Bulletin No. 37A
January 1965

SEISMOLOGICAL BULLETIN

WEST GERMANY, NORWAY, BOLIVIA

THE GEOTECHNICAL CORPORATION
3401 SHILOH ROAD
GARLAND, TEXAS

GEOTECH

SEISMOLOGICAL BULLETIN

GRAFENBERG, WEST GERMANY
OSLO, NORWAY
LA PAZ, BOLIVIA

The Geotechnical Corporation wishes to acknowledge the cooperation of the following scientific organizations in the collection and production of the data in this bulletin.

Bundesanstalt fur Bodenforschung, Hannover, West Germany (Professor Hans Closs, Director)

Jordskel, University of Bergen, Bergen, Norway (Professor A. Kvale, Director)

Observatorio San Calixto, La Paz, Bolivia (Father Ramon Cabre, S. J.)

Bulletin No. 37A
January 1965

May 1965

CONTENTS

ILLUSTRATIONS

* * * * * * *

TABLES

SEISMOLOGICAL BULLETIN

GRAFENBERG, WEST GERMANY
OSLO, NORWAY
LA PAZ, BOLIVIA

1. INTRODUCTION

1.1 This bulletin contains seismological data on earthquake phases recorded at three mobile seismological stations being operated by The Geotechnical Corporation. The bulletin is intended to be an aid to interested observers in determining the extent of the earthquake data contained in the records from the three teams.

1.2 The bulletin contains the following:

a. Data on all of the phases that have been associated with epicenters reported by the U. S. Coast and Geodetic Survey (USC&GS);

b. Data on the epicenters listed in the bulletin - as reported by the USC&GS;

c. Arrival time, period, amplitude, and distance for phases not associated with USC&GS epicenters.

1.3 All phases are listed in chronological order, except that unassociated phases are not mixed with a sequence of associated phases. In such cases, the unassociated phases are listed immediately following the associated phases.

2. INSTRUMENTATION

2.1 Instrumentation at the Grafenberg, West Germany (GG-GR) and Oslo, Norway (OO-NW) sites consists of a short-period vertical Benioff seismometer array. A short-period vertical Johnson-Matheson seismometer array is in operation at La Paz, Bolivia (LZ-BV). Each site is also equipped with a three-component Sprengnether long-period seismograph system. Both systems use phototube amplifiers. The response characteristics of these systems are shown in figures 1, 2, and 3.

2.2 All data are recorded by 35-mm Film Recorders, Geotech Model 1301A, 14-channel Magnetic-Tape Recorders, Ampex Model 314, and 16-mm film Develocorders, Geotech Model 4000C.

2.3 Precision Timing Systems, Geotech Model 5400 or 5400A, are used for primary timing. Chronometers are used for secondary timing. WWV, the National Bureau of Standards' radio station at Beltsville, Maryland, is used for the time standard at LZ-BV. GG-GR and OO-NW use Radio Potsdam. The accuracy of the time program from WWV agrees with U. S. Naval Observatory Time.

2.4 Each system is calibrated at least once every 24 hours. In the short-period system calibration, an electromagnetic (EM) calibrator is used to determine the magnification as a function of frequency and a weight-lift calibration is used to verify the EM magnification at 1 cps. In the long-period systems, magnification is determined as a function of frequency using EM calibrators. No method of verification is used. In the EM method of calibration, the seismometer mass is driven by a known sinusoidal force and the magnification is calculated using the relationships between the sinusoidal force and the recorded amplitude.

3. INTERPRETATION OF COLUMN TITLES

The column titles appearing in this bulletin are defined as follows.

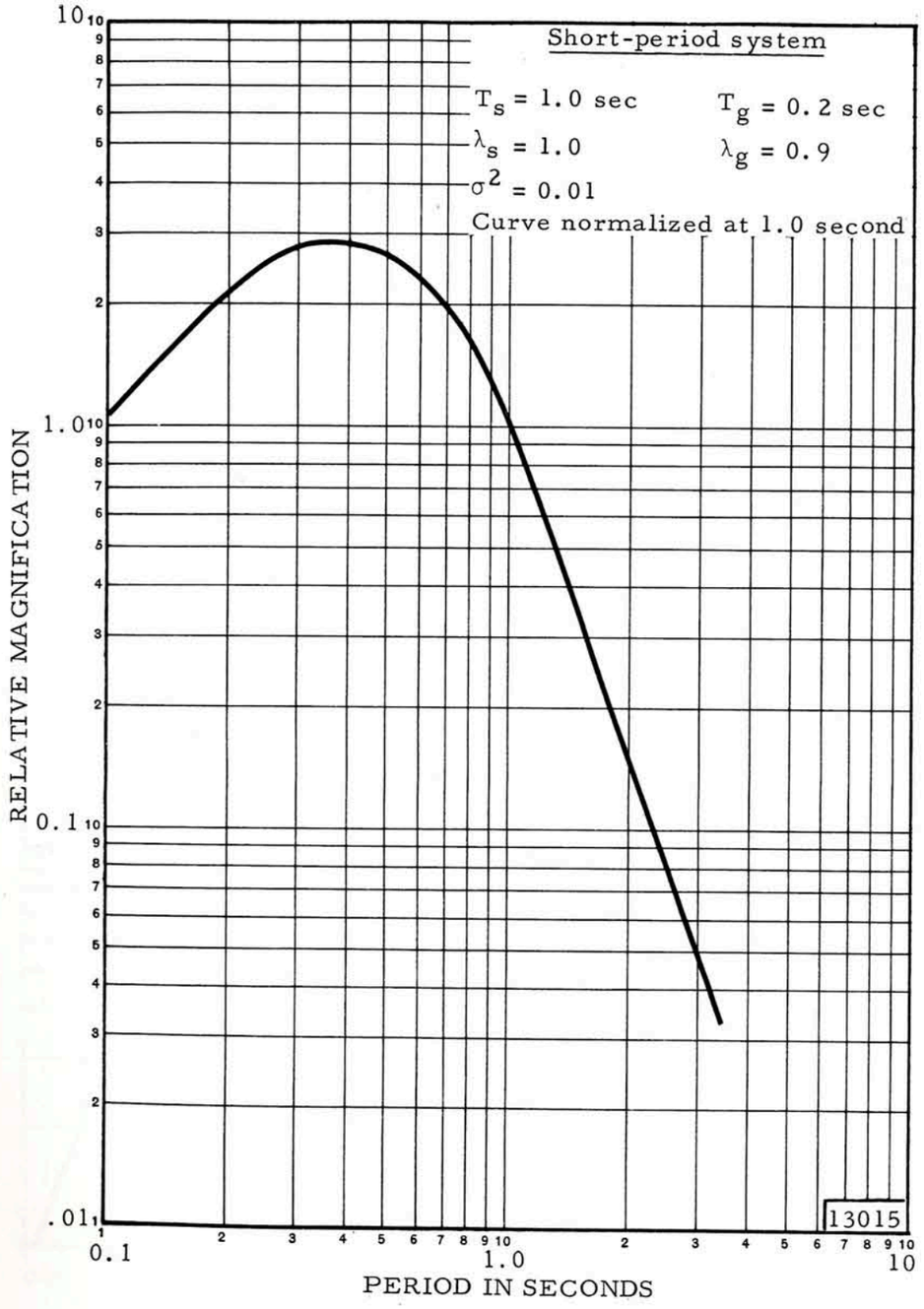


Figure 1. Frequency response of the Benioff short-period seismograph system

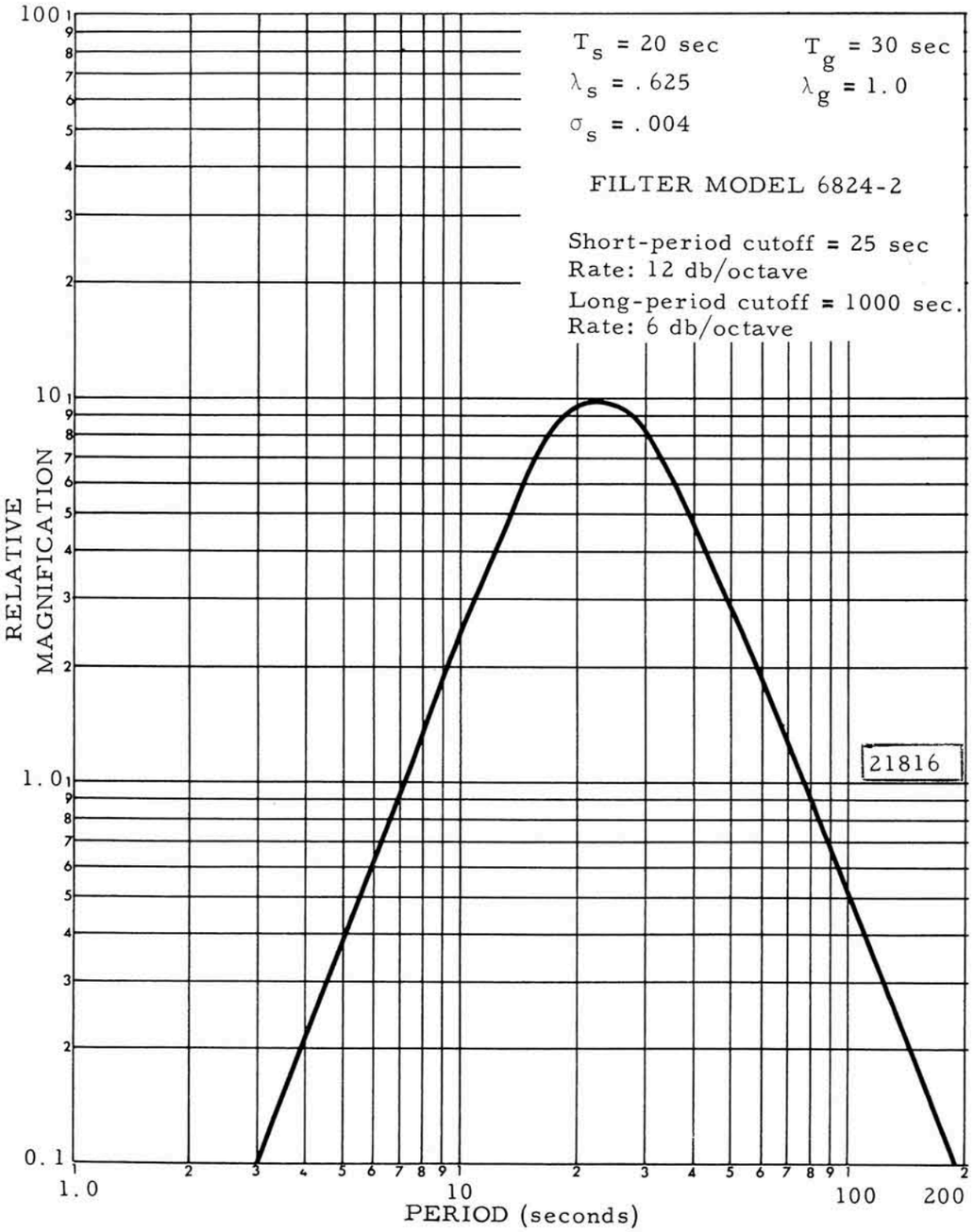


Figure 2. Frequency response of the Sprengnether long-period seismograph system

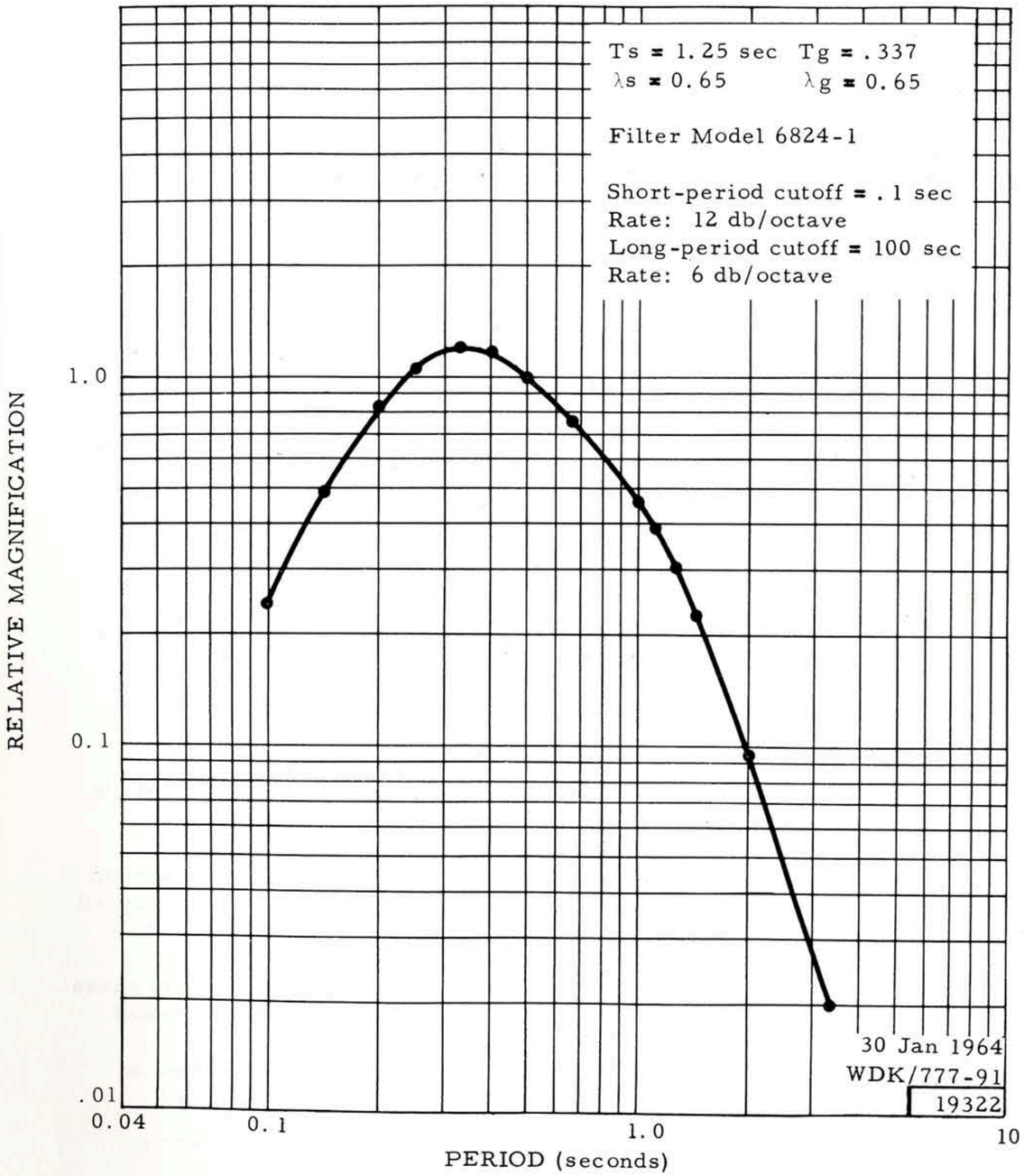


Figure 3. Frequency response of the Johnson-Matheson seismograph system

3.1 DAY

The date, for the day of the month, is printed each time a new epicenter is listed and each time the station designator changes. Dates are given in Greenwich Civil Time (GCT).

3.2 STA

The station from which the data were taken. The station designators used in this bulletin are given in the following table:

Site designator	Site location
GG-	Grafenberg, West Germany
OO-	Oslo, Norway
LZ-	La Paz, Bolivia

The locations of the stations are shown in figure 4.

3.3 PHASE

Symbols defining the phase type are listed in the phase column. Prefixes to the phase designators are defined as follows:

a. An "i" (impetus) preceding the phase designates a sharp or sudden beginning of the phase motion. Direction of first motion is discernible on all "i" phases.

b. An "e" (emersio) preceding the phase designates an emergent phase motion. The direction of the initial break cannot be positively determined.

c. An "i" or "e" alone designates an unidentified phase of either an impetus or emersio arrival.

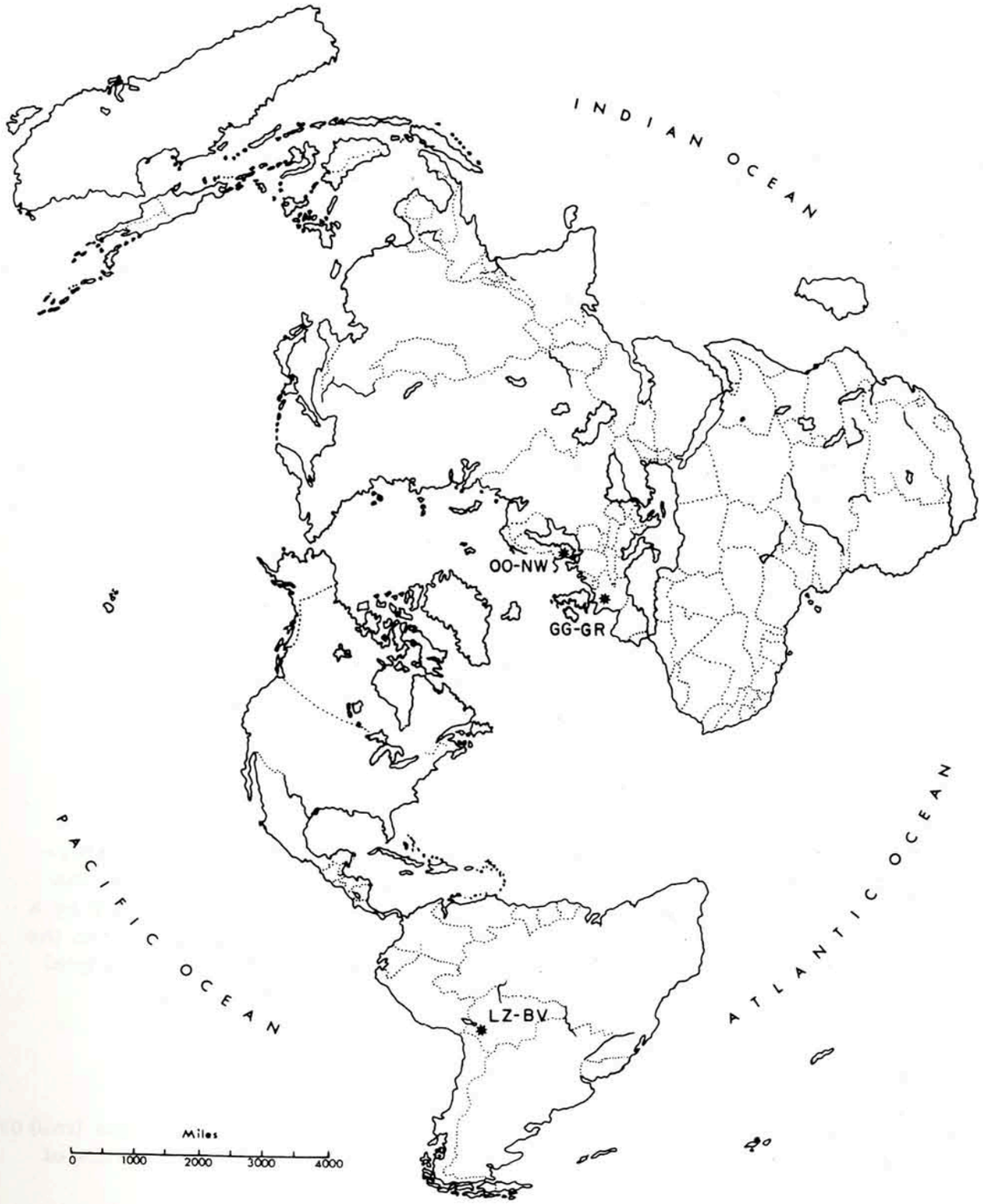


Figure 4. Bulletin sites

3.4 TIME

The arrival time of each phase is given in GCT. Arrival times indicate that time at which phase motion is first detected. Arrival time is measured to the nearest one-tenth second for initial arrivals recorded by the short-period system, and to the nearest second for all other phases on both systems. The direction of motion for iP arrivals is also noted in this field; either C (compression) or D (dilation) will appear immediately to the right of the tenths of second column.

3.5 INST

The seismograph channel from which the data were taken. The symbols used to designate the seismograph channels are given as follows:

SZ	Short-period vertical
SR[1]	Short-period radial (horizontal)
ST[1]	Short-period transverse (horizontal)
LZ	Long-period vertical
LR[1]	Long-period radial (horizontal)
LT[1]	Long-period transverse (horizontal)

3.6 PER

The period in seconds of each phase. When possible, the period is determined from the first full cycle of the phase; otherwise, it is taken as the average period of the first three cycles. If the signal period recorded by a short-period instrument cannot be measured, the digits 999.9 appear in the period columns. The digits 999 appear in the period columns if the signal period recorded by a long-period instrument cannot be measured.

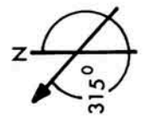
3.7 AMP

This column contains the amplitude of the phase given in millimicrons (mμ) or microns (μ) of ground displacement. All amplitudes are given in tenths of

[1] Table 1 gives the instrument orientation of the horizontal seismometers.

Table 1. Bulletin site information

Site designator	Site location	Horizontal seismometer orientation (Azimuth from true north in degrees[1]) Radial	Trans-verse	Site coordinates in deg, min, sec	Elevation in km	Rock type
GG-GR	Grafenberg, West Germany	140	230	49 41 32 N 11 12 55 E	0.53	Limestone
OO-NW	Oslo, Norway	138	228	61 03 17 N 10 51 58 E	0.56	Glacial drift
LZ-BV	La Paz, Bolivia	141	231	16 15 31 S 68 28 47 W	3.99	Limestone



[1] When earth moves in direction shown, trace moves up.

units. All amplitudes are corrected for instrument response and are reported as one-half the peak-to-peak value. If the amplitude is reported in microns, a "U" appears in the column to the right of the tenths column. The column is left blank if the amplitude is reported in millimicrons. Amplitudes are measured from the largest pulse within the first 3 or 4 cycles when possible. The digits 9999.9 appearing in the amplitude columns indicate either a "clipped" signal or a trace amplitude too large to measure. When amplitudes are not calculated because of insufficient calibration data, the amplitude columns are left blank.

3.8 DIST

This is the distance from the recording station to the epicenter. All reported distances are calculated based on geocentric coordinates. Distance is given to the nearest one-tenth of a degree. Distances computed for unassociated data are determined from the S-P intervals. In some instances, surface groups are recorded which have traveled the major arc from the epicenter to the station. In such cases, the major arc distance is given.

3.9 MAG

The magnitudes provided are body wave magnitudes, m_b, as defined by Gutenberg and Richter.[2] They are determined only from the short-period vertical component of the P phase (initial arrival). The following equation is used:

$$m_b = \log_{10} (A/T) + Q$$

where: m_b = body wave magnitude

A = one-half p-p earth amplitude of P phase in microns

T = period of P phase in seconds

Q = depth-distance factor for PZ given by Gutenberg and Richter,[2] for distances greater than 16°.

[2] Gutenberg, B., and Richter, C. F., 1956, Magnitude and energy of earthquakes: Ann. Geofis., v. 9, p. 1-15.

Magnitude computations for distances less than 16° are based on extensions of the Q tables. Points from 10 to 16° were read from a curve in the Gutenberg-Richter paper, and an inverse cube relationship was used to extrapolate from 2 to 10°.

The average magnitude (sum of station magnitudes/number of stations) is listed on the last line of an epicenter printout.

4. INTERPRETATION OF U. S. COAST AND GEODETIC SURVEY DATA

The epicenter data reported by the USC&GS precede each list of associated phases. This information appears as follows:

Line 1 (from left to right)

First group:	Day of the month
Second group:	Origin time of the event
Third group:	Geographic coordinates of the epicenter
Fourth group:	Geographic description.

NOTE

An asterisk (*) following the origin time indicates epicenters believed accurate to $1/2^{\circ}$ in latitude and longitude and to 50 km in depth.

Line 2 (from left to right)

First group:	Depth (h) of the hypocenter in kilometers
Second group:	Magnitude (MAG) as determined by Pasadena (PAS), Berkeley (BRK), Palisades (PAL), or USC&GS (CGS).

NOTE

MAG. (CGS) is m_b of Gutenberg and Richter from the P phase only. The magnitude quoted is an average value determined from data forwarded by cooperating Standard stations and other observatories.

5. REMARKS

The Geotechnical Corporation routinely receives and preprocesses data collected from three overseas field stations. Information on background levels, magnification levels, operational procedures, available records, and other data can be provided to interested organizations. Requests for such information should be made to the attention of:

THE GEOTECHNICAL CORPORATION
3401 Shiloh Road
Garland, Texas 75041

Attn: Mr. J. M. Whalen

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
1			19.1 N 107.9 W OFF COAST OF JALISCO, MEXICO					
			H= 33 KM MAG 3.70 CGS					
1		LZ- eP	03 38 32.2	SZ	0.8	12.9		
1			5.4 S 154.3 E SOLOMON ISLANDS					
			H=136 KM					
1			34. N 117.6 W SOUTHERN CALIFORNIA					
			H= 14 KM MAG 4.00 CGS					
1			34. N 117.6 W SOUTHERN CALIFORNIA					
			H= 14 KM MAG 4.25 CGS					
1			36.4 N 122.5 W CENTRAL CALIFORNIA					
			H= 14 KM MAG 4.30 CGS					
1			19.6 N 68.5 W NORTH ATLANTIC OCEAN					
			H= 33 KM MAG 4.50 CGS					
1			13.6 N 92.9 W OFF COAST OF CHIAPAS, MEXICO					
			H= 33 KM MAG 4.50 CGS					
1			84.1 N 114.9 E NORTH OF SEVERNAYA ZEMLYA					
			H= 33 KM MAG 4.60 CGS					
1			23.5 N 121.2 E TAIWAN					
			H= 33 KM MAG 5.20 CGS					
1			19.9 N 121.6 E PHILIPPINE ISLANDS REGION					
			H= 23 KM					
1			35.8 N 4.5 E ALGERIA					
			H= 33 KM MAG 4.40 CGS					
1			11.8 S 166.3 E SANTA CRUZ ISLANDS					
			H= 24 KM					
1			40.3 N 124.6 W NEAR COAST OF N. CALIFORNIA					
			H= 20 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
1	20	02 38.*	61.7 N 148.9 W SOUTHERN ALASKA H= 33 KM MAG 4.30 CGS					
1	20	59 20.*	19.3 S 69.6 W NORTHERN CHILE H=174 KM MAG 4.20 CGS					
1	21	38 29.2	35.7 N 4.4 E ALGERIA H= 10 KM MAG 5.20 CGS					
1	LZ-	e	22 01 45	LT	20	240.7	86.1	
		ePS	02 50	LT	22	208.6		
		eSS	07 35	LT	32	494.5		
		e	11 10	LT	31	477.1		
		eLQ	16 40	LR	46	1505.0		
		eLR	19 45	LT	37	9999.9		
2	05	25 03.*	16. S 70.4 W SOUTHERN PERU H= 33 KM MAG 4.40 CGS					
2	LZ-	eL	05 25 50	LR	20.	1303.8	1.9	
2	09	36 53.9	22.1 S 179.4 W SOUTH OF FIJI ISLANDS H=555 KM MAG 4.60 CGS					
2	10	11 35.1	25.5 N 122.5 E TAIWAN REGION H=136 KM MAG 4.70 CGS					
2	13	44 18.9	19.1 N 145.4 E MARIANA ISLANDS H=142 KM MAG 6.10 CGS					
2	00-	ePP	14 00 55	SZ	1.0	56.4	92.2	
		e	01 35	LZ	22	664.5		
		e	08 20	LT	19	901.4		
		eSS	14 05	LT	20	967.3		
		e	19 00	LR	25	987.1		
		e	21 55	LR	25	1135.2		
		eLQ	27 10	LR	48	5882.7		
		eLR	29 30	LR	35	9999.9		
2	GG-	e	14 02 40	LZ	19	660.4	100.4	
		ePPP	04 42	LZ	15	730.9		
		eSPP	11 40	LZ	20	1002.3		
		e	16 45	LZ	22	494.3		
		eL	34 35	LZ	45	9999.9		
2	LZ-	eP'1	14 03 47	LZ	15	1258.7	147.6	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		e	17 27	LR	20.	338.0		
		eSS	26 14	LT	23	896.0		
		eSSS	31 45	LT	21	322.6		
		eLQ	46 18	LT	22	558.5		
		eLR	55 40	LT	24	500.5		
2	18	10 15.5	19.1 N 145.4 E MARIANA ISLANDS H=145 KM MAG 5.30 CGS					
2	LZ-	eP'1	18 29 44.0	SZ	1.0	22.9	147.6	
2	19	23 44.*	18.4 N 104.7 W NEAR COAST JALISCO, MEXICO H= 33 KM MAG 4.00 CGS					
3	LZ-	eP	02 19 18.7	SZ	1.0	23.5		
3	LZ-	eP	02 19 20	LZ	17	287.3		
3	LZ-	e	02 25 15	LT	22	786.9		
3	LZ-	eLQ	02 27 40	LT	35	745.1		
3	LZ-	eLR	02 29 45	LZ	999	9999.9		
3	LZ-	eP	07 01 59.0	SZ	0.4	6.3		
3	LZ-	eP	07 45 25.0	SZ	0.9	3.5		
3	LZ-	eP	07 56 18.0	SZ	1.5	17.4		
3	LZ-	eL	08 00 50	LZ	35	380.3		
3	LZ-	eP	10 06 13.7	SZ	0.4	12.6	2.2	
		eS	06 42	SR	999.9	9999.9		
3	10	55 28.	3 S 124.9 E MOLUCCA SEA H= 39 KM MAG 5.00 CGS					
3	LZ-	eP'2	11 16 03.6	SZ	0.7	9.0	158.9	
3	15	40 18.3	29.3 N 141.7 E SOUTH OF HONSHU, JAPAN H= 42 KM MAG 5.10 CGS					
3	LZ-	eP'2	16 00 06.0	SZ	0.5	12.1	149.4	
3	LZ-	eP	15 42 03.0	SZ	0.3	9999.9	1.8	
		eS	42 25	ST	0.6	15.4		
3	21	53 30.2	30.7 N 129.5 E KYUSHU, JAPAN H=259 KM MAG 4.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
3	23 13 50.4		60.2 N 151.2 W KENAI PENINSULA, ALASKA H= 93 KM MAG 5.60 CGS					
4	03 41 23.*		59.9 N 153.6 W SOUTHERN ALASKA H=122 KM MAG 5.40 CGS					
4	04 06 47.*		39.9 N 117.9 W NEVADA H= 33 KM MAG 4.60 CGS					
4	LZ-	eP	04 11 24.0	SZ	0.5	.8	3.6	
		eS	12 10	SR	0.5	2.8		
4	05 21 55.7		7.3 S 127.9 E BANDA SEA H=148 KM MAG 5.00 CGS					
4	07 07 31.1		19.1 S 177.5 W FIJI ISLANDS REGION H=570 KM MAG 5.50 CGS					
4	LZ-	eP	08 08 32.0	SZ	1.0	5.5		
4	LZ-	eL	08 16 40	LT	27	261.5		
4	LZ-	eP	09 38 34.7	SZ	0.3	12.7	2.1	
		eS	39 02	SR	0.3	7.7		
4	LZ-	eP	09 41 36.0	SZ	0.5	12.3		
4	11 29 48.2		1.8 N 127.2 E HALMAHERA H= 84 KM MAG 5.80 CGS					
4	LZ-	eP'1	11 49 40.5	SZ	1.3	11.9	158.9	
4	19 39 59.3		34.6 N 138.6 E NEAR S. COAST HONSHU, JAPAN H= 86 KM MAG 4.50 CGS					
4	LZ-	eP'1	19 59 42.0	SZ	0.9	6.6	149.6	
4	20 48 54.9		67.4 N 136.2 W N. YUKON TERRITORY, CANADA H= 33 KM MAG 4.50 CGS					
4	21 12 51.*		22.3 S 179.5 W SOUTH OF FIJI ISLANDS H=535 KM MAG 4.60 CGS					
4	22 24 54.7		20. N 143.9 E MARIANA ISLANDS REGION H= 59 KM MAG 4.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	00 51 33.6		7.3 S 106.7 E JAVA H= 89 KM MAG 5.30 CGS					
5	06 24 10.*		13.3 N 90.8 W NEAR COAST OF GUATEMALA H= 33 KM MAG 4.30 CGS					
5	07 32 26.*		39.2 N 120.2 W NORTHERN CALIFORNIA H= 14 KM MAG 3.50 CGS					
5	13 01 46.*		38. N 138.8 E NEAR W. COAST HONSHU, JAPAN H= 33 KM MAG 4.10 CGS					
5	13 46 16.2		6.3 S 154.3 E SOLOMON ISLANDS H= 10 KM MAG 5.10 CGS					
5	14 18 36.*		14.3 N 93.3 W NEAR COAST CHIAPAS, MEXICO H= 53 KM MAG 4.70 CGS					
5	17 21 28.8		51.4 N 170.7 W FOX ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
5	18 05 58.6		20.3 S 174.1 W TONGA ISLANDS H= 33 KM MAG 6.75 CGS					
5	LZ-	eP	18 19 37.8	SZ	1.8	61.9	98.4	5.98
		eP	19 38	LZ	15	680.3		
		ePP	23 37	SZ	1.6	70.3		
		ePP	23 40	LZ	15	1011.7		
		eSKS	30 15	LT	17	9999.9		
		eSS	38 00	LT	22	986.4		
		eLQ	51 47	LT	27	9999.9		
		eLR	53 44	LZ	999	9999.9		
5	GG-	eP'1	18 25 50.0	SZ	2.0	359.1	150.4	
		eP'1	25 55	LZ	22	1054.6		
		eL	19 27 10	LZ	22	1109.2		
5	00-	ePP	18 28 35	LZ	20	529.4	139.1	
		eSP	38 55	LZ	15	600.3		
		eSPP	40 20	LZ	18	623.1		
		eSS	46 35	LR	20	1299.9		
		SKSSKS	48 30	LT	22	999.0		
		eSSS	52 00	LR	26	859.0		
		e	19 01 20	LR	24	744.2		
		eLQ	08 33	LR	22	1204.6		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eLR	11 20	LT	20.	553.3		
5	19 29 38.		14.7 N 93.1 W NEAR COAST CHIAPAS, MEXICO H= 47 KM MAG 4.40 CGS					
5	20 34 20.7		13.9 N 120.8 E MINDORO, PHILIPPINE ISLANDS H=159 KM MAG 5.00 CGS					
5	20 45 50.6		34.6 N 138.8 E NEAR S. COAST HONSHU, JAPAN H=363 KM MAG 4.70 CGS					
5	GG-	eP	20 57 46.0	SZ	1.0	19.1	84.1	4.83
5	LZ-	eP'1	21 05 03.5	SZ	1.0	23.5	149.5	
		e	05 55	SZ	0.9	12.2		
5	23 00 14.8		15.3 S 173.1 W TONGA ISLANDS H= 33 KM MAG 5.30 CGS					
5	GG-	eP'1	23 19 52.5	SZ	1.3	41.7	145.5	
		e	20 12	SZ	1.1	39.4		
5	23 22 29.4		9.7 N 126.3 E MINDANAO, PHILIPPINE ISLANDS H= 12 KM MAG 4.90 CGS					
6	00 55 27.4		7. S 122.9 E FLORES SEA H=546 KM MAG 5.40 CGS					
6	LZ-	eP'1	01 14 20.5	SZ	1.5	39.2	154.3	
		e	14 29	SZ	1.2	40.2		
		eP'2	14 46	SZ	1.0	76.4		
6	02 01 22.2		44.9 N 112.7 W EASTERN IDAHO H= 7 KM MAG 5.10 CGS					
6	LZ-	iP	07 18 08.6D	SZ	0.5	33.6	1.7	
		eS	18 35.5	ST	0.5	20.2		
6	08 21 14.9		33.9 N 137.4 E NEAR S. COAST HONSHU, JAPAN H= 33 KM MAG 4.50 CGS					
6	09 19 01.2		41.4 S 85.4 W WEST CHILE RISE H= 33 KM MAG 5.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6	LZ-	iP	09 25 02.4D	SZ	1.5	274.5	29.0	5.80
		eP	25 05	LZ	16	323.4		
		eS	29 50	LR	20	407.8		
		eLQ	31 15	LR	27	9999.9		
		eLR	33 05	LZ	26	9999.9		
6	09 51 06.		22.7 S 171.5 E LOYALTY ISLANDS REGION H= 64 KM MAG 4.50 CGS					
6	LZ-	eP	10 08 49.5	SZ	0.4	21.3		
6	11 27 49.*		16.3 S 177.5 E FIJI ISLANDS H=109 KM MAG 4.90 CGS					
6	LZ-	eP	14 10 11.0	SZ	0.4	1.5		
6	15 26 32.8		9.5 S 79.4 W OFF COAST OF NORTHERN PERU H= 44 KM MAG 4.50 CGS					
6	LZ-	eP	15 29 35.0	SZ	0.9	3.5	12.6	4.32
		eL	32 30	SR	1.2	33.2		
		eLQ	32 55	LR	19	705.2		
		eLR	34 18	LZ	25	640.1		
6	16 30 36.9		8 S 81.5 W OFF COAST OF ECUADOR H= 19 KM MAG 4.60 CGS					
6	LZ-	eP	16 35 16.0	SZ	1.0	9.8	20.0	4.01
6	16 30 41.*		1. S 81.4 W OFF COAST OF ECUADOR H= 64 KM MAG 4.70 CGS					
6	18 27 34.		60. N 151.8 W KENAI PENINSULA, ALASKA H= 53 KM MAG 5.20 CGS					
6	GG-	eP	18 38 40.0	SZ	0.7	12.7	69.8	5.01
6	22 47 56.5		10.2 S 161.6 E SOLOMON ISLANDS H= 50 KM MAG 5.00 CGS					
7	05 01 50.*		51. N 176.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7	05 40 41.*		22.9 S 171.5 E LOYALTY ISLANDS REGION H= 33 KM MAG 4.50 CGS					
7	08 29 27.*		16.9 N 94.3 W OAXACA, MEXICO H= 71 KM MAG 3.70 CGS					
7	10 22 17.5		36.5 N 26.9 E DODECANESE ISLANDS H= 45 KM MAG 5.10 CGS					
7	00-	eP	10 27 53.4	SZ	0.7	23.4	26.6	4.91
		eS	32 47	LZ	13	690.9		
		eL	37 05	LT	20	407.2		
7	11 05 01.4		14.4 N 92.7 W NEAR COAST CHIAPAS, MEXICO H= 69 KM MAG 4.10 CGS					
7	11 39 33.*		10.5 N 69.7 W VENEZUELA H= 33 KM MAG 5.30 CGS					
7	LZ-	eP	11 45 13.2	SZ	1.0	6.6	26.6	4.23
		eL	53 17	SR	1.2	21.0		
		eL	53 17	LR	20	578.6		
7	11 57 30.*		3.2 S 76.8 W NORTHERN PERU H= 33 KM MAG 4.50 CGS					
7	LZ-	eP	12 01 10.0	SZ	0.5	1.8	15.3	3.69
		eL	06 07	ST	0.7	4.8		
7	12 54 09.4		19.3 N 145.5 E MARIANA ISLANDS H=120 KM MAG 5.20 CGS					
7	LZ-	eP	13 13 42.7	SZ	1.1	25.2	147.5	
		e	14 15	SZ	1.2	16.0		
7	LZ-	eS	13 24 54	ST	0.4	9999.9	2.3	
7	14 17 34.*		14.7 S 69.3 W PERU BOLIVIA BORDER REGION H=115 KM MAG 4.30 CGS					
7	LZ-	eP	14 18 03	LZ	12.	530.0	1.7	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eP	18 03	SZ	0.7	100.2		
		eL	18 39	LR	19	9999.9		
7	15 56 32.5		16.2 N 97.2 W OAXACA, MEXICO H= 43 KM MAG 5.50 CGS					
7	LZ-	eP	16 04 29.7	SZ	1.1	142.4	42.9	5.62
		eP	04 32	LZ	15	270.9		
		ePCP	06 18	LZ	17	179.9		
		eS	11 02	LR	20	202.5		
		eSCS	14 20	LT	27	9999.9		
		eLQ	16 48	LT	25	9999.9		
		eLR	19 35	LZ	21	9999.9		
7	17 09 03.*		9.9 N 93.8 E NICOBAR ISLANDS REGION H= 12 KM					
7	18 49 35.		18.6 N 120.9 E LUZON, PHILIPPINE ISLANDS H= 33 KM MAG 4.80 CGS					
7	18 52 25.9		3.6 N 74.0 W COLOMBIA H= 20 KM MAG 4.30 CGS					
7	LZ-	eP	18 57 11.4	SZ	0.7	6.4	20.5	4.02
		eL	19 03 20	ST	1.0	28.3		
		eLQ	03 25	LT	24	166.5		
		eLR	05 08	LZ	17	429.8		
7	00-	eL	19 33 00	LR	28	701.2	84.4	
7	21 17 33.6		17.1 N 119.8 E PHILIPPINE ISLANDS REGION H= 33 KM MAG 4.20 CGS					
8	10 23 17.*		56.7 N 152.2 W KODIAK ISLAND REGION H= 33 KM MAG 4.30 CGS					
8	10 31 38.*		56.7 N 152.5 W KODIAK ISLAND REGION H= 33 KM MAG 4.30 CGS					
8	11 25 56.6		56.3 N 153.5 W KODIAK ISLAND REGION H= 33 KM MAG 4.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8			34.2 S 179.7 E SOUTH OF KERMADEC ISLANDS					
	12 49 49.9		H= 37 KM MAG 5.10 CGS					
8	16 31 10.6		44.6 N 149.5 E KURILE ISLANDS					
			H= 36 KM MAG 4.60 CGS					
8	LZ-	eP	17 07 21.2	SZ	0.2	7.0	4.4	
		eS	08 15	SR	0.3	6.1		
8	17 43 32.6		18.2 S 172.6 W TONGA ISLANDS REGION					
			H=392 KM MAG 4.20 CGS					
8	LZ-	eP	17 54 30.2	SZ	0.2	18.7		
8	LZ-	eP	18 03 05.2	SZ	0.2	11.7		
8	18 49 46.		59.4 S 24.0 W SOUTH SANDWICH ISLANDS REG.					
			H= 39 KM MAG 5.90 CGS					
8	LZ-	eP	18 59 07.2	SZ	1.2	42.9	53.9	5.35
		ePCP	19 00 14	SZ	0.9	47.2		
		eS	06 40	LR	26	562.6		
		eLQ	14 00	LT	36	1008.8		
		eLR	15 50	LZ	35	1253.6		
8	GG-	eL	19 39 20	LZ	22	543.2	112.5	
8	20 24 56.*		33.8 S 179.3 E SOUTH OF KERMADEC ISLANDS					
			H= 33 KM MAG 6.40 CGS					
8	LZ-	eL	21 10 55	LZ	25.	219.8	98.5	
8	21 08 06.		13.2 S 112.0 W N. EASTER ISLAND CORDILLERA					
			H= 33 KM MAG 5.38 CGS					
8	LZ-	eP	21 15 59.5	SZ	0.7	70.3	42.1	5.53
		eP	16 00	LZ	12	569.6		
		eS	22 20	LT	20	9999.9		
		e	22 34	ST	6.0	1717.6		
		eL	25 45	LR	999	9999.9		
		eL	27 47	SR	4.5	381.3		
8	00-	eSS	21 44 15	LT	30	673.0	117.1	
		e	55 50	LT	32	682.3		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eLQ	56 55	LT	42.	1929.1		
8	GG-	eL	22 06 10	LZ	30	931.2	121.3	
8	LZ-	eP	22 09 14.0	SZ	1.5	19.5		
8	LZ-	e	22 14 09	SZ	0.7	11.2		
8	23 16 20.4		34.2 S 179.8 E SOUTH OF KERMADEC ISLANDS					
			H= 20 KM					
9	00 19 40.*		57.6 N 150.5 W GULF OF ALASKA					
			H= 22 KM MAG 4.20 CGS					
9	LZ-	eL	01 02 30	LZ	22	222.5	99.3	
9	01 42 44.*		34.2 S 179.5 W SOUTH OF KERMADEC ISLANDS					
			H= 33 KM MAG 5.70 CGS					
9	LZ-	eLQ	02 25 40	LT	29.	105.8	97.5	
		eLR	28 55	LZ	25	290.4		
9	LZ-	eP	02 42 30.0	SZ	0.6	4.3		
9	03 29 42.6		46.4 N 153.1 E KURILE ISLANDS					
			H= 28 KM MAG 4.70 CGS					
9	GG-	eP	03 41 46.0	SZ	1.0	25.5	78.7	5.17
9	04 11 49.8		36.4 N 27.6 E DODECANESE ISLANDS					
			H= 39 KM MAG 4.40 CGS					
9	04 28 56.*		34.2 S 179.9 E SOUTH OF KERMADEC ISLANDS					
			H= 74 KM MAG 4.90 CGS					
9	LZ-	eL	05 14 10	LT	28.	298.7	97.9	
9	06 17 19.*		44.5 N 149.6 E KURILE ISLANDS					
			H= 33 KM MAG 4.60 CGS					
9	06 47 21.9		18. S 175.4 W TONGA ISLANDS					
			H=229 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9	LZ-	eL	08 42 05	LT	27.	128.8		
9	LZ-	eP	09 24 08.5	SZ	0.3	24.6	1.7	
		eS	24 32	SR	0.4	9.1		
9	11 19 22.2		3.5 S 150.3 E NEW IRELAND REGION H= 32 KM MAG 4.70 CGS					
9	12 03 11.4		32.2 S 66.9 W SAN LUIS PROV., ARGENTINA H=132 KM MAG 4.70 CGS					
9	LZ-	eP	12 06 51.5	SZ	0.8	27.2	15.9	4.60
		eL	09 53	SZ	1.5	29.6		
		eL	09 55	LT	18	178.9		
9	13 32 46.4		11.9 N 126.2 E PHILIPPINE ISLANDS REGION H= 5 KM MAG 6.10 CGS					
9	LZ-	eP'1	13 52 55.5	SZ	1.2	52.2	165.1	
		eP'1	52 56	LZ	13	510.6		
		ePCPP'	14 02 35	LZ	13	411.8		
		ePCPP'	02 41	SZ	1.3	24.6		
		eSKKS	04 35	LT	18	134.2		
		e	08 10	LT	16	216.8		
		e	11 45	LR	23	183.4		
		e	19 20	LT	24	332.8		
		eSSS	24 50	LT	19	462.9		
		eLQ	43 13	LT	14	9999.9		
		eLR	54 20	LR	35	757.4		
9	00-	eL	14 15 35	LR	46	2550.8	91.4	
9	GG-	eL	14 27 07	LZ	17	664.1	96.5	
9	14 35 12.*		9.7 S 80.1 W OFF COAST OF NORTHERN PERU H= 33 KM MAG 4.40 CGS					
9	LZ-	eP	14 38 29.5	SZ	0.9	5.1	13.1	4.49
9	LZ-	eL	15 00 35	LZ	19.	524.9		
9	17 08 52.*		34.5 S 179.9 E SOUTH OF KERMADEC ISLANDS H= 33 KM					
9	LZ-	eP	19 58 35.0	SZ	0.6	3.2		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9	20 37 12.*		31.6 N 115.0 W GULF OF CALIFORNIA H= 33 KM MAG 4.20 CGS					
9	LZ-	eP	21 31 00.3	SZ	0.5	8.6	3.3	
		eS	31 40	ST	0.6	12.5		
10	GG-	eP	02 21 47.0	SZ	0.7	9.5		
10	GG-	eP	02 47 48.2	SZ	0.6	10.7		
10	02 48 01.*		14.5 N 92.2 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 3.90 CGS					
10	02 52 23.9		45.8 N 26.6 E RUMANIA H=128 KM MAG 5.30 CGS					
10	GG-	eP	02 55 01.8	SZ	0.9	83.6	11.1	5.44
		eP	55 02	LZ	14	734.2		
		eL	56 23	LZ	20	380.8		
10	00-	eP	02 56 12.6	SZ	0.7	84.3	17.8	5.14
		e	56 34	SZ	0.8	66.8		
		eL	03 02 00	SR	0.9	70.4		
							AVG.	5.29
10	02 56 56.3		5.6 S 154.5 E SOLOMON ISLANDS H=126 KM MAG 5.00 CGS					
10	03 43 44.*		3.3 S 81.4 W NEAR COAST OF NORTHERN PERU H= 78 KM MAG 4.80 CGS					
10	LZ-	eP	03 47 53.8	SZ	0.9	8.5	18.1	3.96
		eLQ	54 16	LR	28	205.9		
		eLR	56 00	LZ	18	575.2		
10	07 37 35.1		5.8 S 147.3 E EAST NEW GUINEA REGION H=113 KM MAG 6.50 CGS					
10	LZ-	eP'	07 56 37.7	SZ	0.8	4.3	138.4	
		e	56 46	SZ	0.7	32.6		
		epP'	56 52	SZ	0.9	78.3		
		ePKS	08 00 19	SR	1.0	4.9		
10	GG-	eL	08 10 22	LZ	23.	661.0		
10	08 18 17.6		18.5 N 68.3 W MONA PASSAGE H=143 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
10	LZ-	eP	08 24 53.7	SZ	0.6	4.3	34.5	4.40
10	09 01 06.*		8.9 S 108.6 W N. EASTER ISLAND CORDILLERA H= 33 KM MAG 4.20 CGS					
10	LZ-	eP	09 08 38.6	SZ	0.9	22.1	39.8	4.86
10	10 04 41.*		33. S 70.3 W CHILE ARGENTINA BORDER REG. H= 33 KM MAG 4.40 CGS					
10	LZ-	eP	10 08 37.9	SZ	1.4	21.2	16.8	4.11
10	LZ-	eP	10 22 32.0	SZ	0.3	13.8	3.0	
		eS	23 10	SR	0.7	10.2		
10	LZ-	eP	12 42 44.4	SZ	1.0	9.5		
10	13 17 48.*		58.7 N 157.1 W ALASKA PENINSULA H= 33 KM MAG 4.60 CGS					
10	13 36 30.7		13.5 S 166.6 E NEW HEBRIDES ISLANDS H= 32 KM MAG 6.75 CGS					
10	LZ-	ePD	13 51 36	LZ	20.	9999.9	118.0	
		eP'	55 19	SZ	0.8	12.9		
		eP'	55 20	LZ	22	421.7		
		ePP	56 34	LZ	999	9999.9		
		eSKP	58 54	SZ	0.8	20.0		
		eSKS	14 01 59	LT	19	9999.9		
		e	03 14	SZ	2.0	63.6		
		eSKKS	03 31	LT	23	9999.9		
		e	05 58	SZ	0.8	15.7		
		e	06 10	LZ	999	9999.9		
		e	06 27	LT	999	9999.9		
		eSPP	07 42	LZ	999	9999.9		
		e	08 43	SZ	1.2	18.2		
		ePKKS	09 30	LT	22	9999.9		
		eSKKP	09 40	SZ	1.5	42.4		
		eSS	12 50	LT	999	9999.9		
		e	13 00	SZ	1.7	28.9		
		eP'P'	14 17	SZ	1.0	6.4		
		e	20 15	LT	999	9999.9		
		e	26 15	LR	999	9999.9		
		eL	31 43	LZ	999	9999.9		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
10	00-	ePD	13 52 25	LZ	28.	598.3	129.4	
		eP'	55 37	SZ	1.0	27.5		
		eP'	55 42	LZ	22	1207.1		
		ePP	57 35	LZ	28	6980.4		
		eSKP	59 00	SZ	1.0	32.1		
		eSPP	14 09 20	LZ	999	9999.9		
		eL	37 45	LZ	999	9999.9		
10	GG-	ePD	13 53 09	LZ	22	399.9	138.7	
		eP'	55 48	SZ	0.5	5.0		
		eP'	55 49	LZ	28	9999.9		
		ePP	58 40	SZ	1.2	30.9		
		ePP	58 50	LZ	999	9999.9		
		eSPP	14 11 10	LZ	999	9999.9		
		e	12 24	LZ	999	9999.9		
		e	26 50	LZ	999	9999.9		
		eL	47 10	LZ	999	9999.9		
10	14 54 01.		35.2 N 111.3 E EASTERN CHINA H= 33 KM MAG 4.70 CGS					
10	LZ-	eP	15 46 33.4	SZ	0.7	12.5		
10	LZ-	tP	16 29 19.8D	SZ	0.4	9999.9	1.6	
		eS	29 42	ST	0.6	12.9		
10	16 39 20.*		24.3 S 180.0 SOUTH OF FIJI ISLANDS H=518 KM					
10	17 30 12.*		3.2 S 146.7 E BISMARCK SEA H= 64 KM					
10	LZ-	eL	18 37 02	LT	30.	293.1	140.2	
10	18 00 41.1		3.4 S 146.2 E BISMARCK SEA H= 39 KM MAG 5.10 CGS					
10	LZ-	eL	19 07 20	LT	29.	203.8	140.5	
10	19 38 56.*		28.2 S 66.9 W CATAMARCA PROV., ARGENTINA H=175 KM MAG 4.80 CGS					
10	LZ-	eP	19 41 39.5	SZ	0.5	9999.9	12.0	
		eL	43 45	ST	0.9	20.8		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eL	45 23	LR	22.	9999.9		
10		20 10 04.*	43.2 N 16.8 E YUGOSLAVIA H= 11 KM					
10	GG-	eP	20 11 54.5	SZ	0.5	5.0	7.6	4.86
		eL	14 00	ST	0.7	68.6		
		eLQ	14 20	LT	10	4734.8		
		eLR	15 03	LZ	13	953.8		
10		23 45 38.*	3.4 S 146.1 E BISMARCK SEA H= 24 KM MAG 5.20 CGS					
11		00 21 58.9	3.6 S 146.1 E BISMARCK SEA H= 33 KM MAG 5.20 CGS					
11	GG-	eL	01 20 30	LZ	38.	332.9	120.3	
11	LZ-	eL	01 29 00	LZ	28	125.8	140.5	
11		00 37 19.*	58.6 N 151.4 W KODIAK ISLAND REGION H= 33 KM					
11	LZ-	eL	00 52 30	LT	30.	141.1		
11		02 37 14.*	10.8 N 62.2 W NEAR COAST OF VENEZUELA H= 80 KM MAG 4.20 CGS					
11		04 10 04.4	14. N 89.5 W EL SALVADOR H=144 KM MAG 5.00 CGS					
11	LZ-	eS	04 22 35	LT	16.	122.9	36.5	
		ePCS	23 20	LT	20	135.4		
		eLQ	27 00	LT	25	276.0		
		eLR	29 40	LZ	95	2233.7		
11		06 48 22.3	6.5 S 154.4 E SOLOMON ISLANDS H=100 KM MAG 5.30 CGS					
11		07 19 30.3	33.9 S 179.9 E SOUTH OF KERMADEC ISLANDS H= 33 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
11	LZ-	eL	08 04 58	LT	28.	296.8	98.0	
11	LZ-	eL	09 07 12	SR	0.5	3.6		
11		09 09 16.*	6. S 130.5 E BANDA SEA H=129 KM MAG 5.60 CGS					
11		09 27 40.*	16.8 S 76.6 W OFF COAST OF PERU H= 33 KM MAG 4.30 CGS					
11		09 44 58.*	30. N 130.3 E KYUSHU, JAPAN H= 33 KM MAG 4.90 CGS					
11		10 15 58.9	22.7 S 174.8 W TONGA ISLANDS REGION H= 33 KM MAG 4.50 CGS					
11		10 48 28.*	24.5 N 109.0 W GULF OF CALIFORNIA H= 33 KM MAG 4.80 CGS					
11	LZ-	eL	11 04 40	LZ	18.	80.5	56.6	
11		11 24 23.*	34.1 S 179.2 E SOUTH OF KERMADEC ISLANDS H= 33 KM MAG 4.70 CGS					
11		11 36 52.*	21.3 S 179.1 W FIJI ISLANDS REGION H=642 KM MAG 4.30 CGS					
11	LZ-	eP	12 20 14.5	SZ	0.2	8.2	1.7	
		eS	20 37	SR	0.2	5.4		
11	LZ-	eP	13 28 58.8	SZ	0.6	22.1	2.9	
		eS	29 35	SR	0.5	2.3		
11		13 40 59.*	24.7 N 109.2 W GULF OF CALIFORNIA H= 33 KM MAG 4.20 CGS					
11	LZ-	eL	15 08 20	LZ	20.	264.7		
11		16 25 58.*	14.2 N 92.0 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 3.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
11			61.1 N 151.0 W SOUTHERN ALASKA H= 59 KM MAG 5.40 CGS					
11	16 57 27.							
11		00- eP	17 07 11.0	SZ	0.8	11.1	57.4	4.94
11	19 25 39.*		60.3 N 146.0 W SOUTHERN ALASKA H= 33 KM MAG 3.90 CGS					
11	20 14 33.5		43. N 139.2 E EASTERN SEA OF JAPAN H=189 KM MAG 5.30 CGS					
11		00- eP	20 25 09.5	SZ	0.6	21.6	68.1	5.07
11		GG- eP	20 26 12.5	SZ	0.7	16.0	77.1	4.87
11		LZ- eP'1	20 33 47.0	SZ	1.1	25.6	144.4	
		ePP	37 09	SZ	1.6	39.3	AVG.	4.97
11	22 47 06.3		48.8 N 153.5 E KURILE ISLANDS H=102 KM MAG 5.00 CGS					
11		GG- eP	22 58 49.0	SZ	0.7	64.0	76.7	5.56
12	03 19 10.3		12.3 N 88.9 W OFF COAST OF CENTRAL AMERICA H= 39 KM MAG 4.30 CGS					
12	04 41 18.*		21.1 S 174.7 W TONGA ISLANDS H=123 KM MAG 4.90 CGS					
12		GG- eP'2	05 01 05.5	SZ	0.6	5.3	151.1	
12		LZ- eL	05 27 15	LZ	23	399.6	98.7	
12	05 57 12.*		8.4 N 103.4 W OFF COAST OF MEXICO H= 33 KM MAG 4.10 CGS					
12	06 57 08.*		13.5 S 166.4 E NEW HEBRIDES ISLANDS H= 70 KM MAG 4.50 CGS					
12	09 20 38.*		8.5 N 121.4 E MINDANAO, PHILIPPINE ISLANDS H= 33 KM MAG 5.60 CGS					
12	09 34 21.*		23.8 S 179.9 W SOUTH OF FIJI ISLANDS H=514 KM					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
12	10 08 47.7		56. S 27.4 W SOUTH SANDWICH ISLANDS REG. H= 33 KM MAG 5.80 CGS					
12		LZ- eP	10 17 42.5	SZ	0.9	42.2	50.4	5.38
		eSCP	22 44	SZ	1.3	20.5		
12		GG- eP	12 48 17.5	SZ	0.2	24.0	1.5	
		eS	48 38	ST	0.2	31.3		
12	12 49 36.*		60.3 N 147.8 W SOUTHERN ALASKA H= 33 KM MAG 4.10 CGS					
12	13 32 24.		27.6 N 88.0 E NEPAL H= 23 KM MAG 6.10 CGS					
12		00- eP	13 42 27.0	SZ	1.0	131.8	60.1	5.95
		eS	50 45	LT	22	411.8		
		eSS	55 00	LR	25	470.2		
		eSSS	57 20	LR	22	574.6		
		eLQ	14 05 00	LT	25	1989.3		
		eLR	07 50	LZ	24	2250.8		
12		GG- eP	13 42 40.0	SZ	0.8	157.0	61.2	6.19
		eP	42 40	LZ	17	577.7		
		eL	14 04 55	LZ	26	1113.9		
12		LZ- eP'1	13 52 19.5	SZ	1.5	80.8	155.5	
							AVG.	6.07
12	13 36 51.		9.7 S 75.0 W PERU H= 48 KM MAG 5.40 CGS					
12		LZ- eP	13 39 00.0	SZ	0.5	3.4	9.1	4.76
		eL	41 25	LT	13	9999.9		
12	13 55 20.		27.3 N 87.7 E NEPAL H= 33 KM MAG 5.30 CGS					
12		GG- eP	14 05 35.0	SZ	1.0	18.9	61.2	5.16
12		LZ- eL	14 58 00	LZ	26	9999.9	155.4	
12	14 35 45.*		18.1 S 178.3 W FIJI ISLANDS REGION H=563 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
12			34. S 179.4 E SOUTH OF KERMADEC ISLANDS H= 11 KM MAG 5.20 CGS					
12	15 54 34.*							
12		LZ- eL	16 40 25	LT	25.	231.9	98.4	
12	16 18 11.*		34.7 N 111.8 E EASTERN CHINA H= 33 KM MAG 4.90 CGS					
12		00- eP	16 28 51.0	SZ	0.5	10.6	65.2	5.23
		eLQ	53 05	LR	20	830.4		
		eLR	54 10	LZ	27	842.3		
12		LZ- ePD	16 36 57	SZ	1.0	14.5	161.6	
12		LZ- e	16 46 50	LR	24.	510.3		
12		LZ- eL	16 49 55	LR	19	291.6		
12		LZ- eL	17 46 00	LT	24	204.4		
12		GG- eL	17 58 30	LZ	25	597.0		
12	18 55 53.6		34.2 S 179.3 E SOUTH OF KERMADEC ISLANDS H=187 KM MAG 5.20 CGS					
12		LZ- eL	19 40 40	LT	28.	301.9	98.4	
12		GG- e	20 24 50	LZ	20.	361.4		
12	20 31 02.*		46.7 N 27.5 W NORTH ATLANTIC RIDGE H= 33 KM MAG 4.40 CGS					
12		GG- eL	20 43 20	LZ	23	1094.3	25.8	
12		GG- e	20 35 32	LZ	22.	335.5		
12	20 50 12.3		5.5 S 102.5 E SOUTHERN SUMATRA H= 33 KM MAG 5.60 CGS					
12		LZ- eL	22 07 50	LT	26.			
13	00 18 30.*		44.7 N 149.3 E KURILE ISLANDS H= 33 KM MAG 4.30 CGS					
13	00 24 51.*		15.2 S 172.3 W SAMOA ISLANDS REGION H= 40 KM MAG 4.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
13	02 19 49.*		10.1 N 86.3 W OFF COAST OF COSTA RICA H= 33 KM MAG 4.80 CGS					
13	03 40 54.5		45. N 112.6 W EASTERN IDAHO H= 33 KM MAG 3.80 CGS					
13	03 44 23.3		44.9 N 112.7 W EASTERN IDAHO H= 33 KM MAG 3.80 CGS					
13	03 46 36.*		43.5 S 75.2 W OFF COAST OF SOUTHERN CHILE H= 33 KM MAG 4.70 CGS					
13	05 34 33.8		3.3 S 150.4 E NEW IRELAND REGION H= 33 KM MAG 4.70 CGS					
13	06 42 33.*		14.6 N 92.1 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 3.90 CGS					
13	08 40 57.		39. N 140.7 E HONSHU, JAPAN H= 19 KM MAG 5.00 CGS					
13	16 57 16.		36.5 S 98.6 W SOUTHERN PACIFIC OCEAN H= 33 KM MAG 5.10 CGS					
13	22 15 24.6		123.9 E NORTHERN CELEBES H=127 KM					
13	23 23 54.8		4.5 N 110.2 W YELLOWSTONE PARK, WYOMING H= 33 KM					
14	01 10 42.*		48.6 N 154.3 E KURILE ISLANDS H= 33 KM MAG 4.80 CGS					
14	01 33 14.6		30.2 N 129.0 E KYUSHU, JAPAN H=140 KM MAG 5.30 CGS					
14	08 25 17.5		5.5 S 81.3 W NEAR COAST OF NORTHERN PERU H= 32 KM MAG 5.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
14	GG-	eP	08 38 45	LZ	18.	530.7	95.8	
		ePP	42 35	LZ	16	919.9		
		e	49 28	LZ	17	589.0		
		eSPP	51 52	LZ	18	1061.4		
		eL	09 11 02	LZ	20	669.4		
14	08 28 45.3		6.2 S 149.9 E NEW BRITAIN REGION H= 63 KM MAG 5.60 CGS					
14	GG-	e	08 57 25	LZ	17.	883.5		
14	LZ-	eP	09 00 37.0	SZ	1.2	60.3		
14	GG-	e	09 00 50	LZ	28	801.5		
14	LZ-	eP	12 00 33.9	SZ	999.9	9999.9		
14	12 18 59.3		6.8 N 72.9 W NORTHERN COLOMBIA H=166 KM MAG 4.90 CGS					
14	12 30 11.1		39.6 N 110.2 W EASTERN UTAH H= KM MAG 4.50 CGS					
14	LZ-	eP	17 03 55.2	SZ	1.6	67.6		
14	17 21 17.6		2.3 N 126.9 E MOLUCCA PASSAGE H= 94 KM MAG 5.50 CGS					
14	18 46 20.4		38.8 S 176.0 E NORTH ISLAND, NEW ZEALAND H= 82 KM MAG 5.80 CGS					
14	19 35 36.*		14.1 N 93.1 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 3.90 CGS					
14	21 57 46.*		51.9 N 177.1 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
14	22 04 26.6		5.3 N 76.3 W COLOMBIA H=117 KM MAG 5.00 CGS					
14	23 54 00.*		14.4 N 92.9 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
15	00 34 15.2		36.5 N 71.0 E AFGHANISTAN U.S.S.R. BORDER H=245 KM MAG 5.40 CGS					
15	03 30 22.2		20.9 S 177.8 W FIJI ISLANDS REGION H=597 KM MAG 5.30 CGS					
15	GG-	eP'1	03 49 08.9	SZ	0.8	22.9	150.4	
15	03 52 06.3		18.5 N 145.6 E MARIANA ISLANDS H=204 KM MAG 4.70 CGS					
15	05 59 58.5		49.9 N 79.0 E EASTERN KAZAKH SSR H= KM MAG 6.00 CGS					
15	GG-	iP	06 07 56.8C	SZ	0.7	64.1	42.4	5.46
		ePP	09 36	SZ	0.9	54.5		
15	06 57 40.*		14.6 N 92.8 W NEAR COAST OF CHIAPAS, MEX. H= 33 KM MAG 3.90 CGS					
15	14 56 46.*		37.2 N 22.5 E SOUTHERN GREECE H=108 KM MAG 4.30 CGS					
15	15 27 22.*		35.1 N 111.7 E EASTERN CHINA H= 58 KM MAG 5.10 CGS					
15	15 28 35.*		46.3 N 139.7 E NEAR E. COAST EASTERN RUSSIA H=471 KM MAG 4.20 CGS					
15	18 34 07.6		23.6 N 121.7 E TAIWAN H= 33 KM MAG 5.60 CGS					
15	19 24 33.*		2. S 12.8 W NORTH OF ASCENSION ISLAND H= 33 KM MAG 5.10 CGS					
15	20 13 27.8		18.6 S 178.7 W FIJI ISLANDS REGION H=685 KM MAG 5.30 CGS					
15	20 44 27.*		16.5 S 172.6 W SAMOA ISLANDS REGION H= 33 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
15			13.3 S 166.4 E NEW HEBRIDES ISLANDS					
			H= 85 KM MAG 5.20 CGS					
15			13.3 S 166.3 E NEW HEBRIDES ISLANDS					
			H= 8 KM MAG 5.50 CGS					
15			35.7 N 4.3 E ALGERIA					
			H= 31 KM MAG 4.70 CGS					
16			20.7 S 178.7 W FIJI ISLANDS REGION					
			H=520 KM MAG 4.70 CGS					
16			13.7 S 166.7 E NEW HEBRIDES ISLANDS					
			H= 52 KM MAG 4.80 CGS					
16			13.5 S 166.1 E NEW HEBRIDES ISLANDS					
			H= 53 KM MAG 4.80 CGS					
16			13.9 N 93.0 W OFF COAST OF CHIAPAS, MEXICO					
			H= 33 KM MAG 3.90 CGS					
16			54.3 N 164.6 W UNIMAK ISLAND REGION					
			H= 33 KM MAG 4.40 CGS					
16			5.7 S 151.3 E NEW BRITAIN REGION					
			H= 60 KM MAG 5.70 CGS					
16			3.1 N 99.2 W EAST CENTRAL PACIFIC OCEAN					
			H= 33 KM MAG 4.30 CGS					
16			56.6 S 27.4 W S. SANDWICH ISLANDS REGION					
			H=101 KM MAG 6.10 CGS					
16			25.6 S 180.0 W SOUTH OF FIJI ISLANDS					
			H=445 KM MAG 4.90 CGS					
16			2.2 S 79.8 W NEAR COAST OF ECUADOR					
			H=122 KM MAG 4.70 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
16			2.5 S 78.2 W ECUADOR					
			H= 33 KM MAG 4.50 CGS					
16			19.7 S 68.7 W CHILE BOLIVIA BORDER REGION					
			H=236 KM MAG 4.10 CGS					
16	LZ-	eP	20 29 07.2	SZ	999.9	9999.9		3.4
		eS	29 34	SR	999.9	9999.9		
16	LZ-	eP	21 26 29.2	SZ	1.2	16.5		
16			51.6 N 170.7 W FOX ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
16	LZ-	eP	22 30 14.5	SZ	0.5	1.9		
16			4.4 S 133.0 E WEST NEW GUINEA REGION					
			H= 33 KM MAG 5.50 CGS					
16	LZ-	eP'2	23 05 28.0	SZ	1.2	33.0	150.5	
		eL	59 00	LZ	28	114.8		
17			56.9 N 151.7 W KODIAK ISLAND REGION					
			H= 33 KM MAG 4.40 CGS					
17			58.3 N 151.8 W KODIAK ISLAND REGION					
			H= 33 KM MAG 5.30 CGS					
17	GG-	eL	02 50 42	LZ	30	353.8	71.5	
17			28.1 S 135.7 E SOUTH AUSTRALIA					
			H= 33 KM MAG 3.30 CGS					
17			34.5 N 27.8 E EASTERN MEDITERRANEAN SEA					
			H= 44 KM MAG 4.80 CGS					
17			15.1 S 173.7 W TONGA ISLANDS					
			H= 33 KM MAG 5.40 CGS					
17	GG-	eP'1	08 39 21.9	SZ	1.0	32.2	145.3	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
17			16.4 S 174.3 W TONGA ISLANDS H=123 KM MAG 5.30 CGS					
17	09 01 07.2							
17	GG-	eP'1	09 20 46.5	SZ	1.7	241.6	146.5	
17	10 43 17.5		2.4 S 681.7 SOUTH OF FIJI ISLANDS H=550 KM MAG C.GS CGS					
17	LZ-	ePP	11 00 40.0	SZ	1.7	109.5	103.2	
		eSKS	06 03	SR	2.4	177.2		
17	19 22 42.*		1 S 103.7 W N. EASTER ISLAND CORDILLERA H= 33 KM MAG 4.50 CGS					
17	20 57 41.3		6.8 S 109.1 E JAVA H=242 KM MAG 6.50 CGS					
17	LZ-	iP'1	21 17 12.5D	SZ	1.4	102.4	157.0	
		eP'2	17 44	SZ	1.4	268.5		
		ePP	21 20	SZ	1.6	319.7		
17	LZ-	eP	20 58 02.5	SZ	0.8	2.8		
17	LZ-	eL	21 07 36	LZ	25	1453.9		
18	00 03 11.9		37.7 S 72.9 W CENTRAL CHILE H= 52 KM MAG 5.30 CGS					
18	LZ-	iP	00 08 04.5C	SZ	0.8	87.5	21.7	5.17
		eP	08 05	LZ	18	1821.4		
		e	12 08	ST	1.4	64.2		
		e	12 20	LZ	20	1013.0		
		eL	14 03	ST	1.9	127.7		
		eL	16 00	LT	999	9999.9		
18	GG-	eL	01 08 17	LZ	20	1627.4	114.2	
18	00-	eL	01 09 11	LZ	23	812.2	119.3	
18	00 19 59.8		30.1 N 138.6 E SOUTH OF HONSHU, JAPAN H=415 KM MAG 4.80 CGS					
18	00-	eP	00 31 23.9	SZ	0.6	20.2	79.8	4.98
18	LZ-	eP'2	00 39 09.2	SZ	0.8	25.8	151.6	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
18	LZ-	eP	01 31 16.7	SZ	0.3	2.3		
18	LZ-	e	01 31 27	SZ	0.5	13.6		
18	LZ-	eL	01 32 39	ST	0.8	29.5		
18	LZ-	eP	02 10 01.2	SZ	0.7	10.0		
18	03 28 25.8		37.9 N 72.1 E TADZHIK SSR H= 33 KM MAG 4.90 CGS					
18	05 49 13.2		7.2 N 73.2 W NORTHERN COLOMBIA H=108 KM MAG 4.00 CGS					
18	LZ-	e	05 54 44	SZ	0.6	2.1	23.8	
18	LZ-	eP	06 17 08.7	SZ	0.5	5.4	2.4	
		eS	17 40	ST	0.5	4.1		
18	06 57 12.*		31.1 N 116.6 W BAJA CALIFORNIA H= 33 KM MAG 4.90 CGS					
18	LZ-	eL	14 14 21	LZ	22.	135.3		
18	15 21 56.1		37.1 N 95.6 E TSINGHAI PROVINCE, CHINA H= 39 KM MAG 4.90 CGS					
18	15 57 18.9		18.3 S 167.5 E NEW HEBRIDES ISLANDS H= 33 KM MAG 4.60 CGS					
18	16 16 05.*		18.3 S 167.7 E NEW HEBRIDES ISLANDS H= 33 KM					
18	LZ-	eP	16 57 17.7	SZ	0.8	2.8		
18	20 08 14.*		37.4 N 113.2 W UTAH H= 33 KM MAG 4.10 CGS					
18	LZ-	eP	20 19 26.0	SZ	0.6	6.6	67.9	4.92
18	22 38 23.*		18.2 S 178.0 W FIJI ISLANDS REGION H=569 KM MAG 3.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
19	LZ-	eP	00 19 23.0	SZ	0.5	10.2	1.6	
		eS	19 45	SR	0.5	9.0		
19	00 38 27.*		38. N 119.1 W CALIFORNIA NEVADA BORDER					
			H= 33 KM					
19	01 52 51.*		41.5 S 89.7 W SOUTHERN PACIFIC OCEAN					
			H= 33 KM MAG 4.40 CGS					
19	LZ-	eP	01 59 16.5	SZ	0.6	7.7	31.1	4.75
		eS	02 04 12	LR	24	57.1		
		eLQ	06 32	LR	23	153.7		
		eLR	08 00	LZ	22	431.8		
19	LZ-	e	01 55 15	LZ	23.	83.2		
19	LZ-	eL	04 59 55	LZ	30	104.8		
19	09 14 36.8		14.5 N 91.7 W GUATEMALA					
			H=121 KM MAG 4.30 CGS					
19	LZ-	iP	09 27 33.6D	SZ	0.2	9999.9		
19	LZ-	eP	09 27 40	LZ	14	98.2	1.5	
		eL	28 00	LR	18	233.4		
19	LZ-	eP	12 18 47.0	SZ	0.5	2.8		
19	LZ-	e	14 27 55	LR	26	9999.9		
19	LZ-	eL	14 54 50	LZ	20	60.4		
19	15 18 41.6		28.1 S 66.8 W CATAMARCA PROV., ARGENTINA					
			H=146 KM MAG 5.20 CGS					
19	LZ-	eP	15 21 25	LZ	22.	185.0	11.9	
		eP	21 30	SZ	0.4	10.2		4.73
		eL	24 20	LT	28	9999.9		
19	LZ-	eP	16 43 53.0	SZ	0.5	4.6		
19	17 22 18.8		23.1 S 66.2 W JUJUY PROVINCE, ARGENTINA					
			H=207 KM MAG 4.10 CGS					
19	LZ-	iP	17 24 03.6C	SZ	0.5	9999.9	7.1	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eL	25 22	ST	0.6	12.7		
		eL	25 30	LT	20	54.9		
19	17 57 37.4		7.1 S 129.2 E BANDA SEA					
			H=126 KM MAG 4.90 CGS					
19	LZ-	eP'1	18 17 20.0	SZ	1.0	9.8	150.9	
19	19 41 30.2		9.1 S 107.7 E SOUTH OF JAVA					
			H=261 KM MAG 4.40 CGS					
19	21 04 44.4		32.2 S 178.2 W SOUTH OF KERMADEC ISLANDS					
			H= 33 KM MAG 4.80 CGS					
19	00-	eP'1	21 24 33.8	SZ	0.8	11.4	150.5	
19	00-	eP'1	21 24 33	SZ	0.8	11.4	161.2	
19	LZ-	eSKS	21 29 00	LT	20	72.1	97.3	
		ePS	31 08	LT	22	71.5		
		eL	49 00	LT	28	129.2		
20	01 33 12.8		32.5 S 178.0 W SOUTH OF KERMADEC ISLANDS					
			H= 33 KM MAG 4.90 CGS					
20	00-	eP'1	01 53 00.8	SZ	1.2	37.2	150.9	
20	LZ-	eL	02 18 03	LT	28	68.4	97.0	
20	02 06 09.6		4.9 S 142.3 E NEW GUINEA					
			H= 96 KM MAG 5.50 CGS					
20	06 28 28.4		52.2 N 170.9 W FOX ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.20 CGS					
20	09 18 34.9		18.4 S 167.6 E NEW HEBRIDES ISLANDS					
			H= 10 KM MAG 5.00 CGS					
20	09 45 56.4		67.3 N 136.2 W N. YUKON TERRITORY, CANADA					
			H= 33 KM MAG 4.10 CGS					
20	12 51 56.4		2.6 N 128.3 E HALMAHERA					
			H= 98 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
20	16 42 50.9		60. N 146.8 W GULF OF ALASKA H= 33 KM MAG 4.40 CGS					
20	LZ-	eL	17 12 05	LT	24.	199.0		
20	20 27 05.5		46.3 N 152.3 E KURILE ISLANDS H= 33 KM MAG 4.60 CGS					
20	LZ-	eP	23 30 54.1	SZ	1.0	5.7		
21	LZ-	eL	00 41 02	LZ	25	103.4		
21	LZ-	eP	02 03 22.4	SZ	0.4	3.0	3.0	
		eS	04 00	ST	0.7	15.0		
21	02 04 43.7		15.9 S 173.2 W TONGA ISLANDS H= 33 KM MAG 5.10 CGS					
21	02 41 01.6		33.6 N 136.1 E NEAR S. COAST SOUTH HONSHU H= 13 KM MAG 4.40 CGS					
21	06 09 58.*		34.2 S 179.8 E SOUTH OF KERMADEC ISLANDS H= 33 KM MAG 5.90 CGS					
21	LZ-	eSKS	06 34 16	LT	18.	450.0	98.0	
		ePS	36 23	LT	23	905.8		
		ePPS	37 39	LT	22	699.4		
		e	42 05	LT	25	803.4		
		eL	55 24	LZ	999	9999.9		
21	GG-	eL	07 28 00	LZ	36	433.7	162.4	
21	LZ-	eP	07 14 24.0	SZ	0.6	4.3		
21	LZ-	eP	07 39 40.7	SZ	0.6	9.7		
21	LZ-	eL	08 26 24	LT	21	185.4		
21	11 37 21.*		18. S 178.5 W FIJI ISLANDS REGION H=600 KM MAG 4.30 CGS					
21	12 35 54.*		32.3 S 66.4 W SAN LUIS PROV., ARGENTINA H= 26 KM MAG 4.50 CGS					
21	LZ-	eP	12 39 39.1	SZ	0.6	5.3	16.1	3.88

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		ePP	39 46	SZ	1.2	39.2		
		eL	45 00	LT	22	848.5		
21	13 31 29.4		34.6 N 86.9 E TIBET H= 33 KM MAG 5.00 CGS					
21	LZ-	eP'1	13 51 23.0	SZ	1.0	9.5	151.4	
		eL	14 45 35	LZ	28	225.5		
21	00-	eL	13 55 00	LT	37	986.7	53.8	
21	GG-	eL	14 02 05	LZ	27	313.7	55.8	
21	15 48 06.*		29.8 S 179.4 W KERMADEC ISLANDS H=246 KM MAG 4.10 CGS					
21	00-	eP'1	16 07 22.6	SZ	0.7	12.0	148.0	
21	LZ-	eP	16 02 41.7	SZ	0.5	6.3	2.0	
		eS	03 09.0	ST	0.6	12.6		
21	16 36 46.2		56.2 N 163.1 E NEAR EAST COAST OF KAMCHATKA H=119 KM MAG 4.40 CGS					
21	00-	eP	16 46 50.0	SZ	0.9	11.1	61.1	4.84
21	16 57 51.4		18.6 S 169.3 E NEW HEBRIDES ISLANDS H=260 KM MAG 4.90 CGS					
21	LZ-	eP	19 58 59.0	SZ	0.6	3.2		
21	20 43 55.		12.3 N 86.7 W NICARAGUA H=138 KM MAG 4.40 CGS					
21	21 37 26.2		12.8 S 169.0 E SANTA CRUZ ISLANDS REGION H=639 KM MAG 4.50 CGS					
21	LZ-	eP	22 48 11.2	SZ	0.8	4.0		
22	00 45 12.*		41.2 N 129.0 W OFF COAST N. CALIFORNIA H= 47 KM MAG 4.90 CGS					
22	LZ-	eP	01 36 33.5	SZ	0.5	3.1		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
22	02 41 35.*		20.1 N 94.5 E BURMA H= 76 KM MAG 5.50 CGS					
22	LZ-	eP'2	03 02 23.0	SZ	0.8	2.0	163.4	
22	04 13 04.*		6.8 S 130.9 E BANDA SEA H= 81 KM MAG 4.40 CGS					
22	LZ-	eP'2	04 32 50.4	SZ	0.7	6.1	150.1	
22	05 18 27.9		19.7 S 176.1 W FIJI ISLANDS REGION H=210 KM MAG 4.70 CGS					
22	GG-	eL	07 29 20	LR	45.	5267.1		
22	LZ-	eP	08 25 11.2	SZ	0.3	9999.9	3.0	
		eS	25 50	ST	999.9	9999.9		
22	10 51 37.1		38.5 N 138.5 E NEAR W. COAST HONSHU, JAPAN H= 33 KM MAG 4.40 CGS					
22	LZ-	eP'1	11 11 20.6	SZ	1.7	24.2	147.6	
22	LZ-	eP	10 58 00.1	SZ	0.5	3.1	2.7	
		eS	58 34	ST	0.7	31.8		
22	GG-	eP	12 59 30.5	SZ	0.6	15.7	1.2	
		eS	59 46	SR	0.5	73.7		
22	15 11 14.*		46.9 N 152.5 E KURILE ISLANDS H= 33 KM MAG 4.20 CGS					
22	19 59 50.*		21.5 S 170.1 E LOYALTY ISLANDS REGION H= 33 KM					
22	LZ-	eP	21 22 49.5	SZ	1.0	13.0		
22	LZ-	eL	21 31 30	LZ	24	134.9		
22	22 03 40.*		44.2 N 151.0 E KURILE ISLANDS REGION H= 33 KM MAG 4.40 CGS					
23	01 09 05.*		16.4 N 95.8 W OAXACA, MEXICO H= 33 KM MAG 3.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
23	02 39 30.6		44.2 N 18.0 E YUGOSLAVIA H= 33 KM MAG 5.00 CGS					
23	GG-	eP	02 41 14.0	SZ	0.6	10.4	7.2	4.91
		eL	43 25	SR	1.0	162.7		
23	LZ-	eP	02 56 55.0	SZ	0.6	8.8		
23	04 23 57.*		52.3 N 175.7 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
23	05 14 56.*		50.1 S 163.0 E AUCKLAND ISLANDS REGION H= 33 KM					
23	05 47 32.*		15.1 N 91.8 W MEXICO GUATEMALA BORDER REG. H=166 KM MAG 4.10 CGS					
23	08 03 39.9		16.3 S 174.5 W TONGA ISLANDS H=119 KM MAG 4.80 CGS					
23	LZ-	eP	11 20 41.0	SZ	0.4	9.5	5.2	
		eS	21 43	SR	0.6	1.4		
23	11 23 31.7		39.1 N 48.4 E N. W. IRAN USSR BORDER REG. H= 33 KM MAG 4.60 CGS					
23	LZ-	iP	12 42 58.2D	SZ	0.2	9999.9	1.7	
		eS	43 22	SR	0.4	9999.9		
23	GG-	eP	13 28 50.0	SZ	0.3	11.2	3.3	
		eS	29 31	ST	0.5	42.6		
23	14 48 28.		8.3 S 75.1 W PERU H= 33 KM MAG 4.20 CGS					
23	LZ-	eP	14 51 03.5	SZ	0.5	1.8	10.2	4.63
		eP	51 15	LZ	25	99.7		
		eL	54 07	ST	0.7	9.3		
		eL	54 20	LT	16	468.6		
23	16 01 18.		13.8 N 119.9 E PHILIPPINE ISLANDS REGION H= 66 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
23		16 42 05.*	73.3 N 7.4 E GREENLAND SEA H= 33 KM MAG 4.40 CGS					
23	LZ-	eP	16 47 28.0	SZ	0.4	8.9	2.8	
		eS	48 04	ST	0.6	4.5		
23		20 07 31.4	8.8 N 83.1 W COSTA RICA H= 46 KM MAG 4.50 CGS					
23	LZ-	eSS	20 19 35	LT	22.	128.8	28.8	
		eLQ	22 45	LT	25	379.0		
		eLR	25 07	LZ	17	821.2		
23	LZ-	eP	20 43 46.3	SZ	1.4	27.9		
23		21 51 14.9	36.9 N 140.9 E NEAR E. COAST HONSHU, JAPAN H= 58 KM MAG 5.10 CGS					
23	00-	eP	22 02 47.2	SZ	0.6	43.8	74.2	5.55
23	GG-	eP	22 03 35.7	SZ	0.7	31.3	83.0	5.48
							AVG.	5.51
23		22 03 09.*	35.3 N 72.8 E WEST PAKISTAN H=200 KM MAG 4.90 CGS					
23	00-	eP	22 11 14.0	SZ	0.6	11.9	46.4	4.50
23	GG-	eP	22 11 17.8	SZ	1.2	48.4	46.4	4.81
							AVG.	4.65
23		22 38 25.8	13.7 N 119.9 E PHILIPPINE ISLANDS REGION H= 53 KM					
23		23 24 29.6	7.4 N 123.9 E MINDANAO, PHILIPPINE ISLANDS H=627 KM MAG 5.30 CGS					
23	GG-	eP	23 51 45.0	SZ	0.9	9.6		
24		00 11 12.1	2.4 S 126.0 E CERAM SEA H= 6 KM MAG 6.60 CGS					
24	00-	iP	00 25 18 C	LZ	999.	9999.9U	104.1	
		eP	25 29	SZ	2.5	412.1		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		ePP	29 41	SZ	1.6	378.0		
		ePPP	32 03	SZ	2.3	919.7		
		e	41 28	SZ	1.7	139.0		
		e	49 31	SZ	1.7	79.4		
24	GG-	ePD	00 25 35	LZ	999	9999.9	107.7	
		ePD	25 41	SZ	2.3	243.0		
		e	28 51	SZ	1.6	86.8		
		ePP	30 05	SZ	2.8	3569.8		
		eSKS	35 58	ST	2.3	681.3		
24	LZ-	eP'1	00 31 12.5	SZ	2.0	664.4	156.6	
		eP'1	31 13	LZ	999	9999.9		
24	LZ-	eL	00 20 23	LT	28.	934.2		
24		01 19 32.9	6.8 N 73.1 W NORTHERN COLOMBIA H=169 KM MAG 5.40 CGS					
24	LZ-	eP	01 24 28.0	SZ	0.5	13.2	23.4	4.74
24		02 31 19.*	2.7 S 126.1 E CERAM SEA H= 23 KM					
24	LZ-	eP'2	02 51 27.0	SZ	1.1	10.9	156.3	
24	LZ-	eP	02 40 57.0	SZ	0.4	3.2		
24		02 41 43.*	2.2 S 126.0 E CERAM SEA H= 29 KM MAG 5.80 CGS					
24	LZ-	eP'1	03 01 41.5	SZ	2.0	33.2	156.7	
		eP'2	02 11	SZ	0.7	19.8		
24		06 14 28.*	4.3 S 132.8 E WEST NEW GUINEA REGION H= 11 KM MAG 4.80 CGS					
24	LZ-	eP	09 45 25.0	SZ	0.4	1.8		
24	LZ-	eL	09 47 20	ST	0.8	5.3		
24		16 06 30.7	20.9 S 179.0 W FIJI ISLANDS REGION H=616 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
24			16 38 17.4	51.4 N 170.3 W FOX ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS				
24			19 57 01.*	54.4 N 162.2 W ALASKA PENINSULA H= 20 KM MAG 5.00 CGS				
24	LZ-	eP	20 13 27.6	SZ	0.7	19.1		
24	LZ-	eP	20 42 18.0	SZ	1.0	7.9		
24	LZ-	eP	21 23 14.5	SZ	1.0	5.9		
24	LZ-	eP	21 23 15	LZ	16	118.6		
24	LZ-	e	21 34 05	LT	22	193.7		
24	LZ-	e	21 35 38	LR	25	156.3		
24	LZ-	e	21 40 00	LT	25	123.8		
24	LZ-	e	21 47 32	LR	26	569.6		
24	LZ-	eL	21 52 15	LZ	21	380.8		
24	LZ-	eP	22 10 52.5	SZ	1.7	81.0		
24	LZ-	e	22 11 10	SZ	1.2	39.8		
24	GG-	eL	22 33 10	LZ	30	276.1		
24			22 38 56.	73.1 N 6.5 E GREENLAND SEA H= 33 KM MAG 4.80 CGS				
24	00-	eP	22 41 36.0	SZ	1.0	14.2	12.2	5.00
		eL	48 50	LZ	30	383.5		
24	LZ-	e	22 54 38	LZ	18.	19.0		
24	LZ-	e	22 58 33	LZ	15	25.1		
24	LZ-	eL	23 00 47	LZ	33	53.0		
25			01 11 54.*	14.8 S 171.2 E NEW HEBRIDES ISLANDS REGION H=635 KM MAG 4.30 CGS				
25	LZ-	eLQ	02 10 25	LR	35.	189.7	113.5	
		eLR	13 40	LZ	16	125.2		
25			04 14 21.2	37.9 N 138.9 E NEAR W. COAST HONSHU, JAPAN H= 33 KM MAG 4.60 CGS				
25	LZ-	eP'2	04 34 05.5	SZ	1.0	5.9	147.7	
25			08 51 42.*	15.9 N 93.5 W NEAR COAST OF CHIAPAS, MEX. H= 33 KM MAG 3.90 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
25			10 03 36.2	20.2 S 67.2 W SOUTHERN BOLIVIA H= 9 KM MAG 4.70 CGS				
25	LZ-	t	10 04 58 C	SZ	999.9	9999.9	4.1	
		eL	05 35	LR	21	888.6		
25	LZ-	eP	10 22 59.5	SZ	1.0	21.7		
25	LZ-	e	10 23 17	SZ	0.7	10.4		
25			10 33 16.*	12.9 S 167.2 E SANTA CRUZ ISLANDS H=205 KM MAG 4.80 CGS				
25			12 02 51.4	2.6 S 126.1 E CERAM SEA H= 33 KM MAG 6.30 CGS				
25			12 15 34.1	6. N 125.9 E MINDANAO, PHILIPPINE ISLANDS H=166 KM MAG 5.30 CGS				
25			12 18 33.	34.5 N 32.8 E CYPRUS H= 17 KM MAG 4.80 CGS				
25			12 24 19.*	45.5 N 110.3 W MONTANA H= 33 KM MAG 4.00 CGS				
25	LZ-	eP	15 45 45.0	SZ	0.6	3.3		
25			16 44 18.7	13.7 N 144.3 E MARIANA ISLANDS H=139 KM MAG 5.40 CGS				
25	LZ-	eP'1	17 03 49.0	SZ	0.7	67.6	148.2	
25			16 54 02.*	10.6 S 75.4 W PERU H= 33 KM				
25	LZ-	eP	16 56 10.5	SZ	0.8	4.4	8.8	4.71
		eL	58 37	ST	0.6	6.6		
		eL	59 25	LZ	13	409.7		
25			20 22 56.*	32.2 S 138.6 E NEAR S. COAST OF AUSTRALIA H= 33 KM MAG 4.90 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
25	22 36 54.*		11.4 S 75.2 W PERU H=115 KM MAG 4.20 CGS					
25	LZ-	eP	22 39 00.0	SZ	1.0	5.8	8.1	4.13
		eL	41 25	SR	0.8	6.4		
		eL	41 38	LT	18	168.0		
26	01 19 19.*		61.4 N 152.4 W SOUTHERN ALASKA H=135 KM MAG 4.10 CGS					
26	01 53 31.9		34.6 N 135.2 E NEAR S. COAST SOUTH HONSHU H=357 KM MAG 4.50 CGS					
26	LZ-	eP'1	02 12 49.2	SZ	1.0	9.8	152.0	
26	02 29 02.*		28.4 N 131.1 E RYUKYU ISLANDS REGION H= 33 KM MAG 4.80 CGS					
26	04 54 51.6		23.4 S 179.8 E SOUTH OF FIJI ISLANDS H=474 KM MAG 5.00 CGS					
26	06 25 32.*		2.9 S 102.4 E SOUTHERN SUMATRA H= 89 KM MAG 5.70 CGS					
26	07 22 36.*		68.7 N 18.7 W ICELAND REGION H= 33 KM MAG 4.30 CGS					
26	LZ-	eP	08 31 05.8C	SZ	0.2	68.0		
26	10 42 35.4		17.5 S 178.7 W FIJI ISLANDS REGION H=504 KM MAG 4.20 CGS					
26	10 49 33.5		2.4 S 126.0 E CERAM SEA H= 33 KM MAG 5.20 CGS					
26	LZ-	eP'1	11 09 31.7	SZ	1.3	6.3	156.6	
		eP'2	10 01	SZ	1.5	39.2		
26	11 23 14.*		28.2 N 111.7 W GULF OF CALIFORNIA H= 33 KM MAG 4.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
26	13 48 34.*		4 S 81.1 W OFF COAST OF ECUADOR H= 33 KM MAG 4.20 CGS					
26	LZ-	eP	13 53 03.2	SZ	1.0	5.8	20.1	3.81
		eS	57 05	LT	38	271.0		
		eL	14 01 00	LT	20	341.3		
26	14 17 49.*		2 S 80.8 W NEAR COAST OF ECUADOR H= 33 KM MAG 4.70 CGS					
26	LZ-	eP	14 22 21.2	SZ	0.8	11.7	20.0	4.20
26	16 54 34.*		13.1 S 76.1 W NEAR COAST OF PERU H=118 KM MAG 4.20 CGS					
26	17 08 42.*		42.7 N 141.2 E HOKKAIDO, JAPAN REGION H= 33 KM MAG 4.20 CGS					
26	18 14 44.1		2.4 S 125.7 E CERAM SEA H= 33 KM MAG 5.00 CGS					
26	LZ-	eP'1	18 34 47.0	SZ	1.3	9.4	156.8	
		eP'2	35 12	SZ	0.8	7.3		
26	LZ-	e	18 26 05	LT	18.	243.3		
26	LZ-	eL	18 30 18	LT	18	1390.7		
26	LZ-	eP	21 14 13.5	SZ	0.5	9999.9		
26	LZ-	e	21 15 08	ST	0.9	13.1		
26	23 22 18.4		29.6 N 142.0 E SOUTH OF HONSHU, JAPAN H= 33 KM MAG 4.40 CGS					
26	23 47 38.2		36.1 N 139.5 E HONSHU, JAPAN H=104 KM MAG 5.40 CGS					
26	GG-	eP	23 59 54.5	SZ	0.7	31.8	83.1	5.35
27	LZ-	eP	00 07 12.5	SZ	1.5	278.8		
27	LZ-	e	00 07 23	SZ	1.9	230.1		
27	LZ-	eLQ	02 21 35	LT	22	104.2		
27	LZ-	eLR	02 24 08	LZ	16	888.9		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
27			11 10 20.*	51.7 N 177.2 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS				
27	LZ-	eP	12 46 07.5	SZ	0.5	1.8	3.8	
		eS	46 53	ST	999.9	9999.9		
27			13 24 09.*	28.6 N 111.7 W GULF OF CALIFORNIA H= 33 KM MAG 4.20 CGS				
27			15 31 30.*	36.7 N 139.6 E HONSHU, JAPAN H= 89 KM MAG 3.90 CGS				
27			19 01 00.*	48.8 N 154.8 E KURILE ISLANDS H= 33 KM MAG 4.50 CGS				
27			19 24 50.*	30.5 N 138.7 E SOUTH OF HONSHU, JAPAN H=399 KM MAG 4.10 CGS				
27			19 53 55.	6.6 S 153.9 E NEW BRITAIN REGION H=118 KM MAG 4.80 CGS				
27			20 13 39.*	22. S 179.5 W FIJI ISLANDS REGION H=563 KM				
27			20 42 59.2	6.7 S 154.6 E SOLOMON ISLANDS H= 49 KM MAG 4.70 CGS				
27			21 44 36.9	7. S 129.6 E BANDA SEA H=110 KM MAG 4.80 CGS				
27	LZ-	eP'2	22 04 21.5	SZ	0.9	15.0	150.8	
		epP'2	04 57	SZ	0.6	4.0		
		eLQ	54 45	LR	35	218.0		
		eLR	23 00 00	LZ	21	168.4		
28	LZ-	eL	00 16 25	LT	28.	197.0		
28			00 24 54.6	6.1 S 154.4 E SOLOMON ISLANDS H= 45 KM MAG 4.90 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
28	LZ-	eP	01 17 20.5	SZ	0.8	11.7		
28			02 20 57.4	15.6 S 168.1 E NEW HEBRIDES ISLANDS H=151 KM MAG 4.30 CGS				
28			02 34 03.	2.5 S 102.5 E SOUTHERN SUMATRA H= 33 KM MAG 5.60 CGS				
28	LZ-	eP'1	02 54 00.5	SZ	1.5	17.3	159.4	
		eP'2	54 39	SZ	1.0	15.6		
		e	55 22	SZ	1.6	47.5		
		ePP	58 12	SZ	1.3	9.4		
28			04 03 39.5	15.3 N 93.9 W NEAR COAST CHIAPAS, MEXICO H= 33 KM MAG 5.30 CGS				
28	LZ-	eP	04 11 14.0	SZ	1.1	25.2	40.2	4.84
		ePCP	13 16	SZ	1.4	18.0		
		e	21 05	LZ	25	127.8		
		eLQ	23 22	LT	25	186.9		
		eLR	24 40	LZ	25	362.1		
28	00-	eP	04 16 07.0	SZ	1.2	74.5	83.7	5.69
		eLR	45 35	LZ	33	471.5		
28	GG-	eLR	04 47 05	LZ	25	115.9	87.9	
							AVG.	5.26
28			04 58 20.*	22.6 N 45.5 W NORTH ATLANTIC RIDGE H= 33 KM MAG 4.20 CGS				
28	LZ-	eP	05 06 31.0	SZ	0.8	7.3	44.7	4.56
		eSCS	16 50	LR	20	94.4		
		eLQ	20 00	LR	25	245.7		
		eLR	21 00	LZ	30	156.7		
28			05 35 00.*	12.9 S 78.5 W OFF COAST OF PERU H= 33 KM MAG 4.90 CGS				
28	LZ-	eP	05 37 26.0	SZ	0.8	8.8	10.2	5.10
		eL	40 40	LZ	31	244.2		
28			08 15 43.6	23.9 S 66.7 W JUJUY PROVINCE, ARGENTINA H=203 KM MAG 4.10 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
28	LZ-	eP	08 17 36.4	SZ	0.2	36.2	7.8	5.25
		eL	19 05	SR	0.6	11.8		
28	09 38 57.*		28.9 S 72.2 W OFF COAST OF CENTRAL CHILE H= 70 KM MAG 4.20 CGS					
28	LZ-	eP	09 42 04.0	SZ	1.0	3.9	13.0	4.10
		eL	44 27	SR	0.8	2.5		
		eLR	45 55	LZ	24	201.3		
28	LZ-	eP	10 51 57.4	SZ	0.2	30.4	2.0	
		eS	52 24	ST	0.4	9.7		
28	LZ-	eP	13 36 25.3	SZ	0.7	8.9		
28	LZ-	e	13 42 30	LT	20	150.9		
28	LZ-	eL	13 47 40	LZ	35	264.6		
28	LZ-	eP	15 20 20.0	SZ	0.2	1.1	5.2	
		eS	21 23	ST	0.6	8.7		
28	16 15 35.		4. S 104.2 W N. EASTER ISLAND CORDILLERA H= 33 KM MAG 5.00 CGS					
28	LZ-	eP	16 22 46.5	SZ	1.3	66.1	37.1	5.27
		eS	28 41	LT	24	9999.9		
		eLQ	31 12	LT	26	1605.5		
		eLR	33 50	LZ	999	9999.9		
28	00-	eL	17 06 33	LZ	40	740.0	105.4	
28	LZ-	eP	19 54 51.4	SZ	0.2	25.7		
28	GG-	eL	22 08 25	LZ	30	293.8		
28	LZ-	eP	22 43 39.7	SZ	0.2	9999.9	1.9	
		eS	44 05	ST	0.5	9999.9		
28	23 10 44.2		42.7 N 23.2 E BULGARIA H= 33 KM MAG 4.50 CGS					
28	00-	eP	23 15 05.0	SZ	0.5	14.6	19.8	4.50
29	00 11 22.*		23.9 N 108.7 W GULF OF CALIFORNIA H= 33 KM MAG 5.40 CGS					
29	LZ-	eP	00 20 59.0	SZ	1.6	90.8	56.0	5.55
		eS	28 55	LT	20	183.7		
		eLQ	35 00	LT	25	313.9		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eLQ	37 50	LT	20.	348.4		
		eLR	41 45	LZ	20	913.3		
29	00-	eLQ	00 45 10	LT	30	190.8	82.4	
		eLR	47 55	LT	40	750.2		
29	GG-	eL	00 57 35	LZ	25	346.6	89.4	
29	01 22 57.		36.1 N 140.3 E NEAR E. COAST HONSHU, JAPAN H= 33 KM MAG 4.40 CGS					
29	01 27 16.*		37.6 N 122.4 W CENTRAL CALIFORNIA H= 14 KM MAG 4.00 CGS					
29	01 40 48.*		36.6 N 121.9 W CENTRAL CALIFORNIA H= 14 KM MAG 4.70 CGS					
29	02 21 54.5		24.2 N 108.6 W GULF OF CALIFORNIA H= 33 KM MAG 4.60 CGS					
29	LZ-	eP	02 31 32.0	SZ	1.5	48.3	56.1	5.31
		eSSS	45 30	LT	19	314.8		
		eLQ	48 25	LT	22	300.7		
		eLR	52 10	LZ	21	777.8		
29	00-	eL	03 00 40	LT	38	883.3	82.1	
29	LZ-	eP	02 32 50.5	SZ	0.5	23.5	4.2	
		eS	33 43	ST	0.6	14.0		
29	03 28 18.		21.2 S 178.9 W FIJI ISLANDS REGION H=550 KM MAG 4.80 CGS					
29	LZ-	eP	04 36 49.0	SZ	0.6	13.3		
29	06 58 06.6		23.7 N 108.5 W GULF OF CALIFORNIA H= 33 KM MAG 4.50 CGS					
29	77 53		08 08 05	3Z	25.	313.6		
29	08 20 42.*		36.9 S 72.5 W NEAR COAST OF CENTRAL CHILE H= 33 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
29	LZ-	eP	08 25 35.0	SZ	1.5	17.5	20.9	4.16
29	LZ-	eP	08 23 49.5	SZ	0.7	7.8		
29	LZ-	eP	09 06 15.0	SZ	0.6	5.5		
29	09 35 25.7		54.8 N 161.7 E NEAR EAST COAST OF KAMCHATKA H= 33 KM MAG 5.80 CGS					
29	00-	eP	09 45 45.0	SZ	1.0	87.2	62.2	5.85
		eP	45 46	LZ	20	182.9		
		ePPP	49 50	LZ	20	137.1		
		eL	10 07 35	LZ	30	537.9		
29	GG-	eP	09 46 54.5	SZ	0.7	64.8	73.0	5.77
29	LZ-	eP'1	09 54 26.5	SZ	1.2	13.5	125.7	
		eL	10 38 15	LZ	26	435.9		
							AVG.	5.81
29	LZ-	eP	10 21 56.0	SZ	0.7	10.4		
29	10 29 22.8		18.9 S 169.1 E NEW HEBRIDES ISLANDS H=149 KM MAG 4.00 CGS					
29	10 52 00.*		20.3 S 177.6 W FIJI ISLANDS REGION H=447 KM MAG 4.10 CGS					
29	LZ-	eP	11 16 51.5C	SZ	0.2	49.7	1.8	
		eS	17 15	ST	0.4	16.9		
29	11 21 04.3		2.9 S 126.3 E CERAM SEA H= 51 KM MAG 4.80 CGS					
29	LZ-	eP'1	11 40 59.0	SZ	1.5	17.5	156.0	
		eP'2	41 25	SZ	0.8	20.8		
29	GG-	eP	14 00 40.0	SZ	999.9	9999.9	2.2	
		eS	01 01	SR	0.5	18.3		
29	20 06 02.4		35.6 N 73.6 E NORTHWESTERN KASHMIR H= 33 KM MAG 5.70 CGS					
29	00-	eP	20 14 27.0	SZ	0.7	7.0	46.5	4.77
29	22 31 56.3		51.3 N 179.0 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
29	23 39 02.5		34.8 N 27.6 E EASTERN MEDITERRANEAN SEA H= 36 KM MAG 5.10 CGS					
29	GG-	eP	23 43 24.0	SZ	1.0	26.0	19.1	4.45
29	23 40 41.7		16.2 S 168.7 E NEW HEBRIDES ISLANDS H=227 KM MAG 5.10 CGS					
30	LZ-	eP	01 36 07.8	SZ	0.5	9.0	1.7	
		eS	36 30	ST	999.9	9999.9		
30	04 37 15.1		51.6 N 179.8 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 5.60 CGS					
30	LZ-	eP	07 04 28.3	SZ	0.4	7.6	2.0	
		eS	04 54	ST	0.7	11.1		
30	08 40 35.*		32.6 S 178.3 W SOUTH OF KERMADEC ISLANDS H= 55 KM MAG 5.00 CGS					
30	00-	eP'1	09 00 20.5	SZ	0.7	16.3	150.9	
30	GG-	eP	09 00 32.7	SZ	999.9	9999.9	1.0	
		eS	00 49	ST	999.9	9999.9		
30	LZ-	eP	09 52 46.0	SZ	0.5	1.8	2.8	
		eS	53 21	ST	0.9	12.1		
30	12 15 54.*		5.9 S 129.9 E BANDA SEA H=149 KM MAG 5.50 CGS					
30	GG-	eP	13 44 51.0	SZ	0.6	42.6	1.3	
		eS	45 09	SR	0.4	30.2		
30	GG-	eP	14 33 22.5	SZ	0.5	2.4		
30	GG-	e	14 33 34	SZ	0.7	25.3		
30	15 49 28.9		50. N 157.9 E KURILE ISLANDS REGION H= 33 KM MAG 4.70 CGS					
30	GG-	eP	16 01 18.5	SZ	0.8	18.8	76.7	5.17
30	00-	eL	16 30 15	LZ	21.	228.0		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
30	17 42 12.3		13. S 169.4 E SANTA CRUZ ISLANDS REGION H=647 KM MAG 5.20 CGS					
30	GG=	eP'	18 00 30.8	SZ	0.7	22.2	139.3	
30	00=	eP	18 00 09.5	SZ	0.6	13.7		
30	00=	e	18 02 35	SZ	0.6	21.6		
30	18 06 21.2		12.9 S 169.5 E SANTA CRUZ ISLANDS REGION H=649 KM MAG 5.40 CGS					
30	00=	eP'	18 24 18.2	SZ	0.7	9.3	129.5	
		ePP	26 44	SZ	0.7	25.7		
31	LZ=	eP	01 00 42.3	SZ	0.7	12.5		
31	LZ=	i	01 04 09 C	SZ	1.2	54.8		
31	LZ=	e	01 04 12	SZ	0.6	40.9		
31	LZ=	e	01 06 12	SZ	1.3	21.5		
31	LZ=	e	01 08 30	LR	46	1666.6		
31	LZ=	e	01 09 20	SZ	1.6	20.6		
31	LZ=	e	01 12 05	LR	28	785.7		
31	LZ=	eL	01 13 50	LT	26	455.3		
31	LZ=	eLR	01 18 25	LZ	28	766.4		
31	LZ=	eL	01 22 02	LT	20	1011.0		
31	LZ=	eL	01 22 02	LR	30	1488.2		
31	LZ=	eL	01 22 02	LZ	26	914.8		
31	03 09 17.2		60.3 N 147.8 W SOUTHERN ALASKA H= 33 KM MAG 4.50 CGS					
31	LZ=	eLQ	09 00 00	LR	42.	408.6		
31	LZ=	eLR	09 03 20	LZ	32	209.7		
31	11 05 01.*		60.2 N 146.1 W SOUTHERN ALASKA H= 33 KM MAG 4.30 CGS					
31	12 01 44.*		47.1 N 153.2 E KURILE ISLANDS H= 33 KM MAG 4.50 CGS					
31	12 57 29.1		21.2 S 67.8 W CHILE BOLIVIA BORDER REGION H= 71 KM MAG 5.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
31	LZ=	eP	12 58 52.3	SZ	999.9	9999.9	5.0	
		iP	58 53 C	LZ	15	1791.9		
		eSCS	13 12 45	SR	3.5	277.7		
31	LZ=	eP	14 13 08.3	SZ	0.8	5.7		
31	LZ=	eP	14 18 17.2	SZ	0.2	12.5	2.7	
		eS	18 51	ST	0.7	16.2		
31	14 57 25.*		21.1 S 67.8 W CHILE BOLIVIA BORDER REGION H= 71 KM MAG 5.10 CGS					
31	LZ=	eP	14 58 46.2	SZ	999.9	9999.9	4.9	
		eL	59 05	LZ	12	463.7		
31	LZ=	e	21 31 15	LZ	27.	127.0		
31	LZ=	eLQ	21 33 10	LT	28	186.9		
31	LZ=	eLR	21 35 00	LZ	25	162.9		
31	23 09 18.5		1.4 N 127.0 E MOLUCCA PASSAGE H=144 KM MAG 5.30 CGS					
31	23 36 13.4		51.2 N 178.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.20 CGS					
31	00=	eP	23 47 08.7	SZ	0.7	4.6	67.7	4.70
		ePCP	47 35	LZ	20	186.3		
		eS	56 18	LR	20	189.8		
32	00=	eSS	00 00 35	LR	27	222.7	67.7	
		e	04 11	LR	17	193.0		
		eLQ	07 40	LR	28	281.9		
		eLR	09 45	LZ	30	465.7		
31	23 50 28.*		51.1 N 178.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					

Bulletin No. 36A
February 1965

SEISMOLOGICAL BULLETIN

WEST GERMANY, NORWAY, BOLIVIA

THE GEOTECHNICAL CORPORATION
3401 SHILOH ROAD
GARLAND, TEXAS
GEOTECH

SEISMOLOGICAL BULLETIN

GRAFENBERG, WEST GERMANY
OSLO, NORWAY
LA PAZ, BOLIVIA

The Geotechnical Corporation wishes to acknowledge the cooperation of the following scientific organizations in the collection and production of the data in this bulletin.

Bundesanstalt fur Bodenforschung, Hannover, West Germany
(Professor Hans Closs, Director)

Jordskel, University of Bergen, Bergen, Norway
(Professor A. Kvale, Director)

Observatorio San Calixto, La Paz, Boliva (Father Ramon Cabre, S. J.)

Bulletin No. 38A
February 1965

June 1965

CONTENTS

ILLUSTRATIONS

* * * * * * * * * * * *

TABLES

SEISMOLOGICAL BULLETIN

GRAFENBERG, WEST GERMANY
OSLO, NORWAY
LA PAZ, BOLIVIA

1. INTRODUCTION

1.1 This bulletin contains seismological data on earthquake phases recorded at three mobile seismological stations being operated by The Geotechnical Corporation. The bulletin is intended to be an aid to interested observers in determining the extent of the earthquake data contained in the records from the three teams.

1.2 The bulletin contains the following:

a. Data on all of the phases that have been associated with epicenters reported by the U. S. Coast and Geodetic Survey (USC&GS);

b. Data on the epicenters listed in the bulletin - as reported by the USC&GS;

c. Arrival time, period, amplitude, and distance for phases not associated with USC&GS epicenters.

1.3 All phases are listed in chronological order, except that unassociated phases are not mixed with a sequence of associated phases. In such cases, the unassociated phases are listed immediately following the associated phases.

2. INSTRUMENTATION

2.1 Instrumentation at the Grafenberg, West Germany (GG-GR), and Oslo, Norway (OO-NW), sites consists of a short-period vertical Benioff seismometer array. A short-period vertical Johnson-Matheson seismometer array is in operation at La Paz, Bolivia (LZ-BV). Each site is also equipped with a three-component Sprengnether long-period seismograph system. Both systems use phototube amplifiers. The response characteristics of these systems are shown in figures 1, 2, and 3.

2.2 All data are recorded by 35-mm Film Recorders, Geotech Model 1301A, 14-channel Magnetic-Tape Recorders, Ampex Model 314, and 16-mm film Develocorders, Geotech Model 4000C.

2.3 Precision Timing Systems, Geotech Model 5400 or 5400A, are used for primary timing. Chronometers are used for secondary timing. WWV, the National Bureau of Standards' radio station at Beltsville, Maryland, is used for the time standard at LZ-BV. GG-GR and OO-NW use Radio Potsdam. The accuracy of the time program from WWV agrees with U. S. Naval Observatory time.

2.4 Each system is calibrated at least once every 24 hours. In the short-period system calibration, an electromagnetic (EM) calibrator is used to determine the magnification as a function of frequency and a weight-lift calibration is used to verify the EM magnification at 1 hz. In the long-period systems, magnification is determined as a function of frequency using EM calibrators. No method of verification is used. In the EM method of calibration, the seismometer mass is driven by a known sinusoidal force and the magnification is calculated using the relationships between the sinusoidal force and the recorded amplitude.

3. INTERPRETATION OF COLUMN TITLES

The column titles appearing in this bulletin are defined as follows.

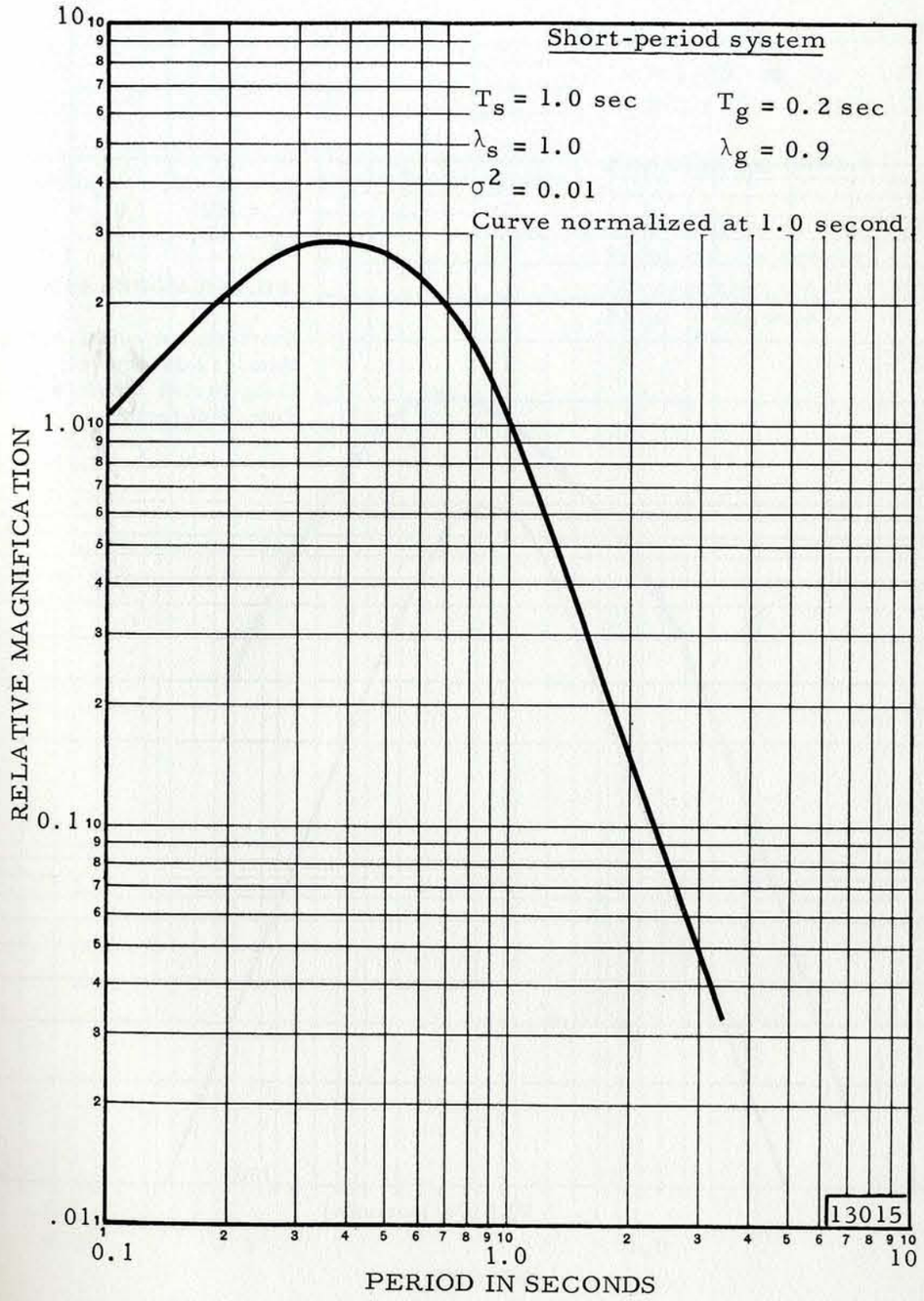


Figure 1. Frequency response of the Benioff short-period seismograph system

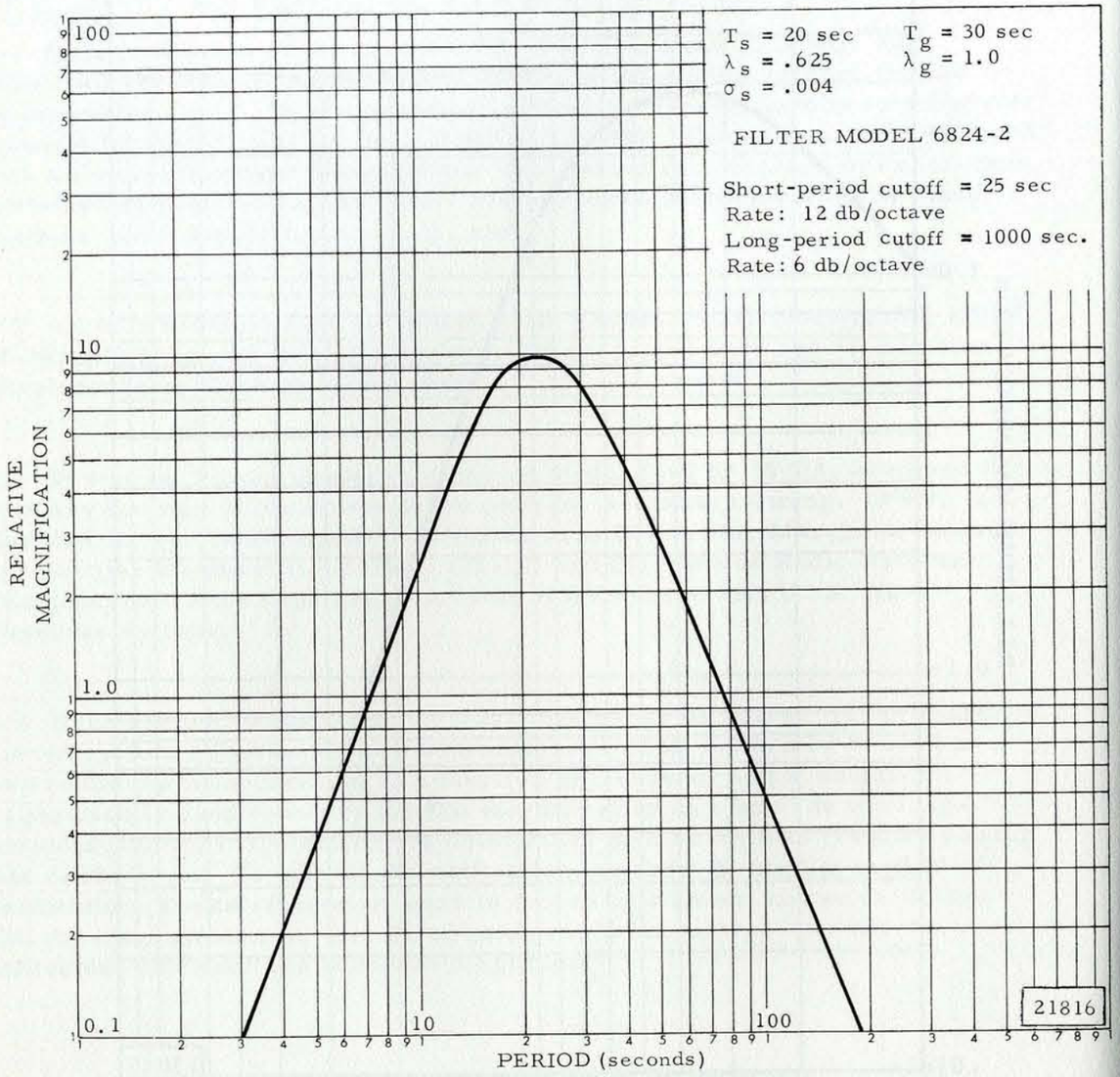


Figure 2. Frequency response of the Sprengnether long-period seismograph system

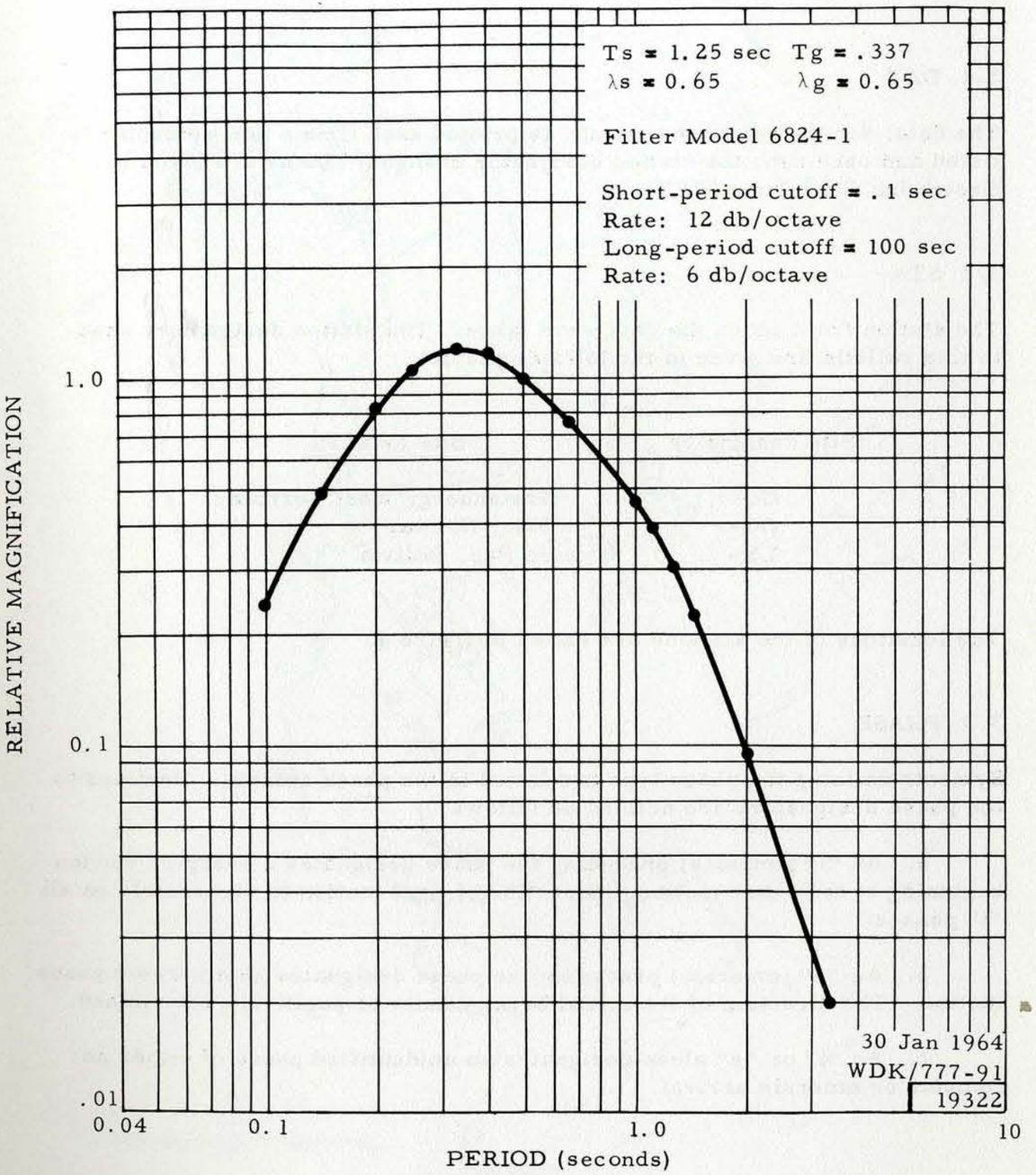


Figure 3. Frequency response of the Johnson-Matheson seismograph system

3.1 DAY

The date, for the day of the month, is printed each time a new epicenter is listed and each time the station designator changes. Dates are given in Greenwich Civil Time (GCT).

3.2 STA

The station from which the data were taken. The station designators used in this bulletin are given in the following table:

Site designator	Site location
GG-	Grafenberg, West Germany
OO-	Oslo, Norway
LZ-	La Paz, Bolivia

The locations of the stations are shown in figure 4.

3.3 PHASE

Symbols defining the phase type are listed in the phase column. Prefixes to the phase designators are defined as follows:

a. An "i" (impetus) preceding the phase designates a sharp or sudden beginning of the phase motion. Direction of first motion is discernible on all "i" phases.

b. An "e" (emersio) preceding the phase designates an emergent phase motion. The direction of the initial break cannot be positively determined.

c. An "i" or "e" alone designates an unidentified phase of either an impetus or emersio arrival.

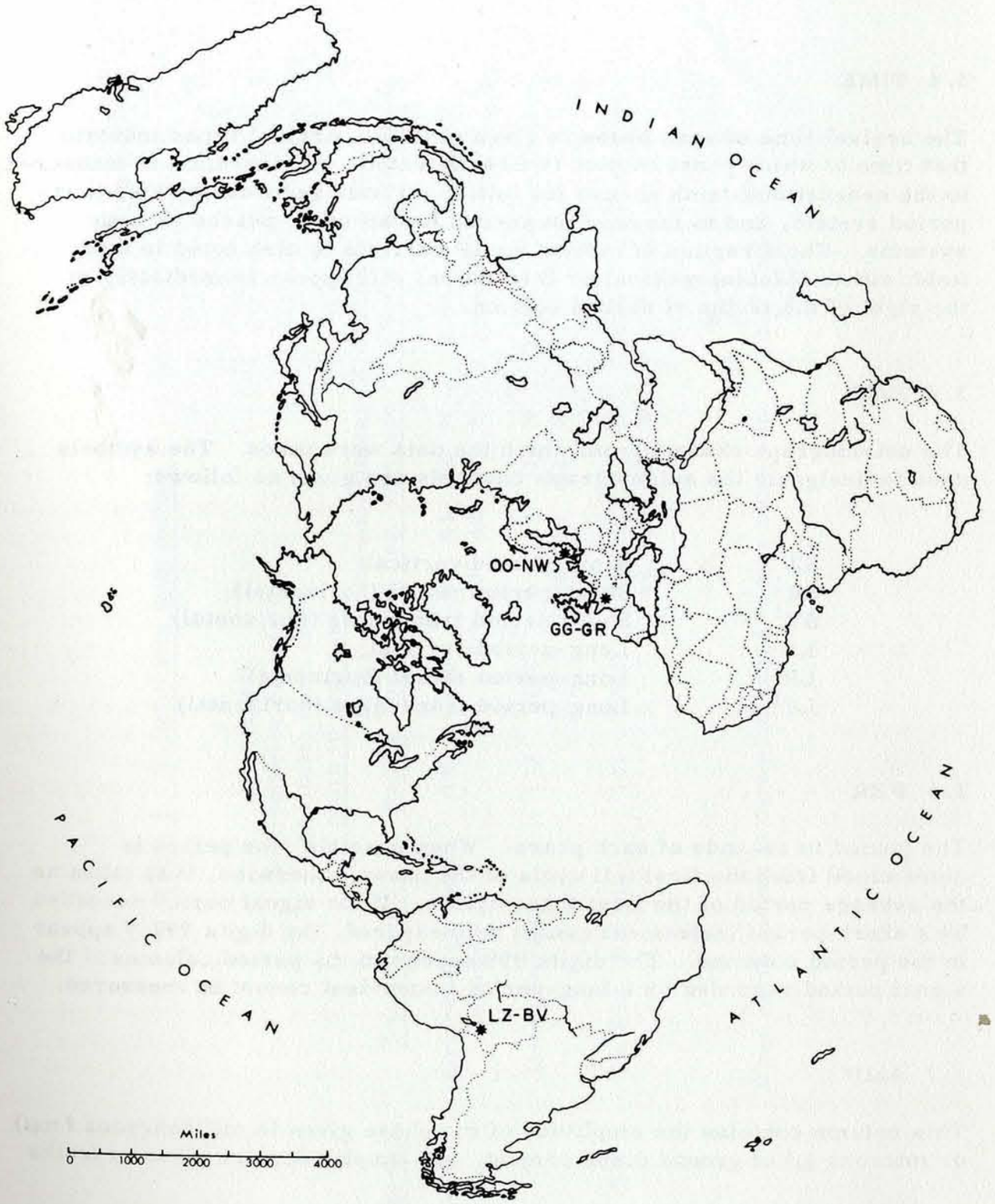


Figure 4. Bulletin sites

3.4 TIME

The arrival time of each phase is given in GCT. Arrival times indicate that time at which phase motion is first detected. Arrival time is measured to the nearest one-tenth second for initial arrivals recorded by the short-period system, and to the nearest second for all other phases on both systems. The direction of motion for iP arrivals is also noted in this field; either C (compression) or D (dilation) will appear immediately to the right of the tenths of second column.

3.5 INST

The seismograph channel from which the data were taken. The symbols used to designate the seismograph channels are given as follows:

SZ	Short-period vertical
SR[1]	Short-period radial (horizontal)
ST[1]	Short-period transverse (horizontal)
LZ	Long-period vertical
LR[1]	Long-period radial (horizontal)
LT[1]	Long-period transverse (horizontal)

3.6 PER

The period in seconds of each phase. When possible, the period is determined from the first full cycle of the phase; otherwise, it is taken as the average period of the first three cycles. If the signal period recorded by a short-period instrument cannot be measured, the digits 999.9 appear in the period columns. The digits 999 appear in the period columns if the signal period recorded by a long-period instrument cannot be measured.

3.7 AMP

This column contains the amplitude of the phase given in millimicrons (mμ) or microns (μ) of ground displacement. All amplitudes are given in tenths

[1]Table 1 gives the instrument orientation of the horizontal seismometers.

Table 1. Bulletin site information

Site designator	Site location	Horizontal seismometer orientation (Azimuth from true north in degrees[1]) Radial	Trans-verse	Site coordinates in deg, min, sec				Elevation in km	Rock type
GG-GR	Grafenberg, West Germany	140	230	49	41	32	N	0.53	Limestone
				11	12	55	E		
OO-NW	Oslo, Norway	138	228	61	03	17	N	0.56	Glacial drift
				10	51	58	E		
LZ-BV	La Paz, Bolivia	141	231	16	15	31	S	3.99	Limestone
				68	28	47	W		

[1]When earth moves in direction shown, trace moves up.

of units. All amplitudes are corrected for instrument response and are reported as one-half the peak-to-peak value. If the amplitude is reported in microns, a "U" appears in the column to the right of the tenths column. The column is left blank if the amplitude is reported in millimicrons. Amplitudes are measured from the largest pulse within the first 3 or 4 cycles when possible. The digits 9999.9 appearing in the amplitude columns indicate either a "clipped" signal or a trace amplitude too large to measure. When amplitudes are not calculated because of insufficient calibration data, the amplitude columns are left blank.

3.8 DIST

This is the distance from the recording station to the epicenter. All reported distances are calculated based on geocentric coordinates. Distance is given to the nearest one-tenth of a degree. Distances computed for unassociated data are determined from the S-P intervals. In some instances, surface groups are recorded which have traveled the major arc from the epicenter to the station. In such cases, the major arc distance is given.

3.9 MAG

The magnitudes provided are body wave magnitudes, m_b, as defined by Gutenberg and Richter[2]. They are determined only from the short-period vertical component of the P phase (initial arrival). The following equation is used:

$$m_b = \log_{10}(A/T) + Q$$

where:

m_b = body wave magnitude
A = one-half p-p earth amplitude of P phase in microns
T = period of P phase in seconds
Q = depth-distance factor for PZ given by Gutenberg and Richter[2], for distances greater than 16^o

[2]Gutenberg, B., and Richter, C. F., 1956, Magnitude and energy of earthquakes: Ann. Geofis., v. 9, p. 1-15

Magnitude computations for distances less than 16^o are based on extensions of the Q tables. Points from 10^o to 16^o were read from a curve in the Gutenberg-Richter paper, and an inverse cube relationship was used to extrapolate from 2^o to 10^o.

The average magnitude (sum of station magnitudes/number of stations) is listed on the last line of an epicenter printout.

4. INTERPRETATION OF THE U.S. COAST AND GEODETIC SURVEY DATA

The epicenter data reported by the USC&GS precede each list of associated phases. This information appears as follows:

Line 1 (from left to right)

First group:	Day of the month
Second group:	Origin time of the event
Third group:	Geographic coordinates of the epicenter
Fourth group:	Geographic description

NOTE

An asterisk (*) following the origin time indicates epicenters believed accurate to $1/2^o$ in latitude and longitude and to 50 km in depth.

Line 2 (from left to right)

First group:	Depth (h) of the hypocenter in kilometers
Second group:	Magnitude (MAG) as determined by Pasadena (PAS), Berkeley (BRK), Palisades (PAL), or USC&GS (CGS).

NOTE

MAG. (CGS) is m_b of Gutenberg and Richter from the P phase only. The magnitude quoted is an average value determined from data forwarded by cooperating Standard stations and other observatories.

5. REMARKS

5.1 The Geotechnical Corporation routinely receives and preprocesses data collected from three overseas field stations. Information on background levels, magnification levels, operational procedures, available records, and other data can be provided to interested organizations. Requests for such information should be made to the attention of:

THE GEOTECHNICAL CORPORATION
3401 Shiloh Road
Garland, Texas 75041

Attn: Mr. J. M. Whalen

5.2 LZ-BV was transferred to Observatorio San Calixto on 15 February 1965.

5.3 The February 1965 Seismological Bulletin Number 38A is the final bulletin to be published by The Geotechnical Corporation containing seismic data from La Paz, Bolivia, Oslo, Norway, and Grafenberg, West Germany. The following organizations are now in charge of operations of the three stations listed above.

Observatorio San Calixto, La Paz, Bolivia
(Father Ramon Cabre, S. J.)

Jordskel, University of Bergen, Bergen, Norway
(Professor A. Kvale, Director)

Geophysical Institute of the Technical University,
Hertzstrausse 16, Karlsruke, Germany
(Dr. Mueller)

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
1	LZ-	eL	00 33 25	LZ	25	102.5		
1	02 20 52.*		51.3 N 178.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
1	05 27 04.5		18.6 S 178.1 W FIJI ISLANDS REGION H=472 KM MAG 5.60 CGS					
1	LZ-	eP	05 40 16.3	SZ	0.9	15.7	102.6	5.70
		esPP	46 55	LZ	15	270.3		
		eS	51 23	LR	25	277.7		
		esS	54 40	LR	24	381.3		
		e	06 06 10	LT	25	222.2		
		eL	08 50	LT	28	207.6		
1	00-	eP'	05 45 25.9	SZ	0.9	14.4	137.1	
		ePP	48 21	SZ	1.0	28.2		
1	06 49 01.*		51.4 N 178.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
1	LZ-	eP	08 19 04.0	SZ	0.4	.7		
1	LZ-	eL	08 20 17	ST	0.7	2.4		
1	08 31 20.7		21.4 S 178.6 W FIJI ISLANDS REGION H=510 KM MAG 5.30 CGS					
1	LZ-	eP	10 48 12.5	SZ	0.4	3.1	3.1	
		eS	48 51	ST	0.5	2.9		
1	LZ-	eL	15 41 00	LZ	18	125.6		
1	15 43 53.*		13.1 N 89.6 W EL SALVADOR H= 62 KM MAG 4.20 CGS					
1	LZ-	iP	19 11 33.9	SZ	0.3	9999.9	2.0	
		eS	12 00	SR	999.9	9999.9		
1	19 27 12.*		5.8 S 147.4 E EAST NEW GUINEA REGION H= 80 KM MAG 5.00 CGS					
1	LZ-	eP'	19 46 26.0	SZ	1.0	7.8	138.3	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		e	46 34	SZ	1.0	17.6		
1	LZ-	eP	19 50 35.0	SZ	0.5	2.2		
1	23 50 19.4		10.3 S 161.6 E SOLOMON ISLANDS H= 64 KM					
2	01 14 34.*		14.1 N 92.4 W NEAR COAST OF CHIAPAS, MEX. H= 33 KM MAG 3.90 CGS					
2	02 48 51.*		5.5 S 147.0 E EAST NEW GUINEA REGION H=217 KM MAG 5.10 CGS					
2	03 37 13.9		14. N 91.0 W GUATEMALA H= 33 KM MAG 4.90 CGS					
2	LZ-	eLQ	03 50 20	LT	26.	224.9	37.4	
		eLR	53 25	LZ	19	368.0		
2	LZ-	eP	03 39 23.0	SZ	0.7	3.8		
2	03 46 36.2		14.3 N 90.4 W GUATEMALA H= 94 KM					
2	LZ-	eLQ	04 04 05	LT	28.	212.4	37.3	
		eLR	07 32	LZ	19	349.3		
2	03 53 11.8		17.3 S 178.8 W FIJI ISLANDS REGION H=504 KM MAG 4.00 CGS					
2	04 13 41.1		38. N 142.1 E OFF E. COAST HONSHU, JAPAN H= 33 KM MAG 4.80 CGS					
2	LZ-	eP*1	04 33 18.0	SZ	1.0	5.8	145.5	
		e	33 34	SZ	1.1	16.1		
2	04 30 33.1		17.2 N 94.5 W CHIAPAS, MEXICO H=140 KM MAG 5.30 CGS					
2	LZ-	eP	04 38 13.0	SZ	0.9	12.2	42.0	4.61

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		e	38 16	SZ	0.7	68.3		
2	LZ-	eP	05 15 10.5	SZ	0.5	14.0		
2	07 58 15.6		2.1 S 138.9 E WEST NEW GUINEA H= 12 KM MAG 6.10 CGS					
2	LZ-	eP*1	08 18 03.5	SZ	0.6	31.0	147.4	
		eL	09 09 45	LZ	30	184.2		
2	00-	eL	08 52 50	LT	30	376.5	109.4	
2	09 58 17.7		21.4 S 176.2 W FIJI ISLANDS REGION H=171 KM MAG 5.10 CGS					
2	LZ-	iP	10 09 25.6D	SZ	0.3	9.4		
2	LZ-	eL	13 57 25	LT	25	150.8		
2	15 56 51.		37.5 N 73.4 E TADZHIK SSR H= 33 KM MAG 5.80 CGS					
2	00-	eP	16 05 03.2	SZ	0.6	15.7	44.9	5.04
		eP	05 10	LZ	13	94.2		
		ePP	06 40	SZ	1.8	179.3		
		e	06 45	LR	25	189.0		
		eS	11 40	LT	24	663.0		
		e	14 10	LZ	18	639.9		
		eLQ	16 25	LT	43	5362.6		
2	LZ-	eP*	16 16 21.0	SZ	1.2	13.4	140.3	
		eSPP	31 47	LZ	21	153.3		
		eSS	37 35	LR	20	270.2		
		eSSS	43 10	LT	40	641.5		
		eLQ	57 30	LR	38	1226.1		
		eLR	17 08 15	LZ	27	565.5		
2	16 36 30.*		60.7 N 154.3 W SOUTHERN ALASKA H= 10 KM MAG 4.50 CGS					
2	19 21 54.*		50. N 177.1 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
2	21 14 20.3		5.7 S 152.0 E NEW BRITAIN REGION H= 42 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
2	LZ-	eP	23 36 34.3	SZ	0.5	9.3		
2	LZ-	eL	23 38 00	SR	0.8	2.5		
3	01 18 43.*		43.3 N 17.9 E YUGOSLAVIA H= 33 KM MAG 4.40 CGS					
3	LZ-	iP	03 29 19.3C	SZ	0.5	48.5	2.4	
		eS	29 50	ST	999.9	9999.9		
3	LZ-	eP	04 27 27.7	SZ	0.4	4.7	2.1	
		eS	27 56	SR	0.6	3.5		
3	LZ-	eP	05 30 36.1	SZ	0.5	1.8		
3	LZ-	eL	05 33 40	ST	0.8	6.7		
3	06 24 12.3		31.4 S 68.6 W SAN JUAN PROV., ARGENTINA H=115 KM MAG 4.60 CGS					
3	LZ-	iP	06 27 42.6D	SZ	1.0	56.8	15.1	4.78
		eS	30 25	LT	15	88.6		
		eL	30 39	ST	1.6	32.6		
		eL	32 50	LZ	21	179.1		
3	LZ-	eP	11 35 12.5	SZ	0.8	5.8		
3	15 15 29.*		17.6 N 104.9 W OFF COAST OF MICHOACAN, MEX. H= 33 KM MAG 3.70 CGS					
3	LZ-	eL	15 41 00	LZ	20.	137.1	49.2	
3	18 26 05.3		14.2 S 172.7 E NEW HEBRIDES ISLANDS REGION H=634 KM					
3	18 28 51.7		13.9 N 92.0 W OFF COAST OF CHIAPAS, MEXICO H= 56 KM MAG 4.70 CGS					
3	LZ-	eP	18 36 08.1	SZ	1.0	5.8	37.9	4.38
		eS	42 10	LT	17	100.7		
		eLQ	47 25	LT	27	542.0		
		eLR	49 32	LZ	26	208.5		
3	18 35 12.*		16.1 N 90.3 W MEXICO GUATEMALA BORDER H= 33 KM MAG 4.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
3	21 25 51.*		18.8 N 97.0 W VERA CRUZ, MEXICO H=100 KM MAG 4.00 CGS					
3	LZ-	e	21 33 24	SZ	1.0	11.7	44.7	
4	LZ-	eP	00 11 48.7	SZ	1.5	26.1		
4	LZ-	e	00 14 55	SZ	1.6	10.5		
4	LZ-	e	00 16 35	LT	30			
4	LZ-	eL	00 22 00	LT	26			
4	00 56 23.*		45.5 S 73.8 W NEAR COAST OF SOUTHERN CHILE H= 33 KM MAG 5.10 CGS					
4	LZ-	eP	01 04 36.4	SZ	1.5	34.8		
4	LZ-	eP	01 55 50.2	SZ	0.6	5.5		
4	LZ-	eP	03 17 40.6	SZ	0.3	5.5		
4	LZ-	eS	03 18 13	ST	0.7	27.3		
4	03 25 00.8		51.8 S 139.7 E SOUTH OF AUSTRALIA H= 33 KM MAG 5.90 CGS					
4	LZ-	ePP	03 43 47	SZ	1.2	5.3	107.9	
		eSKS	50 00	LT	23			
		ePS	53 10	LT	30			
		eSS	58 55	LT	28			
		eL	04 14 45	LT	30			
4	GG-	eP*1	03 44 34.5	SZ	0.8	41.5	147.9	
		eP*1	44 48	LZ	14	517.2		
		eL	04 37 00	LZ	36	2502.3		
4	00-	eP*1	03 44 49.8	SZ	1.4	44.1	151.0	
4	04 33 09.5		3.9 N 128.7 E NORTH OF HALMAHERA H= 41 KM					
4	LZ-	eP*2	04 53 46.5	SZ	0.8	10.3	159.1	
4	04 53 57.7		51.1 N 178.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.80 CGS					
4	00-	eP	05 04 52.5	SZ	1.2	11.4	67.8	4.83
4	GG-	eP	05 06 01.5	SZ	1.0	25.5	79.0	5.13
							AVG.	4.98

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	05 01 21.8		51.3 N 178.6 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 7.75 CGS					
4	00-	eP	05 12 14.0	SZ	0.7	3.6	67.6	4.58
		e	12 18	SZ	0.7	20.9		
		e	12 33	SZ	999.9	9999.9		
		eL	30 30	ST	15.0	196.4U		
		eP'P'	40 48	SZ	1.5	18.1		
4	GG-	eP	05 13 21.0	SZ	1.1	31.4	78.8	5.19
		e	13 25	SZ	1.0	89.2		
		e	13 32	SZ	999.9	9999.9		
		eP	13 33	LZ	999	9999.9		
		eL	38 31	SZ	1.5	187.5		
4	LZ-	e	05 16 49	SZ	0.9	3.5	116.8	
		e	17 02	LZ	15			
		eP'	19 52	SZ	1.0	23.5		
		eSP	30 51	SZ	1.0	27.4		
		eL	48 26	SZ	12.0	56.9U		
							AVG.	4.88
4	05 19 17.*		50.1 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.70 CGS					
4	00-	eP	05 30 24.0	SZ	0.8	14.6	68.3	5.12
4	LZ-	e	05 20 16	ST	0.9	11.6		
4	00-	eP	05 37 17.0	SZ	0.8	3.6		
4	LZ-	eP	05 50 04.7	SZ	0.8	5.8		
4	00-	e	06 01 46	SZ	1.0	18.5		
4	00-	e	06 02 55	SZ	0.9	7.6		
4	06 04 58.*		51.7 N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 6.10 CGS					
4	00-	eP	06 15 46.8	SZ	1.2	20.9	66.9	5.14
4	GG-	eP	06 16 54.0	SZ	999.9	9999.9	78.0	
4	LZ-	eP'	06 23 45.6	SZ	1.0	9.8	119.0	
4	00-	e	06 06 35	SZ	0.6	4.1		
4	00-	e	06 07 18	SZ	0.4	12.7		
4	GG-	eP	06 07 52.5	SZ	0.8	41.5		
4	06 16 22.*		52.2 N 172.3 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.40 CGS					
4	00-	e	06 23 03	ST	7.0	56.5U		
4	06 34 17.		52.2 N 177.1 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	00-	eP	06 45 06.5	SZ	0.7	3.6	66.6	4.65
4	00-	eP	06 36 02.7	SZ	0.7	3.6		
4	06 37 05.4		52.6 N 172.0 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.70 CGS					
4	00-	eP	06 47 46.2	SZ	1.0	12.3	65.7	4.99
4	GG-	eP	06 48 54.5	SZ	0.8	30.1	76.8	5.37
							AVG.	5.18
4	06 39 30.1		51.7 N 175.8 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.90 CGS					
4	00-	eP	06 50 20.0	SZ	0.9	9.5	67.0	4.93
4	GG-	eP	06 51 28.5	SZ	1.5	262.6	78.1	6.05
							AVG.	5.49
4	LZ-	eP	06 49 43.5	SZ	1.0	15.6		
4	06 52 51.7		52.2 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.50 CGS					
4	00-	eP	07 03 37.0	SZ	0.9	8.5	66.2	4.88
4	GG-	eP	07 04 44.0	SZ	1.2	39.2	77.3	5.32
							AVG.	5.10
4	07 11 22.7		51.1 N 177.7 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.90 CGS					
4	00-	eP	07 22 17.4	SZ	0.7	9.8	67.7	5.02
4	GG-	eP	07 23 14.3	SZ	0.9	78.4	78.9	5.68
							AVG.	5.35
4	07 14 58.7		52. N 173.9 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.80 CGS					
4	00-	eP	07 25 47.3	SZ	0.7	6.7	66.5	4.91
4	GG-	eP	07 26 55.0	SZ	1.0	63.7	77.6	5.63
							AVG.	5.27
4	07 23 12.3		51.9 N 173.2 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.50 CGS					
4	00-	eP	07 34 00.0	SZ	0.8	8.7	66.5	4.97
4	GG-	eP	07 35 09.0	SZ	1.0	31.8	77.6	5.33
							AVG.	5.15
4	LZ-	eP	07 27 33.4	SZ	1.1	11.5		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	LZ-	eP	07 28 31.0	SZ	1.5	39.2		
4	07 31 58.9		50.6 N 176.9 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					
4	07 40 27.*		50.9 N 177.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.00 CGS					
4	LZ-	eP	07 40 33.2	SZ	1.1	4.6		
4	07 43 43.2		52.7 N 172.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.50 CGS					
4	00-	eP	07 54 25.0	SZ	0.8	3.6	65.7	4.56
4	07 51 40.*		52.3 N 174.5 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 5.00 CGS					
4	07 53 38.7		53.5 N 179.3 E RAT ALEUTIAN ISLANDS H= 30 KM					
4	07 56 31.*		51.6 N 174.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
4	08 00 41.*		52.7 N 175.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
4	08 04 09.4		52.1 N 172.8 E RAT ALEUTIAN ISLANDS H= 30 KM					
4	00-	eP	08 14 55.0	SZ	1.0	6.1	66.3	4.70
4	GG-	eP	08 16 04.0	SZ	1.0	19.1	77.4	5.09
							AVG.	4.89
4	08 06 16.6		51.9 N 174.3 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.60 CGS					
4	00-	eP	08 17 02.8	SZ	1.4	20.6	66.6	5.05
4	GG-	eP	08 18 11.0	SZ	1.2	49.0	77.8	5.39
							AVG.	5.22
4	08 10 09.6		52.1 N 173.3 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	00-	eP	08 22 02.5	SZ	0.5	1.3		
4	08 33 40.9		51.9 N 174.0 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.70 CGS					
4	00-	eP	08 44 28.8	SZ	1.5	25.4	66.6	5.14
4	GG-	eP	08 45 37.0	SZ	1.2	49.0	77.7	5.42
							AVG.	5.28
4	08 37 14.5		51.7 N 174.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.10 CGS					
4	00-	eP	08 47 56.5	SZ	0.8	1.4	66.8	4.16
4	GG-	eP	08 49 10.0	SZ	1.1	39.3	78.0	5.35
							AVG.	4.75
4	08 39 22.6		51.2 N 179.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.40 CGS					
4	00-	eP	08 50 18.0	SZ	1.0	7.4	67.7	4.78
4	08 40 40.9		51.3 N 179.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 6.88 CGS					
4	00-	eP	08 51 33.0	SZ	0.5	2.3	67.6	4.52
		e	51 36	SZ	0.9	9999.9		
4	GG-	eP	08 52 39.5	SZ	0.5	12.0	78.9	5.11
		e	52 42	SZ	0.6	80.0		
4	LZ-	eP'	08 59 21.0	SZ	1.0	7.8	116.3	
							AVG.	4.81
4	08 54 04.3		52. N 172.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.30 CGS					
4	LZ-	e	09 09 58	SZ	1.6	84.7	120.4	
4	08 57 55.5		52.1 N 174.6 E RAT ALEUTIAN ISLANDS H= 32 KM MAG 5.00 CGS					
4	LZ-	e	09 13 45	SZ	1.2	29.5	119.1	
4	08 59 17.9		52.4 N 173.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.50 CGS					
4	GG-	eP	09 11 11.2	SZ	0.7	15.8	77.2	5.18
4	LZ-	eP'	09 18 08.7	SZ	0.6	6.6	119.6	
4	09 00 31.5		51.9 N 174.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
4	GG-	eP	09 12 25.0	SZ	0.8	18.8	77.8	5.17

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	GG	e	09 00 58	ST	4.6	1903.2		
4	09 06 27.*		51.2 N 177.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.40 CGS					
4	GG	eP	09 18 28.0	SZ	1.2	29.4	78.8	5.12
4	09 11 55.5		50.9 N 174.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.30 CGS					
4	LZ	eP	09 17 25.0	SZ	2.0	65.3		
4	00	eP	09 19 50.6	SZ	1.5	29.0		
4	09 20 02.		51.6 N 176.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
4	09 35 20.3		51.8 N 176.6 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.20 CGS					
4	00	eP	09 46 11.0	SZ	1.2	7.6	66.9	4.71
4	09 37 28.4		51.8 N 176.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.30 CGS					
4	00	eP	09 48 19.5	SZ	1.3	11.8	66.9	4.89
4	00	eP	09 39 03.8	SZ	0.7	3.0		
4	09 42 51.6		51.8 N 174.6 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 5.10 CGS					
4	09 48 25.9		51.8 N 175.4 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.20 CGS					
4	09 52 02.9		51.5 N 175.9 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.60 CGS					
4	00	eP	10 02 54.0	SZ	1.3	16.6	67.2	5.01
4	10 01 01.5		51.7 N 174.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
4	10 04 30.1		52. N 173.2 E ALEUTIAN NEAR ISLANDS H= 40 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	10 12 25.7		51.8 N 176.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					
4	10 14 24.2		51.8 N 172.7 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 5.10 CGS					
4	10 22 44.*		50.5 N 170.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
4	10 26 21.1		51.3 N 171.9 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
4	10 30 40.8		51.8 N 173.3 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.70 CGS					
4	10 35 13.7		51.7 N 174.5 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.80 CGS					
4	10 38 44.6		51.7 N 175.2 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS					
4	10 39 32.*		52.2 N 172.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.20 CGS					
4	10 41 33.9		51.5 N 176.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.10 CGS					
4	11 00 27.6		51.5 N 176.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					
4	00	eP	11 11 20.0	SZ	0.8	2.1	67.2	4.31
4	11 06 23.*		52. N 173.2 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.70 CGS					
4	11 08 46.		51.4 N 176.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS					
4	11 15 30.8		51.6 N 175.4 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	11 18 42.9		51.6 N 175.0 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.70 CGS					
4	11 20 47.8		52.3 N 173.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
4	11 23 10.7		52.1 N 172.9 E RAT ALEUTIAN ISLANDS					
			H= 15 KM MAG 4.90 CGS					
4	11 25 01.*		51.1 N 177.5 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.80 CGS					
4	11 27 22.		51.5 N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 5.10 CGS					
4	00-	eP	11 38 12.5	SZ	1.0	4.9	67.1	4.63
4	11 33 11.7		53.9 N 174.9 E ALEUTIAN NEAR ISLANDS					
			H= 35 KM MAG 5.30 CGS					
4	11 36 05.*		52.3 N 175.7 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.20 CGS					
4	11 48 23.9		51.2 N 177.2 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.70 CGS					
4	00-	eP	11 59 17.4	SZ	0.6	3.1	67.6	4.57
4	11 58 06.9		51.6 N 176.3 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 5.10 CGS					
4	00-	eP	12 08 56.8	SZ	1.3	9.5	67.1	4.74
4	12 06 04.3		52.6 N 172.1 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 6.50 CGS					
4	LZ-	eP'	12 24 56.3	SZ	1.0	5.8	120.5	
		ePP	26 26	SZ	1.5	26.1		
4	00-	eL	12 38 00	LZ	999	9999.9	65.7	
4	12 20 05.*		51.5 N 178.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
4	LZ-	ePD	12 35 00	SZ	1.2	24.1	116.8	
		eP'	38 36	SZ	2.1	66.0		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	12 42 14.4		51.6 N 177.0 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.70 CGS					
4	12 44 13.*		52. N 177.7 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					
4	12 50 57.5		51.6 N 174.8 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.20 CGS					
4	00-	eP	13 01 49.0	SZ	1.3	91.7	67.0	5.77
4	12 53 07.7		52.1 N 174.2 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.30 CGS					
4	13 00 37.*		52.2 N 171.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					
4	13 07 02.8		52.5 N 179.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
4	13 09 33.*		51.2 N 179.2 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.30 CGS					
4	13 11 51.2		53.8 N 177.3 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.00 CGS					
4	13 12 39.2		51. N 175.5 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.90 CGS					
4	13 23 42.*		51.4 N 176.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					
4	13 29 54.6		51.6 N 174.7 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.70 CGS					
4	00-	eP	13 40 45.9	SZ	0.7	14.2	67.0	5.22
4	13 33 12.9		51.8 N 174.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.10 CGS					
4	13 36 11.8		51.3 N 175.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	13 38 52.*		52.7 N 175.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					
4	13 45 08.*		50.7 N 179.1 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.10 CGS					
4	13 52 04.*		51.7 N 174.4 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.50 CGS					
4	14 02 25.		51.2 N 177.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					
4	14 04 47.*		51.3 N 175.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
4	14 13 23.9		52.1 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.00 CGS					
4	14 18 27.9		53. N 171.0 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 6.25 CGS					
4	00-	eP	14 29 05	LZ	22	2727.2	65.2	
		eP	29 07	SZ	0.9	110.0		6.00
		eS	37 50	ST	2.2	475.8		
		eS	37 50	LT	20	4272.2		
		ePS	38 30	LT	999	9999.9		
		eL	50 10	LZ	999	9999.9		
4	LZ-	eP'	14 37 20.0	SZ	1.0	9.8	121.1	
4	14 29 44.7		51.4 N 176.6 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.20 CGS					
4	00-	eP	14 40 38.0	SZ	1.2	29.3	67.3	5.27
4	14 30 26.6		51.3 N 176.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.30 CGS					
4	00-	eP	14 41 19.0	SZ	0.8	25.4	67.4	5.39
4	14 39 33.*		51.3 N 173.8 E ALEUTIAN NEAR ISLANDS					
			H= 35 KM MAG 4.30 CGS					
4	14 41 53.4		51.4 N 176.8 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	14 42 59.2		51.2 N 179.3 E RAT ALEUTIAN ISLANDS					
			H= 31 KM MAG 5.10 CGS					
4	LZ-	eP	14 47 24.9	SZ	1.4	14.5		
4	14 48 53.4		51.6 N 173.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.90 CGS					
4	15 03 33.8		51.4 N 175.7 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.60 CGS					
4	15 06 06.4		51.7 N 174.2 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.70 CGS					
4	15 14 50.		51.3 N 175.6 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.80 CGS					
4	15 31 14.1		52.3 N 172.3 E RAT ALEUTIAN ISLANDS					
			H= 45 KM MAG 5.10 CGS					
4	15 44 46.4		52.3 N 174.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
4	15 49 52.6		51.2 N 175.4 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.90 CGS					
4	15 51 25.5		53.1 N 170.8 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 6.25 CGS					
4	00-	eP	16 02 02.5	SZ	1.4	283.9	65.1	6.19
		eL	23 00	LZ	32	2101.4		
4	LZ-	eP'	16 10 18.3	SZ	1.0	3.9	121.2	
		ePP	11 42	SZ	1.8	29.0		
4	15 59 32.3		52.1 N 172.2 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.90 CGS					
4	16 03 35.8		50.6 N 177.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.20 CGS					
4	LZ-	eP	16 20 20.9	SZ	0.9	5.2		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	16		28 14.6 51.5 N 176.4 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.00 CGS					
4	16		32 36. 52. N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.20 CGS					
4		00- eP	16 43 24.2	SZ	0.9	14.6	66.4	5.12
4	16		51 33.9 51.8 N 176.4 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.80 CGS					
4	17		03 43.8 52.8 N 171.8 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.30 CGS					
4	17		04 35.4 51.3 N 176.9 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 5.20 CGS					
4		00- eP	17 15 30.5	SZ	1.0	23.8	67.4	5.31
4	17		14 44. 51.2 N 174.2 E ALEUTIAN NEAR ISLANDS					
			H= 33 KM MAG 4.30 CGS					
4	17		17 29.4 51.7 N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.70 CGS					
4	17		20 35.* 51.3 N 179.0 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 4.50 CGS					
4	17		30 36.8 51.9 N 172.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					
4	17		47 01.* 51.5 N 175.7 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.00 CGS					
4	17		50 43.4 51.9 N 175.2 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.00 CGS					
4	17		59 28.* 52.1 N 172.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.20 CGS					
4	18		01 29.8 51.6 N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	18		06 57.* 50.9 N 175.5 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 5.00 CGS					
4	18		13 50.9 51.9 N 173.3 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.00 CGS					
4	18		34 07.3 51.2 N 176.7 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.30 CGS					
4		00- eP	18 45 00.6	SZ	1.3	73.3	67.5	5.63
4	18		39 47.2 51.5 N 174.8 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.10 CGS					
4		00- eP	18 50 46.0	SZ	0.8	11.2	67.1	5.05
4	18		43 45.9 51.3 N 177.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.90 CGS					
4	18		48 11. 52. N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 5.30 CGS					
4		00- eP	18 58 58.5	SZ	0.7	16.6	66.6	5.26
4		LZ- eP	18 49 00.8	SZ	0.9	3.5		
4	18		51 49. 52.2 N 171.9 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.50 CGS					
4	18		56 04.5 51.2 N 178.2 E RAT ALEUTIAN ISLANDS					
			H= 37 KM MAG 4.80 CGS					
4	18		56 27.7 13.5 N 44.8 W NORTH ATLANTIC RIDGE					
			H= 33 KM MAG 5.50 CGS					
4		LZ- eP	19 03 43.4	SZ	1.1	16.1	37.7	4.73
		ePP	05 10	SZ	1.0	7.8		
4	18		58 12.6 52.1 N 173.0 E RAT ALEUTIAN ISLANDS					
			H= 42 KM MAG 4.80 CGS					
4	19		01 36.2 52.7 N 170.8 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	00-	eP	19 12 17.0	SZ	0.8	16.9	65.5	5.22
4	19 12 06.7		51.3 N 175.1 E RAT ALEUTIAN ISLANDS H= 36 KM MAG 5.10 CGS					
4	19 16 56.3		5.2 331.7 RAT ALEUTIAN ISLANDS H=480 KM MAG C.GS CGS					
4	19 21 46.*		51.5 N 176.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
4	19 33 29.1		52. N 172.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
4	19 38 13.		51.5 N 174.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
4	LZ-	eP	19 57 04.0	SZ	2.8	212.5	119.3	
4	19 44 05.6		13.3 N 44.8 W NORTH ATLANTIC RIDGE H= 33 KM MAG 5.40 CGS					
4	LZ-	eP	19 51 20.5	SZ	1.1	92.2	37.6	5.49
		ePP	52 49	SZ	1.2	53.7		
		ePCP	53 29	SZ	2.5	300.0		
4	00-	eP	19 54 30.5	SZ	1.3	45.8	62.2	5.46
							AVG.	5.47
4	19 54 37.1		51.6 N 175.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.20 CGS					
4	19 57 49.1		51.6 N 174.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.30 CGS					
4	00-	eP	20 08 41.1	SZ	0.7	18.9	67.0	5.36
4	20 05 42.2		51.6 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
4	20 15 40.5		51.5 N 177.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	20 17 17.2		51.5 N 174.2 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.80 CGS					
4	20 21 42.*		51.9 N 170.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
4	20 23 15.*		51.5 N 175.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.60 CGS					
4	20 32 25.1		51.6 N 176.6 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.40 CGS					
4	20 47 12.1		51.5 N 175.4 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.30 CGS					
4	LZ-	eP	21 21 50.5	SZ	0.4	4.7		
4	LZ-	eL	21 23 09	SR	0.8	8.0		
4	21 24 05.7		51.6 N 174.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
4	21 29 38.9		52.4 N 174.7 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 5.10 CGS					
4	21 35 47.3		51. N 177.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					
4	21 38 47.		51.1 N 177.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
4	21 51 46.*		51.2 N 175.6 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
4	21 55 29.		51.6 N 176.3 E RAT ALEUTIAN ISLANDS H= 32 KM MAG 4.50 CGS					
4	22 13 07.*		51.2 N 177.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
4	22	14 04.	51.8 N 173.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
4	22	15 45.8	5.7 S 154.4 E SOLOMON ISLANDS H=183 KM MAG 4.30 CGS					
4	22	30 05.1	51.8 N 174.2 E RAT ALEUTIAN ISLANDS H= 31 KM MAG 5.40 CGS					
4	00-	eP	22 40 55.3	SZ	0.6	25.9	66.7	5.54
4	22	42 25.*	51.5 N 176.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
4	22	46 48.2	51.3 N 178.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
4	23	07 12.*	51. N 175.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
4	23	13 44.9	51.8 N 174.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
4	23	26 22.5	51.3 N 177.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.20 CGS					
5	00	23 00.9	51. N 177.5 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					
5	00	31 35.5	52. N 176.6 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.90 CGS					
5	00-	eP	00 42 23.0	SZ	0.7	11.8	66.7	5.11
		e	42 47	SZ	1.0	28.6		
5	00	42 22.2	52.2 N 172.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.10 CGS					
5	00-	eP	00 53 18.0	SZ	1.1	41.2	66.1	5.47
5	LZ-	eP	00 52 33.5	SZ	0.5	2.7		
5	00	58 28.*	51.6 N 173.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	01	06 14.*	52. N 173.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.90 CGS					
5	01	11 18.*	52.6 N 171.9 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.10 CGS					
5	01	21 24.9	51.4 N 177.3 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.70 CGS					
5	01	37 07.*	50.6 N 172.2 E ALEUTIAN ISLANDS REGION H= 33 KM MAG 4.20 CGS					
5	LZ-	eP	02 02 04.5	SZ	0.8	4.4		
5	02	05 03.*	50.9 N 178.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.40 CGS					
5	02	06 33.3	51.8 N 173.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.90 CGS					
5	02	08 00.*	52.1 N 171.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
5	02	17 30.*	53.2 N 171.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
5	02	28 29.2	52. N 173.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.50 CGS					
5	02	33 39.5	52. N 173.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.70 CGS					
5	02	58 28.5	51.5 N 174.9 E RAT ALEUTIAN ISLANDS H= 36 KM MAG 5.40 CGS					
5	00-	eP	03 09 21.0	SZ	0.4	4.9	67.1	4.98
		e	09 30	SZ	0.8	25.4		
5	03	02 46.*	51.7 N 176.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	03 43 02.*		50.7 N 173.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
5	03 51 39.*		51.9 N 176.8 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.20 CGS					
5	03 56 15.1		51.9 N 175.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
5	04 01 40.8		51.7 N 175.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
5	04 08 46.*		51.3 N 177.1 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.50 CGS					
5	04 12 46.		51.1 N 178.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.90 CGS					
5	04 23 11.*		51.5 N 172.2 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.50 CGS					
5	04 37 23.9		51.9 N 174.2 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					
5	04 46 45.6		51.4 N 174.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
5	05 05 17.1		52.2 N 173.1 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					
5	05 06 50.*		51.4 N 176.8 E RAT ALEUTIAN ISLANDS H= 46 KM MAG 4.80 CGS					
5	05 10 24.5		51.8 N 173.8 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.80 CGS					
5	05 13 20.3		52.6 N 172.4 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	05 51 46.*		51.5 N 171.9 E RAT ALEUTIAN ISLANDS H= 25 KM					
5	05 59 40.9		52. N 173.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.90 CGS					
5	06 25 23.1		51.8 N 177.0 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.50 CGS					
5	06 31 42.4		51.8 N 174.9 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.00 CGS					
5	06 39 49.6		51.8 N 175.1 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 6.38 CGS					
5	00-	eP	06 50 40.5	SZ	0.9	66.0	66.8	5.79
		eL	07 12 02	LZ	35	2698.3		
5	LZ-	eP'	06 58 38.5	SZ	1.1	6.8	118.9	
5	LZ-	eP	06 40 53.0	SZ	0.5	.9		
5	06 43 52.*		50.8 N 170.4 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.80 CGS					
5	06 48 31.*		51.6 N 174.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.50 CGS					
5	LZ-	iP	06 56 50.3C	SZ	0.4	9.4	2.3	
		eS	57 20	ST	0.7	20.3		
5	07 07 59.7		51.6 N 175.9 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.80 CGS					
5	07 19 15.		51.7 N 174.7 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.00 CGS					
5	00-	eP	07 30 04.0	SZ	0.9	18.3	66.9	5.19
5	07 29 16.2		51.6 N 175.2 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
5	07 31 32.4		51.6 N 176.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5			51.7 N 173.9 E ALEUTIAN NEAR ISLANDS H= 30 KM MAG 4.70 CGS					
5			17.3 S 179.0 W FIJI ISLANDS REGION H=477 KM					
5			51.6 N 173.9 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					
5			13.8 N 93.2 W OFF COAST OF CHIAPAS, MEX. H= 33 KM MAG 3.70 CGS					
5			51.6 N 174.8 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.50 CGS					
5			15.2 N 93.5 W NEAR COAST OF CHIAPAS, MEX. H= 17 KM MAG 4.10 CGS					
5	LZ-	eP	08 42 54.0	SZ	1.0	5.8	39.8	4.21
5	LZ-	eP	08 48 18.5	SZ	0.7	3.8		
5			52.2 N 175.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
5			51.6 N 176.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
5	LZ-	eP	09 17 50.0	SZ	0.5	1.8	2.6	
		eS	18 26	ST	0.5	1.1		
5			51.6 N 178.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
5			52.3 N 174.3 E RAT ALEUTIAN ISLANDS H= 41 KM MAG 6.50 CGS					
5	00-	eP	09 42 53.4	SZ	1.0	224.2	66.2	6.23
		eL	10 04 00	LZ	30	6514.3		
5	LZ-	eP	09 50 56.5	SZ	1.0	9.7	119.3	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		ePP	52 29	SZ	1.5	21.7		
		ePKKP	10 01 11	SZ	1.2	18.7		
5			51.7 N 173.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
5			52.4 N 172.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.50 CGS					
5			52.2 N 174.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.90 CGS					
5			52.1 N 175.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
5			52.6 N 174.8 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.40 CGS					
5			52.1 N 176.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.80 CGS					
5			52.3 N 172.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					
5			51.3 N 177.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
5			50.5 N 177.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
5			50.3 N 176.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS					
5			50.9 N 177.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
5			52.6 N 175.5 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	LZ-	eP	11 49 45.0	SZ	0.4	3.1	3.2	
		eS	50 25	ST	0.7	1.9		
5	11 53 50.1		51.5 N 173.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.50 CGS					
5	12 08 33.*		51. N 172.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
5	12 23 00.*		52.4 N 172.5 E ALEUTIAN NEAR ISLANDS H= 30 KM MAG 3.60 CGS					
5	12 29 25.9		51.2 N 177.7 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
5	12 37 00.*		51.6 N 175.1 E RAT ALEUTIAN ISLANDS H= 10 KM MAG 4.30 CGS					
5	12 42 15.*		50.5 N 172.7 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.10 CGS					
5	12 50 19.*		51.1 N 174.7 E RAT ALEUTIAN ISLANDS H= 10 KM MAG 4.20 CGS					
5	12 55 41.8		51.7 N 173.8 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.00 CGS					
5	13 05 49.5		51.7 N 173.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					
5	13 16 34.*		51.3 N 176.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
5	13 23 22.*		51.7 N 175.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
5	13 26 43.9		51.2 N 175.3 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	13 38 46.7		52. N 174.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.50 CGS					
5	00-	eP	13 49 34.2	SZ	1.2	72.4	66.5	5.68
5	13 51 48.6		52.1 N 173.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.90 CGS					
5	00-	eP	14 02 35.1	SZ	0.8	12.2	66.3	5.08
5	14 08 22.7		51.6 N 174.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.80 CGS					
5	00-	eP	14 19 12.5	SZ	0.9	32.5	66.9	5.45
5	14 17 34.*		51.2 N 173.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.60 CGS					
5	14 27 11.*		51. N 176.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.50 CGS					
5	14 28 42.2		51.8 N 174.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.30 CGS					
5	00-	eP	14 39 32.0	SZ	0.8	13.9	66.7	5.15
5	14 38 14.5		51.7 N 174.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
5	14 54 10.*		51.1 N 177.9 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.40 CGS					
5	15 14 36.6		51.3 N 176.8 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.60 CGS					
5	15 21 31.*		51.5 N 173.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
5	15 30 00.6		51.5 N 175.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.20 CGS					
5	15 55 02.4		52.2 N 173.1 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.70 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5		16 04 02.8	51.4 N 176.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.40 CGS					
5		16 08 17.6	51.5 N 174.2 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.90 CGS					
5		16 31 49.*	51.3 N 176.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
5		16 39 57.	52.1 N 172.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					
5	LZ-	eP	16 40 21.0	SZ	0.5	5.5		
5		16 50 49.1	51.5 N 174.1 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					
5		17 02 06.*	51.2 N 172.8 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 3.80 CGS					
5		17 17 29.7	51.5 N 173.3 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.80 CGS					
5		17 30 48.*	53.7 N 174.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS					
5		18 13 01.9	51.6 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
5		18 16 07.6	51.9 N 173.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.10 CGS					
5		18 21 26.*	51.6 N 175.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
5		18 24 02.8	51.6 N 174.0 E RAT ALEUTIAN ISLANDS H= 34 KM MAG 5.30 CGS					
5		18 55 48.*	51.9 N 174.9 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5		19 00 41.9	52. N 173.2 E RAT ALEUTIAN ISLANDS H= 27 KM MAG 5.50 CGS					
5		19 28 16.*	51.8 N 171.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
5		20 10 23.*	51.7 N 173.4 E ALEUTIAN NEAR ISLANDS H= 30 KM MAG 4.40 CGS					
5	00-	eP	20 11 37.0	SZ	1.5	124.6		
5	LZ-	eP	20 16 34.0	SZ	0.6	16.5		
5		20 39 09.4	51.2 N 176.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
5		20 47 13.3	51.9 N 174.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.70 CGS					
5	00-	eP	20 58 01.7	SZ	0.7	39.8	66.6	5.65
		eP	58 03	LZ	17	947.5		
		e	21 06 44	LZ	23	744.5		
		e	11 46	LT	25	1493.2		
		eL	19 27	LZ	33	3329.7		
5		21 26 37.*	53.2 N 176.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
5		21 30 39.9	51.4 N 177.1 E RAT ALEUTIAN ISLANDS H= 41 KM MAG 5.00 CGS					
5		21 43 59.7	51.3 N 176.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.00 CGS					
5		21 48 25.8	51.1 N 178.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.40 CGS					
5	00-	eP	21 59 21.4	SZ	1.0	23.5	67.7	5.28
5	LZ-	iP	22 15 40.8D	SZ	0.4	9999.9	1.6	
5		22 15 59.5	51.5 N 176.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
5	00-	eP	22 26 52.3	SZ	0.9	25.3	67.2	5.37
		e	27 07	SZ	0.9	43.4		
		eL	49 50	LZ	30	1112.2		
5	LZ-	eS	22 16 04	ST	0.5	9999.9	1.6	

5 22 42 43.4 52.4 N 174.0 E ALEUTIAN NEAR ISLANDS
H= 33 KM MAG 4.30 CGS

5 22 49 53.* 52.3 N 171.2 E ALEUTIAN NEAR ISLANDS
H= 33 KM MAG 4.60 CGS

5 23 14 14.* 51.3 N 173.0 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.50 CGS

5	00-	eP	23 37 17.7	SZ	0.7	18.9		

6 00 08 17. 51.8 N 174.8 E RAT ALEUTIAN ISLANDS
H= 25 KM MAG 4.60 CGS

6 00 12 05.* 51.7 N 171.3 E ALEUTIAN NEAR ISLANDS
H= 30 KM MAG 4.40 CGS

6 00 32 57.* 52.6 N 171.8 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.40 CGS

6 00 42 45.* 52.1 N 173.4 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.10 CGS

6 01 15 39.9 52.6 N 171.2 E RAT ALEUTIAN ISLANDS
H= 20 KM MAG 4.80 CGS

6	00-	eP	01 26 32.2	SZ	1.0	16.9	65.6	5.17

6 01 40 33.2 53.2 N 161.9 W SOUTH OF ALASKA
H= 33 KM MAG 6.40 CGS

6	00-	eP	01 51 17.7	SZ	0.9	231.7	66.0	6.31
		eP	51 18	LZ	13	8571.5		
		eS	02 00 10	LT	999	9999.9		
		eS	00 17	SR	3.0	991.1		
		eSS	04 24	LT	26	3875.4		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eSSS	07 44	LT	999.	9999.9		
		eLQ	09 48	LT	999	9999.9		
		eLR	12 00	LZ	999	9999.9		

6 02 07 01.* 50. N 170.4 E RAT ALEUTIAN ISLANDS
H= 25 KM MAG 4.40 CGS

6 02 09 15.* 51.5 N 174.2 E RAT ALEUTIAN ISLANDS
H= 25 KM MAG 4.60 CGS

6	00-	e	02 19 44	SZ	1.4	56.0	67.0	

6 02 30 07.* 50.2 N 172.7 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.30 CGS

6 03 14 38.* 50.8 N 176.3 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.70 CGS

6 03 18 21.* 51.4 N 177.3 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.20 CGS

6 03 22 09.* 51.6 N 172.6 E ALEUTIAN NEAR ISLANDS
H= 33 KM MAG 4.50 CGS

6 03 22 27.* 51.3 N 173.9 E RAT ALEUTIAN ISLANDS
H= 30 KM MAG 5.20 CGS

6 03 27 24.* 51.6 N 173.2 E RAT ALEUTIAN ISLANDS
H= 15 KM MAG 4.60 CGS

6 03 39 15.5 51.5 N 175.3 E RAT ALEUTIAN ISLANDS
H= 31 KM MAG 5.10 CGS

6 03 47 54.1 35.1 N 26.9 E CRETE
H= 50 KM MAG 5.40 CGS

6 04 02 53.* 52.1 N 175.7 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 5.90 CGS

6	00-	eP	04 13 40.6	SZ	0.8	30.6	66.5	5.48
		eP	13 42	LZ	24	2203.5		
		e	21 55	LT	25	1424.2		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		e	27 17	LT	29.	4587.4		
		eL	35 47	LZ	32	9999.9		
6	LZ-	eP'	04 21 50.0	SZ	1.0	7.8	118.5	
6	04 15 59.*		52.8 N 176.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
6	04 27 03.*		51.4 N 173.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
6	04 34 09.*		50.8 N 174.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
6	04 50 51.8		51.1 N 177.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.20 CGS					
6	00-	eP	05 01 47.1	SZ	0.7	9.3	67.7	5.00
6	05 16 55.*		50.9 N 176.7 E RAT ALEUTIAN ISLANDS H= 45 KM MAG 4.50 CGS					
6	05 32 12.2		51.5 N 175.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
6	05 54 25.*		51.4 N 172.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
6	06 08 35.*		51.6 N 173.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.10 CGS					
6	06 20 11.*		51.4 N 173.3 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.50 CGS					
6	06 23 39.		52. N 173.2 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.30 CGS					
6	00-	eP	06 34 25.4	SZ	1.0	23.5	66.4	5.28
6	06 28 06.3		51.2 N 177.6 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.10 CGS					
6	00-	eP	06 39 02.5	SZ	0.7	11.7	67.6	5.13

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6	06 36 21.*		51.5 N 176.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.80 CGS					
6	06 38 12.*		53. N 176.4 W ANDREANOF ALEUTIAN ISLANDS H= 30 KM MAG 4.50 CGS					
6	06 48 30.*		51.8 N 178.1 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.00 CGS					
6	06 52 03.*		52.3 N 173.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
6	07 07 50.*		51.5 N 172.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
6	07 08 48.*		51.7 N 172.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.40 CGS					
6	07 14 45.1		52.1 N 173.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
6	00-	eP	07 25 31.4	SZ	1.0	42.3	66.3	5.52
6	07 27 24.1		52.4 N 172.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
6	07 57 22.*		51.9 N 172.9 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.50 CGS					
6	08 14 08.8		13.8 N 89.3 W EL SALVADOR H= 16 KM MAG 4.30 CGS					
6	LZ-	eP	08 41 28.5	SZ	1.0	5.8		
6	08 42 17.*		53.6 N 175.7 W ANDREANOF ALEUTIAN ISLANDS H= 15 KM MAG 4.00 CGS					
6	08 46 51.2		51.9 N 174.0 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 6.00 CGS					
6	00-	eP	08 57 39.0	SZ	1.0	32.9	66.6	5.43

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6	08 54 38.9		52.1 N 175.4 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.40 CGS					
6	09 04 08.8		51.3 N 174.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.10 CGS					
6	09 21 35.*		51.1 N 173.6 E ALEUTIAN NEAR ISLANDS H= 30 KM MAG 4.50 CGS					
6	09 24 30.*		51.2 N 178.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
6	09 25 26.*		50.6 N 174.6 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.80 CGS					
6	10 12 43.*		51.1 N 173.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
6	10 30 54.*		51.2 N 173.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
6	10 32 01.*		51.9 N 173.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
6	10 53 46.2		41. S 75.6 W OFF COAST OF SOUTHERN CHILE H= 33 KM MAG 4.40 CGS					
6	LZ-	eP	10 59 14.0	SZ	0.7	6.4	25.4	4.35
6	10 59 48.*		50.7 N 173.7 E RAT ALEUTIAN ISLANDS H= 10 KM MAG 4.40 CGS					
6	LZ-	eP	11 11 15.5	SZ	0.4	88.2	2.2	
		eS	11 44	ST	0.5	9999.9		
6	11 17 08.*		51.7 N 173.2 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
6	11 32 15.8		51.5 N 174.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6	12 06 31.*		50.8 N 174.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
6	12 22 26.2		51.8 N 175.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
6	LZ-	eP	12 41 14.0	SZ	1.2	10.7	118.8	
6	12 51 38.1		51.8 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
6	13 15 14.7		51.7 N 175.2 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.80 CGS					
6	13 20 33.*		51. N 173.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
6	13 34 42.9		51.6 N 176.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
6	13 59 03.*		51.5 N 175.9 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					
6	14 11 10.1		51.7 N 174.2 E RAT ALEUTIAN ISLANDS H= 38 KM MAG 5.10 CGS					
6	14 23 36.1		51.7 N 173.8 E RAT ALEUTIAN ISLANDS H= 34 KM MAG 4.70 CGS					
6	14 34 32.*		53.9 N 160.9 W SOUTH OF ALASKA H= 35 KM MAG 4.70 CGS					
6	14 40 17.*		51.5 N 175.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
6	14 46 48.*		52.7 N 178.3 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
6	15 26 12.*		51.6 N 172.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6			51.6 N 174.4 E RAT ALEUTIAN ISLANDS					
	15	31 40.3	H= 40 KM MAG 4.50 CGS					
6			52.2 N 177.0 E RAT ALEUTIAN ISLANDS					
	15	40 48.*	H= 33 KM MAG 4.40 CGS					
6			52.4 N 174.4 E RAT ALEUTIAN ISLANDS					
	16	06 38.*	H= 33 KM MAG 4.20 CGS					
6			50.4 N 177.1 E RAT ALEUTIAN ISLANDS					
	16	27 54.*	H= 25 KM MAG 4.30 CGS					
6			51.3 N 176.7 E RAT ALEUTIAN ISLANDS					
	16	31 05.1	H= 33 KM MAG 4.70 CGS					
6			53.3 N 161.8 W SOUTH OF ALASKA					
	16	50 29.*	H= 33 KM MAG 6.50 CGS					
6			52.2 N 171.8 E RAT ALEUTIAN ISLANDS					
	16	55 31.4	H= 33 KM MAG 4.90 CGS					
6			51.5 N 172.3 E RAT ALEUTIAN ISLANDS					
	17	02 44.*	H= 33 KM					
6	LZ-	eP	17 04 36.5	SZ	1.0		3.9	
6	LZ-	eP	17 04 37	LZ	24			
6	LZ-	eL	17 08 15	LR	26			
6	LZ-	eL	17 08 33	ST	1.2		6.0	
6	LZ-	eP	17 20 20.0	SZ	1.4		18.0	
6			51. N 178.3 E RAT ALEUTIAN ISLANDS					
	17	26 52.*	H= 33 KM MAG 4.40 CGS					
6			50.8 N 175.6 E RAT ALEUTIAN ISLANDS					
	17	45 07.*	H= 33 KM MAG 5.20 CGS					
6			51.3 N 176.5 E RAT ALEUTIAN ISLANDS					
	18	07 24.7	H= 33 KM MAG 5.00 CGS					
6			51.5 N 176.5 E RAT ALEUTIAN ISLANDS					
	18	10 28.8	H= 35 KM MAG 5.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6			51.3 N 176.3 E RAT ALEUTIAN ISLANDS					
	18	39 20.*	H= 33 KM MAG 4.30 CGS					
6			51.3 N 176.2 E RAT ALEUTIAN ISLANDS					
	18	42 29.2	H= 25 KM MAG 5.00 CGS					
6			51.3 N 176.5 E RAT ALEUTIAN ISLANDS					
	19	19 52.*	H= 25 KM MAG 4.80 CGS					
6	LZ-	iP	19 41 55.4D	SZ	999.9	9999.9		
6			51.4 N 177.0 E RAT ALEUTIAN ISLANDS					
	19	48 12.*	H= 20 KM MAG 4.40 CGS					
6			52.1 N 174.6 E RAT ALEUTIAN ISLANDS					
	20	18 52.	H= 35 KM MAG 4.40 CGS					
6			51.2 N 176.5 E RAT ALEUTIAN ISLANDS					
	20	34 42.*	H= 33 KM MAG 4.20 CGS					
6			52.8 N 172.0 E RAT ALEUTIAN ISLANDS					
	21	02 59.6	H= 20 KM MAG 5.60 CGS					
6			51.8 N 171.8 E RAT ALEUTIAN ISLANDS					
	21	39 32.*	H= 33 KM MAG 4.20 CGS					
6	LZ-	eP	21 41 52.0	SZ	1.0		8.0	
6			51.1 N 174.1 E RAT ALEUTIAN ISLANDS					
	21	54 38.*	H= 33 KM MAG 4.20 CGS					
6			51.3 N 175.0 E RAT ALEUTIAN ISLANDS					
	22	15 09.*	H= 15 KM MAG 4.40 CGS					
6			51.8 N 174.6 E RAT ALEUTIAN ISLANDS					
	22	20 12.2	H= 33 KM MAG 4.30 CGS					
6			51.9 N 178.5 E RAT ALEUTIAN ISLANDS					
	22	26 10.5	H= 33 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
6			51.3 N 174.5 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.00 CGS					
6	LZ-	eL	23 35 55	LR	25	183.1	119.4	
6			50.3 N 171.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.10 CGS					
6			52. N 175.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.00 CGS					
6			50.7 N 172.6 E RAT ALEUTIAN ISLANDS					
			H= 31 KM MAG 4.50 CGS					
6			51.5 N 176.5 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.90 CGS					
6			51.9 N 173.4 E RAT ALEUTIAN ISLANDS					
			H= 31 KM MAG 5.20 CGS					
7			51.3 N 179.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
7	LZ-	eL	00 32 00	LR	28.	188.5		
7			50.8 N 176.9 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.40 CGS					
7			51. N 178.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					
7			51.9 N 171.8 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					
7			52.2 N 172.1 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 5.30 CGS					
7			51.3 N 172.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7			50.8 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.30 CGS					
7			51.4 N 173.4 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 6.00 CGS					
7	LZ-	eP'	02 35 58.5	SZ	1.0	10.0	120.0	
		ePP	37 25	LZ	14	314.2		
		ePS	47 15	LR	24	467.3		
		eSS	53 48	LR	40	9999.9		
		e	57 30	LR	22	397.8		
		eL	03 16 30	LR	21	9999.9		
7			52.4 N 170.3 E ALEUTIAN NEAR ISLANDS					
			H= 33 KM MAG 4.30 CGS					
7			52.1 N 172.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
7	LZ-	eP	03 20 54.0	SZ	0.7	10.6		
7	LZ-	e	03 21 39	SZ	0.6	11.3		
7			51.6 N 174.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					
7			51. N 176.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					
7			53.5 N 161.5 W SOUTH OF ALASKA					
			H= 30 KM MAG 4.80 CGS					
7			51.9 N 175.3 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.50 CGS					
7	LZ-	eL	05 10 00	LR	999	9999.9	118.8	
7			51.8 N 176.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.90 CGS					
7			51.5 N 175.0 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.90 CGS					
7			21.6 S 66.0 W SOUTHERN BOLIVIA					
			H=110 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7	LZ-	iP	04 39 11.5C	SZ	0.5	9999.9	5.4	
		eS	40 15	SR	999.9	9999.9		
7	05 17 06.*		50.8 N 174.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
7	05 31 55.*		51.1 N 175.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
7	LZ-	eP	05 49 44.0	SZ	0.5	10.5		
7	05 58 54.3		51.7 N 174.9 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.20 CGS					
7	06 02 26.*		51.9 N 174.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
7	06 29 59.*		51.1 N 173.4 E RAT ALEUTIAN ISLANDS H= 39 KM MAG 4.50 CGS					
7	06 56 42.*		50.9 N 178.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
7	07 25 42.*		51. N 175.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
7	07 45 17.*		52.2 N 174.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
7	08 08 19.*		51.9 N 174.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
7	LZ-	eP	08 15 31.5	SZ	0.3	9999.9	2.8	
		eS	15 56	SR	0.4	9999.9		
7	08 15 56.*		51.1 N 173.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
7	08 37 59.*		51.3 N 175.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7	08 40 05.3		51.8 N 174.7 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.10 CGS					
7	09 25 51.1		51.4 N 179.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.30 CGS					
7	LZ-	ePS	09 55 30	LR	999	9999.9	116.5	
		eL	10 22 20	LZ	32	9999.9		
7	09 28 31.*		44.1 N 128.6 W OFF COAST OF OREGON H= 33 KM MAG 4.20 CGS					
7	09 44 16.9		51.4 N 176.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.90 CGS					
7	09 48 59.*		51.3 N 173.6 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.40 CGS					
7	LZ-	eP	10 15 41.5	SZ	0.7	9.2	5.7	
7	LZ-	eS	10 16 48	SR	0.5	9999.9	5.7	
7	LZ-	eP	10 25 54.5	SZ	0.3	3.2	1.9	
		eS	26 20	ST	0.5	5.7		
7	LZ-	eP	11 17 37.5	SZ	0.5	15.3		
7	11 23 14.8		52.2 N 172.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.30 CGS					
7	LZ-	eL	12 23 20	LR	25	623.9	120.5	
7	11 30 40.8		53.3 N 161.9 W SOUTH OF ALASKA H= 10 KM MAG 5.00 CGS					
7	11 45 52.8		51.2 N 177.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.00 CGS					
7	12 07 46.7		51.1 N 179.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
7	12 21 21.1		53. N 171.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7		00- eP	12 32 02.0	SZ	1.0	27.9	65.3	5.37
7		GG- eP	12 33 10.2	SZ	0.6	14.1	76.4	5.20
		eL	13 00 00	LZ	30	523.2		
							AVG.	5.28
7		12 33 40.*	50.9 N 176.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
7		12 55 07.8	52.6 N 171.4 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.90 CGS					
7		13 20 46.3	51.1 N 175.8 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.30 CGS					
7		00- eP	13 31 40.8	SZ	1.0	18.6	67.5	5.13
7		13 53 13.*	51.8 N 175.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
7		14 47 11.6	51.7 N 174.6 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 5.10 CGS					
7		14 53 05.*	51. N 176.2 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					
7		15 06 50.*	51.5 N 173.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
7		15 12 28.8	51.4 N 172.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS					
7		15 28 51.*	51.7 N 174.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.50 CGS					
7		15 53 20.*	51.5 N 174.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
7		15 57 09.*	50.8 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
7		16 03 52.3	51.3 N 179.0 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7		16 47 17.*	51.9 N 171.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
7		17 13 08.2	52.2 N 173.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
7		00- eP	17 23 53.5	SZ	1.0	37.2	66.2	5.47
7		GG- eP	17 25 02.0	SZ	1.1	41.8	77.3	5.38
							AVG.	5.42
7		17 20 27.*	50.9 N 173.7 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.50 CGS					
7		17 35 44.*	50.2 N 172.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
7		17 40 17.*	50.9 N 173.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.60 CGS					
7		17 59 15.6	51.4 N 175.0 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.20 CGS					
7		18 12 07.*	50.8 N 178.2 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.40 CGS					
7		19 01 23.*	50.6 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
7		LZ- eP	19 05 57.0	SZ	0.7	3.9		
7		19 18 42.*	52.2 N 171.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
7		19 28 46.*	51.7 N 171.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
7		19 29 23.9	55.2 N 165.2 E KOMANDORSKY ISLANDS REGION H= 20 KM MAG 5.20 CGS					
7		GG- eP	19 40 58.5	SZ	1.0	22.6	73.2	5.18
		eL	20 09 00	LZ	22	198.9		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
7	20 10 33.7		51.2 N 178.2 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.70 CGS					
7	20 54 32.*		51.2 N 173.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
7	21 29 19.*		52.5 N 172.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
7	LZ-	eP	21 54 52.5	SZ	0.3	9999.9		2.0
		eS	55 19	ST	0.8	13.3		
7	22 57 02.		5.8 S 148.6 E NEW BRITAIN REGION H=125 KM MAG 4.30 CGS					
7	23 22 26.*		51.3 N 176.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
7	23 45 34.*		54. N 174.9 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.90 CGS					
8	00 37 07.*		50.8 N 174.5 E ALEUTIAN ISLANDS REGION H= 33 KM MAG 4.90 CGS					
8	LZ-	eP	01 00 55.0	SZ	0.5	3.4		4.6
		eS	01 51	SR	0.5	9999.9		
8	01 30 46.*		52.5 N 171.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
8	01 41 31.1		51.7 N 174.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
8	02 12 19.*		51.9 N 173.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.50 CGS					
8	02 26 41.5		51.3 N 179.3 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.00 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8	02 33 36.		50.8 N 171.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.90 CGS					
8	03 37 34.8		63.4 N 151.7 W CENTRAL ALASKA H= 31 KM MAG 4.50 CGS					
8	04 11 31.*		51.6 N 174.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
8	05 07 48.5		52.3 N 173.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.50 CGS					
8	LZ-	eP	05 14 40.5	SZ	0.5			2.8
8	05 18 46.*		51.6 N 171.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
8	05 25 42.*		51.6 N 172.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
8	05 35 18.*		50.8 N 176.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS					
8	06 30 49.		18.6 N 145.6 E MARIANA ISLANDS H=116 KM MAG 5.30 CGS					
8	LZ-	eP'2	06 50 21.0	SZ	1.5		13.3	147.4
8	06 43 04.*		50.9 N 173.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.90 CGS					
8	06 47 03.*		51.7 N 174.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
8	LZ-	eP'	07 06 03.0	SZ	1.2		22.0	119.2
8	07 04 42.*		51.2 N 172.0 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8	LZ-	eP	07 12 43.0	SZ	0.5	.9		
8	07 14 14.5		51.5 N 175.9 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.60 CGS					
8	LZ-	eL	08 15 05	LR	25	38.2	118.5	
8	LZ-	eLQ	07 14 35	LT	24.	308.1		
8	LZ-	eLR	07 15 37	LZ	16	616.1		
8	07 23 08.8		51.8 N 174.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.40 CGS					
8	00-	eP	07 33 58.0	SZ	1.0	51.1	66.7	5.61
8	GG-	eP	07 35 05.0	SZ	1.0	33.9	77.9	5.33
							AVG.	5.47
8	07 49 24.*		50.7 N 178.0 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.60 CGS					
8	07 57 14.*		51.3 N 179.5 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.80 CGS					
8	08 03 06.*		52. N 172.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 3.90 CGS					
8	08 09 53.*		51.3 N 175.4 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					
8	08 22 42.*		51.7 N 170.5 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.20 CGS					
8	LZ-	eP	09 04 28.0	SZ	0.7	6.6		
8	LZ-	e	09 14 40	LR	21	56.6		
8	LZ-	e	09 18 12	LR	23	139.2		
8	LZ-	eLR	09 20 33	LZ	25	375.9		
8	09 29 25.*		52.1 N 176.7 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.90 CGS					
8	LZ-	eP	09 33 14.0	SZ	0.2	43.2	2.1	
		eS	33 41	SR	999.9	9999.9		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8	09 37 51.*		52.2 N 177.6 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.40 CGS					
8	09 42 04.*		50.3 N 171.9 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.20 CGS					
8	09 58 04.*		50.3 N 176.6 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.00 CGS					
8	10 09 18.4		51.7 N 175.0 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.40 CGS					
8	10 17 48.*		52.1 N 171.6 E RAT ALEUTIAN ISLANDS					
			H= 26 KM MAG 4.40 CGS					
8	12 07 30.*		52.7 N 172.4 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.40 CGS					
8	12 37 42.*		17.3 S 179.0 W FIJI ISLANDS REGION					
			H=495 KM MAG 4.70 CGS					
8	13 34 23.3		51.4 N 176.6 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 4.80 CGS					
8	LZ-	eL	14 34 38	LZ	20	203.7	118.0	
8	LZ-	eP	13 50 07.5	SZ	0.2	16.8	2.1	
		eS	50 35	ST	0.3	10.8		
8	14 03 52.8		36.4 N 73.0 E AFGHANISTAN USSR BORDER REG.					
			H=220 KM MAG 5.10 CGS					
8	GG-	eL	14 17 10	LZ	25.	129.4		
8	14 17 37.*		17.5 S 179.0 W FIJI ISLANDS REGION					
			H=482 KM MAG 4.90 CGS					
8	15 37 03.*		55. N 165.2 E KOMANDORSKY ISLANDS REGION					
			H= 33 KM MAG 4.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8	15 41 19.7		52.5 N 172.0 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.10 CGS					
8	15 46 49.9		55.1 N 165.7 E KOMANDORSKY ISLANDS REGION H= 40 KM MAG 5.60 CGS					
8	00-	eP	15 57 10.0	SZ	0.8	52.2	62.5	5.69
		eP	57 11	LZ	8	1274.1		
		e	57 21	SZ	0.8	66.0		
		e	16 05 40	LZ	15	738.0		
		eLQ	12 35	LR	42	1187.2		
		eLR	18 05	LZ	30	1702.9		
8	GG-	eP	15 58 20.0	SZ	1.4	234.4	73.4	5.98
		eP	58 21	LZ	12	587.2		
		e	58 31	SZ	1.4	390.7		
		e	16 07 48	LZ	15	561.3		
		eL	22 45	LZ	31	887.3		
8	LZ-	eP'	16 05 46.0	SZ	1.7	36.5	123.4	
		ePP	07 37	LZ	15	462.8		
		ePS	16 55	LR	24	153.8		
		e	20 08	LR	20	247.1		
		eSS	24 25	LR	37	9999.9		
		e	29 13	LR	26	9999.9		
		eL	46 25	LZ	32	1005.4		
							AVG.	5.83
8	16 19 58.6		50.9 N 174.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					
8	17 03 17.*		55.1 N 165.3 E KOMANDORSKY ISLANDS REGION H= 33 KM MAG 4.80 CGS					
8	17 31 57.*		51.5 N 179.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
8	17 37 24.6		55.2 N 165.3 E KOMANDORSKY ISLANDS REGION H= 30 KM MAG 5.80 CGS					
8	00-	eP	17 47 46.0	SZ	0.6	15.5	62.3	5.32
		eL	18 08 15	LZ	30	230.9		
8	GG-	eP	17 48 55.5	SZ	1.1	40.5	73.3	5.36
							AVG.	5.34
8	17 55 00.*		55. N 164.6 E KOMANDORSKY ISLANDS REGION H= 33 KM MAG 4.30 CGS					
8	18 03 37.1		51.8 N 174.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
8	18 16 22.*		51.3 N 177.1 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.40 CGS					
8	18 23 21.*		51.3 N 176.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
8	19 09 28.*		50.5 N 177.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
8	LZ-	eP	19 43 09.0	SZ	0.5	3.8		
8	19 57 28.*		52.6 N 172.2 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.40 CGS					
8	20 17 39.*		52.3 N 171.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
8	21 31 02.5		28.7 N 142.2 E BONIN ISLANDS REGION H= 40 KM					
8	21 32 26.*		51.1 N 178.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
8	LZ-	eP	21 50 46.6	SZ	1.4	72.3		
8	21 59 33.*		51.1 N 176.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 3.90 CGS					
8	21 59 57.*		49.8 N 171.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
8	22 31 38.*		53.4 N 174.4 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.30 CGS					
8	22 32 51.*		31.6 S 178.4 W KERMADEC ISLANDS H= 54 KM					
8	23 25 52.6		55.1 N 165.2 E KOMANDORSKY ISLANDS REGION H= 40 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9			00 26 13.5	51.5 N 177.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS				
9			01 25 18.6	52.3 N 172.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS				
9			01 43 02.*	1.3 N 127.2 E HALMAHERA H=102 KM MAG 5.60 CGS				
9			03 43 10.*	51. N 177.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.90 CGS				
9			04 34 55.1	51.6 N 179.0 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.50 CGS				
9			05 42 06.8	18.8 S 169.2 E NEW HEBRIDES ISLANDS H=223 KM MAG 5.50 CGS				
9	GG-	eP*1	06 01 16.5	SZ	1.0	153.1	144.5	
9			06 01 15.*	51.8 N 176.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS				
9	LZ-	eP	06 22 48.0	SZ	0.3	3.9	1.8	
		eS	23 11	ST	0.6	47.0		
9	LZ-	eP	06 53 36.0	SZ	999.9	9999.9		
9	LZ-	eP	06 53 37	LZ	17	965.7		
9			07 18 41.*	50.4 N 172.6 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.20 CGS				
9			07 38 16.*	51.3 N 179.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS				
9			08 13 37.*	28.6 N 142.4 E BONIN ISLANDS REGION H= 33 KM MAG 4.70 CGS				
9	LZ-	eP*2	08 33 25.5	SZ	0.5	7.4	149.0	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9			09 08 57.8	52.2 N 172.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS				
9	LZ-	eP	09 20 14.0	SZ	0.7	23.1		
9	LZ-	e	09 20 28	SZ	0.7	52.6		
9	LZ-	eL	09 21 33	LR	17	9999.9		
9			09 54 34.*	51.2 N 177.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS				
9			09 56 05.*	52.1 N 172.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS				
9			10 16 23.*	51.1 N 176.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS				
9			10 42 58.*	51.1 N 173.1 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.30 CGS				
9			11 35 13.*	52. N 172.1 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.10 CGS				
9	LZ-	eP	11 49 52.0	SZ	0.5	2.7		
9	LZ-	e	11 50 51	SZ	0.6	11.0		
9			11 53 00.5	17. S 68.4 W PERU BOLIVIA BORDER REGION H= 61 KM MAG 4.50 CGS				
9	LZ-	e	11 53 46	SZ	999.9	9999.9	.8	
9	LZ-	eP	11 53 47	LZ	20.	1061.4		
9	LZ-	eL	12 11 43	LZ	27	121.0		
9			12 15 13.*	2.7 S 140.4 E NEAR N. COAST W. NEW GUINEA H= 33 KM MAG 5.40 CGS				
9	LZ-	eP*2	12 34 57.0	SZ	1.0	23.4	145.8	
9			12 21 29.1	13.3 N 144.2 E MARIANA ISLANDS H=123 KM MAG 5.20 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9	LZ-	eP'1	12 41 05.3	SZ	0.7	11.5	148.3	
9	LZ-	eP	14 35 05.5	SZ	0.5	1.8		
9	14 55 29.2		44.4 N 148.0 E KURILE ISLANDS H=140 KM MAG 4.60 CGS					
9	15 47 18.*		51.8 N 173.9 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.40 CGS					
9	15 52 52.*		6.7 S 130.0 E BANDA SEA H= 91 KM MAG 5.20 CGS					
9	LZ-	eP'1	16 12 33.5	SZ	0.6	3.3	150.8	
		eP'2	12 39	SZ	0.7	41.1		
9	16 35 48.*		51. N 172.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
9	16 53 28.8		22.2 S 170.6 E LOYALTY ISLANDS REGION H= 29 KM MAG 4.90 CGS					
9	17 00 27.9		26.1 S 179.5 E SOUTH OF FIJI ISLANDS H=491 KM MAG 4.70 CGS					
9	17 37 15.9		52.8 N 171.9 E RAT ALEUTIAN ISLANDS H= 41 KM MAG 5.70 CGS					
9	00-	eP	17 47 56.3	SZ	0.6	52.5	65.5	5.82
9	GG-	eP	17 49 04.6	SZ	1.2	210.7	76.6	6.02
		eL	18 16 03	LZ	26	737.7		
9	LZ-	ePP	17 57 40	LZ	18	133.6	120.6	
		ePKKP	18 06 12	SZ	1.3	18.9		
		ePS	07 12	LR	19	163.3		
		e	14 30	LR	30	117.5		
		eL	37 50	LR	25	9999.9		
							AVG.	5.92
9	17 50 10.8		51.3 N 177.7 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.70 CGS					
9	18 18 21.2		51.8 N 173.9 E RAT ALEUTIAN ISLANDS H= 10 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
9	LZ-	iP	18 21 17.9D	SZ	0.4	11.0	1.8	
		eS	21 42	ST	0.6	9.3		
9	18 30 02.1		50.4 N 176.9 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.40 CGS					
9	18 53 57.*		50.7 N 175.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
9	19 56 23.*		53.8 N 164.7 W UNIMAK ISLAND REGION H= 33 KM MAG 4.40 CGS					
9	20 38 45.3		37.7 N 20.3 E IONIAN SEA H= 51 KM MAG 4.50 CGS					
9	GG-	eP	20 42 06.0	SZ	0.8	27.0	13.7	4.93
		eL	46 46	LZ	22	737.4		
9	00-	eP	20 43 56.1	SZ	0.6	15.5	24.1	4.67
		eL	50 33	LR	28	634.5		
							AVG.	4.80
9	LZ-	eP	22 59 56.2	SZ	0.3	3.9	3.4	
		e	23 00 00	SZ	0.4	18.1		
		eS	00 39	SR	999.9	9999.9		
9	23 09 22.*		51. N 173.8 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.20 CGS					
9	23 11 26.7		52.2 N 173.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					
9	GG-	e	23 23 41	SZ	0.8	14.8	77.4	
		eL	50 37	LZ	34	961.8		
9	LZ-	eSS	23 47 52	LT	25	177.8	119.9	
		e	51 31	LT	21	163.1		
10	LZ-	eLQ	00 03 50	LT	41	492.1	119.9	
		eLR	10 00	LR	24	9999.9		
9	23 32 58.9		38. N 20.3 E IONIAN SEA H= 44 KM MAG 4.50 CGS					
9	23 48 15.*		50.8 N 172.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
10	00 38 06.1		52.4 N 173.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
10	00 40 20.		51.9 N 172.8 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.00 CGS					
10	LZ-	eL	01 38 50	LR	24	9999.9	120.3	
10	00 47 11.*		51.3 N 172.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
10	01 25 46.5		12.2 S 167.2 E SANTA CRUZ ISLANDS H=268 KM MAG 5.10 CGS					
10	01 47 40.*		53.3 N 172.4 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	02 08 32.9		52.2 N 172.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.40 CGS					
10	GG-	eL	02 46 45	LZ	33	545.9	77.3	
10	LZ-	eL	03 05 26	LR	28	134.0	120.2	
10	02 43 11.*		51. N 176.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
10	02 45 26.*		51.5 N 173.1 E ALEUTIAN NEAR ISLANDS H= 33 KM MAG 4.30 CGS					
10	LZ-	eP	03 21 40.9	SZ	0.5	8.4		
10	03 47 15.*		51.4 N 173.6 E RAT ALEUTIAN ISLANDS H= 45 KM MAG 4.30 CGS					
10	04 13 46.4		6. S 106.1 E JAVA H=152 KM MAG 4.90 CGS					
10	05 06 44.*		50.7 N 175.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
10	05 15 57.*		50.7 N 174.8 E ALEUTIAN ISLANDS REGION H= 33 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
10	05 28 14.*		52. N 171.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
10	06 37 58.		14.7 S 167.2 E NEW HEBRIDES ISLANDS H=156 KM MAG 4.60 CGS					
10	07 57 48.*		52.1 N 172.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.70 CGS					
10	08 12 00.1		51.4 N 175.2 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.40 CGS					
10	08 18 18.*		51. N 173.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	LZ-	eL	09 08 15	LR	22.		120.1	
10	09 14 09.*		50.9 N 174.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.90 CGS					
10	09 51 14.*		51.6 N 171.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	11 08 12.1		50.5 N 176.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
10	11 28 14.7		50.7 N 175.1 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.80 CGS					
10	LZ-	eP	11 31 20.2	SZ	1.0		3.9	
10	13 38 52.*		51.2 N 174.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
10	15 16 50.*		52.2 N 175.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	15 41 21.*		50.9 N 179.8 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
10	15	50 22.*	50.9 N 179.3 W ANDREANOF ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
10	LZ-	iP	15 51 19.1D	SZ	0.2	9999.9		
10	16	09 54.1	37.6 N 47.1 E NORTHWESTERN IRAN H= 52 KM MAG 5.10 CGS					
10	GG-	eP	16 15 46.7	SZ	0.9	17.5	28.4	4.79
		eL	24 10	LZ	30	233.5		
10	OO-	eL	16 26 40	LZ	34	863.6	32.6	
10	17	53 53.*	50.8 N 172.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	18	27 53.6	51. N 176.7 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.70 CGS					
10	19	30 43.*	13. N 89.5 W OFF COAST OF CENTRAL AMERICA H= 55 KM MAG 4.00 CGS					
10	19	48 43.*	51.1 N 172.9 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
10	20	10 37.*	55.2 N 164.7 E KOMANDORSKY ISLANDS REGION H= 33 KM MAG 4.60 CGS					
11	00	31 46.*	51.3 N 173.7 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS					
11	01	05 13.*	51.4 N 175.2 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.70 CGS					
11	01	10 30.*	51.8 N 173.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
11	01	36 02.*	37.2 N 118.2 W CALIFORNIA NEVADA BORDER H= 14 KM					
11	02	33 29.3	21.8 S 176.4 W FIJI ISLANDS REGION H=174 KM MAG 5.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AM		
11	LZ-	eP	02 47 05.0	SZ	1.2	10.7	99.9	5.20
		ePP	51 03	SZ	1.6	42.3		
		eLQ	03 15 16	LR	23	140.9		
		eLR	20 08	LZ	28	300.0		
11	GG-	eP'2	02 53 04.0	SZ	1.0	45.6	151.5	
11	02	45 00.*	50.1 N 172.9 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS					
11	03	13 58.*	50.6 N 173.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
11	03	40 24.*	36.4 N 89.7 W NEW MADRID, MISSOURI REGION H= 18 KM MAG 4.60 CGS					
11	04	42 00.7	1.3 S 14.4 W NORTH OF ASCENSION ISLAND H= 33 KM					
11	LZ-	eP	04 51 31.0	SZ	0.8	10.3	55.3	4.91
		e	51 52	LZ	23	61.4		
		eS	59 25	LR	22	264.2		
		eS	59 25	LT	25	116.7		
		eSS	05 02 53	LR	21	160.2		
		eL	05 25	LR	34	951.1		
11	GG-	eP	04 51 31.5	SZ	1.0	45.6	55.4	5.46
		e	59 19	LZ	19	342.6		
		eL	05 03 20	LZ	35	549.9		
							AVG.	5.18
11	05	57 16.*	50.7 N 176.5 E RAT ALEUTIAN ISLANDS H= 42 KM MAG 4.60 CGS					
11	06	17 17.*	51.4 N 171.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
11	06	25 34.3	51.2 N 177.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
11	06	39 06.1	52.2 N 171.2 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.60 CGS					
11	06	46 23.3	52.9 N 171.6 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
11			07 25 44.*	52.2 N 179.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS				
11			08 08 44.*	50.5 N 178.6 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.20 CGS				
11			08 53 21.8	24. N 122.5 E TAIWAN REGION H= 38 KM MAG 5.20 CGS				
11			08 55 33.*	52.4 N 178.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS				
11			09 46 42.	51.9 N 172.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS				
11			11 25 00.*	48.5 N 93.3 E MONGOLIA H= 33 KM MAG 4.60 CGS				
11			12 55 15.1	52.1 N 173.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS				
11			13 04 54.8	51. N 175.9 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.30 CGS				
11			13 32 46.*	52.1 N 170.7 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS				
11			13 40 11.*	52. N 174.0 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.30 CGS				
11			14 16 11.5	23.8 S 67.7 W CHILE ARGENTINA BORDER REG. H=101 KM MAG 4.60 CGS				
11	LZ-	eP	14 18 02.5	SZ	0.9	26.2	7.5	4.81
11			15 27 49.5	51.3 N 176.1 E RAT ALEUTIAN ISLANDS H= 34 KM MAG 4.90 CGS				
11			16 10 30.4	1.4 S 77.8 W ECUADOR H=190 KM MAG 5.10 CGS				

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
11	LZ-	e	16 14 20	LZ	15.	295.4	17.4	
		eP	14 21	SZ	0.9	357.1		5.78
		eS	17 35	LT	15	1270.3		
		eS	17 39	ST	1.3	74.6		
		eL	21 25	LR	18	460.8		
11	LZ-	eP	16 13 08.7	SZ	0.2	11.7	1.9	
		eS	13 34	SR	0.7	6.3		
11	LZ-	eP	17 58 26.0	SZ	0.8	2.9		
11	LZ-	eP	18 55 05.0	SZ	0.8	2.9		
11			21 10 04.*	50.7 N 176.3 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.40 CGS				
11			21 52 17.*	31.6 N 113.9 W GULF OF CALIFORNIA H= 33 KM MAG 6.63 CGS				
11	LZ-	iP	22 34 03.1C	SZ	0.7	97.7	3.7	
		eS	34 49	ST	0.8	19.4		
11			22 35 23.2	51.4 N 174.6 E RAT ALEUTIAN ISLANDS H= 50 KM MAG 4.50 CGS				
11			23 03 50.*	3.5 S 145.4 E NEAR N. COAST OF NEW GUINEA H= 33 KM MAG 4.70 CGS				
11			23 28 12.*	50.6 N 177.4 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.20 CGS				
12			00 43 17.1	51.5 N 175.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.75 CGS				
12	00-	eP	00 54 09.2	SZ	0.7	7.0	67.2	4.90
		eP	54 10	LZ	15	331.5		
		eS	01 03 05	LR	18	424.7		
12	GG-	eP	00 55 23	LZ	17	307.7	78.3	
12	00-	eP	01 05 53.0	SZ	0.9	54.3	66.2	5.71
		e	06 22	ST	0.7	19.4		
		eS	14 20	LT	18	2251.6		
		eSS	19 25	LT	23	2106.0		
		eLQ	25 35	LR	35	3047.8		
		eLR	27 12	LZ	40	5364.5		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
12	GG-	eP	01 07 01.5	SZ	0.9	47.6	77.3	5.55
		eP	07 05	LZ	19	1267.8		
		e	07 06	SZ	1.1	153.0		
		ePP	09 50	LZ	18	790.9		
		e	16 48	LZ	23	1442.7		
		eL	33 00	LZ	23	2564.8		
12	LZ-	e	01 11 15	LT	16	123.9	120.2	
		e	13 10	LZ	19	156.2		
		e	23 25	LT	22	289.6		
		eSS	32 02	LT	23	1246.6		
		e	35 12	LT	20	987.8		
		eLQ	47 33	LT	38	2476.4		
		eLR	54 00	LZ	24	1553.8		
							AVG.	5.38

12 01 03 18. 51.3 N 176.2 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 5.40 CGS

12	00-	eP	01 14 10.0	SZ	0.6	15.7	67.4	5.30

12 01 10 39.2 51.4 N 172.7 E RAT ALEUTIAN ISLANDS
H= 25 KM MAG 4.60 CGS

12	LZ-	eP	01 14 12.0	SZ	1.0	4.0	5.7	
		eS	15 20	SR	1.2	4.0		

12 01 18 21.5 52. N 173.0 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.80 CGS

12 01 31 04.1 51.8 N 171.8 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.30 CGS

12 01 35 53.6 52.1 N 172.8 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 5.00 CGS

12 02 23 03.* 55.2 N 165.2 E KOMANDORSKY ISLANDS REGION
H= 33 KM MAG 4.50 CGS

12 03 30 32.* 50.4 N 176.6 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.70 CGS

12 04 48 00.* 50.7 N 174.6 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.70 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG

12 05 17 23. 51.9 N 172.9 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.70 CGS

12 05 43 06.* 51.8 N 172.2 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.30 CGS

12	LZ-	eP	07 06 06.0	SZ	1.0	4.0		
12	LZ-	eL	07 09 16	SR	1.0	3.5		

12 07 27 42.* 51.6 N 178.2 E RAT ALEUTIAN ISLANDS
H= 50 KM MAG 3.90 CGS

12	LZ-	eP	07 58 56.0	SZ	0.2	2.4	5.3	
		eS	08 00 00	ST	1.0	24.5		

12 08 10 47.* 51.6 N 172.6 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.20 CGS

12 09 01 26.4 50.4 N 178.1 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.60 CGS

12 09 38 14.* 51. N 174.3 E RAT ALEUTIAN ISLANDS
H= 25 KM MAG 4.30 CGS

12 09 42 48.1 51.3 N 174.0 E RAT ALEUTIAN ISLANDS
H= 30 KM MAG 4.30 CGS

12	LZ-	eP	09 52 14.5	SZ	0.2	1.2	4.3	
		eS	53 07	SR	0.4	1.8		

12 10 16 09.3 32.7 N 119.2 W OFF COAST OF CALIFORNIA
H= 33 KM MAG 4.40 CGS

12 10 50 19.7 40.3 N 124.9 W NEAR COAST OF NORTH CALIF.
H= 33 KM MAG 5.30 CGS

12 11 45 27.* 50.8 N 175.7 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.70 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
12			51.2 N 173.7 E ALEUTIAN NEAR ISLANDS					
			H= 27 KM MAG 4.70 CGS					
12			50.6 N 174.5 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.50 CGS					
12			52.2 N 171.3 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.00 CGS					
12			51.5 N 175.7 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.40 CGS					
12			52.1 N 171.0 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.20 CGS					
12			9.7 N 104.9 W OFF COAST OF MEXICO					
			H= 33 KM MAG 4.70 CGS					
12	LZ-	e	12 53 55	LR	17.	353.0	44.3	
		e	57 18	LR	23	281.9		
		eL	13 02 05	LZ	32	2617.8		
12			38.2 S 73.5 W NEAR COAST OF CENTRAL CHILE					
			H= 33 KM MAG 4.40 CGS					
12	LZ-	eP	12 47 12.5	SZ	1.2	19.2		
12	LZ-	eL	12 49 02	SR	0.8	4.1		
12			52.1 N 171.1 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.50 CGS					
12			31.4 N 138.0 E SOUTH OF HONSHU, JAPAN					
			H=426 KM MAG 4.10 CGS					
12			51.7 N 174.7 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.80 CGS					
12			51.6 N 172.8 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
12			63.6 N 134.3 W S. YUKON TERRITORY, CANADA					
			H= 33 KM MAG 3.90 CGS					
12			51.5 N 173.2 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.80 CGS					
12			51.2 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.80 CGS					
12			9.7 N 126.2 E MINDANAO, PHILIPPINE ISLANDS					
			H= 81 KM MAG 5.30 CGS					
12			40.3 N 124.7 W NEAR COAST OF NORTH CALIF.					
			H= 33 KM MAG 4.90 CGS					
12			52.2 N 171.6 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.70 CGS					
12			52. N 174.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
12	LZ-	iP	23 02 53.8C	SZ	0.2	42.2		
12			52.2 N 174.8 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.80 CGS					
13			38.4 N 45.7 E N. W. IRAN USSR BORDER REG.					
			H= 33 KM					
13			51. N 173.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.50 CGS					
13			51.7 N 171.4 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.70 CGS					
13			51.4 N 172.7 E RAT ALEUTIAN ISLANDS					
			H= 29 KM MAG 4.80 CGS					
13			50.9 N 174.5 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
13			52.3 N 170.8 E RAT ALEUTIAN ISLANDS					
	02	30 33.*	H= 33 KM MAG 4.30 CGS					
13	LZ-	eP	02 31 49.0	SZ	0.7	7.7		
13			51.2 N 174.2 E RAT ALEUTIAN ISLANDS					
	02	47 46.5	H= 35 KM MAG 5.00 CGS					
13			51.1 N 172.7 E RAT ALEUTIAN ISLANDS					
	03	19 40.*	H= 33 KM MAG 4.40 CGS					
13			51.1 N 174.2 E RAT ALEUTIAN ISLANDS					
	03	50 10.	H= 33 KM MAG 5.00 CGS					
13			51.3 N 174.1 E RAT ALEUTIAN ISLANDS					
	04	45 32.7	H= 33 KM MAG 5.00 CGS					
13	LZ-	eP	05 49 57.5	SZ	0.5	1.8		
13			50.8 N 170.1 E RAT ALEUTIAN ISLANDS					
	07	27 13.*	H= 35 KM MAG 4.40 CGS					
13			50.9 N 174.8 E RAT ALEUTIAN ISLANDS					
	08	25 15.*	H= 33 KM MAG 4.30 CGS					
13			50.9 N 176.5 E RAT ALEUTIAN ISLANDS					
	09	19 33.*	H= 25 KM MAG 4.30 CGS					
13	LZ-	eP	10 08 40.0	SZ	1.0	3.9		
13	LZ-	eL	10 12 57	SR	1.5	25.1		
13	LZ-	eL	10 13 15	LT	14	822.0		
13			52.4 N 171.0 E RAT ALEUTIAN ISLANDS					
	10	52 44.6	H= 33 KM					
13	LZ-	eP	12 01 13.5	SZ	0.3	7.9		.5
		eS	01 22	SR	0.3	3.3		
13	LZ-	eP	12 06 38.0	SZ	0.6	11.0		
13	LZ-	e	12 07 12	SZ	0.6	8.8		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
13			51.3 N 178.2 E RAT ALEUTIAN ISLANDS					
	12	18 06.6	H= 25 KM MAG 4.40 CGS					
13			50.9 N 173.9 E RAT ALEUTIAN ISLANDS					
	12	51 54.*	H= 33 KM MAG 3.90 CGS					
13	LZ-	eP	12 52 02.5	SZ	0.7	5.1		
13	LZ-	iP	13 34 56.6D	SZ	0.2	25.8		1.7
		eS	35 20	ST	0.6	6.0		
13	LZ-	eP	14 07 04.0	SZ	1.0	7.8		
13			51.5 N 173.3 E RAT ALEUTIAN ISLANDS					
	14	38 51.*	H= 35 KM MAG 4.20 CGS					
13			51.2 N 171.6 E RAT ALEUTIAN ISLANDS					
	15	08 45.*	H= 30 KM MAG 4.70 CGS					
13			6.9 S 129.6 E BANDA SEA					
	15	16 28.8	H=128 KM					
13			50.7 N 175.1 E RAT ALEUTIAN ISLANDS					
	15	25 22.6	H= 30 KM MAG 4.90 CGS					
13			50.9 N 174.8 E RAT ALEUTIAN ISLANDS					
	15	29 41.*	H= 30 KM MAG 4.60 CGS					
13	LZ-	eP	15 36 05.5	SZ	1.0	7.8		
13	LZ-	e	15 36 11	SZ	0.7	45.1		
13	LZ-	e	15 36 46	SZ	0.9	35.0		
13			51.1 N 174.3 E RAT ALEUTIAN ISLANDS					
	17	59 45.3	H= 30 KM					
13			52. N 173.2 E RAT ALEUTIAN ISLANDS					
	18	08 41.6	H= 33 KM MAG 5.30 CGS					
13			51.3 N 178.0 E RAT ALEUTIAN ISLANDS					
	18	16 39.3	H= 27 KM MAG 5.30 CGS					
13			22.8 S 68.2 W NORTHERN CHILE					
	22	30 33.*	H= 33 KM MAG 5.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
13	LZ-	e	22 32 22	SZ	0.5	5.5	6.5	
		eL	32 50	ST	0.8	9999.9		
13	22 48 40.*		51.5 N 172.2 E RAT ALEUTIAN ISLANDS H= 33 KM					
13	22 51 22.3		19.2 N 121.4 E PHILIPPINE ISLANDS REGION H= 33 KM MAG 4.90 CGS					
13	23 06 28.*		18.8 N 155.4 W HAWAII REGION H= 33 KM					
14	00 10 14.1		50.4 N 176.2 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.20 CGS					
14	03 39 14.		52.5 N 173.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
14	05 59 02.*		51.8 N 175.8 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.40 CGS					
14	06 51 50.*		6.9 N 73.1 W NORTHERN COLOMBIA H=153 KM					
14	08 59 53.5		51.9 N 172.0 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.70 CGS					
14	09 53 00.*		51.3 N 178.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
14	10 38 07.3		52.3 N 172.6 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
14	11 32 00.*		50.8 N 176.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS					
14	11 45 25.*		50.1 N 176.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
14	12 01 42.5		50.2 N 179.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
14	12 21 17.*		50.7 N 173.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.60 CGS					
14	12 27 44.8		50.8 N 174.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
14	LZ-	eP	12 39 56.6	SZ	0.7	10.2	3.3	
		eS	40 38	ST	0.7	6.9		
14	12 50 51.*		6.8 N 73.0 W NORTHERN COLOMBIA H=141 KM MAG 4.20 CGS					
14	13 54 47.*		51.6 N 174.8 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.10 CGS					
14	15 36 15.*		51.2 N 175.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
14	15 47 44.*		52.4 N 170.6 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.50 CGS					
14	15 52 56.*		54.9 N 164.8 E KOMANDORSKY ISLANDS REGION H= 33 KM MAG 4.50 CGS					
14	15 56 18.		51.7 N 176.5 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.60 CGS					
14	17 01 13.9		55.1 N 165.6 E KOMANDORSKY ISLANDS REGION H= 20 KM MAG 5.00 CGS					
14	17 42 26.5		52.7 N 171.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.20 CGS					
14	17 55 42.4		72.8 N 5.4 E NORWEGIAN SEA H= 19 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
14	00-	eP	17 58 35.7	SZ	1.1	29.0	12.0	5.39
		eL	18 01 22	LT	24			
14	GG-	eP	18 00 55.0	SZ	0.8	22.5	23.3	4.72
		eL	07 05	LZ	30	337.0		
14	LZ-	eL	18 46 46	LZ	27	163.0	100.7 AVG.	5.05

14 18 10 58.* 52.1 N 172.6 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.80 CGS

14 18 46 49.* 50.4 N 177.8 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.20 CGS

14 18 47 03.* 42.6 S 80.0 W OFF COAST OF SOUTHERN CHILE
H= 33 KM MAG 4.60 CGS

14	LZ-	eP	18 52 50.3	SZ	1.5	17.3	28.1	4.60
		eS	57 51	LR	18	523.9		
		e	19 00 00	LR	20	826.8		
		eL	01 36	LT	28	470.0		
14	LZ-	e	18 49 52	LZ	17.	283.8		

14 19 37 17.8 73. N 6.5 E GREENLAND SEA
H= 33 KM MAG 5.40 CGS

14	00-	eP	19 40 09.2	SZ	1.0	37.6	12.1	5.43
		e	40 19	SZ	0.7	42.1		
		e	42 19	SZ	1.0	23.5		
		eLQ	42 32	LT	27			
		eLR	43 28	LT	22			
14	GG-	eP	19 42 29.1	SZ	1.1	70.6	23.5	5.06
		eP	42 31	LZ	19	362.6		
		eL	48 32	LZ	31	1572.4		
14	LZ-	eL	20 28 08	LZ	27	286.5	101.1 AVG.	5.24

14 21 17 34.4 52.4 N 173.9 E RAT ALEUTIAN ISLANDS
H= 39 KM MAG 5.30 CGS

14	00-	eP	21 28 18.8	SZ	0.5	10.6	66.1	5.21

14 23 11 06.* 46. S 76.1 W OFF COAST OF SOUTHERN CHILE
H= 33 KM MAG 4.80 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
14	LZ-	eS	23 22 13	LT	25.	157.5	30.3	
		eLQ	26 03	LT	28	529.0		
		eLR	27 54	LT	26	9999.9		
14	LZ-	iP	23 41 42.1D	SZ	0.4	9999.9		
15	LZ-	eL	00 37 00	LZ	42	463.0		

15 01 25 08.8 51.4 N 179.4 E RAT ALEUTIAN ISLANDS
H= 42 KM MAG 5.80 CGS

15	00-	eP	01 36 02.9	SZ	0.9	39.8	67.5	5.50
		eS	45 10	LT	17			
		eSCS	45 58	LT	20			
		e	50 07	LT	25			
		eL	58 15	LT	35			
15	GG-	eP	01 37 08	LZ	19	527.4	78.8	
		eL	02 07 02	LZ	25	851.8		
15	LZ-	eSKP	01 47 07	LZ	15	221.3	116.3	
		e	52 31	LT	20	267.0		
		eSCSP	54 52	LZ	19	355.5		
		eSS	02 00 55	LT	24	414.3		
		eL	23 50	LZ	21	891.0		

15 02 29 48.* 9.9 N 86.5 W OFF COAST OF COSTA RICA
H= 33 KM MAG 5.50 CGS

15 03 43 55.* 51.7 N 172.0 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.10 CGS

15 03 54 00.* 50.9 N 172.9 E RAT ALEUTIAN ISLANDS
H= 20 KM MAG 3.90 CGS

15 05 01 27.2 52.2 N 172.7 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 5.30 CGS

15	GG-	eP	05 13 21.0	SZ	0.7	9.4	77.3	4.93

15 05 44 30.* 51.1 N 173.3 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.00 CGS

15 06 04 57.5 52.3 N 172.6 E RAT ALEUTIAN ISLANDS
H= 26 KM MAG 4.80 CGS

15 06 26 16.3 45.9 S 76.0 W OFF COAST OF SOUTHERN CHILE
H= 33 KM MAG 4.90 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
15	LZ-	eP	06 32 28.1	SZ	1.7	42.0	30.2	4.97
		eS	37 32	LR	21	290.9		
		ePCS	39 23	LR	28	707.6		
		eLQ	40 53	LT	26	1262.9		
		eLR	42 50	LT	27	9999.9		
15	GG-	eL	07 29 15	LZ	27	498.0	121.5	

15 06 42 11.2 51.4 N 179.5 E RAT ALEUTIAN ISLANDS
H= 28 KM MAG 4.90 CGS

15 07 05 08.* 51.4 N 171.4 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.00 CGS

15 07 57 53.4 51.9 N 170.8 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.90 CGS

15	LZ- eP	08 02 06.8	SZ	1.1	21.0	
15	LZ- eL	08 11 38	LZ	21	319.4	

15 08 19 12.* 51.4 N 172.3 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.50 CGS

15	LZ- iP	08 56 41.0D	SZ	0.3	27.2	2.7	
	eS	57 05	SR	0.6	9999.9		
15	LZ- eP	08 59 42.0	SZ	0.4	9999.9	2.1	
	eS	09 00 10	ST	999.9	9999.9		

15 09 42 22.* 4 N 19.2 W CENTRAL MID ATLANTIC RIDGE
H= 33 KM MAG 4.70 CGS

15	LZ- eP	09 51 28.2	SZ	1.5	22.0	51.3	4.90
	eP	51 29	LZ	18	488.6		
	ePP	53 31	LZ	17	518.9		
	eS	58 36	LR	999	9999.9		
	eLQ	10 02 23	LR	999	9999.9		
	eL	07 12	SR	16.0	49.3U		
	eLR	07 30	LZ	999	9999.9U		
15	GG- eP	09 52 05	LZ	20	286.5	55.6	
	ePPP	55 25	LZ	17	555.1		
	e	59 47	LZ	22	1788.9		

15 09 43 00.* 55.3 N 167.1 W FOX ALEUTIAN ISLANDS
H= 35 KM MAG 4.50 CGS

DAY	STA	PHASE	TIME	INST	PER			

15 10 14 39.* 51.2 N 173.6 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.60 CGS

15 10 43 19.8 3. N 125.9 E TALAUD ISLANDS
H= 33 KM MAG 6.00 CGS

15	LZ-	eP*1	11 03 21.0	SZ	1.4	99.2	160.7	
		e	07 50	ST	3.0	236.0		
		e	08 09	SZ	2.2	64.1		
		e	09 39	ST	1.7	34.1		
		eSKKS	14 25	SR	2.0	42.8		
		eSS	27 55	LR	18	777.4		
		eL	12 06 40	LZ	25	629.5		
15	GG-	eL	11 37 30	LZ	31	825.5	103.4	

15	LZ-	eP	10 59 27.7	SZ	0.5	3.9	
15	LZ-	eL	11 01 46	ST	0.6	11.1	

15 11 22 35.* 56.7 N 152.4 W KODIAK ISLAND REGION
H= 33 KM MAG 4.90 CGS

15 12 34 54.8 53.6 N 81.3 E CENTRAL RUSSIA
H= 11 KM MAG 5.30 CGS

15	00-	eP	12 42 04.3	SZ	0.6	29.1	37.0	5.21
		ePP	43 32	SZ	1.3	53.6		
		eL	49 50	SZ	1.0	18.6		
15	GG-	eP	12 42 48.8	SZ	0.7	43.3	42.1	5.30
15	LZ-	eL	13 47 00	LR	26	246.2	135.9	
							AVG.	5.25

15 12 53 57.* 42.1 S 72.1 W NEAR COAST OF SOUTHERN CHILE
H= 15 KM MAG 4.90 CGS

15	LZ- eP	12 59 31.7	SZ	0.9	47.8	25.9	5.12
	eL	13 09 20	LZ	22	299.3		

15	LZ- eP	12 57 52.0	SZ	1.4	14.6	

15 13 53 12.* 51.3 N 174.2 E RAT ALEUTIAN ISLANDS
H= 30 KM MAG 4.40 CGS

15	LZ- eL	13 58 02	LZ	23.	565.5	

DAY	STA PHASE	TIME	INST	PER	AMPL	DIST	MAG
15	14 40 53.4	10.2 S 161.0 E SOLOMON ISLANDS H= 33 KM MAG 5.10 CGS					
15	14 55 13.*	51.1 N 173.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
15	15 03 06.*	50.6 N 176.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
15	15 03 14.*	14.2 N 92.4 W NEAR COAST OF CHIAPAS, MEX. H= 41 KM MAG 3.90 CGS					
15	15 18 43.*	50.7 N 176.3 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.40 CGS					
15	15 41 12.*	52.1 N 171.9 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS					
15	LZ- iP	18 06 55.9D	SZ	999.9	9999.9	2.1	
	eS	07 23	ST	0.4	9999.9		
15	18 12 29.5	51.6 N 172.8 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.50 CGS					
15	18 21 12.*	51.4 N 171.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.10 CGS					
15	20 01 40.5	13.6 N 126.1 E PHILIPPINE ISLANDS REGION H= 33 KM MAG 4.90 CGS					
15	21 41 02.5	12.9 N 125.9 E SAMAR, PHILIPPINE ISLANDS H= 63 KM MAG 4.90 CGS					
15	22 44 41.*	5.7 S 131.0 E BANDA SEA H= 33 KM MAG 4.70 CGS					
16	GG- eL	00 06 45	LZ	18.	265.6		
16	00 22 13.*	51.3 N 172.5 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.60 CGS					

DAY	STA PHASE	TIME	INST	PER	AMPL	DIST	MAG
16	00 46 37.*	50.7 N 178.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.40 CGS					
16	00 54 59.1	51.2 N 177.5 E RAT ALEUTIAN ISLANDS H= 45 KM MAG 4.90 CGS					
16	00- eP	01 05 52.0	SZ	0.7	9.2	67.6	4.96
16	01 39 41.*	23.4 S 180.0 E SOUTH OF FIJI ISLANDS H=580 KM MAG 4.20 CGS					
16	02 58 26.*	11.2 S 162.5 E SOLOMON ISLANDS H= 25 KM MAG 4.80 CGS					
16	07 33 06.*	51.9 N 171.6 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
16	08 46 07.7	26.4 N 109.9 W GULF OF CALIFORNIA H= 33 KM MAG 4.60 CGS					
16	10 38 15.	29.6 N 140.7 E SOUTH OF HONSHU, JAPAN H=101 KM MAG 4.50 CGS					
16	10 54 40.*	13.4 N 91.2 W NEAR COAST OF GUATEMALA H= 97 KM MAG 4.10 CGS					
16	10 59 17.5	26.4 N 110.0 W GULF OF CALIFORNIA H= 33 KM MAG 5.20 CGS					
16	12 24 08.8	39.5 N 141.8 E HONSHU, JAPAN H= 33 KM MAG 5.60 CGS					
16	00- eP	12 35 32.2	SZ	1.0	71.7	72.1	5.66
	eP	35 33	LZ	25	167.7		
	eL	57 32	LR	40	1529.6		
16	GG- eP	12 36 23.4	SZ	0.8	63.6	81.1	5.64
	eL	13 05 35	LZ	28	335.0		
						AVG.	5.65
16	12 24 36.*	30.7 N 113.2 W GULF OF CALIFORNIA H= 33 KM MAG 4.20 CGS					
16	14 18 42.*	51.1 N 175.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
16			52. N 171.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.50 CGS					
16	15	36 16.*						
16			7.9 N 126.6 E MINDANAO, PHILIPPINE ISLANDS					
			H=102 KM MAG 5.30 CGS					
16	17	49 02.9						
16			38.1 N 28.1 E TURKEY					
			H= 50 KM					
16	19	12 50.*						
16			39.9 N 105.1 W COLORADO					
			H= 5 KM MAG 4.60 CGS					
16	20	17 54.*						
16			50.3 N 176.0 E RAT ALEUTIAN ISLANDS					
			H= 24 KM MAG 4.50 CGS					
16	20	33 18.*						
16			36.3 N 70.8 E HINDU KUSH REGION					
			H=190 KM MAG 5.30 CGS					
16	20	46 37.4						
	00-	eP	20 54 31.0	SZ	0.9	33.0	44.6	4.80
		epP	55 12	SZ	1.0	28.6		
16			52. N 175.8 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.50 CGS					
16	21	09 47.2						
	00-	eP	21 20 35.0	SZ	0.6	16.0	66.7	5.31
		e	20 46	SZ	0.8	11.3		
16			51.6 N 172.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 3.80 CGS					
16	21	23 04.*						
16			39.9 N 105.0 W COLORADO					
			H= 5 KM MAG 4.90 CGS					
16	22	21 44.*						
16			38.1 S 73.4 W NEAR COAST OF CENTRAL CHILE					
			H= 33 KM MAG 4.90 CGS					
16	22	27 14.*						
17			51.9 N 174.3 E RAT ALEUTIAN ISLANDS					
			H= 45 KM MAG 4.40 CGS					
17	00	07 12.4						
17			51.4 N 173.5 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.10 CGS					
17	00	33 00.*						

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
17			51.5 N 179.0 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.50 CGS					
17	00	50 44.9						
17			51.7 N 174.2 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					
17	01	00 23.3						
17			51.9 N 175.1 E RAT ALEUTIAN ISLANDS					
			H= 34 KM MAG 4.90 CGS					
17	02	52 26.						
17	GG-	eL	03 23 20	LZ	23	233.6	77.9	
17	00-	eL	03 11 50	LR	34.	477.7		
17			51.5 N 175.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
17	03	25 24.*						
17			57.1 N 153.4 W KODIAK ISLAND REGION					
			H= 20 KM MAG 4.90 CGS					
17	04	01 35.5						
17			52. N 171.4 E RAT ALEUTIAN ISLANDS					
			H= 40 KM MAG 4.40 CGS					
17	04	45 39.*						
17			57.1 N 152.9 W KODIAK ISLAND REGION					
			H= 33 KM MAG 4.50 CGS					
17	04	53 06.						
17			50.7 N 177.1 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 4.20 CGS					
17	05	17 25.*						
17			51.8 N 172.5 W ANDREANOF ALEUTIAN ISLANDS					
			H= 33 KM MAG 3.90 CGS					
17	07	25 00.*						
17			51.2 N 173.2 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.20 CGS					
17	07	42 26.*						
17			51.2 N 177.4 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.10 CGS					
17	09	36 59.*						
17			51.2 N 178.3 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.30 CGS					
17	10	11 13.7						

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
17	10 13 03.2		50.3 N 173.1 E RAT ALEUTIAN ISLANDS H= 23 KM MAG 5.00 CGS					
17	10 18 51.3		51.8 N 176.6 E RAT ALEUTIAN ISLANDS H= 44 KM MAG 5.60 CGS					
17	00-	eP	10 29 41.2	SZ	1.2	51.4	66.9	5.50
		eP	29 42	LZ	17	393.6		
		ePS	39 00	LT	18	437.1		
		e	43 36	LT	23	779.7		
		eL	51 10	LZ	34	1230.0		
17	GG-	eL	10 56 22	LZ	21	337.4	78.1	
17	10 39 38.*		50.8 N 176.7 E RAT ALEUTIAN ISLANDS H= 32 KM MAG 4.70 CGS					
17	11 06 30.*		59.7 N 151.7 W KENAI PENINSULA, ALASKA H= 33 KM MAG 3.80 CGS					
17	11 46 32.*		7.4 N 82.4 W SOUTH OF PANAMA H= 33 KM MAG 4.30 CGS					
17	11 49 14.*		50.8 N 175.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.20 CGS					
17	12 06 03.*		51.8 N 179.3 W ANDREANOF ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
17	12 52 49.8		51.6 N 176.2 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.30 CGS					
17	13 03 17.*		51.2 N 176.8 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.10 CGS					
17	13 05 36.*		19.9 S 178.0 W FIJI ISLANDS REGION H=558 KM MAG 4.70 CGS					
17	00-	eP	13 35 29.8	SZ	0.5	17.7		
17	13 42 07.*		50.3 N 176.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
17	15 06 44.*		50.7 N 178.0 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.70 CGS					
17	16 37 07.*		50.8 N 173.5 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.40 CGS					
17	18 23 51.7		21.6 N 142.8 E MARIANA ISLANDS REGION H=290 KM MAG 5.50 CGS					
17	00-	eP	18 36 14.2	SZ	1.0	32.9	89.0	5.22
17	18 24 34.*		51.2 N 175.6 E RAT ALEUTIAN ISLANDS H= 25 KM MAG 4.20 CGS					
17	19 35 30.3		3 S 19.0 W CENTRAL MID ATLANTIC RIDGE H= 33 KM MAG 4.90 CGS					
17	GG-	eL	20 03 58	LZ	22.	97.4	56.1	
17	00-	eL	20 10 07	LT	26	152.9	65.3	
17	21 59 50.4		50.5 N 174.7 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.20 CGS					
17	22 15 49.*		52.7 N 163.0 W SOUTH OF ALASKA H= 31 KM MAG 4.50 CGS					
18	02 21 17.*		51. N 173.6 E RAT ALEUTIAN ISLANDS H= 45 KM MAG 4.40 CGS					
18	03 52 54.*		22.9 S 63.7 W SALTA PROVINCE, ARGENTINA H=530 KM MAG 3.90 CGS					
18	03 54 11.*		23.1 S 62.5 W SALTA PROVINCE, ARGENTINA H=468 KM MAG 4.70 CGS					
18	04 26 33.5		25. N 94.3 E BURMA INDIA BORDER REGION H= 36 KM MAG 5.40 CGS					
18	00-	eP	04 37 13.0	SZ	1.2	21.7	65.3	5.15

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		e	37 25	SZ	0.9	18.1		
		eSSS	53 12	LT	21	270.9		
		eL	05 00 15	LT	31	714.2		
18	GG-	eP	04 37 25.2	SZ	1.1	26.5	67.0	5.27
		e	37 40	SZ	1.3	68.9		
		eL	05 04 04	LZ	21	394.0		
							AVG.	5.21

18 06 17 21.4 52. N 175.0 E RAT ALEUTIAN ISLANDS
H= 45 KM MAG 4.30 CGS

18 07 16 13.* 53.1 N 171.6 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.20 CGS

18 07 26 57.8 51.9 N 174.1 E RAT ALEUTIAN ISLANDS
H= 36 KM MAG 5.20 CGS

18	00-	eP	07 37 46.2	SZ	0.8	13.9	66.6	5.13

18 07 32 17.* 51.4 N 171.7 E RAT ALEUTIAN ISLANDS
H= 20 KM MAG 4.00 CGS

18 07 33 36.* 51.3 N 172.2 E RAT ALEUTIAN ISLANDS
H= 40 KM MAG 4.30 CGS

18 08 10 17.* 38.9 S 72.2 W CENTRAL CHILE
H= 33 KM MAG 4.00 CGS

18 08 34 05.4 51.8 N 176.4 E RAT ALEUTIAN ISLANDS
H= 15 KM MAG 5.20 CGS

18	00-	eP	08 44 58.8	SZ	0.8	27.8	66.9	5.50

18 09 11 07.* 51.5 N 172.1 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.10 CGS

18 09 34 52.4 51.6 N 174.9 E RAT ALEUTIAN ISLANDS
H= 20 KM MAG 5.10 CGS

18 10 44 28.8 52. N 172.3 E RAT ALEUTIAN ISLANDS
H= 35 KM MAG 4.40 CGS

18 12 42 56.* 51.4 N 172.1 E RAT ALEUTIAN ISLANDS
H= 45 KM MAG 4.20 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG

18 14 11 17.* 48.4 N 174.2 E RAT ALEUTIAN ISLANDS
H= 45 KM MAG 4.20 CGS

18 17 41 12.* 50.4 N 175.9 E RAT ALEUTIAN ISLANDS
H= 33 KM MAG 4.20 CGS

18	00-	eP	19 15 53.8	SZ	0.2	11.5		4.4
		eS	16 45	SR	0.4	10.5		

18 19 30 19.9 59.2 N 147.5 W GULF OF ALASKA
H= 30 KM MAG 5.30 CGS

18 20 30 03.1 18.6 N 120.0 E LUZON, PHILIPPINE ISLANDS
H= 36 KM MAG 4.70 CGS

18 22 22 20.* 28.8 S 178.0 W KERMADEC ISLANDS
H=119 KM MAG 4.50 CGS

18 22 32 19.6 9.9 S 71.2 W PERU BRAZIL BORDER REGION
H=594 KM MAG 5.20 CGS

18 22 39 45.8 7.3 S 126.9 E BANDA SEA
H= 33 KM MAG 5.80 CGS

18	00-	eL	23 32 05	LR	43.	1208.6	108.8	

18 23 13 36.3 51.4 N 179.1 E RAT ALEUTIAN ISLANDS
H= 28 KM MAG 6.00 CGS

18	00-	eP	23 24 30.9	SZ	0.9	52.1	67.5	5.67
		eLR	47 00	LZ	35	3020.4		
18	GG-	eP	23 25 38.2	SZ	1.2	82.7	78.8	5.60
		eP	25 40	LZ	22	454.8		
		e	35 55	LZ	35	928.7		
		e	42 35	LZ	26	849.4		
		eLR	55 20	LZ	28	1666.6		
							AVG.	5.63

18 23 26 38.9 51.4 N 174.7 E RAT ALEUTIAN ISLANDS
H= 44 KM MAG 5.00 CGS

18 23 35 00.2 41.3 N 139.0 E HOKKAIDO, JAPAN REGION
H= 12 KM MAG 4.80 CGS

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
19	01 48 16.		51.4 N 176.9 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.50 CGS					
19	03 07 32.		52.8 N 172.0 E RAT ALEUTIAN ISLANDS H= 10 KM MAG 4.60 CGS					
19	03 24 43.1		51.6 N 175.0 E RAT ALEUTIAN ISLANDS H= 23 KM MAG 5.20 CGS					
19	04 02 40.*		50.8 N 176.3 E RAT ALEUTIAN ISLANDS H= 15 KM MAG 4.10 CGS					
19	04 20 56.		51.7 N 176.5 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.60 CGS					
19	04 46 34.*		51.3 N 173.6 E RAT ALEUTIAN ISLANDS H= 45 KM MAG 4.60 CGS					
19	06 15 08.*		51.6 N 176.0 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.10 CGS					
19	06 22 23.4		51.2 N 177.8 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 5.10 CGS					
19	07 55 38.*		51. N 177.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
19	08 14 48.*		50.8 N 175.7 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.60 CGS					
19	09 13 47.*		46.7 N 9.3 E SWITZERLAND H= 25 KM					
19	09 21 49.*		50.9 N 174.5 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.60 CGS					
19	09 36 02.5		17.4 S 69.1 W PERU BOLIVIA BORDER REGION H=136 KM MAG 4.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
19	09 38 30.*		50.5 N 175.7 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
19	09 57 17.*		20.1 S 177.7 W FIJI ISLANDS REGION H=478 KM MAG 3.90 CGS					
19	10 08 41.6		12.4 S 166.4 E SANTA CRUZ ISLANDS H= 65 KM MAG 5.00 CGS					
19	13 39 42.8		51.8 N 175.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
19	14 47 48.1		52.4 N 174.8 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.10 CGS					
19	14 50 23.*		30.1 N 113.7 W GULF OF CALIFORNIA H= 33 KM MAG 4.30 CGS					
19	16 07 36.*		51.3 N 171.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
19	17 35 21.		44.7 N 110.1 W YELLOWSTONE PARK, WYOMING H= 22 KM MAG 4.00 CGS					
19	18 18 15.		27.9 N 139.7 E BONIN ISLANDS REGION H=480 KM MAG 4.60 CGS					
19	18 52 42.1		51.1 N 178.4 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.60 CGS					
19	00-	eP	19 03 36.0	SZ	0.8	11.2	67.8	5.02
		e	17 30	LZ	20	148.6		
		eL	25 55	LR	29	371.3		
19	GG-	eP	19 04 43.5	SZ	1.5	108.5	79.0	5.59
							AVG.	5.30
19	23 13 51.5		50.7 N 177.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
19	23 40 29.1		51.7 N 176.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
20			5.5 S 146.3 E EAST NEW GUINEA REGION					
			H= 99 KM MAG 4.90 CGS					
20			51.8 N 174.9 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					
20			34.8 N 139.3 E NEAR S. COAST HONSHU, JAPAN					
			H= 19 KM MAG 4.70 CGS					
20			34.8 S 112.1 W EASTER ISLAND CORDILLERA					
			H= 33 KM MAG 4.70 CGS					
20			15.2 S 173.5 W TONGA ISLANDS					
			H= 33 KM MAG 4.80 CGS					
20			1.7 N 127.3 E HALMAHERA					
			H=186 KM MAG 4.10 CGS					
20			10.5 N 62.3 W NEAR COAST OF VENEZUELA					
			H= 6 KM MAG 4.60 CGS					
20			51.6 N 173.4 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.50 CGS					
20			7.8 S 117.8 E BALI SEA					
			H= 33 KM MAG 4.80 CGS					
20			50.6 N 176.1 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					
20			50.5 N 178.0 E RAT ALEUTIAN ISLANDS					
			H= 20 KM MAG 4.40 CGS					
20			26.6 N 51.9 W NORTH ATLANTIC OCEAN					
			H= 33 KM MAG 5.20 CGS					
20	00-	eL	16 54 13	LZ	27.	180.0	54.0	
20			50.7 N 174.4 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
20			4.4 S 79.1 W PERU ECUADOR BORDER REGION					
			H=266 KM MAG 3.90 CGS					
20			54.7 N 172.8 E ALEUTIAN NEAR ISLANDS					
			H= 33 KM MAG 4.70 CGS					
20			51.7 N 176.4 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 5.00 CGS					
20	00-	eL	21 16 59	LZ	33	339.0	67.0	
20	GG-	eL	21 23 56	LZ	30	241.5	78.2	
20			51.6 N 173.7 E ALEUTIAN NEAR ISLANDS					
			H= 33 KM MAG 4.40 CGS					
20			18.4 S 72.4 W OFF COAST OF NORTHERN CHILE					
			H= 33 KM MAG 5.20 CGS					
20			50.4 N 178.2 E RAT ALEUTIAN ISLANDS					
			H= 32 KM MAG 5.10 CGS					
20	00-	eL	22 40 30	LZ	35	493.2	68.4	
20	GG-	eL	22 47 12	LZ	26	173.3	79.7	
20			50.9 N 174.5 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.60 CGS					
20			51.4 N 176.7 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.70 CGS					
20			38.4 N 21.9 E GREECE					
			H= 10 KM MAG 4.50 CGS					
21			80.7 N 13.1 E SVALBARD REGION					
			H= 33 KM MAG 4.30 CGS					
21			51.1 N 177.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 3.90 CGS					
21			63.6 N 153.5 W CENTRAL ALASKA					
			H= 33 KM MAG 4.10 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
21			02 54 47.* 50.1 N 176.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
21			03 10 27.* 9. S 108.9 W N. EASTER ISLAND CORDILLERA H= 33 KM MAG 4.50 CGS					
21			03 25 35.* 32.4 N 76.9 E KASHMIR INDIA BORDER REGION H= 33 KM MAG 4.50 CGS					
21			03 38 14.3 6. S 149.5 E NEW BRITAIN REGION H= 33 KM MAG 4.80 CGS					
21			04 19 51.* 50.7 N 175.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
21			04 38 46.3 44.7 N 148.1 E KURILE ISLANDS H= 61 KM MAG 4.90 CGS					
21			05 46 27.1 51.1 N 177.8 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.80 CGS					
21			05 51 58.* 50.8 N 177.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
21			10 08 14.* 17.7 N 103.1 W NEAR COAST MICHOACAN, MEXICO H= 33 KM MAG 3.80 CGS					
21			10 32 00.* 52.2 N 169.3 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.30 CGS					
21			11 14 15.1 15.1 S 173.2 W TONGA ISLANDS H= 33 KM MAG 6.00 CGS					
21	00-	eL	12 16 41	LT	34.	808.1	134.0	
21	GG-	eL	12 23 33	LZ	34	839.6	145.3	
21	GG-	eL	11 33 52	LZ	13.	498.1		
21			12 05 38.* 51.7 N 171.0 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
21			13 23 05.* 48.9 N 176.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
21			13 58 00.8 3.5 S 149.8 E BISMARCK SEA H= 33 KM MAG 4.80 CGS					
21	00-	eL	14 52 42	LT	45.	463.1	114.8	
21	GG-	eL	15 00 32	LZ	28	374.5	122.2	
21			14 09 19.1 22.6 S 69.0 W NORTHERN CHILE H=109 KM MAG 4.90 CGS					
21			16 09 09.* 51. N 173.7 E ALEUTIAN ISLANDS REGION H= 33 KM MAG 3.70 CGS					
21			17 08 07.2 13.8 S 166.0 E NEW HEBRIDES ISLANDS H= 20 KM MAG 5.20 CGS					
21			17 29 10.* 50.9 N 172.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.00 CGS					
21			19 44 44.3 51.2 N 177.6 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.40 CGS					
21			22 28 28.4 37.4 N 139.5 E HONSHU, JAPAN H=145 KM MAG 4.60 CGS					
21	00-	eP	22 39 46.0	SZ	0.6	9.8	73.4	4.77
21			22 30 14.8 51.1 N 178.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
21			23 11 41.* 51.1 N 179.5 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 3.90 CGS					
22			01 39 46.* 11.2 N 60.8 W WINDWARD ISLANDS H= 83 KM MAG 3.70 CGS					
22			02 22 46.* 19.5 N 108.9 W REVILLA GIGEDO ISLANDS REG. H= 33 KM MAG 4.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
22			03 28 40.*					
			50.9 N 175.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
22			03 52 09.*					
			53.6 N 175.9 W ANDREANOF ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.20 CGS					
22			04 46 13.*					
			52.2 N 172.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.80 CGS					
22			05 31 50.*					
			51.7 N 172.9 E ALEUTIAN NEAR ISLANDS					
			H= 35 KM MAG 4.20 CGS					
22			06 33 09.*					
			51.1 N 174.7 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
22			07 27 30.*					
			51.4 N 177.1 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					
22			08 49 33.*					
			49. N 168.0 E ALEUTIAN ISLANDS REGION					
			H= 30 KM MAG 4.40 CGS					
22			09 14 51.3					
			51.9 N 173.4 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 5.50 CGS					
22	00-	eP	09 25 40.5	SZ	1.2	28.9	66.5	5.28
		eL	52 08	LR	22	167.2		
22	GG-	eL	09 55 03	LZ	28	330.4	77.7	
22			10 52 00.*					
			52. N 170.6 E ALEUTIAN NEAR ISLANDS					
			H= 20 KM MAG 4.60 CGS					
22			11 17 58.8					
			51.9 N 171.1 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 5.10 CGS					
22			11 47 28.*					
			52.1 N 171.9 E ALEUTIAN NEAR ISLANDS					
			H= 35 KM MAG 4.30 CGS					
22			11 52 42.5					
			51.2 N 177.4 E RAT ALEUTIAN ISLANDS					
			H= 25 KM MAG 4.50 CGS					
22			13 35 52.*					
			51.1 N 173.1 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
22			13 37 29.*					
			50.6 N 176.5 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.60 CGS					
22			13 42 28.*					
			26.3 S 177.5 W SOUTH OF FIJI ISLANDS					
			H= 33 KM					
22			14 06 15.8					
			55.4 N 164.8 E KOMANDORSKY ISLANDS REGION					
			H= 30 KM MAG 5.10 CGS					
22			16 33 55.*					
			1.4 S 132.2 E WEST NEW GUINEA REGION					
			H=110 KM MAG 4.90 CGS					
22			17 00 10.*					
			52.1 N 171.9 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.60 CGS					
22			17 57 11.*					
			36.7 N 120.9 W CENTRAL CALIFORNIA					
			H= 33 KM MAG 3.75 CGS					
22			20 47 01.*					
			21.2 N 106.8 W OFF COAST OF CENTRAL MEXICO					
			H= 33 KM MAG 4.20 CGS					
22			21 10 10.*					
			51.7 N 174.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
22			21 13 27.*					
			51.2 N 179.3 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.40 CGS					
22			21 22 36.*					
			19.1 N 106.2 W OFF COAST OF JALISCO, MEXICO					
			H= 33 KM MAG 4.10 CGS					
22			21 38 15.5					
			16.8 S 175.7 E FIJI ISLANDS REGION					
			H= 73 KM MAG 4.90 CGS					
22	GG-	eP'2	21 57 46.2	SZ	1.4	56.3	144.9	
		eP'2	57 48	LZ	10	972.2		
		eL	22 47 24	LZ	27	279.8		
22	00-	e	22 18 20	LT	17	204.6	134.5	
		eL	42 00	LZ	42	848.0		
22			22 55 15.*					
			18.5 N 106.4 W OFF COAST OF JALISCO, MEXICO					
			H= 35 KM MAG 3.60 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
23			16.1 N 93.4 W CHIAPAS, MEXICO					
	00	08 41.1	H= 33 KM MAG 4.10 CGS					
23			50.8 N 174.3 E RAT ALEUTIAN ISLANDS					
	02	07 44.6	H= 33 KM MAG 4.50 CGS					
23	GG-	eL	02 35 00	SR	0.6	20.5		
23			51.2 N 178.7 E RAT ALEUTIAN ISLANDS					
	03	04 36.*	H= 35 KM MAG 4.30 CGS					
23			52.6 N 173.0 E RAT ALEUTIAN ISLANDS					
	07	07 13.*	H= 40 KM MAG 5.20 CGS					
23			18.3 S 168.2 E NEW HEBRIDES ISLANDS					
	07	37 11.*	H= 33 KM MAG 4.60 CGS					
23			48.7 N 154.2 E KURILE ISLANDS					
	08	11 23.*	H= 30 KM MAG 4.50 CGS					
23			53.6 N 160.8 W SOUTH OF ALASKA					
	12	20 33.*	H= 33 KM MAG 4.90 CGS					
23	GG-	eP	12 39 38.5	SZ	0.3	22.3	1.5	
		eS	39 59	SR	0.5	46.8		
23			52. N 169.9 E ALEUTIAN ISLANDS REGION					
	12	59 13.*	H= 33 KM MAG 4.10 CGS					
23			5.5 N 128.7 E EAST OF PHILIPPINE ISLANDS					
	13	23 34.*	H= 67 KM MAG 5.60 CGS					
23	GG-	eP	14 00 07.5	SZ	0.5	23.6	1.1	
		eS	00 23	SR	0.4	83.5		
23	00-	eP	17 26 00.0	SZ	0.5	12.7		
23			25.7 S 70.5 W NEAR COAST OF NORTHERN CHILE					
	22	11 50.2	H= 80 KM MAG 7.25 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
23	00-	ePD	22 26 10	LZ	18.	823.7	108.1	
		e	29 12	SZ	0.5	1.8		
		ePP	30 34	LZ	20	2022.1		
		ePP	30 36	SZ	2.0	211.3		
		eSKS	36 45	LR	21	4579.1		
		eSP	39 50	LZ	16	9999.9		
23	GG-	e	22 26 11	SZ	2.0	142.2	104.1	
		eP	26 12	LZ	20	1526.3		
		e	29 26	SZ	1.6	117.6		
		ePP	30 00	LZ	16	2998.5		
		eSKS	36 28	LT	18	9836.0		
		ePS	39 10	LT	34	21.4U		
		eL	23 01 50	LZ	34	9999.9U		
24			13.7 N 92.1 W OFF COAST OF CHIAPAS, MEXICO					
	00	26 45.8	H= 87 KM MAG 4.50 CGS					
24			51.9 N 167.8 W FOX ALEUTIAN ISLANDS					
	00	45 33.*	H= 30 KM MAG 4.30 CGS					
24			60.1 N 149.6 W KENAI PENINSULA, ALASKA					
	01	13 01.1	H= 30 KM MAG 4.80 CGS					
24			52. N 171.3 E RAT ALEUTIAN ISLANDS					
	02	22 45.*	H= 35 KM MAG 4.00 CGS					
24			19. S 169.1 E NEW HEBRIDES ISLANDS					
	06	56 14.3	H= 97 KM MAG 4.30 CGS					
24			9.5 N 138.5 E WEST CAROLINE ISLANDS					
	08	05 16.6	H= 33 KM MAG 4.90 CGS					
24			14. N 92.2 W NEAR COAST OF CHIAPAS, MEX.					
	08	09 17.2	H= 56 KM MAG 5.00 CGS					
24	GG-	eP	08 22 05	LZ	17.	604.9	87.9	
		e	32 40	LZ	15	447.1		
		eL	51 40	LZ	33	1287.7		
24	00-	e	08 32 18	LR	16	1575.9	84.1	
		e	38 45	LR	28	574.0		
		eL	49 10	LR	33	1753.2		
24			50.4 N 175.5 E RAT ALEUTIAN ISLANDS					
	08	30 40.*	H= 25 KM MAG 4.50 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
24	09 37 17.6		14.2 N 92.1 W NEAR COAST OF CHIAPAS, MEX. H= 33 KM MAG 5.10 CGS					
24	10 44 34.*		6.3 N 75.9 W NORTHERN COLOMBIA H= 33 KM MAG 3.60 CGS					
24	14 21 18.9		51.1 N 177.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.00 CGS					
24	15 28 37.*		20.4 S 179.1 W FIJI ISLANDS REGION H=487 KM MAG 4.40 CGS					
24	16 53 46.*		6.1 S 130.2 E BANDA SEA H=128 KM MAG 5.70 CGS					
24	19 13 51.2		51.2 N 179.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
24	20 53 52.4		52.2 N 174.4 E RAT ALEUTIAN ISLANDS H= 34 KM MAG 5.30 CGS					
24	21 09 12.*		15.3 N 92.2 W MEXICO GUATEMALA BORDER REG. H=262 KM MAG 4.20 CGS					
24	21 23 16.5		51.4 N 178.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.20 CGS					
24	00-	eP	21 34 10.5	SZ	0.6	7.8	67.4	5.01
24	22 54 59.5		10.8 S 165.8 E SANTA CRUZ ISLANDS H= 91 KM MAG 4.70 CGS					
25	01 13 12.*		51.8 N 173.7 E RAT ALEUTIAN ISLANDS H= 20 KM MAG 4.30 CGS					
25	01 32 23.8		5.4 S 152.2 E NEW BRITAIN REGION H= 38 KM MAG 5.40 CGS					
25	01 55 37.7		40.1 N 143.0 E NEAR E. COAST HONSHU, JAPAN H= 33 KM MAG 4.30 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
25	02 02 37.4		61.2 N 146.7 W SOUTHERN ALASKA H= 40 KM MAG 4.50 CGS					
25	02 32 16.*		16.9 N 98.7 W NEAR COAST OF GUERRERO, MEX. H= 33 KM MAG 4.00 CGS					
25	03 05 45.*		42.9 N 135.6 E SEA OF JAPAN H=435 KM MAG 4.40 CGS					
25	03 33 49.*		51.8 N 175.0 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.60 CGS					
25	03 35 27.1		59.2 S 26.2 W SOUTH SANDWICH ISLANDS REG. H= 33 KM MAG 5.60 CGS					
25	04 51 27.8		5.5 S 152.0 E NEW BRITAIN REGION H= 35 KM MAG 6.50 CGS					
25	00-	ePP	05 11 20	LZ	20.	1870.5	117.4	
		ePPP	14 00	LZ	20	1137.4		
		eSKS	17 10	LT	32	1281.9		
		ePS	21 05	LT	27	4543.4		
		eSS	27 55	LT	39	9999.9		
		eSSS	31 50	LT	25	9999.9		
		eLQ	41 10	LR	35	5106.2		
		eLR	54 20	LZ	27	9999.9		
25	05 22 14.5		52.1 N 173.2 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 5.60 CGS					
25	00-	eP	05 33 00.5	SZ	1.4	134.5	66.3	5.88
25	05 46 53.*		52. N 173.6 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.80 CGS					
25	06 20 57.5		51.9 N 173.4 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 5.00 CGS					
25	06 28 22.1		15. N 60.0 W WINDWARD ISLANDS H= 49 KM MAG 4.80 CGS					
25	09 16 35.8		41.2 S 91.2 W SOUTHERN PACIFIC OCEAN H= 33 KM MAG 4.90 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
25	10 19 11.*		5.5 S 152.3 E NEW BRITAIN REGION H= 31 KM MAG 5.70 CGS					
25	10 34 06.1		23.8 N 94.8 E BURMA INDIA BORDER REGION H= 87 KM MAG 5.40 CGS					
25	11 21 55.*		34. N 117.6 W SOUTHERN CALIFORNIA H= 14 KM MAG 4.60 CGS					
25	12 27 51.9		51.1 N 178.1 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 5.00 CGS					
25	13 35 25.*		51.3 N 174.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.80 CGS					
25	14 52 49.		20.7 S 174.3 W TONGA ISLANDS H=139 KM MAG 4.60 CGS					
25	16 04 45.7		19.2 N 121.2 E PHILIPPINE ISLANDS REGION H= 13 KM MAG 5.10 CGS					
25	00-	eL	16 48 18	LR	28.	839.9	82.8	
25	GG-	eL	16 54 54	LZ	25	370.5	87.8	
25	16 49 20.2		26.2 S 179.7 E SOUTH OF FIJI ISLANDS H=517 KM MAG 3.80 CGS					
25	17 15 43.1		50.8 N 177.4 E RAT ALEUTIAN ISLANDS H= 40 KM MAG 4.50 CGS					
25	18 52 38.*		5.5 S 151.2 E NEW BRITAIN REGION H=137 KM MAG 5.00 CGS					
25	19 23 33.		11.4 S 166.1 E SANTA CRUZ ISLANDS H= 86 KM MAG 5.70 CGS					
25	GG-	ePP	19 45 34	LZ	22.	329.2	136.5	
		eL	20 34 10	LZ	28	477.3		
25	00-	eLQ	20 24 15	LT	30	404.0	127.2	

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
		eLR	30 15	LZ	31.	1521.7		
26	01 07 05.*		50.6 N 175.5 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
26	01 37 05.6		35.1 N 57.6 E IRAN H= 33 KM MAG 5.20 CGS					
26	GG-	eP	01 44 10.0	SZ	1.0	12.3	36.6	4.69
26	00-	eP	01 44 31.0	SZ	0.6	4.0	39.3	4.32
		ePP	45 54	SZ	1.0	19.3		
		eL	02 01 05	LZ	20	704.2		
							AVG.	4.50
26	03 35 26.*		50.8 N 177.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.20 CGS					
26	04 42 28.3		18.8 S 176.1 W FIJI ISLANDS REGION H= 33 KM MAG 5.30 CGS					
26	GG-	eP 2	05 02 19.5	SZ	1.1	34.7	148.6	
		eL	55 38	LZ	31	444.8		
26	00-	eL	05 47 03	LT	30	346.3	137.5	
26	05 36 01.1		18.9 S 176.3 W FIJI ISLANDS REGION H= 61 KM MAG 5.40 CGS					
26	00-	eL	06 40 40	LZ	36.	1550.3	137.6	
26	GG-	eL	06 48 58	LZ	30	1119.4	148.7	
26	06 43 02.*		36.1 N 133.0 E SEA OF JAPAN H= 33 KM MAG 4.50 CGS					
26	07 34 30.*		36.9 N 142.6 E OFF E. COAST HONSHU. JAPAN H= 33 KM MAG 4.20 CGS					
26	08 55 42.2		6.7 S 102.7 E SOUTHWEST OF SUMATRA H= 33 KM MAG 6.10 CGS					
26	GG-	eP	09 09 17	LZ	13.	212.0	96.0	
		eL	48 14	LZ	20	577.7		

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
26	00-	e	09 12 45	LR	14.	195.9	96.7	
		eSKS	19 48	LR	14	274.2		
		eL	47 33	LT	29	2455.5		
26	14 26 35.*		50.3 N 176.6 E RAT ALEUTIAN ISLANDS H= 37 KM MAG 4.60 CGS					
26	14 26 56.*		22.8 S 65.3 W JUJUY PROVINCE, ARGENTINA H= 91 KM MAG 4.50 CGS					
26	14 34 04.*		50.6 N 177.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.70 CGS					
26	15 43 19.4		50.2 N 130.0 W VANCOUVER ISLAND REGION H= 33 KM MAG 4.50 CGS					
26	16 47 26.*		51.9 N 172.4 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.30 CGS					
26	17 54 18.*		2.6 S 133.9 E WEST NEW GUINEA REGION H= 33 KM MAG 5.60 CGS					
26	20 02 07.*		34.7 N 22.5 E MEDITERRANEAN SEA H= 33 KM					
26	20 25 18.*		52. N 171.6 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.80 CGS					
26	00-	eP	20 34 57.8	SZ	0.5	8.7		
26	20 58 46.*		51.7 N 172.1 E RAT ALEUTIAN ISLANDS H= 35 KM MAG 4.10 CGS					
26	22 18 06.3		40. N 142.7 E NEAR E. COAST HONSHU, JAPAN H= 33 KM MAG 4.40 CGS					
26	22 23 22.*		51.3 N 174.1 E RAT ALEUTIAN ISLANDS H= 30 KM MAG 4.70 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
26	23 36 12.2		6.9 N 73.0 W NORTHERN COLOMBIA H=146 KM MAG 5.70 CGS					
26	GG-	eP	23 48 13.2	SZ	0.7	11.2	81.0	4.76
27	00 49 39.4		5.4 S 152.3 E NEW BRITAIN REGION H= 51 KM MAG 5.10 CGS					
27	01 50 02.*		51.3 N 175.6 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.50 CGS					
27	02 01 36.3		25.1 N 128.2 E RYUKYU ISLANDS H= 33 KM MAG 5.20 CGS					
27	GG-	eP	02 14 19.2	SZ	1.0	11.2	86.9	4.98
27	04 08 22.5		25.1 N 128.2 E RYUKYU ISLANDS H= 33 KM MAG 5.10 CGS					
27	05 49 18.*		50.9 N 173.2 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.90 CGS					
27	07 46 29.1		28.5 N 112.1 W GULF OF CALIFORNIA H= 33 KM MAG 5.30 CGS					
27	08 45 24.*		5.2 S 152.0 E NEW BRITAIN REGION H= 60 KM MAG 4.80 CGS					
27	09 13 52.*		29. N 111.6 W GULF OF CALIFORNIA H= 33 KM MAG 3.10 CGS					
27	09 14 56.*		20.2 S 68.9 W CHILE BOLIVIA BORDER REGION H= 90 KM MAG 4.20 CGS					
27	10 52 45.*		28.7 N 112.0 W GULF OF CALIFORNIA H= 33 KM MAG 4.60 CGS					
27	11 29 59.		24.2 N 5.1 E SOUTHERN ALGERIA H= KM MAG 5.80 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
27			19.4 N 107.8 W OFF COAST OF JALISCO, MEXICO					
			H= 33 KM MAG 3.70 CGS					
27	13	26 17.*	51. N 173.5 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.50 CGS					
27	14	17 25.*	51.1 N 178.2 E RAT ALEUTIAN ISLANDS					
			H= 30 KM MAG 4.10 CGS					
27	15	15 13.8	2.4 N 126.9 E MOLUCCA PASSAGE					
			H= 22 KM MAG 4.90 CGS					
27	17	33 10.7	51.4 N 176.6 E RAT ALEUTIAN ISLANDS					
			H= 35 KM MAG 4.40 CGS					
27	18	34 22.*	19.5 N 120.6 E PHILIPPINE ISLANDS REGION					
			H=121 KM					
27	20	22 24.3	4.1 S 152.7 E NEW BRITAIN REGION					
			H=118 KM MAG 4.90 CGS					
28	00	11 11.9	50.4 N 177.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
28	00	40 07.*	4.9 N 128.1 E NORTH OF HALMAHERA					
			H= 77 KM MAG 5.20 CGS					
28	00	44 29.*	50.1 N 176.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
28	00	46 58.3	50.3 N 177.6 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.80 CGS					
28	00	59 15.6	50.3 N 177.7 E RAT ALEUTIAN ISLANDS					
			H= 32 KM MAG 4.60 CGS					
28	01	16 21.8	50.4 N 177.7 E RAT ALEUTIAN ISLANDS					
			H= 34 KM MAG 5.20 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
28	01	50 58.*	49.8 N 179.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
28	03	53 15.6	52.5 N 172.8 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.50 CGS					
28	04	40 55.1	21.2 N 121.3 E TAIWAN REGION					
			H= 33 KM MAG 4.50 CGS					
28	06	15 28.*	36.2 S 178.6 E OFF E. COAST N. ISLAND, N.Z.					
			H=221 KM					
28	06	20 10.	2.6 N 79.8 W SOUTH OF PANAMA					
			H= 33 KM MAG 4.10 CGS					
28	06	56 52.*	12.8 N 89.7 W OFF COAST OF CENTRAL AMERICA					
			H= 97 KM MAG 4.00 CGS					
28	07	05 32.*	49.9 N 178.7 E ALEUTIAN ISLANDS REGION					
			H= 25 KM MAG 4.20 CGS					
28	08	05 37.*	27.6 N 55.1 E SOUTHERN IRAN					
			H= 33 KM					
28	09	05 10.*	51.2 N 174.0 E RAT ALEUTIAN ISLANDS					
			H= 33 KM MAG 4.30 CGS					
28	09	36 12.*	53.3 N 159.8 E NEAR EAST COAST OF KAMCHATKA					
			H= 70 KM MAG 4.60 CGS					
28	12	20 09.*	24. S 179.9 W SOUTH OF FIJI ISLANDS					
			H=529 KM MAG 4.80 CGS					
28	13	06 48.9	51.3 N 174.5 E RAT ALEUTIAN ISLANDS					
			H= 46 KM MAG 4.70 CGS					
28	19	33 14.*	54.5 N 80.9 E CENTRAL RUSSIA					
			H= 33 KM MAG 4.70 CGS					

DAY	STA	PHASE	TIME	INST	PER	AMPL	DIST	MAG
28	20	31 23.*	51.6 N 171.3 E RAT ALEUTIAN ISLANDS H= 33 KM MAG 4.10 CGS					
28	21	51 58.	35.4 S 71.3 W CENTRAL CHILE H= 94 KM MAG 4.50 CGS					
28	23	42 21.9	25.3 S 179.6 E SOUTH OF FIJI ISLANDS H=485 KM MAG 4.80 CGS					