95 E H = 02 49 15.6 h = 30 km MB = 4.7 D = 17.47 Az = 318.2 (USCGS) PV(A):2.0s 64.0nm MPV(A)=4.4 LmH(B):16s 1.3/um MLH(B)=4.3 LmV(B):12s 1.0/um MLV(B)=4.4
8.	eP A	07 03 04	<u>Turkey</u> 38.88 N 29.94 E H = 06 58 59.1 h = 34 km MB = 4.4 (USCGS) D = 17.5
8.	eP A	15 55 13.5	<u>Kurile Islands</u> 44.70 N 148.29 E H = 15 43 25.2 h = 102 km MB = 4.6 D = 77.87 Az = 333.5 (USCGS)
8.	eP e e LmH LmV	A 18 33 59 A 34 16 A 34 23 B 40.0 B 40.0	<u>Greece</u> 38.77 N 22.41 E H = 18 30 41.4 h = 47 km MB = 4.3 D = 14.12 Az = 330.7 (USCGS) LmH(B):12s 0.5/um MLH(B)=3.8 LmV(B):10s 0.4/um
8.	eP e A	A 19 34 38 A 34 49	<u>Kurile Islands</u> 43.96 N 146.68 E H = 19 22 37.6 h = 13 km MB = 4.9 D = 78.00 Az = 332.6 (USCGS) PV(A):1.1s 16.1nm MPV(A)=5.1
9.	e LmH LmV	A 13 36 01 B 14 17.0 B 22.0	Probably <u>West New Guinea Region</u> (USCGS)

Day	Phase	h m s	Remarks
9.	ePKIKP epPKIKP ePKKP eSS esSS LmH LmV	A 18 19 25 A 21 09 A 29 13 B 37 35 B 39 53 B 19 04.0 B 19.0	<u>New Britain Region</u> 4.36 S 151.71 E H = 18 00 50.0 h = 203 km MB = 5.9 D = 123.05 Az = 330.8 (USCGS) PKIKPV(A):1.0s 27.6nm LmH(B):22s 1.4/um
10.	ePn ePg eSn iSg e	A 01 49 58.5 A 50 12.5 A 50 41.5 A 50 57.5 A 51 02	<u>Austria</u> 47.2 N 9.6 E H = 01 49 03 (BCIS) D = 3.6
10.	eP1 eP2 e(pP) LmH LmV	A 04 06 10 A 06 16.5 A 06 29 B 13.0 B 13.0	<u>Ionian Sea</u> 37.37 N 20.69 E H = 04 02 43.1 h = 53 km MB = 4.1 (USCGS) D = 14.8 P2V(A):0.8s 21.2nm MP2V(A)=4.3 LmH(B):12s 0.4/um LmV(B):12s 0.5/um
10.	ePKP A	10 58 08	<u>Fiji Islands</u> 20.53 S 178.24 W H = 10 39 18.2 h = 521 km MB = 4.5 (USCGS) D = 149.0 PKPV(A):1.1s 16.1nm
10.	eP e eiPP1 iPP2 eS e eSS LmH LmV	A 20 17 58 A 22 03 AB 22 12 A 22 14 B 28 36 B 34 12 B 35 40 B 21 07.0 B 07.0	<u>Mariana Islands</u> 18.58 N 145.24 E H = 20 05 15.9 h = 602 km MB = 5.6 (USCGS) D = 99.9 PV(A):1.5s 25.1nm MPV(A)=5.4 PP2V(A):1.4s 58.1nm MPPV(A)=5.7
10.	eP A	21 58 55.5	<u>Off East Coast of Honshu, Japan</u> 34.47 N 141.60 E H = 21 46 23.6 h = 43 km MB = 4.7 D = 84.47 Az = 330.7 (USCGS)

Day	Phase	h m s	Remarks
11.	eP	A 03 19 35.5	<u>Southern Iran</u> 28.54 N 52.27 E
	e	A 19 40	H = 03 12 19.7 h = 22 km MB = 5.1
	LmH	B 39.1	D = 37.67 Az = 317.3 (USCGS)
	LmV	B 39.1	PV(A):1.2s 28.5nm MPV(A)=4.9
11.	eP	A 03 55 32	<u>Mexico</u> (UPP) PV(A):2.3s 48.7nm
11.	ePn	A 05 53 46.5	<u>Yugoslavia</u> 45.0 N 17.3 E
	eSn	A 55 02.5	H = 05 52 07 (BCIS)
	e	A 55 20	D = 6.80
	e	A 55 33	PnV(A):0.8s 17.3nm
11.	e(P)	A 09 19 19	<u>Turkey</u> 39.61 N 29.37 E H = 09 15 26 h = 56 km D = 16.65 Az = 317 (ISC)
11.	eP	A 10 21 45	<u>Near Islands, Aleutian Is.</u> 52.50 N 173.37 E H = 10 10 01.2 h = 59 km MB = 4.8 D = 76.08 Az = 348.1 (USCGS)
11.	ePKHKP	A 15 25 05.5	<u>Fiji Islands</u> 19.57 S 178.04 W
	ePKP2	A 25 09.5	H = 15 06 13.6 h = 480 km MB = 4.9 (USCGS)
	epPKHKP	A 26 57	D = 148.1 PKHKPV(A):1.6s 44.0nm pPKHKPV(A):1.8s 40.6nm
11.	eP	A 16 32 38	<u>Turkey</u> 38.92 N 30.11 E
	LmH	B 38.6	H = 16 28 30.8 h = normal MB = 4.3
	LmV	B 40.4	D = 17.54 Az = 317.9 (USCGS) PV(A):2.0s 30.0nm MPV(A)=4.1
12.	ePKIKP	A 01 21 27.5	<u>South of Fiji Islands</u>
	ePKHKP	A 21 36	23.47 S 179.99 W
	ePKP2	A 21 47	H = 01 02 43.2 h = 550 km MB = 4.9
	epPKP	A 23 44.5	D = 151.41 Az = 344.5 (USCGS)
	e	A 23 51.5	PKHKPV(A):1.1s 20.2nm pPKPV(A):1.1s 20.2nm

Day	Phase	h m s	Remarks
12.	ePKIKP	A 17 17 37.5	<u>Tonga Islands</u> 20.60 S 174.42 W
	ePKHKP	A 17 42	H = 16 58 01.4 h = 95 km MB = 5.3 D = 149.64 Az = 352.4 (USCGS) PKHKPV(A):1.5s 65.3nm
12.	eP	A 22 16 17	<u>West Pakistan</u> 27.49 N 67.47 E H = 22 07 39.4 h = 23 km MB = 4.7 D = 47.81 Az = 314.7 (USCGS)
12.	eP	A 22 52 28.5	<u>Greece</u> 38.24 N 22.69 E
	eX1	A 52 34	H = 22 59 02.2 h = 35 km MB = 4.9
	eX2	A 52 38.5	D = 14.69 Az = 331.2 (USCGS)
	eX3	A 52 41.5	X3V(A):1.3s 30.6nm
	LmH	B 59.2	LmH(B):12s 1.1 μ m MLH(B)=5.2
	LmV	B 59.4	LmV(B):15s 1.4 μ m
13.	ePKP2	A 16 03 59	<u>South of Kermadec Islands</u> 33.73 S 178.79 W H = 15 43 21.2 h = 60 km MB = - D = 161.46 Az = 338.8 (USCGS)
13.	iPn	A 17 52 40.5	<u>Federal Rep. Germany</u> 47.8 N 11.1 E
	iPg	A 52 45.5	H = 17 51 57 (BCIS)
	eiSn	A 53 15	D = 2.85
	eiSg	A 53 26	
	i	A 53 29	
14.	eP	A 03 48 04	<u>Off Coast of Oregon</u> 42.52 N 126.39 W H = 03 35 54.3 h = normal MB = 4.7 D = 80.25 Az = 25.6 (USCGS)
14.	ePKIKP1	A 08 51 29.5	<u>Near North Coast of New Guinea</u>
	ePKIKP2	A 51 33	3.38 S 145.15 E
	ePP	AB 52 55	H = 08 32 42.2 h = 29 km MB = 5.6
	eSS	B 09 05	D = 118.88 Az = 328.2 (USCGS)
	eSSS	B 13 40	PKIKP2V(A):2.0s 29.9nm

Day	Phase	h m s	Remarks	
14.	+eP Pm e i e eS LmH LmV	AB A A E A E E B	09 25 47.5 25 52 26 09 26 16 26 19 30 19 36.5 37.2	<u>Eastern Caucasus</u> 43.02 N 47.08 E H = 09 20 22.0 h = 17 km MB = 5.8 D = 25.24 Az = 300.0 (USCGS) PV(B):7s 2.1/um MPV(B)=6.0 PmV(A):1.6s 121.0nm MPmV(A)=5.4 LmH(B):14s 9.4/um MLH(B)=5.5 LmV(B):14s 11.4/um MLV(B)=5.7
14.	ePn iSg	A A	10 01 04.5 01 29	<u>Czechoslovakia</u> 50.76 N 14.43 E H = 10 00 00 explosion 21.6 to D = 1.79 Az = 267 (PRU)
14.	+iP1 Pm iS LmH LmV	AB A E B B	18 17 50 18 13 22 16 28.5 29.3	<u>Eastern Caucasus</u> 43.03 N 47.09 E H = 18 12 28.0 h = 44 km MB = 5.6 D = 25.24 Az = 299.9 (USCGS) PV(A):1.2s 69.1nm MPV(A)=5.2 PV(B):6s 4.0/um MPV(B)=6.3 PmV(A):1.6s 867.0nm MPmV(A)=6.2 LmH(B):16s 113.0/um MLH(B)=6.5 LmV(B):16s 136.0/um MLV(B)=6.7
14.	e	A	19 26 02	<u>Eastern Caucasus</u> 42.98 N 46.79 E H = 19 20 26.1 h = normal MB = 4.8 D = 25.08 Az = 300.1 (USCGS)
14.	eP e	A A	19 37 06 37 19	<u>Eastern Caucasus</u> 42.87 N 47.00 E H = 19 31 38.1 h = normal MB = 4.6 D = 25.27 Az = 300.3 (USCGS)
14.	eP	A	21 21 14	<u>Eastern Caucasus</u> 43.05 N 47.15 E H = 21 15 50.5 h = normal MB = 4.9 D = 25.27 Az = 299.9 (USCGS)
14.	eP	A	21 38 10	<u>Turkey</u> 38.86 N 30.04 E H = 21 34 04.8 h = 19 km MB = 4.2 D = 17.56 Az = 318.2 (USCGS) PV(A):2.2s 32.7nm MPV(A)=4.1

Day	Phase	h m s	Remarks	
15.	e	A	02 02 23	<u>Eastern Caucasus</u> 42.92 N 46.76 E H = 01 56 47.3 h = normal MB = 4.6 D = 25.08 Az = 300.2 (USCGS)
15.	eP e	A A	02 12 50 13 30	<u>Eastern Caucasus</u> 43.00 N 46.81 E H = 02 08 04.1 h = normal MB = 4.8 D = 25.08 Az = 300.0 (USCGS)
15.	eP	A	06 24 47	<u>Eastern Caucasus</u> 43.06 N 47.28 E H = 06 19 16.6 h = normal MB = 4.5 D = 25.35 Az = 299.9 (USCGS)
15.	eP LmH LmV	AB B B	09 57 33 10 38.5 38.9	<u>Near Coast of Chiapas, Mexico</u> 14.51 N 92.81 W H = 09 44 45.2 h = normal MB = 5.2 D = 87.80 Az = 38.1 (USCGS) PV(A):0.5s 11.5nm MPV(A)=5.4 PV(B):7s 0.4/um MPV(B)=5.8 LmH(B):17s 1.3/um MLH(B)=5.4 LmV(B):17s 1.0/um MLV(B)=5.3
15.	+iPKIKP -iPKHKP epPKP	AB AB A	10 59 31.5 59 36.8 11 00 37	<u>Fiji Islands</u> 21.47 S 176.72 W H = 10 40 14.1 h = 251 km MB = 5.3 D = 150.16 Az = 349.3 (USCGS) PKIKPV(A):1.2s 30.5nm PKHKPV(A):1.1s 186.0nm
15.	eP	A	13 42 18.5	<u>Southern Nevada</u> 37.16 N 116.04 W H = 13 30 00.0 h = 0 km MB = 5.3 D = 81.19 Az = 30.7 (USCGS) Nevada test site "Cornice" 37°09'50" N 116°02'13" W (USAEC) PV(A):1.4s 18.6nm MPV(A)=4.9
15.	eP	A	14 21 55	<u>South Atlantic Ridge</u> 22.49 S 12.71 W H = 14 10 10.1 h = normal MB = 4.9 D = 75.92 Az = 15.7 (USCGS) PV(A):1.4s 18.6nm MPV(A)=5.0

Day	Phase	h m s	Remarks
15.	iPKP A	15 37 30	<u>Loyalty Islands</u> 20.26 S 168.80 E H = 15 18 00.7 h = 64 km MB = 4.4 D = 144.73 Az = 334.7 (USCGS) PKPV(A):1.1s 24.2nm
15.	+iP1 AB	17 21 54.5	<u>USSR-Mongolia Border Region</u>
	iP2 A	22 00.5	50.17 N 91.25 E
	+iPP B	23 46	H = 17 13 15.1 h = normal MB = 5.9
	-i A	23 50	D = 48.38 Az = 303.1 (USCGS)
	eS B	28 55	P1V(A):0.8s 50.0nm MP1V(A)=5.6
	eSS B	32 20	P1V(B):5.5s 5.2/um MP1V(B)=6.8
	LmH B	41.8	P2V(A):1.9s 985.0nm MP2V(A)=6.5
	LmV B	43.4	PPV(B):8s 7.1/um MPPV(B)=6.6 SH(B):11s 7.5/um MSH(B)=6.5 LmH(B):13s 218.0/um MLH(B)=7.3 LmV(B):14s 133.5/um MLV(B)=7.2
15.	eP A	18 07 09	<u>USSR-Mongolia Border Region</u> 50.18 N 91.34 E H = 17 58 28.3 h = normal MB = 5.1 D = 48.42 Az = 303.1 (USCGS) PV(A):0.8s 15.4nm MPV(A)=5.2
15.	eP A	18 44 46.5	<u>USSR-Mongolia Border Region</u> 50.25 N 91.34 E H = 18 36 04.0 h = normal MB = 4.5 D = 48.38 Az = 303.1 (USCGS)
15.	eP A	18 58 47	<u>USSR-Mongolia Border Region</u> 50.29 N 91.19 E H = 18 50 07.4 h = normal MB = 4.6 D = 48.28 Az = 303.0 (USCGS)
15.	eP1 A	20 20 57.5	<u>USSR-Mongolia Border Region</u>
	eP2 A	21 00.5	50.23 N 91.26 E
	LmH B	40.7	H = 20 12 16.9 h = normal MB = 5.0
	LmV B	43.5	D = 48.36 Az = 303.1 (USCGS) P1V(A):1.6s 22.0nm MP1V(A)=5.0 P2V(A):1.5s 40.2nm MP2V(A)=5.3

Day	Phase	h m s	Remarks
cont. 15.			LmH(B):13s 1.4/um MLH(B)=5.1 LmV(B):16s 0.9/um MLV(B)=4.9
15.	eP1 A	20 59 56	<u>East of Lake Baikal</u> 56.85 N 117.83 E
	eP2 AB	21 00 00	H = 20 50 12.7 h = normal MB = 4.9
	eSS B	12 28	D = 56.86 Az = 313.1 (USCGS)
	LmH B	26.6	P1V(A):1.0s 13.6nm MP1V(A)=4.9
	LmV B	26.6	P2V(A):2.0s 55.6nm MP2V(A)=5.2 LmH(B):13s 2.8/um MLH(B)=5.5 LmV(B):14s 2.9/um MLV(B)=5.6
16.	e A	10 49 11	<u>Eastern Caucasus</u> 42.88 N 47.11 E H = 10 43 23.0 h = normal MB = 4.4 D = 25.33 Az = 300.2 (USCGS)
16.	eP A	21 32 24	<u>Eastern Caucasus</u> 42.99 N 46.96 E
	e A	32 31.5	H = 21 26 55.3 h = normal MB = 4.8
	LmH B	44.0	D = 25.18 Az = 300.0 (USCGS)
	LmV B	45.4	LmH(B):13s 0.5/um MLH(B)=4.2 LmV(B):11s 0.5/um MLV(B)=4.4
17.	eP A	01 05 32	<u>USSR-Mongolia Border Region</u>
	e A	07 32.5	50.19 N 91.26 E
	e A	08 20	H = 00 56 48.0 h = normal MB = 4.5
	LmH B	25.2	D = 48.37 Az = 303.1 (USCGS)
	LmV B	28.0	LmH(B):13s 0.5/um MLH(B)=4.7 LmV(B):13s 0.4/um MLV(B)=4.7
17.	ePKP A	03 53 56	<u>Fiji Islands</u> 17.55 S 178.89 W H = 03 35 22.8 h = 610 km MB = 4.4 D = 145.93 Az = 348.0 (USCGS) PKPV(A):1.0s 9.8nm
17.	eP1 A	05 07 41.5	<u>Eastern Caucasus</u> 43.00 N 46.88 E
	eP2 A	07 43.5	H = 05 02 17.7 h = normal MB = 4.7
	LmH B	19.0	D = 25.13 Az = 300.0 (USCGS)
	LmV B	19.7	P2V(A):2.0s 21.4nm MP2V(A)=4.5 LmH(B):14s 0.6/um MLH(B)=4.3 LmV(B):12s 0.7/um MLV(B)=4.5

Day	Phase	h m s	Remarks
17.	eP	AB	06 54 31 <u>Eastern Caucasus</u> 42.97 N 46.88 E
	i	A	54 38.5 H = 06 49 06.1 h = normal MB = 5.0
	i	A	54 43.5 D = 25.14 Az = 300.1 (USCGS)
	Pm	A	55 04 PV(A):1.5s 27.6nm MPV(A)=4.8
	eS	B	59 06 PmV(A):1.9s 91.0nm MPmV(A)=5.2
	e	B	07 00 32 LmH(B):16s 4.5 μ m MLH(B)=5.1
	ei	B	01 00 LmV(B):14s 4.1 μ m MLV(B)=5.2
	LmH	B	05.0
	LmV	B	05.8
	17.	eP	A
eP		A	23 07 03 <u>Near Islands, Aleutian Is.</u> 53.14 N 171.04 E H = 22 55 23.2 h = 38 km MB = 4.6 D = 75.14 Az = 346.6 (USCGS)
eiP		AB	01 35 35.5 <u>North Atlantic Ridge</u> 52.08 N 30.20 W
18.	ei	A	35 37.5 H = 01 30 02.6 h = normal MB = 4.9
	i	A	35 47.5 D = 25.34 Az = 54.2 (USCGS)
	eS	B	40 12 PV(A):1.0s 35.5nm MPV(A)=5.0
	LmH	B	45.3 LmH(B):14s 2.5 μ m MLH(B)=4.9
	LmV	B	46.0 LmV(B):13s 1.6 μ m MLV(B)=4.9
18.	ePKIKP	A	03 26 31 <u>Santa Cruz Islands</u> 12.38 S 166.59 E H = 03 07 15.5 h = 76 km MB = 5.1 D = 136.72 Az = 336.9 (USCGS)
18.	eP	A	07 40 56.5 <u>USSR-Mongolia Border Region</u> 50.26 N 91.30 E
	LmV	B	08 03.3 H = 07 32 16.2 h = normal MB = 4.8 D = 48.36 Az = 303.0 (USCGS) PV(A):1.0s 15.8nm MPV(A)=5.1 LmV(B):14s 0.6 μ m MLV(B)=4.8

Day	Phase	h m s	Remarks
18.	eP1	A	14 46 27 <u>East of Lake Baikal</u> 56.89 N 117.62 E
	eP2	A	46 31 H = 14 36 40.7 h = normal MB = 4.6
	LmV	B	15 12.9 D = 56.75 Az = 313.0 (USCGS)
	LmH	B	15 13.0 P2V(A):1.0s 15.7nm MP2V(A)=5.0 LmV(B):14s 0.6 μ m MLV(B)=4.8 LmH(B):14s 1.1 μ m MLH(B)=5.0
18.	eP	A	19 22 52 <u>Fox Islands, Aleutian Is.</u>
	e	A	23 05 51.32 N 170.83 W H = 19 10 52.1 h = normal MB = 4.3 D = 78.39 Az = 358.4 (USCGS)
19.	LmH	B	01 52.5 <u>Probably Near Coast of Chiapas, Mexico</u>
	LmV	B	52.8 (USCGS) LmH(B):16s 0.4 μ m LmV(B):16s 0.5 μ m
19.	eP1	A	02 13 40 <u>Greenland Sea</u> 79.24 N 2.50 E
	eP2	A	13 48 H = 02 07 41.5 h = normal MB = 4.8
	e	A	13 56 D = 28.90 Az = 167.9 (USCGS) P2V(A):1.5s 30.2nm MP2V(A)=4.9
19.	ePKP	A	07 35 10 <u>New Hebrides Islands</u> 18.78 S 167.23 E H = 07 16 03.0 h = 212 km MB = 4.6 D = 143.56 Az = 335.9 (USCGS) PKPV(A):1.1s 12.1nm
19.	eP	A	10 34 56.5 <u>Near Coast of Venezuela</u> 10.91 N 69.94 W H = 10 22 57.6 h = 16 km MB = 5.1 D = 75.66 Az = 40.4 (USCGS) PV(A):1.0s 7.9nm MPV(A)=4.8
19.	ePKIKP	A	15 07 29 <u>New Britain Region</u> 5.19 S 152.25 E H = 14 48 35.3 h = 65 km MB = 5.6 D = 124.02 Az = 330.8 (USCGS)
19.	e(PKP2)	A	20 38 56 <u>Kermadec Islands Region</u> 31.4 S 178.1 W H = 20 18 10.6 h = 41 km MB = 4.6 (USCGS) D = 159.7

Day	Phase	h m s	Remarks
20.	ePKP2 A	00 39 27	<u>Kermadec Islands Region</u> 31.81 S 179.94 E H = 00 19 39.6 h = 396 km MB = 4.4 (USCGS) D = 159.3
20.	ePKIKP A	20 22 08	<u>South Sandwich Islands</u> 55.89 S 28.33 W
	ePP A	22 44	H = 20 03 42.3 h = 70 km MB = 6.0
	e B	23 09	D = 111.23 Az = 26.0 (USCGS)
	e B	23 42	PPV(A):1.5s 20.1nm MPPV(A)=5.5
	e B	30 28	PKKP1V(A):1.2s 14.2nm
	eSP B	32 12	PKKP2V(A):1.3s 26.2nm
	ePKKP1 A	33 05	LmH(B):22s 3.5/um MLH(B)=5.9
	ePKKP2 A	33 13.5	LmV(B):18s 2.7/um MLV(B)=5.9
	eSS B	38 00	
	LmH B	21 02.6	
	LmV B	07.0	
20.	eP AB	20 42 49	<u>Andreanof Islands, Aleutian Is.</u> 51.47 N 178.52 W H = 20 30 54.7 h = 48 km MB = 5.7 D = 77.90 Az = 353.4 (USCGS) PV(A):1.2s 61.0nm MPV(A)=5.0
20.	eP A	22 14 44.5	<u>Near West Coast of Columbia</u> 5.66 N 77.50 W H = 22 02 09.0 h = normal MB = 4.9 D = 85.10 Az = 39.7 (USCGS) PV(A):1.5s 20.1nm MPV(A)=5.1
21.	eiPKHKP A	00 55 30.5	<u>Fiji Islands</u> 20.29 S 178.00 W
	ePKP2 A	55 36	H = 00 36 43.8 h = 549 km MB = 5.0 D = 148.76 Az = 348.2 (USCGS) PKHKPV(A):1.0s 31.5nm
21.	eP A	14 27 19	<u>Southern Nevada</u> 37.07 N 116.01 W H = 14 15 00.0 h = 0 km MB = 5.1 D = 81.26 Az = 30.7 (USCGS) Nevada test site "Morronees" 37°04'15" N 116°00'47" W (USAEC) PV(A):1.1s 6.0nm MPV(A)=4.6

Day	Phase	h m s	Remarks
22.	iPn A	14 45 29.5	<u>Adelebsen/Solling, Fed. Rep. Germany</u> 51°36.51' N 9°44.78' E
	iSn A	45 50	explosion, H = 14 45 00.84 yield 7.5 to (Hannover)
	iSg A	45 53	D = 1.5
23.	LmV B	08 44.8	Probably <u>Southern Pacific Ocean</u> (USCGS)
	LmH B	46.0	LmV(B):18s 0.5/um LmH(B):20s 0.5/um
23.	eP A	15 00 16.5	<u>USSR-Mongolia Border Region</u> 50.06 N 91.63 E H = 14 51 34.7 h = 43 km MB = 4.5 D = 48.64 Az = 303.3 (USCGS) PV(A):0.8s 7.7nm MPV(A)=4.8 LmH(B):12s 0.4/um MLH(B)=4.7 LmV(B):12s 0.4/um MLV(B)=4.7
	LmH B	20.0	
	LmV B	23.4	
23.	eP A	16 29 19	<u>Near Coast of Chiapas, Mexico</u> 14.91 N 92.23 W H = 16 16 43.8 h = 109 km MB = 4.9 D = 87.14 Az = 38.2 (USCGS) PV(A):0.6s 11.5nm MPV(A)=5.0
23.	eP AB	23 21 54	<u>Kurile Islands</u> 43.55 N 147.91 E
	epP A	22 03.5	H = 23 09 52.8 h = 35 km MB = 5.2
	LmV B	24 00.3	D = 78.77 Az = 333.4 (USCGS)
	LmH B	01.7	PV(A):1.0s 19.7nm MPV(A)=5.1 LmV(B):12s 3.7/um MLV(B)=6.0 LmH(B):16s 1.5/um MLH(B)=5.4
24.	eP A	00 53 21	<u>Kurile Islands</u> 43.82 N 147.63 E
	epP A	53 31.5	H = 00 41 19.5 h = normal MB = 4.5 D = 78.44 Az = 333.2 (USCGS)
24.	e A	11 07 16	<u>Dodecanese Islands</u> 36.17 N 25.61 E
	LmH B	15.6	H = 11 02 56.3 h = 13 km MB = 4.5
	LmV B	15.8	D = 17.64 Az = 329.5 (USCGS)

Day	Phase	h m s	Remarks
24.	eP	A 16 44 41	<u>Near East Coast of Kamchatka</u>
	LmH	B 17 18.5	55.00 N 162.59 E
	LmV	B 19.0	H = 16 33 17.7 h = normal MB = 4.7 D = 71.97 Az = 341.0 (USCGS)
25.	ePn	A 12 57 19.5	<u>Italy</u> 42.6 N 12.5 E
	ePg	A 58 02	H = 12 55 24 (BCIS)
	eSn	A 58 49	D = 8.10 PnV(A):1.1s 14.1nm
25.	eP	A 16 27 49.5	<u>Near East Coast of Honshu, Japan</u> 37.26 N 140.99 E H = 16 15 33.8 h = 50 km MB = 4.5 D = 81.80 Az = 330.2 (USCGS)
25.	ePKIKP	A 17 07 25	<u>Kermadec Islands</u> 29.43 S 177.80 W
	ePKHKP	A 07 37	H = 16 47 36.0 h = 63 km MB = 5.5
	ePKP2	A 07 58	D = 157.65 Az = 344.1 (USCGS) PKIKPV(A):1.4s 16.3nm PKHKPV(A):1.3s 15.3nm PKP2V(A):1.5s 40.0nm
25.	ePn	A 17 45 50	<u>Swabian Jura, Fed. Rep. Germany</u> 48.3 N 9.1 E
	ePg	A 46 04	H = 17 45 06 (BCIS)
	iSg	A 46 37	D = 2.84
25.	eP	A 18 17 12	<u>Dodecanese Islands</u> 36.23 N 25.68 E H = 18 13 07.8 h = 29 km MB = 4.4 D = 17.61 Az = 329.3 (USCGS)
26.	eSg	A 03 22 09	<u>Swabian Jura, Fed. Rep. Germany</u> 48.3 N 9.1 E H = 03 20 37 (BCIS) D = 2.84
26.	+iP	A 10 05 13	<u>Unimak Island</u> 54.19 N 164.69 W H = 09 53 31.0 h = 36 km MB = 5.2 D = 75.50 Az = 2.4 (USCGS) PV(A):1.1s 42.3nm MPV(A)=5.4

Day	Phase	h m s	Remarks
26.	ePn	A 12 06 29.5	<u>Italy</u> 42.6 N 12.5 E
	eSn	A 08 00	H = 12 04 34 (BCIS)
	LmH	B 10.4	D = 8.1
	LmV	B 10.4	PnV(A):1.0s 19.7nm
26.	LmH	B 13 43.0	Probably <u>New Britain Region</u> (USCGS)
	LmV	B 43.0	
26.	eP	A 15 12 18	<u>Southern Nevada</u> 37.11 N 116.11 W H = 15 00 00.0 h = 0 km MB = 5.6 D = 81.27 Az = 30.6 (USCGS) Nevada test site "Flask" 37°06'50" N 116°03'48" W (USAEC) PV(A):1.3s 41.5nm MPV(A)=5.3
27.	-eP1	A 12 17 23.5	<u>Bonin Islands</u> 27.22 N 140.12 E
	-iP2	ABC 17 24.2	H = 12 05 06.0 h = 382 km MB = 6.2
	epP	A 18 54	D = 90.13 Az = 330.1 (USCGS)
	-isP	B 19 35	P2V(A):2.4s 1800.0nm MP2V(A)=6.5
	ePP	B 21 05	P2V(B):10s 15.1/um MP2V(B)=6.8
	epPP	A 22 18	LmH(B):16s 32.6/um
	isPP	B 23 00	LmV(B):15s 27.2/um
	eisPPPP	B 26 30	(P'P'P')V(A):1.8s 20.3nm
	eisP	B 28 44	
	e	A 28 50	
	iPS	B 29 36	
	isS	B 30 15	
	iSS	B 33 46	
	ePKKP	A 34 52	
	esSS	B 36 18	
e	B 42 50		
eP'P'	A 42 55		
eSKPPKP	A 45 42		
LmH	B 57.3		
LmV	B 13 01.5		
e(P'P'P')A	03 47		

Day	Phase	h m s	Remarks
27.	eP	AB 19 17 46	<u>Off East Coast of Honshu, Japan</u>
	ePP	B 20 52	40.30 N 142.99 E
	eS	B 27 50	H = 19 05 39.1 h = 33 km MB = 5.7
	eSS	B 34 10	D = 79.92 Az = 331.0 (USCGS)
	LmH	B 52.7	PV(A):2.0s 342.0nm MPV(A)=5.9
	LmV	B 58.7	PV(B):12s 3.1/um MPV(B)=6.1 PPV(B):(16s) 1.8/um MPPV(B)=5.9 SH(B):20s 5.2/um MSH(B)=6.1 LmH(B):18s 47.3/um MLH(B)=6.9 LmV(B):16s 41.7/um MLV(B)=6.9
27.	eP	A 20 14 54	<u>Near Coast of Chiapas, Mexico</u> 15.37 N 93.74 W H = 20 02 13.7 h = 89 km MB = 4.6 D = 87.68 Az = 37.9 (USCGS) PV(A):1.4s 11.6nm MPV(A)=4.8
27.	eP	AB 22 47 56.5	<u>Off East Coast of Honshu, Japan</u>
	eS	B 58 00	40.21 N 143.16 E
	LmH	B 23 23.0	H = 22 35 46.4 h = 16 km MB = 5.5
	LmV	B 27.3	D = 80.07 Az = 331.1 (USCGS) PV(A):2.2s 262.0nm MPV(A)=5.8 LmH(B):18s 9.8/um MLH(B)=6.2 LmV(B):15.5s 5.5/um MLV(B)=6.0
27.	+iP	AB 24 08 46.5	<u>Off East Coast of Honshu, Japan</u>
	ePP	B 11 44	40.30 N 142.99 E
	ePP	A 11 50	H = 23 50 40.0 h = 38 km MB = 5.4
	eS	B 18 50	D = 79.92 Az = 331.0 (USCGS)
	LmH	B 43.7	PV(A):2.0s 171.0nm MPV(A)=5.6
	LmV	B 49.6	LmH(B):18s 5.7/um MLH(B)=6.0 LmV(B):17s 4.3/um MLV(B)=5.9
28.	eP	A 06 41 22	<u>Kurile Islands</u> 46.47 N 153.41 E H = 06 29 25.7 h = 30 km MB = 4.7 D = 77.79 Az = 336.2 (USCGS)

Day	Phase	h m s	Remarks
28.	ePKP	A 11 53 03.5	<u>New Hebrides Islands</u> 20.49 S 169.68 E
	epPKP	A 53 35.5	H = 11 33 41.3 h = 144 km MB = 4.9 D = 145.28 Az = 335.3 (USCGS) PKPV(A):1.4s 48.8nm
28.	ePKP	A 14 32 23	<u>New Hebrides Islands</u> 18.84 S 169.49 E H = 14 13 18.0 h = 232 km MB = 4.1 D = 143.72 Az = 336.1 (USCGS) PKPV(A):1.2s 12.2nm
28.	eP	A 15 27 06	<u>Bonin Islands</u> 27.25 N 140.14 E H = 15 14 46.8 h = 369 km MB = 4.9 D = 90.10 Az = 330.1 (USCGS) PV(A):1.5s 15.1nm MPV(A)=4.7
28.	eiP	A 17 50 16.5	<u>Vancouver Island</u> 48.45 N 126.66 W H = 17 38 32.1 h = 3 km MB = 4.9 D = 74.99 Az = 26.0 (USCGS) PV(A):1.0s 21.6nm MPV(A)=5.1
29.	-eiP	AB 04 42 55	<u>Kurile Islands</u> 44.19 N 146.73 E H = 04 31 03.7 h = 13 km MB = 5.3 D = 77.83 Az = 332.6 (USCGS) PV(A):1.3s 96.0nm MPV(A)=5.8
29.	ePKP	AB 05 34 11.5	<u>Tonga Islands</u> 14.99 S 173.52 W
	e(PSPS)	B 52 08	H = 05 14 38.0 h = normal MB = 5.5
	LmH	B 06 39.0	D = 144.19 Az = 354.4 (USCGS)
	LmV	B 39.8	PKPV(A):3.0s 131.5nm LmH(B):20s 1.2/um MLH(B)=5.6 LmV(B):20s 1.6/um
29.	iPn	A 07 29 08	<u>Swabian Jura, Fed.Rep.Germany</u> 48.3 N 9.1 E
	iPg	A 29 17	H = 07 28 23 (BCIS)
	iSn	A 29 42.5	D = 2.84
	eiSg	A 29 52	
	i	A 29 55	
	i	A 29 57	

Day	Phase	h m s	Remarks
29.	e(P) A	10 44 49.5	<u>Burma-India Border Region</u> 24.01 N 94.09 E H = 10 33 58.6 h = 47 km MB = 5.0 D = 67.16 Az = 316.8 (USCGS) PV(A):1.0s 15.7nm MPV(A)=5.2 pPV(A):1.5s 30.1nm
	epP A	45 05	
29.	ePKIKP AB	19 21 36	<u>Santa Cruz Islands</u> 11.63 S 166.34 E H = 19 02 19.0 h = 50 km MB = 5.9 D = 135.92 Az = 337.0 (USCGS) PKIKPV(A):3.0s 131.5nm LmH(B):21s 2.8 μ m MLH(B)=5.9 LmV(B):21s 2.6 μ m
	epPKIKP A	21 50	
	ePP B	24 12	
	LmH B	20 19.6	
	LmV B	23.9	
29.	eP A	19 45 18	<u>Kurile Islands</u> 45.44 N 149.99 E H = 19 33 24.4 h = 45 km MB = 5.0 D = 77.73 Az = 334.4 (USCGS) PV(A):1.2s 18.3nm MPV(A)=5.1
29.	ePKIKP AB	20 49 22	<u>Fiji Islands</u> 20.57 S 178.74 W H = 20 30 45.1 h = 610 km MB = 5.1 D = 148.89 Az = 347.2 (USCGS) PKIKPV(A):0.8s 13.5nm PKHKPV(A):1.1s 117.0nm PKP2V(A):1.2s 75.5nm
	eiPKHKP AB	49 26.8	
	iPKP2 A	49 35	
	epPKP A	51 46	
	e A	51 51	
30.	ePKP A	03 44 49.5	<u>Loyalty Islands</u> 21.85 S 170.09 E H = 03 25 12.1 h = 58 km MB = 4.7 D = 146.68 Az = 334.8 (USCGS) PKPV(A):1.3s 21.8nm
30.	eP1 A	04 28 04.5	<u>Taiwan Region</u> 21.37 N 121.86 E H = 04 15 20.8 h = normal MB = 4.5 D = 85.76 Az = 323.2 (USCGS) P2V(A):1.0s 11.8nm MP2V(A)=5.0 LmH(B):12s 0.4 μ m MLH(B)=5.1 LmV(B):14s 0.6 μ m MLV(B)=5.1
	eP2 A	28 07	
	LmH B	05 11.5	
	LmV B	11.5	

Day	Phase	h m s	Remarks
30.	ePKIKP A	11 12 37	<u>Fiji Islands</u> 20.06 S 178.52 W H = 10 54 03.1 h = 615 km MB = 4.8 D = 148.44 Az = 347.6 (USCGS) PKHKPV(A):1.3s 43.6nm
	eiPKHKP A	12 42.5	
	ePKP2 A	12 48.5	
30.	eP AB	13 29 39	<u>Samar, Philippine Islands</u> 12.16 N 124.48 E H = 13 16 27.1 h = 93 km MB = 5.8 D = 94.62 Az = 323.9 (USCGS) PV(A):1.6s 55.0nm MPV(A)=5.8 PPV(A):1.5s 45.2nm MPPV(A)=5.8 LmH(B):17.5s 0.9 μ m LmV(B):16s 1.1 μ m
	e A	30 08	
	e AB	30 18	
	ePP AB	33 27	
	eSKS B	40 00	
	eS B	40 48	
	ePS B	42 22	
	ePSPS B	47 44	
	eSSS B	51 05	
	LmH B	14 17.0	
LmV B	19.0		
30.	iPn A	16 38 47.5	<u>Swabian Jura, Fed.Rep.Germany</u> 48.3 N 9.1 E H = 16 38 03 (BCIS) D = 2.84 LmH(B):4.5s 0.5 μ m LmV(B):4.5s 0.2 μ m
	ePg A	38 56	
	iSn A	39 23	
	iSg A	39 34	
	i A	39 35	
	LmH B	39.9	
	LmV B	39.9	
30.	iPn A	16 56 11.5	<u>Yugoslavia</u> 45.3 N 15.1 E H = 16 54 45 (BCIS) D = 5.82 PnV(A):0.4s 11.6nm
	e A	56 33	
	ePg A	56 37	
	eSn A	57 14	
	eSg A	57 48	
30.	e(PKHKP) A	18 25 47	<u>Tonga Islands</u> 22.53 S 174.51 W H = 18 05 54.4 h = 55 km MB = 4.6 D = 151.53 Az = 351.8 (USCGS) XV(A):1.6s 19.2nm
	eX A	25 50	
	e(PKP2) A	25 59	
	e A	26 05	
	e A	26 18	

Day	Phase	h m s	Remarks
30.	eP	A 23 31 23	<u>Unimak Island</u> 53.67 N 164.12 W
	e	A 31 32	H = 23 19 37.4 h = normal MB = 4.9
	eX	A 31 35	D = 76.00 Az = 2.8 (USCGS)
	LmV	B 24 11.0	XV(A):1.8s
	LmH	B 11.5	
31.	eP	A 03 02 45	<u>Unimak Island</u> 53.62 N 164.51 W
			H = 02 50 58.5 h = normal MB = 4.4 D = 76.06 Az = 2.5 (USCGS)
31.	+iPn	A 08 12 12.8	<u>Federal Rep. Germany</u> 48.36 N 9.18 E
	iPg	A 12 19.2	H = 08 11 29.3 h = 16 km MB = 3.9
	iSg	A 12 59	D = 2.78 Az = 33.9 (USCGS)
	LmH	B 13.2	LmH(B):7.5s 2.3 μ m
	LmV	B 13.4	LmV(B):5s 1.3 μ m
31.	e	A 10 31 26.5	<u>Eastern Caucasus</u> 42.98 N 47.02 E
	LmH	B 41.8	H = 10 25 50.4 h = 25 km MB = 4.6
	LmV	B 42.4	D = 25.22 Az = 300.1 (USCGS)
31.	-iP1	AB 20 36 57.3	<u>Near Coast of Northern Peru</u>
	+iP2	B 37 20	9.18 S 78.82 W
	eiP3	B 37 32	H = 20 23 27.3 h = 43 km MB = 6.6 (USCGS)
	ePP1	B 41 00	D = 97.3
	e	B 41 08	Multiple shock
	ePP2	B 41 20	P1V(A):1.8s 203.0nm MP1V(A)=6.5
	ePP3	B 41 35	P3V(A):2.2s 1450.0nm MP2V(A)=7.2
	eSKS1	B 47 25	P3V(B):15s 40.0 μ m MP2V(B)=7.9
	eSKS2	B 47 46	PP3V(B):16s 32.4 μ m MPP3V(B)=7.5
	eiSKS3	B 47 59	LmV(B):19s 405.0 μ m MLV(B)=8.0
	eS	B 48 13	LmH(B):20s 325.0 μ m MLH(B)=7.9
	esS	B 48 45	
	eSPP	B 50 25	
	eSS	B 55.0	
	eP'P'	A 21 02 06	
	LmV	B 20.0	
	LmH	B 20.1	
e(P'P'P')A	23 20		

Day	Phase	h m s	Remarks
31.	e	A 22 01 51	<u>Near Coast of Peru</u> 10.22 S 78.60 W H = 21 48 04.4 h = 51 km MB = 5.6 D = 97.95 Az = 40.0 (USCGS)

Day	Phase	h m s	Remarks
1.	eP1	A 01 18 59	<u>Greece-Albania Border Region</u>
	eP2	A 19 02	39.06 N 20.79 E H = 01 15 49.0 h = 65 km MB = 4.2 D = 13.28 Az = 333.8 (USCGS) P2V(A):0.8s 9.6nm
1.	eP	A 01 49 40	<u>Off Coast of Northern Peru</u>
	epP	AB 49 53	9.30 S 79.00 W
	e	A 50 09	H = 01 36 10.2 h = 49 km MB = 6.0
	eSKS	B 02 00 12	D = 97.50 Az = 40.0 (USCGS)
	eS	B 00 59	PV(A):1.8s 33.8nm MPV(A)=5.7
	eSS	B 07 40	LmH(B):19s 0.7/um MLH(B)=5.1
	LmH	B 33.1	LmV(B):19s 1.1/um MLV(B)=5.4
1.	+eP	A 02 58 53.3	<u>Near Coast of Peru</u> 10.15 S 78.73 W
	epP	AB 59 07	H = 02 45 21.5 h = 66 km MB = 5.8
	iSKS	B 03 09 28	D = 97.98 Az = 40.0 (USCGS)
	eS	B 10 14	PV(A):1.8s 27.0nm MPV(A)=5.5
	eSP	B 11 32	SKSH(B):5.5s 1.2/um
	eSPP	B 12 32	SH(B):7s 0.5/um MSH(B)=6.1
	LmV	B 41.2	LmV(B):21s 2.6/um
1.	eP	A 07 59 10.5	<u>Crete</u> 34.3 N 24.2 E
	LmH	B 08 08.0	H = 07 54 52 h = 51 km (ISC)
	LmV	B 08.0	D = 18.8
1.	eP	AB 17 57 08	<u>South of Panama</u> 5.92 N 82.52 W
	e	A 57 12.5	H = 17 44 15.0 h = 9 km MB = 5.6
	eSKS	B 18 07 40	D = 88.09 Az = 39.4 (USCGS)
	eS	B 07 55	PV(A):1.4s 32.6nm MPV(A)=5.5
	eSS	B 14 55	LmH(B):20.5s 2.5/um MLH(B)=5.6
	LmH	B 29.4	LmV(B):20s 1.7/um MLV(B)=5.5
	LmV	B 31.0	
2.	eP	A 01 50 53.5	<u>Near Coast of Northern Peru</u>
	epP	AB 51 08.5	9.76 S 78.80 W

Day	Phase	h m s	Remarks
cont. 2.	ePP	B 01 54 48	H = 01 37 22.7 h = 58 km MB = 5.7
	eSKS	B 02 01 28	D = 97.73 Az = 40.0 (USCGS)
	ePS	B 04 00	PV(A):0.8s 7.7nm MPV(A)=5.3
	LmH	B 35.0	pPV(A):1.9s 106.0nm
	LmV	B 35.0	LmH(B):17s 0.9/um MLH(B)=5.3 LmV(B):17s 1.2/um MLV(B)=5.5
2.	eX	A 03 01 48.5	<u>Tonga Islands</u> 17.81 S 174.66 W H = 02 41 42.9 h = 137 km MB = 4.7 (USCGS) D = 146.8 XV(A):1.8s 33.8nm
	2.	+iP	AB 03 10 17.5
ei		A 10 22.5	H = 02 59 31.3 h = 95 km MB = 5.5
e(PcP)		B 10 47	D = 67.31 Az = 11.4 (USCGS)
eS		B 19 04	PV(A):1.0s 68.9nm MPV(A)=5.5
ePS		B 19 40	PV(B):4.5s 0.4/um MPV(B)=5.6
eP'P'		A 38 34	SH(B):6.5s 1.0/um MSH(B)=5.9 P'P'V(A):1.5s 17.6nm
2.	eiPKP	A 21 20 34.5	<u>New Hebrides Islands</u> 18.74 S 168.88 E
	ePP	A 24 42	H = 21 01 21.3 h = 163 km MB = 4.9 D = 143.39 Az = 335.6 (USCGS) PKPV(A):1.2s 34.6nm
2.	+iPKHKP	A 21 49 36.1	<u>Fiji Islands</u> 20.33 S 177.45 W
	ePKP2	A 49 43	H = 21 30 32.2 h = 388 km MB = 5.2
	epPKHKP	A 51 12	D = 148.91 Az = 348.8 (USCGS) PKHKPV(A):0.8s 38.5nm
2.	eiP	A 23 45 27	<u>Kurile Islands</u> 45.71 N 150.92 E
	e	A 45 31.5	H = 23 33 30.2 h = 20 km MB = 5.4
	LmH	B 24 22.9	D = 77.77 Az = 334.9 (USCGS)
	LmV	B 23.2	PV(A):1.1s 28.2nm MPV(A)=5.3 LmH(B):20s 0.5/um MLH(B)=4.8 LmV(B):20s 0.5/um MLV(B)=4.9

Day	Phase	h m s	Remarks
3.	LmH B	21 54.3	<u>Off Coast of Michoacan, Mexico</u> 15.4 N 105.0 W H = 20 57 08.3 h = normal MB = 4.2 (USCGS) D = 94.2 LmH(B):16s 0.3 μ m MLH(B)=4.8 LmV(B):16s 0.4 μ m MLV(B)=4.9
	LmV B	54.3	
3.	ePKIKP A	22 56 47	<u>New Hebrides Islands</u> 13.13 S 167.20 E H = 22 37 46.5 h = 220 km MB = 4.8 D = 137.63 Az = 337.0 (USCGS) PKIKPV(A):1.3s 10.9nm
4.	eP A	04 22 56	<u>Near Coast of Northern Peru</u> 9.80 S 78.63 W H = 04 09 26.3 h = 57 km MB = 5.8 D = 97.65 Az = 40.0 (USCGS) PV(A):1.4s 21.0nm MPV(A)=5.5 pPV(A):3.0s 237.0nm pPV(B):10s 1.2 μ m LmH(B):19s 4.9 μ m MLH(B)=6.0 LmV(B):16s 4.9 μ m MLV(B)=6.1
	epP AB	23 11	
	esP A	23 20	
	ePP BC	26 48	
	eSKS BC	33 28	
	iSKS BC	33 32	
	eSP BC	35 32	
	eSPP BC	36 38	
	e B	40 24	
	eSS BC	40 50	
	eSSS BC	44 48	
	LmH B	05 05.4	
	LmV B	07.5	
	4.	ePg A	
eSg A		06 20	
5.	eP A	05 01 25	<u>Alma-Ata Region</u> 42.48 N 78.76 E H = 04 53 06.4 h = 20 km MB = 6.0 D = 45.43 Az = 304.6 (USCGS) PV(A):1.3s 197.0nm MPV(A)=5.9 PV(B):12s 6.8 μ m MPV(B)=6.5 PPV(B):12s 10.0 μ m MPPV(B)=6.6 LmH(B):11s 97.0 μ m MLH(B)=7.0 LmV(B):15s 124.0 μ m MLV(B)=7.0
	iP A	01 26	
	ei A	03 16.5	
	ePP A	03 20	
	i B	03 27	
	eiPcS B	05 48	
	LmH B	22.7	
	LmV B	24.0	

Day	Phase	h m s	Remarks
5.	eP1 A	09 23 39.5	<u>Southern Italy</u> 39.19 N 15.44 E H = 09 20 55.6 h = 262 km MB = 4.4 D = 11.77 Az = 348.0 (USCGS) P1V(A):1.5s 12.6nm P2V(A):1.3s 48.0nm
	eP2 A	23 41.5	
5.	+iP A	10 10 05.8	<u>Greece</u> 38.05 N 22.41 E H = 10 06 36.2 h = 100 km MB = 4.2 D = 14.76 Az = 332.1 (USCGS) PV(A):0.8s 19.2nm
5.	-iP AB	10 42 05.5	<u>Eastern Siberia</u> 63.37 N 146.23 E H = 10 31 34.3 h = normal MB = 5.5 (USCGS) D = 60.8 PV(A):1.3s 107.0nm MPV(A)=5.8 LmH(B):16s 3.4 μ m MLH(B)=5.6 LmV(B):14s 1.7 μ m MLV(B)=5.4
	e B	11 06 22	
	LmH B	08.3	
	LmV B	12.6	
5.	eP A	12 03 11.5	<u>Rumania</u> 45.66 N 26.62 E H = 12 00 32.9 h = 129 km MB = 4.4 D = 11.19 Az = 301.9 (USCGS) PV(A):1.5s 25.1nm
5.	eP A	14 06 37.5	<u>Fox Islands, Aleutian Is.</u> 52.20 N 170.52 W H = 13 54 44.8 h = 45 km MB = 4.4 D = 77.51 Az = 358.6 (USCGS) PV(A):1.8s 27.0nm MPV(A)=5.1
5.	+iP AB	22 51 57.5	<u>Off East Coast of Kamchatka</u> 52.18 N 159.58 E H = 22 40 23.1 h = normal MB = 5.5 D = 74.02 Az = 339.4 (USCGS) PV(A):1.4s 97.6nm MPV(A)=5.6 pPV(A):1.4s 114.0nm LmH(B):23s 2.0 μ m MLH(B)=5.4 LmV(B):14s 1.3 μ m MLV(B)=5.4
	epP A	52 12	
	eS BC	23 01 26	
	esS BC	01 45	
	LmH B	22.8	
	LmV B	30.7	

Day	Phase	h m s	Remarks
6.	eP	A 10 39 00	<u>Mindanao, Philippine Islands</u> 9.12 N 125.31 E H = 10 25 14.1 h = 49 km MB = - (USCGS) D = 97.5 PV(A):0.8s 7.7nm MPV(A)=5.4
6.	eP ePP	A 13 12 35 A 16 50	<u>Mariana Islands</u> 18.63 N 145.21 E H = 12 59 53.8 h = 599 km MB = 5.1 D = 99.87 Az = 332.1 (USCGS) PPV(A):1.4s 46.5nm MPPV(A)=5.6
6.	ePKHKP ePKP2	A 18 02 38 A 02 44	<u>Fiji Islands</u> 20.39 S 178.99 W H = 17 43 57.7 h = 619 km MB = 4.4 D = 148.67 Az = 347.0 (USCGS) PKHKPV(A):1.4s 18.6nm
7.	eP e	A 07 55 48 A 56 05	<u>Eastern Gulf of Aden</u> 12.9 N 51.3 E H = 07 46 59 M = 5 D = 49.6 (ANUSSR) PV(A):1.7s 24.2nm MPV(A)=4.9
7.	eiP ePcP	A 13 40 52 A 41 09.5	<u>Sea of Okhotsk</u> 52.99 N 153.53 E H = 13 30 14.9 h = 448 km MB = 4.8 (USCGS) D = 71.6 PV(A):1.0s 27.6nm MPV(A)=4.8 PcPV(A):1.1s 12.1nm
7.	eP LmH LmV	A 17 55 05 B 18 11.5 B 13.2	<u>Western Iran</u> 33.01 N 49.37 E H = 17 48 33.8 h = 50 km MB = 4.7 (USCGS) D = 32.8
7.	eP	A 20 37 04	<u>Kurile Islands</u> 43.74 N 146.67 E H = 20 25 18.6 h = 132 km MB = 4.2 D = 78.19 Az = 332.6 (USCGS) PV(A):1.0s 7.9nm MPV(A)=4.4
8.	eP e e(Sg)	A 06 53 43 A 56 35 A 57 12	<u>Albania</u> 41.23 N 20.01 E H = 06 51 04.9 h = 38 km MB = 4.6 D = 11.08 Az = 331.0 (USCGS)

Day	Phase	h m s	Remarks
8.	eP	A 09 31 33	<u>Atlantic-Indian Rise</u> 29.35 S 61.03 E H = 09 18 31.7 h = normal MB = 5.1 D = 90.83 Az = 331.1 (USCGS)
8.	eP e	A 12 38 28 A 46 45	<u>Eastern Caucasus</u> 43.18 N 47.33 E H = 12 33 02.9 h = normal MB = 4.7 D = 25.32 Az = 299.7 (USCGS)
9.	eP ePP	A 10 41 48 A 43 43	<u>Eastern Gulf of Aden</u> 13.27 N 51.37 E H = 10 33 01.0 h = normal MB = 5.0 D = 49.28 Az = 327.5 (USCGS) PV(A):1.8s 20.3nm MPV(A)=4.8
9.	ePKIKP LmH LmV	AB 11 14 35.5 B 12 20.0 B 29.5	<u>Samoa Islands Region</u> 15.73 S 172.89 W H = 10 55 01.1 h = normal MB = 5.3 D = 144.98 Az = 355.0 (USCGS) PKIKPV(A):1.5s 30.2nm PKIKPV(B):10s 1.0/um LmH(B):20s 0.7/um MLH(B)=5.4 LmV(B):16s 0.6/um
9.	eP LmH LmV	A 14 44 28.5 B 52.2 B 52.3	<u>Turkey</u> 38.8 N 30.0 E H = 14 40 19.6 h = 0 km (ISC) D = 17.6
9.	eP LmH LmV	A 20 47 34 B 53.6 B 56.5	<u>Dodecanese Islands</u> 36.09 N 25.59 E H = 20 43 28.9 h = 54 km MB = 4.4 D = 17.70 Az = 329.6 (USCGS)
10.	e	A 04 26 23.5	<u>Southern Alaska</u> 61.31 N 151.09 W H = 04 15 16.8 h = 64 km MB = 4.0 D = 67.54 Az = 11.8 (USCGS)
10.	eP LmV LmH	AB 05 21 14 B 29.3 B 29.5	<u>Turkey</u> 39.16 N 29.46 E H = 05 17 14.0 h = 27 km MB = 4.2 D = 17.03 Az = 318.2 (USCGS) PV(A):2.0s 34.2nm MPV(A)=4.1 LmV(B):12s 0.7/um MLV(B)=4.2 LmH(B):9.5s 0.7/um MLH(B)=4.2

Day	Phase	h m s	Remarks
10.	ePKP2 A	06 17 43	<u>Kermadec Islands</u> 30.28 S 177.74 W H = 05 57 13.4 h = 26 km MB = 4.4 D = 158.48 Az = 343.6 (USCGS)
10.	LmH B LmV B	09 13.6 13.6	Probably <u>Kyushu, Japan</u> (USCGS) LmH(B):14.5s 0.6/um LmV(B):16s 0.7/um
10.	eiP AB eS B eSKS B LmH B LmV B	16 29 43 39 24 39 50 17 08.5 08.6	<u>Kurile Islands</u> 44.89 N 149.55 E H = 16 17 48.7 h = 57 km MB = 5.7 (USCGS) D = 78.0 PV(A):2.0s 385.0nm MPV(A)=6.0 LmH(B):17s 5.2/um MLH(B)=5.9 LmV(B):17s 5.8/um MLV(B)=6.0
10.	eP A	17 48 59.5	<u>Turkey</u> 39.20 N 30.67 E H = 17 44 53.5 h = 20 km MB = 4.3 D = 17.63 Az = 316.7 (USCGS) PV(A):2.2s 32.7nm MPV(A)=4.1
11.	eP AB i A eX A eiPP B ePP A iSKS B eSP B e A ePKKP A eSS B e(SKKS) A LmH B LmV B	06 16 40.5 16 54 17 10 20 51 20 55 27 14 29 48 32 40 33 02 35 05 40 57 07 00.7 00.7	<u>Chile-Argentina Border Region</u> 24.53 S 68.50 W H = 06 02 54.9 h = 112 km MB = 6.3 (USCGS) D = 102.6 PV(A):1.8s 43.6nm MPV(A)=5.9 XV(A):2.5s 169.0nm PKKP(A):2.2s 120.0nm (SKKS)V(A):2.5s 84.5nm LmH(B):20s 6.7/um LmV(B):21s 8.3/um
11.	ePKIKP B eX A e(PKIKP2) AB	17 06 28 06 42 06 55	<u>Maquarie Islands Region</u> 59.11 S 157.77 E H = 16 46 38.3 h = normal MB = 5.8

Day	Phase	h m s	Remarks
cont. 11.	ePKP21 B i A i(PKP22) A eSKKP B eSS B e B eSSS B e B LmH B LmV B	17 07 12 07 36.2 07 40 18 10 31 16 34 20 37 45 46 08 18 26.5 36.2	D = 158.97 Az = 261.2 Appears to be a complex multiple event. Many incompatible data (USCGS) PKIKPV(B):5s 0.5/um X1V(A): 1.3s 10.9nm (PKIKP2)V(A):3.3s 965.0nm LmH(B):18s 48.3/um MLH(B)=7.3 LmV(B):16s 42.7/um
11.	eiP A epP A	17 48 42 49 24	<u>Afghanistan-USSR Border Region</u> 36.45 N 71.10 E H = 17 40 50.4 h = 184 km MB = 5.2 (USCGS)
12.	eP A	03 17 16.5	<u>Kurile Islands</u> 44.87 N 148.91 E H = 03 05 20.7 h = normal MB = 4.9 D = 77.91 Az = 333.8 (USCGS) PV(A):1.0s 11.8nm MPV(A)=5.0
12.	+iP AB e A eS BC eSS BC LmH B LmV B	05 05 55 06 02 15 22 20 25 40.6 47	<u>Kodiak Island Region</u> 56.64 N 152.05 W H = 04 54 31.4 h = normal MB = 5.2 (USCGS) D = 68.0 PV(A):1.7s 81.9nm MPV(A)=5.7 PV(B):6s 0.6/um MPV(B)=6.0 SH(B):12s 0.7/um MSH(B)=5.7 LmH(B):17s 1.3/um MLH(B)=5.2 LmV(B):14s 1.1/um MLV(B)=5.3
12.	ePKIKP A e B ePP A e B eSKP B e B e B ePKKP A eSS C LmH B LmV B	08 24 56 25 37 26 01 26 12 28 38 33 40 34 08 35 38 41 50 09 17.8 19.7	<u>Near N. Coast of West New Guinea</u> 2.89 S 139.10 E H = 08 06 16.6 h = 32 km MB = 5.7 D = 115.18 Az = 326.1 (USCGS) LmH(B):19s 4.6/um MLH(B)=6.0 LmV(B):18s 5.0/um MLV(B)=6.1

Day	Phase	h m s	Remarks
12.	eP A	13 06 42.5	<u>Luzon, Philippine Islands</u> 18.68 N 122.31 E H = 12 53 55.5 h = 48 km MB = 5.0 D = 88.15 Az = 323.4 (USCGS) PV(A):1.2s 21.2nm MPV(A)=5.3
12.	iPn A	15 05 25.0	<u>Bransrode, Fed.Rep.Germany, explosion</u>
	iPg A	05 25.5	51°13.9'N 09°51.51'E
	i A	05 41	H = 15 05 01.16, yield 23 to (Hannover) D = 1.2
12.	eP A	16 08 26	<u>Southern Sinkiang Prov., China</u>
	e A	08 33	40.74 N 78.37 E
	LmH B	29.4	H = 16 00 01.4 h = normal MB = 5.0 D = 46.20 Az = 305.8 (USCGS) PV(A):1.4s 23.3nm MPV(A)=5.0
12.	ePKP A	21 56 08	<u>New Hebrides Islands</u> 18.85 S 169.35 E H = 21 37 04.1 h = 245 km MB = 4.7 D = 143.67 Az = 336.0 (USCGS)
13.	eP A	05 39 47.5	<u>Andreanof Islands, Aleutian Is.</u> 51.59 N 178.34 W H = 05 27 54.4 h = 55 km MB = 5.5 D = 77.79 Az = 353.5 (USCGS) PV(A):0.8s 19.2nm MPV(A)=5.1
13.	eP A	12 00 40	<u>Kurile Islands</u> 44.55 N 148.27 E H = 11 48 46.3 h = 50 km MB = 5.0 D = 77.99 Az = 333.5 (USCGS) PV(A):1.0s 5.9nm MPV(A)=4.7
14.	+iPKIKP1 ABC	00 19 11	<u>Near Coast of Southern Chile</u>
	eiPKIKP2 AB	19 19	51.95 S 73.85 W
	ePP ABC	21 00	H = 00 00 11.3 h = normal MB = 6.0 D = 125.07 Az = 50.8 (USCGS)
	e A	21 24	PKIKP1V(A):1.8s 142.0nm
	e A	22 06	PKIKP2V(A):1.6s 192.0nm
	eSKP BC	22 22	

Day	Phase	h m s	Remarks
cont. 14.	e A	00 22 32	LmH(B):22s 20.9 μ m MLH(B)=6.8
	e A	22 46	LmV(B):24s 25.4 μ m MLV(B)=6.8
	ePPP A	23 50	
	e C	25 00	
	eSKS BC	26 16	
	eSKKS BC	28 00	
	eSKSP BC	30 44	
	eSS C	37 52	
	eSSSS BC	46 35	
	LmH B	01 06.6	
	LmV B	06.7	
14.	ePKIKP1 A	00 31 24	<u>Near Coast of Southern Chile</u>
	eiPKIKP2 A	31 28	52.05 S 74.17 W H = 00 12 24.7 h = normal MB = 5.7 D = 125.28 Az = 51.1 (USCGS) PKIKP1V(A):1.2s 12.4nm PKIKP2V(A):1.2s 32.5nm
14.	iP A	11 59 17	<u>Northern Italy</u> 45.3 N 11.2 E
	iS A	12 00 26.5	H = 11 57 44 (BCIS) D = 5.35
14.	ePKIKP A	20 21(46)	<u>Near Coast of Southern Chile</u> 51.96 S 74.22 W H = 20 02 45.3 h = normal MB = 5.2 D = 125.25 Az = 51.0 (USCGS)
14.	ePKIKP A	21 51 31	<u>Solomon Islands</u> 5.92 S 154.78 E H = 21 32 44.2 h = 142 km MB = 5.1 D = 125.87 Az = 331.9 (USCGS)
14.	ePKHKP AB	22 01 49	<u>Easter Island Cordillera</u>
	LmH B	23 11.7	54.79 S 119.66 W
	LmV B	15.3	H = 21 42 00.0 h = normal MB = 5.1 D = 150.68 Az = 77.7 (USCGS) PKHKPV(A):1.6s 35.8nm LmH(B):18s 0.3 μ m MLH(B)=5.1 LmV(B):18s 0.4 μ m

Day	Phase	h m s	Remarks	
15.	e e	A A	06 27 53 28 14	<u>Eastern Caucasus</u> 43.22 N 47.07 E H = 06 22 15 h = 3 km (ISC) D = 25.1
15.	ePKIKP ei ei eiX ei ePP ePP e eSKP eSKS eSKKS e(ScSP) ePS ePPS eSS LmV LmH	AB A A A A BC A BC BC BC BC BC C BC B B	11 33 46 33 47 33 51.5 33 55 34 02.5 35 22 35 27 35 44 37 24 40 55 42 20 44 55 45 20 46 50 51 55 12 27.6 35.3	<u>Falkland Islands Region</u> 54.34 S 63.65 W H = 11 14 52.4 h = normal MB = 5.6 D = 122.02 Az = 46.6 (USCGS) PKIKPV(A):0.7s 15.3nm XV(A):1.3s 61.0nm LmV(B):20s 64.9 μ m MLV(B)=7.3 LmH(B):17.5s 51.4 μ m MLH(B)=7.2
15.	ePn eSn	A A	20 25 44 27 40	<u>Albania</u> 41.9 N 20.2 E H = 20 23 11 (BCIS) D = 10.50
15.	e e	A A	20 46 59.5 48 29.5	<u>Albania</u> 41.9 N 20.2 E H = 20 42 22 (BCIS) D = 10.50
16.	iPKIKP eiPKHKP eiPKP2 epPKIKP epPKHKP epPKP2	AB AB A A A A	02 51 34 51 39 51 49 53 50 53 55 54 05	<u>South of Fiji Islands</u> 23.12 S 179.14 E H = 02 32 50.5 h = 581 km MB = 5.0 D = 150.85 Az = 343.6 (USCGS) PKHKPV(A):1.0s 51.2nm

Day	Phase	h m s	Remarks	
16.	ePn ePg eSn eSg LmH LmV	A A A AB B B	04 20 53 21 21 22 00 22 43 22.7 22.7	<u>Italy</u> 44.8 N 10.4 E H = 04 19 26 (BCIS) D = 5.90 PgV(A):0.8s 23.1nm LmH(B):5s 0.2 μ m LmV(B):4s 0.2 μ m
16.	e e	A A	05 20(16) 21 11	Probably <u>Italy</u> (BCIS)
16.	eP eS eSS	AB B B	05 23 28 34 00 40 00	<u>South of Panama</u> 5.37 N 82.55 W H = 05 10 33.0 h = 17 km MB = 5.6 D = 88.53 Az = 39.4 (USCGS) PV(A):2.0s 64.1nm MPV(A)=5.6
16	eX	A	06 32 44.5	<u>Eastern Caucasus</u> 43.2 N 47.2 E H = 06 22 15 (BCIS) D = 25.20 XV(A):0.7s 11.5nm
16.	ePn eSn eSg	A A A	06 51 40 52 43 53 19	<u>Yugoslavia</u> 45.4 N 16.0 E H = 06 50 12 (BCIS) D = 6.00
16.	eP e(PcP)	A A	17 32 03.5 34 42.5	<u>Southern Iran</u> 29.57 N 51.34 E H = 17 25 02.1 h = 38 km MB = 4.3 D = 36.37 Az = 316.7 (USCGS) (PcP)V(A):0.6s 9.6nm
16.	ePKHKP ePKP2	A A	18 14 26 14 36.5	<u>South of Fiji Islands</u> 24.10 S 177.03 W H = 17 54 41.7 h = 116 km MB = 4.8 D = 152.66 Az = 348.0 (USCGS) PKHKPV(A):0.6s 5.7nm
17.	+eiP epP e e	AB B A A	04 57 48.5 58 19 58 31 58 39	<u>Southern Peru</u> 15.75 S 71.84 W H = 04 44 20.9 h = 91 km MB = 5.9 D = 97.94 Az = 39.7 (USCGS) PV(A):1.8s 101.5nm MPV(A)=6.1

Day	Phase	h m s	Remarks
cont. 17.	e	A 05 00 26	LmH(B):21s 2.1/um
	ePP	A 01 46	LmV(B):20.5s 2.7/um
	+iS	B 08 20	
	+eisS	B 09 09	
	+ePS	B 10 30	
	LmH	B 39.4	
	LmV	B 39.5	
17.	eP	A 06 03 21	<u>Greece</u> 38.38 N 22.00 E
	e	A 03 26	H = 05 59 58.1 h = 6 km MB = 4.6
	LmH	B 09.5	D = 14.30 Az = 332.3 (USCGS)
	LmV	B 09.6	PV(A):0.7s 5.8nm LmH(B):12s 0.8/um MLH(B)=3.9 LmV(B):12s 0.7/um
17.	eP	A 12 01 32	<u>Yunnan Province, China</u> 24.18 N 102.37 E
			H = 11 50 06.9 h = normal MB = 4.8
			D = 72.15 Az = 318.0 (USCGS)
17.	eP	A 18 56 15	<u>Kyushu, Japan</u> 30.20 N 131.11 E
	LmH	B 19 38.5	H = 18 43 48.2 h = 24 km MB = 5.1
	LmV	B 38.6	D = 83.43 Az = 326.1 (USCGS) PV(A):2.4s 48.3nm MPV(A)=5.3 LmH(B):15.5s 2.5/um MLH(B)=5.7 LmV(B):15s 2.9/um MLV(B)=5.8
17.	ePKIKP	A 21 49 22	<u>West Chile Rise</u> 36.30 S 97.59 W
	eX	A 49 34	H = 21 30 14.6 h = normal MB = 5.2
	LmH	B 22 48.2	D = 128.59 Az = 50.3 (USCGS)
	LmV	B 48.3	XV(A):1.8s 27.0nm
18.	ePKP2	AB 06 59 41	<u>Balleny Islands Region</u>
	ePP	B 07 03 10	61.33 S 160.02 E
	LmH	B 08 35.8	H = 06 39 03.3 h = normal MB = 5.0 (USCGS)
	LmV	B 40.0	D = 159.7 PKP2V(A):2.0s 59.8nm LmH(B):17.5s 0.9/um MLH(B)=5.6 LmV(B):16s 0.8/um

Day	Phase	h m s	Remarks
18.	ePn	A 09 05 30	<u>Western Mediterranean Sea</u>
	e	A 05 34	40.95 N 7.42 E H = 09 03 00.2 h = 0 km MB = 4.7 D = 10.13 Az = 15 (ISC)
18.	LmV	B 11 49.8	Probably <u>Kyushu, Japan</u> (USCGS)
	LmH	B 49.9	LmV(B):16s 0.9/um LmH(B):14s 0.8/um
19.	eP	A 11 10 06	<u>Near Coast of Northern Chile</u>
	ePP	A 14 15	22.19 S 70.52 W
	e	A 14 29	H = 10 56 14.8 h = 52 km MB = 6.2
	e	A 14 36	D = 102.05 Az = 40.2 (USCGS)
	e	B 15 00	PV(A):1.5s 30.2nm MPV(A)=5.7
	iSKS	B 20 43	PPV(B):14s 0.8/um MPPV(B)=5.9
	eS	B 21 43	SH(B):13s 1.9/um MSH(B)=6.6
	ePKKP	AB 26 32	PKKP(A):1.7s 24.2nm
	eiSS	AB 28 40	LmH(B):25s 5.3/um MLH(B)=6.0
	LmH	B 52.0	LmV(B):23s 5.8/um MLV(B)=6.1
	LmV	B 52.2	
19.	+iP1	AB 14 35 08.8	<u>North Atlantic Ridge</u> 15.35 N 45.95 W
	+eiP2	A 35 11	H = 14 25 18.4 h = normal MB = 5.5
	eiS	B 43 12	D = 57.84 Az = 39.4 (USCGS)
	eSS	C 46 50	P1V(A):1.8s 108.0nm MP1V(A)=5.6
	LmH	B 15 01.4	P1V(B):10s 1.1/um MP1V(B)=5.8
	LmV	B 03.3	P2V(A):1.7s 188.0nm MP2V(A)=5.8 SH(B):16s 3.4/um MSH(B)=5.9 LmH(B):16.5s 5.9/um MLH(B)=5.8 LmV(B):16s 8.6/um MLV(B)=6.0
19.	e	A 15 31 50	<u>Birresborn/Eifel/Fed.Rep.Germany</u> 52°11.69' N 06°37.81' E H = 15 30 00.55 explosion, yield 4.2 to (Hannover) D = 1.6 traces

Day	Phase	h m s	Remarks
19.	ePKP AB	18 58 05	<u>Fiji Islands Region</u> 15.40 S 176.29 W H = 18 38 24.9 h = normal MB = 5.3 D = 144.27 Az = 351.4 (USCGS) PKPV(A):1.5s 10.1nm
19.	eP AB	19 03 43	<u>Near East Coast of Kamchatka</u> 57.34 N 163.27 E H = 18 52 33.6 h = normal MB = 5.2 D = 69.87 Az = 341.2 (USCGS) PV(A):2.0s 59.8nm MPV(A)=5.4
19.	ePKP AB LmH B LmV B	19 09 19 20 13.0 14.0	<u>Fiji Islands Region</u> 15.20 S 176.34 W H = 18 49 46.6 h = normal MB = 5.4 D = 144.07 Az = 350.4 (USCGS) PKPV(A):2.0s 59.8nm LmH(B):19.5s 2.0/um MLH(B)=5.9 LmV(B):20s 3.2/um
19.	iP A	22 30 00	<u>Greece-Albania-Border Region</u> 39.4 N 20.4 E H = 22 27 01 (BCIS) D = 12.85
20.	eP A LmH B LmV B	02 36 34 03 11.6 17.9	<u>Off East Coast of Honshu, Japan</u> 40.14 N 143.24 E H = 02 24 26.5 h = 42 km MB = 4.9 D = 80.16 Az = 331.1 (USCGS) PV(A):1.6s 22.0nm MPV(A)=4.9 LmH(B):18s 0.9/um MLH(B)=5.2 LmV(B):15s 0.5/um MLV(B)=5.0
20.	ePKP A	04 22 35	<u>Fiji Islands Region</u> 17.93 S 178.63 W H = 04 04 01.9 h = 633 km MB = 4.4 D = 146.35 Az = 348.2 (USCGS) PKPV(A):1.0s 13.8nm
20.	eP A LmH B	06 08 32 16.3	<u>Turkey</u> 38.95 N 29.92 E H = 06 04 24.8 h = 26 km MB = 4.5

Day	Phase	h m s	Remarks
cont. 20.	LmV B	06 16.3	D = 17.42 Az = 318.1 (USCGS) LmH(B):12s 0.9/um MLH(B)=4.2 LmV(B):12.5s 1.2/um MLV(B)=4.5
20.	LmH B LmV B	14 03.7 03.8	Probably <u>Philippine Islands Region</u> (USCGS)
20.	eP A	18 16 58	<u>South Atlantic Ridge</u> 26.53 S 13.76 W H = 18 04 50.4 h = normal MB = 4.3 D = 80.05 Az = 16.1 (USCGS)
21.	eP A	16 21 09	<u>Kirgiziya</u> 40.83 N 72.93 E H = 16 13 08.0 h = 40 km MB = 4.7 D = 42.76 Az = 305 (ISC)
21.	eP A e BC eS C eSS C e C LmH B LmV B	20 00 22 04 44 10 30 15 34 22 00 35.0 35.0	<u>South Atlantic Ridge</u> 26.55 S 13.73 W H = 19 48 14.3 h = normal MB = 5.2 D = 80.07 Az = 16.1 (USCGS) PV(A):1.6s 30.2nm MPV(A)=5.0 LmH(B):16s 0.4/um MLH(B)=4.9 LmV(B):16s 0.4/um MLV(B)=4.9
22.	ePKHKP A ePKP2 A	06 07 32 07 34	<u>Loyalty Islands Region</u> 22.00 S 170.54 E H = 05 47 50.1 h = normal MB = - D = 146.99 Az = 335.2 (USCGS) PKHKPV(A):1.2s 10.2nm PKP2V(A):1.2s 20.3nm
22.	ePKP2 A	09 41 24	<u>South of Fiji Islands</u> 26.07 S 177.36 W H = 09 21 18.0 h = 85 km MB = 4.7 D = 154.51 Az = 346.7 (USCGS)
22.	ePKIKP A	11 58 02	<u>New Hebrides Islands</u> 15.24 S 167.49 E H = 11 38 45.5 h = 111 km MB = 4.8 D = 139.66 Az = 336.3 (USCGS)

Day	Phase	h m s	Remarks
22.	+eP ABC	14 51 04.5	<u>South of Alaska</u> 55.19 N 156.50 W
	eS BC	15 00 38	H = 14 39 30.6 h = normal MB = 5.5
	e B	00 49	D = 74.07 Az = 7.8 (USCGS)
	e C	00 50	PV(A):1.7s 161.0nm MPV(A)=5.8
	LmH B	29.4	LmH(B):16s 1.1/um MLH(B)=5.3
	LmV B	37.6	LmV(B):13s 1.1/um MLV(B)=5.4
22.	eP A	14 55 47	<u>South of Alaska</u> 55.22 N 156.69 W
			H = 14 44 07.7 h = 0 km MB = 5.1
			D = 74.05 Az = 8 (ISC)
			PV(A):1.0s 15.8nm MPV(A)=5.0
22.	eP A	18 15 04	<u>Near East Coast of Kamchatka</u>
			52.60 N 158.85 E
			H = 18 03 37.2 h = 65 km MB = 4.9
			D = 73.47 Az = 338.9 (USCGS)
			PV(A):1.0s 13.8nm MPV(A)=4.8
22.	eP ABC	21 45 33.5	<u>Kurile Islands</u> 43.47 N 147.62 E
	+ipP A	45 45	H = 21 33 32.7 h = normal MB = 5.6
	ePP B	48 30	D = 78.75 Az = 333.2 (USCGS)
	eS BC	55 28	PV(A):1.5s 85.4nm MPV(A)=5.6
	iSKS BC	55 47	PV(B):5.s 0.8/um MPV(B)=6.0
	LmH B	22 25.1	pPV(A):1.5s 211.0nm
	LmV B	32.5	SH(B):6.5s 0.6/um MSH(B)=5.8
			LmH(B):14.5s 4.2/um MLH(B)=5.9
			LmV(B):13.5s 2.9/um MLV(B)=5.8
23.	ePP A	03 58 14	<u>South Sandwich Islands Region</u>
			60.69 S 25.35 W
			H = 03 38 35.1 h = normal MB = 5.3 (USCGS)
			D = 114.8
23.	e A	04 27(44)	<u>Macquarie Islands Region</u> 59.61 S 157.90 E
	ePKP2 AB	28 16.5	H = 04 07 46.0 h = 30 km MB = 5.3
	ePP B	31 55	D = 158.95 Az = 259.7 (USCGS)
			PKP2V(A):2.0s 59.8nm

Day	Phase	h m s	Remarks
23.	ePKHKP A	08 33 42.5	<u>South of Fiji Islands</u> 21.99 S 179.74 W
	ePKP2 A	33 51	H = 08 15 02.0 h = 649 km MB = 4.8
			D = 150.04 Az = 345.5 (USCGS)
			PKHKPV(A):1.2s 26.4nm
23.	ePKIKP A	16 28 54	<u>Kermadec Islands Region</u> 31.86 S 178.65 W
	e A	29 12	H = 16 08 54.9 h = 42 km MB = 4.8
	e A	29 28	D = 159.74 Az = 340.9 (USCGS)
23.	ePKP A	18 02 01	<u>Tonga Islands</u> 16.33 S 173.11 W
	eX1 A	02 09.5	H = 17 42 24.9 h = normal MB = 4.7
	eX2 A	02 20	D = 145.55 Az = 354.7 (USCGS)
			PKPV(A):1.5s 45.2nm
			X1V(A): 1.5s 50.2nm
			X2V(A): 1.4s 25.6nm
23.	ePP A	20 24 20	<u>Northern Chile</u> 19.40 S 69.08 W
			H = 20 06 57.6 h = 118 km MB = 5.3 (USCGS)
			D = 99.0
23.	ePn A	22 14 18.5	<u>Peissenberg, Fed.Rep.Germany</u> 47.8 N 11.1 E
	e(Pg) A	14 24.5	H = 22 13 32 (BCIS)
	eSn A	14 41.5	D = 2.85
	eSg A	15 05.5	
24.	e(P) A	00 53 45	<u>India-China Border Region</u>
			28.93 N 95.57 E
			H = 00 43 01.9 h = normal MB = 4.8
			D = 64.54 Az = 315.5 (USCGS)
			(P)V(A):0.7s 11.5nm MPV(A)=5.2
24.	eP AB	07 42 02	<u>Queen Charlotte Islands Region</u>
	eS BC	51 32	51.84 N 130.76 W
	e B	53 15	H = 07 30 30.8 h = normal MB = 4.9 (USCGS)
	eSS BC	56 17	D = 73.0
	LmH B	08 14.3	PV(A):1.2s 16.3nm MPV(A)=5.0
	LmV B	17.4	LmH(B):18s 2.0/um MLH(B)=5.4
			LmV(B):15s 2.7/um MLV(B)=5.7

Day	Phase	h m s	Remarks
24.	-eP1	AB 13 20 40.5	<u>Queen Charlotte Islands Region</u>
	+iP2	A 20 49	51.75 N 131.02 W
	ePP	B 23 30	H = 13 09 08.3 h = 12 km MB = 5.6 (USCGS)
	eS	B 30 16	D = 73.0
	eSS	BC 34 58	P1V(A):1.8s 47.3nm MP1V(A)=5.3
	eP'P'	A 48 15.5	P1V(B):10.5s 5.9 μ m MP1V(B)=6.7
	eP'P'	A 48 25	P2V(A):1.6s 159.2nm MP2V(A)=5.9
	LmH	B 56.2	PPV(B):10s 5.4 μ m MPPV(B)=6.8
	LmV	B 56.2	SH(E):12s 10.3 μ m MSH(B)=6.8 LmH(B):18s 96.4 μ m MLH(B)=7.1 LmV(B):17s 147.0 μ m MLV(B)=7.4
	24.	-eiP	A 13 28 30
			51.89 N 131.09 W
			H = 13 17 01.2 h = normal MB = 5.5 (USCGS)
			D = 73.0 PV(A):1.1s 32.3nm MPV(A)=5.4
24.	eP	A 15 24 30	<u>Kurile Islands</u> 50.27 N 156.82 E
			H = 15 12 50.2 h = 36 km MB = 4.8
			D = 75.17 Az = 337.9 (USCGS)
25.	eP	A 05 05 40.5	<u>Ural Mountains Region</u> 52.20 N 55.69 E
			H = 04 59 52.4 h = 0 km MB = 4.9
			D = 27.22 Az = 284.4 (USCGS)
			Underground explosion (UPP)
25.	-ePKIKP	AB 05 33 01	<u>Solomon Islands</u> 7.92 S 158.69 E
	epPKIKP	A 33 15.5	H = 05 13 58.6 h = 69 km MB = 6.1
	ePP	B 35 08	D = 129.42 Az = 333.4 (USCGS)
	e	A 35 11.5	PKIKPV(A):2.0s 162.4nm
	eSKP	B 36 18	pPKIKPV(A):1.6s 126.5nm
	e	BC 36 24	LmV(B):20s 4.6 μ m
	e	BC 36 46	LmH(B):20s 4.2 μ m
	e(PS)	BC 45 38	
	e(PPS)	BC 47 10	
	eSS	BC 52 50	
	eSSS	BC 57 30	
	LmV	B 06 34.1	
	LmH	B 34.2	

Day	Phase	h m s	Remarks
25.	ePKIKP	A 13 25 44.5	<u>Solomon Islands</u> 7.81 S 158.66 E
			H = 13 06 40.3 h = 57 km MB = 5.3
			D = 129.31 Az = 333.4 (USCGS)
25.	eP	A 16 18 40.5	<u>Off East Coast of United States</u>
			39.60 N 71.00 W
			H = 16 08 54.6 h = 0 km MB = 5.0
			D = 56.44 Az = 49.3 (USCGS)
			PV(A):1.2s 12.2nm MPV(A)=4.8
26.	+iP	AB 16 02 51.5	<u>North of Ascension Island</u>
	eS	BC 10 40	0.04 S 17.92 W
	LmH	B 26.0	H = 15 53 11.2 h = normal MB = 5.4
	LmV	B 30.5	D = 56.40 Az = 22.1 (USCGS)
			PV(A):1.6s 60.5nm MPV(A)=5.4
			LmH(B):16s 0.7 μ m MLH(B)=4.8
			LmV(B):13s 0.4 μ m MLV(B)=4.8
27.	eP	A 03 36 40.5	<u>Kurile Islands</u> 48.40 N 155.59 E
	LmH	B 04 15.7	H = 03 24 51.6 h = normal MB = 4.8
	LmV	B 15.7	D = 76.60 Az = 337.4 (USCGS)
			PV(A):1.2s 26.4nm MPV(A)=5.2
27.	e	A 05 22 22	<u>Caspian Sea</u> 43.25 N 49.1 E
			H = 05 16 45.1 h = 33 km (ISC)
			D = 26.2
27.	eP	A 08 04 22	<u>Iran</u> 35.15 N 50.70 E
	e	A 04 31	H = 07 57 53.3 h = 14 km MB = 4.9
			D = 32.11 Az = 311.0 (USCGS)
27.	eP	A 09 58 57	<u>Near Coast of Northern Peru</u>
	LmH	B 10 43.0	9.77 S 78.59 W
	LmV	B 43.0	H = 09 45 28.5 h = 62 km MB = 5.6
			D = 97.60 Az = 40.0 (USCGS)
			PV(A):1.1s 16.1nm MPV(A)=5.5
			LmH(B):20s 0.2 μ m MLH(B)=4.6
			LmV(B):20s 0.3 μ m MLV(B)=4.8

Day	Phase	h m s	Remarks
27.	eP	A 13 26 46	<u>Talaud Islands</u> 4.18 N 126.20 E
	e	A 31 24	H = 13 12 59.5 h = 85 km MB = 5.6
	e	A 31 33	D = 102.04 Az = 323.7 (USCGS)
	e	A 31 46	PV(A):1.5s 32.7nm MPV(A)=5.8
	eSKS	BC 37 12	LmH(B):23s 1.7/um
	eS	BC 38 22	LmV(B):18s 1.1/um
	e(SPP)	BC 40 45	
	LmH	B 14 07.5	
	LmV	B 18.3	
	27.	ePn	A 18 59 46.5
e		A 59 56	H = 18 57 12.2 h = 25 km MB = 4.5
e		A 19 00 16	D = 10.64 Az = 332.3 (USCGS)
ePg		A 00 47	LmH(B):6s 1.2/um
e		A 02 36	LmV(B):5s 0.7/um
eSn		B 02 44	
eSg		A 02 51	
LmH		B 03.7	
LmV		B 03.7	
27.		eP	AB 23 06 13
	eS	BC 16 48	14.70 N 92.84 W
	ePS	BC 18 00	H = 22 53 27.0 h = 41 km MB = 5.3 (USCGS)
	LmH	B 47.5	D = 87.7
	LmV	B 47.5	LmH(B):18.5s 0.9/um MLH(B)=5.1 LmV(B):18s 0.6/um MLV(B)=5.0
28.	eP diff	AB 01 44 44	<u>Timor</u> 8.66 S 124.16 E
	ePKIKP	A 48(34)	H = 01 30 12.6 h = 41 km MB = 6.0 (USCGS)
	e	AB 49 15	D = 110.9
	iPP	BC 49 25	PdiffV(A):1.9s 41.6nm MPdiffV(A)=6.5
	e	B 49 50	LmH(B):25s 10.3/um MLH(B)=6.3
	ePPP	BC 51 35	LmV(B):27s 8.5/um MLV(B)=6.2
	ePS	BC 58 52	
	LmH	B 02 35.2	
	LmV	B 36.9	

Day	Phase	h m s	Remarks
28.	+iP	AB 02 05 46.4	<u>Eastern Kazakh SSR</u> 49.83 N 78.25 E
	ePn	A 07 18.5	H = 01 57 57.7 h = 0 km MB = 5.9 D = 41.31 Az = 297.7 (USCGS) Underground explosion (UPP) PV(A):0.7s 318.0nm MPV(A)=6.2
28.	ePKP	A 04 00 29.5	<u>Tonga Islands</u> 16.58 S 173.71 W
	epPKP	A 00 52.5	H = 03 40 59.1 h = 90 km MB = 4.5 D = 145.75 Az = 354.0 (USCGS) PKPV(A):1.4s 32.5nm
28.	e	A 07 59 52	<u>Eastern Caucasus</u> 43.0 N 45.7 E
			H = 07 54 42 h = 148 km MB = 4.5 (ISC) D = 24.3
28.	+iP	AB 11 13 23.3	<u>Near East Coast of Kamchatka</u>
	eS	BC 22 45	53.44 N 160.37 E H = 11 01 53.5 h = 23 km MB = 5.8 D = 73.01 Az = 339.8 (USCGS) PV(A):1.0s 260.0nm MPV(A)=6.3
28.	iPKIKP	AB 11 28 30.5	<u>Fiji Islands Region</u> 21.63 S 179.53 W
	iPKHKP	AB 28 36.5	H = 11 09 54.2 h = 623 km MB = 5.8
	iPKP2	A 28 43.5	D = 149.74 Az = 345.9 (USCGS)
	epPKP	B 30 50	PKIKPV(A):1.1s 68.5nm
	e	A 30 59.5	PKHKPV(A):1.2s 724.0nm
	esPKP	B 31 52	PKP2V(A):1.2s 488.0nm
	eSKKS	BC 38 05	
	e	BC 42 25	
	eSS	BC 50 40	
	esSS	C 54 24	
28.	eP	A 13 43 40	<u>Tunesia</u> 35.8 N 11.6 E
	e	A 43 46	H = 13 40 14 h = 37 km
	eX	A 44 03	D = 14.82 Az = 360 (ISC)
	eS	BC 46 40	XV(A):1.8s 47.3nm
	LmH	B 49.7	LmH(B):15s 3.5/um
	LmV	B 50.6	LmV(B):13s 3.7/um

Day	Phase	h m s	Remarks
28.	ePKIKP AB	22 58 26.5	<u>Tonga Islands</u> 21.07 S 174.45 W
	ePKHKP A	58 32	H = 22 38 37.3 h = 34 km MB = 5.4
	ePKP2 A	58 40	D = 150.10 Az = 352.2 (USCGS) PKIKPV(A):1.4s 55.8nm PKHKPV(A):1.5s 55.5nm PKP2V(A): 1.5s 60.5nm
29.	ePKIKP A	06 07 41.5	<u>Kermadec Islands Region</u> 31.06 S 179.86 W
	ePKHKP A	07 54	H = 05 48 23.5 h = 335 km MB = 5.2
	+iPKP2 AB	08 20	D = 158.64 Az = 339.6 (USCGS)
	e A	08 33	PKP2V(A):1.2s 112.0nm
29.	ePn A	12 17 50	<u>Yugoslavia</u> 42.1 N 19.6 E H = 12 15 23 h = 0 km D = 10.20 Az = 330 (ISC)
29.	eP A	18 12 59	<u>North of Ascension Island</u> 0.14 S 17.94 W
	LmH B	42.3	H = 18 03 18.6 h = normal MB = 5.0
	LmV B	42.7	D = 56.49 Az = 22.1 (USCGS) PV(A):0.7s 19.2nm MPV(A)=5.2
29.	ePKP2 A	23 33 04	<u>Kermadec Islands Region</u> 30.86 S 179.60 W H = 23 13 11.5 h = 361 km MB = 5.3 (USCGS) D = 158.7 PKP2V(A):1.5s 17.6nm
30.	eP A	03 43 10	<u>Iceland Region</u> 68.05 N 18.66 W H = 03 38 09.5 h = normal MB = 4.3 D = 22.88 Az = 124.4 (USCGS)
30.	eP A	03 58 01.5	<u>Taiwan Region</u> 22.76 N 121.45 E H = 03 45 37.3 h = 93 km MB = 4.9 D = 84.42 Az = 323.0 (USCGS) PV(A):1.6s 22.0nm MPV(A)=4.9
30.	eP A	06 34 33.5	<u>Off Coast of Northern Peru</u> 9.22 S 79.02 W H = 06 21 03.9 h = 56 km MB = 5.4 D = 97.45 Az = 39.9 (USCGS)

Day	Phase	h m s	Remarks
30.	epP A	16 26 00.5	<u>Hokkaido, Japan Region</u> 41.50 N 142.67 E H = 16 13 48.1 h = 50 km MB = 4.7 D = 78.76 Az = 330.7 (USCGS)
30.	eP A	17 55 43	<u>Greece</u> 38.80 N 20.7 E
	LmH B	18 00.6	H = 17 52 30.4 h = 0 km
	LmV B	02.0	D = 13.46 Az = 335 (ISC) LmH(B):15s 1.2/um MLH(B)=4.1
30.	eP A	18 24 31	<u>Greece</u> 38.45 N 20.24 E
	e B	27 35	H = 18 21 14.2 h = 6 km MB = 4.8
	e BC	28 13	D = 13.64 Az = 336.1 (USCGS)
	e BC	28 48	PV(A):0.9s 15.6nm
	LmH B	29.4	LmH(B):14s 5.1/um MLH(B)=4.7
	LmV B	30.9	LmV(B):11s 1.8/um
30.	ePKIKP A	21 55 13	<u>Tonga Islands</u> 21.34 S 174.68 W
	ePKHKP A	55 18	H = 21 35 32.9 h = 72 km MB = 4.6
	ePKP2 A	55 24.5	D = 150.33 Az = 351.9 (USCGS) PKHKPV(A):1.3s 28.4nm
30.	eP A	22 18 25	<u>Greece</u> 38.82 N 20.58 E
	LmH B	23.3	H = 22 15 13.8 h = 0 km MB = 4.2
	LmV B	24.7	D = 13.41 Az = 335 (ISC) LmH(B):15s 1.2/um MLH(B)=3.9 LmV(B):11s 0.5/um

Day	Phase	h m s	Remarks
1.	eP LmH	A B 01 43 20 48.2	<u>Ionian Sea</u> 38.3 N 20.1 E H = 01 40 06 (BCIS) D = 13.73 LmH(B):15s 0.5/um MLH(B)=3.7
1.	eP LmH	A B 01 51 18 56.2	<u>Greece</u> 38.82 N 20.4 E H = 01 48 05 h = 0 km D = 13.35 Az = 335 (ISC) LmH(B):15s 1.3/um MLH(B)=4.1
1.	eP	A 03 29 25.5	<u>Bonin Islands</u> 28.08 N 139.28 E H = 03 17 25.5 h = 514 km MB = 4.8 D = 89.01 Az = 329.7 (USNOAA) PV(A):1.6s 33.0nm MPV(A)=5.3
1.	e	A 04 47 43.5	Probably Timor (USNOAA)
1.	ePKP	A 13 03 17	<u>Tonga Islands</u> 17.12 S 175.02 W H = 12 44 03.6 h = 245 km MB = 4.7 D = 146.13 Az = 352.4 (USNOAA) PKPV(A):1.9s 45.4nm
1.	eiP ei	A A 15 55 22 55 34	<u>Cyprus</u> 35.29 N 31.23 E H = 15 50 39.6 h = 36 km MB = 4.8 D = 20.92 Az = 323.2 (USNOAA) PV(A):1.2s 56.9nm MPV(A)=4.8
1.	eiP LmH LmV	A B B 16 27 46 45.5 45.5	<u>North Atlantic Ridge</u> 23.77 N 45.57 W H = 16 18 42.8 h = normal MB = 5.1(USNOAA) D = 51.3 PV(A):1.3s 32.8nm MPV(A)=5.1 MLH(B):20s 1.3/um MLH(B)=4.8 MLV(B):20s 1.6/um MLV(B)=5.1
1.	epP	A 21 40 56	<u>Hokkaido, Japan Region</u> 41.57 N 142.70 E H = 21 28 43.8 h = 51 km MB = 4.5 D = 78.71 Az = 330.7 (USNOAA)

Day	Phase	h m s	Remarks
2.	eP epP eSKS eSKKS LmH LmV	ABC AB BC BC B B 00 58 33 58 46 01 09 09 09 33 40.7 40.7	<u>Near Coast of Peru</u> 10.11 S 78.59 W H = 00 45 02.0 h = 62 km MB = 5.8 D = 97.86 Az = 40.0 (USNOAA) PV(A):1.5s 35.2nm MPV(A)=5.7 LmH(B):21s 2.1/um MLH(B)=5.6 LmV(B):20s 2.8/um MLV(B)=5.8
2.	iPKP eX1 eX2 LmH LmV	ABC A AB B B 01 15 58 16 00 16 15 02 18.7 26.0	<u>South of Australia</u> 51.04 S 139.49 E H = 00 56 15.3 h = normal MB = 5.6 D = 147.65 Az = 290.1 (USNOAA) PKPV(A):1.6s 38.5nm X1V(A):1.4s 60.5nm X2V(A):2.2s 272.0nm X2V(B):7.0s 1.3/um LmH(B):20s 1.3/um MLH(B)=5.6 LmV(B):21s 2.4/um MLV(B)=5.9
2.	eP1 eiP2 eS LmH LmV	A ABC BC B B 02 29 22.5 29 25.7 33 24 39.2 39.3	<u>Turkey</u> 38.81 N 36.67 E H = 02 24 35.8 h = 27 km MB = 4.8 D = 21.26 Az = 312.0 (USNOAA) P1V(A):1.9s 26.5nm MPV1(A)=4.3 P2V(A):1.9s 60.6nm MPV2(A)=4.6 LmH(B):13s 2.4/um MLH(B)=4.8 LmV(B):17s 3.0/um MLV(B)=4.9
2.	ePKHKP ePKP2 epPKP	A A A 07 37 07 37 15.5 39 30	<u>Fiji Islands Region</u> 21.78 S 179.37 W H = 07 18 22.5 h = 595 km MB = 4.9 D = 149.93 Az = 346.0 (USNOAA) PKHKPV(A):0.8s 25.0nm
2.	eP eX e LmH LmV	A A B B B 07 53 23 53 34 57 04 58.3 59.7	<u>Greece</u> 38.73 N 20.51 E H = 07 50 14.6 h = 34 km MB = 5.0 D = 13.47 Az = 335.0 (USNOAA) XV(A):1.4s 51.1nm LmH(B):14s 4.0/um MLH(B)=4.6 LmV(B):11s 2.7/um

Day	Phase	h m s	Remarks
2.	e A	13 01 03.5	<u>Near Coast of Peru</u> 10.13 S 78.68 W H = 12 47 07.8 h = 60 km MB = 4.9 D = 97.93 Az = 40.0 (USNOAA)
2.	eP A LmH B	14 16 10 21.0	<u>Greece</u> 38.6 N 20.3 E H = 14 12 59 (BCIS) D = 13.55 LmH(B):15s 1.0 μ m MLH(B)=5.1
2.	eP AB e(PS) B LmH B LmV B	19 26 30 37 40 20 09.5 09.5	<u>Northern Sumatra</u> 4.67 N 97.71 E H = 19 14 01.5 h = normal MB = 5.2 D = 83.94 Az = 320.3 (USNOAA) PV(A):1.4s 25.6nm MPV(A)=5.2 LmH(B):20s 0.5 μ m MLH(B)=4.9 LmV(B):19s 0.6 μ m MLV(B)=5.0
3.	eP1 A eP2 A e B LmH B LmV B	00 44 09.5 44 12 47 52 49.2 50.5	<u>Greece</u> 38.68 N 20.36 E H = 00 41 01.0 h = normal MB = 5.1 D = 13.47 Az = 335.5 (USNOAA) P2V(A):0.7s 17.2nm MP2V(A)=5.1 LmH(B):16s 2.9 μ m MLH(B)=4.4 LmV(B):10s 1.3 μ m
3.	eP A	10 01 31.5	<u>Northwest of Kurile Islands</u> 49.85 N 150.62 E H = 09 50 33.5 h = 360 km MB = 5.1 D = 73.93 Az = 334.2 (USNOAA) PV(A):0.8s 26.8nm MPV(A)=5.1
4.	eP A LmV C LmH C	01 25 27 50.6 51.0	<u>North of Ascension Island</u> 3.26 S 12.13 W H = 01 15 36.0 h = normal MB = 4.7 D = 57.43 Az = 17.7 (USNOAA)
4.	iP A	15 02 29	<u>Kurile Islands</u> 43.22 N 146.25 E H = 14 50 31.6 h = 57 km MB = 4.4 D = 78.51 Az = 332.5 (USNOAA)

Day	Phase	h m s	Remarks
4.	LmH B LmV B	20 17.3 20.6	<u>Banda Sea</u> 4.3 S 127.8 E H = 19 01 46.1 h = 59 km MB = 5.3(USNOAA) D = 109.8 LmH(B):21s 0.6 μ m MLH=5.1 LmV(B):20s 0.5 μ m MLV=5.1
4.	LmH B LmV B	23 57.4 58.5	<u>Caucasus</u> H = 23 40 38 (UPP) LmH(B):14s 0.3 μ m LmV(B):14s 0.3 μ m
5.	eP A LmH C	07 08 50 16.0	<u>Peru-Brazil Border Region</u> 8.77 S 74.38 W H = 06 55 46.3 h = 140 km MB = 4.9 D = 94.18 Az = 39.6 (USNOAA) PV(A):2.0s 47.0nm MPV(A)=5.5
5.	eP A epP A esP A e(pPP) A eSKS BC ePS C eSS C LmH B LmV B	14 25 55.5 26 09 26 16 30 26 36 44 39(12) 44(40) 15 14.5 14.5	<u>Mindanao, Philippine Islands</u> 7.43 N 126.85 E H = 14 12 16.6 h = 59 km MB = 5.6 D = 99.79 Az = 324.2 (USNOAA) PV(A):1.8s 33.8nm MPV(A)=5.6 LmH(B):20s 1.6 μ m MLH(B)=5.5 LmV(B):20s 1.8 μ m MLV(B)=5.6
5.	ePKP AB LmH B LmV B	24 08 54 25 20.0 23.0	<u>Tonga Islands</u> 17.43 S 173.43 W H = 23 49 13.5 h = 34 km MB = 4.8 D = 146.61 Az = 354.2 (USNOAA) PKPV(A):1.8s 67.6nm LmH(B):18s 0.3 μ m MLH(B)=5.1 LmV(B):18s 0.4 μ m MLV(B)=5.2
6.	eP1 A eP2 A epP A LmH C	03 44 47.5 44 49.5 45 00.5 04 17.0	<u>Kurile Islands</u> 43.28 N 147.64 E H = 03 32 48.8 h = 58 km MB = 4.7 D = 78.92 Az = 333.2 (USNOAA)

Day	Phase	h m s	Remarks
6.	ePKP A	04 28 50	<u>New Hebrides Islands</u> 19.15 S 169.26 E H = 04 09 33.2 h = 148 km MB = 4.6 D = 143.91 Az = 335.7 (USNOAA)
6.	eP AB	05 57 07	<u>South of Panama</u> 4.03 N 78.23 W H = 05 44 23.3 h = normal MB = 4.5 D = 86.82 Az = 39.6 (USNOAA)
	e B	57.20	
	e B	06 01 06	LmH(B):17s 0.6/um MLH(B)=5.1
	e B	07 16	LmV(B):17s 0.6/um MLV(B)=5.1
	e B	07 36	
	e B	07 46	
	LmH B	39.8	
	LmV B	43.7	
6.	LmH B	16 51.0	<u>USSR-Mongolia Boder Region</u> 50.5 N 90.6 E H = 16 20 12 (ANUSSR) D = 47.8
	LmV B	51.2	LmH(B):14s 0.3/um MLH(B)=4.4 LmV(B):14s 0.3/um MLV(B)=4.5
7.	ePn1 A	06 06 18	<u>Central Italy</u> 42.83 N 13.00 E H = 06 04 21.0 h = 17 km MB = 4.0 D = 7.88 Az = 353.6 (USNOAA)
	ePn2 A	06 20.5	
	e A	06 30	Pn2V(A):1.1s 16.1nm
	ePg A	06 56	LmH(B):8s 0.6/um MLH(B)=3.6
	iSn A	07 44	
	eSg ABC	08 44	
	LmH BC	09.3	
7.	eiP A	06 32 11	<u>Kurile Islands</u> 45.64 N 149.44 E H = 06 20 23.7 h = 80 km MB = 5.0 D = 77.38 Az = 334.0 (USNOAA) PV(A):1.0s 33.5nm MPV(A)=5.2
7.	eP A	08 06 01	<u>North Atlantic Ridge</u> 43.62 N 28.87 W H = 08 00 11.7 h = normal MB = 4.8(USNOAA) D = 27.45
	eS C	10 50	PV(A):2.0s 21.4nm MPV(A)=4.4
	LmH B	14.4	LmH(B):14s 0.4/um MLH(B)=4.2
	LmV B	15.4	LmV(B):14s 0.4/um MLV(B)=4.3

Day	Phase	h m s	Remarks
7.	e(P) A	22 23 56.5	<u>Kurile Islands</u> 44.38 N 148.0 E H = 22 11 58.9 h = 0 km MB = 5.0 D = 78.06 Az = 333 (ISC)
8.	-iP1 AB	04 59 53	<u>Virgin Islands</u> 17.96 N 64.63 W H = 04 49 10.6 h = 150 km MB = 5.8(USNOAA)
	+iP2 AC	59 54	D = 67.6
	Pm A	59 55.5	P1V(A):1.0s 43.3nm MP1V(A)=5.2
	esP BC	05 00 38	P2V(A):1.4s 65.0nm MP2V(A)=5.3
	ePP BC	02 20	PmV(A):2.2s 415.0nm MPmV(A)=5.9
	eS BC	08 38	P1V(B):6s 2.2/um MP1V(B)=6.2
	eScS BC	09 36	PPV(B):5s 1.0/um MPPV(B)=6.3
	e A	09 40	LmV(B):16s 1.1/um
	esScS BC	10 42	LmH(B):14.5s 1.1/um
	eSSS C	16 20	
	LmV B	23.9	
	LmH B	24.7	
8.	ePg A	14 00 44	<u>Switzerland</u> 46.3 N 7.7 E H = 13 59 06 (BCIS) D = 5.05
	eSg A	01 53	
8.	ePg A	14 09 09	<u>Switzerland</u> 46.3 N 7.8 E H = 14 07 33 (BCIS) D = 5.00
	e A	09 12	
	eSg A	10 15	
8.	eP A	15 10 50	<u>Hokkaido, Japan Region</u> 42.04 N 142.51 E H = 14 58 56.0 h = 71 km MB = 4.8 D = 78.23 Az = 330.6 (USNOAA) h = 91 km PV(A):1.5s 25.2nm MPV(A)=4.9
	epP A	11 13	
	LmH B	47.0	
	LmV B	47.0	
8.	eP A	23 21(08)	<u>Afghanistan-USSR Border Region</u> 37.09 N 66.05 E H = 23 13 29.7 h = normal MB = 5.1 D = 40.61 Az = 307.3 (USNOAA) LmH(B):14s 0.1/um MLH(B)=4.0 LmV(B):12s 0.3/um MLV(B)=4.4
	LmH B	43.0	
	LmV B	43.0	

Day	Phase	h m s	Remarks
9.	+iP ABC	08 23 08.5	<u>Kurile Islands Region</u> 43.85 N 148.40 E
	eipP A	23 20.5	H = 08 11 09.7 h = 51 km MB = 5.4
	LmH B	55.8	D = 78.66 Az = 333.6 (USNOAA)
	LmV B	09 02.1	h = 40 km PV(A):1.0s 51.2nm MPV(A)=5.5 LmH(B):20s 1.2/um MLH(B)=5.2 LmV(B):16s 0.9/um MLV(B)=5.3
9.	+iP1 ABC	11 36 38.3	<u>Kurile Islands Region</u> 43.89 N 148.53 E
	-eP2 A	36 39	H = 11 24 39.5 h = 41 km MB = 5.4
	eS BC	46 32	D = 78.67 Az = 333.7 (USNOAA)
	esS BC	46 48	P1V(A):0.7s 13.4nm MP1V(A)=5.0
	LmH B	12 09.3	P2V(A):2.0s 145.0nm MP2V(A)=5.6
	LmV B	15.6	LmH(B):19.5s 2.3/um MLH(B)=5.5 LmV(B):16s 1.8/um MLV(B)=5.5
9.	eP ABC	12 23 57	<u>Kurile Islands Region</u> 43.85 N 148.44 E
	Pm A	23 59	H = 12 11 58.9 h = 48 km MB = 5.5
	eS B	33 51	D = 78.67 Az = 333.6 (USNOAA)
	esS B	34 09	PV(A):0.8s 61.5nm MPV(A)=5.6
	LmH B	56.6	PmV(A):2.0s 214.0nm MPmV(A)=5.9
	LmV B	13 03.0	LmH(B):20s 6.2/um MLH(B)=5.9 LmV(B):15.5s 4.3/um MLV(B)=5.9
9.	iPg A	17 05 23.5	<u>Böhmischbruck, Federal Rep. Germany</u>
	iSg A	05 38	49°34.1'N 12°21.4'E explosion H c. 18 05 00 yield c. 5.0 to (Hannover) D c. 1.2
9.	eP A	20 32 41	<u>Kurile Islands Region</u> 43.94 N 148.30 E
	LmH B	21 05.0	H = 20 20 40.2 h = normal MB = 4.6
	LmV B	11.7	D = 78.54 Az = 333.5 (USNOAA) PV(A):0.8s 13.5nm MPV(A)=5.1 LmH(B):19s 0.3/um MLH(B)=5.7 LmV(B):16s 0.3/um MLV(B)=5.7

Day	Phase	h m s	Remarks
9.	eP A	20 34 47	<u>Kurile Islands Region</u> H = 20 22 46 (UPP) PV(A):0.6s 9.6nm
9.	eP A	21 10 55	<u>Rumania</u> 45.71 N 26.47 E
	e A	11 12	H = 21 08 18.5 h = 143 km MB = 4.6 D = 11.08 Az = 301.8 (USNOAA)
10.	eP A	01 23 21	<u>Kurile Islands</u> 44.13 N 148.36 E
	epP A	23 33.5	H = 01 11 22.5 h = normal MB = 4.1 D = 78.40 Az = 333.6 (USNOAA) h = 46 km
10.	ePKIKP AB	09 44 32	<u>Santa Cruz Islands</u> 11.98 S 166.56 E
	ePP AB	47 13	H = 09 25 24.4 h = 140 km MB = 5.3 D = 136.34 Az = 337.0 (USNOAA) PKIKPV(A):2.3s 73.0nm
10.	eP AB	13 27 48	<u>Near Coast of Guerrero, Mexico</u>
	eX A	28 14	17.49 N 101.02 W
	ePP B	31 25	H = 13 14 50.9 h = 46 km MB = 5.1
	eSKS EC	38 12	D = 90.20 Az = 36.0 (USNOAA)
	e EC	38 52	PV(A):1.8s 27.0nm MPV(A)=5.3
	ePS EC	39 56	XV(A):1.6s 27.5nm
	eSS C	44 46	LmH(B):17s 0.9/um MLH(B)=5.3
	LmH B	14 11.5	LmV(B):18s 1.0/um MLV(B)=5.3
10.	LmV B	11.5	
	eP A	13 34 26	<u>Turkey</u> 40.86 N 35.58 E H = 13 29 57.0 h = 17 km MB = 4.6 D = 19.28 Az = 308.5 (USNOAA) PV(A):2.4s 69.1nm MPV(A)=4.5
10.	ePg A	14 05 56	<u>Eschenlohe, Federal Rep. Germany</u>
	e A	06 02	47°37.9 N 11°08.7 E explosion
	eSg A	06 39.5	H c. 14 05 00 yield c. 15 to (Hannover)
	eSg A	06 40.5	D c. 3.0
	e A	06 42.5	

Day	Phase	h m s	Remarks	
10.	eP e e LmV LmH	A A AB B B	14 21 17.5 21 25 24 30 25.9 26.0	<u>Rumania</u> 47.73 N 25.64 E H = 14 18 58.8 h = normal MB = 4.7 D = 9.64 Az = 292.8 (USNOAA) PV(A):1.1s 18.1nm LmV(B):7s 0.9/um LmH(B):9s 0.8/um MLH(B)=3.9
10.	eP LmH LmV	A B B	16 29 21 17 11.5 11.5	<u>Ryukyu Islands</u> 28.73 N 129.29 E H = 16 16 57.3 h = 63 km MB = 5.2 D = 83.73 Az = 325.4 (USNOAA) PV(A):1.0s 17.7nm MPV(A)=5.1 LmH(B):16.5s 0.6/um MLH(B)=5.0 LmV(B):17s 0.6/um MLV(B)=5.1
10.	eP e e e eS e eSP e LmH LmV	AB A A A BC B B BC B B	21 19 34.5 19 41 19 51 19 57 30 22 30 50 31 27 31 29 22 05.5 06.0	<u>Mindoro, Philippine Islands</u> 13.93 N 120.45 E H = 21 06 38.3 h = 80 km MB = 5.6 D = 90.87 Az = 322.9 (USNOAA) PV(A):1.5s 101.0nm MPV(A)=5.9 LmH(B):20s 0.5/um LmV(B):18s 0.3/um
11.	e	A	06 56 26	<u>Poland</u> 50.32 N 18.87 E H = 06 55 26.5 MB = 2.7 (ISC) D = 4.6
11.	e LmH LmV	A B B	13 38 22 46.4 46.7	<u>Mediterranean Sea</u> 34.41 N 22.24 E H = 13 33 51.9 h = 18 km MB = 4.6 D = 17.98 Az = 337.3 (USNOAA) LmH(B):16s 0.4/um MLH(B)=3.8 LmV(B):16s 0.5/um MLV(B)=4.0
11.	eP e	A A	14 40 31.5 40 36	<u>Near East Coast of Honshu, Japan</u> 36.48 N 140.51 E H = 14 28 15.5 h = 67 km MB = 5.2 D = 82.29 Az = 330.0 (USNOAA) PV(A):1.2s 24.4nm MPV(A)=5.1

Day	Phase	h m s	Remarks	
11.	eP epP eS LmH LmV	A A BC B B	21 29 03 29 15 39 24 22 04.2 11.0	<u>Ryukyu Islands</u> 28.33 N 129.44 E H = 21 16 33.8 h = 35 km MB = 5.2 D = 84.14 Az = 325.5 (USNOAA) h = 43 km PV(A):2.0s 30.0nm MPV(A)=4.9 pPV(A):2.0s 34.2nm LmH(B):18s 1.4/um MLH(B)=5.4 LmV(B):17s 0.6/um MLV(B)=5.1
11.	eP epP eS e(SS) LmH LmV	ABC A BC B B B	22 47 15 47 28 52 12 54 00 23 05.0 05.0	<u>Caspian Sea</u> 37.55 N 48.98 E H = 22 41 15.6 h = 65 km MB = 5.1 D = 29.52 Az = 308.4 (USNOAA) h = 65 km PV(A):1.6s 22.0nm MPV(A)=4.6 pPV(A):1.5s 25.1nm LmH(B):17s 1.5/um LmV(B):14.5s 1.2/um
11.	eP e LmH LmV	A B B B	23 32 28.5 36 10 37.3 38.7	<u>Greece-Albania Border Region</u> 38.97 N 20.64 E H = 23 29 20.2 h = 41 km MB = 4.8 D = 13.30 Az = 334.3 (USNOAA) PV(A):0.8s 26.9nm LmH(B):14.5s 2.6/um MLH(B)=4.4 LmV(B):12s 1.1/um
12.	eP e ePP e(SKKS) e LmH LmV	ABC A ABC BC BC B B	09 31 25 31 48 35 22 42 20 43 10 10 11.6 19.3	<u>Leyte, Philippine Islands</u> 10.83 N 125.39 E H = 09 17 59.0 h = 35 km MB = 5.5 D = 96.21 Az = 324.1 (USNOAA) PV(A):1.2s 32.6nm MPV(A)=5.7 LmH(B):24s 2.0/um MLH(B)=5.5 LmV(B):18s 1.4/um MLV(B)=5.5
12.	ePKP	A	15 57 37	<u>New Hebrides Islands</u> 19.13 S 168.77 E H = 15 38 05.5 h = 28 km MB = - D = 143.69 Az = 335.3 (USNOAA) PKPV(A):0.7s 9.6nm

Day	Phase	h m s	Remarks
13.	eP	A	<u>Greece</u> 38.91 N 20.62 E H = 00 46 47.4 h = normal MB = 4.7 D = 13.35 Az = 334.4 (USNOAA) XV(A):1.6s 27.5nm LmH(B):14.5s 2.7/um MLH(B)=4.4 LmV(B):10.5s 1.2/um
	eX	A	
	LmH	B	
	LmV	B	
13.	ePKP	A	<u>Tonga Islands</u> 16.68 S 173.93 W H = 06 12 14.4 h = 47 km MB = 4.9 D = 145.83 Az = 353.7 (USNOAA) PKPV(A):1.2s 16.3nm
13.	eP	A	<u>Southern Alaska</u> 60.43 N 152.04 W H = 16 00 41.4 h = 104 km MB = 4.8 D = 68.50 Az = 11.1 (USNOAA) h = 100 km PV(A):1.4s 16.3nm MPV(A)=4.7
	epP	A	
	e	A	
14.	e	A	Probably <u>Kermadec Islands</u> (ISC)
14.	eP	ABC	<u>Norwegian Sea</u> 72.46 N 2.04 E H = 18 06 37.8 h = normal MB = 4.9 D = 22.30 Az = 163.8 (USNOAA) PV(A):1.4s 34.9nm MPV(A)=4.6 PmV(A):1.5s 65.4nm MPmV(A)=4.9 XV(A):1.5s 90.5nm LmH(B):19s 1.1/um MLH(B)=4.3 LmV(B):12s 0.7/um MLV(B)=4.4
	Pm	A	
	eiX	A	
	eS	BC	
	LmH	B	
	LmV	B	
15.	epPKP	A	<u>New Hebrides Islands</u> 20.79 S 169.85 E H = 14 53 46.8 h = 120 km MB = 4.9 D = 145.63 Az = 335.3 (USNOAA)
16.	eP	A	<u>Kurile Islands Region</u> 43.88 N 148.33 E H = 01 41 13.9 h = 40 km MB = 4.7 D = 78.61 Az = 333.6 (USNOAA) PV(A):0.9s 13.6nm MPV(A)=5.0 LmV(B):12s 0.3/um MLV(B)=4.9 LmH(B):16s 4.2/um MLH(B)=4.9
	LmV	B	
	LmH	B	

Day	Phase	h m s	Remarks
16.	ePKIKP	A	<u>South of Fiji Islands</u> 25.30 S 178.10 W H = 07 38 00.8 h = 225 km MB = 5.2 D = 153.61 Az = 346.0 (USNOAA) h = 238 km PKIKPV(A):1.4s 14.0nm
	ePKHKP	A	
	ePKP2	A	
	ei	A	
	epPKIKP	A	
	epPKHKP	A	
	ep PKP2	A	
	16.	ePg	
16.	iPg	A	<u>South of Fiji Islands</u> 25.88 S 177.25 W H = 15 43 20.2 h = 90 km MB = 5.3 D = 154.35 Az = 346.9 (USNOAA)
	e	A	
	iSg	A	
16.	ePKIKP	A	<u>Tonga Islands</u> 19.19 S 173.45 W H = 21 17 44.2 h = normal MB = 5.8 D = 148.35 Az = 353.8 (USNOAA) PKIKPV(A):1.7s 30.3nm PKHKPV(A):1.8s 203.0nm LmH(B):19s 2.7/um MLH(B)=6.0 LmV(B):18s 2.6/um MLV(B)=6.0
	ePKHKP	A	
	e(PKP2)	AB	
	e	B	
	e	B	
	eSS	E	
	e	B	
LmH	B		
LmV	E		
16.	ePKP	A	<u>Samoa Islands Region</u> 15.62 S 172.89 W H = 23 24 02.8 h = normal MB = 4.7 D = 144.88 Az = 355.0 (USNOAA)
	e	A	
17.	eP	A	<u>Fox Islands, Aleutian Is.</u> 51.05 N 171.31 W H = 07 32 10.1 h = normal MB = 4.9 D = 78.65 Az = 358.1 (USNOAA) h = 46 km PV(A):1.1s 16.2nm MPV(A)=5.0 pPV(A):0.9s 25.3nm
	epP	A	

Day	Phase	h m s	Remarks
17.	eP	A 18 02 43.5	<u>Ecuador</u> 1.79 S 77.27 W H = 17 49 59.5 h = 182 km MB = 4.9 D = 90.66 Az = 39.5 (USNOAA) PV(A):2.0s 42.8nm MPV(A)=5.1
17.	ePKIKP	AB 20 24 32.5	<u>Tonga Islands Region</u> 22.10 S 174.71 W H = 20 04 46.5 h = normal MB = 5.6 D = 151.08 Az = 351.7 (USNOAA)
	+iPKHKP	A 24 38.5	PKIKPV(A):1.0s 23.6nm
	ePKP2	A 24 46	PKHKPV(A):1.6s 151.0nm
	ePP	B 28 12	PKP2V(A):1.8s 263.0nm
	e	E 28 46	LmV(E):18s 6.0/um MLV(E)=6.4
	ePPP	B 31 28	LmH(E):17s 5.2/um MLH(E)=6.3
	e	E 32 40	
	eSKKS	B 35 12	
	eSS	E 47 36	
	LmV	E 21 42.7	
	LmH	E 42.8	
18.	eiP	AB 02 00 34	<u>Andreanof Islands, Aleutian Is.</u>
	-i	A 00 39.5	51.39 N 178.52 W
	epP	A 00 56.5	H = 01 48 38.9 h = 46 km MB = 5.7
	esP	B 01 06	D = 77.97 Az = 353.4 (USNOAA)
	ePP	B 03 32	h = 90 km
	ePPP	E 05 22	PV(A):1.4s 100.0nm MPV(A)=5.6
	eS	E 10 25	PV(E):9s 1.5/um MPV(E)=6.0
	eSKS	E 10 37	PPV(E):9s 0.9/um MPPV(E)=5.9
	ePPS	B 11 29	LmH(E):19s 6.0/um MLH(E)=5.9
	eSS	B 15 40	LmV(E):20s 5.0/um MLV(E)=5.9
	LmH	E 39.2	
	LmV	E 39.3	
18.	ePKHKP	A 05 28 10	<u>Tonga Islands</u> 20.18 S 173.12 W H = 05 08 20.3 h = 31 km MB = 4.7 D = 149.37 Az = 354.1 (USNOAA)
19.	eF	A 05 06 15	<u>Iceland Region</u> 62.91 N 24.68 W
	e	A 06 21	H = 05 01 11.6 h = normal MB = 4.0
	e	A 06 26.5	D = 23.00 Az = 105.3 (USNOAA)

Day	Phase	h m s	Remarks
19.	e	A 09 41 50.5	<u>New Ireland Region</u> 3.79 S 152.40 E
	ePP	AB 43 20	H = 09 22 40.1 h = 20 km MB = 5.5
	LmH	B 10 26.6	D = 122.88 Az = 331.4 (USNOAA)
	LmV	B 35.7	PPV(A):2.5s 77.0nm MPPV(A)=5.8 LmH(E):23s 4.8/um MLH(E)=6.1 LmV(E):19s 2.5/um MLV(E)=5.9
19.	ep	A 22 17 23	<u>Central Mid-Atlantic Ridge</u> 0.87 S 22.82 W H = 22 07 22.1 h = normal MB = 4.6 D = 59.11 Az = 24.8 (USNOAA)
19.	ep	A 23 43 44	<u>Kurile Islands</u> 44.62 N 148.15 E H = 23 31 47.5 h = normal MB = 4.7 D = 77.89 Az = 333.4 (USNOAA)
21.	+iP	AB 01 25 51.5	<u>Hindu Kush Region</u> 36.47 N 70.47 E
	epP	A 26 36.5	H = 01 18 05.2 h = 210 km MB = 5.2
	ePP	A 27 30	D = 43.80 Az = 308.1 (USNOAA)
	LmH	B 53.7	h = 213 km
	LmV	B 57.6	PV(A):1.4s 60.5nm MPV(A)=4.9 pPV(A):1.4s 23.3nm PPV(A):1.8s 33.8nm MPPV(A)=4.8 LmH(E):18s 0.4/um LmV(E):16s 0.4/um
21.	+iP	A 03 10 43.5	<u>Eastern Kazakh SSR</u> 49.96 N 77.76 E
	epn	A 12 14.5	H = 03 02 57.1 h = 0 km MB = 5.4 D = 40.97 Az = 297.4 (USNOAA) Underground explosion (UPP) PV(A):0.7s 46.0nm MPV(A)=5.3
21.	ePKP	A 06 41 10	<u>Tonga Islands</u> 15.87 S 173.07 W
	epPKP	A 41 27	H = 06 21 33.5 h = normal MB = 5.0
	e(sPKP)	A 41 37	D = 145.10 Az = 354.8 (USNOAA) h = 57 km PKPV(A):1.5s 30.3nm pPKPV(A):1.7s 48.5nm sPKPV(A):1.3s 19.7nm

Day	Phase	h m s	Remarks
21.	epP	A 09 08 18	<u>Tadzhik-Sinkiang Border Region</u> 38.57 N 73.42 E H = 08 59 51.9 h = 120 km MB = 4.6 D = 44.39 Az = 306.7 (USNOAA) pPV(A):0.9s 9.7nm
21.	ePn	A 11 25 48	<u>Switzerland</u> 46.5 N 7.7 E H = 11 24 35 (BCIS)
	ePg	A 26 10	D = 4.9
	iSg	A 27 12.5	LmH(B):7.5s 1.4/um MLH(B)≠3.8
	LmH	B 27.5	LmV(B):9s 0.6/um
	LmV	B 27.6	
21.	ePKHKP	AB 19 04 08.5	<u>Tonga Islands</u> 19.20 S 173.42 W H = 18 44 30.2 h = 88 km MB = 5.1 D = 148.37 Az = 353.9 (USNOAA) PKHKPV(A):1.4s 11.6nm
	e	A 04 19	
	LmH	E 20 11.0	
	LmV	B 17.0	
21.	eP	A 23 16 50	<u>Unimak Islands Region</u> 53.73 N 164.84 W H = 23 05 02 h = 18 km MB = 4.2 (ISC) D = 76.0
22.	ePKIKP	A 13 28 14.5	<u>East New Guinea Region</u> 5.53 S 147.27 E H = 13 09 39.8 h = 165 km MB = 5.3 D = 121.81 Az = 328.4 (USNOAA) PKIKPV(A):1.2s 10.2nm
23.	eP	A 05 31 24.5	<u>Central Mid-Atlantic Ridge</u> 6.11 N 33.60 W H = 05 21 31.4 h = normal MB = 4.8 D = 58.16 Az = 32.1 (USNOAA)
23.	eiPKP	A 16 04 41.5	<u>Tonga Islands</u> 15.71 S 173.85 W H = 15 45 14.6 h = 95 km MB = 5.4 D = 144.88 Az = 353.9 (USNOAA) PKPV(A):1.2s 32.5nm

Day	Phase	h m s	Remarks
24.	+iP	A 04 04 46.5	<u>Eastern Kazakh SSR</u> 49.80 N 78.17 E H = 03 56 57.4 h = 0 km MB = 5.3 D = 41.28 Az = 297.7 (USNOAA) Underground explosion (UPP) PV(A):0.6s 76.6nm MPV(A)=5.6
	ePn	A 06 19.5	
24.	eP	A 08 14 10	<u>Near Islands, Aleutian Is.</u> 52.14 N 171.45 E H = 08 02 23.6 h = normal MB = 5.0 D = 76.18 Az = 346.9 (USNOAA)
25.	eP	A 11 16 47	<u>Bonin Islands Region</u> 28.85 N 139.04 E H = 11 04 43.7 h = 462 km MB = 4.9(USNOAA) D = 88.2
25.	+iP1	AB 22 53 28.5	<u>Kyushu, Japan</u> 32.18 N 131.70 E H = 22 41 10.7 h = 34 km MB = 6.1 D = 82.06 Az = 326.2 (USNOAA)
	eiP2	A 53 34	
	ePP	B 56 31	P1V(A):1.7s 206.0nm MP1V(A)=6.0
	ePPP	B 58 15	P1V(B):14s 20.0/um MP1V(B)=7.0
	ePPPP	B 59 55	P2V(A):2.0s 760.0nm MP2V(A)=6.5
	iS	B 23 03 48	PFV(B):12s 9.7/um MPPV(B)=7.0
	iPS	B 04 38	SH(B):13s 13.7/um MSH(B)=6.9
	eSS	B 07 55	LmH(B):17s 440.0/um MLH(B)=7.9
	ei	B 08 38	LmV(B):16s 566.0/um MLV(B)=8.1
	LmH	B 34.1	
	LmV	B 34.2	
26.	+iP	AB 07 22 54	<u>Kyushu, Japan</u> 32.19 N 131.81 E H = 07 10 36.0 h = 35 km MB = 6.1 D = 82.11 Az = 326.3 (USNOAA) PV(A):2.0s 440.0nm MPV(A)=6.1 PV(B):12s 2.0/um MPV(B)=6.1 PPV(B):13s 1.1/um MPPV(B)=6.0 SH(B):20s 2.4/um MSH(B)=6.0 LmV(B):16s 65.5/um MLV(B)=7.1 LmH(B):14s 50.5/um MLH(B)=7.0
	ePP	AB 26 04	
	ePPP	B 27 56	
	ePPPP	B 29 28	
	eS	B 33 08	
	eSKS	B 33 18	
	ePS	B 33 58	
	ePFS	B 34 12	
	eSS	B 38 22	
	eSSS	B 42 35	
	LmV	B 08 03.6	
	LmH	B 03.7	

Day	Phase	h m s	Remarks	
27.	ePg e eSn eSg i	A A A A A	12 10 29 10 38 11 08 11 33 11 40	<u>Switzerland</u> 46.6 N 7.5 E H = 12 08 56 (BCIS) D = 4.9
27.	+ePKIKP epPKIKP	A A	12 52 04.5 52 26	<u>Off E. Coast of N. Island, N.Z.</u> 37.83 S 177.61 E H = 12 31 18.7 h = 87 km MB = 5.7(USNOAA) D = 163.7 h = 75 km PKIKPV(A):1.2s 20.4nm
28.	ePKIKP ePKP2	A A	05 07 27 07 39	<u>Tonga Islands</u> 21.75 S 174.63 W H = 04 47 47.7 h = normal MB = 5.2 D = 150.75 Az = 351.9 (USNOAA) PKP2V(A):1.6s 35.7nm
28.	eP ePP LmH LmV	A A B B	06 41 28 43 08.5 07 02.5 02.9	<u>Hindu Kush Region</u> 36.03 N 68.33 E H = 06 33 35.0 h = 60 km MB = 5.0 D = 42.71 Az = 308.3 (USNOAA) PV(A):1.4s 20.9nm MPV(A)=4.7 LmH(B):14s 0.2/um LmV(B):10s 0.3/um
28.	eP epP	A A	19 39 50 40 10	<u>Fox Islands, Aleutian Is.</u> 54.11 N 165.95 W H = 19 28 13.8 h = 92 km MB = 4.8 D = 75.60 Az = 1.6 (USNOAA) h = 80 km
28.	e ePP e(FPP) eSP eSPP eSS eSSS LmH LmV	A B B B B B B B B	23 25 25 27 00 30 15 37 00 38 32 43 45 48 30 24 18.0 19.9	<u>Off East of Southern Chile</u> 44.50 S 79.57 W H = 23 06 22.9 h = normal MB = 4.8 D = 123.24 Az = 49.6 (USNOAA) LmH(B):19s 2.3/um MLH(B)=5.8 LmV(B):18s 2.2/um MLV(B)=5.9

Day	Phase	h m s	Remarks	
29.	eP Pm ePP e eS e(ScS) eSS e e LmV LmH	AB A B B B E E B B B B	05 59 23.5 59 32 06 01 16 03 00 06 12 09 14 09 20 09 46 10 00 20.3 20.4	<u>Southern Sinkiang Prov., China</u> 39.88 N 77.80 E H = 05 50 56.4 h = 13 km MB = 5.2 D = 46.34 Az = 306.4 (USNOAA) PV(A):1.2s 30.3nm MPV(A)=5.0 PmV(A):1.8s 81.3nm MPmV(A)=5.5 PPV(B):9s 0.5/um MPPV(B)=5.4 LmV(B):16.5s 16.2/um MLV(B)=6.1 LmH(B):17s 13.4/um MLH(B)=6.0
29.	-iP Pm e(sP) ePP ePPP e iS e(PS) eSS eSSS LmV e LmH ePKPPKP eSKPPKP ePKPPKS eSKPP'P' eP'P'PKS	AB A AB B B B B B B B E B A A A A A	10 27 04.5 27 06 27 28 29 32 31 12 31 24 35 50 36 24 40 06 43 08 55.0 55.34 55.6 55 38 58 54 59 06 11 18 10 18 19	<u>Burma-India Border Region</u> 26.02 N 95.40 E H = 10 16 19.3 h = 59 km MB = 6.5 D = 66.52 Az = 316.4 (USNOAA) PV(A):1.4s 1120.0nm MPV(A)=6.6 PV(B):10.5s 10.3/um MPV(B)=6.7 PmV(A):1.4s 1400.0nm MPmV(A)=6.7 PPV(B):9s 6.1/um MPPV(B)=6.9 SH(B):10.5s 23.8/um MSH(B)=7.3 LmV(B):32s 127.4/um MLV(B)=7.0 LmH(B):20.5s 50.2/um MLH(B)=6.7 PKPPKPV(A):1.8s 88.0nm PKPPKPKSV(A):2.1s 67.0nm
29.	+iP	A	10 41 55	<u>Burma-India Border Region</u> 26.25 N 95.13 E H = 10 31 10.6 h = 48 km MB = 5.5 D = 66.19 Az = 316.3 (USNOAA) PV(A):1.2s 54.9nm MPV(A)=5.4

Day	Phase	h m s	Remarks
29.	ePn	A 15 51 36.5	<u>Austria</u> 47.8 N 11.1 E
	ePg	A 51 42	H = 15 50 51 (BCIS)
	e	A 52 05	D = 2.85
	eSn	A 52 10	
	eSg	A 52 22.5	
29.	e	A 18 35 05	<u>South Atlantic Ridge</u> 14.01 S 14.31 W H = 18 23 58.3 h = normal MB = 5.2 D = 68.27 Az = 17.4 (USNOAA)
30.	eP1	AB 00 59 01.5	<u>Iran-USSR Border Region</u>
	+iP2	A 59 06	37.82 N 55.88 E
	eS	B 01 04 28	H = 00 52 19.5 h = 19 km MB = 5.7
	eSS	B 06 14	D = 33.70 Az = 306.8 (USNOAA)
	e(SSS)	B 06 44	P1V(A):1.3s 80.8nm MP1V(A)=5.5
	e	B 08 25	P1V(B):5s 6.6 μ m MP1V(B)=6.8
	e	B 09 02.5	P2V(A):1.2s 240.0nm MP2V(A)=6.0
	LmH	B 18.4	SH(B):8s 10.4 μ m MSH(B)=6.6
	LmV	B 20.4	LmH(B):14s 58.9 μ m MLH(B)=6.4 LmV(B):13s 39.6 μ m MLV(B)=6.4
30.	eP	A 02 08 45	<u>Iran-USSR Border Region</u>
	e	A 09 09	37.63 N 55.82 E H = 02 02 02.0 h = normal MB = 4.8 D = 33.78 Az = 307.0 (USNOAA) PV(A):0.6s 13.4nm MPV(A)=5.1
30.	eP	A 02 27 07.5	<u>Kenai Peninsula, Alaska</u> 60.58 N 148.57 W H = 02 16 08.8 h = 24 km MB = 4.7 D = 67.99 Az = 13.5 (USNOAA) PV(A):0.6s 13.4nm MPV(A)=5.3
30.	eP	A 02 41 55	<u>Iran-USSR Border Region</u> 37.48 N 55.76 E H = 02 35 11.5 h = normal MB = 4.9 D = 33.83 Az = 307.2 (USNOAA)

Day	Phase	h m s	Remarks
30.	+eP1	A 05 07 26.5	<u>Eastern Gulf of Aden</u> 14.26 N 51.84 E
	+iP2	A 07 31	H = 04 58 43.8 h = normal MB = 5.5
	iP3	A 07 37	D = 48.70 Az = 326.8 (USNOAA)
	-eiP4	A 07 42.5	P1V(A):1.7s 57.6nm MP1V(A)=5.3
	+eiPP	A 09 33	P2V(A):2.0s 120.0nm MP2V(A)=5.6 P3V(A):2.5s 600.0nm MP3V(A)=6.2 P4V(A):2.1s 790.0nm MP4V(A)=6.4 PPV(A):3.2s 2220.0nm MPPV(A)=6.5
30.	eP1	A 05 11 35	<u>Socotra Region</u> 13.9 N 52.1 E
	eP2	A 11 37	H = 05 02 56 h = 38 km MB = 5.1
	eP3	A 11 48	D = 49.17 Az = 327 (ISC)
	+eP4	A 11 54.5	P1V(A):1.6s 38.4nm MP1V(A)=5.1
	ePP	A 13 37	P2V(A):2.1s 135.0nm MP2V(A)=5.5 P3V(A):1.7s 127.0nm MP3V(A)=5.6 P4V(A):2.0s 522.0nm MP4V(A)=6.1
30.	e(PKP2)	A 06 02 41	<u>Kermadec Islands Region</u> 28.15 S 176.55 W H = 05 42 10.5 h = 48 km MB = 4.6(USNOAA) D = 157.1 (PKP2V)(A):0.6s 11.5nm
30.	eP	A 07 25 01.5	<u>North of Ascension Island</u> 0.87 S 13.12 W H = 07 15 26.8 h = normal MB = 4.9 D = 55.49 Az = 18.9 (USNOAA) PV(A):0.6s 13.4nm MPV(A)=5.2
30.	ePKIKP	A 09 11 19	<u>Near North Coast of New Guinea</u>
	epPKIKP	A 11 48	4.45 S 143.96 E H = 08 52 40.7 h = 106 km MB = 5.4 D = 119.14 Az = 327.4 (USNOAA) h = 109 km
30.	+iPKP	AB 19 03 40.8	<u>Tonga Islands</u> 15.55 S 174.00 W
	epPKP	A 04 12.5	H = 18 44 17.9 h = 122 km MB = 5.0
	esPKP	A 04 29	D = 144.70 Az = 353.8 (USNOAA) h = 124 km PKPV(A):1.4s 67.4nm

Day	Phase	h m s	Remarks
31.	eP	A 01 48 34	<u>Kurile Islands</u> 44.25 N 147.07 E H = 01 36 43.1 h = 79 km MB = 4.3 D = 77.87 Az = 332.8 (USNOAA)
31.	eP e epP LmH LmV	A 02 05 16 A 05 24 A 05 27 B 40.7 B 44.8	<u>Kurile Islands</u> 43.42 N 147.53 E H = 01 53 16.5 h = 49 km MB = 4.9 D = 78.76 Az = 333.2 (USNOAA) h = 41 km PV(A):1.1s 20.2nm MPV(A)=5.0 pPV(A):1.4s 27.9nm LmH(B):16s 0.4/um MLH(B)=4.8 LmV(B):16s 0.2/um MLV(B)=4.6
31.	ePKP eX1 eX2	A 04 00 38 AB 00 48 A 01 01	<u>Tonga Islands</u> 17.83 S 173.26 W H = 03 40 57.1 h = normal MB = 4.8 D = 147.03 Az = 354.3 (USNOAA) PKPV(A):2.0s 42.7nm X1V(A):2.0s 55.6nm X2V(A):1.8s 67.5nm
31.	eP1 eP2 LmH LmV	A 13 21 56.5 A 21 59 B 49.0 B 55.5	<u>Szechwan Province, China</u> 28.62 N 103.55 E H = 13 10 47.4 h = 25 km MB = 5.5 D = 69.60 Az = 317.2 (USNOAA) P1V(A):1.3s 21.8nm MP1V(A)=5.1 P2V(A):1.5s 35.2nm MP2V(A)=5.2 LmH(B):22s 1.6/um MLH(B)=5.2 LmV(B):12s 0.4/um MLV(B)=5.0
31.	ePKIKP eX LmV LmH	A 15 35 32 A 35 49 B 16 32.3 B 39.8	<u>Easter Island Region</u> 27.04 S 113.31 W H = 15 16 18.7 h = normal MB = 5.3 D = 132.36 Az = 44.9 (USNOAA) XV(A):2.5s 61.4nm LmV(B):20s 0.7/um MLV(B)=5.4 LmH(B):17s 0.9/um MLH(B)=5.5

Day	Phase	h m s	Remarks
31.	-iP1 +iP2 -iP3 eP4 i e e e(P) iSKS eiS ei(sPPPP) eiSP eiSPP eisS eiSS eisSS e(SSSS) eiPKPKPK ei e eSKPP'P' eiX Xm	AB 17 19 47.5 B 19 52 B 20 10 B 20 31 B 21 44 B 22 33 B 23 03 B 23 45 B 29 17 B 29 32 B 30 00 B 30 38 B 31 12 B 33 43 B 35 50 B 39 22 B 42 42 A 45 33 A 47 47 A 18 05 35 A 06 15 A 06 32 A 07 07	<u>Colombia</u> 1.46 S 72.56 W H = 17 08 05.4 h = 651 km MB = 7.1 D = 87.42 Az = 39.3 (USNOAA) P1V(B):6.5s 18.9/um MP1V(B)=7.0 P2V(B):9.5s 60.1/um MP2V(B)=7.3 P3V(B):11s 77.9/um MP3V(B)=7.4 SH(B):10s 99.0/um MSH(B)=7.7 XmV(A):2.8s 129.0nm
31.	ePKP	A 21 05 40.5	<u>Fiji Islands Region</u> 14.96 S 176.98 W H = 20 46 05.5 h = normal MB = 5.2 D = 143.73 Az = 350.7 (USNOAA)

Day	Phase	h m s	Remarks
1.	eP	A 01 30 56	<u>Southern Sumatra</u> 2.96 S 102.42 E H = 01 17 56.3 h = 125 km MB = 5.4 D = 92.78 Az = 320.4 (USNOAA)
	epP	A 31 26	
	eX	A 34 19	PV(A):1.3s 17.5nm MPV(A)=5.1
	ePP	A 34 39	XV(A):1.9s 22.7nm
	iSKS	B 40 15	PPV(A):2.0s 51.2nm MPPV(A)=5.6
	iS	B 40 49	SH(B):6.0s 0.7 μ m MSH(B)=6.0
	esS	A 42 37	
	e	B 42 40	
1.	e	A 06 45 21	<u>New Hebrides Islands</u> 15.26 S 167.67 E H = 06 24 48.3 h = 180 km MB = 4.8 D = 139.76 Az = 336.4 (USNOAA)
1.	eP	A 14 49 05	<u>Greenland Sea</u> 73.93 N 9.92 E H = 14 43 59.0 h = normal MB = 4.4 D = 23.38 Az = 177.3 (USNOAA)
	LmH	B 58.5	PV(A):0.9s 19.5nm MPV(A)=4.6
	LmV	B 58.5	LmH(B):15s 0.2 μ m MLH(F)=3.8 LmV(B):16s 0.2 μ m MLV(F)=3.8
2.	ePn	A 01 28 32	<u>Upper Silesia</u>
	ei(Sg)	A 29 37.5	rock burst (CLL) D c. 3.8
2.	+eiP	A 01 48 00.5	<u>Kurile Islands</u> 46.70 N 152.52 E H = 01 36 10.6 h = 60 km MB = 5.0 D = 77.33 Az = 335.7 (USNOAA)
	epP	A 48 12.5	h = 48 km
	esP	A 48 19	PV(A):1.0s 37.4nm MPV(A)=5.3
2.	LmH	B 02 09.0	<u>Off Coast of Mexico</u> 8.6 N 102.6 W H = 01 13 59.7 h = normal MB = 4.6(USNOAA) D = 98.3
	LmV	B 09.0	LmH(B):20s 0.4 μ m MLH(F)=4.9 LmV(B):20s 0.1 μ m MLV(F)=4.5
2.	ePKP	AB 13 35 57	<u>Samoa Islands Region</u> 16.39 S 172.90 W H = 13 16 19.9 h = normal MB = 4.7 D = 145.63 Az = 354.9 (USNOAA)
	e	A 36 03	PKPV(A):1.8s 23.7nm
	e	A 36 15	

Day	Phase	h m s	Remarks
2.	-ePKP	AB 19 43 33	<u>Samoa Islands Region</u> 16.57 S 172.77 W H = 19 23 55.3 h = normal MB = 4.7 D = 145.62 Az = 355.0 (USNOAA)
	eX1	A 43 37	PKPV(A):3.0s 184.0nm
	eX2	A 43 49	PKPV(B):8s 1.1 μ m
	e	B 44 00	PX1V(A):1.8s 60.9nm
	LmH	B 20 56.5	PX2V(A):1.8s 88.0nm
	LmV	B 21 02.9	LmH(B):17.5s 0.7 μ m MLH(F)=5.4 LmV(B):17s 0.7 μ m MLV(F)=5.5
3.	+eiPKP	AB 00 53 19	<u>Tonga Islands</u> 15.93 S 173.94 W H = 00 33 54.3 h = 120 km MB = 5.4 D = 145.08 Az = 353.8 (USNOAA)
	e	A 53 42	PKPV(A):1.8s 270.0nm
	ei	AB 53 50	
	LmH	B 02 02.9	
	LmV	B 03.0	
3.	ePKP	A 03 53 11	<u>Tonga Islands</u> 16.21 S 174.62 W H = 03 33 34.7 h = normal MB = 5.2 D = 145.29 Az = 353.0 (USNOAA)
	eX	A 53 16	PKPV(A):1.2s 12.4nm XV(A):1.6s 49.5nm
3.	ePKIKP1	AB 07 20 15	<u>Solomon Islands</u> 7.93 S 158.72 E H = 07 01 11.9 h = 67 km MB = 5.9 D = 129.44 Az = 333.4 (USNOAA)
	ePKIKP2	A 20 16	h = 54 km
	epPKIKP	A 20 30	PKIKP1V(A):1.2s 10.2nm
	ePKS	B 23 38	PKIKP2V(A):1.6s 38.5nm
	epPKS	B 24 00	pPKIKPV(A):1.8s 74.3nm
	LmH	B 08 21.4	LmH(B):20s 1.9 μ m
	LmV	B 21.6	LmV(B):20s 1.9 μ m
3.	e(PKP)	A 13 35 03	<u>Loyalty Islands Region</u> 22.61 S 170.60 E H = 13 15 18.4 h = 21 km MB = - D = 147.56 Az = 334.8 (USNOAA)

Day	Phase	h m s	Remarks
3.	-iP	AB	22 42 39
	ipP	A	42 56
	eSKS	B	52 59
	e	B	53 00
	e	B	54 50
	LmH	B	23 27.3
	LmV	B	28.1
			<u>Northern Sumatra</u> 2.60 N 97.98 E H = 22 30 02.5 h = 38 km MB = 5.9 D = 85.69 Az = 320.4 (USNOAA) h = 63 km PV(A):1.3s 80.8nm MPV(A)=5.8 pPV(A):1.4s 144.0nm LmH(B):20s 0.4/um LmV(B):18s 0.2/um
4.	LmH	B	01 35.6
	LmV	B	45.8
			<u>West New Guinea Region</u> 4.6 S 134.0 E H = 00 32 06.4 h = normal MB = 5.2(USNOAA) D = 113.7 LmH(B):18s 0.9/um MLH(B)=5.4 LmV(B):20s 0.3/um MLV(B)=4.9
4.	eP	A	11 41 45.5
			<u>Fox Islands, Aleutian Is.</u> 53.33 N 166.86 W H = 11 29 59.6 h = 46 km MB = 4.8 D = 76.39 Az = 1.0 (USNOAA)
4.	LmH	B	13 33.1
	LmV	B	39.0
			<u>South of Honshu, Japan</u> 31.8 N 139.3 E H = 12 41 41.9 h = 29 km MB = 4.8(USNOAA) D = 85.8 LmH(B):13s 0.8/um MLH(B)=5.3 LmV(B):13s 0.5/um MLV(B)=5.2
4.	eP	A	17 36 07
			<u>Greece</u> 38.90 N 21.96 E H = 17 32 47.8 h = 65 km MB = 4.3(USNOAA) D = 13.9
4.	eiPKP	A	19 53 58.5
	eipPKP	A	54 12
			<u>Tonga Islands</u> 16.04 S 173.62 W H = 19 34 21.9 h = normal MB = 4.7 D = 145.22 Az = 354.2 (USNOAA) h = 48 km PKPV(A):0.8s 23.1nm pPKPV(A):1.2s 24.4nm

Day	Phase	h m s	Remarks
5.	-ePn	A	04 29 09.3
	+iPn	A	29 10.3
	e	A	29 37.5
	eiSn	A	30 30.5
	eSg	AB	31 16
	LmH	B	31.4
	LmV	B	33.0
			<u>Yugoslavia</u> 44.11 N 15.95 E H = 04 27 24.7 h = normal MB = 4.7 D = 7.17 Az = 337.3 (USNOAA) PnV(A):1.0s 94.5nm LmH(B):6.0s 1.3/um MLH(B)=4.1
5.	eP	A	05 39 25
			<u>Near Coast of Northern Peru</u> 9.24 S 78.91 W H = 05 25 57.6 h = 69 km MB = 5.6(USNOAA) D = 97.4 PV(A):1.3s 21.8nm MPV(A)=5.5
5.	-eP	AB	09 18 59.5
	e	A	19 06
	LmV	B	39.7
LmH	B	40.5	
			<u>North Atlantic Ridge</u> 11.86 N 43.74 W H = 09 08 59.4 h = normal MB = 5.2(USNOAA) D = 59.2 PV(A):1.3s 43.7nm MPV(A)=5.4 LmV(B):16s 0.4/um MLV(B)=4.7 LmH(B):20s 0.4/um MLH(B)=4.5
5.	eP	A	13 34 43
			<u>Costa Rica</u> 9.84 N 84.32 W H = 13 22 05.5 h = 56 km MB = 4.6(USNOAA) D = 86.2
5.	ePKIKP	A	13 48 04
			<u>Fiji Islands Region</u> 21.3 S 176.5 W H = 13 28 38.5 h = 219 km MB = 4.3(USNOAA) D = 150.0 PKIKPV(A):1.4s 11.6nm
6.	e	A	02 50 33
	LmH	B	03 29.3
	LmV	B	29.5
			<u>South of Honshu, Japan</u> 31.7 N 139.4 E H = 02 37 49.0 h = 29 km MB = 4.7(USNOAA) D = 86.0 LmH(B):14s 0.4/um MLH(B)=5.0 LmV(B):14s 0.2/um MLV(B)=4.7
6.	iPn	A	13 55 50
	iPg	A	56 07
			<u>Northern Italy</u> 46.93 N 10.53 E H = 13 54 54.9 h = normal MB = - (USNOAA)

Day	Phase	h m s	Remarks
cont.			
6.	i	A 13 56 08	D = 3.8
	iSn	A 56 38.5	
	iSg	A 57 02	
	i	A 57 03.5	
6.	ePKHKP	AB 21 41 36	<u>Tonga Islands Region</u> 22.97 S 175.37 W
	ePKP2	A 41 48	H = 21 21 44.6 h = 50 km MB = 5.0(USNOAA)
	LmH	B 22 57.0	D = 151.8
	LmV	B 59.0	LmH(E):18s 0.4/um MLH(E)=5.2 LmV(B):18s 0.3/um MLV(E)=5.1
6.	eP	A 22 17 19	<u>Norwegian Sea</u> 71.7 N 1.7 E
			H = 22 12 32 D = 21.6 (ANUSSR)
			Northeast of Jan Mayen, near 71 1/2 N 3 W
			H = 22 12 22 (UPP)
			D = 22.0
			PV(A):1.6s 11.0nm MPV(A)=4.0
7.	eP	A 01 55 20	<u>Kurile Islands Region</u> 43.77 N 148.35 E
	eX1	A 55 29	H = 01 43 19.0 h = normal MB = 5.0(USNOAA)
	eX2	A 55 31.5	D = 78.6
	LmH	B 02 28	PV(A):1.2s 21.0nm MPV(A)=5.1
	LmV	B 42	X2V(A):1.2s 32.5nm LmH(B):20s 0.5/um MLH(B)=4.8
7.	eP	A 04 57 26	<u>Turkey</u> 39.0 N 29.3 E
			H = 04 53 23 (BCIS)
			D = 17.1
7.	-eiPKIKP	AB 08 09 49.5	<u>Fiji Islands Region</u> 17.71 S 178.30 W
	+eiPKHKP	A 09 51.5	H = 07 51 12.0 h = 548 km MB = 5.5(USNOAA)
	eiPKP2	A 09 54.4	D = 146.2
	epPKP	AB 12 02.5	PKIKPV(A):1.6s 38.5nm
	eSKP	E 12 44	PKHKPV(A):1.6s 192.0nm
	ei(sSS)	E 35 00	pPKPV(A):1.6s 60.4nm

Day	Phase	h m s	Remarks
7.	ePKP	A 08 53 44	<u>Fiji Islands Region</u> 15.55 S 177.06 W
			H = 08 34 56.3 h = 416 km MB = 4.6(USNOAA)
			D = 144.2
			PKPV(A):1.1s 10.1nm
7.	eP	A 13 52 25	<u>Kurile Islands Region</u> 43.63 N 148.40 E
			H = 13 40 23.4 h = normal MB = 4.5
			D = 78.86 Az = 333.6 (USNOAA)
7.	eP	A 14 45 57.5	<u>Kurile Islands</u> 48.12 N 153.36 E
			H = 14 34 18.4 h = 110 km MB = 4.8(USNOAA)
			D = 76.2
			PV(A):1.1s 20.1nm MPV(A)=4.8
7.	eP	AB 16 46 30	<u>Bonin Islands Region</u> 27.29 N 141.74 E
	e	A 46 47	H = 16 33 29.2 h = normal MB = 5.4(USNOAA)
	ePP	A 50 06	D = 90.7
	e	A 50 14	PV(A):2.0s 42.7nm MPV(A)=5.4
	eSKS	B 57 00	LmH(B):15s 1.9/um MLH(B)=5.6
	eS	B 57(24)	LmV(B):13s 1.5/um MLV(B)=5.6
	eSP	B 58 25	
	ePS	B 58 30	
	LmH	B 17 27.1	
	LmV	B 33.7	
7.	ePKHKP	A 19 25 35	<u>South of Fiji Islands</u> 22.56 S 179.09 E
			H = 19 06 49.3 h = 583 km MB = 4.7(USNOAA)
			D = 150.3
8.	ePn	A 04 28 56	<u>Northern Italy</u> 44.67 N 12.82 E
	ePg	A 29 28	H = 04 27 27.4 h = 27 km MB = 4.2(USNOAA)
	iSn	A 30 05	D = 6.0
	eSg	A 30 49	
	LmH	B 31.9	
	LmV	B 31.9	
8.	eP	A 09 13 19	<u>Kyushu, Japan</u> 30.63 N 129.99 E
	e	A 14 04	H = 09 01 08.3 h = 120 km MB = 5.1(USNOAA)
	e(PS)	B 24 20	D = 82.5

Day	Phase	h m s	Remarks
cont.			
8.	LmH B	09 49.0	PV(A):1.8s 67.5nm MPV(A)=5.1
	LmV B	55.0	
8.	eX A	11 55 02	<u>Northern Sinkiang Prov., China</u>
	LmH B	12 11.1	44.31 N 81.21 E
	LmV B	14.5	H = 11 46 31.3 h = normal MB = 4.7 D = 45.88 Az = 303.8 (USNOAA) XV(A):1.2s 20.4nm LmH(B):7.5s 0.7/um MLH(B)=5.0
8.	e A	12 16 45	Probably <u>Southern Greece</u> (USNOAA)
	e A	16 50.5	
	e A	16 56	
8.	eP A	14 39 47	<u>Kurile Islands</u> 44.56 N 148.46 E H = 14 27 51.2 h = normal MB = 4.4(USNOAA)
8.	ePKP A	17 17 10.5	<u>Fiji Islands Region</u> 17.53 S 179.09 W H = 16 58 32.7 h = 558 km MB = 4.1(USNOAA) D = 145.8
8.	eP A	21 18 12	<u>Molucca Passage</u> 1.15 N 126.11 E
	e A	18 18	H = 21 04 05.9 h = 24 km MB = 5.8(USNOAA)
	e B	18 24	D = 104.5
	ePP AB	22 34	PV(A):1.7s 30.3nm MPV(A)=5.9
	e A	22 40	SH(B):9s 0.65/um MSH(B)=6.1
	e A	22 44.5	LmH(B):21s 2.9/um MLH(B)=5.8
	eSKS B	28 46	LmV(B):16s 1.8/um MLV(B)=5.7
	eS B	30 00	
	LmH B	22 04.8	
	LmV B	11.3	
9.	LmH B	11 57.4	<u>South Pacific Cordillera</u>
	LmV B	57.5	62.80 S 160.51 W H = 10 16 04.6 h = normal MB = 5.2(USNOAA) D = 167.0 LmH(B):20s 0.7/um MLH(B)=5.5 LmV(B):20s 0.4/um MLV(B)=5.3

Day	Phase	h m s	Remarks
9.	e A	20 11 27	<u>United Kingdom</u> 54.47 N 2.39 W
	eSn A	12 58.5	H = 20 09 00.5 h = normal MB = 4.0 D = 9.35 Az = 108.5 (USNOAA)
10.	-iPKP AB	11 53 28.5	<u>Tonga Islands</u> 16.47 S 174.05 W H = 11 33 55.7 h = 60 km MB = 5.0 D = 145.61 Az = 353.6 (USNOAA) PKPV(A):1.2s 87.3nm
10.	ePKP AB	15 34 33	<u>New Hebrides Islands</u> 13.87 S 166.79 E
	e A	34 41.5	H = 15 15 19.5 h = 46 km MB = 6.0
	ePP AB	37 32	D = 138.15 Az = 336.4 (USNOAA)
	eiSKP AB	38 20	SKPV(A):1.0s 51.1nm
	ePS B	47 45	SS2H(B):24s 14.6/um
	e B	50 00	PSPS2H(B):25s 27.4/um
	e(SS2) B	16 08 52	LmH(B):20s 6.0/um MLH(B)=6.3
	e(PSPS2) B	13 09	LmV(B):18s 6.6/um MLV(B)=6.4
	LmH B	37.7	
	LmV B	44.1	
10.	-iPn A	16 40 29	<u>Yugoslavia</u> 44.15 N 16.15 E
	ePg A	40 57	H = 16 38 43.2 h = 27 km MB = 4.2
	iSn A	41 51	D = 7.19 Az = 336.3 (USNOAA)
	e(Sg) A	42 24	PnV(A):0.8s 100.0nm
	e A	42 32	
	LmH B	42.7	
	LmV B	42.7	
11.	eP A	01 15 21	<u>Kashmir-Tibet Border Region</u> 34.10 N 79.33 E H = 01 06 19.3 h = normal MB = 4.8 D = 50.90 Az = 310.6 (USNOAA)
11.	+eP1 AB	03 58 28.5	<u>North of Ascension Island</u>
	iP2 A	58 36.5	1.11 S 13.87 W
	ePP AB	04 00 29	H = 03 48 52.4 h = normal MB = 5.4
	e A	00 37	D = 55.96 Az = 19.3 (USNOAA)
	ePPP B	01 38	P1V(A):1.6s 121.0nm MP1V(A)=5.7
	eS B	06 08	P1V(B):12s 1.1/um MP1V(B)=5.8

Day	Phase	h m s	Remarks
cont.			
11.	ei	B 04 06 19	P2V(A):1.5s 226.0nm MP2V(A)=6.0 PPV(B):10s 0.9/um MPPV(B)=5.8 SH(B):13s 5.9/um MSH(B)=6.3 LmH(B):19s 16.8/um MLH(B)=6.2 LmV(B):18s 15.4/um MLV(B)=6.2
	LmH	B 21.7	
	LmV	B 23.4	
11.	ePKP	A 08 53 35.5	<u>Fiji Islands Region</u> 17.74 S 178.74 W H = 08 35 01.0 h = 609 km MB = 4.1 D = 146.14 Az = 348.2 (USNOAA) PKPV(A):1.0s 11.6nm
11.	ePKIKP	A 10 28 54	<u>New Hebrides Islands</u> 14.16 S 166.61 E H = 10 09 27.9 h = normal MB = 5.1 D = 138.34 Az = 336.1 (USNOAA) PKIKP(A):1.4s 18.6nm
11.	ePKIKP	AB 10 41 35	<u>New Hebrides Islands</u> 14.12 S 166.65 E H = 10 22 20.0 h = normal MB = 6.2 D = 138.33 Az = 336.2 (USNOAA)
	eX1	A 41 39	
	iX2	A 41 48	
	ei	B 42 10	X1V(A):1.6s 30.2nm
	eiPP	AB 44 32	X2V(A):3.0s 526.0nm
	iPKS	A 45 21	LmH(B):20s 27.0/um MLH(B)=6.9
	i	B 45 24	LmV(B):21s 30.3/um MLV(B)=7.0
	i	A 45 29	
	ePS	B 54 48	
	LmH	B 11 44.8	
	LmV	B 45.0	
11.	LmH	B 18 27.0	Probably <u>West New Guinea Region</u> (USNOAA) LmH(B):20s 0.2/um
11.	eP	A 18 36 43.5	<u>Southwestern Ryukyu Islands</u> 25.26 N 125.75 E H = 18 24 13.8 h = 60 km MB = 5.0 D = 84.75 Az = 324.3 (USNOAA) PV(A):1.8s 33.8nm MPV(A)=5.1
	e	A 36 49	
	e	A 37 02	
	e	A 37 11	

Day	Phase	h m s	Remarks
11.	eP	A 20 11 15.5	<u>Off Coast of Costa Rica</u> 8.92 N 84.64 W
	epP	A 11 21.5	H = 19 58 32.4 h = normal MB = 4.8 D = 87.12 Az = 39.3 (USNOAA) PV(A):2.0s 25.6nm MP1V(A)=5.2 pPV(A):1.9s 37.9nm
11.	ePP	AB 20 30 30	<u>South Sandwich Islands Region</u> 60.61 S 25.40 W
	eSP	B 40 16	
	ePS	B 40 28	H = 20 10 52.5 h = normal MB = 6.0(USNOAA)
	eSPP	B 41 06	D = 114.8
	ePPS	B 41 16	PPV(A):1.9s 68.2nm MPPV(A)=6.1
	LmV	B 21 13.9	LmV(B):20s 0.8/um MLV(B)=5.3
	LmH	B 14.0	LmH(B):20s 0.7/um MLH(B)=5.3
12.	ePKP	B 01 00 04	<u>New Hebrides Islands</u> 13.93 S 166.51 E
	e	A 00 12	H = 00 40 42.9 h = 39 km MB = 5.4
	ePP	B 02 50	D = 138.09 Az = 336.1 (USNOAA)
	eSKP	A 03 38	SKPV(A):1.5s 25.1nm
	LmH	B 59.2	LmH(B):20s 1.2/um MLH(B)=5.6
	LmV	B 02 09.0	LmV(B):20s 1.9/um MLV(B)=5.8
12.	ePKIKP	A 01 58 50	<u>New Hebrides Islands</u> 13.86 S 166.49 E
	e	AB 58 58	H = 01 39 36.7 h = 43 km MB = 5.8
	e	A 59 00	D = 138.02 Az = 336.2 (USNOAA)
	e	A 59 11	LmH(B):19.5s 4.5/um MLH(B)=6.2
	ePP	AB 02 01 44	LmV(B):18s 4.7/um MLV(B)=6.3
	e	A 02 31	
	LmH	B 03 07.6	
	LmV	B 08.0	
12.	ePKIKP	A 08 40 47	<u>New Hebrides Islands</u> 13.91 S 166.67 E
	eSKP	A 44 20	H = 08 21 24.4 h = 42 km MB = 5.1 D = 138.14 Az = 336.3 (USNOAA) PKIKPV(A):1.5s 15.1nm SKPV(A):1.4s 18.6nm
12.	ePKHKP	A 09 25 10	<u>New Hebrides Islands</u> 14.15 S 166.69 E
	ePKIKP	A 25 16	H = 09 05 48.9 h = 37 km MB = 5.2
	eSKP	A 28 47	D = 138.36 Az = 336.2 (USNOAA)

Day	Phase	h m s	Remarks
12.	eP AB	09 36 49	<u>Nicaragua</u> 12.02 N 86.54 W H = 09 24 11.5 h = normal MB = 5.9 D = 85.92 Az = 39.2 (USNOAA) PV(A):4.0s 435.0nm MPV(A)=6.1
	e A	36 14	
	e A	36 25	
	ePP A	40 17	
	e AB	40 30	LmH(B):18.5s 25.8/um MLH(B)=6.6
	e A	40 41	LmV(B):18.5s 32.5/um MLV(B)=6.8
	eS B	47 20	
	eSSS B	56 30	
	LmH B	10 14.5	
	LmV B	14.7	
12.	eP A	10 37 03.5	<u>Nicaragua</u> 12.05 N 86.54 W H = 10 24 23.9 h = normal MB = 5.6 D = 85.89 Az = 39.2 (USNOAA)
	e A	37 16.5	
	e A	37 34.5	
12.	ePKIKP A	12 54 16	<u>New Hebrides Islands</u> 14.10 S 166.37 E H = 12 34 51.4 h = 28 km MB = 4.9 D = 138.19 Az = 336.0 (USNOAA)
12.	eP A	18 55 40	<u>Northeast of Taiwan</u> 24.96 N 124.67 E H = 18 43 14.9 h = 87 km MB = 5.2 D = 84.42 Az = 323.9 (USNOAA) PV(A):1.0s 17.7nm MPV(A)=5.0
	LmH B	19 31.5	
	LmV B	38.6	
12.	+eP A	22 58 13	<u>Kurile Islands</u> 44.07 N 147.84 E H = 22 46 19.0 h = 69 km MB = 5.2 D = 78.28 Az = 333.3 (USNOAA) PV(A):0.9s 37.0nm MPV(A)=5.3
13.	ePKHKP A	00 42 33.5	<u>South Of Fiji Islands</u> 25.82 S 176.98 W H = 00 22 43.0 h = 90 km MB = 5.1 D = 154.35 Az = 347.3 (USNOAA)
	ePKP2 A	42 47	
13.	eP diff A	04 36 43.5	<u>Sumbawa Island Region</u> 8.88 S 117.98 E H = 04 22 38.5 h = 117 km MB = 6.0 D = 107.19 Az = 320.3 (USNOAA) PV(A):1.6s 19.2nm MPV(A)=6.0
	e A	40 02	
	ePKIKP A	40 48	
	e(PP) A	41 12	
	e B	46 06	PcPPKP(A):1.8s 33.8nm
	ePcPPKP A	56 15	
	e A	56 25	

Day	Phase	h m s	Remarks
13.	e A	07 11 29	<u>Burma-India Border Region</u> 24.70 N 93.92 E H = 07 00 41.6 h = 40 km MB = 4.7 D = 66.55 Az = 316.5 (USNOAA)
13.	eP A	15 53 19	<u>North Atlantic Ridge</u> 48.97 N 28.37 W H = 15 47 50.5 h = normal MB = 4.5 D = 25.65 Az = 71.0 (USNOAA) XV(A):1.6s 16.5nm
	eX A	53 28	
13.	eP A	19 36 24	<u>Lake Baikal Region</u> 51.82 N 105.49 E H = 19 26 55.5 h = normal MB = 4.7 D = 54.70 Az = 308.9 (USNOAA) PV(A):1.0s 15.7nm MPV(A)=5.0
	epP A	36 31.5	
	LmH B	20 02.7	
	LmV B	02.7	pPV(A):1.8s 40.5nm LmH(B):14s 2.2/um MLH(B)=5.3 LmV(B):14.5s 2.7/um MLV(B)=5.5
13.	eP A	22 56 19.5	<u>Near East Coast of Kamchatka</u> 53.66 N 160.36 E H = 22 44 52.3 h = normal MB = 4.6 D = 72.79 Az = 339.8 (USNOAA) PV(A):0.8s 11.5nm MPV(A)=4.9
13.	LmH B	24 25.6	<u>Mariana Islands</u> 14.1 N 146.5 E H = 23 27 05.7 h = 46 km MB = 5.4(USNOAA) D = 104.5 LmH(B):16.5s 0.8/um MLH(B)=5.3 LmV(B):14.5s 0.8/um MLV(B)=5.6
	LmV B	37.5	
14.	eP A	03 50 05.5	<u>Central Alaska</u> 64.89 N 147.80 W H = 03 39 33.5 h = 19 km MB = 5.0 D = 63.70 Az = 14.5 (USNOAA) PV(A):1.4s 23.3nm MPV(A)=5.2
	epP A	50 12.5	
14.	e A	06 41 30	Probably <u>Northern California</u> (USNOAA)

Day	Phase	h m s	Remarks
14.	ePKP A	13 27 09	<u>Tonga Islands</u> 16.25 S 172.97 W H = 13 07 31.5 h = normal MB = 4.6 D = 145.49 Az = 354.8 (USNOAA) PKPV(A):1.7s 27.3nm
14.	ePn A	13 30 15	<u>Czechoslovakia, explosion</u>
	i(Sg) A	30 38.5	50.62 N 14.35 E
	i A	30 43	H = 13 h 29 min yield 7.6 to D = 1.74 Az = 272 (PRU)
15.	ePKP A	02 01(25)	<u>Fiji Islands Region</u> 16.71 S 177.11 W
	e(pPKP) A	01 30	H = 01 41 48.3 h = 50 km MB = 4.7 D = 145.43 Az = 350.2 (USNOAA) (pPKP)V(A):1.2s 16.2nm
15.	ePKP A	05 02 32.5	<u>Fiji Islands Region</u> 16.98 S 177.18 W
	e A	02 39.5	H = 04 42 55.1 h = normal MB = 5.3 D = 145.68 Az = 350.1 (USNOAA) PKPV(A):1.4s 23.2nm
15.	ePKHKP A	07 20 24	<u>South of Fiji Islands</u> 25.88 S 177.08 W
	ePKP2 A	20 35	H = 07 00 32.4 h = 99 km MB = 4.6 D = 154.38 Az = 347.1 (USNOAA)
16.	ePn A	10 48 27.5	<u>Ionian Sea</u> 37.94 N 16.49 E
	ei A	48 38	H = 10 45 21.4 h = 52 km MB = 4.3
	i A	48 49	D = 13.17 Az = 346.3 (USNOAA)
	e A	51 29	
	LmH B	54.0	
	LmV B	56.0	
17.	e A	02 45 26	<u>Albania</u> 41.6 N 19.9 E
	eSn A	47 12	H = 02 42 36 (BCIS)
	e A	48 02	D = 10.75
18.	ePn A	04 26 51	<u>Switzerland</u> 46.4 N 7.5 E
	e A	27 00	H = 04 25 33 (BCIS)
	eiPb A	27 06	D = 5.09

Day	Phase	h m s	Remarks
cont.			
18.	eiPg A	04 27 14	LmH(B):7.0s 0.8/um MLH(B)=3.5
	eSg AB	28 10	LmV(E):7.0s 1.0/um
	i AB	28 14	
	LmH B	28.85	
	LmV B	28.85	
17.	e A	04 27 41	<u>Albania</u> 41.6 N 19.9 E
			H = 04 22 19 (BCIS)
			D = 10.75
18.	-eiP A	17 05 11	<u>Celebes Sea</u> 4.54 N 123.02 E
	ePP AB	09 29	H = 16 52 25.3 h = 561 km MB = 5.7 D = 99.85 Az = 323.0 (USNOAA) PV(A):1.3s 39.3nm MPV(A)=5.7 PPV(A):1.3s 39.3nm MPPV(A)=5.5
18.	eP A	17 43 29	<u>Greece</u> 39.21 N 21.85 E
	e A	43 38	H = 17 40 16.4 h = 31 km MB = 4.6
	e A	44 14	D = 13.53 Az = 331.1 (USNOAA)
	LmH B	49.3	LmH(B):13s 1.0/um MLH(B)=4.1
	LmV B	49.3	LmV(B):12s 1.1/um
18.	+eiP1 A	18 03 02.5	<u>Southern Alaska</u> 60.70 N 145.38 W
	iP2 AB	03 03	H = 17 52 06.3 h = 16 km MB = 5.6
	e AB	03 10	D = 67.47 Az = 15.6 (USNOAA)
	e AB	05 31	P2V(A):1.0s 181.0nm MP2V(A)=6.3
	ePP B	05 40	P2V(E):4s 1.04/um MP2V(E)=6.4
	eS B	11 57	PPV(E):10s 1.02/um MPPV(E)=6.2
	e B	12 08	LmH(B):17s 3.8/um MLH(B)=5.7
	eSS B	16 24	LmV(B):15s 3.0/um MLV(B)=5.7
	ePKPPKP A	31 29	
	LmH B	38.4	
	LmV B	39.0	
18.	eSn A	18 45 50	<u>Italy</u> 43.3 N 11.6 E
	e A	47 36	H = 18 42 45 (BCIS)
			D = 7.40

Day	Phase	h m s	Remarks
19.	eP1	A 02 04 30	<u>Albania</u> 41.10 N 19.77 E
	iP2	A 04 33.5	H = 02 01 53.1 h = normal MB = 5.2
	iP3	A 04 40	D = 11.10 Az = 332.0 (USNOAA)
	iP4	AB 04 43.5	P1V(A):1.0s 27.6nm MP1V(A)=5.4
	ei	A 05 32	P2V(A):1.0s 59.0nm MP2V(A)=5.8
	eS	B 06 31	P3V(A):0.9s 80.0nm MP3V(A)=6.0
	LmH	B 08.4	P4V(A):1.2s 173.0nm MP4V(A)=6.2
	LmV	B 09.6	LmH(B):17s 22.8/um MLH(B)=5.2 LmV(B):16s 18.2/um
19.	e	A 03 16 46	<u>Near East Coast of Honshu, Japan</u> 39.47 N 142.91 E H = 03 04 29.2 h = normal MB = 4.7 D = 80.62 Az = 331.0 (USNOAA)
19.	e	A 05 17 31.5	Probably <u>Poland</u> (ISC)
19.	eP	A 10 09 08	<u>Off East Coast of Kamchatka</u> 52.86 N 159.43 E H = 09 57 40.2 h = 55 km MB = 4.7 D = 73.35 Az = 339.3 (USNOAA) PV(A):1.2s 10.2nm MPV(A)=4.7
19.	eP	A 12 21(42)	<u>Central Italy</u> 43.24 N 11.06 E H = 12 19 54.5 h = normal MB = 5.1 D = 7.42 Az = 2.7 (USNOAA)
20.	ePKHKP	A 13 12(46)	<u>Loyalty Islands Region</u> 22.31 S 171.49 E H = 12 53 13.0 h = 100 km MB = 5.2 D = 147.63 Az = 335.8 (USNOAA)
	ePKP2	A 12 51	
20.	e(P)	A 15 36 41.5	<u>Southern Iran</u> 29.28 N 51.62 E H = 15 29 52.2 h = 33 km MB = 4.4(USNOAA)
	LmH	B 58.0	D = 36.7
	LmV	B 58.0	
21.	+iP	A 00 55 54	<u>Kurile Islands</u> 45.82 N 150.06 E
	e	A 56 00	H = 00 44 06.4 h = 80 km MB = 5.2

Day	Phase	h m s	Remarks
cont.			
21.	e	A 00 56 06	D = 77.40 Az = 334.4 (USNOAA) PV(A):1.1s 50.4nm MPV(A)=5.3
21.	ePKP	A 08 57 57	<u>Samoa Islands Region</u> 14.62 S 175.67 W H = 08 38 22.3 h = normal MB = 5.3 D = 143.58 Az = 352.2 (USNOAA)
21.	eP	A 12 09 42	<u>Southern Alaska</u> 60.81 N 142.50 W H = 11 58 50.0 h = 14 km MB = 4.5 D = 66.96 Az = 17.6 (USNOAA)
	e	A 09 48	
21.	eP	A 15 33 47.5	<u>Hindu Kush Region</u> 36.12 N 68.46 E H = 15 25 56.8 h = 98 km MB = 5.2 D = 42.74 Az = 308.2 (USNOAA)
22.	eP1	A 11 38 44	<u>Off East Coast of Kamchatka</u> 53.55 N 161.35 E H = 11 27 15.3 h = normal MB = 5.1 D = 73.10 Az = 340.4 (USNOAA) P1V(A):0.8s 23.1nm MP1V(A)=5.2 P2V(A):0.9s 38.9nm MP2V(A)=5.4
	eP2	A 38 46	
22.	eP	A 12 08 05	<u>Greece</u> 38.07 N 20.00 E H = 12 04 48.2 h = normal MB = 4.6 D = 13.92 Az = 337.3 (USNOAA)
	e	A 08 15	LmH(B):13s 0.6/um MLH(B)=3.9
	LmH	B 13.3	LmV(B):12s 0.7/um
	LmV	B 14.4	
23.	eP	A 03 45 14.5	<u>Ascension Island Region</u> 7.11 S 11.85 W H = 03 35 01.3 h = normal MB = 4.9 D = 61.00 Az = 16.9 (USNOAA) PV(A):1.2s 12.2nm MPV(A)=4.9
23.	ePKIKP	A 05 17 08.5	<u>Fiji Islands Region</u> 17.79 S 178.78 W H = 04 58 31.5 h = 560 km MB = 5.0 D = 146.18 Az = 348.1 (USNOAA) PKHKPV(A):1.2s 34.6nm
	ePKHKP	A 17 10	

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Day	Phase	h m s	Remarks
23.	eP1	AB 11 13 12.5	<u>North Atlantic Ocean</u> 53.14 N 35.10 W
	eP2	A 13 14.5	H = 11 07 18.4 h = normal MB = 5.0
	ePP	E 14 50	D = 28.54 Az = 75.9 (USNOAA)
	eS	B 17 50	P1V(A):1.4s 14.0nm MP1V(A)=4.5
	ei	B 18 04	P2V(A):1.6s 27.5nm MP2V(A)=4.7
	LmH	B 24.3	LmH(B):16s 2.7/um MLH(B)=5.0
	LmV	B 24.3	LmV(B):16s 2.6/um MLV(B)=5.0
23.	ePn	A 11 40(40)	<u>Albania</u> 40.9 N 20.2 E
	e(Sg)	A 44 03	H = 11 37 45 (BCIS) D = 11.50
23.	eP	A 19 05 42.5	<u>Southern Sumatra</u> 1.83 S 100.18 E
	e	A 05 52	H = 18 52 46.1 h = 69 km (ISC) D = 90.5
24.	eX	A 07 14 02	<u>West of Macquarie Island</u> 58.99 S 149.3 E H = 06 53 31 h = 15 km D = 154.60 Az = 270 (ISC) XV(A):1.0s 7.9nm
24.	ePKHKP	A 09 52 46.5	<u>South of Fiji Islands</u> 25.81 S 177.12 W
	ePKP2	A 53 00	H = 09 32 52.6 h = 63 km MB = 5.2
	ePP	A 56 46	D = 154.31 Az = 347.1 (USNOAA) PKHKPV(A):1.6s 11.0nm PKP2V(A):1.6s 30.1nm
24.	ePKIKP	AB 12 50 20	<u>South Pacific Cordillera</u>
	ePKHKP	A 50(42)	56.59 S 142.48 W
	-iPKP2	AB 51 13.5	H = 12 30 19.5 h = normal MB = 5.9
	PKP2max	A 51 17	D = 163.58 Az = 100.3 (USNOAA)
	ePP	AB 54 57	PKIKPV(A):1.5s 27.6nm
	ePPP	AB 58 49	PKHKPV(A):2.8s 193.0nm
	e	A 13 00 41	PKP2maxV(A):2.4s 456.0nm
	eX	A 01 30.5	PPV(A):2.5s 322.0nm
	iSS	B 15 32	XV(A):1.2s 20.3nm
	LmH	B 14 10.8	

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Day	Phase	h m s	Remarks
24.	eP	A 16 41(10)	<u>Turkey</u> 38.32 N 39.31 E H = 16 36 03.2 h = normal MB = 4.4 D = 23.13 Az = 311.1 (USNOAA)
25.	ePn1	A 01 42 17.5	<u>Yugoslavia</u> 43.29 N 18.41 E
	ePn2	A 42 21.5	H = 01 40 09.6 h = 10 km MB = 5.2
	e	A 43 41.5	D = 8.70 Az = 330.1 (USNOAA)
	iSn	A 43 47.5	Pn1V(A):0.8s 50.0nm
	i	A 44 22.5	Pn2V(A):0.9s 151.5nm
	i	A 44 26.5	LmH(B):12s 8.0/um MLH(B)=4.5
	LmV	B 45.8	LmV(B):10s 3.8/um
25.	eP	A 03 54 54	<u>Kurile Islands</u> 45.52 N 149.99 E H = 03 43 01.6 h = 50 km MB = 4.8 D = 77.65 Az = 334.3 (USNOAA) PV(A):1.0s 13.8nm MPV(A)=4.9
25.	ePKP	A 05 08 32	<u>Samoa Islands Region</u> 16.56 S 172.84 W H = 04 48 53.0 h = 22 km MB = 4.7 D = 145.81 Az = 355.0 (USNOAA) PKPV(A):1.2s 26.4nm
25.	ePKP2	A 12 05 50.5	<u>South of Fiji Islands</u> 24.35 S 179.93 E H = 11 46 38.7 h = 488 km MB = 5.0 D = 152.24 Az = 343.9 (USNOAA) PKP2V(A):0.6s 15.3nm
26.	eP	AB 15 24 38.5	<u>Luzon, Philippine Islands</u>
	eipP	A 24 50	18.02 N 120.48 E
	ei	AB 24 55	H = 15 11 54.9 h = 58 km MB = 5.5
	ei	A 25 07.5	D = 87.64 Az = 323 (ISC)
	e	B 28 20	PV(A):2.4s 96.7nm MPV(A)=5.6
	eSKS	B 35 00	LmV(B):13s 1.9/um MLV(B)=5.6
	eiS	B 35 15	LmH(B):17s 2.5/um MLH(B)=5.7
	eSS	B 41 10	
	LmV	B 16 06.7	
	LmH	B 07.1	

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Day	Phase	h m s	Remarks	
26.	ePKIKP eiPKHKP ePKP2	A A A	18 33(08) 33 12.5 33 17.5	<u>Fiji Islands Region</u> 20.09 S 178.08 W H = 18 14 26.5 h = 550 km MB = 4.7 D = 148.55 Az = 348.1 (USNOAA) PKHKPV(A):0.8s 17.3nm
26.	eP e LmH LmV	A A B B	21 07 11 07 20 51.0 51.0	<u>Off East Coast of Honshu, Japan</u> 34.78 N 141.60 E H = 20 54 43.0 h = 45 km MB = 5.0 D = 84.20 Az = 330.6 (USNOAA) PV(A):1.4s 9.3nm MPV(A)=4.7 LmH(B):15s 1.1/um MLH(B)=5.4 LmV(B):14s 0.8/um MLV(B)=5.3
27.	ePKHKP ePKP2	A A	13 20 20 20 27	<u>Fiji Islands Region</u> 21.80 S 179.63 W H = 13 01 38.7 h = 640 km MB = 4.7 D = 149.88 Az = 345.7 (USNOAA)
27.	eP	A	16 41 32	<u>Philippine Islands Region</u> 19.92 N 121.76 E H = 16 28 47.1 h = 33 km MB = 5.1(USNOAA) D = 86.8
27.	ePKP eX LmH LmV	AB A B B	16 41 59.5 41 09 17 49.9 50.0	<u>Tonga Islands</u> 15.22 S 173.28 W H = 16 22 24.7 h = 23 km MB = 5.4 D = 144.44 Az = 354.6 (USNOAA) PKPV(A):2.0s 68.4nm PKPV(B):10s 1.3/um XV(A):1.8s 81.0nm LmH(B):18s 2.2/um LmV(B):20s 1.0/um
27.	eP1 eP2 ePP e eSKS eiS	AB A AB B B B	19 57 36 57 42 20 01 02.5 01 11 08 04 08 25	<u>Near Coast of Oaxaca, Mexico</u> 15.41 N 95.60 W H = 19 44 42.0 h = 31 km MB = 5.5 D = 88.75 Az = 37.5 (USNOAA) P1V(B):8s 0.7/um MP1V(B)=6.0 P2V(A):2.0s 128.0nm MP2V(A)=5.9

Day	Phase	h m s	Remarks	
cont.				
27.	LmH LmV	B B	20 39.0 40.0	PPV(B):7s 0.33/um MPPV(B)=5.9 SH(B):11.5s 2.1/um MSH(B)=6.1 LmH(B):17.5s 2.2/um MLH(B)=5.6 LmV(B):19s 2.4/um MLV(B)=5.7
27.	ePKP e	A A	20 31 25.5 31 33	<u>Tonga Islands</u> 15.21 S 173.22 W H = 20 11 52.0 h = normal MB = 5.1 D = 144.45 Az = 354.7 (USNOAA)
28.	eP +iPKIKP +i ePP eSKS e ePS eSS LmH LmV	A AB A AB B B B B B B	01 18 12 21 39 21 41.8 23 17 28 30 30 44 33 03 40 12 02 13.5 17.8	<u>New Ireland Region</u> 4.57 S 153.06 E H = 01 02 49.0 h = 88 km MB = 5.9(USNOAA) D = 123.8 PKIKPV(A):2.0s 128.0nm PPV(B):9s 2.0/um MPPV(B)=6.2 LmH(B):22s 8.8/um MLH(B)=6.4 LmV(B):21s 7.2/um MLV(B)=6.3
28.	eP eX	A A	01 34 46 34 57	<u>India-East Pakistan Border Region</u> 24.66 N 91.67 E H = 01 24 04.4 h = 17 km MB = 4.9 D = 65.17 Az = 316.3 (USNOAA) PV(A):0.9s 9.7nm MPV(A)=5.0 XV(A):1.0s 11.8nm
28.	ePKIKP ePKHKP ePKP2 e e ePP e	A A A A A A A	10 25 58.5 26 11.5 26 42 26 55 29 40 30 25 30 36	<u>South of Kermadec Islands</u> 33.86 S 179.82 W H = 10 06 08.8 h = 90 km MB = 5.6 D = 161.25 Az = 336.9 (USNOAA) PKIKPV(A):2.0s 42.8nm
28.	ePKP e	A A	14 21 03.5 21 11.5	<u>Tonga Islands</u> 15.12 S 173.40 W H = 14 01 29.9 h = normal MB = 5.3 D = 144.33 Az = 354.5 (USNOAA) PKPV(A):1.3s 21.8nm

Day	Phase	h m s	Remarks
28.	ePKP A	14 36 02	<u>Tonga Islands</u> 15.06 S 173.17 W H = 14 16 23.1 h = 33 km MB = 5.0 D = 144.30 Az = 355 (ISC)
28.	eP A	18 34 50	<u>Luzon, Philippine Islands</u> 18.63 N 120.99 E H = 18 22 02.9 h = 23 km MB = 5.1 D = 87.45 Az = 323.0 (USNOAA) PV(A):1.9s 30.3nm MPV(A)=5.2
28.	ePb A	20 52 52.5	<u>Italy</u> 44.6 N 10.9 E H = 20 50 59 (BCIS) D = 6.12
	ePg A	53 05.5	
	eSn A	53 34	
	e A	53 40	
	eSg A	54 17	
	e A	54 20	
29.	iP AB	01 54 52.8	<u>Near West Coast of Honshu, Japan</u> 36.99 N 136.75 E H = 01 43 12.2 h = 284 km MB = 5.2 D = 80.29 Az = 328.1 (USNOAA) PV(A):1.2s 85.4nm MPV(A)=5.4
	epP A	56 04	
	ePP A	57 58	
29.	eP A	03 11 56	<u>Venezuela</u> 7.59 N 71.93 W H = 02 59 43.0 h = 26 km MB = 4.6 D = 80.08 Az = 40.0 (USNOAA)
29.	ePn A	10 44(48)	<u>Albania</u> 41.45 N 19.42 E H = 10 42 17.5 h = 38 km MB = 4.4 D = 10.67 Az = 332.1 (USNOAA)
	e A	44 55	
	eSn A	46 47	
29.	+eP1 A	15 10 20	<u>Eastern Russia</u> 51.10 N 135.26 E H = 14 59 22.6 h = normal MB = 5.4 D = 67.90 Az = 325.1 (USNOAA) P1V(A):1.2s 48.8nm MP1V(A)=5.5 P2V(A):1.3s 78.5nm MP2V(A)=5.6 LmH(B):16s 0.9 μ m MLH(B)=5.1 LmV(B):12s 0.7 μ m MLV(B)=5.1
	iP2 A	10 22	
	LmH B	39.2	
	LmV B	45.3	

Day	Phase	h m s	Remarks
29.	iPg A	16 00 21	Explosion <u>Bischhofsheim/Rhön, Fed. Rep. Germany</u> 50°25.29'N 10°01.71'E H = 16 00 01.51 yield 5.1 to (Hannover) D = 1.1
	iSg A	00 36	
	i A	00 37	
29.	ePKP A	20 41 55.5	<u>Tonga Islands</u> 16.77 S 174.05 W H = 20 22 22.5 h = 64 km MB = 4.7 D = 145.90 Az = 353.6 (USNOAA) PKPV(A):1.2s 32.5nm
30.	ePKIKP A	00 47 53	<u>New Ireland Region</u> 4.77 S 153.37 E H = 00 29 00.1 h = 60 km MB = 5.0 D = 124.19 Az = 331.5 (USNOAA) PKIKPV(A):1.3s 21.8nm
30.	+eP AB	00 50 15	<u>Off East Coast of Kamchatka</u> 52.09 N 159.65 E H = 00 38 40.1 h = normal MB = 5.2 D = 74.12 Az = 339.5 (USNOAA) PV(A):2.5s 161.0nm MPV(A)=5.6 LmH(B):16s 2.3 μ m MLH(B)=5.6 LmV(B):15s 1.7 μ m MLV(B)=5.5
	ePcP B	50 28	
	eS B	59 46	
	e B	59 54	
	LmH B	01 28.2	
	LmV B	28.2	
30.	+ePKP A	01 03 33	<u>Samoa Islands Region</u> 16.14 S 172.52 W H = 00 43 57.4 h = normal MB = 5.3 D = 145.42 Az = 355.4 (USNOAA) PKPV(A):2.7s 230.0nm LmV(B):12s 0.9 μ m MLV(B)=5.8 LmH(B):15.5s 1.0 μ m MLH(B)=5.7
	LmV B	31.0	
	LmH B	31.2	
30.	eP A	03 25 32.5	<u>Off East Coast of Kamchatka</u> 52.17 N 159.73 E H = 03 13 58.4 h = normal MB = 4.8 D = 74.06 Az = 339.5 (USNOAA)
30.	ePn A	03 51 39.5	<u>Yugoslavia</u> 43.4 N 18.6 E H = 03 49 36 (BCIS) D = 8.72
	e A	53 42.5	
	eSg A	54 13	

Day	Phase	h m s	Remarks
30.	iP	A 16 24 15.5	<u>Iran</u> 37.38 N 56.04 E H = 16 17 31.0 h = normal MB = 5.1 D = 34.07 Az = 307.3 (USNOAA) PV(A):0.9s 17.5nm MPV(A)=5.0
30.	iP1	A 17 56 30.5	<u>Sea of Okhotsk</u> 52.38 N 151.60 E H = 17 46 09.0 h = 645 km MB = 6.6 D = 71.91 Az = 334.5 (USNOAA) SH(B):15s 118.0/um MSH(B)=7.2 St = Strainseismograph
	iP2	B 56 32	
	ipP	B 58 44	
	e	B 59 48	
	esP	B 59 56	
	esPP	B 18 02 31	
	esPPP	B 03 56	
	eiS	B 04 56	
	iSKS	B 05 32	
	esS	B 08 55	
	esPS	St 09 16	
	eSS	B 09 52	
	esSS	B 13 12	
	e	B 16 16	
	e	A 23 29	
	e	A 43 42	
30.	eP	A 20 47 53	<u>Off East Coast of Kamchatka</u> 52.14 N 159.71 E H = 20 36 19.2 h = normal MB = 4.6 D = 74.09 Az = 339.5 (USNOAA) PV(A):1.1s 10.1nm MPV(A)=4.7
31.	eP	A 04 25 46	<u>Albania</u> 40.71 N 19.90 E H = 04 22 58.1 h = 67 km MB = 4.3 D = 11.49 Az = 332.6 (USNOAA) PV(A):0.8s 7.7nm MPV(A)=4.5
31.	eX	A 13 00 51.5	<u>Off East Coast of Kamchatka</u> 52.23 N 159.62 E H = 12 49 03.0 h = normal MB = 4.6 D = 73.99 Az = 339.5 (USNOAA) XV(A):1.0s 11.8nm

Day	Phase	h m s	Remarks
1.	eP	A 01 10 02	<u>Greece</u> 38.03 N 20.16 E H = 01 06 41.8 h = 16 km MB = 4.8 D = 14.00 Az = 337.0 (USNOAA) PV(A):1.0s 19.7nm LmH:14s 7.2/um MLH=4.9 LmV:13s 4.8/um
	LmH	B 15.3	
	LmV	B 16.4	
1.	eP	AB 05 25 06	<u>Mariana Islands</u> 17.72 N 147.62 E H = 05 11 16.1 h = 40 km MB = 6.3 D = 101.73 Az = 333.1 (USNOAA) PV(A):2.0s 94.0nm MPV(A)=6.1 PV(B):9s 1.85/um MPV(B)=6.7 LmH:16s 14.4/um MLH =6.6 LmV:18s 14.8/um MLV =6.5
	e	A 25 24	
	iPP	AB 29 16.3	
	eSKS	B 35 42	
	eSS	B 43 40	
	LmH	B 06 13.1	
	LmV	B 15.6	
1.	eP	A 07 33 09	<u>North Atlantic Ridge</u> 15.42 N 46.12 W H = 07 23 17.7 h = normal MB = 4.4 D = 57.89 Az = 39.5 (USNOAA) PV(A):1.8s 27.0nm MPV(A)=5.0
1.	eP	A 15 36 14.5	<u>North of Ascension Island</u> 1.65 S 12.75 W H = 15 26 36.9 h = normal MB = 5.0 D = 56.10 Az = 18.8 (USNOAA) PV(A):2.0s 81.1nm MPV(A)=5.4 LmH:15s 0.92/um MLH =5.0 LmV:16s 0.94/um MLV =5.0
	LmH	B 58.7	
	LmV	B 16 01.7	
1.	eP	A 16 15 37	<u>North of Ascension Island</u> 1.69 S 12.32 W H = 16 06 02.8 h = normal MB = 4.7 D = 56.01 Az = 18.1 (USNOAA)
1.	eP	A 16 27 37	<u>North of Ascension Island</u> 1.60 S 12.70 W
	LmH	B 38.1	

Day	Phase	h m s	Remarks
cont. 1.	LmV	B 16 41.1	H = 16 17 59.4 h = normal MB = 4.8 D = 56.04 Az = 18.4 (USNOAA) PV(A):1.2s 10.2nm MPV(A)=4.7 LmH:14s 0.62/um MLH =4.8 LmV:18s 0.83/um MLV =4.9
2.	iP esP ePcP	A 01 22 56 A 23 09 A 23 14	<u>Near East Coast of Kamchatka</u> 53.13 N 159.79 E H = 01 11 29.3 h = 60 km MB = 4.9(USNOAA) D = 73.17 Az = 339 (ISC) PV(A):1.0s 39.4nm MPV(A)=5.3
2.	eP epP	A 04 03 10.5 A 03 25	<u>Off East Coast of Kamchatka</u> 52.23 N 159.60 E H = 03 51 39.1 h = 60 km MB = 4.7(USNOAA) D = 73.99 Az = 339 (ISC) PV(A):1.0s 15.7nm MPV(A)=4.9
2.	eP	A 07 55 20	<u>Off W. Coast of Northern Sumatra</u> 1.80 N 94.59 E H = 07 42 49.3 h = 33 km MB = 5.2(USNOAA) D = 84.2 PV(A):1.8s 23.6nm MPV(A)=5.0
3.	LmH	00 44.5	LmH:23s 0.6/um
3.	eP Pm eS	AB 05 37 04 A 37 10 B 41 11	<u>Turkey</u> 39.62 N 38.70 E H = 05 32 09.7 h = 23 km MB = 5.1 D = 21.93 Az = 309.1 (USNOAA) PV(A):1.6s 99.0nm MPV(A)=5.0 PmV(A):1.7s 225.0nm MPmV(A)=5.2
3.	ePKP e LmH LmV	A 09 51 45 A 53 31 B 10 57.1 B 11 10.8	<u>New Hebrides Islands</u> 16.92 S 167.83 E H = 09 32 23.0 h = 44 km MB = 5.5 D = 141.33 Az = 335.7 (USNOAA)

Day	Phase	h m s	Remarks
3.	ePKHKP ePKP2 epPKP2	A 19 30 08 A 30 18 A 30 27.5	<u>Tonga Islands Region</u> 22.90 S 175.00 W H = 19 10 15.7 h = normal MB = 4.7 D = 151.83 Az = 351.1 (USNOAA)
4.	eP eipP	A 13 19 43 A 20 37.5	<u>Hindukush Region</u> 36.58 N 70.11 E H = 13 12 02.2 h = 290 km MB = 4.9 D = 43.50 Az = 307.9 (USNOAA) pPV(A):1.6s 44.0nm MPV(A)=4.5
4.	ePg eSg	A 15 30 32 A 30 52.5	<u>Federal Rep. Germany</u> explosion 4.8 t 51.19 N 9.24 E H = 15 30 00.78 (HAN) D = 1.55 phi = 51°11.31'N, lambda = 09°14.73'E
4.	eP	A 23 31 08	<u>Yugoslavia</u> 43.78 N 18.10 E H = 23 29 08.0 h = 38 km MB = 4.4 D = 8.16 Az = 329.6 (USNOAA) PV(A):0.7s 7.7nm
5.	eP LmH LmV	A 03 55 40 B 04 37 B 37	<u>Taiwan</u> 23.99 N 121.25 E H = 03 43 16.5 h = 43 km MB = 4.8(USNOAA) D = 83.3 PV(A):(1.8)s 27.0nm MPV(A)=5.0
5.	iP ipP iPP eiS isS LmH LmV ePKPPKP epPKPPKP	A 08 02 55.2 AB 04 55 B 05 48 B 11 32 B 14 58 B 21.7 B 28.7 A 30 42 A 32 48	<u>Sea of Okhotsk</u> 52.23 N 151.43 E H = 07 52 27.9 h = 580 km MB = 5.7 D = 72.00 Az = 334.4 (USNOAA) PV(A):1.2s 214.0nm MPV(A)=5.6 pPV(A):1.6s 385.0nm LmH:16.5s 3.3/um LmV:13.5s 2.3/um ei(B) 15 00 e(A) 32 55
5.	LmH LmV	B 10 07.8 B 11.5	LmH:17s 0.6/um LmV:18s 0.6/um

Day	Phase	h m s	Remarks
5.	eP	A 11 47 33	<u>Arabian Sea</u> 14.83 N 53.76 E
	epP	AB 47 40	H = 11 38 46.1 h = normal MB = 4.9
	i(sP)	A 47 45	D = 49.25 Az = 325.7 (USNOAA)
	eS	B 54 41	PV(A):1.1s 24.2nm MPV(A)=5.1
	eSP	B 54 49	pPV(A):1.8s 67.6nm MPV(A)=5.4
	LmH	B 12 14.0	PV(B):5s 0.44/um MPV(B)=5.7
	LmV	B 15.0	SH:17s 2.32/um MSH(B)=5.8 LmH:20s 3.3/um MLH =5.3 LmV:16s 1.9/um MLV =5.3
5.	eP	A 13 48 20	<u>Szechwan Province, China</u>
	epP	A 48 24.5	32.04 N 101.16 E
	esP	A 48 35.5	H = 13 37 34.9 h = normal MB = 5.0
	LmH	B 14 13.7	D = 65.70 Az = 305.7 (USNOAA)
	LmV	B 18.4	PV(A):1.0s 11.8nm MPV(A)=4.9 LmH:19.5s 1.9/um MLH =5.3 LmV:15s 1.2/um MLV =5.3
5.	ePKHKP	A 17 27 31	<u>Tonga Islands Region</u> 17.45 S 171.90 W
	ePKP2	A 27 34	H = 17 07 50.7 h = normal MB = 5.2 D = 146.76 Az = 355.9 (USNOAA) PKHKPV(A):1.5s 42.7nm PKP2V(A):1.6s 88.0nm
5.	ePKP	A 17 34 56.5	<u>Tonga Islands</u> 17.45 S 171.90 W H = 17 15 15.9 h = normal MB = 5.0 D = 146.77 Az = 355.9 (USNOAA) PKPV(A):1.5s 30.2nm
5.	eP	A 19 17 22	<u>Greenland Sea</u> 73.65 N 8.70 E H = 19 12 18.6 h = normal MB = 4.6 D = 23.13 Az = 175.3 (USNOAA) PV(A):1.5s 25.1nm MPV(A)=4.5
5.	eP	A 19 34 24	<u>Afghanistan-USSR Border Region</u>
	eX	A 34 31.5	37.04 N 71.38 E
	epP	A 34 48	H = 19 26 25.6 h = 112 km MB = 5.1 D = 44.02 Az = 307.7 (USNOAA) eX(A):1.9s 30.3nm MPV(A)=4.7

Day	Phase	h m s	Remarks
6.	+iP	A 04 10 46.5	<u>Eastern Kazakh SSR</u> 49.77 N 78.09 E
	ePP	A 12 19	H = 04 02 57.4 h = 0 km MB = 5.6 D = 41.25 Az = 297.7 (USNOAA) PV(A):0.9s 87.6nm MPV(A)=5.5 Underground explosion, MB = 6.4 (UPP)
6.	eP	A 15 54 16	<u>Southeastern Alaska</u> 60.11 N 141.16 W H = 15 43 18.1 h = 5 km MB = 4.7 D = 67.43 Az = 18.4 (USNOAA) PV(A):1.0s 11.8nm MPV(A)=5.1
7.	ePKHKP	A 03 51 02	<u>Fiji Islands Region</u> 21.01 S 178.42 W H = 03 32 09.1 h = 497 km MB = 4.4 D = 149.39 Az = 347.4 (USNOAA) PKHKP(A):1.8s 27.0nm
7.	ePKP2	A 06 47 40	<u>Tonga Islands Region</u> 18.41 S 172.48 W H = 06 27 56.1 h = normal MB = 4.5(USNOAA) D = 147.4
7.	eP	A 12 55 58.5	<u>Yugoslavia</u> 43.96 N 15.96 E
	LmH	B 58.3	H = 12 54 13.0 h = 36 km MB = 4.6(USNOAA)
	LmV	B 58.9	D = 7.35 PV(A):0.9s 77.7nm LmH:6s 1.3/um LmV:10s 0.6/um
7.	eP	A 14 04 14	<u>Central Italy</u> 43.01 N 12.89 E
	iSn	A 05 34	H = 14 02 23.3 h = 36 km MB = 4.3(USNOAA)
	LmH	B 07.2	D = 7.75 PV(A):1.0s 27.6nm LmH:7.0s 1.9/um LmV:14.0s 1.4/um
7.	eP	A 18 36 37	<u>Morocco</u> 34.16 N 4.90 W H = 18 31 55 h = 0 D = 20.34 Az = 31 (ISC)

Day	Phase	h m s	Remarks
7.	eiPn AB	21 00 39	<u>Yugoslavia</u> 43.95 N 16.06 E H = 20 58 49.8 h = 5 km MB = 5.5
	eiSn A	01 57	D = 7.35 Az = 337.3 (USNOAA)
	LmH B	03.0	PV(A):1.0s 17630.0nm
	LmV B	03.6	LmH:6.0s 27.5/um LmV:9.0s 18.4/um
7.	ePn A	23 27 06	<u>Yugoslavia</u> 44.15 N 15.67 E
	iPx A	27 07	H = 23 25 23.2 h = normal (USNOAA)
	eSn A	28 30.5	D = 7.08
	eSg A	29 14	PV(A):0.6s 15.3nm ei(A) 28 30.5 e(A) 28 50 e(A) 29 17
8.	ePKP A	04 21 22	<u>Tonga Islands</u> 15.93 S 173.07 W
	esPKP A	21 32	H = 04 01 44.8 h = 25 km MB = 4.4 D = 145.16 Az = 354.8 (USNOAA) PKP(A):1.0s 11.8nm
8.	e(Pn) A	07 32 11	<u>Albania</u> 41.08 N 19.57 E
	e A	34 41	H = 07 29 23.2 h = 25 km MB = 4.1
	e A	35 04.5	D = 11.05 Az = 332.6 (USNOAA)
	eSg A	35 21	
8.	ePKIKP A	14 46 10	<u>South of Fiji Islands</u> 23.78 S 179.24 E
	ePKHKP A	46 16.5	H = 14 27 21.6 h = 524 km MB = 4.9(USNOAA) D = 151.5 PKHKPV(A):1.1s 14.1nm
8.	eP A	17 02 27	<u>Hokkaido, Japan Region</u> 42.20 N 143.05 E H = 16 50 33.5 h = 70 km MB = 4.8 D = 78.27 Az = 330.8 (USNOAA) PV(A):0.8s 13.5nm MPV(A)=4.9
9.	eP A	00 17 35	<u>Cyprus</u> 34.76 N 32.67 E H = 00 12 41.6 h = normal MB = 4.6 D = 22.05 Az = 322.5 (USNOAA) PV(A):1.3s 19.7nm MPV(A)=4.4

Day	Phase	h m s	Remarks
9.	e(P) A	05 30 03	<u>Turkey</u> 38.97 N 29.52 E H = 05 25 58.8 h = 0 km MB = 4.8 (ISC) D = 16.6
9.	eP A	19 31 16	<u>Ryukyu Islands Region</u> 29.85 N 131.77 E
	ePcP A	31 21	H = 19 18 44.1 h = 13 km MB = 5.1
	esP A	31 28	D = 84.03 Az = 326.4 (USNOAA)
	LmH B	20 13.9	sPV(A):1.8s 73.3nm MPV(A)=5.6 LmH:15.5s 1.9/um MLH = 5.6 LmV:15.5s 1.9/um MLV = 5.6
10.	eP A	02 51 00	<u>West Pakistan</u> 29.90 N 70.39 E H = 02 42 20.9 h = 20 km MB = 4.9 D = 48.01 Az = 312.9 (USNOAA)
10.	erPKP A	03 36 15	<u>Fiji Islands Region</u> 17.80 S 178.59 W H = 03 17 40.5 h = 586 km MB = 4.7 D = 146.23 Az = 348.3 (USNOAA)
10.	iPg A	13 47 32.8	<u>Federal Rep. Germany, possibly artificial</u>
	iSg A	47 42.8	49.5 N 11.6 E H = 13 47 24 (BCIS) D = 1.17
11.	ePKP AB	01 23 49.5	<u>Eastern Island Cordillera</u>
	epPKP A	23 57	50.05 S 114.47 W
	e A	24 24	H = 01 04 12.4 h = normal MB = 5.2
	LmH B	02 25.2	D = 146.23 Az = 67.8 (USNOAA)
	LmV B	24.9	pPKPV(A):1.2s 32.5nm LmH:20s 2.0/um MLH=5.8 LmV:20s 2.2/um
11.	ePKP A	11 03 53.5	<u>Loyalty Islands Region</u> 21.86 S 170.6 E H = 10 44 22 h = 86 km D = 146.88 Az = 335 (ISC)
12.	ePn A	08 41 28	<u>Yugoslavia</u> 44.23 N 15.66 E
	iX A	41 30	H = 08 39 45.9 h = 43 km MB = 4.5
	eSn A	42 51	D = 6.98 Az = 338.3 (USNOAA)

Day	Phase	h m s	Remarks
cont.			
12.	LmH B	08 43.7	PnV(A):1.0s 25.6nm
	LmV B	44.0	XV(A):0.7s 99.6nm
			LmH:7.0s 0.7/um MLH=3.7
12.	eP A	14 43 26	<u>Southern California</u> 34.26 N 117.55 W
	ePcP A	43 30	H = 14 30 51.9 h = 9 km MB = 5.4
	e A	43 38	D = 84.31 Az = 29.7 (USNOAA)
	LmH B	15 22.7	PV(A):1.4s 27.9nm MPV(A)=5.3
	LmV B	23.4	PcP(A):1.5s 45.2nm MP2V(A)=5.5
			LmH:15s 1.5/um MLH =5.5
			LmV:15s 2.2/um MLV =5.7
12.	eP A	15 44 50.5	<u>Kurile Islands</u> 45.40 N 149.81 E
			H = 15 32 59.1 h = 60 km MB = 4.9
			D = 77.71 Az = 334.3 (USNOAA)
13.	eP A	08 41 29	<u>Northern Sumatra</u> 0.94 N 100.19 E
			H = 08 28 58.1 h = 197 km MB = 4.8
			D = 88.38 Az = 320.5 (USNOAA)
			PV(A):1.6s 16.5nm MPV(A)=4.7
13.	ePP A	14 04 56	<u>Volcano Islands Region</u> 25.64 N 142.77 E
	LmH B	46.0	H = 13 47 56.6 h = 26 km MB = 4.9(USNOAA)
	LmV B	48.0	D = 92.7
			PPV(A):1.6s 16.5nm MPPV(A)=5.2
13.	eP A	16 24 45.5	<u>North Atlantic Ridge</u> 49.76 N 28.96 W
			H = 16 19 14.6 h = normal MB = 4.5
			D = 25.76 Az = 72.3 (USNOAA)
			PV(A):1.2s 12.2nm MPV(A)=4.4
13.	eP A	21 22 41	<u>Off Coast of Northern California</u>
	ePP A	25 44	40.22 N 125.14 W
	LmH B	59.9	H = 21 10 23.0 h = normal MB = 5.4
	LmV B	22 00.9	D = 81.90 Az = 26.1 (USNOAA)
			PV(A):1.2s 12.2nm MPV(A)=4.8
			PPV(A):1.7s 18.2nm MPPV(A)=5.2
			LmH:17s 1.2/um MLH =5.3
			LmV:15s 1.0/um MLV =5.4

Day	Phase	h m s	Remarks
14.	eP A	01 07 02.5	<u>Northern Celebes</u> 0.57 S 121.83 E
	ePP A	11 07.5	H = 00 53 05.1 h = normal MB = 5.6
	e A	11 19	D = 103.15 Az = 322.2 (USNOAA)
	LmH B	02 01	PPV(A):1.9s 30.3nm MPPV(A)=5.5
	LmV B	02	
14.	eP A	09 51 54.5	<u>Southern Sinkiang</u> 39.94 N 77.02 E
	e A	51 59	H = 09 43 33.5 h = normal MB = 5.2
	epP A	52 02	D = 45.83 Az = 306.2 (USNOAA)
			PV(A):0.8s 13.5nm MPV(A)=4.9
14.	+iP AB	09 57 05	<u>Near East Coast of Honshu, Japan</u>
	ePP B	10 00 09	38.74 N 142.17 E
	ePPP B	01 59.5	H = 09 44 53.7 h = 44 km MB = 5.6
	eS B	07 06	D = 80.98 Az = 330.7 (USNOAA)
	eSKS B	07 20	PV(A):2.5s 445.0nm MPV(A)=5.9
	eSS B	12 06.5	PV(B):8s 2.6/um MPV(B)=6.1
	LmH B	34.4	PPV(B):10.5s 1.1/um MPPV(B)=6.0
	LmV B	36.2	LmH:17s 15.9/um MLH =6.4
			LmV:17s 16.6/um MLV =6.5
			e(B) 00 16 e(B) 02 14.5 e(B) 07 08
			e(B) 12 10 i(B) 12 21
14.	eP A	12 55 57.5	<u>Kuril Islands Region</u> 43.50 N 147.98 E
	e A	56 08	H = 12 43 55.6 h = 30 km MB = 4.6
	LmH B	13 35	D = 78.84 Az = 333.4 (USNOAA)
	LmV B	35	PV(A):1.0s 11.8nm MPV(A)=4.9
14.	ePKIKP A	15 55 23	<u>Near Coast of Central Chile</u>
	ePP A	56 18	33.97 S 72.17 W
			H = 15 36 51.3 h = 31 km MB = 5.6
			D = 111.82 Az = 43.0 (USNOAA)
			PKPV(A):1.2s 10.2nm
14.	eP A	16 19 00	<u>Hindu Kush Region</u> 36.42 N 70.07 E
			H = 16 11 15.6 h = 219 km MB = 5.1
			D = 43.57 Az = 308.1 (USNOAA)
			PV(A):1.4s 11.6nm MPV(A)=4.1

Day	Phase	h m s	Remarks
14.	eP	A 18 29 04	<u>Kurile Islands</u> 43.64 N 147.60 E H = 18 17 03.1 h = normal MB = 4.3 D = 78.59 Az = 333.2 (USNOAA)
14.	e	A 18 52 01	<u>Kurile Islands</u> 43.37 N 147.63 E H = 18 39 46.3 h = normal MB = 4.2 D = 78.84 Az = 333.2 (USNOAA)
14.	eP	A 19 56 33	<u>Kurile Islands</u> 43.46 N 147.90 E H = 19 44 31.5 h = 30 km MB = 5.1 D = 78.85 Az = 333.4 (USNOAA) PV(A):1.2s 20.3nm MPV(A)=5.0
15.	eP e	A 04 07 29.5 A 07 35.5	<u>Greenland Sea</u> 73.29 N 5.80 E H = 04 02 29.7 h = normal MB = 4.6 D = 22.87 Az = 170.4 (USNOAA) PV(A):0.8s 17.3nm MPV(A)=4.5
15.	eSg	A 07 56 43	<u>Poland</u> 50.28 N 18.95 E H = 07 54 10.2 MAG = 2.9 (ISC, WAR) D = 4.65
15.	ePKIKP eiPKHKP ePKP2	A 09 54 46 A 54 51 A 54 56.5	<u>Fiji Islands Region</u> 20.53 S 178.84 W H = 09 36 10.5 h = 615 km MB = 5.1 D = 148.83 Az = 347.1 (USNOAA) PKHKPV(A):1.5s 72.9nm
15.	LmH LmV	B 12 08.6 B 09.8	LmH:18.5s 1.1/um LmV:16s 0.9/um
15.	ePKIKP ePKHKP ePKP2 LmH LmV	A 21 02 53 A 03 04 A 03 28.5 B 22 29 B 25	<u>Kermadec Islands</u> 30.21 S 177.61 W H = 20 42 59.1 h = 34 km MB = 5.2(USNOAA) D = 158.51 Az = 344 (ISC) PKP2V(A):1.5s 37.7nm

Day	Phase	h m s	Remarks
15.	iPn e e(Pg) eSg	A 22 48 46.5 A 48 54 A 48 57.5 A 49 37	<u>Federal Rep. Germany</u> 48.4 N 11.1 E H = 22 48 09 h = 0 km D = 2.31 Az = 8 (ISC)
15.	eP	A 23 27 24	<u>Mozambique Channel</u> 23.49 S 37.29 E H = 23 15 30.9 h = normal MB = 4.9 D = 77.22 Az = 343.6 (USNOAA) PV(A):1.6s 13.7nm MPV(A)=4.7
16.	ePKP2 epPKP2	A 00 55 59 A 56 05	<u>Kermadec Islands</u> 30.17 S 177.66 W H = 00 35 29.6 h = normal MB = 5.0(USNOAA) D = 158.3 PKPV(A):1.3s 15.3nm
16.	e e ePP eSKS e(PS) LmH LmV	A 02 06 37 B 06(45) B 07 50 B 13 57 B 16 40 B 55.6 B 55.3	<u>Mariana Islands</u> 13.01 N 144.43 E H = 01 49 20.5 h = 47 km MB = 6.0(USNOAA) D = 104.5 PPV(A):2.5s 158.0nm MPPV(A)=6.0 LmH:18.5s 4.2/um MLH =6.0 LmV:19s 0.7/um MLV =5.2
16.	eP e epP	A 03 17 37.5 A 17 51.5 A 17 57	<u>Taiwan Region</u> 22.25 N 121.34 E H = 03 05 05.4 h = normal MB = 5.0 D = 84.76 Az = 323.0 (USNOAA) PV(A):1.2s 20.3nm MPV(A)=5.2
16.	e	A 04 16 49	<u>Poland</u> 50.31 N 18.93 E H = 04 14 31.5 MAG=3.1 (ISC, WAR) D = 4.7
17.	ePKP epPKP	A 05 02 53.5 A 03 03	<u>New Hebrides Islands</u> 17.96 S 168.93 E H = 04 43 21.7 h = 27 km MB = 5.0 D = 142.69 Az = 336.1 (USNOAA)
17.	eP esP	A 11 36 20 A 36 36	<u>North Atlantic Ridge</u> 26.56 N 22.76 W H = 11 29 23.7 h = normal MB = 4.6 D = 35.55 Az = 38.2 (USNOAA)

Day	Phase	h m s	Remarks
17.	ePKP A	23 33 19	<u>Chile-Argentina Border Region</u> 31.81 S 69.95 W H = 23 15 02.1 h = 118 km MB = 5.3 D = 108.97 Az = 41.8 (USNOAA)
18.	iP1 AB	02 11 25.4	<u>Jan Mayen Island Region</u> 71.16 N 7.69 W
	iP2 A	11 34.6	H = 02 06 30.4 h = normal MB = 5.1
	eP1 B	11 35	D = 22.40 Az = 146.5 (USNOAA)
	eS B	15 28	P1mV(A):1.6s 65.9nm MP1V(A)=4.9
	LmH B	21.0	P2mV(A):1.4s 181.0nm MP2V(A)=5.3
	LmV B	22.8	SH:18s 2.3/um MSH =5.3 LmH:15s 3.5/um MLH =4.9 LmV:13s 3.0/um MLV =5.0
18.	eP1 AB	16 17 35.5	<u>North Atlantic Ridge</u> 51.12 N 29.55 W
	eP2 A	17 39.5	H = 16 12 07.1 h = normal MB = 5.2
	eS B	22 14	D = 25.74 Az = 74.8 (USNOAA)
	e B	22 36	P1V(A):0.5s 23.1nm MP1V(A)=5.0
	LmH B	26.8	P2V(A):1.7s 72.7nm MP2V(A)=5.0
	LmV B	27.4	LmH:15s 3.0/um MLH =4.9 LmV:12s 2.0/um MLV =5.0
18.	eP A	16 58 07.5	<u>Crete</u> 34.34 N 26.25 E
	e A	58 12.5	H = 16 53 40.0 h = 25 km MB = 4.5 D = 19.49 Az = 331.2 (USNOAA)
19.	eP A	00 55 55.5	<u>South of Honshu, Japan</u> 32.41 N 137.71 E
	epP A	57 28	H = 00 44 01.2 h = 365 km MB = 5.1 D = 84.60 Az = 328.9 (USNOAA) PV(A):0.9s 11.7nm MPV(A)=4.7
19.	eP A	01 16 06.5	<u>Mongolia</u> 48.36 N 89.30 E
	LmH B	34.7	H = 01 07 22.3 h = normal MB = 4.7
	LmV B	36.7	D = 48.31 Az = 303.6 (USNOAA) PV(A):1.3s 15.3nm MPV(A)=4.9 LmH:13.5s 0.94/um MLH =4.9 LmV:10s 0.65/um MLV =5.0

Day	Phase	h m s	Remarks
19.	LmH B	07 43.6	LmH:18s 1.0/um
	LmV B	44.0	LmV:18s 1.3/um
19.	eP A	21 02 08	<u>Jan Mayen Island Region</u> 71.15 N 7.90 W
			H = 20 57 11.6 h = normal MB = 4.5 D = 22.43 Az = 146.1 (USNOAA) PV(A):1.5s 22.6nm MPV(A)=4.4
19.	eP A	21 37 46.5	<u>Jan Mayen Island Region</u> 70.99 N 8.47 W
			H = 21 32 48.4 h = normal MB = 4.2 D = 22.40 Az = 145.0 (USNOAA)
19.	eP A	22 03 03	<u>Jan Mayen Island Region</u> 70.93 N 8.11 W
			H = 21 58 02.0 h = normal MB = 3.9 D = 22.29 Az = 145.5 (USNOAA)
19.	ePKIKP A	24 00 46	<u>Near Coast of Southern Chile</u> 51.93 S 74.14 W
			H = 23 41 48.0 h = normal MB = 4.8 D = 125.20 Az = 51.0 (USNOAA)
20.	eP A	10 50 40	<u>South of Honshu, Japan</u> 29.51 N 141.33 E
	ePP A	54 05	H = 10 37 48.5 h = normal MB = 5.0 D = 88.67 Az = 330.7 (USNOAA)
20.	ePKP A	12 10 03.5	<u>Samoa Islands Region</u> 15.98 S 172.92 W
	ePKP2 A	10 06.5	H = 11 50 27.7 h = normal MB = 4.5 D = 145.23 Az = 354.9 (USNOAA) PKPV(A):1.1s 12.1nm
21.	ePKHKP A	01 31 03.5	<u>South of Fiji Islands</u> 24.48 S 176.38 W
	ePKP2 A	31 14	H = 01 11 08.7 h = normal MB = 4.9 D = 153.15 Az = 348.7 (USNOAA) PKHKPV(A):0.5s 17.3nm PKP2V(A):1.4s 11.6nm
21.	e(P) A	11 59 22.5	<u>Turkey</u> 39.8N 38.9 E
	e A	59 27	H = 11 54 22 h = 15 km (ANUSSR) D = 21.9

Day	Phase	h m s	Remarks
21.	iPKP2 A	15 59 54	<u>Kermadec Islands Region</u> 30.32 S 179.80 W H = 15 40 04.3 h = 367 km MB = 4.4(USNOAA) D = 157.9
21.	eP A	19 12 07.5	<u>Turkey</u> 38.85 N 29.91 E H = 19 08 02.3 h = 32 km MB = 4.2 D = 17.49 Az = 318.3 (USNOAA)
22.	eP A	06 49 25	<u>Greece</u> 38.01 N 20.10 E
	eS A	52 10	H = 06 46 08.9 h = normal MB = 4.4
	LmH B	55.9	D = 14.01 Az = 337.2 (USNOAA)
	LmV B	55.9	PV(A):0.7s 9.6nm MPV(A)=4.6 LmH:12s 1.0/um MLH =4.1 LmV:12s 1.2/um
23.	eiP A	12 17 46	<u>Alaska Peninsula</u> 58.41 N 155.37 W
	epP A	18 18	H = 12 06 39.6 h = 100 km MB = 4.6
	e A	18 28	D = 70.78 Az = 8.7 (USNOAA)
	e A	18 40	PV(A):0.6s 34.5nm MPV(A)=5.4
23.	ePKIKP A	12 23 54	<u>Solomon Islands</u> 6.47 S 154.62 E
	epPKP A	24 06	H = 12 04 54.2 h = 39 km MB = 5.7
	ePP C	25 52	D = 126.27 Az = 331.6 (USNOAA)
	eSKKKS A	32 48	LmH:21s 8.5/um MLH=6.4
	eSKSP C	35 39	LmV:18s 2.3/um MLV=5.9
	ePKKS2 A	37 05	e(A) 32 03.5 e(C) 43 00
	ePFS C	37 20	
	eSS C	42 35	
	LmH B	13 22.0	
	LmV B	31	
23.	eP A	21 14 49.5	<u>Andreanof Islands, Aleutian Is.</u> 51.35 N 179.41 W H = 21 02 54.6 h = 43 km MB = 5.2 D = 77.95 Az = 352.8 (USNOAA) PV(A):1.2s 26.4nm MPV(A)=5.1

Day	Phase	h m s	Remarks
23.	eP A	23 01 10.5	<u>Near Coast of Guatemala</u> 13.51 N 90.09 W H = 22 48 33.8 h = 80 km MB = 4.7 D = 86.94 Az = 38.6 (USNOAA)
23.	eP A	23 08 37	<u>Near Coast of Guatemala</u> 13.52 N 90.08 W H = 22 56 00.1 h = 83 km MB = 4.6 D = 86.93 Az = 38.6 (USNOAA)
23.	ePKIKP AC	23 30 58	<u>Solomon Islands</u> 6.55 S 154.68 E
	ePP B	32 55	H = 23 11 58.5 h = 47 km MB = 5.3
	eSKSP B	42(40)	D = 126.37 Az = 331.6 (USNOAA)
	ePFS B	44 20	PPV:10s 0.81/um MPPV=5.9
	LmH B	30.9	LmH:18s 2.1/um MLH =5.8
	LmV B	30.9	LmV:18s 2.4/um MLV =5.9
23.	iP ABC	16 56 03.5	<u>Near East Coast of Kamchatka</u>
	eS BC	17 05 20	54.66 N 162.83 E
	e BC	05 28	H = 16 44 40.0 h = 34 km MB = 5.3
	LmH B	32.2	D = 72.34 Az = 341.2 (USNOAA)
	LmV B	34	PV(A):1.8s 98.0nm MPV(A)=5.5 PV(B):8s 0.49/um MPV(B)=5.6 SH:14s 0.42/um MSH =5.5 LmH:15s 2.0/um MLH =5.5 LmV:14s 2.1/um MLV =5.6
24.	eP A	18 45 27	<u>Svalbard Region</u> 79.91 N 5.06 E H = 18 39 24.3 h = normal MB = 4.6 D = 29.47 Az = 170.5 (USNOAA)
26.	e(P) A	06 17 34	<u>Greece</u> 38.98 N 21.89 E H = 06 14 08.8 h = normal MB = 4.3 D = 13.74 Az = 331.4 (USNOAA)
26.	eP AB	12 15 05	<u>Near West Coast of Colombia</u>
	eisP A	15 09	6.20 N 77.59 W
	ePP BC	18 08	H = 12 02 29.3 h = 8 km MB = 6.1
	eSKS BC	25 22	D = 84.74 Az = 39.7 (USNOAA)

Day	Phase	h m s	Remarks
cont. 26.	eiS BC	12 25 32	PmV(A):1.8s 122.0nm MPV(A)=5.8
	eiPS C	26 25	sPmV(A):2.0s 385.0nm MPV(A)=6.3
	eSS B	31 23	PV(B):10s 9.7/um MPV(B)=7.0
	eSSS C	35 44	PPV:10s 3.5/um MPPV =6.7
	eSSSS C	37 20	SH:14s 28.0/um MSH =7.1
	LmH B	48.5	LmH:19.5s 21.5/um MLH =6.5
	LmV B	48.5	LmV:20s 23.4/um MLV =6.6
			ei(B) 26 29
26.	iPn A	16 44 03.4	<u>Northern Italy</u> 44.33 N 12.30 E
	ePg A	44 34.5	H = 16 42 28 h = 12 km
	iSn A	45 12.5	D = 6.33 Az = 356 (ISC)
	e A	45 24	
	e A	45 40	
	eSg A	46 07	
27	eP A	03 51 11	<u>Near West Coast of Colombia</u>
	+iPcP AB	51 14	6.43 N 77.41 W
	ePP BC	54 40	H = 03 38 36.2 h = 8 km MB = 5.8
	eS BC	04 01 40	D = 84.46 Az = 39.8 (USNOAA)
	ePS C	02 15	PmV(A):3.0s 921.0nm MPV(A)=6.5
	eiPPS BC	03 03	PV(B):9s 3.7/um MPV(B)=6.6
	eSS B	06 45	PPV:10s 2.36/um MPPV =6.7
	eSSS C	10 55	SH:13s 8.0/um MSH =6.6
	eLQ C	13 44	LmH:25s 43.1/um MLH =6.7
	ePKPPKP A	17 34	LmV:24s 53.0/um MLV =6.9
	eLR C	18 00	e(B,C) 00 53 ei(R) 02 38
	LmH B	22.9	
	LmV B	23.0	
27.	ePKP A	09 14 05	<u>New Britain Region</u> 5.08 S 152.81 E
			H = 08 55 10.3 h = 58 km MAG=4.9 (ISC)
			D = 124.2
27.	eP A	10 25 02	<u>Philippine Islands Region</u>
			20.65 N 122.23 E
			H = 10 12 19.4 h = normal MB = 4.7(USNOAA)
			D = 86.5

Day	Phase	h m s	Remarks
27.	eP A	15 59 36	<u>Greece-Albania Border Region</u> 39.30N 20.14E
	LmH B	16 04.2	H = 15 56 32.2 h = 23 km MB = 4.2
	LmV B	05.8	D = 12.84 Az = 334.9 (USNOAA)
27.	eP A	16 36 55.5	<u>Greece-Albania Border Region</u>
	LmH B	41	39.29 N 20.25 E
	LmV B	42	H = 16 33 53.8 h = 40 km MAG=4.2
			D = 12.88 Az = 335 (ISC)
27.	ePn A	19 20 49	<u>Southern Italy</u> 41.71 N 13.83 E
	eSn A	22 31	H = 19 18 36.7 h = 27 km MB = 4.4
			D = 9.06 Az = 351.0 (USNOAA)
			PV(A):0.8s 7.7nm MPV(A)=(5.0)
28.	eP A	04 33 26.5	<u>Unimak Island Region</u> 54.48 N 164.49 W
			H = 04 21 49.8 h = 77 km MB = 5.0
			D = 75.19 Az = 2.6 (USNOAA)
			PV(A):1.1s 16.1nm MPV(A)=4.8
28.	eP A	09 21 03	<u>Near East Coast of Kamchatka</u>
			55.11 N 162.64 E
			H = 09 09 41.5 h = normal MB = 4.4(USNOAA)
			D = 71.8
28.	eP A	11 44 47	<u>North Atlantic Ridge</u> 57.17 N 33.35 W
	e A	44 50.5	H = 11 39 09.0 h = normal MB = 4.6
	e A	44 54	D = 26.87 Az = 84.6 (USNOAA)
	LmH B	55	PV(A):1.6s 16.5nm MPV(A)=4.4
	LmV B	55	
28.	eP A	15 45 26	<u>Kurile Islands</u> 44.05 N 148.99 E
	ePcP A	45 40	H = 15 33 25.7 h = normal MB = 4.6
			D = 78.67 Az = 333.9 (USNOAA)
			PV(A):1.4s 11.6nm MPV(A)=4.7
28.	-eiP ABC	17 33 29.5	<u>Near East Coast of Kamchatka</u>
	eS B	42 44	53.33 N 158.74 E
	eSPP BC	43 30	H = 17 22 12.1 h = 118 km MB = 5.4

Day	Phase	h m s	Remarks
cont. 28.	esS BC	17 43 40	D = 72.77 Az = 338.8 (USNOAA) PV(A):1.3s 264.0nm MPV(A)=5.9
28.	eP A	19 58 24	<u>Turkey</u> 37.10 N 28.60 E H = 19 54 09.4 h = 36 km MB = 4.2
	LmH B	20 06	D = 18.20 Az = 323.4 (USNOAA)
	LmV B	06	PV(A):1.8s 27.0nm MPV(A)=4.1
28.	eP A	23 55 10.5	<u>North Atlantic Ocean</u> 57.20 N 33.45 W H = 23 49 32.0 h = normal MB = 4.8(USNOAA)
	e A	55 42	D = 26.89 Az = 85 (ISC) PmV(A):2.0s 51.2nm MPmV(A)=4.8
28.	eP A	24 02 42.5	<u>North Atlantic Ocean</u> 57.28 N 33.30 W H = 23 57 04.1 h = normal MB = 4.9
	e A	02 57	D = 26.83 Az = 84.9 (USNOAA)
	LmH B	13.4	PV(A):1.0s 15.8nm MPV(A)=4.6
	LmV B	13.8	PmV(A):1.7s 42.4nm MPmV(A)=4.8 LmH:15.5s 1.5/um MLH =4.6 LmV:15 s 1.4/um MLV =4.8
29.	iP AC	04 55 04.5	<u>Nicaragua</u> 11.47 N 85.48 W H = 04 42 46.6 h = 192 km MB = 5.4(USNOAA)
	iPcP A	55 12	D = 85.66 Az = 39 (ISC)
	ipP AC	55 52.5	LmH:16s 0.4/um
	eS C	05 05 22	LmV:16s 0.5/um
	ePS BC	06 36	
	LmH B	28.4	
	LmV B	28.5	
29.	ePKP ABC	06 22 45	<u>New Hebrides Islands</u> 13.51 S 166.55 E H = 06 03 26.0 h = 59 km MB = 5.8(USNOAA)
	ePP A	25 36	D = 137.7
	eSS BC	43 40	PKPV(A):1.7s 21.2nm
	LmH B	07 28.3	LmH:20s 4.1/um MLH=6.1
	LmV B	28.2	LmV:21.5s 5.2/um MLV=6.2 e(BC) 25 40 e(AB) 25 49 e(A) 26 02 e(BC) 26 42 e(C) 48 28

Day	Phase	h m s	Remarks
29.	ePn A	10 36 35	<u>Yugoslavia</u> 44.1 N 15.7 E H = 10 34 56 h = 59 km
	eSn A	37 57.5	D = 7.10 Az = 338 (ISC)
	eSg A	38 40	PnV(A):0.9s 15.6nm MPnV(A)=4.6
29.	ePP A	23 30 21	<u>Solomon Islands</u> 9.59 S 159.34 E H = 23 09 33.6 h = 548 km MB = 4.9(USNOAA) D = 131.1 PPV(A):1.6s 22.0nm MPPV(A)=5.1
30.	eP A	10 05 03.5	<u>Philippine Islands Region</u> 20.59 N 122.02 E H = 09 52 22.7 h = normal MB = 5.1
	esP A	05 16	D = 86.47 Az = 323.3 (USNOAA)
	e B	05 32	PV(A):1.5s 20.1nm MPV(A)=5.2
	ePP A	08 26.5	PPV(A):1.7s 30.3nm MPPV(A)=5.5
	e A	08 38	LmH:12.5s 3.1/um MLH =5.9
	eS BC	15 36	LmV:16s 2.9/um MLV =5.8
	LmH B	44.9	
	LmV B	49.2	
30.	+eiP A	18 25 42.5	<u>Alaska Peninsula</u> 58.38 N 155.28 W H = 18 14 35.9 h = 101 km MB = 4.5 D = 70.80 Az = 8.8 (USNOAA) PV(A):0.8s 19.2nm MPV(A)=5.0

Day	Phase	h m s	Remarks	
1.	eP e(PP)	A A	09 53 28 56 08	<u>Sakhalin Island</u> 46.85 N 143.64 E H = 09 42 28.6 h = 385 km MB = 5.0 D = 74.44 Az = 330.6 (USNOAA)
1.	eP LmH LmV	A B B	22 25 28.5 31.8 31.8	<u>Greece</u> 38.13 N 22.76 E H = 22 21 54.9 h = 24 km MB = 4.7 D = 14.81 Az = 331.2 (USNOAA) PV(A):2.0s 30.0nm MPV(A)=4.1 LmH(B):11s 2.1 μ m MLH(B)=4.5 LmV(B):9.5s 2.2 μ m MLV(B)=4.8
1.	eP LmH LmV	A B B	22 42 03.5 47.1 48.4	<u>Greece</u> 38.04 N 22.79 E H = 22 38 35.3 h = 29 km MB = 5.0 D = 14.90 Az = 331.3 (USNOAA) PV(A):1.8s 40.5nm MPV(A)=4.2 LmH(B):12s 1.8 μ m MLH(B)=4.4 LmV(B):10s 1.8 μ m MLV(B)=4.7
2.	eP LmH LmV	A B B	00 35 31.5 41.3 42.0	<u>Algeria</u> 35.57 N 6.18 E H = 00 31 48.7 h = 36 km MB = 4.5 D = 15.57 Az = 13.0 (USNOAA) PV(A):1.2s 24.4nm MPV(A)=4.2 LmH(B):13s 0.5 μ m MLH(B)=3.9 LmV(B):12s 0.4 μ m MLV(B)=4.0
2.	ePKIKP LmH LmV	A B B	06 34 32.5 22.2 28.7	<u>Solomon Islands</u> 6.82 S 154.91 E H = 06 15 32.8 h = 54 km MB = 5.4 D = 126.71 Az = 331.7 (USNOAA) PKIKPV(A):1.5s 30.2nm LmH(B):21s 2.5 μ m MLH(B)=5.9 LmV(B):21s 1.6 μ m MLV(B)=5.7
2.	ePKP2 LmH LmV	A B B	10 00 43 11 15.7 21.4	<u>Kermadec Islands Region</u> 28.95 S 177.05 W H = 09 40 21.2 h = 59 km MB = 5.5 (USNOAA) D = 157.3 PKP2V(A):1.4s 27.9nm LmH(B):20s 1.8 μ m MLH(B)=5.8 LmV(B):18s 1.4 μ m MLV(B)=5.8

Day	Phase	h m s	Remarks	
2.	iP	A	14 45 20	<u>Explosion Hilders/Rhön, Fed. Rep. Germany</u> 50°32.52'N 10°02.39'E H = 14 45 00.87 yield 21.4 t (Hannover) D = 1.0
3.	iP ipP	A A	08 23 35.5 23 41.5	<u>Gulf of Alaska</u> 58.36 N 150.52 W H = 08 12 20.8 h = 25 km MB = 5.0 D = 70.38 Az = 12.0 (USNOAA)
3.	LmH LmV	B B	11 38.5 41.7	<u>Probably New Britain Region</u> (USNOAA) LmH(B):22s 2.9 μ m
3.	eP	A	14 29 28	<u>Near West Coast of Colombia</u> 6.39 N 77.51 W H = 14 16 55.3 h = 25 km MB = 5.2 (USNOAA) D = 84.5 PV(A):1.8s 40.5nm MPV(A)=5.4
4.	ePKHKP ePKP2	A A	00 55 38 55 45	<u>Fiji Islands Region</u> 20.84 S 178.76 W H = 00 36 57.9 h = 631 km MB = 4.7 D = 149.15 Az = 347.1 (USNOAA) PKHKPV(A):0.8s 17.3nm
4.	eP	A	02 24 15	<u>North Atlantic Ocean</u> 58.3 N 31.4 W H = 02 18 48.4 h = 33 km MB = 4.0 D = 25.77 Az = 88 (ISC)
4.	ePKIKP	A	17 15 23	<u>Banda Sea</u> 6.83 S 130.41 E H = 16 56 54.3 h = 92 km MB = 5.6 D = 113.31 Az = 322.6 (USNOAA)
4.	eP LmH LmV	A B B	17 52 22 18 32.0 32.0	<u>Gulf of California</u> 30.63 N 113.65 W H = 17 39 45.4 h = normal MB = 5.0 D = 85.75 Az = 31.4 (USNOAA) PV(A):1.2s 10.2nm MPV(A)=4.9

Day	Phase	h m s	Remarks
5.	eP	A 10 51 08.5	<u>Kirgiz-Sinkiang Border Region</u> 40.16 N 77.09 E H = 10 42 49.1 h = normal MB = 5.0 D = 45.74 Az = 306.0 (USNOAA) PV(A):0.8s 11.5nm MPV(A)=4.9
5.	ePKIKP	A 14 44 51.5	<u>Fiji Islands</u> 22.55 S 178.22 W
	+iPKHKP	A 44 57.5	H = 14 26 09.8 h = 545 km MB = 4.7
	ePKP2	A 45 03	D = 148.97 Az = 347.8 (USNOAA) PKHKPV(A):1.3s 35.0nm
5.	eP	A 14 58 36	<u>Jordan-Syria Region</u> 35.12 N 38.90 E H = 14 53 11.7 h = 33 km MB = 4.8 D = 25.12 Az = 316.6 (USNOAA) PV(A):1.4s 32.5nm MPV(A)=4.7
5.	+iPKP	A 20 00 42.8	<u>Fiji Islands Region</u> 15.81 S 177.66 W H = 19 41 58.2 h = 456 km MB = 4.8 D = 144.46 Az = 349.8 (USNOAA) PKPV(A):1.2s 40.6nm
5.	-iPn	AB 23 26 08.4	<u>Yugoslavia</u> 44.03 N 15.78 E
	ePg	A 26 36.5	H = 23 24 23.1 h = 49 km MB = 5.0
	iSn	A 27 29	D = 7.20 Az = 338.3 (USNOAA)
	e	A 27 59	LmH(B):11s 1.6/um MLH(B)=3.9
	iSg	B 28 16	LmV(B):12s 1.3/um
	LmH	B 29.1	
	LmV	B 29.1	
6.	eP	A 04 27 52	<u>Kurile Islands</u> 49.60 N 156.07 E
	e	A 28 28	H = 04 16 10.8 h = 46 km MB = 4.9
	LmH	B 05 03.0	D = 75.61 Az = 337.5
	LmV	B 03.6	
6.	e	A 14 59 37.5	<u>USSR, explosion, yield 11.5 t (PRU)</u> 50°47.4'N 14°31.5'E

Day	Phase	h m s	Remarks
6.	e(P)	A 15 50 45	<u>Near West Coast of Colombia</u> 5.95 N 77.60 W H = 15 38 06.8 h = 38 km MB = 4.5 D = 84.94 Az = 39.7 (USNOAA)
6.	eP	A 21 37 54	<u>Near West Coast of Colombia</u>
	e	A 38 00.5	6.18 N 77.62 W
	LmH	B 22 14.5	H = 21 25 21.0 h = 33 km MB = 5.2
	LmV	B 14.5	D = 84.79 Az = 39.7 (USNOAA) LmH(B):18s 0.3/um MLH(B)=4.8 LmV(B):20s 0.6/um MLV(B)=5.1
6.	eP1	A 22 14 20.5	<u>Tadzhik SSR</u> 39.07 N 71.62 E
	iP2	A 14 22.5	H = 22 06 26.8 h = 68 km MB = 5.2
	ePn	A 15 57	D = 42.96 Az = 306.0 (USNOAA)
	ePP	A 16 02	P1V(A):1.0s 15.7nm MP1V(A)=4.8 P2V(A):1.0s 39.3nm MP2V(A)=5.1
6.	eP	A 23 47 23.5	<u>Hokkaido, Japan Region</u> 41.51 N 142.10 E H = 23 35 28.6 h = 71 km MB = 5.0 D = 78.54 Az = 330.4 (USNOAA) PV(A):1.4s 20.9nm MPV(A)=4.8
7.	e(P)	A 01 24 03.5	<u>Near West Coast of Colombia</u> 5.98 N 77.58 W H = 01 11 23.1 h = 34 km MB = 4.8 D = 84.91 Az = 39.7 (USNOAA) (P)V(A):1.5s 17.6nm
7.	e(pP)	A 02 28 24	<u>Southern Iran</u> 27.78 N 56.50 E H = 02 20 36.7 h = 43 km MB = 5.0 D = 40.78 Az = 316.5 (USNOAA)
7.	eP	A 10 51 10.5	<u>Western Caucasus</u> 43.36 N 44.04 E
	e	A 51 25	H = 10 46 03.8 h = normal MB = 4.5
	LmH	C 59.0	D = 23.14 Az = 299.7 (USNOAA)

Day	Phase	h m s	Remarks
cont. 7.	LmV	C 11 00.9	PV(A):0.8s 13.5nm MPV(A)=4.5 LmH(C):20s 0.4/um MLH(C)=3.9 LmV(C):14s 0.5/um MLV(C)=4.3
7.	ePn	A 14 47 02	D = 2.9
	e	A 47 07	
	e(Sn)	A 47 34.5	
	eSg	A 47 48	
7.	eP	A 16 13 09	<u>Rat Islands, Aleutian Is.</u> 50.50 N 177.66 E H = 16 01 10.3 h = 41 km MB = 4.9 D = 78.53 Az = 351.0 (USNOAA) PV(A):1.1s 16.1nm MPV(A)=49
7.	ePKP	A 19 02 41.5	<u>Samoa Islands Region</u> 16.44 S 172.43 W H = 18 43 01.2 h = 14 km MB = 5.1 D = 145.73 Az = 355.4 (USNOAA) h = 18 km PKPV(A):1.1s 30.2nm
	eipPKP	A 02 46.5	
8.	eP	A 01 54 19.5	<u>Northwest of Kurile Islands</u> 47.93 N 146.75 E H = 01 43 30.4 h = 490 km MB = 4.6 D = 74.50 Az = 332.2 (USNOAA) PV(A):1.0s 19.7nm MPV(A)=4.6
8.	P1	A 02 51 16.5	<u>Dead Sea Region</u> 31.7 N 35.3 E H = 02 45 45 h = 0 km D = 25.82 Az = 324 (ISC) P1V(A):0.6s 13.2nm MP1V(A)=4.9 P2V(A):1.3s 28.4nm MP2V(A)=4.7
	P2	A 51 19.5	
8.	ePKP	A 04 07 57.5	<u>Tonga Islands</u> 19.27 S 173.47 W H = 03 48 13.3 h = 40 km MB = 5.2 D = 148.44 Az = 353.8 (USNOAA) PKPV(A):1.6s 30.2nm
	e	A 08 20	
	e	A 08 40	

Day	Phase	h m s	Remarks
8.	+iP	ABC 05 04 46	<u>Near East Coast of Kamchatka</u>
	eS	BC 14 04	53.83 N 160.45 E
	ePS	C 14 32	H = 04 53 21.8 h = 53 km MB = 5.6
	ePPS	BC 14 57	D = 72.66 Az = 339.8 (USNOAA)
	e	BC 15 05	PV(A):1.2s 287.0nm MPV(A)=6.1
	LmV	B 35.3	PV(B):4.5s 7.7/um MPV(B)=5.9
	LmH	B 35.8	LmV(B):26s 1.7/um MLV(B)=5.2 LmH(B):25s 2.4/um MLH(B)=5.4
8.	ePKIKP	A 07 17 52	<u>Fiji Islands Region</u> 21.63 S 179.05 W
	-iPKHKP	A 17 57.5	H = 06 59 10.7 h = 577 km MB = 5.0
	ePKP2	A 18 05.5	D = 149.85 Az = 346.4 (USNOAA) PKHKPV(A):1.1s 76.6/um
8.	ePKP2	A 10 59 09.5	<u>Kermadec Islands</u> 29.30 S 176.96 W H = 10 38 44.5 h = 49 km MB = 4.7(USNOAA) D = 157.7 PKP2V(A):1.2s 12.2nm
8.	ePKP2	A 11 28 07.5	<u>Kermadec Islands Region</u> 29.37 S 176.89 W H = 11 07 43.5 h = 47 km MB = 4.8(USNOAA) D = 157.7
8.	eP	A 13 14 06.5	<u>Andreanof Islands, Aleutian Is.</u>
	e	A 14 12.5	50.45 N 176.20 W
	e	A 14 18.5	H = 13 02 04.7 h = 38 km MB = 5.1
	e	A 14 26.5	D = 79.07 Az = 354.9 (USNOAA) PV(A):1.4s 46.5 MPV(A)=5.3
8.	ePKP2	A 15 30 17.5	<u>Tonga Islands Region</u> 22.50 S 175.36 W H = 15 10 13.1 h = normal MB = 4.5 D = 151.38 Az = 350.7 (USNOAA) PKP2V(A):1.2s 10.2nm
8.	eP1	A 22 17 37	<u>Greece</u> 38.28 N 20.25 E
	eP2	A 17 39.5	H = 22 14 23.5 h = 57 km MB = 4.5
	e(S)	A 20 22	D = 13.80 Az = 336.4 (USNOAA)

Day	Phase	h m s	Remarks
cont. 8.	LmH	B 22 24.3	P2V(A):1.0s 19.7nm MP2V(A)=4.2
	LmV	B 24.3	LmH(B):11s 0.7/um LmV(B):12s 0.9/um
8.	eP	A 23 24 43.5	<u>Kurile Islands</u> 43.59 N 146.89 E H = 23 12 44.8 h = normal MB = 4.7 D = 78.39 Az = 332.8 (USNOAA)
8.	+iP1	ABC 23 48 11	<u>Kurile Islands</u> 43.80 N 147.43 E
	iP2	A 48 13	H = 23 36 09.7 h = 15 km MB = 5.8
	e	A 48 21	D = 78.38 Az = 333.1 (USNOAA)
	eS	BC 58 00	P1V(A):1.3s 107.0nm MP1V(A)=5.8
	e	B 58 20	P2V(A):1.1s 187.5nm MP2V(A)=6.1
	eSS	C 24 03.0	LmV(B):17.5s 4.3/um MLV(B)=5.9
	LmV	B 27.5	LmH(B):16s 4.1/um MLH(B)=5.9
	LmH	B 27.6	
9.	eP	A 01 02 05	<u>Ionian Sea</u> 37.85 E 19.94 E
	LmH	B 08.7	H = 00 58 43.6 h = 14 km MB = 4.6
	LmV	B 08.7	D = 14.10 Az = 337.8 (USNOAA)
			PV(A):1.3s 13.1nm MPV(A)=4.5
			LmH(B):11s 1.6/um MLH(B)=4.4
			LmV(B):12s 1.3/um
9.	eP1	A 01 26 36	<u>Tadzhik SSR</u> 39.00 N 71.64 E
	iP2	A 26 37.9	H = 01 18 44.1 h = 81 km MB = 5.1
	ePP	A 28 17.5	D = 43.02 Az = 306.1 (USNOAA)
	e	A 28 29	P2V(A):1.2s 34.6nm MP2V(A)=5.1
	e	A 28 52	LmH(B):8s 0.5/um
	e	A 29 11.5	LmV(B):11s 0.4/um
	LmH	B 43.9	
	LmV	B 47.3	
9.	eP1	A 07 37 23	<u>Mediterranean Sea</u> 34.96 N 13.67 E
	eP2	A 37 26	H = 07 33 39.2 h = normal MB = 4.3
	F m	A 37 28	D = 15.75 Az = 355.2 (USNOAA)
	LmH	B 44.4	P2mV(A):2.0s 42.7nm MP2mV(A)=4.2

Day	Phase	h m s	Remarks
cont. 9.	LmV	B 07 45.6	LmH(B):14s 0.8/um MLH(B)=5.0 LmV(B):13s 0.4/um MLV(B)=5.0
9.	LmH	C 11 10.0	Probably <u>Mindanao, Philippine Islands</u>
	LmV	C 20.0	(USNOAA)
9.	eP	A 11 19 16	<u>Andreanof Islands, Aleutian Is.</u> 51.38 N 178.42 W H = 11 07 20.2 h = 41 km MB = 5.2 D = 78.00 Az = 353.5 (USNOAA) PV(A):1.2s 16.3nm MPV(A)=4.9
9.	eP1	A 13 56 48	<u>Tadzhik SSR</u> 39.10 N 71.67 E
	eP2	A 56 50.2	H = 13 48 52.6 h = 46 km MB = 5.2
	ePP	A 58 28.5	D = 42.97 Az = 306.0 (USNOAA)
	LmH	B 14 15.8	P1V(A):0.9s 19.5nm MP1V(A)=4.9
	LmV	B 18.5	P2V(A):1.2s 36.6nm MP2V(A)=5.0
			LmH(B):14s 0.4/um MLH(B)=4.4
			LmV(B):13.6s 0.3/um MLV(B)=4.5
9.	e(Sn)	A 17 37 42	<u>Yugoslavia</u> 46.6 N 15.17 E H = 17 35 25 (ISC) D = 5.7
10.	eP	A 00 28 52	<u>Andreanof Islands, Aleutian Is.</u> 50.18 N 178.59 W H = 00 16 49.1 h = normal MB = 4.6 D = 79.18 Az = 353.4 (USNOAA) PV(A):0.8s 9.6nm MPV(A)=4.9
10.	eiP1	ABC 09 05 28.5	<u>South Indian Ocean</u> 3.59 S 86.16 E
	iP2	A 05 38.2	H = 08 53 04.8 h = normal MB = 5.9
	iP3	A 05 48.7	D = 83.03 Az = 321.8 (USNOAA)
	ePP	BC 08 44	P1V(A):1.3s 100.0nm MP1V(A)=5.8
	e	B 08 47	P1V(B):6s 1.2/um MP1V(B)=6.3
	eS	B 15 40	P3V(A):1.5s 261.0nm MP3V(A)=6.1
	iS	C 15 46	PPV(B):12s 0.97/um MPPV(B)=6.1
	eSS	C 20 56	SH(B):15s 3.45/um MSH(B)=6.3

Day	Phase	h m s	Remarks
cont. 10.	eSSS	C 09 24 44	LmV(B):16s 5.4/um MLV(B)=6.0
	eSSSS	C 27 25	LmH(B):17.5s 5.7/um MLH(B)=6.0
	LmV	B 47.6	
	LmH	B 47.8	
10.	eP	A 10 49 58.5	<u>Kurile Islands</u> 46.49 N 153.32 E
	e	A 50 02.5	H = 10 38 02.8 h = normal MB = 4.8 D = 77.75 Az = 336.2 (USNOAA) PV(A):1.0s 11.8nm MPV(A)=4.9
10.	eiP	A 13 51 41.5	<u>Ionian Sea</u> 38.03 N 19.89 E
	eipP	A 51 47.5	H = 13 48 23.5 h = 18 km MB = 4.6
	LmH	B 58.4	D = 13.92 Az = 337.6 (USNOAA)
	LmV	B 58.4	PV(A):0.8s 21.2nm LmH(B):10s 1.6/um MLH(B)=4.4 LmV(B):11s 1.6/um
10.	ePKIKP	BC 22 19 40	<u>Kermadec Islands Region</u>
	e	A 19 42	31.90 S 177.93 W
	eiPKP2	AB 20 19	H = 21 59 42.9 h = normal MB = 5.9
	ei	B 20 50	D = 159.97 Az = 342.0 (USNOAA)
	ePP	C 24 00	PPV(B):8.5s 1.63/um MPPV(B)=6.2
	ePP	B 24 04	LmV(B):18s 6.5/um MLV(B)=6.5
	ePS	C 34 24	LmH(B):17s 3.5/um MLH(B)=6.2
	eiSPP	BC 37 26	
	e(PPS)	C 37 31	
	eSS	C 44 08	
	ei	B 44 28	
	eiSSS	B 50 00	
	LmV	B 23 48.1	
	LmH	B 49.7	
11.	ePKP2	A 01 23 33	<u>South of Kermadec Islands</u> 32.03 S 177.90 W H = 01 02 58.0 h = normal MB = 4.6(USNOAA) D = 160.2 PKP2V(A):1.5s 20.1nm

Day	Phase	h m s	Remarks
11.	eP	A 02 38 47.5	<u>Greece</u> 38.19 N 20.06 E
	LmV	B 45.4	H = 02 35 29.2 h = 21 km MB = 4.7
	LmH	B 45.6	D = 13.83 Az = 337.0 (USNOAA) PV(A):0.8s 34.6nm LmV(B):8s 1.0/um LmH(B):8s 0.9/um MLH(B)=4.2
11.	ePKIKP	ABC 03 36 47	<u>Kermadec Islands Region</u> 31.81 S 178.13 W
	iPKP2	ABC 37 25	H = 03 16 49.6 h = normal MB = 5.6
	ePP	BC 41 00	D = 159.84 Az = 341.8 (USNOAA)
	ePP	A 41 05	PPV(B):9s 2.0/um MPPV(B)=6.3
	ePS	C 51 32	LmV(B):15.5s 10.5/um MLV(B)=6.8
	eSPP	C 54 30	LmH(B):14.5s 7.6/um MLH(B)=6.6
	eSS	C 04 01 08	
	eSSS	C 06 15	
	e	C 07 00	
	LmV	B 26.2	
	LmH	B 26.4	
11.	eP	A 03 42 41	<u>Ryukyu Islands</u> 26.74 N 129.69 E
			H = 03 30 01.9 h = 27 km MB = 5.3
			D = 85.57 Az = 325.7 (USNOAA) PV(A):2.3s 110.0nm MPV(A)=5.6
11.	eP	A 05 11 43.5	<u>Ryukyu Islands</u> 29.29 N 130.43 E
	e	A 11 54.5	H = 04 59 18.3 h = 51 km MB = 5.1
			D = 83.84 Az = 325.9 (USNOAA)
11.	eiP	A 05 41 16	<u>Kurile Islands</u> 43.48 N 147.66 E
	eipP	A 41 28	H = 05 29 17.3 h = 50 km MB = 5.2
			D = 78.75 Az = 333.2 (USNOAA) h = 44 km
11.	ePKIKP	A 05 58 05	<u>South of Kermadec Islands</u>
	ePKP2	A 58 41.5	32.05 S 177.82 W
	eSKKS2	BC 06 13 32	H = 05 38 06.0 h = 32 km MB = 5.6
	ePPS	BC 15 52	D = 160.15 Az = 342.1 (USNOAA)
	LmH	B 07 12.2	LmH(B):20s 3.3/um MLH(B)=6.1
	LmV	B 16.0	LmV(B):20s 3.1/um MLV(B)=6.1

Day	Phase	h m s	Remarks
11.	ePKP2 A	07 05 45	<u>Kermadec Islands Region</u> 31.94 S 177.80 W H = 06 45 07.7 h = normal MB = 4.8(USNOAA) D = 160.1
11.	eP A	08 57 55	<u>Near East Coast of Kamchatka</u> 51.47 N 157.17 E H = 08 46 21.3 h = normal MB = 4.8 D = 74.14 Az = 338.0 (USNOAA) PV(A):0.8s 7.7nm MPV(A)=4.8
11.	eP A	10 38 01	<u>Near East Coast of Kamchatka</u>
	LmH B	11 20.4	53.80 N 160.73 E
	LmV B	27.7	H = 10 26 34.5 h = normal MB = 5.0 D = 72.74 Az = 340.0 (USNOAA) PV(A):0.9s 19.5nm MPV(A)=5.1 LmH(B):18s 1.3/um MLH(B)=5.2 LmV(B):14s 1.4/um MLV(B)=5.4
11.	e A	10 44 35	<u>Ryukyu Islands</u> 26.56 N 129.73 E
	e A	44 45	H = 10 31 33.1 h = normal MB = 4.9(USNOAA) D = 85.7
11.	ePKP2 A	11 47 17.5	<u>South of Kermadec Islands</u>
	e A	47 43.5	32.31 S 177.77 W H = 11 26 40.3 h = normal MB = 5.0(USNOAA) D = 160.3 PKP2V(A):1.6s 22.0nm
11.	e A	16 00 31	Probably <u>Oaxaca, Mexico</u> (USNOAA)
11.	ePKP2 A	20 46 48	<u>Kermadec Islands Region</u> 31.45 S 178.09 W H = 20 26 14.3 h = normal MB = 4.3(USNOAA) D = 159.7
11.	ePKP2 A	22 49 01	<u>South of Kermadec Islands</u> 32.28 S 178.02 W H = 22 28 25.0 h = normal MB = 4.5(USNOAA) D = 160.3

Day	Phase	h m s	Remarks
12.	e A	03 59 10	<u>Upper Silesia / Poland,</u> rockburst (CLL)
12.	ePKHKP A	07 20(11)	<u>South of Kermadec Islands</u>
	ePKP2 A	20 35	32.03 S 178.04 W H = 06 59 58.3 h = normal MB = 5.1(USNOAA) D = 160.1 PKP2V(A):1.2s 26.4nm
12.	ePKP2 A	07 31 13.5	<u>South of Kermadec Islands</u>
	LmH B	08 49.5	32.23 S 178.04 W
	LmV B	49.5	H = 07 10 36.3 h = normal MB = 4.8(USNOAA) D = 160.3 PKP2V(A):1.2s 20.3nm LmH(B):16s 0.5/um MLH(B)=5.3 LmV(B):16s 0.6/um MLV(B)=5.5
12.	ePKP2 A	07 32 58.5	<u>South of Kermadec Islands</u>
	e A	33 03	H = 07 12 21 (UPP)
12.	eiP A	09 44 11	<u>E.Russia-N.E. China Border Region</u>
	epP A	46 08	42.75 N 131.04 E
	esP A	47 05	H = 09 33 36.6 h = 555 km MB = 5.2 D = 73.07 Az = 324.6 (USNOAA) PV(A):1.8s 132.0nm MPV(A)=5.1 pPV(A):1.7s 60.6nm
12.	ePKP2 A	11 51 04	<u>South of Kermadec Islands</u> 32.3 S 178.0 W H = 11 30 27.0 h = normal MB = 4.7(USNOAA) D = 160.3
12.	eP A	20 18 14.5	<u>Gulf of California</u> 30.07 N 113.38 W
	LmH B	20 54.5	H = 20 05 34.5 h = normal MB = 5.2
	LmV B	56.5	D = 86.11 Az = 31.5 (USNOAA) PV(A):1.2s 12.2nm MPV(A)=5.0 LmH(B):20s 0.5/um MLH(B)=4.9 LmV(B):18s 0.5/um MLV(B)=5.0

Day	Phase	h m s	Remarks	
13.	eP1 eP2 LmV LmH	A A B B	00 58 29 58 32 01 09.8 11.0	<u>Turkey</u> 38.28 N 36.98 E H = 00 53 37.3 h = 34 km MB = 4.6 D = 21.80 Az = 313 (ISC) P2V(A):1.6s 44.0nm MPV(A)=4.4
13.	ePKP	AB	04 19 12.5	<u>Fiji Islands Region</u> 18.85 S 175.99 E H = 03 59 35.9 h = normal MB = 5.3 D = 145.92 Az = 342.2 (USNOAA) PKPV(A):2.3s 158.0nm
13.	ePKP e	A A	07 13 05.5 13 13.5	<u>Fiji Islands Region</u> 18.78 S 176.00 E H = 06 53 28.6 h = normal MB = 5.1 D = 145.86 Az = 342.2 (USNOAA) PKPV(A):1.3s 50.2nm
13.	ePKP2	A	08 32 40	<u>South of Kermadec Islands</u> 32.3 S 177.9 W H = 08 12 03.4 h = normal MB = 4.8(USNOAA) D = 160.4 PKP2V(A):1.4s 16.3nm
13.	ePKP e	A A	14 22 02 22 09	<u>Fiji Islands Region</u> 18.54 S 176.12 E H = 14 02 25.8 h = normal MB = 5.1 D = 145.66 Az = 342.4 (USNOAA) PKPV(A):2.0s 68.4nm
13.	ePKIKP e ePP e ePKKP LmH LmV	A BC A B A B B	19 12 05.5 13 20 13 28.5 14 10 22 21 56.0 20 04.0	<u>New Guinea</u> 4.06 S 143.03 E H = 18 53 30.0 h = 120 km MB = 5.7 D = 118.32 Az = 327.2 (USNOAA) PKIKPV(A):1.2s 20.3nm PPV(A):1.4s 48.8nm MPPV(A)=5.3 PKKPV(A):2.2s 32.7nm LmH(B):19s 1.2/um LmV(B):15s 0.7/um
13.	eP e	A A	23 34 16.5 34 31	<u>Near Coast of Guatemala</u> 13.76 N 90.05 W H = 23 21 42.5 h = 100 km MB = 4.8 D = 86.72 Az = 38.6 (USNOAA) PV(A):1.3s 13.1nm MPV(A)=4.8

Day	Phase	h m s	Remarks	
14.	e(P)	A	00 45 36.5	<u>India-West Pakistan Border Region</u> 31.23 N 74.34 E H = 00 36 34.5 h = normal MB = 5.2 D = 49.63 Az = 312.0 (USNOAA)
14.	+iP iPn +iPcP eiS eiSn LmH LmV e(P'P')	ABC B B B B B B A	06 06 03.0 06 30 09 10 10 56 11 35 17.8 20.8 39 25	<u>Novaya Zemlya</u> 73.32 N 55.15 E H = 05 59 57.1 h = 0 km MB = 6.7 D = 29.35 Az = 243.4 (USNOAA) PV(A):1.4s 1083.0nm MPV(A)=6.5 PV(B):3.0s 3.1/um MPV(B)=6.6 LmH(B):13s 24.2/um MLH(B)=6.0 LmV(B):8s 15.3/um MLV(B)=6.1
14.	eP	A	07 26 23.5	<u>Kurile Islands</u> 43.79 N 146.88 E H = 07 14 26.2 h = 40 km MB = 4.6 D = 78.22 Az = 332.8 (USNOAA) PV(A):1.3s 13.1nm MPV(A)=4.8
14.	eP LmH LmV	A B B	07 39 19 08 02.7 02.7	<u>Southern Sinkiang Prov., China</u> 40.93 N 89.43 E H = 07 29 58.6 h = 0 km MB = 4.6 D = 52.77 Az = 308.6 (USNOAA) Atmospheric nuclear explosion (UPP) LmH(B):14s 1.3/um MLH(B)=5.1 LmV(B):14s 1.6/um MLV(B)=5.3
14.	eP epP ePP	A A A	07 56 46 56 57.5 08 00 56	<u>Mindanao, Philippine Islands</u> 7.03 N 123.84 E H = 07 43 12.6 h = 59 km MB = 5.4 D = 98.35 Az = 323.4 (USNOAA) PV(A):1.2s 8.1nm MPV(A)=5.1
14.	ePKP2 e e e	A A A A	09 26 35 26 41 26 44 26 58	<u>South of Kermadec Islands</u> 32.62 S 177.48 W H = 09 05 52.6 h = normal MB = 4.4(USNOAA) D = 160.8 PKP2V(A):1.0s 9.8nm

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Day	Phase	h m s	Remarks
14.	+ePKIKP AB	10 59 31	<u>Fiji Islands Region</u> 18.06 S 178.46 W H = 10 40 58.0 h = 609 km MB = 5.3 D = 146.51 Az = 348.4 (USNOAA)
	+iPKHKP A	59 33.7	
	ePKP2 A	59 35.8	
	e A	11 05 48	PKIKPV(A):1.4s 34.9nm PKHKPV(A):1.2s 97.6nm
14.	+eP A	14 42 18.5	<u>Southern Nevada</u> 37.07 N 116.01 W H = 14 30 00.0 h = 0 km MB = 5.5 D = 81.26 Az = 30.7 (USNOAA) 37°04'14.4"N 116°00'18.5"W Nevada test site "Tijeras" (USAEC) PV(A):1.3s 43.6nm MPV(A)=5.4 LmV(C):16s 0.2/um MLV(C)=4.5
	LmV C	15 20.5	
14.	+iP A	16 12 35	<u>Kurile Islands Region</u> 43.40 N 148.04 E H = 16 00 34.1 h = 42 km MB = 5.2 D = 78.94 Az = 333.4 (USNOAA)
	ipP A	12 48	
	LmH B	45.0	h = 48 km
	LmV B	52.3	PV(A):1.2s 38.6nm MPV(A)=5.3 pPV(A):1.5s 75.4nm LmH(B):20s 1.6/um MLH(B)=5.4 LmV(B):16s 1.6/um MLV(B)=5.5
14.	epP A	17 02 56	<u>Burma</u> 21.90 N 94.25 E H = 16 51 37.9 h = 71 km MB = 5.2 D = 68.79 Az = 317.4 (USNOAA)
	e A	03 05	h = 78 km
14.	eP A	18 18 01	<u>Kurile Islands</u> 43.51 N 147.85 E H = 18 05 59.9 h = 33 km MB = 5.1 D = 78.78 Az = 333.3 (USNOAA)
	epP A	18 13.5	h = 46 km PV(A):1.6s 35.7nm MPV(A)=5.1 pPV(A):1.4s 65.0nm
14.	+iP AB	18 27 38.7	<u>Kurile Islands Region</u> 43.52 N 147.97 E H = 18 15 37.3 h = 30 km MB = 5.5 D = 78.82 Az = 333.4 (USNOAA)
	+ipP A	27 51.5	
	eS BC	37 32	h = 47 km
	eSS BC	42 48	

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Day	Phase	h m s	Remarks
cont. 14.	LmH B	19 07.4	PV(A):1.3s 69.8nm MPV(A)=5.5
	LmV B	07.5	PV(B):10s 2.2/um MPV(B)=6.2 pPV(A):2.0s 265.0nm SH(B):13s 3.2/um MSH(B)=6.2 LmH(B):15s 17.8/um MLH(B)=6.5 LmV(B):16s 21.7/um MLV(B)=6.6
14.	eP A	18 38 36.5	<u>Kurile Islands</u> 43.56 N 147.68 E H = 18 26 37.3 h = 45 km MB = 4.9 D = 78.68 Az = 333.2 (USNOAA)
	ePcP A	38 46	h = 46 km
	epP A	38 49	
14.	eP A	18 47 16	<u>Kurile Islands Region</u> 43.44 N 148.05 E H = 18 35 16.2 h = 52 km MB = 4.8 D = 78.91 Az = 333.4 (USNOAA) PV(A):1.5s 20.1nm MPV(A)=4.9
14.	+iP AB	21 25 59.3	<u>Kurile Islands</u> 43.49 N 146.98 E H = 21 14 01.0 h = 41 km MB = 5.4 D = 78.51 Az = 332.8 (USNOAA)
	eS BC	35 50	
	eSS C	40 45	
	LmV B	22 05.5	PV(A):1.1s 52.4nm MPV(A)=5.4 PV(B):8s 1.2/um MPV(B)=5.9 SH(B):8s 1.2/um MSH(B)=6.0 LmV(B):17s 6.3/um MLV(B)=6.1 LmH(B):14s 5.7/um MLH(B)=6.1
	LmH B	05.6	
15.	eP A	00 38 27.5	<u>Kurile Islands</u> 43.88 N 147.80 E H = 00 26 28.2 h = normal MB = 4.7 D = 78.44 Az = 333.3 (USNOAA)
	epP A	38 40	h = 46 km
15.	eP A	01 56 08.5	<u>Kurile Islands</u> 43.70 N 147.80 E H = 01 44 07.8 h = normal MB = 4.6 D = 78.60 Az = 333.3 (USNOAA)
	epP A	56 20	h = 43 km
15.	eP A	04 03 38.5	<u>Southern Sinkiang Prov., China</u> 39.76 N 77.23 E

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Day	Phase	h m s	Remarks
cont.			
15.	LmH B LmV B	04 24.3 24.3	H = 03 55 16.1 h = normal MB = 4.9 D = 46.06 Az = 306.4 (USNOAA) PV(A):1.0s 5.9nm MPV(A)=4.6 LmH(B):12s 0.6/um MLH(B)=4.7 LmV(B):12s 0.8/um MLV(B)=5.0
15.	LmH B LmV B	05 11.4 11.4	<u>Southern Sinkiang Prov., China</u> 39.8 N 72.2 E H = 04 42 19.0 h = normal MB = 4.6(USNOAA) D = 46.1 LmH(B):12s 0.3/um MLH(B)=4.5 LmV(B):13s 0.5/um MLV(B)=4.7 P is superimposed by calibration pulses
15.	ePKIKP A +iPKHKP A	12 32 00 32 01.8	<u>Fiji Islands Region</u> 17.61 S 178.84 W H = 12 13 23.6 h = 564 km MB = 5.1 D = 145.99 Az = 348.1 (USNOAA) PKIKPV(A):1.2s 14.2nm PKHKPV(A):1.4s 65.1nm
15.	eP A LmH B LmV B	15 37 21.5 16 16.0 16.0	<u>Hokkaido, Japan Region</u> 42.00 N 144.29 E H = 15 25 22.3 h = 56 km MB = 4.7 D = 78.90 Az = 331.5 (USNOAA) PV(A):1.5s 20.1nm MPV(A)=4.9 LmH(B):16s 0.6/um MLH(B)=5.0 LmV(B):17.5s 0.8/um MLV(B)=5.1
16.	eiP1 ABC eP2 A eP3 A ePP B ePP C eS C LmH B LmV B	05 38 21 38 24 38 26.5 41 28 41 30 48 22 06 11.4 20.5	<u>Honshu, Japan</u> 39.26 N 140.70 E H = 05 26 13.3 h = 24 km MB = 5.9 D = 79.95 Az = 329.9 (USNOAA) P1V(A):1.4s 65.0nm MP1V(A)=5.5 P1V(B):9s 1.9/um MP1V(B)=6.1 P2V(A):1.6s 148.5nm MP2V(A)=5.8 P3V(A):2.2s 392.0nm MP3V(A)=6.1 PPV(B):10s 0.9/um MPPV(B)=5.9 LmH(B):18s 13.4/um MLH(B)=6.3 LmV(B):14.5s 8.1/um MLV(B)=6.2

Day	Phase	h m s	Remarks
16.	eP A	10 55 56.5	<u>Honshu, Japan</u> 39.32 N 140.72 E H = 10 43 49.0 h = 25 km MB = 4.7 D = 79.91 Az = 329.9 (USNOAA)
16.	ePKP A	12 38 50	<u>New Hebrides Islands</u> 19.18 S 168.83 E H = 12 19 19.9 h = 33 km MB = 4.5 D = 143.77 Az = 335.3 (USNOAA) PKPV(A):0.7s 9.6nm
16.	eP A	16 23 38	<u>Fox Islands, Aleutian Is.</u> 53.01 N 167.66 W H = 16 11 50.5 h = 45 km MB = 4.2 D = 76.72 Az = 0.5 (USNOAA)
17.	eP A LmH B LmV B	01 54 53 02 03.5 05.5	<u>Turkey</u> 40.47 N 35.83 E H = 01 50 23.9 h = normal MB = 4.2 D = 19.68 Az = 309.2 (USNOAA)
17.	eP A LmH B LmV B	03 23 21.5 04 05.0 05.0	<u>Taiwan Region</u> 23.99 N 122.05 E H = 03 10 54.8 h = 51 km MB = 4.8 D = 83.78 Az = 323.1 (USNOAA) PV(A):1.2s 10.2nm MPV(A)=4.7 LmH(B):16s 0.8/um MLH(B)=5.2 LmV(B):16s 0.8/um MLV(B)=5.2
17.	eP A	05 41 39.5	<u>Kirgiz-Sinkiang Border Region</u> 41.43 N 79.24 E H = 05 33 15.2 h = normal MB = 5.0 D = 46.33 Az = 305.5 (USNOAA) PV(A):1.0s 15.7nm MPV(A)=5.0
17.	eP A	13 51 50.5	<u>Kurile Islands</u> 43.71 N 147.59 E H = 13 39 50.4 h = normal MB = 4.7 D = 78.52 Az = 333.2 (USNOAA)
18.	ePKIKP A ePKHKP A ePKP2 A	01 26 07.5 26 15.5 26 30	<u>South of Fiji Islands</u> 25.69 S 178.59 E H = 01 07 21.0 h = 572 km MB = 4.9 D = 153.14 Az = 341.5 (USNOAA)

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Day	Phase	h m s	Remarks
cont. 18.	epPKHKP epPKP2	A A	01 28 20 28 36
18.	eP LmH LmV	A B B	06 18 14.5 37.0 37.0 <u>Southern Iran</u> 27.34 N 55.05 E H = 06 10 39.1 h = 40 km MB = 4.8 D = 40.22 Az = 317.3 (USNOAA) LmH(B):16s 0.6 μ m MLH(B)=4.5 LmV(B):16s 0.7 μ m MLV(B)=4.7
18.	-iPKP ei LmH LmV	A A B B	09 39 11.5 39 17.5 10 58.5 11 00.0 <u>Samoa Islands Region</u> 16.74 S 172.09 W H = 09 19 33.2 h = 35 km MB = 5.5 D = 146.04 Az = 355.8 (USNOAA) PKPV(A):1.3s 129.0nm
18.	e(PKHKP) e e(PKP2)	A A A	16 33 56.5 34 02 34 07.5 <u>South of Fiji Islands</u> 22.88 S 176.01 W H = 16 14 07.0 h = 30 km MB = 5.0 D = 151.65 Az = 349.8 (USNOAA)
18.	ePKP2	A	18 49 08.5 <u>South of Kermadec Islands</u> 33.3 S 179.7 W H = 18 28 40.6 h = 115 km MB = 5.1(USNOAA) D = 160.7 PKP2V(A):1.4s 18.6nm
18.	ePKIKP	A	20 51 09 <u>New Britain Region</u> 5.11 S 152.09 E H = 20 32 17.0 h = 68 km MB = 5.4 D = 123.88 Az = 330.8 (USNOAA) PKIKPV(A):1.2s 20.3nm
18.	eP e	A A	21 32 16.5 32 21 <u>Andaman Islands Region</u> 10.79 N 93.51 E H = 21 20 35.7 h = 95 km MB = 5.3 D = 76.61 Az = 319.6 (USNOAA)
19.	ePKHKP ePKP2	A A	05 22 10 22 20 <u>Tonga Islands Region</u> 22.86 S 174.84 W H = 05 02 15.5 h = normal MB = 5.1 D = 151.81 Az = 351.3 (USNOAA) PKHKPV(A):1.7s 42.4nm

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Day	Phase	h m s	Remarks
19.	eP	A	05 48 49.5 <u>West Pakistan</u> 26.87 N 66.96 E H = 05 40 12.2 h = normal MB = 5.4 D = 47.93 Az = 315.1 (USNOAA) PV(A):0.9s 19.5nm MPV(A)=5.2
19.	eP epP	A A	08 20 38.5 20 50.5 <u>Kurile Islands</u> 43.34 N 147.53 E H = 08 08 38.6 h = 47 km MB = 4.9 D = 78.83 Az = 333.2 (USNOAA) h = 45 km PV(A):1.3s 28.4nm MPV(A)=5.1
19.	eP	A	10 14 04.5 <u>Southern Siankiang Province, China</u> 38.6 N 75.6 E H = 10 05 47 MB = 4.5 (ANUSSR) D = 45.7
19.	eP epP esP	A A A	18 23 07.5 23 23 23 31 <u>South of Honshu, Japan</u> 31.98 N 140.73 E H = 18 10 29.3 h = 63 km MB = 5.2 D = 86.27 Az = 330.2 (USNOAA) h = 67 km
20.	ePKHKP ePKP2	A A	00 40 27.5 40 32.5 <u>Tonga Islands</u> 18.36 S 173.29 W H = 00 20 43.6 h = normal MB = 4.8 D = 147.55 Az = 354.2 (USNOAA) PKHKPV(A):1.5s 32.7nm
20.	ePKIKP iX	A A	08 44 54 45 02 <u>New Hebrides Islands</u> 15.37 S 167.41 E H = 08 25 45.1 h = 112 km MB = 5.5 D = 139.76 Az = 336.2 (USNOAA) XV(A):1.4s 60.4nm
20.	ePn e eSg	A A A	13 47 37.5 49 13 49 39.5 <u>Yugoslavia</u> 44.82 N 17.23 E H = 13 45 55.0 h = 17 km MB = 4.4 D = 6.95 Az = 329.0 (USNOAA) PnV(A):0.7s 9.6nm
20.	eiPn iSn	A A	20 21 08.5 22 34.5 <u>Yugoslavia</u> 44.84 N 17.33 E H = 20 19 23.9 h = 8 km MB = 5.0

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Day	Phase	h m s	Remarks
cont. 20.	eiSg	A 20 23 10	D = 6.97 Az = 328.5 (USNOAA) PnV(A):1.0s 47.2nm
20.	eP	A 23 34 53.5	<u>Greenland Sea</u> 74.74 N 9.13 E H = 23 29 38.8 h = normal MB = 4.5 D = 24.20 Az = 176.1 (USNOAA) PV(A):1.5s 40.2nm MPV(A)=4.8
21.	eP epP	A 01 26 59.5 A 27 12	<u>Near East Coast of Honshu, Japan</u> 40.01 N 142.86 E H = 01 14 52.4 h = 48 km MB = 4.7 D = 80.13 Az = 330.9 (USNOAA) h = 46 km pPV(A):1.2s 20.3nm
21.	-eiP	AB 08 19 27.5	<u>Greenland Sea</u> 74.62 N 8.41 E H = 08 14 14.1 h = normal MB = 5.5(USNOAA) D = 24.13 PV(A):1.8s 872.0nm MPV(A)=6.1 PV(B):2.0s 1.4/um MPV(B)=6.2
21.	eP	A 12 47 42.5	<u>Andreanof Islands, Aleutian Is.</u> 51.44 N 174.25 W H = 12 35 43.7 h = 21 km MB = 5.1 D = 78.17 Az = 356.2 (USNOAA) PV(A):1.0s 19.7nm MPV(A)=5.1
21.	eP eS LmV LmH	ABC 16 00 04 BC 08 10 B 25.5 B 25.6	<u>Central Mid-Atlantic Ridge</u> 7.66 N 37.60 W H = 15 50 05.5 h = normal MB = 5.3 D = 59.05 Az = 34.2 (USNOAA) PV(A):1.6s 55.0nm MPV(A)=5.4 LmV(B):17s 1.8/um MLV(B)=5.4 LmH(B):17.5s 2.3/um MLH(B)=5.5
22.	ePKHKP ePKP2	A 01 32 03 A 32 06	<u>Tonga Islands</u> 19.04 S 172.96 W H = 01 12 18.2 h = normal MB = 5.1 D = 148.25 Az = 354.5 (USNOAA)

Day	Phase	h m s	Remarks
22.	eP	A 03 05 37.5	<u>Kurile Islands</u> 46.4 N 151.8 E H = 02 53 42.9 h = 20 km MB = 4.7 (ISC) D = 77.5
22.	+iP	A 03 20 44.5	<u>Fox Islands, Aleutian Is.</u> 54.18 N 165.31 W H = 03 09 05.2 h = 65 km MB = 4.8 D = 75.52 Az = 2.0 (USNOAA) PV(A):0.6s 21.1nm MPV(A)=5.2
22.	ePKIKP ePP LmV LmH	AB 06 33 06 B 35 07 B 07 28.4 B 28.5	<u>West Chile Rise</u> 36.48 S 97.24 W H = 06 14 00.2 h = normal MB = 5.3 D = 128.49 Az = 50.3 (USNOAA) PKPV(A):1.6s 16.5nm LmV(B):18s 1.6/um MLV(B)=5.7 LmV(B):17s 1.3/um MLH(B)=5.7
22.	ePKP	A 20 07 25	<u>New Hebrides Islands</u> 19.00 S 169.32 E H = 19 48 21.9 h = 255 km MB = 4.6 D = 143.80 Az = 335.9 (USNOAA) PKPV(A):0.9s 9.7nm
23.	ePKIKP LmH LmV	A 11 20 34 B 12 15.9 B 19.0	<u>West Chile Rise</u> 36.52 S 97.21 W H = 11 01 28.4 h = normal MB = 5.5 D = 128.49 Az = 50.3 (USNOAA) PKIKPV(A):1.6s 16.5nm LmH(B):17s 0.8/um MLH(B)=5.4 LmV(B):17s 0.9/um MLV(B)=5.5
23.	iPg e(Sg)	A 15 05 24.7 A 05 41.5	<u>Bransrode / Federal Rep. Germany</u> 51°14.0'N 9°51.6'E explosion, H = 15 05 00.63, yield 20250 kg (Hannover) D = 1.2
23.	-iP e e	AB 24 06 06.5 A 07 07 A 07 50	<u>Sea of Okhotsk</u> 48.05 N 145.49 E H = 23 55 20.1 h = 479 km MB = 5.1(USNOAA) D = 74.0 PV(A):1.7s 18.2nm MPV(A)=5.4

Day	Phase	h m s	Remarks	
24.	eP e e	A A A	00 21 14.5 21 21.5 21 40	<u>Alaska Peninsula</u> 56.07 N 158.09 W H = 00 09 46.3 h = normal MB = 4.6 D = 73.32 Az = 6.8 (USNOAA)
24.	eiP	A	15 00 14.5	<u>Dodecanese Islands</u> 35.75 N 27.93 E H = 14 55 52.7 h = normal MB = 4.4 D = 18.99 Az = 326.7 (USNOAA) PV(A):1.0s 27.6nm MPV(A)=4.4
24.	eP	A	19 38 27.5	<u>Turkey</u> 37.03 N 29.08 E H = 19 34 10.9 h = 31 km MB = 4.1 D = 18.48 Az = 322.9 (USNOAA) PV(A):(1.5)s 15.1nm MPV(A)=4.0
25.	e	A	05 26 37	<u>Nicobar Islands Region</u> 9.06 N 94.02 E H = 05 14 32.6 h = normal MB = 4.9 D = 78.24 Az = 319.9 (USNOAA)
25.	eP e	A A	07 56 19 56 29	<u>Nicobar Islands Region</u> 8.97 N 93.98 E H = 07 44 23.7 h = normal MB = 5.1 D = 78.29 Az = 319.9 (USNOAA)
25.	eP e e	A A A	10 17 24.5 17 32 17 49	<u>Nicobar Islands Region</u> 9.02 N 94.02 E H = 10 05 27.2 h = normal MB = 4.8 D = 78.28 Az = 319.9 (USNOAA)
25.	eP e	A A	10 27 13 27 28.5	<u>Nicobar Islands Region</u> 9.11 N 94.04 E H = 10 15 15.2 h = normal MB = 5.0 D = 78.22 Az = 319.9 (USNOAA) PV(A):0.8s 9.6nm MPV(A)=4.9
25.	eP LmH	A C	11 28 07 38.6	<u>Iran-Iraq Border Region</u> 36.77 N 45.13 E H = 11 22 18.2 h = 19 km MB = 5.5 D = 27.64 Az = 310.7 (USNOAA) PV(A):1.5s 42.7nm MPV(A)=4.9 LmH(C):25s 2.1/um MLH(C)=4.6

Day	Phase	h m s	Remarks	
25.	eP eS eSS eSSS LmH LmV	A C C C C C	12 12 45 22 43 27 28 31 25 36.0 36.8	<u>Mid-Indian Rise</u> 13.69 S 66.26 E H = 12 00 35.2 h = 24 km MB = 5.8(USNOAA) D = 79.8 PV(A):1.5s 75.4nm MPV(A)=5.5 LmH(C):60s 4.7/um MLH(C)=5.4 LmV(C):48s 2.8/um MLV(C)=5.3
25.	eiP1 eP2 eP3 ePP eS1 is2 eSS eSSS LmH LmV	ABC A A C C C C C B B	15 21 47 21 53 21 57.5 24 47 31 36 31 42 36 51 40 00 16 01.7 03.6	<u>Nicobar Islands Region</u> 9.02 N 93.87 E H = 15 09 49.4 h = normal MB = 5.5 D = 78.18 Az = 319.9 (USNOAA) P1V(A):1.6s 94.0nm MP1V(A)=5.5 P1V(B):8s 1.9/um MP1V(B)=6.2 P2V(A):2.0s 196.3nm MP2V(A)=5.9 P3V(A):1.7s 254.0nm MP3V(A)=6.0 LmH(B):18s 10.2/um MLH(B)=6.2 LmV(B):17s 10.0/um MLV(B)=6.3
25.	eP e e	A A A	15 33 52 33 55 34 05	<u>Nicobar Islands Region</u> 8.97 N 94.00 E H = 15 21 49.2 h = normal MB = 5.1(USNOAA) D = 78.3
25.	eP	A	15 54 31	<u>Nicobar Islands Region</u> 8.98 N 94.08 E H = 15 42 31.2 h = normal MB = 4.9 D = 78.34 Az = 319.9 (USNOAA)
25.	eP	A	22 20 13.5	<u>Nicobar Islands Region</u> 9.15 N 94.08 E H = 22 08 16.1 h = normal MB = 4.9 D = 78.21 Az = 319.9 (USNOAA) PV(A):1.7s 24.2nm MPV(A)=5.0
25.	eP	A	22 32 46	<u>Nicobar Islands Region</u> 9.12 N 94.36 E H = 22 20 46.8 h = 31 km MB = 4.9 D = 78.41 Az = 319.9 (USNOAA)
26.	ePKIKP +iPKHKP e e	A A A A	08 31 32.5 31 33.6 32 53.5 34 11	<u>Fiji Islands Region</u> 18.17 S 177.87 W H = 08 12 57.7 h = 609 km MB = 5.1 D = 146.72 Az = 349.0 (USNOAA) PKHKPV(A):0.7s 34.5nm

Day	Phase	h m s	Remarks	
26.	+iP	ABC	20 59 34.7	<u>Greenland Sea</u> 79.82 N 2.67 E
	Pm	A	59 55	H = 20 53 32.4 h = 32 km MB = 5.6
	e	B	21 01 20	D = 29.46 Az = 168.4 (USNOAA)
	eS	BC	04 20	P1V(A):1.1s 36.3nm MP1V(A)=5.0
	e	C	07 26	P1V(B):6s 1.6/um MP1V(B)=6.0
	eX	A	11 10	PmV(A):1.2s 183.0nm MPmV(A)=5.6
	LmH	B	13.5	SH(B):12s 3.3/um MSH(B)=5.7
	LmV	B	13.5	XV(A):1.6s 30.2nm LmH(B):14.5s 6.3/um MLH(B)=5.4 LmV(B):13s 7.1/um MLV(B)=5.6
28.	ePn	A	01 15 56	<u>Austria</u> 47.46 N 11.17 E
	ePg	A	16 11	H = 01 15 05.0 h = 0 km
	eSn	A	16 35	D = 3.20 Az = 5 (ISC)
	eSg	A	16 51	PgV(A):1.0s, 11.8nm
28.	e	A	05 32 35	<u>Upper Silesia / Poland</u> rockburst (CLL)
28.	ePKP	A	22 46 36	<u>Fiji Islands Region</u> 16.39 S 177.50 W
	e	A	47 16.5	H = 22 27 01.0 h = normal MB = 4.9 D = 145.05 Az = 349.9 (USNOAA)
29.	eiP	A	01 09 26.5	<u>Unimak Island Region</u> 54.17 N 164.63 W
				H = 00 57 42.8 h = 27 km MB = 5.3 D = 75.51 Az = 2.5 (USNOAA) PV(A):1.0s 31.4nm MPV(A)=5.3
29.	eP	A	03 01 06.5	<u>North Atlantic Ridge</u> 50.83 N 29.47 W
				H = 02 55 36.8 h = normal MB = 4.5 D = 25.77 Az = 74.2 (USNOAA)
29.	LmH	B	03 39.0	Probably <u>Mid-Indian Rise</u> (USNOAA)
	LmV	B	41.5	LmH(B):17s 1.6/um LmV(B):18s 1.3/um

Day	Phase	h m s	Remarks	
29.	+eiP	A	09 23 01.5	<u>Mid-Indian Rise</u> 15.45 S 67.21 E
	+eiX	A	23 07.5	H = 09 10 44.0 h = normal MB = 5.4 D = 81.80 Az = 327.9 (USNOAA) PV(A):1.8s 67.5nm MPV(A)=5.4 XV(A):1.6s 57.6nm
29.	+eP	A	19 42 29.5	<u>Kurile Islands</u> 44.56 N 149.03 E
				H = 19 30 35.8 h = 67 km MB = 5.2 D = 78.23 Az = 333.9 (USNOAA) PV(A):1.1s 42.3nm MPV(A)=4.8
29.	+iPg	A	22 47 38.5	D c. 80 km
	i	A	47 48	
	iSg	A	47 49	
29.	e(pP)	A	23 27 06.5	<u>Honshu, Japan</u> 35.97 N 139.93 E
				H = 23 14 42.9 h = 62 km MB = 4.9 D = 82.49 Az = 329.7 (USNOAA) (pP)V(A):1.3s 10.9nm
30.	ePKHKP	A	05 34 24	<u>Tonga Islands</u> 18.56 S 174.73 W
				H = 05 14 52.5 h = 115 km MB = 4.5 D = 147.59 Az = 352.5 (USNOAA) PKHKPV(A):1.2s 10.2nm
30.	ePKHKP	A	11 12 34	<u>Fiji Islands Region</u> 19.84 S 177.52 W
	ePKP2	A	12 38	H = 10 53 34.9 h = 421 km MB = 4.6 D = 148.42 Az = 348.9 (USNOAA)
30.	eP	A	23 54 44.5	<u>Greece-Albania Border Region</u>
				39.95 N 20.5 E
				H = 23 51 47 h = 3 km D = 12.38 Az = 333 (ISC)
31.	e(P)	A	02 54 12.5	<u>Republic of South Africa</u>
				26.85 S 26.88 E
				H = 02 42 09.9 h = normal MB = 5.3 D = 78.32 Az = 350.1 (USNOAA) (P)V(A):0.8s 11.5nm

Day	Phase	h m s	Remarks
31.	eP	A 09 20 33	<u>Southern Sumatra</u> 4.34 S 102.76 E H = 09 07 13.7 h = 13 km MB = 5.5 D = 94.04 Az = 320.3 (USNOAA)
31.	eP	A 15 07 45	<u>Kodiak Island Region</u> 56.54 N 152.99 W H = 14 56 20.3 h = 44 km MB = 4.6 D = 72.42 Az = 10.2 (USNOAA)
31.	eP1 eiP2 eSn LmH LmV	A 16 10 03 A 10 07.5 A 12 11 B 15.3 B 15.4	<u>Yugoslavia</u> 42.13 N 19.32 E H = 16 07 37.9 h = 23 km MB = 4.9 D = 10.04 Az = 330.7 (USNOAA) P2V(A):1.3s 26.2nm LmH(B):15s 0.6/um MLH(B)=3.6 LmV(B):16s 1.0/um
31.	eiP	A 16 20 37.5	<u>Andreanof Islands, Aleutian Is.</u> 51.21 N 179.38 W H = 16 08 41.7 h = 39 km MB = 5.0 D = 78.04 Az = 352.9 (USNOAA) PV(A):1.3s 26.2nm MPV(A)=5.1
31.	eP diff eP diff ePKIKP e e e iPP ePPP eSKKS ei eS diff ePS eSS LmH LmV	C 18 08 35 AB 08 38 A 11 57 A 12 10 B 12 56 B 13 20 BC 13 31 B 15 55 BC 20 15 BC 20 20 B 21 08 C 23 00 C 29 44 B 55.9 B 19 03.4	<u>Near North Coast of New Guinea</u> 4.93 S 145.47 E H = 17 53 09.3 h = 42 km MB = 6.0 D = 120.35 Az = 327.9 (USNOAA) P diff V(C):12s 0.5/um LmH(B):22.5s 109.2/um MLH(B)=7.4 LmV(B):22s 66.7/um MLV(B)=7.2
31.	eSg	A 18 26 28	<u>Adriatic Sea</u> 41.8 N 18.7 E H = 18 20 54 h = 0 km D = 10.2

Day	Phase	h m s	Remarks
1.	LmH LmV	B 05 24.3 B 24.3	<u>Gulf of California</u> 23.14 N 107.92 W H = 04 31 08.5 h = 57 km MB = 4.9 (ISC) D = 89.3 LmH:16s 2.6/um MLH=5.8 LmV:16s 2.9/um MLV=5.8
1.	LmV LmH	B 12 19.0 B 21.1	<u>Near North Coast of New Guinea</u> 4.82 S 145.73 E H = 11 07 40.7 h = normal MB = 5.5 D = 120.40 Az = 328.0 (USNOAA) LmH:20s 1.3/um MLH=5.6 LmV:20s 1.8/um MLV=5.7
1.	eP	A 20 33 38	<u>Honshu, Japan</u> 39.62 N 141.12 E H = 20 21 41.4 h = 124 km MB = 4.8 D = 79.81 Az = 330.1 (USNOAA) traces
1.	eP e	A 22 43 48 A 43 57.3	<u>Central Mid-Atlantic Ridge</u> 8.40 N 39.49 W H = 22 33 44.4 h = normal MB = 4.7 D = 59.51 Az = 35.1 (USNOAA)
2.	ePn	A 02 12 50.5	<u>Austria</u> 47.9 N 14.3 E (VIE) D = 3.2
2.	eP	A 03 26 38	<u>Central Italy</u> 43.71 N 12.10 E H = 03 24 55.6 h = 0 km (ISC) D = 7.0
2.	ePn ePg eSn eSg	A 08 43 33 A 44 04.5 A 44 35.5 A 45 10	<u>Northern Italy</u> 45.1 N 11.1 E H = 08 42 12 (BCIS) D = 5.57 (ISC)
2.	ePKP e LmH	A 10 33 14 A 33 23.5 B 11 34.2	<u>Fiji Islands Region</u> 15.49 S 176.16 W H = 10 13 36.3 h = 44 km MB = 5.4 D = 144.38 Az = 351.5 (USNOAA)

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Day	Phase	h m s	Remarks
cont. 2.	LmV	B 11 37	PKPV(A):1.6s 16.5nm LmH(B):22s 2.6/um MLH(B)=5.9 LmV(B):20s 2.2/um
2.	ePn	A 12 14 00	<u>Yugoslavia</u> 44.87 N 17.09 E
	eSn	A 15 22	H = 12 12 16.5 h = 0 km
	e	A 16 01	D = 6.86 Az = 329 (ISC) PnV(A):0.9s 15.6nm
3.	+iP	A 02 40 57.5	<u>Central Alaska</u> 62.03 N 151.17 W
	eipP	A 41 24.5	H = 02 30 11.4 h = 70 km MB = 5.6
	ei(sP)	A 41 34	D = 66.84 Az = 11.8 (USNOAA) h _{pp} = 110 km h _{sp} = 100 km PV(A):0.8s 77.0nm MPV(A)=5.7
3.	e(Pn)	A 08 47 23	<u>Belgium</u> 50.4 N 4.5 E
	eSn	A 48 11	H = 08 45 58 h = 0 km
	eSg	A 48 20	D = 4.73 Az = 84 (ISC)
3.	ePKP	A 09 42 42	<u>Easter Island Cordillera</u>
	ePKP2	A 42 47	49.99 S 114.42 W
	e	A 42 51.5	H = 09 23 04.5 h = normal MB = 5.2
	LmH	B 11 05	D = 146.17 Az = 67.6 (USNOAA)
	LmV	B 07	PKPV(A):0.8s 21.2nm
3.	ePKP	A 10 05 37.5	<u>Eastern Island Cordillera</u>
	epPKP	A 05 45	49.90 S 115.03 W
	epPKP2	A 05 50.5	H = 09 46 00.1 h = normal MB = 4.7 D = 146.51 Az = 67.8 (USNOAA)
3.	ePn	A 15 14 35	<u>Greece</u> 38.6 N 20.3 E
			H = 15 11 26.7 h = 0 km
			D = 13.42 Az = 334 (ISC)
3.	eP	A 15 24 57	<u>Luzon, Philippine Islands</u>
	epP	A 25 08	18.43 N 120.88 E
	LmH	B 16 07	H = 15 12 11.6 h = 41 km MB = 5.5
	LmV	B 07	D = 87.54 Az = 323.0 (USNOAA) PV(A):2.0s 85.5nm MPV(A)=5.6

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Day	Phase	h m s	Remarks
4.	+iP	A 06 10 43.8	<u>Eastern Kazakh SSR</u> 49.97 N 77.79 E
	ePn	A 12 15	H = 06 02 57.0 h = 0 km MB = 5.4
	ePP	A 12 19.5	D = 40.99 Az = 297.4 (USNOAA)
	ePcP	A 12 39.5	PV(A):0.8s 46.2nm MPV(A)=5.3 Underground explosion MB = 6.1 (UPP)
4.	+iPKIKP	A 18 02 43.2	<u>New Hebrides Islands</u> 20.04 S 169.25 E
	+ipPKIKP	A 02 57.5	H = 17 43 11.1 h = 44 km MB = 5.2 D = 144.71 Az = 335.2 (USNOAA) PKIKP(A):1.0s 112.0nm pPKIKP(A):0.9s 42.8nm
5.	eP	A 07 34 44	<u>Andreanof Islands, Aleutian Is.</u> 51.47 N 179.27 W
			H = 07 22 48.7 h = 36 km MB = 4.7 D = 77.84 Az = 352.9 (USNOAA)
5.	ePKP	A 12 27 35.5	<u>Loyalty Islands Region</u> 21.82 S 170.57 E
			H = 12 08 02.6 h = 91 km D = 146.84 Az = 335.3 (USNOAA) PKPV(A):1.2s 12.2nm
5.	eP	A 13 24 39	<u>South of Panama</u> 6.90 N 82.61 W
	e	A 24 54	H = 13 11 53.5 h = normal MB = 5.6
	e	A 25 03	D = 87.39 Az = 39.5 (USNOAA)
	eS	B 35 23	PV(A):1.2s 40.6nm MPV(A)=5.6
	ePS	B 36 23	SH(B):10s 1.0/um MSH(B)=5.8
	eSS	B 41 18	LmH:22s 1.8/um MLH = 5.4
	LmV	B 56.8	LmV:22s 1.8/um MLV = 5.5
	LmH	B 57	
5.	eP	A 20 43 36	<u>North Atlantic Ridge</u> 34.72 N 36.98 W
	esP	A 43 50	H = 20 36 11.9 h = normal MB = 5.1(USNOAA)
	LmV	B 57	D = 38.3
	LmH	B 58	LmH:18s 0.4/um MLH=4.3 LmV:18s 1.0/um MLV=4.8

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Day	Phase	h m s	Remarks
6.	eP	A	<u>Iceland Region</u> 63.85 N 22.73 W H = 07 15 43.8 h = 8 km MB = 4.5 D = 22.45 Az = 109.8 (USNOAA) LmH:16s 1.2/um MLH=4.4 LmV:11s 1.6/um MLV=4.8
	LmH	B	
	LmV	B	
6.	eP	A	<u>Iceland Region</u> 63.79 N 23.27 W H = 11 25 24.9 h = normal MB = 4.3 D = 22.65 Az = 109.0 (USNOAA) PV(A):0.6s 9.6nm MPV(A)=4.4 LmH:15s 1.0/um MLH =4.4 LmV:14s 1.4/um MLV =4.6
	LmH	B	
	LmV	B	
7.	eP	A	<u>Kurile Islands</u> 48.96 N 155.20 E H = 03 23 26.6 h = normal MB = 4.7 D = 75.98 Az = 337.1 (USNOAA) PV(A):1.1s 20.2nm MPV(A)=5.2
7.	e	A	<u>Albania</u> 41.8 N 19.5 E H = 04 34 17 (ATH) D = 10.45 traces
7.	ePKP2	A	<u>South of Kermadec Islands</u> 34.63 S 179.71 E H = 07 44 57.0 h = 76 km MB = 5.1(USNOAA) D = 161.8 PKP2V(A):1.9s 30.3nm
7.	eiP	A	<u>Luzon, Philippine Islands</u> 18.51 N 120.88 E H = 23 18 24.0 h = 55 km MB = 5.4 D = 87.48 Az = 323.0 (USNOAA) PV(A):3.0s 64.1nm MPV(A)=5.5 LmH:21s 1.7/um MLH =5.4 LmV:18s 1.5/um MLV =5.5
	e	A	
	epP	A	
	eSKKS	C	
	eS	B	
	eSP	B	
	eSS	B	
	LmV	B	
	LmH	B	

Day	Phase	h m s	Remarks
8.	eP	A	<u>Eastern Caucasus</u> 41.30 N 48.92 E H = 00 09 03.4 h = 87 km MB = 4.7 D = ca. 27 traces
8.	ePKHKP	A	<u>Tonga Islands</u> 19.75 S 174.47 W H = 04 34 52.5 h = normal MB = 5.0(USNOAA) D = 148.7
8.	eP	A	<u>Szechwan Province, China</u> 32.21 N 101.31 E H = 09 15 55.6 h = 38 km MB = 5.1 D = 65.68 Az = 315.7 (USNOAA) PV(A):1.5s 22.6nm MPV(A)=5.0 LmH:20s 2.1/um MLH =5.4 LmV:14s 1.7/um MLV =5.4
	LmH	B	
	LmV	B	
8.	eP	ABC	<u>Mindanao, Philippine Islands</u> 9.13 N 126.33 E H = 14 58 53.6 h = 22 km MB = 5.7 D = 98.13 Az = 324.3 (USNOAA) PV(A):1.8s 47.3nm MPV(A)=5.7 PV(B):11s 0.65/um MPV(B)=6.1 LmH:17s 4.4/um MLH =6.0 LmV:16s 4.0/um MLV =6.0
	eSKS	BC	
	eS	C	
	eSP	BC	
	eSS	C	
	LmH	B	
8.	eP diff	A	<u>West New Guinea Region</u> 3.44 S 135.63 E H = 22 35 46.7 h = normal MB = 6.2 D = 113.67 Az = 324.8 (USNOAA) P diff V(A):2.0s 47.0nm PKIKPV(A):1.7s 36.4nm PPV(B):12s 3.63/um MPPV(B)=6.8 PPH(B):12s 1.98/um MPPH(B)=6.9 PKKP2(A):3.4s 410.0nm LmH:20.5s 36.7/um MLH =7.0 LmV:18s 25.5/um MLV =6.9 e(A) 55 25 e(A) 55 31
	ePKIKP	AB	
	ePP	ABC	
	eSKS	BC	
	eSKKS	B	
	eiS diff	BC	
	ePS	BC	
	ePKKP2	A	
	ePPS	BC	
	iSS	BC	
eiSSS	BC		
LmH	B		
LmV	B		

Day	Phase	h m s	Remarks
9.	eIP	A 17 49 06	<u>Southern Iran</u> 29.52 N 56.85 E
	ipP	A 49 30	H = 17 41 42.2 h = 106 km MB = 5.5
	esP	A 49 42	D = 39.76 Az = 315.0 (USNOAA)
	ePP	A 50 04	$h_{pP} = 115$ km $h_{sP} = 110$ km
	eScP	A 54 49.5	PV(A):1.0s 25.6nm MPV(A)=5.0
10.	eP1	A 00 38 07.5	<u>Southern Honshu, Japan</u> 34.60 N 136.71 E
	eP2	A 38 13	H = 00 26 21.6 h = 349 km MB = 5.3
	eipP	AB 39 26.5	D = 82.30 Az = 328.3 (USNOAA)
	i	A 39 28	P1V(A):1.2s 24.4nm MP1V(A)=4.9
	ePP	A 41 15	P2V(A):1.2s 26.4nm MP2V(A)=5.0
	eSKS	B 47 48	pPV(A):1.5s 118.0nm (MpPV(A)=5.5)
	eS	B 47 52	LmH:14s 0.7/um
	LmH	B 01 14.0	LmV:16s 1.2/um
	LmV	B 22.7	
10.	ePKIKP	A 14 07 30	<u>South of Kermadec Islands</u>
	ePKP2	A 08 09	32.04 S 178.11 W
	LmV	B 15 40.5	H = 13 47 34.1 h = 37 km MB = 5.4
	LmH	B 41.0	D = 160.06 Az = 341.6 (USNOAA)
11.	eP	A 11 58 49.5	<u>Kurile Islands</u> 44.56 N 148.08 E
			H = 11 46 55.7 h = 50 km MB = 5.1 D = 77.92 Az = 333.4 (USNOAA) PV(A):1.1s 16.1nm MPV(A)=4.9
11.	eP	AB 21 02 31.5	<u>Dodecanese Islands</u> 36.12 N 28.21 E
	Pm	A 02 45	H = 20 58 13.2 h = 43 km MB = 4.9
	eS	B 06 04	D = 18.81 Az = 325.7 (USNOAA)
	e	C 06 06	PV(A):1.3s 96.0nm MPV(A)=4.9
	e	B 06 10	PmV(A):2.0s 242.0nm MPmV(A)=5.1
	LmH	B 09.3	LmH:12.5s 5.8/um MLH = 5.1
	LmV	B 12.2	LmV:12s 5.0/um MLV = 5.0
12.	eP	A 04 13 09	<u>Hokkaido, Japan Region</u> 41.85 N 142.54 E
			H = 04 01 13.5 h = 61 km MB = 5.0 D = 78.41 Az = 330.6 (USNOAA) PV(A):1.2s 18.3nm MPV(A)=4.9

Day	Phase	h m s	Remarks
12.	ePKIKP	A 06 26 06	<u>East New Guinea Region</u> 5.05 S 145.06 E
	epPKP	A 26 12	H = 06 67 12.4 h = 15 km MB = 5.9
	ePP	B 27 42	D = 120.24 Az = 327.7 (USNOAA)
	e	B 35 40	PKIKPV(A):2.0s 77.0nm
	ePKKP	A 36 20	PKKPV(A):1.8s 47.3nm
	eSKKP	A 40 09	PPV(B):9s 2.0/um MPPV(B)=6.8
	ePoPPKP	A 40 20	LmH:17.5s 10.3/um MLH = 6.5
	eSS	B 44 15	LmV:16s 8.2/um MLV = 6.5
	eSSS	B 48 24	
		LmH	B 07 24.7
	LmV	B 24.7	
12.	ePKP	A 07 51 09.5	<u>Off East Coast of North Island, N.Z.</u>
			36.77 S 179.42 E H = 07 31 02.8 h = 21 km MB = 5.1 (ISC) D = 163.7
12.	ePn	A 11 36 20	<u>Albania</u> 41.0 N 20.8 E
	eSn	A 38 40	H = 11 33 34 h = 75 km D = 11.52 Az = 330 (ISC)
12.	eP1	A 13 16 49.5	<u>Iran-USSR Border Region</u> 38.27 N 57.17 E
	eP2	A 16 51.5	H = 13 10 06.3 h = 63 km MB = 4.6 D = 34.25 Az = 306.1 (USNOAA) P1V(A):1.1s 16.1nm MP1V(A)=4.9 P2V(A):1.2s 24.4nm MP2V(A)=5.0
13.	LmH	B 01 11.5	LmH:18s 0.8/um
	LmV	B 10.0	
13.	ePKP	A 02 32 44.5	<u>Loyalty Islands Region</u> 22.63 S 170.3 E
			H = 02 13 06 h = 39 km (ISC) D = 147.4 PKPV(A):1.4s 18.6nm
13.	e	A 06 55 48.5	<u>Rockburst Upper Silesia</u>

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Moxa

Day	Phase	h m s	Remarks
13.	eP A	12 49 05	<u>Hokkaido, Japan Region</u> 42.02 N 142.13 E H = 12 37 12.0 h = 80 km MB = 4.7 D = 78.11 Az = 330.4 (USNOAA)
13.	eP1 A	14 29 42	<u>Leyte, Philippine Islands</u> 11.95 N 123.97 E
	epP A	29 47	
	esP A	29 50.5	H = 14 16 18.0 h = 15 km MB = 5.4
	eP2 ABC	29 54	D = 94.50 Az = 323.8 (USNOAA)
	e B	39 00	sPV(A):1.3s 48.0nm MsPV(A)=5.7
	eSKS BC	40 25	P2V(A):1.9s 137.0nm MP2V(A)=6.0
	eSKKS BC	40 46	P2V(B):7s 0.65/um MP2V(B)=6.1
	eiS BC	40 52	LmH:25s 48.4/um MLH =6.9
	ePS C	42 25	LmV:20s 14.0/um MLV =6.4
	eSS C	47 28	
	LmH B	15 07.4	
	LmV B	18.5	
13.	iP A	17 38 05.5	<u>Afghanistan-USSR Border Region</u> 36.91 N 71.62 E
	eipP A	38 31	H = 17 30 06.7 h = 124 km MB = 5.3(USNOAA)
	esP A	38 42	D = 44.2 h = 117 km
	ePP A	39 58	PV(A):2.0s 111.0nm MPV(A)=5.2
14.	eP A	05 05 32	<u>South of Mariana Islands</u> 12.64 N 143.30 E
	e A	06 17	
	e A	09 46.5	H = 04 51 37.8 h = 95 km MB = 5.5
	ePP A	09 50	D = 104.22 Az = 330.6 (USNOAA)
	LmH B	48.8	PV(A):1.1s 14.1nm MPV(A)=5.8
	LmV B	58.8	PPV(A):2.0s 85.5nm MPPV(A)=6.0 LmH:18s 3.0/um LmV:20s 1.5/um
14.	e A	08 01 40	<u>Czechoslovakia, explosion</u> 49.50 N 14.93 E H = 08 ^h 00 ^m yield: 12 t (PRU) D = 2.4
14.	eP1 A	08 10 50	<u>Taiwan Region</u> 22.71 N 121.34 E
	+iP2 BC	10 51.2	H = 07 58 19.8 h = 28 km MB = 5.7
	+iPcP A	10 55	D = 84.40 Az = 323.0 (USNOAA)

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Moxa

Day	Phase	h m s	Remarks
cont. 14.	e A	08 14 00	P1V(A):1.4s 102.5nm MP1V(A)=5.7
	ePP ABC	14 06	PmV(A):2.2s 273nm MPmV(A)=6.1
	i A	14 09	PV(B):10.5s 3.45/um MPV(B)=6.5
	eS BC	21 10	PPV:8s 1.63/um MPPV =6.6
	ePS BC	22 00	SH:12.5s 3.9/um MSH =6.4
	eSS C	26 40	LmH:16s 38.3/um MLH =6.9
	e C	27 32	LmV:17s 67.7/um MLV =7.1
	LmH B	53.4	
	LmV B	53.7	
14.	eP A	16 02 53	<u>South of Honshu, Japan</u> 33.42 N 140.09 E H = 15 50 31.8 h = 110 km MB = 4.5 D = 84.75 Az = 330.0 (USNOAA)
15.	ePKIKP A	03 32 26	<u>South of Fiji Islands</u> 22.98 S 177.09 W
	iPKHKP AB	32 32.5	H = 03 12 54.8 h = 153 km MB = 5.1
	iPKP2 A	32 41.5	D = 151.57 Az = 348 (ISC)
	i A	32 45.5	PKIKPV:1.4s 23.3nm
	esPKP A	33 20	PKHKPV:1.5s 100.5nm
16.	ePn A	04 26 12	<u>Federal Republic Germany</u> 48.38 N 11.08 E
	e A	26 19	H = 04 25 33.1 h = 0 km
	eSn A	26 46.5	D = 2.30 Az = 8 (ISC)
	eSg A	27 00	
	i A	27 01.5	
16.	eP A	05 06 00	<u>Northern Sinkiang Prov., China</u> 43.24 N 81.20 E
	ei A	06 07	
	LmH B	22.9	H = 04 57 32.9 h = 24 km MB = 5.2
	LmV B	26.3	D = 46.48 Az = 304.6 (USNOAA)
			PV(A):1.5s 22.6nm MPV(A)=5.0
			LmH:20s 1.9/um MLH =5.0
			LmV:14.5s 1.4/um MLV =5.1
16.	ePKIKP A	07 03 12	<u>New Britain Region</u> 6.08 S 148.58 E
	LmH B	56	H = 06 44 21.4 h = 81 km MB = 5.5
	LmV B	57	D = 122.95 Az = 328.8 (USNOAA)

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Day	Phase	h m s	Remarks
16.	eX A	21 51 45	<u>Molucca Sea</u> 1.03 S 126.87 E H = 21 32 58.8 h = normal MB = 5.4 D = 106.58 Az = 323.1 (USNOAA) XV(A):2.0s 55.5nm
17.	eP A e A e A	00 28 58.5 29 03.5 29 10.5	<u>Turkey</u> 36.68 N 29.58 E H = 00 24 36.8 h = 29 km MB = 4.4 D = 19.00 Az = 322.9 (USNOAA) PV(A):1.4s 25.6nm MPV(A)=4.3
18.	LmH B LmV B	10 56.5 55.8	<u>Bismarck Sea</u> 3.51 S 148.89 E H = 09 45 26.4 h = 15 km MB = 5.8(USNOAA) D = 120.8 LmH:20s 3.5/um MLH=6.0 LmV:21s 3.9/um MLV=6.0
18.	eP A epP A ePP B e B iS B eSS B LmH B LmV B	12 30 28.5 30 33.5 31 56 31 58 36 22 39 10 44.3 44.2	<u>North Atlantic Ridge</u> 35.1 N 35.7 W H = 12 23 18.0 h = normal MB = 5.4(USNOAA) D = 37.3 PV(A):1.7s 18.2nm MPV(A)=4.5 PmV(A):3.2s 419nm MPmV(A)=5.6 PPV(B):11s 1.4/um MPPV(B)=5.8 SH(B):13.5s 5.06/um MSH(B)=6.2 LmH:12.5s 7.7/um MLH =5.7 LmV:15s 5.9/um MLV =5.9
18.	ePKIKP A -iPKHKP A +iPKP2 A epPKP A +ipPKP2 A	17 01 53.5 01 57.5 02 04 04 10 04 12	<u>South of Fiji Islands</u> 21.89 S 175.17 E H = 16 43 14.1 h = 570 km MB = 5.6 D = 148.54 Az = 339.8 (USNOAA) PKIKPV(A):2.0s 51.4nm PKHKPV(A):1.7s 373.0nm
18.	LmH B LmV B	21 30.2 30.3	LmH:16s 1.4/um LmV:18s 1.9/um
19.	eP A	05 42 02	<u>Republic of South Africa</u> 22.19 S 30.73 E H = 05 30 18.6 h = 0 km (ISC) D = 74.4 PV(A):1.2s 16.3nm MPV(A)=5.0

Day	Phase	h m s	Remarks
19.	e A e A	18 05 11.5 05 32.5	Probably <u>rockburst in Upper Silesia</u> (Poland)
19.	ePn A ePg A eSn A eSg A	18 13(38) 13 59 14 41.5 15 21	<u>Northern Italy</u> 44.2 N 10.2 E H = 18 12 01 h = 0 km D = 6.50 Az = 8 (ISC)
19.	eP A e A	18 21 10 21 16	<u>Mid-Indian Rise</u> 12.21 S 65.68 E H = 18 09 11.5 h = normal MB = 5.2 D = 78.27 Az = 328.2 (USNOAA)
20.	eP A	04 44 58	<u>Andreanof Islands, Aleutian Is.</u> 51.30 N 179.94 W H = 04 33 02.6 h = 40 km MB = 5.1 D = 77.96 Az = 352.5 (USNOAA)
20.	eP A	12 56 17	<u>Kurile Islands Region</u> 50.00 N 159.26 E H = 12 44 31.9 h = 35 km MB = 4.6 D = 76.00 Az = 339.4 (USNOAA) traces
20.	eP A	13 59 53	<u>Bonin Islands Region</u> 28.12 N 142.48 E H = 13 46 52.8 h = normal MB = 5.4 D = 90.36 Az = 331.2 (USNOAA) PV(A):1.5s 25.2nm MPV(A)=5.3
20.	+eiP AB eipP A eS BC eSKS BC eSS C LmH B LmV B	14 00 22 00 32 10 12 10 31 15.9 39.5 39.8	<u>Kurile Islands</u> 43.5 N 146.91 E H = 13 48 23.7 h = 36 km MB = 5.7(USNOAA) D = 78.5 PV(A):1.8s 257.0nm MPV(A)=6.0 pPV(A):2.0s 171.0nm PV(B):5s 1.03/um MPV(B)=6.2 SH(B):7.5s 0.71/um MSH(B)=5.8 LmH:14.5s 2.1/um MLH =5.6 LmV:17.5s 2.8/um MLV =5.7

Day	Phase	h m s	Remarks
21.	ePKHKP	A 00 48 03	<u>Tonga Islands</u> 20.41 S 174.23 W
	epPKP2	A 48 13.5	H = 00 28 14.5 h = normal MB = 5.2
	LmH	C 02 05	D = 149.48 Az = 352.7 (USNOAA) PKHKPV(A):1.6s 49.5nm pPKPV(A):1.7s 72.7nm
21.	eP	A 02 18 09	<u>Turkey</u> 36.96 N 28.96 E
	LmH	C 25	H = 02 13 51.3 h = normal MB = 4.3 D = 18.48 Az = 323.2 (USNOAA) PV(A):1.6s 41.2nm MPV(A)=4.3
21.	eP	A 08 41 41	<u>Eastern Caucasus</u> 40.05 N 48.26 E
	e	A 41 42.5	H = 08 35 59.1 h = 68 km MB = 5.1 D = 27.58 Az = 304.9 (USNOAA) PV(A):1.5s 27.6nm MPV(A)=4.6
21.	eP	AB 12 32 34.5	<u>Luzon, Philippine Islands</u>
	epP	A 32 52	14.95 N 120.10 E
	ePP	A 36 09.5	H = 12 19 39.2 h = 47 km MB = 5.5
	eSKS	BC 43 02	D = 89.85 Az = 322.9 (USNOAA)
	eS	BC 43 16	PV(A):1.2s 36.6nm MPV(A)=5.6
	eFS	BC 44 22	pPV(A):1.8s 67.5nm
	eSS	C 49.7	PV(B):8s 0.44/um MPV(B)=5.8
	LmH	B 13 15	LmH:19s 1.4/um MLH =5.4
	LmV	B 15.1	LmV:20s 1.9/um MLV =5.5
21.	eP	A 19 37 46	<u>Alaska Peninsula</u> 56.95 N 156.99 W H = 19 26 28.1 h = 90 km MB = 4.6 D = 72.36 Az = 7.6 (USNOAA)
22.	eP	A 12 07 38.5	<u>Mariana Islands</u> 18.33 N 145.97 E
	e	A 11 38	H = 11 53 59.1 h = 91 km MB = 5.5
	ePP	A 11 45	D = 100.47 Az = 332.4 (USNOAA)
	e	A 12 15.5	LmH:15s 0.6/um
	LmH	B 52.4	LmV:20s 0.9/um
	LmV	B 56.6	

Day	Phase	h m s	Remarks
22.	eP	A 15 30 08	<u>North of Ascension Island</u> 0.14 S 16.14 W H = 15 20 32.8 h = 33 km MB = 4.5 (ISC) D = 55.8
22.	eP	A 19 07 17	<u>West Pakistan</u> 30.82 N 67.75 E H = 18 58 52 h = 18 km (ISC) D = 45.7 PV(A):1.6s 22.0nm MPV(A)=4.8
22.	ePn	A 20 39 39	<u>Austria</u> 47.4 N 16.1 E
	e(Sn)	A 40 24.5	H = 20 38 36 h = 0 km
	eSg	A 40 41	D = 4.10 Az = 322 (ISC)
23.	eP	A 00 37 44	<u>Norwegian Sea</u> 72.41 N 2.05 E H = 00 32 49.3 h = normal MB = 4.5 D = 22.25 Az = 163.8 (USNOAA) PV(A):1.3s 21.8nm MPV(A)=4.5
24.	ePKP	A 02 12 13	<u>Tonga Islands</u> 15.14 S 173.36 W
	e	A 12 37	H = 01 52 39.1 h = 25 km MB = 5.0 D = 144.35 Az = 354.6 (USNOAA) PKPV(A):0.8s 9.6nm
24.	iP	A 05 18 18.5	<u>Kurile Islands</u> 47.44 N 152.49 E
	eiPcP	A 18 30.5	H = 05 06 41.4 h = 136 km MB = 5.3
	e	A 18 36.5	D = 76.65 Az = 335.6 (USNOAA) PV(A):1.1s 121.0nm MPV(A)=5.5
24.	eP	A 11 54 22.5	<u>Kazakh Sinkiang Border Region</u>
	epP	A 54 28.5	47.55 N 84.31 E
	LmH	B 12 11.0	H = 11 45 59.2 h = normal MB = 4.9 D = 45.93 Az = 302.2 (USNOAA)
	LmV	B 14.1	
24.	eP	A 15 53 45	<u>Southern Sumatra</u> 0.06 S 99.33 E H = 15 41 01.1 h = 97 km MB = 4.9 D = 88.59 Az = 320.5 (USNOAA) PV(A):1.5s 15.1nm MPV(A)=4.9

Day	Phase	h m s	Remarks
24.	eP A	17 25 08.5	<u>Jan Mayen Island Region</u> 71.82 N 2.54 W
	LmH B	34.4	H = 17 20 13.5 h = normal MB = 4.6
	LmV B	36.0	D = 22.19 Az = 155.7 (USNOAA) PV(A):1.7s 48.5nm MPV(A)=4.7
25.	eP A	09 51 55.5	<u>Kurile Islands</u> 43.16 N 146.68 E
	ePcP A	52 05.5	H = 09 39 58.9 h = 67 km MB = 4.7 D = 78.71 Az = 332.7 (USNOAA) PV(A):1.8s 33.8nm MPV(A)=5.0
26.	eP A	02 01 53	<u>Crete</u> 34.58 N 23.96 E
	e A	02 38	H = 01 57 39.1 h = normal MB = 4.6
	LmH C	10.8	D = 18.41 Az = 334.5 (USNOAA)
	LmV C	10.9	PV(A):1.3s 34.9nm MPV(A)=4.4
26.	eiP1 A	03 23 50	<u>Off Coast of Oregon</u> 43.78 N 127.45 W
	isP1 A	23 55	H = 03 11 42.8 h = 14 km MB = 5.6
	eP2 A	24 07	D = 79.44 Az = 25.1 (USNOAA)
	eS BC	33 56	MP1V(A):1.4s 39.5nm MP1V(A)=5.3
	eSS C	39 06	MP2V(A):2.1s 183.0nm MP2V(A)=5.7
	LmH B	04 04.0	LmH:15.5s 4.0/um MLH =5.9
	LmV B	04.0	LmV:15s 3.8/um MLV =5.9
26.	ePKHKP A	06 18 08	<u>Tonga Islands</u> 19.96 S 174.02 W
			H = 05 58 20.5 h = normal MB = 4.7 D = 149.05 Az = 353.0 (USNOAA) PKHKP(A):1.3s 17.5nm
26.	ePKHKP A	16 35 25.5	<u>South of Fiji Islands</u> 23.38 S 179.92 E
			H = 16 16 33.3 h = 549 km MB = 4.7 D = 151.30 Az = 344.4 (USNOAA) PKHKP(A):1.3s 15.3nm

Day	Phase	h m s	Remarks
27.	eP A	08 10 18.5	<u>Nicobar Islands Region</u> 6.49 N 94.70 E
	ePcP A	10 23.5	H = 07 58 14.0 h = 85 km MB = 5.2
	epP A	10 41.5	D = 80.63 Az = 320.2 (USNOAA)
27.	eP AB	09 51 47	<u>Taiwan Region</u> 24.23 N 122.31 E
	ePP A	55 01.5	H = 09 39 23.2 h = 57 km MB = 5.9
	eS C	10 02 00	D = 83.72 Az = 323.2 (USNOAA)
	eSS C	08.5	PV(A):1.5s 126.0nm MPV(A)=5.7
	LmH B	33.7	PV(B):7s 0.65/um MPV(B)=5.8
	LmV B	33.7	PPV(A):1.4s 51.2nm MPPV(A)=5.7 LmH:18s 1.3/um MLH =5.4 LmV:18s 1.7/um MLV =5.5
27.	eP A	19 58 39.5	<u>South Atlantic Ridge</u> 14.34 S 13.64 W
	LmH C	20 21	H = 19 47 39.7 h = normal MB = 4.8 D = 68.39 Az = 17.0 (USNOAA) PV(A):1.4s 20.9nm MPV(A)=5.0
28.	eX A	01 14 40	<u>Molucca Sea</u> 0.10 S 126.80 E
			H = 00 56 06.8 h = normal MB = 5.6 D = 106.51 Az = 323.1 (USNOAA) XV(A):1.9s 37.9nm
28.	eP A	02 35 30	<u>Iceland Region</u> 63 N 27.5 W
			H = 02 30 23 h = 33 km MB = 4.1 (ISC) D = 25.0
28.	eP A	11 22 30	<u>Northern Chile</u> 20.92 S 69.83 W
	ePP C	26 34	H = 11 08 42.5 h = 33 km MB = 6.0
	ePS C	35.5	D = 100.67 Az = 39.8 (USNOAA)
	eSS C	41 00	PPV(A):1.8s 60.8nm MPPV(A)=5.8
	LmH B	12 09.3	LmH:18s 1.1/um MLH =5.4 LmV:19s 0.9/um MLV =5.3
28.	eP A	14 59 19	<u>Northern Chile</u> 20.92 S 69.87 W
	ePP A	15 03 21	H = 14 45 31.7 h = 34 km MB = 5.9
	LmH B	39.7	D = 100.70 Az = 39.9 (USNOAA)
	LmV B	40.4	PPV(A):2.0s 59.9nm MPPV(A)=5.7 LmH:25.5s 1.3/um MLH =5.3 LmV:20s 0.8/um MLV =5.3

Day	Phase	h m s	Remarks	
28.	ePKIKP	A 20 41 25.5	<u>New Guinea</u> 4.13 S 142.90 E	
	e	A 42 27	H = 20 20 50.6 h = 114 km MB = 5.8	
	ePP	AB 42 44	D = 118.31 Az = 327.1 (USNOAA)	
	ePKKP	A 51 45	PKIKPV(A):1.1s 16.1nm	
	ePS	C 52 32	PPV(B):8s 1.63/um MPPV(B)=6.2	
	eSKKP	A 55 30	LmH:22s 2.8/um	
	eSS	C 58 52	LmV:20s 2.2/um	
	LmH	B 21 23.4	e(C) 52 36 e(C) 53 18 e(B) 53 20	
	LmV	B 32.0	e(BC) 53 25 e(C) 54 28 e(B) 59 44	
29.	eP	A 02 12 13	<u>Southern Sinkiang Prov., China</u>	
	LmV	B 33.2	41.62 N 81.81 E	
	LmH	B 33.3	H = 02 03 37.4 h = normal MB = 5.1 D = 47.78 Az = 306.0 (USNOAA) PV(A):1.2s 12.2nm MPV(A)=4.8	
29.	ePP	A 05 21 49	<u>Afghanistan-USSR Border Region</u> 36.2 N 71.4 E H = 05 12 06.8 h = 117 km MB = 4.9 D = 44.6 (USNOAA)	
	29.	eP1	A 06 12 02	<u>Ascension Island Region</u> 11.68 S 14.09 W
eP2		AB 12 04.5	H = 06 01 18.7 h = normal MB = 5.3	
+ipP		A 12 09.5	D = 65.99 Az = 17.6 (USNOAA)	
esP		A 12 15	P1V(A):1.3s 17.5nm MP1V(A)=5.0	
ePPP		C 16 04	P2V(A):2.4s 110.5nm MP2V(A)=5.5	
eS		C 20 48	pPV(A):1.2s 48.7nm MpPV(A)=5.5	
ePS		C 21 14	sPV(A):2.1s 216.1nm MsPV(A)=5.9	
eiSS		C 25 00	LmH:17s 13.5/um MLH =6.2	
eSSS		C 27 55	LmV:16s 16.4/um MLV =6.4	
LmH		B 41.4		
LmV		B 41.7		
29.		ePKP2	A 15 24 11	<u>Tonga Islands</u> 20.81 S 174.46 W H = 15 04 16.0 h = 28 km MB = 4.3 D = 149.84 Az = 352.3 (USNOAA)

Day	Phase	h m s	Remarks
29.	eP	A 15 40 11	<u>Southern Sinkiang Prov., China</u>
	LmH	B 16 01.0	41.59 N 81.78 E
	LmV	B 01.2	H = 15 31 29.7 h = normal MB = 4.7 D = 47.77 Az = 306.0 (USNOAA) PV(A):1.0s 11.8nm MPV(A)=4.9 LmH:10s 0.65/um MLH =4.9 LmV:10s 0.7/um MLV =5.0
29.	eiP	A 17 44 08.5	<u>Turkmen SSR</u> 39.62 N 54.64 E
	epP	A 44 20	H = 17 37 45.9 h = 53 km MB = 4.7 D = 31.87 Az = 304.6 (USNOAA) PV(A):1.2s 24.4nm MPV(A)=4.8
29.	eP	A 20 13 30	<u>Mexico - Guatemala Border Region</u>
	LmH	B 53.0	15.29 N 92.79 W
	LmV	B 53.0	H = 20 00 54.0 h = 105 km MB = 5.0 D = 87.18 Az = 38 (ISC)
30.	eP	A 09 52 18.5	<u>Greece</u> 39.07 N 21.87 E
	e	A 52 20	H = 09 49 03.2 h = 48 km MB = 4.3 D = 13.65 Az = 331.3 (USNOAA)
30.	eP	A 17 28 09.5	<u>Ascension Island Region</u> 11.43 S 14.43 W
	e	A 28 17.5	H = 17 17 24.1 h = normal MB = 4.7 D = 65.86 Az = 17.8 (USNOAA) LmH:18s 0.5/um MLH =4.8 LmV:18s 0.5/um MLV =4.8
30.	ePKHKP	A 20 36 46	<u>Fiji Islands Region</u> 21.81 S 178.62 W
	ePKP2	A 36 55	H = 20 17 56.7 h = 555 km MB = 4.7 D = 150.12 Az = 346.9 (USNOAA)

Day	Phase	h m s	Remarks
1.	eP	A 01 06 00.5	<u>Tunisia</u> 36.94 N 9.73 E
	e	A 06 06.5	H = 01 02 44.2 h = 24 km MB = 5.1
	LmH	B 11.5	D = 13.77 Az = 5.1 (USNOAA)
	LmV	B 12.5	PV(A):1.8s 40.5nm LmH(B):17s 1.8/um MLH(B)=4.2 LmV(B):12s 1.8/um
1.	ePn	A 10 49 50	<u>Federal Rep. Germany</u> 50.30 N 7.79 E
	i	A 49 52	H = 10 49 09.3 h = 18 km MB = 3.9
	iPg	A 49 56.7	D = 2.47 Az = 80.5 (USNOAA)
	iSn	A 50 18.7	
	iSg	A 50 27.2	
1.	eP1	AB 12 02 23.5	<u>Turkey</u> 39.89 N 38.85 E
	eP2	A 02 27	H = 11 57 29.1 h = 21 km MB = 4.7
	eSS	B 06 32	D = 21.85 Az = 308.5 (USNOAA)
	LmH	B 13.2	P1V(A):1.4s 30.3nm MP1V(A)=4.5
	LmV	B 13.3	P2V(A):1.3s 94.0nm MP2V(A)=5.0 LmH(B):16s 1.7/um MLH(B)= 4.6 LmV(B):15.5s 2.0/um MLV(B)= 4.8
1.	ePKHKP	A 13 08 13	<u>New Britain Region</u> 6.00 S 152.60 E
			H = 12 49 19.0 h = 34 km MB = 5.4 D = 124.90 Az = 330.7 (USNOAA)
1.	ePKIKP	ABC 18 34 13	<u>Solomon Islands</u> 10.97 S 163.39 E
	ePP	AB 36 43	H = 18 14 38.6 h = normal MB = 5.5(USNOAA)
	eSS	C 54 10	D = 134.2
	eSS	B 54 12	PPV(B):8s 1.2/um MPPV(B)=6.1
	e	C 56 20	LmV(B):16s 1.2/um MLV(B)= 5.7
	eSSS	RC 59 12	LmH(B):19s 2.9/um MLH(B)= 6.0
	LmV	B 19 37.3	
	LmH	B 37.9	
1.	+iP	A 19 41 06.2	<u>Fox Islands, Aleutian Is.</u> 52.42 N 169.08 W
			H = 19 29 16.6 h = 60 km MB = 5.2 D = 77.31 Az = 359.5 (USNOAA) PV(A):1.0s 35.4nm MPV(A)=5.3

Day	Phase	h m s	Remarks
1.	+eiP	ABC 21 21 34	<u>Andreanof Islands, Aleutian Is.</u>
	ePP	B 24 30	51.40 N 175.30 W
	e	C 24 40	H = 21 09 37.2 h = 36 km MB = 5.6
	ePPP	B 26 22	D = 78.16 Az = 355.5 (USNOAA)
	ePPP	C 26 24	PV(A):1.0s 51.2nm MPV(A)=5.5
	eS	C 31 30	PV(A):2.5s 184.3nm MPV(A)=5.8
	eSKS	B 31 36	PV(A):superposition of two periods
	eSKS	C 31 40	PV(B):10s 1.4/um MPV(B)=6.0
	ePPS	B 32 16	PPV(B):8s 0.8/um MPPV(B)=5.9
	e(SS)	C 36.7	LmH(B):16s 4.7/um MLH(B)=5.9
	e(SS)	B 36 52	
	LmH	B 22 03.4	
	LmV	B 06.4	
1.	ePKP	A 22 21 28	<u>Tonga Islands</u> 15.56 S 173.18 W
			H = 22 01 54.1 h = normal MB = 5.4 D = 144.79 Az = 354.7 (USNOAA) PKPV(A):1.4s 23.3nm
2.	eP	ABC 02 46 54	<u>Andreanof Islands, Aleutian Is.</u>
	e	A 47 31.5	51.44 N 175.25 W
	e	A 47 49	H = 02 34 59.5 h = 57 km MB = 5.4
	ePP	B 49 54	D = 78.12 Az = 355.5 (USNOAA)
	eS	C 56 48	PV(A):1.3s 52.4nm MPV(A)=5.3
	e(SS)	C 03 02 16	PV(B):8.5s 0.6/um MPV(B)=5.7
	LmH	B 29.0	LmH(B):16.5s 2.1/um MLH(B)=5.5
	LmV	B 31.0	
2.	eP	AB 09 15 09	<u>Andreanof Islands, Aleutian Is.</u>
	LmH	B 59.4	51.43 N 175.24 W
	LmV	B 10 00.0	H = 09 03 14.6 h = 52 km MB = 5.2 D = 78.14 Az = 355.5 (USNOAA) PV(A):(1.5)s 25.1nm MPV(A)=4.9 LmH(B):16s 1.5/um MLH(B)=5.4 LmV(B):16s 1.3/um MLV(B)=5.4
2.	e	B 15 45 24	<u>Solomon Islands</u> 10.86 S 163.46 E
	ePP	B 47 38	H = 15 25 46.7 h = 36 km MB = 5.3

Day	Phase	h m s	Remarks
cont. 2.	e	B 15 48 00	D = 134.09 Az = 335.3 (USNOAA)
	ePKS	B 48 28	
	ePPP	B 50 19	
	ePKKP	B 52 34	
2.	ePKIKP	A 16 13 37	<u>Solomon Islands</u> 10.97 S 163.29 E
	e	B 14 12	H = 15 54 19.9 h = normal MB = 5.8
	ePP	B 16 15	D = 134.11 Az = 335.1 (USNOAA)
	e	B 16 34	LmH(B):20s 35.9/um MLH(B)=7.1
	ePKS	B 17 22	LmV(B):20s 30.3/um MLV(B)=7.1
	eSKS	B 20 31	
	e	B 23 12	
	e	B 23 31	
	ePPS	B 27 57	
	eSKSPKP	B 29 00	
	eSS	B 33 44	
	e	B 34 08	
	LmH	B 17 16.0	
	LmV	B 16.2	
2.	eP	A 19 23 36	<u>Kansu Province, China</u> 35.90 N 105.49 E
			H = 19 12 53.8 h = 28 km MB = 5.3
			D = 65.46 Az = 315.7 (USNOAA)
			PV(A):1.8s 54.1nm MPV(A)=5.4
3.	eP	A 05 12 16	<u>Northern Colombia</u> 7.36 N 76.04 W
	LmH	B 50.2	H = 04 59 53.4 h = 38 km MB = 5.7
	LmV	B 50.2	D = 82.91 Az = 39.9 (USNOAA)
			PV(A):1.9s 68.2nm MPV(A)=5.4
			LmH(B):20s 1.7/um MLH(B)=5.4
			LmV(B):20s 1.8/um MLV(B)=5.5
3.	eP	A 07 21 33	<u>Molucca Sea</u> 1.06 S 126.80 E
	LmH	B 08 11.4	H = 07 02 46.6 h = 26 km MB = 5.8
	LmV	B 11.4	D = 106.56 Az = 323.1 (USNOAA)
			PV(A):2.0s 51.2nm

Day	Phase	h m s	Remarks
3.	ePKP	A 15 34 12.5	<u>Tonga Islands</u> 16.27 S 173.99 W
			H = 15 14 43.1 h = 85 km MB = 4.6
			D = 145.41 Az = 353.7 (USNOAA)
			PKPV(A):1.2s 20.3nm
4.	eP	ABC 02 04 02	<u>Western Caucasus</u> 43.78 N 39.13 E
	eS	BC 07 45	H = 01 59 29.1 h = normal MB = 4.9
	LmV	B 15.2	D = 19.83 Az = 299.9 (USNOAA)
	LmH	B 16.9	PV(A):1.5s 40.2nm MPV(A)=4.4
			PV(B):6s 1.3/um MPV(B)=5.3
			LmV(B):12s 3.9/um MLV(B)=5.1
			LmH(B):10s 3.3/um MLH(B)=5.0
4.	eP	A 10 03 44	<u>Panama</u> 9.78 N 79.68 W
	LmH	B 37.7	H = 09 51 16.1 h = 20 km MB = 5.3
	LmV	B 37.7	D = 83.34 Az = 39.9 (USNOAA)
			LmH(B):18s 1.9/um MLH(B)=5.5
			LmV(B):18s 1.9/um MLV(B)=5.6
4.	eP	AC 17 22 45	<u>Near Coast of Northern Chile</u>
	e	A 22 58.5	23.13 S 70.11 W
	e	A 23 03	H = 17 08 48.7 h = 36 km MB = 5.9
	ePP	ABC 26 52	D = 102.53 Az = 40.2 (USNOAA)
	e	A 27 06.5	PV(A):1.6s 38.5nm MPV(A)=5.8
	e	A 27 19	LmH(B):20s 9.9/um MLH(B)=6.3
	e	A 27 24	LmV(B):20s 9.2/um MLV(B)=6.3
	eSKS	BC 33 22	
	eiPS	BC 36 04	
	eSS	C 41 32	
	e	C 41 44	
	LmH	B 18 05.6	
	LmV	B 05.6	
5.	eiPKP	A 22 18 41	<u>Tonga Islands</u> 18.12 S 175.38 W
	epPKP	A 19 47	H = 21 59 25.3 h = 241 km MB = 5.0
			D = 147.07 Az = 351.8 (USNOAA)
			PKPV(A):1.5s 45.2nm

Day	Phase	h m s	Remarks
6.	ePKP A	02 51 53	<u>Fiji Islands Region</u> 17.26 S 176.33 W H = 02 32 19.9 h = 48 km MB = 4.9 D = 146.09 Az = 350.9 (USNOAA) PKPV(A):1.9s 37.9nm
6.	eP A	04 29 02	<u>Banda Sea</u> 6.27 S 130.14 E H = 04 10 37.8 h = 118 km MB = 5.7 D = 112.70 Az = 322.7 (USNOAA)
6.	e A	12 59 07	<u>Kurile Islands</u> 43.58 N 147.03 E H = 12 47 31.4 h = 40 km MB = 4.9 D = 78.45 Az = 332.9 (USNOAA)
6.	eP A	17 45 42	<u>Ascension Island Region</u> 7.95 S 13.41 W H = 17 35 20.1 h = normal MB = 4.2 D = 62.26 Az = 17.7 (USNOAA)
6.	eP A	17 53 43	<u>Ascension Island Region</u> 7.95 S 13.50 W H = 17 43 21.4 h = normal MB = 4.4 D = 62.29 Az = 17.8 (USNOAA)
6.	+iP AB	20 32 51.5	<u>Hokkaido, Japan Region</u> 41.80 N 143.51 E H = 20 20 52.2 h = 48 km MB = 5.7 D = 78.80 Az = 331.1 (USNOAA)
	Pmax A	32 54	
	+i A	33 03	
	ePP BC	35 52	PmaxV(A):1.2s 118.0nm MPmaxV(A)=5.7
	eS BC	42 44	PV(B):11s 2.6/um MPV(B)=6.2
	eSS C	48 45	PPV(B):10s 1.35/um MPPV(B)=6.0
	LmH B	21 06.9	LmH(B):17s 23.6/um MLH(B)=6.6
	LmV B	10.7	LmV(B):19.5s 20.1/um MLV(B)=6.5
7.	eiP A	12 26 50.5	<u>Panama-Colombia Border Region</u> 6.98 N 77.68 W H = 12 14 21.6 h = 25 km MB = 4.8 D = 84.21 Az = 39.8 (USNOAA)
7.	-eiP1 ABC	21 47 50.5	<u>South of Honshu, Japan</u> 29.69 N 140.01 E H = 21 35 21.4 h = 179 km MB = 5.9 D = 87.96 Az = 330.0 (USNOAA)
	iP2 AB	47 56.5	
	epP1 B	48 44	

Day	Phase	h m s	Remarks
cont. 7.	+ipP2 C	21 48 50	P1V(A):1.5s 178.0nm MP1V(A)=5.8
	ePP1 C	51 14	P2V(A):2.0s 940.0nm MP2V(A)=6.4
	eiPP2 BC	51 21	LmH(B):16.5s 10.6/um
	eipPP C	52 21.5	LmV(B):13s 6.8/um
	eiSKS C	57 56.5	
	eiSKS B	58 00	
	eiS B	58 22	
	iSP BC	59 16	
	ei C	59 24	
	ei BC	59 35	
	i C	22 03 30	
	eiSS C	04 08	
	eSS B	04 14	
	e C	04 58	
	LmH B	23.3	
	LmV B	37.3	
8.	eP A	09 11 30	<u>Off W. Coast of Northern Sumatra</u>
	e A	11 38.5	2.39 N 94.88 E H = 08 59 00.2 h = 21 km MB = 5.3 D = 83.88 Az = 320.5 (USNOAA) PV(A):1.4s 18.6nm MPV(A)=5.1
8.	ePKP A	11 28 52	<u>New Hebrides Islands</u> 18.87 S 169.25 E H = 11 09 45.2 h = 226 km MB = 4.6 D = 143.65 Az = 335.9 (USNOAA)
8.	eP diff B	19 44 25	<u>Near Coast of Central Chile</u>
	e A	44 52.5	30.70 S 71.21 W H = 19 30 06.7 h = 50 km MB = 5.8 D = 108.86 Az = 41.9 (USNOAA)
	ePKIKP A	48 25	
	ePP C	48 54.5	PdiffV(B):10s 1.0/um MPdiffV(B)=7.0
	iPP E	48 56	PKIKPV(A):2.3s 61.0nm
	ePP A	48 57	
	i BC	49 00	PPV(B):9s 2.4/um MPPV(B)=6.8
	eSKS B	55 32	LmH(B):19.5s 12.1/um MLH(B)=6.5
	iSKS C	55 36	LmV(B):20s 16.7/um MLH(B)=6.6
	e C	58 16	
	ei EC	58 18	
	e C	58 23	

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Day	Phase	h m s	Remarks
cont. 8.	e	B 19 58 30	
	e	A 59 38.5	
	eSS	C 20 04 29	
	ei	C 04 37	
	+i	B 04 43	
	eSSS	C 08 06	
	ei	B 08 21	
	LmH	B 33.9	
	LmV	B 33.9	
9.	ePn	A 00 46 48.5	<u>Peißenberg, FRG</u> 47.7 N 11.2 E
	eiPb	A 46 54.5	H = 00 46 04 (BCIS)
	iPg	A 46 59.2	D = 2.6
	iSn	A 47 24.2	
	iSg	A 47 38.2	
9.	eP	A 08 15 43	<u>Near Coast of Guerrero, Mexico</u>
	e	A 15 50	16.15 N 99.41 W
	LmH	C 57.0	H = 08 02 43.3 h = 34 km MB = 5.5
	LmV	C 57.5	D = 90.37 Az = 36.5 (USNOAA)
9.	+iPKP2	A 08 32 02.3	<u>Tonga Islands</u> 18.41 S 174.80 W
			H = 08 12 31.1 h = 124 km MB = 4.9
			D = 147.43 Az = 352.4 (USNOAA)
			PKPV(A):1.3s 19.6nm
9.	ePKP2	A 12 06 00	<u>Loyalty Islands Region</u> 22.64 S 172.16 E
			H = 11 46 16.9 h = 44 km MB = 4.9
			D = 148.19 Az = 336.3 (USNOAA)
9.	eP	A 16 41 18	<u>Ecuador</u> 1.40 S 77.66 W
	e	A 42 02.5	H = 16 28 33.4 h = 178 km MB = 5.0
			D = 90.61 Az = 39.5 (USNOAA)
			PV(A):1.6s 27.5nm
9.	eP	A 19 45 02	<u>Kyushu, Japan</u> 31.53 N 130.19 E
			H = 19 33 01.2 h = 175 km MB = 4.7
			D = 81.88 Az = 325.6 (USNOAA)
			PV(A):1.2s 18.3nm MPV(A)=4.7

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Day	Phase	h m s	Remarks
10.	+eiP1	ABC 04 47 58.5	<u>Peru-Ecuador Border Region</u>
	eiP2	A 48 03.5	3.99 S 80.72 W
	iP3	A 48 08.8	H = 04 34 38.9 h = 25 km MB = 6.3
	iPP	B 51 41	D = 94.54 Az = 39.7 (USNOAA)
	iPP	C 52 00	P1V(A):1.6s 154.0nm MP1V(A)=6.2
	iSKS	BC 58 32	P2V(A):2.0s 666.0nm MP2V(A)=6.6
	iS	BC 59 26	P3V(A):1.6s 824.0nm MP3V(A)=6.9
	-iPKKP	A 05 05 01.5	PKKP(A):2.0s 115.0nm
	eP'P'1	A 13 11	P'P'1V(A):2.2s 120.0nm
	eP'P'2	A 13 15	P'P'2V(A):2.0s 132.0nm
	eP'P'3	A 13 19	P'P'3V(A):3.0s 842.0nm
	LmH	B 27.7	LmH(B):20s 152.0 μ m MLH(B)=7.5
	LmV	B 27.9	LmV(B):20s 174.8 μ m MLV(B)=7.5
10.	eP	A 05 46 08.5	<u>Peru-Ecuador Border Region</u>
			3.95 S 80.73 W
			H = 05 32 49.7 h = 33 km MB = 5.4
			D = 94.52 Az = 39.7 (USNOAA)
10.	eP1	A 10 26 55	<u>Fox Islands, Aleutian Islands</u>
	eP2	A 26 58.5	53.10 N 169.85 W
	LmH	B 11 11.6	H = 10 15 07.2 h = 48 km MB = 5.5(USNOAA)
	LmV	B 11.6	D = 76.5
			P2V(A):1.8s 33.8nm MP2V(A)=5.0
			LmH(B):15s 1.0 μ m MLH(B)=5.6
			LmV(B):16s 0.8 μ m MLV(B)=5.2
10.	eP	A 11 51 04	<u>Peru-Ecuador Border Region</u>
	e	A 51 12	3.98 S 80.79 W
	LmH	B 12 31.5	H = 11 37 42.4 h = 32 km MB = 5.4(USNOAA)
	LmV	B 31.8	D = 94.6
			LmH(B):22s 1.5 μ m MLH(B)=5.4
			LmV(B):22s 1.6 μ m MLV(B)=5.5
10.	eP	A 20 04 03	<u>Peru-Ecuador Border Region</u>
			4.11 S 80.75 W
			H = 19 50 43.1 h = normal MB = 5.1
			D = 94.65 Az = 39.7 (USNOAA)

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Day	Phase	h m s	Remarks
10.	eP A	22 00 00	<u>Peru, Ecuador Border Region</u> 3.94 S 80.81 W H = 21 46 41.7 h = 34 km MB = 5.0 D = 94.56 Az = 39.7 (USNOAA) PV(A):1.9s 22.7nm MPV(A)=5.3
11.	e A	07 40 49	<u>North Atlantic Ridge</u> 43.82 N 28.42 W H = 07 34 54.5 h = normal MB = 5.2 D = 27.76 Az = 61.6 (USNOAA) PV(A):2.6s 60.6nm LmH(B):17s 2.0/um MLH(B)=4.8 LmV(B):18.5s 3.4/um MLV(B)=5.1
	LmH B	51.2	
	LmV B	51.3	
11.	eP1 A	10 37 54.5	<u>Peru-Ecuador Border Region</u> 3.95 S 80.72 W H = 10 24 36.2 h = 37 km MB = 5.7 D = 94.51 Az = 39.7 (USNOAA) P2V(A):2.0s 42.8nm MPV(A)=5.5 LmH(B):19s 2.7/um MLH(B)=5.7 LmV(B):22s 3.5/um MLV(B)=5.8
	eP2 A	37 56	
	e B	38 00	
	eSKS B	48 24	
	e C	48 30	
	e BC	49 08	
	LmH B	11 17.7	
	LmV B	18.6	
11.	iPg A	11 44 20	<u>USSR, explosion, yield 10.7 to</u> 50°33.8'N 14°00.4'E (PRU) D c. 1.6
	iSg A	44 40.5	
12.	ePKIKP A	01 29 39	<u>Fiji Islands Region</u> 20.81 S 177.99 W H = 01 10 41.2 h = 411 km MB = 5.5 D = 149.28 Az = 348.0 (USNOAA) h = 425 km PKIKPV(A):1.1s 16.1nm PKHKPV(A):1.7s 96.9nm PKP2V(A):1.7s 121.0nm
	eiPKHKP A	29 43.5	
	ePKP2 A	29 48.5	
	epPKP A	31 25	
	ePP A	33 14	
12.	+iP ABC	07 07 06.8	<u>Western Kazakh SSR</u> 43.85 N 54.77 E H = 07 00 57.3 h = 0 km MB = 6.1 D = 29.73 Az = 298.6 (USNOAA)
	e A	07 33	
	LmH B	17.9	

Day	Phase	h m s	Remarks
cont. 12.	LmV B	07 19.1	PV(A):1.4s 125.5nm MPV(A)=5.7 LmH(B):16s 3.3/um MLH(B)=5.1 LmV(B):13s 2.3/um MLV(B)=5.1
12.	ePKP2 A	10 42 50	<u>Fiji Islands</u> 19.67 S 177.80 W H = 10 24 08.3 h = 573 km MB = 4.2 D = 148.20 Az = 348.6 (USNOAA)
12.	eP A	11 22 53	<u>Iran-USSR Border Region</u> 37.25 N 55.43 E H = 11 16 13.4 h = 46 km ME = 4.5 D = 33.76 Az = 307.5 (USNOAA)
13.	e A	01 04 38	<u>Near Coast of Northern Peru</u> 4.2 S 81.2 W H = 00 50 51 h = 9 km MB = 4.8 (ISC) D = 95.1
13.	-eP A	04 15 49	<u>Near West Coast of Honshu, Japan</u> 39.81 N 139.38 E H = 04 03 42.5 h = 14 km MB = 5.4 D = 78.97 Az = 329.2 (USNOAA) PV(A):1.4s 27.9nm MPV(A)=5.1 LmH(C):18s 0.45/um MLH(C)=4.8
	LmH C	47.9	
13.	eP A	13 00 08.5	<u>Southern Sumatra</u> 4.25 S 103.37 E H = 12 47 00.3 h = 119 km MB = 5.4 D = 94.37 Az = 320.3 (USNOAA) PV(A):1.2s 14.2nm MPV(A)=5.2
	e A	00 33	
14.	eP ABC	07 46 04	<u>Near Coast of Ecuador</u> 1.31 S 80.91 W H = 07 32 52.5 h = normal ME = 5.4 D = 92.61 Az = 39.5 (USNOAA) PV(A):1.8s 33.8nm MPV(A)=5.5 LmH(B):21s 2.4/um MLH(B)=5.6 LmV(B):20s 2.5/um MLV(B)=5.7
	ePP B	49 43	
	eSKS BC	56 38	
	eS BC	57 08	
	ePS BC	58 14	
	LmH B	08 23.2	
	LmV B	25.3	

Day	Phase	h m s	Remarks
14.	eP LmH	A B 15 00 00 41.0	<u>Fox Islands, Aleutian Is.</u> 53.03 N 169.93 W H = 14 48 11.8 h = 50 km MB = 5.3 D = 76.69 Az = 359.0 (USNOAA) LmH(B):18s 0.5 _{um} MLH(B)=4.9
14.	eP LmH LmV	A B B 21 23 27 22 02.5 08.6	<u>Fox Islands, Aleutian Is.</u> 53.01 N 170.02 W H = 21 11 39.1 h = 54 km MB = 5.2 D = 76.71 Az = 358.9 (USNOAA) PV(A):2.0s 47.0nm MPV(A)=5.1 LmH(B):20s 1.9 _{um} MLH(B)=5.4 LmV(B):16s 1.5 _{um} MLV(B)=5.4
15.	eP	A 02 17 30	<u>Off W. Coast of Northern Sumatra</u> 2.92 N 95.47 E H = 02 05 00.3 h = normal MB = 4.9 D = 83.85 Az = 320.5 (USNOAA)
15.	eP LmH LmV	A B B 08 07 39.5 48.8 51.2	<u>Near Coast of Chiapas, Mexico</u> 14.39 N 93.06 W H = 07 54 51.6 h = normal MB = 5.1 D = 88.04 Az = 38.0 (USNOAA) PV(A):0.7s 9.6nm MPV(A)=5.2 LmH(B):18s 1.6 _{um} MLH(B)=5.5 LmV(B):16s 1.5 _{um} MLV(B)=5.5
15.	ePKJKP ePKHKP ePKIKP e e	A A A A A 15 43 34 43 37 43 42 46 21 47 03.5	<u>New Hebrides Islands</u> 14.39 S 167.34 E H = 15 24 37.4 h = 182 km MB = 5.8 D = 138.83 Az = 336.6 (USNOAA) PKJKPV(A):0.6s 11.5nm PKIKPV(A):1.5s 75.5nm
15.	ePKP2	A 16 26 08.5	<u>Tonga Islands</u> 18.41 S 175.62 W H = 16 06 53.1 h = 252 km MB = 4.6 D = 147.33 Az = 351.5 (USNOAA) PV(A):1.6s 30.2nm

Day	Phase	h m s	Remarks
15.	eP	A 21 28 41	<u>Peru-Ecuador Border Region</u> 4.03 S 80.86 W H = 21 15 20.2 h = 32 km MB = 5.2 D = 94.66 Az = 39.7 (USNOAA)
16.	eiP eSKS LmH LmV	ABC B B B 01 13 22.5 23 55 50.2 50.2	<u>New West Coast of Colombia</u> 6.04 N 77.54 W H = 01 00 46.9 h = 14 km MB = 5.6 D = 84.84 Az = 39.7 (USNOAA) PV(A):1.6s 85.2nm MPV(A)=5.7 LmH(B):19s 1.0 _{um} MLH(B)=5.2 LmV(B):20s 1.0 _{um} MLV(B)=5.2
16.	e(P) LmH LmV	A B B 08 57 03 09 29.4 29.4	<u>Costa Rica</u> 8.71 N 83.15 W H = 08 44 22.0 h = 64 km MB = 5.1 D = 86.35 Az = 39.5 (USNOAA) LmH(B):21s 0.7 _{um} LmV(B):22s 0.5 _{um}
16.	eP	A 16 12 18.5	<u>Southern Nevada</u> 37.10 N 116.01 W H = 16 00 00.1 h = 0 km MB = 5.1 D = 81.23 Az = 30.7 (USNOAA) PV(A):1.2s 12.2nm MPV(A)=5.0
16.	eP	A 16 36 32	<u>Andreanof Islands, Aleutian Is.</u> 51.28 N 174.89 W H = 16 24 34.8 h = 37 km MB = 4.9 D = 78.30 Az = 355.8 (USNOAA) PV(A):2.0s 34.2nm MPV(A)=5.0
16.	e(PKP)	A 21 06 33	<u>Fiji Islands Region</u> 17.59 S 178.54 W H = 20 47 50.2 h = 544 km MB = 4.6 D = 146.03 Az = 348.4 (USNOAA)
17.	+iP e ePn	A A A 07 08 46.8 08 53.5 10 19.5	<u>Eastern Kazakh SSR</u> 49.73 N 78.13 E H = 07 00 57.4 h = 0 km MB = 5.5 D = 41.29 Az = 297.8 (USNOAA) PV(A):0.8s 80.7nm MPV(A)=5.5

Day	Phase	h m s	Remarks
17.	e(P) A	07 52 23	<u>Near West Coast of Colombia</u> 6.48 N 77.54 W H = 07 39 53.8 h = 18 km MB = 5.1 D = 84.50 Az = 39.8 (USNOAA)
17.	eP A	09 28 58.5	<u>North of Severnaya Zemlya</u>
	e A	29 06.5	83.38 N 115.38 E
	LmH B	43.6	H = 09 21 13.0 h = normal MB = 4.8
	LmV B	44.0	D = 41.55 Az = 291.2 (USNOAA) PV(A):1.6s 33.0nm MPV(A)=4.8
17.	ePg A	11 05 04	<u>USSR, explosion, yield 28 to</u>
	iSg A	05 24.8	50°35.2'N 14°03.2'E (PRU)
17.	ePKP A	15 10 45.5	<u>Fiji Region</u> 18.15 S 177.89 W H = 14 52 07.3 h = 570 km MB = 4.7 (ISC) D = 146.8
17.	+iP A	16 17 18.0	<u>Southern Nevada</u> 37.13 N 116.08 W
	ePP A	20 22	H = 16 05 00.2 h = 0 km MB = 5.7 D = 81.24 Az = 30.6 (USNOAA) 37°06'00.6"N 116°00'28.6"W "Artesia" Nevada test site (USAEC) PV(A):1.2s 69.1nm MPV(A)=5.7
18.	eP A	15 40 52.5	<u>South of Alaska</u> 53.30 N 160.78 W
	ePcP A	41 03.5	H = 15 29 05.7 h = normal MB = 5.1 D = 76.23 Az = 5.0 (USNOAA) PV(A):1.6s 41.2nm MPV(A)=5.2 PcPV(A):1.2s 28.4nm
18.	eP A	15 42 19	<u>Southern Nevada</u> 37.17 N 116.10 W H = 15 30 00.2 h = 0 km MB = 5.2 D = 81.21 Az = 30.6 (USNOAA) 37°10'23.3"N 116°05'55.9"W Nevada test site "Baneberry" (USAEC)

Day	Phase	h m s	Remarks
18.	ePKP A	23 14 47.5	<u>Loyalty Islands Region</u> 21.9 S 169.6 E H = 22 55 09 h = 36 km D = 146.53 Az = 334 (ISC)
18.	eP1 A	24 03 02.5	<u>Mindanao, Philippine Islands</u>
	-iP2 ABC	03 06.5	5.12 N 123.55 E
	epP A	04 59	H = 23 50 12.3 h = 511 km MB = 5.5
	e A	05 07	D = 99.70 Az = 323.2 (USNOAA)
	ePP C	07 08	P1V(A):1.3s 52.4nm MP1V(A)=5.8
	e(PPP) C	09 48	P2V(A):1.2s 150.3nm MP2V(A)=6.3
	eSKS B	13 48	LmH(E):18s 1.7/um
	ePS C	16 09	LmV(B):18s 1.8/um
	e C	17 00	
	e BC	17 22	
	e BC	19 54	
	LmH B	52.0	
	LmV B	52.3	
19.	ePKIKP A	02 47 50	<u>New Britain Region</u> 5.63 S 151.80 E
	LmH B	03 41.1	H = 02 28 56.0 h = 56 km MB = 5.6
	LmV B	47.4	D = 124.23 Az = 330.5 (USNOAA) LmH(B):18s 1.8/um MLH(B)=5.8 LmV(E):20s 2.2/um MLV(E)=5.8
19.	ePn A	03 01 18	<u>Yugoslavia</u> 46.42 N 16.40 E
	e(Sn) A	02 18.5	H = 02 59 58.1 h = 16 km MB = 4.2
	e A	02 46	D = 5.29 Az = 324.8 (USNOAA)
	e B	02 48	
19.	eP1 ABC	10 51 02.5	<u>Southern Sumatra</u> 1.63 S 99.90 E
	+iP2 A	51 06.5	H = 10 38 05.2 h = 46 km MB = 5.8
	ipP2 AB	51 17	D = 90.16 Az = 320.5 (USNOAA)
	ePP BC	54 40	P1V(A):1.5s 37.7nm MP1V(A)=5.5
	eiPPP C	56 48	P1V(B):5s 1.6/um MP1V(E)=6.5
	eSKS B	11 01 30	P2V(A):1.9s 356.0nm MP2V(A)=6.4
	eSKS C	01 32	PPV(B):8s 1.2/um MPPV(B)=6.4
	eiS B	01 52	SH(B):12s 1.95/um MSH(B)=6.4
	eiS C	01 54	LmH(E):16.5s 4.5/um MLH(B)=6.0
	ePS E	03 08	LmV(E):22s 4.8/um MLV(E)=5.9

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Day	Phase	h m s	Remarks
cont. 19.	ei	C 11 03 16	
	e	C 07 36	
	eSS	B 08 00	
	eSSS	C 11 31	
	e	C 14 36	
	LmH	B 39.6	
	LmV	B 39.7	
19.	eiP	A 12 21 32.5	<u>United Arab Republic</u> 27.51 N 33.78 E H = 12 15 34.1 h = 20 km MB = 4.6 D = 28.60 Az = 329.9 (USNOAA) PV(A):0.7s 11.5nm MPV(A)=4.7
19.	e	A 22 50 13	<u>United Arab Republic</u> 27.51 N 33.88 E H = 22 44 09.3 h = 23 km MB = 4.6 D = 28.64 Az = 329.8 (USNOAA)
20.	ePKP	A 00 51 22	<u>Loyalty Islands Region</u> 21.7 S 169.8 E H = 00 31 06 h = 24 km (ISC) D = 146.4
20.	ePKP	A 03 00 36	<u>Loyalty Islands Region</u> 21.9 S 169.6 E H = 02 40 55 h = 0 km (ISC) D = 146.9
20.	+iP	A 06 12 09	<u>Central Alaska</u> 63.09 N 151.45 W
	e	A 12 42	H = 06 01 36.1 h = 130 km MB = 5.3 D = 65.83 Az = 11.7 (USNOAA) PV(A):1.4s 37.2nm MPV(A)=5.1
20.	ePKP	A 10 59 43	<u>Near North Coast of New Guinea</u> 4.84 S 144.14 E H = 10 41 03.1 h = 104 km MB = 5.5 D = 119.57 Az = 327.4 (USNOAA) PKPV(A):1.1s 14.1nm

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Day	Phase	h m s	Remarks
20.	eP1	AB 11 05 40	<u>Turkey</u> 39.40 N 29.24 E
	eP2	AC 05 43	H = 11 01 48.0 h = 38 km ME = 5.0
	P2max	A 05 50	D = 16.73 Az = 318.0 (USNOAA)
	eSS	C 08 55	P2V(A):1.4s 27.9nm MP2V(A)=4.2
	e	E 09 11	P2maxV(A):1.8s 111.6nm MP2maxV(A)=4.7 LmH(E):14s 8.8/um MLH(E) = 5.2 LmV(E):10s 7.0/um MLV(E) = 5.4
20.	eiPKP	A 12 14 27.5	<u>Fiji Islands Region</u> 17.83 S 179.96 W H = 11 55 56.7 h = 635 km ME = 4.9 D = 145.98 Az = 346.8 (USNOAA) PV(A):1.4s 39.6nm
21.	eP	A 07 46 35.5	<u>Peru-Ecuador Border Region</u> 3.96 S 80.81 W H = 07 33 15.5 h = 32 km MB = 5.1 D = 94.58 Az = 39.7 (USNOAA) PV(A):1.6s 27.5nm MPV(A)=5.5
21.	eP	A 11 04 59	<u>Kurile Islands Region</u> 43.83 N 151.03 E H = 10 52 54.9 h = 38 km ME = 5.1 D = 79.50 Az = 335.1 (USNOAA) PV(A):1.8s 27.0nm MPV(A)=5.0
21.	LmH	B 13 56.3	Probably <u>Philippine Islands</u> (USNOAA)
	LmV	B 59.0	LmH(B):16s 1.3/um LmV(B):16s 1.2/um
21.	eX	A 14 59 13	<u>Sumbawa Island Region</u> 9.12 S 116.42 E
	e	A 59 16	H = 14 40 45.0 h = 92 km MB = 5.9
	LmH	C 15 45.5	D = 106.38 Az = 320.1 (USNOAA)
	LmV	C 48.6	XV(A):1.8s 47.3nm LmH(C):23s 0.9/um LmV(C):21s 0.6/um
22.	eP	A 02 01 49	<u>Peru-Ecuador Border Region</u>
	LmH	C 42.0	3.96 S 80.82 W

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Day	Phase	h m s	Remarks
cont. 22.	LmV	C 02 42.4	H = 01 48 30.2 h = 33 km MB = 5.5 D = 94.58 Az = 39.7 (USNOAA) PV(A):1.4s 23.3nm MPV(A)=5.5 LmV(C):19s 0.5/um MLV(C)=5.0
22.	ePKP2	A 02 49 51	<u>Fiji Islands Region</u> 19.49 S 178.90 W H = 02 31 13.9 h = 608 km MB = 4.6 D = 147.81 Az = 347.4 (USNOAA)
22.	ePKIKP +iPKHKP eX1 eX2	A 05 57 13 A 57 14.5 A 57 43 A 57 58	<u>New Hebrides Islands</u> 20.81 S 109.84 E H = 05 37 47.9 h = 119 km MB = 5.6 D = 145.63 Az = 335.3 (USNOAA) PKIKPV(A):0.8s 15.4nm PKHKPV(A):1.8s 87.8nm X1V(A):1.5s 40.2nm X2V(A):1.2s 106.0nm
22.	+iP e LmV LmH	A 20 59 46.5 A 59 52.5 B 21 18.5 B 18.6	<u>North Atlantic Ridge</u> 28.30 N 43.91 W H = 20 51 16.2 h = normal MB = 5.3 D = 47.04 Az = 45.8 (USNOAA) PV(A):1.9s 83.4nm MPV(A)=5.4 LmV(E):18s 1.6/um MLV(E)=5.1 LmH(E):16s 1.2/um MLH(E)=5.0
22.	iP1 eP2 ePcP eS LmV LmH	AB 21 01 34 A 01 40 C 06(50) BC 08 36 B 18.5 B 18.6	<u>North Atlantic Ridge</u> 28.29 N 43.94 W H = 20 53 04.3 h = normal MB = 5.4 D = 47.07 Az = 45.8 (USNOAA) P1V(A):1.7s 79.0nm MP1V(A)=5.5 P2V(A):1.8s 128.3nm MP2V(A)=5.8 LmV(B):18s 1.6/um MLV(B)=5.1 LmH(B):16s 1.2/um MLH(B)=5.0 Superposition of surface waves
22.	iPn e(Pg) i i(Sn) i	A 22 14 16 A 14 24 A 14 47.5 A 14 51.5 A 15 07.5	<u>PeiBenberg, Federal Rep. Germany</u> 47.8 N 11.02 E H = 22 13 31 (BCIS) D = 2.9

Day	Phase	h m s	Remarks
23.	+iP ePn e e(PP) i +eiPcP LmH LmV	A 07 07 07.5 A 07 35 A 07 36 A 08 09.5 A 08 48 A 10 10 B 22.4 B 25.3	<u>Western Kazakh SSR</u> 43.83 N 54.85 E H = 07 00 57.3 h = 0 km MB = 6.1 D = 29.79 Az = 298.6 (USNOAA) PV(A):1.7s 242.0nm MPV(A)=5.8 LmH(B):10s 0.9/um MLH(B)=4.7 LmV(B):10s 0.9/um MLV(B)=4.8
23.	LmH LmV	B 12 40.6 B 46.4	Probably <u>South of Mariana Islands</u> (USNOAA) LmH(B):16s 0.6/um LmV(B):20s 0.6/um
23.	eP1 eP2 eS LmH LmV	A 15 36 17 A 36 18 BC 46 50 C 16 06.0 C 10.0	<u>Near Coast of Chiapas, Mexico</u> 15.90 N 93.82 W H = 15 23 39.1 h = 90 km MB = 5.3 D = 87.31 Az = 37.9 (USNOAA) P1V(A):1.1s 12.1nm MP1V(A)=4.9 P2V(A):1.4s 55.8nm MP2V(A)=5.4 LmV(C):24s 0.5/um
24.	e(PKP2)	A 07 45 31.5	<u>Fiji Islands Region</u> 20.30 S 178.66 W H = 07 26 51.2 h = 610 km MB = 4.3 D = 148.65 Az = 347.4 (USNOAA) (PKP2)V(A):0.8s 15.4nm
24.	eP ePP e e eSKS eS LmH LmV	ABC 08 13 11 A 16 24 C 17 06 B 17 09 BC 23 32 BC 23 42 C 42.5 C 42.7	<u>Chiapas, Mexico</u> 16.10 N 93.56 W H = 08 00 37.6 h = 116 km MB = 5.6 D = 87.00 Az = 38.0 (USNOAA) PV(A):1.5s 181.0nm MPV(A)=5.9 LmH(C):48s 1.2/um LmV(C):40s 2.2/um

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Day	Phase	h m s	Remarks
24.	eP	A 08 34 14	<u>Andreanof Islands, Aleutian Is.</u> 51.47 N 178.31 W H = 08 22 20.8 h = 53 km MB = 5.3 D = 77.91 Az = 353.6 (USNOAA) PV(A):1.6s 38.5nm MPV(A)=5.1
25.	e(PKP)	A 04 25 36	<u>Tonga</u> 21.3 S 175.4 W H = 04 05 50 h = 22 km MB = 4.5 (ISC) D = 150.3
25.	+eiP	ABC 13 03 22.5	<u>Central Mid-Atlantic Ridge</u> 0.32 S 19.17 W H = 12 53 37.4 h = normal MB = 5.5 D = 57.13 Az = 22.8 (USNOAA) PV(A):1.2s 95.5nm MPV(A)=5.7 LmH(B):10s 0.9/um MPV(B)=5.7 LmV(B):16s 3.6/um MLV(P)=5.6
	ePP	BC 05 30	
	ePPP	C 06 37	
	ePPP	B 06 38	
	eiS	BC 11 13	
	LmH	B 26.6	
	LmV	B 30.3	
25.	ePKP	A 20 07 56	<u>New Hebrides Islands Region</u> 21.85 S 174.40 E H = 19 48 09.7 h = 13 km MB = 5.0 D = 148.24 Az = 339.0 (USNOAA)
26.	e(PKP)	A 06 45 28	<u>Fiji Islands Region</u> 20.22 S 176.39 W H = 06 26 32.9 h = 270 km MB = 4.8 D = 148.99 Az = 350.1 (USNOAA) XV(A):0.9s 17.5nm
	eX	A 45 50	
26.	eP	AB 10 14 43	<u>Nicobar Islands Region</u> 9.28 N 94.06 E H = 10 02 47.9 h = 47 km MB = 5.4 D = 78.10 Az = 319.8 (USNOAA) PV(A):1.1s 14.1nm MPV(A)=4.8 LmH(B):19.5s 1.5/um MLH(B)=5.3 LmV(B):20s 1.3/um MLV(B)=5.3
	eS	B 24 28	
	ePS	B 25 04	
	LmH	B 53.6	
	LmV	B 54.1	

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Day	Phase	h m s	Remarks
26.	eP	A 10 27 27.5	<u>Nicobar Islands Region</u> 9.38 N 94.04 E H = 10 15 49.3 h = normal MB = 4.8 D = 78.02 Az = 319.8 (USNOAA)
	e	A 27 46	
26.	e(PKP)	A 14 35 29.5	<u>Fiji Islands Region</u> 21.63 S 176.85 W H = 14 16 06.4 h = 251 km MB = 4.1 D = 150.28 Az = 349.1 (USNOAA)
26.	ePKP	A 19 25 11.5	<u>Fiji Islands</u> 15.98 S 178.22 E H = 19 05 46.9 h = 86 km MB = 5.3 D = 143.77 Az = 345.5 (USNOAA) PKPV(A):2.8s 107.0nm
	LmV	B 20 21.6	
	LmH	B 22.7	
26.	ePKP	A 21 59 18.5	<u>Tonga Islands</u> 16.35 S 174.43 W H = 21 39 40.6 h = 9 km MB = 4.7 D = 145.44 Az = 353.2 (USNOAA)
26.	eX	A 22 06 14.5	<u>West of Macquarie Islands</u> 56.50 S 146.85 E H = 21 46 17.3 h = normal MB = - D = 153.17 Az = 276.6 (USNOAA) XV(A):1.8s 23.6nm
27.	ePKP	A 02 26 21.5	<u>Fiji Islands</u> 16.20 S 178.79 E H = 02 06 45.1 h = 29 km MB = 5.1 D = 144.12 Az = 346.0 (USNOAA) PKPV(A):1.4s 18.6nm
27.	ePKP	A 10 32 28	<u>Fiji Islands Region</u> 20.40 S 178.52 W H = 10 13 42.5 h = 557 km MB = 4.5 D = 148.77 Az = 347.5 (USNOAA) PKPV(A):1.2s 24.4nm
27.	eP	A 15 32 25.5	<u>Near East Coast of Kamchatka</u> 54.00 N 160.06 E H = 15 21 10.7 h = 123 km MB = 4.4 D = 72.41 Az = 339.5 (USNOAA) PV(A):0.9s 15.6nm MPV(A)=4.8

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Day	Phase	h m s	Remarks
27.	eP	A 19 26 48	<u>Off East Coast of Kamchatka</u> 52.57 N 158.96 E H = 19 15 14.4 h = 18 km MB = 4.7 D = 73.51 Az = 339.0 (USNOAA)
27.	eP e LmH	A 20 56 46 A 56 59 C 21 34.0	<u>Kurile Islands Region</u> 44.90 N 150.65 E H = 20 44 48.9 h = 48 km MB = 5.2 D = 78.42 Az = 334.8 (USNOAA) PV(A):1.4s 51.1nm MPV(A)=5.3 LmH(C):20s 0.5 μ m MLH(C)=4.8
28.	eP	A 03 46 35	<u>Turkey</u> 37.05 N 28.93 E H = 03 42 15.5 h = 11 km MB = 4.5 D = 18.39 Az = 323.1 (USNOAA) PV(A):1.6s 27.5nm MPV(A)=4.2
28.	eP	A 11 34 12.5	<u>Hokkaido, Japan</u> 41.30 N 142.7 E H = 11 22 20 h = 28 km (ISC) D = 78.8
28.	iP LmV LmH	A 17 05 08 B 14.8 B 14.9	<u>Dodecanese Islands</u> 36.06 N 28.25 E H = 17 00 47.9 h = 46 km MB = 4.5 D = 18.38 Az = 325.7 (USNOAA) PV(A):1.5s 60.3nm MPV(A)=4.6 LmV(B):12s 0.9 μ m MLV(B)=4.5 LmH(B):10s 0.6 μ m MLH(B)=4.2
28.	ePKIKP1 iPKIKP2 ePP ePPP eiPS iPPS iSS eSSS LmH LmV	AB 20 22 20 A 22 21.5 BC 24 08 B 26 44 B 33 58 B 35 34 B 41 00 B 45 10 B 21 20.4 B 21.0	<u>New Ireland Region</u> 5.16 S 153.62 E H = 20 03 25.1 h = 61 km MB = 6.0 D = 124.65 Az = 331.5 (USNOAA) PKIKP1V(A):1.2s 16.3nm PKIKP2V(A):2.0s 103.0nm LmH(B):20.5s 12.1 μ m MLH(B)=6.5 LmV(B):18.5s 11.3 μ m MLV(B)=6.6

Day	Phase	h m s	Remarks
29.	eP eX ePP	A 00 53 11 A 53 16 A 53 26	<u>Crete</u> 34.98 N 23.23 E H = 00 49 04.8 h = 53 km MB = 4.5 D = 17.79 Az = 335.2 (USNOAA) XV(A):1.7s 27.2nm
29.	ePKIKP ePP iPKS ePS ePPS iSS eiSSP eSSS LmH LmV	A 02 45 23.5 B 47 44 B 48 44 B 58 00 B 59 56 B 03 05 14 B 05 44 B 10 16 E 45.8 B 47.1	<u>Solomon Islands</u> 10.55 S 161.40 E H = 02 26 12.2 h = 72 km MB = 6.1 D = 132.94 Az = 334.0 (USNOAA) LmH(B):20s 13.3 μ m LmV(B):20s 9.1 μ m
29.	eP eX LmH LmV	A 08 15 18 A 15 26 B 55.0 B 56.1	<u>Peru-Ecuador Border Region</u> 3.90 S 80.90 W H = 08 01 59.3 h = 47 km MB = 5.8 D = 94.59 Az = 39.6 (USNOAA) PV(A):1.2s 24.4nm MPV(A)=5.6 XV(A):1.4s 32.6nm LmH(B):20s 1.3 μ m MLH(B)=5.4 LmV(B):20s 1.6 μ m MLV(B)=5.5
29.	eP	A 10 36 35	<u>Fox Islands, Aleutian Is.</u> 51.24 N 168.44 W H = 10 24 31.4 h = 9 km MB = 5.0 D = 78.49 Az = 360.0 (USNOAA)
29.	eP	A 12 51 14	<u>Crete</u> 35.02 N 23.25 E H = 12 47 11.4 h = 63 km MB = 4.7 D = 17.76 Az = 335.1 (USNOAA)
29.	eP	A 15 51 33	<u>Kurile Islands</u> 44.59 N 147.60 E H = 15 39 37.5 h = normal MB = 4.7 D = 77.75 Az = 333.1 (USNOAA) PV(A):1.0s 15.8nm MPV(A)=5.0

Day	Phase	h m s	Remarks
29.	eP	A 17 29 39.5	<u>Rat Islands, Aleutian Is.</u> 51.56 N 177.65 E H = 17 17 51.4 h = 58 km MB = 4.4 D = 77.49 Az = 350.9 (USNOAA)
29.	eP	A 20 38 30	<u>Eastern, Mediterranean Sea</u> 35.93 N 28.11 E H = 20 34 07.4 h = 16 km MB = 4.1 D = 18.93 Az = 326.1 (USNOAA)
29.	eP	A 21 08 00	<u>Dodecanese Islands</u> 36.00 N 28.21 E H = 21 03 37.9 h = 22 km MB = 4.4 D = 18.91 Az = 325.9 (USNOAA) PV(A):1.6s 30.2nm MPV(A)=4.2
30.	e	A 02 21 50.5	<u>Northern Italy</u> 44.35 N 8.17 E H = 02 20 05.8 h = normal MB = 4.0 D = 6.70 Az = 19.1 (USNOAA)
	ePg	A 22 17.5	
	e	A 22 47.5	LmH(E):10s 1.3/um MLH(E)=3.9
	eSg	A 23 08.5	
	LmH	B 23 47	
	LmH	B 24.3	
30.	eX	A 04 00 16	<u>New Ireland Region</u> 3.26 S 152.52 E H = 03 41 11.9 h = 29 km MB = 5.2 D = 122.47 Az = 331.6 (USNOAA) XV(A):2.0s 72.7nm LmH(B):20s 2.2/um MLH(B)=5.8 LmV(B):19s 2.2/um MLV(B)=5.8
	ePP	A 01 46.5	
	LmH	B 55.8	
	LmV	B 58.1	
30.	eP	A 08 23 48	<u>Northern Sumatra</u> 1.44 N 99.09 E H = 08 11 05.1 h = 86 km MB = 5.5 D = 87.29 Az = 320.4 (USNOAA) PV(A):1.6s 44.0nm MPV(A)=5.3 pPV(A):1.4s 46.5nm
	epP	A 24 11.5	
30.	eP	A 09 43 23	<u>Kirgiz SSR</u> 40.26 N 72.73 E H = 09 35 25.9 h = normal MB = 5.0 D = 42.97 Az = 305.1 (USNOAA)

Day	Phase	h m s	Remarks
30.	eP	A 11 37 10	<u>Dodekanese Islands</u> 36.05 N 28.34 E H = 11 32 46.5 h = 36 km (ISC) D = 18.9
30.	eP	A 18 59 02	<u>Turkey</u> 37.08 N 28.94 E H = 18 54 43.8 h = normal MB = - D = 18.38 Az = 323.0 (USNOAA)
30.	-eP1	A 21 02 37.5	<u>North Atlantic Ocean</u> 37.21 N 15.05 W H = 20 57 30.6 h = normal MB = 5.1 D = 23.28 Az = 46.3 (USNOAA)
	iP2	AB 02 38.8	
	i	BC 02 42	P1V(A):0.9s 23.4nm MP1V(A)=4.7
	-iX	B 02 45	P2V(A):1.4s 123.0nm MP2V(A)=5.2
	eiS	BC 06 50	XV(A):1.6s 274.0nm
	Smax	B 07 10	SmaxH(B):11s 4.0/um MSmaxH(B)=5.8
	LmH	B 10.2	LmH(E):18s 9.5/um MLH(E)=5.3
	LmV	B 12.9	LmV(E):14s 4.4/um MLV(E)=5.2
31.	eP	A 05 46 02	<u>Off Coast of Washington</u> 47.77 N 128.76 W H = 05 34 13.5 h = normal MB = 5.2 D = 76.20 Az = 24.7 (USNOAA)
31.	eP	A 06 04 53.5	<u>Kurile Islands</u> 46.03 N 153.07 E H = 05 52 57.3 h = 44 km MB = 4.7 D = 78.10 Az = 336.1 (USNOAA)
31.	eP	A 08 13 29	<u>North of Svalbard</u> 80.32 N 0.34 E H = 08 07 20.4 h = normal MB = 4.5 D = 30.04 Az = 165.6 (USNOAA)
31.	ePn	A 22 06 25	<u>Northern Italy</u> 44.39 N 8.46 E H = 22 04 47.9 h = normal MB = 4.1 D = 6.61 Az = 17.7 (USNOAA)
	e	A 06 58.5	
	iSn	A 07 44.5	LmH(B):11s 1.4/um MLH(B)=3.8
	i	A 07 56	
	iSg	A 08 38	LmV(E):8s 0.5/um
	LmH	B 09.0	
	LmV	B 09.7	

Day	Phase	A	h m s	Remarks
31.	eP	A	23 45 24	<u>Kurile Islands</u> 44.56 N 148.03 E H = 23 33 31.7 h = 67 km MB = 5.1 D = 77.90 Az = 333.3 (USNOAA)

Distribution of Azimuth and Epicentral Distance of Earthquakes Relative to Moxa (MOX)

by
HORST NEUNHÖFER

The knowledge how the azimuth A and epicentral distance D of earthquakes are distributed relative to a seismic station is useful for estimating the possibility to carry out special investigations by using the seismograms of that station. For instance, the distribution of the azimuths can be helpful for an effective arrangement of a seismic network to be established for the investigation of seismic surface waves. Sometimes, only earthquakes in a distant epicentral distances give the sought information on a depth interval of the Earth. Then the distribution of the epicentral distances helps us to decide whether a planned investigation is possible with the records of the station or not. Therefore, the distribution of the azimuth and epicentral distance of the earthquakes is characteristic of a station.

The distribution density $p(D)$ and $p(A)$ of the epicentral distance and the azimuth relative to Moxa are given in Figs. 1 and 2, respectively. In both cases the compilation was done by grouping into the intervals i one degree wide with the midvalues 0.5, 1.5, 2.5, etc. The relations

$$\sum_{i=1}^{180} p_i(D) = 1$$

and

$$\sum_{i=1}^{360} p_i(A) = 1$$

are valid. For compiling, the punched cards of the U.S. Geological Survey National Earthquake Information Service (formerly NOAA and USCGS) and the computer routine 'AZENT' developed by the author are used. All earthquakes occurred during the period 1st January, 1968 to 23rd March, 1973 with the magnitude $m_b \geq 5.0$ are considered.

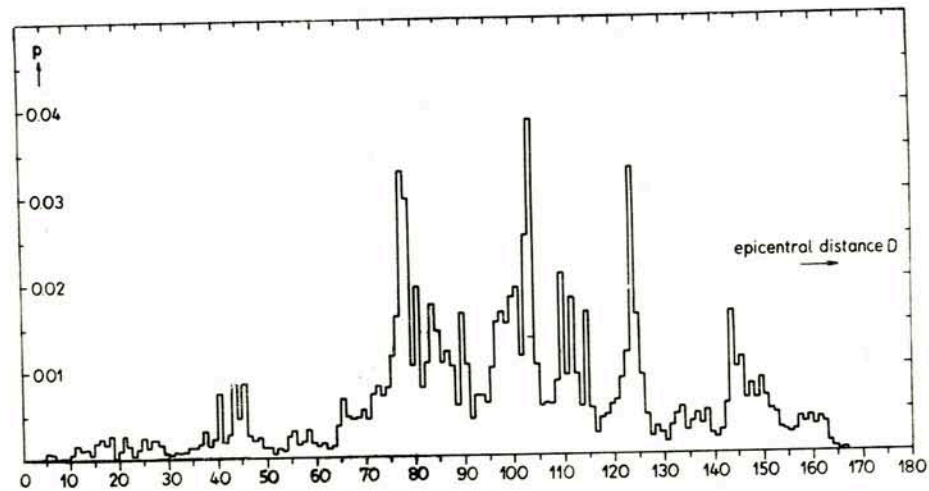


Fig. 1. Distribution density of the epicentral distance relative to Moxa

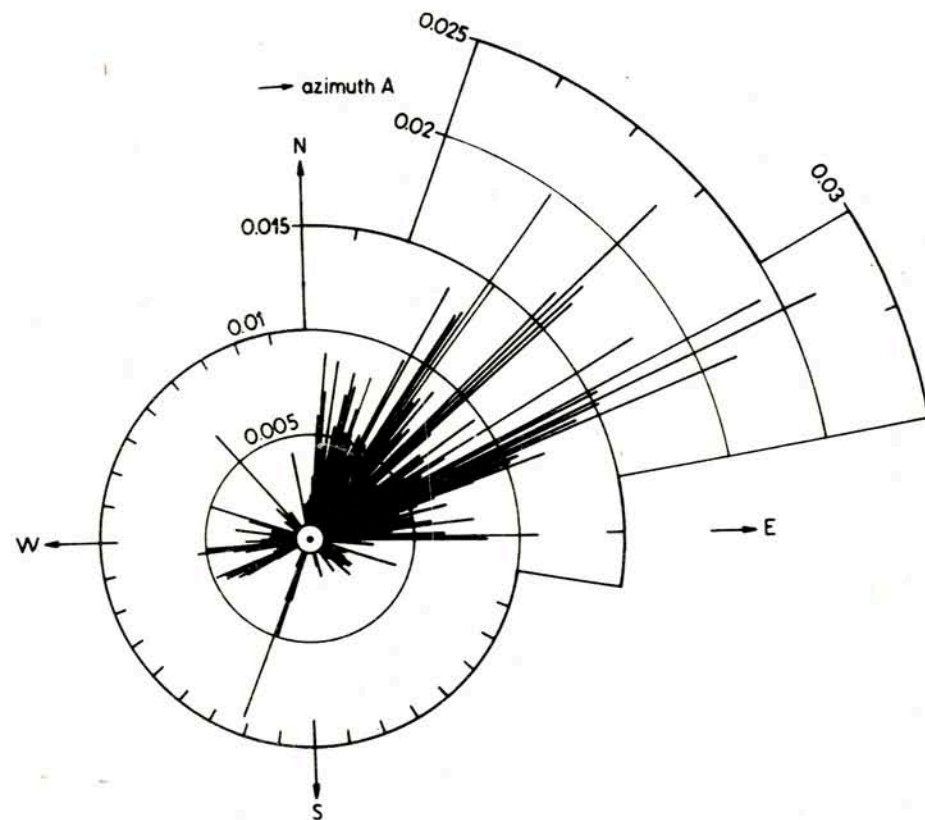


Fig. 2. Distribution density of the azimuth relative to Moxa

ERNST C. KRAUS

Die Entwicklungsgeschichte der Kontinente und Ozeane

2., ergänzte und verbesserte Auflage

1971. XIII, 429 Seiten — 155 Abbildungen, davon 18 auf Faltafeln
— 1 Tabelle — gr. 8° — Leinen 55,— M
Bestell-Nr. 7613111 (5303)

Der Verfasser geht von den bisherigen Theorien über die äußere Erdgestaltung aus und faßt die Forschungsergebnisse über die Bildung des Erdantlitzes zu einem übersichtlichen Gesamtbild zusammen. Dabei führt er einige Beobachtungstatsachen an, gibt einen kurzen Überblick über die regionale Geologie und nimmt zu Grundproblemen der Geotektonik Stellung. Neben geochemischen und geophysikalischen Tatsachen sind Art, Struktur und Fossilinhalt der Gesteine feste Anhaltspunkte. Mit der Bildung und Umbildung der Gesteine hat die Erde einen wenn auch späten Abschnitt der Geschichte selbst niedergeschrieben. Aus diesen Grundlagen gewinnt der Verfasser im theoretischen Hauptteil ein modernes Bild von der kontinentalen und ozeanischen Entwicklung.

Bestellungen durch eine Buchhandlung erbeten



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