Bulletin of the Seismographic Stations

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ARCATA--BERKELEY--FICKLE HILL--FRIANT--GRANITE CREEK--JAMESTOWN--LLANADA--MANZANITA LAKE--MINA--MINERAL MOUNT HAMILTON--OROVILLE--PARAISO--PILARCITOS CREEK PRIEST--SAN ANDREAS GEOPHYSICAL OBSERVATORY--WHISKEYTOWN

Earthquakes and the Registration of Earthquakes

From January 1, 1974 to June 30, 1974

by

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1975

BULLETIN OF THE SEISMOGRAPHIC STATIONS
of the University of California

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CONTENTS

INTRODUCTION

Each issue of the Bulletin includes determination of epicenters, origin times, magnitudes, and other information available at the time of writing, for earthquakes in Northern California and adjoining areas. Recorded arrival times of seismic waves are tabulated only for $M \geq 4$ earthquakes in the local area and for teleseisms.

Information items regarding the seismographic stations which comprise the Berkeley network are repeated in each issue. Information of a general nature, such as the Modified Mercalli Intensity Scale, will be found only in the first number of each volume.

PERSONNEL (October 1975)

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HISTORY OF THE UNIVERSITY OF CALIFORNIA STATIONS

"The Seismographic Stations at Mount Hamilton and Berkeley present several items of interest in the history of earthquake science, one of which is that according to the available records they were the first seismographic stations set up in America. Furthermore, they have functioned continuously from their founding to the present day, with improvements in instrumental equipment from time to time as the development of the science and opportunity have permitted.

Several outstanding figures in the seismology of the 1880's were impressed with the importance of these stations, and Ewing, Milne, and Gray each took a personal interest in aiding one or both stations to obtain their own best and most modern types of instruments."

The quotation is from "History of the University of California Seismographic Stations and Related Activities" by Professor George D. Louderback, published in the Bulletin of the Seismological Society of America, Vol. 32, No. 3, pp. 205-229, 1942. In this paper may be found a detailed account of the development of the Berkeley stations from the installation of the instruments (the first earthquake known recorded at Mount Hamilton was on April 24, 1887) to 1942.

Since 1942, the number of seismographic stations associated with the University of California has increased from six to eighteen in 1974. In 1950, Professor Perry Byerly was appointed Director by the Regents; he had been in charge of instruction and research since 1925. Professor Bruce A. Bolt was appointed Director in 1963. Since 1960, the stations have entered into research and service contracts with the Air Force Office of Scientific Research, the National Science Foundation, the California Department of Water Resources and the California State Division of Mines and Geology. A telemetry network of fourteen stations in Central California, recording on film and selected stations on magnetic tape, is now operated together with seismographs with broad-band frequency response at Berkeley. Copies of records from instruments at the Berkeley observatory are available, together with response characteristics, on request to the Director.

THE BYERLY SEISMOGRAPHIC STATION (BKS)

Equipment of a WWSS station began operating in a newly constructed tunnel east of the main campus on June 8, 1962. The closest buildings, part of the Lawrence Berkeley Laboratory, are about 0.8 km away. The tunnel was cut into the upper part of the Claremont Formation. Of Miocene age, this formation consists of thin layers of cherty material alternating with shale.

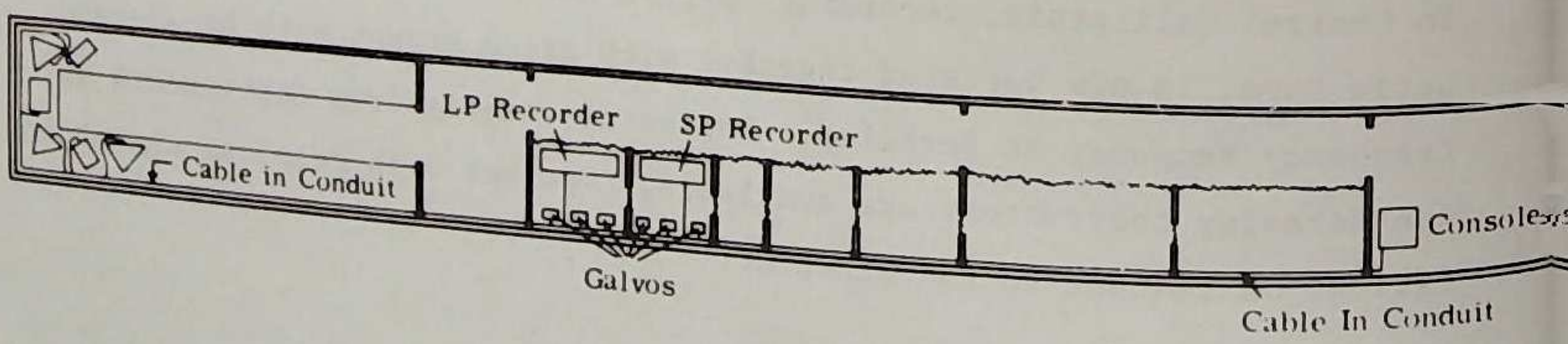
A plan of the tunnel is shown in the diagram below. Piers are constructed of reinforced concrete with no isolation from floor and walls. The temperature is stable. A ventilating and dehumidifying system is connected to all rooms.

The short-period world-wide standard instruments are operated with an approximate magnification of 25,000 at 1 sec and the long-period standard instruments with a peak magnification of 3,000 at about 15 sec.

On March 20, 1964, the Regents of the University of California named this station the "Byerly Seismographic Station" in recognition of the work of Professor Perry Byerly.

Geology

The portal of the adit is in an old quarry which exposes near-vertical intensely contorted, thinly-bedded, brittle chert, and softer interbedded shale of the Miocene Claremont Formation. Individual beds are one to a few inches thick; the chert beds are intensely fractured and intricately criss-crossed by fine patterns of jointing. Near-surface beds are warped by downhill creep; soil is very thin. The area is crossed by numbers of minor faults, and is about one mile from the active trace of the Hayward fault.



STATIONS IN OPERATION: January 1, 1974 to June 30, 1974

Station (From N to S)	North Latitude	West Longitude	Elev. Meters	Foundation Material	Symbol	Present Auspices and Date Established
Arcata	40° 52!6	124° 04!5	60	Sandstone (loose)	ARC	Humboldt State Coll. 1948
Fickle Hill	40° 48!1	123° 59!1	610	Siltstone over graywacke	FHC	Humboldt State Coll. Sept. 4, 1968
Whiskeytown	40° 34!0	122° 32!0	300	Geo-Devonian meta-volcanic	WDC	National Park Service March 8, 1973
Manzanita Lake	DISCONTINUED					
Mineral	40° 20!7	121° 36!3	1495	Volcanic	MIN	National Park Service 1938
Oroville	39° 33!3	121° 30!0	360	Basalt	ORV	Dept. of Water Resources 1963
Mina (Nevada)	38° 26!0	118° 09!2	1524	Limestone	MNV	Lawrence Livermore Lab. 1969
Jamestown	37° 56!8	120° 26!3	457	Metamorphic (serpentine)	JAS	Dept. of Water Resources 1964
Berkeley (Strawberry)	37° 52!6	122° 14!1	276	Claremont shales & cherts	BKS	University of Calif. 1962
Berkeley	37° 52!4	122° 15!6	81	Franciscan sandstone	BRK	University of Calif. 1887
Pilarcitos Creek	37° 30!0	122° 22!9	91	Grano-diorite (weathered)	PCC	Sare Ranch, 1965
Mt. Hamilton	37° 20!5	121° 38!5	1282	Franciscan formation (greenstone)	MHC	Lick Observatory 1887
Granite Creek	37° 01!8	121° 59!8	122	Granite	GCC	Richard E. Randolph Santa Cruz, 1965
Friant	36° 59!5	119° 42!5	119	Alluvium overlying granite	FRI	Bureau of Reclamation March 9, 1971 #Nov. 6, 1972
San Andreas Geophysical Observatory	36° 45!9	121° 26!7	350	Granite	SAO	University of Calif. 1966
Llanada	36° 37!0	120° 56!6	475	Alluvium overlying sandstone	LLA	Charles McCullough Ranch 1961
Paraiso	36° 19!9	121° 22!2	363	Grano-diorite	PRS	Paraiso Hot Springs 1961
Priest	36° 08!5	120° 39!9	1187	Greenstone basic metamorphic	PRI	Federal Aviation Agency 1961

STATION INSTRUMENTATION

January 1, 1974 to June 30, 1974

Station	Type of Instrument	T_o sec	T_g sec	Component	Mag. at
ARC	Wood-Anderson torsion	0.8	-	S, W	2,000
BKS	Benioff 100 kg	1.0	0.75	N, E, Z	25,000
	Sprengnether	15	100	N, E, Z	3,000
	Wood-Anderson torsion	0.8	-	S, W	2,000
	Sprengnether ULP	100	300 Filter	N45°E	250
	" "	100	300 Filter	N45°W	650
	" "	100	300 Filter	Z	570
BRK	#Benioff 100 kg	1.0	0.2	Z	25,000
	Benioff 100 kg	1.0	8.0	Z	Variable
	100X torsion	0.8	-	N, E	100
	4X torsion	0.8	-	N, E	4
	Press-Ewing	15	30	Z	1,000
	*Press-Ewing	30	BB	N45°W, N45°E, Z	- - - - -
FHC	#Benioff 14 kg	1.0	0.2	Z	40,000
FRI	#Benioff 14 kg	1.0	0.2	Z	110,000
GCC	#Benioff 14 kg	1.0	0.2	Z	50,000
JAS	Benioff 100 kg	1.0	0.75	N, E, Z	250,000
	#*Benioff 14 kg	1.0	0.2	Z	600,000
	Sprengnether	40	--	Z (4-3-74)	
	*BB Velocity				- - - - -
	*Displacement				- - - - -
	*Short Period (Filter)				- - - - -
LLA	#Benioff 14 kg	1.0	0.2	Z	50,000
MHC	#Benioff 14 kg	1.0	0.2	Z	50,000
	Wood-Anderson torsion	0.8	-	S, E	2,000
MIN	Benioff 100 kg	1.0	0.4	Z	30,000
	Wood-Anderson torsion	0.8	-	S, E	2,000
MNV	#Broad Band instrument filtered to give short-period response			Z	600,000
ORV	#Benioff 100 kg	1.0	0.2	Z	220,000
PCC	#Benioff 14 kg	1.0	0.2 Filter	Z	50,000
PRI	#*Benioff 14 kg	1.0	0.2	Z	50,000
PRS	#Benioff 14 kg	1.0	0.2	Z	50,000
SAO	*Benioff 14 kg	1.0	0.2	Z	- - - - -
	+#Sprengnether 0.70 kg	0.2	0.05 Filter	Z	
WDC	Sprengnether	40	-	Z	
	*BB Velocity				- - - - -
	*Displacement				- - - - -
	#*Short Period (Filter)				500,000 at 1 sec

\# Signals telemetered to Berkeley. Magnifications on 20X Viewer.
* Signals recorded on magnetic tape, Berkeley.
\+ Signals recorded on magnetic tape at SAO.

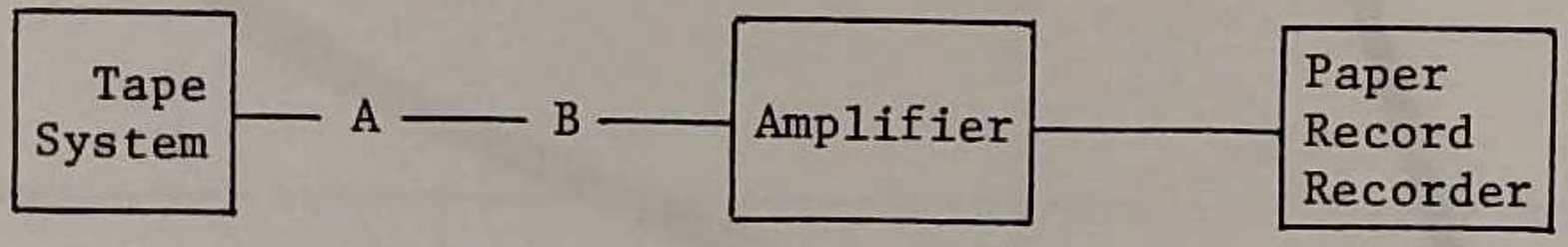
Direction of motion: In the "Component" column, each horizontal component seismograph is designated by the direction of ground motion corresponding to upward trace motion on the seismogram when it is oriented so that time increases from left to right. On all vertical component (Z) instruments, upward trace motion corresponds to upward ground motion.

Relative magnification curves of instruments recording through the telemeter system are listed on the following pages. Absolute magnification may be obtained by use of calibration pulses recorded daily from each telemetered station.

Tape-recorded long-period seismometers (BRK): On pages 8 and 9 are given the frequency response curves, amplitude and phase, for the Press-Ewing long-period broadband seismometers which record on magnetic tape at BRK.

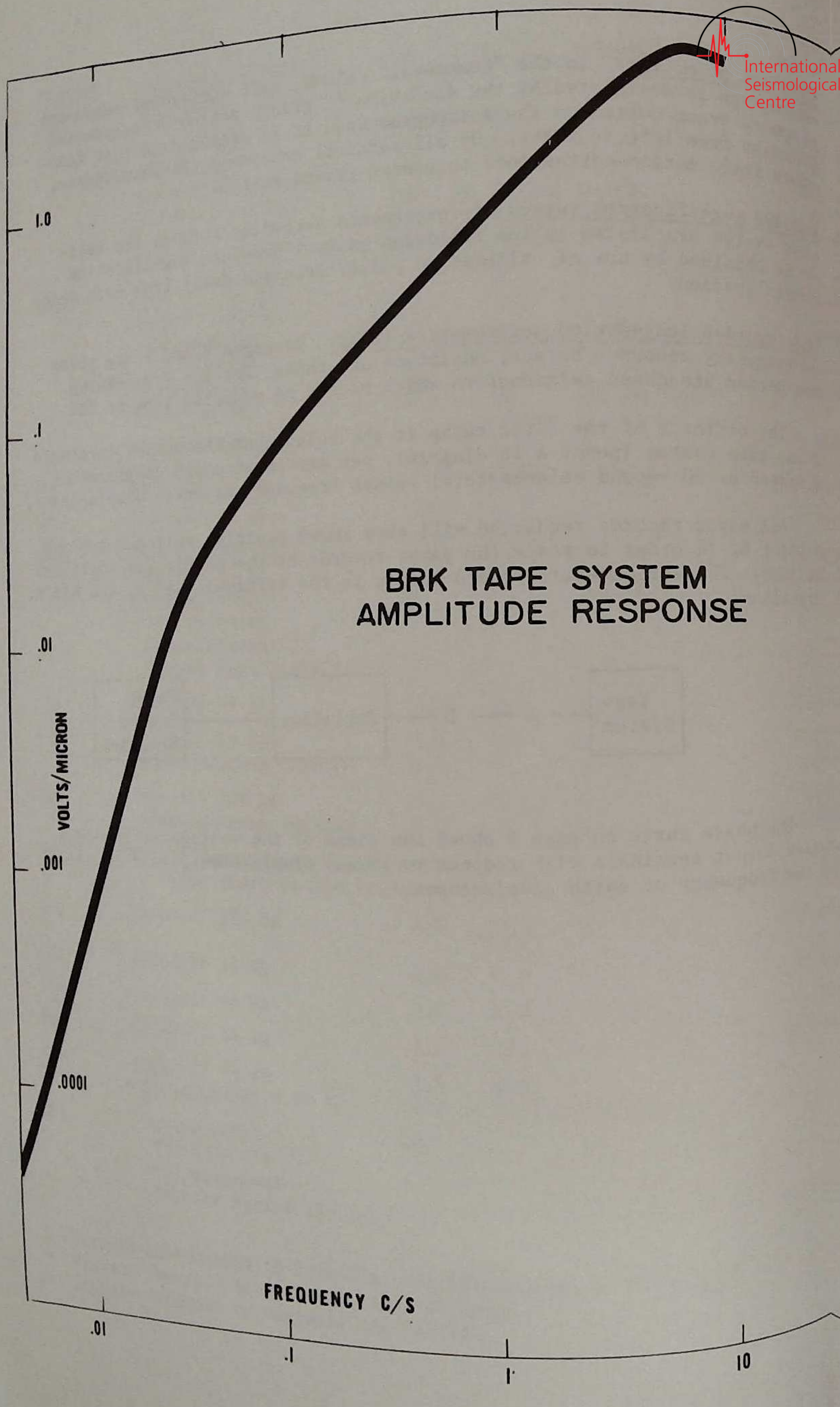
The ordinate of the first curve is the voltage at the output terminals of the tape system (point A in diagram), per micron of earth displacement as sensed by 30-second seismometers; versus frequency of earth displacement.

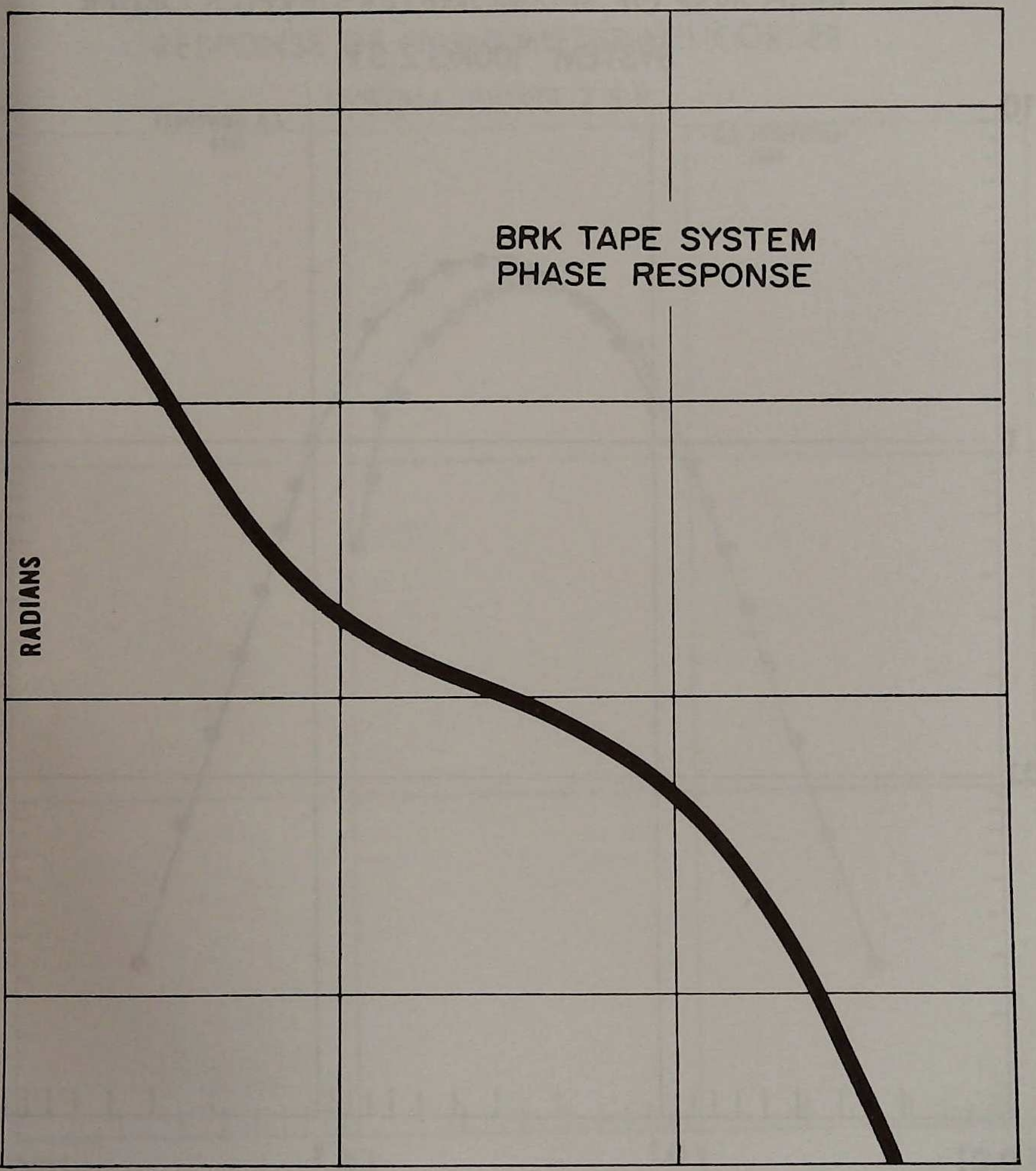
All paper records requested will show known positive voltages applied at point B, in order to scale the paper records at the particular amplifier settings. The seismometers record motion in the vertical, N45°W, and N45°E, directions.



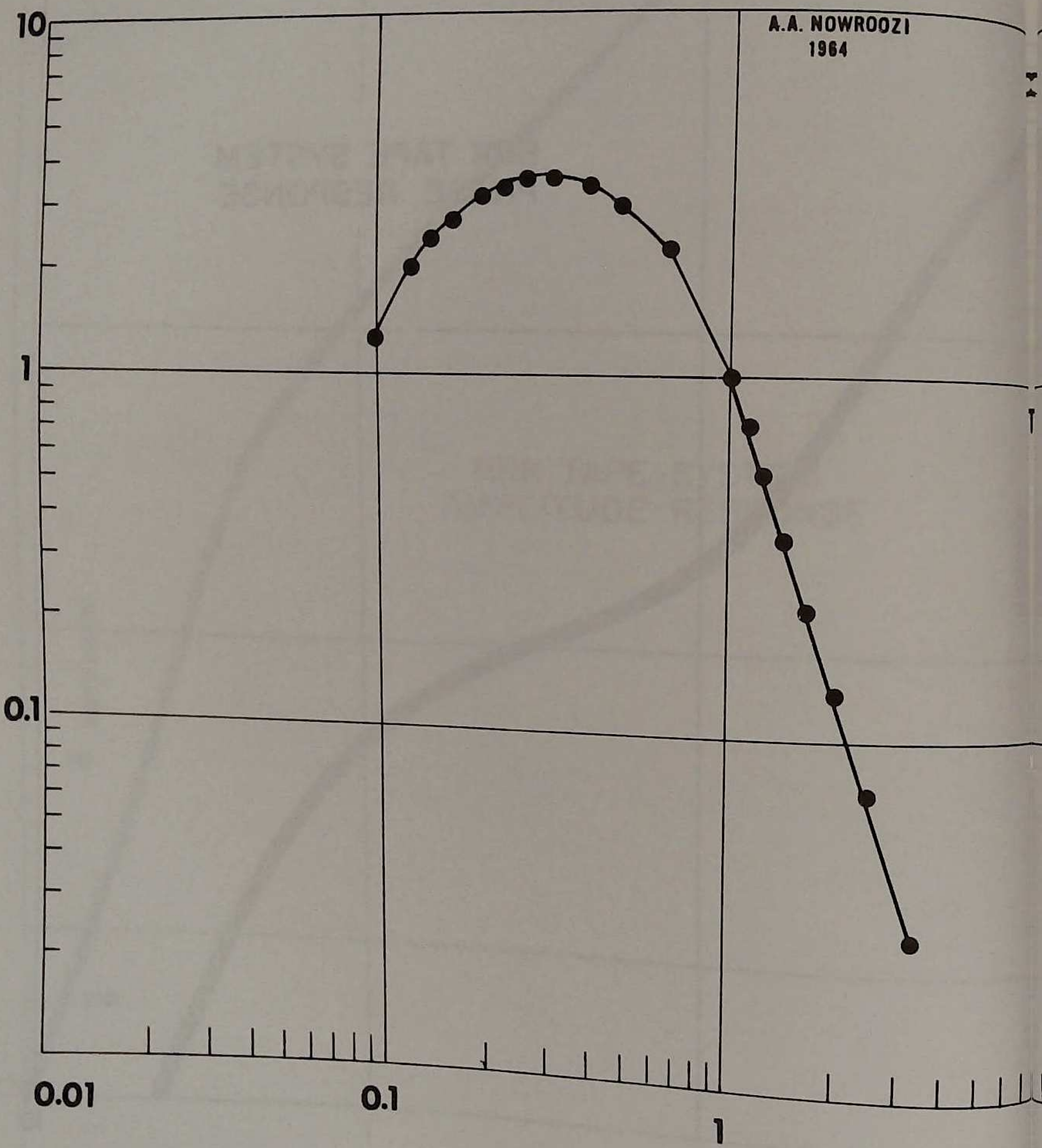
The phase curve on page 9 shows the phase of the voltage at the tape system output terminals with respect to ground displacement, as a function of the frequency of earth displacement.

BRK TAPE SYSTEM AMPLITUDE RESPONSE



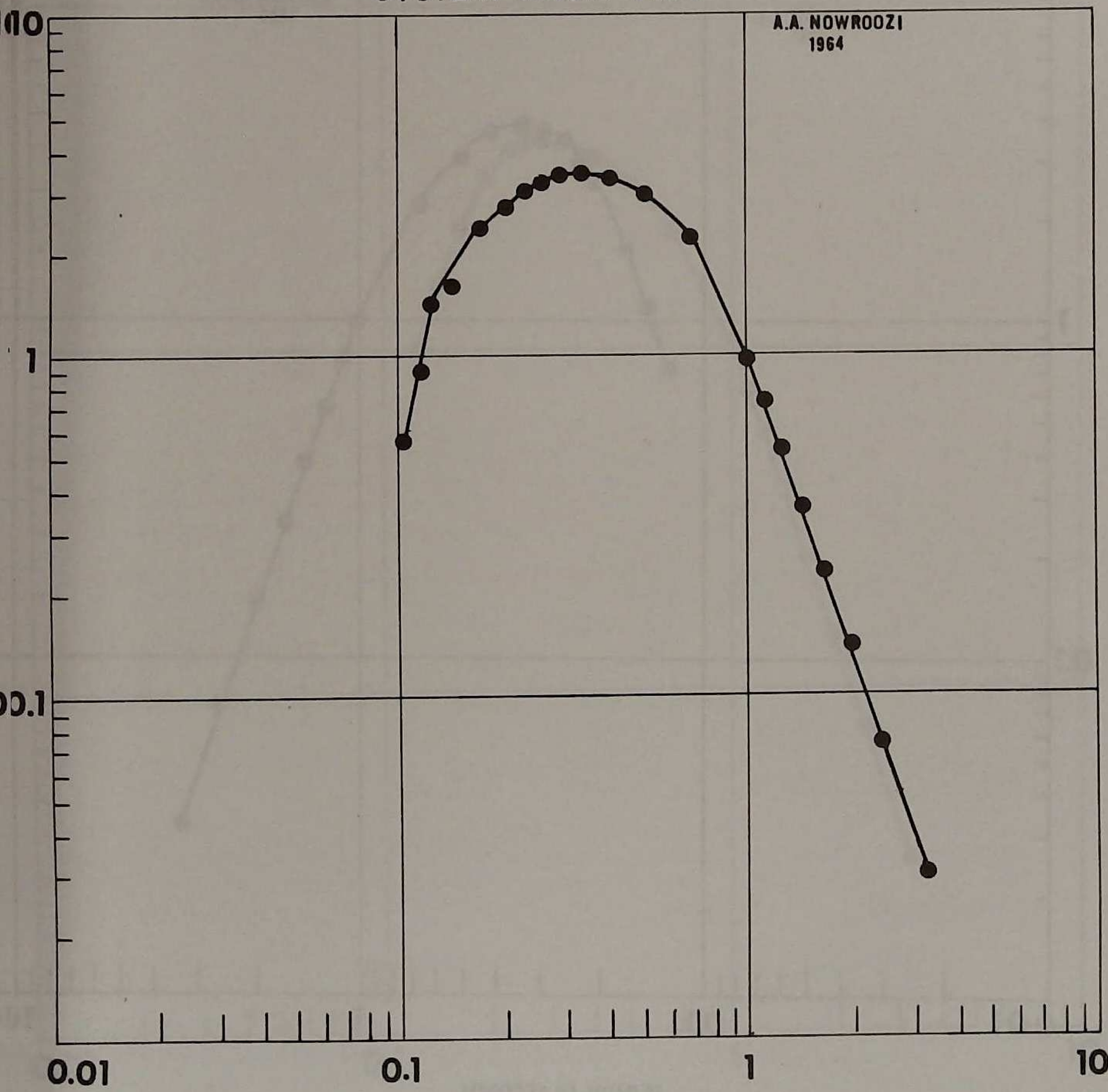


RESPONSE OF SEISMOMETER-DEVELOCORDER SYSTEM 100KG Z.S.P.

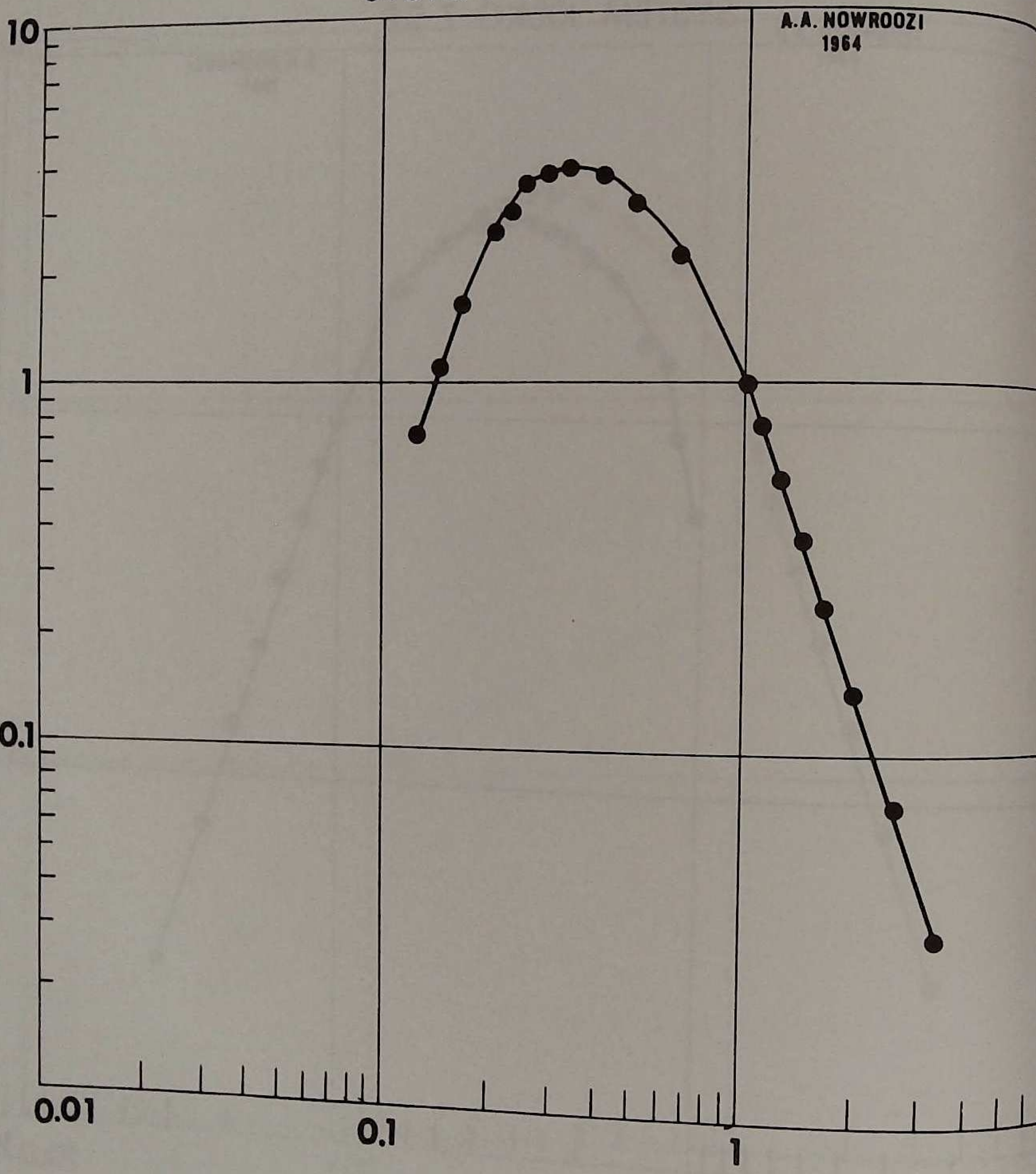


RESPONSE OF SEISMOMETER-HELICORDER

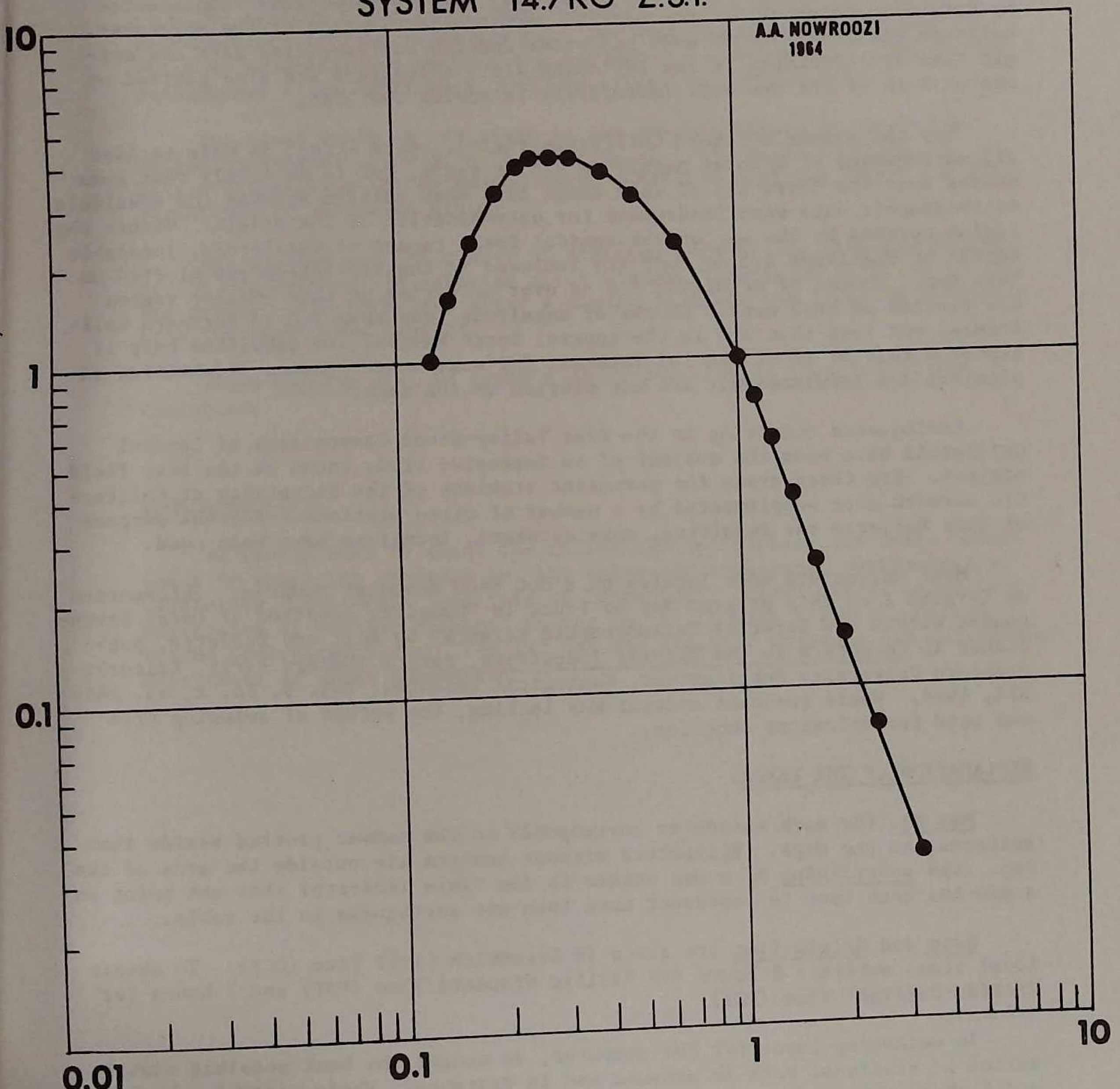
SYSTEM 100KG Z.S.P.



RESPONSE OF SEISMOMETER-HELICORDER SYSTEM 14.7 KG Z.S.P.



RESPONSE OF SEISMOMETER-DEVELOCORDER SYSTEM 14.7KG Z.S.P.



PART I. LOCAL EARTHQUAKES IN NORTHERN CALIFORNIA

This section includes information on earthquakes in Northern California (including adjacent offshore areas) and in the adjoining section of Nevada which were well enough recorded at the U.C. station (sometimes complemented by data from neighboring stations) to permit determination of the epicenter. Latitude and longitude of each epicenter and the corresponding date and origin time are tabulated in the following list; epicenters are also plotted on one or both of the two maps immediately following the list.

For the entire Northern California region, every effort is made to list all earthquakes of Richter magnitude 3.0 or above, but it is likely that some shocks near the lower end of this range have been omitted because the available seismographic data were inadequate for determination of the origin. Within the region covered by the map of the central Coast ranges of California, locatable shocks of magnitude 2.5 or over are included in the tabulation and plotted on this map. Shocks of magnitude 3.0 or over occurring in this smaller region are plotted on both maps. Shocks of magnitude less than 3.0 in Northern California, and less than 2.5 in the central Coast Ranges, are tabulated only if reported felt or if of special interest for some other reason. Identified explosions are tabulated but are not plotted on the maps.

Earthquakes occurring in the Bear Valley-Stone Canyon area of Central California have been the subject of an intensive study known as the Near Field project. For these areas the permanent stations of the University of California network were supplemented by a number of close stations. For the purpose of this Bulletin the resulting, more accurate, locations have been used.

Most epicenters were located by a CDC 6400 computer program. Information on Version I of this program may be found in "Computer Location of Local Earthquakes within the Berkeley Seismographic Network" by Bolt and Turcotte, published in Computers in the Mineral Industries, Part 2 (George Parks, Editor); Stanford University Publications, Geological Sciences, Vol. 9, No. 2, pp. 561-576, 1964. Where quadrant control was lacking, the method of swinging arcs was used for epicenter location.

EXPLANATION OF THE TABLE:

Map No. for each epicenter corresponds to the number plotted beside that epicenter on the maps. Epicenters without numbers lie outside the area of the map. The underlining of a map number in the table indicates that one point on a map has been used to represent more than one earthquake in the table.

Date and Origin Time are given in Greenwich Civil Time (GCT). To obtain local time, subtract 8 hours for Pacific Standard Time (PST) and 7 hours for Pacific Daylight Time (PDT).

In selecting input for the computer, we sought the best possible distribution of stations, both in azimuth and in distance. Where possible, both P and S phases were used. However, the number of P arrivals greatly outnumbered the S arrivals. Geographic coordinates are quoted to tenths of a minute for computer located epicenters. Uncertainties of up to five minutes exist in determinations where the depth has been restricted, or where the epicenters

lie outside the network. Those epicenters located by the arc method have their coordinates expressed to tenths of a degree. This is the accuracy to which the arc method allows.

The Magnitude of the earthquake is determined on the Richter scale from the maximum trace amplitudes recorded for the shock by standard Wood-Anderson torsion seismographs. The magnitudes of earthquakes for which no Wood-Anderson records are available are determined from Benioff seismograph trace amplitudes, and are listed in parentheses.

The focal depth h is given to the nearest kilometer or by the following ranges: a, 0-5; b, 5.1-10; c, 10.1-15; d, 15.1-40 km. A letter R following the estimated depth indicates that the depth has been restricted to the value given.

No. of Stas. is the number of stations used by the computer program or the arc method. An asterisk after a number indicates location by the arc method. Two asterisks after a number indicate the location resulting from the Near Field Project.

Under Remarks will be found a short descriptive location of the epicenter.

ACKNOWLEDGMENTS:

We should like to thank the following institutions for their assistance in supplying readings for the epicenter locations: Seismological Laboratory, California Institute of Technology; Seismological Laboratory, University of Nevada; National Center for Earthquake Research, United States Geological Survey; Pacific Gas and Electric Company; and California Department of Water Resources.

EARTHQUAKES IN NORTHERN CALIFORNIA

Map No.	Date 1974	Origin Time (G.C.T.)	Latitude North	Longitude West	Magni-tude	h	No. of Stas.	Remarks
1	Jan 03	02 58 32.9	41° 45.0'	119° 18.5'	3.0	5(R)	5	E of Alturas
2	Jan 06	13 55 23.0	41° 03.0'	121° 29.0'	4.2	1(R)	5	NE of Burney. Felt in Fall River Mills
	Jan 06	23 17 31.2	40.4°	127.1°	4.2	a(R)	6*	Cape Mendocino
3	Jan 10	11 22 24.8	36° 56.8'	121° 36.0'	4.4	10	8	S of Gilroy. Felt in central Calif.
4	Jan 12	04 12 22.0	36° 29.3'	120° 19.5'	3.0	11	6	SW of Fresno
	Jan 13	01 11 52.0	40.4°	126.6°	3.0	a(R)	4*	Cape Mendocino
5	Jan 23	01 37 58.6	36° 22.6'	120° 25.0'	3.1	13	8	SW of Fresno
6	Jan 23	15 56 51.4	36° 50.9'	121° 37.8'	3.0	3	10	W of Hollister
7	Jan 30	07 12 32.8	37° 25.0'	118° 32.7'	3.0	5(R)	5	N of Bishop
8	Feb 01	03 27 51.0	36° 46.5'	121° 33.9'	3.5	2	7	SW of Hollister
9	Feb 06	02 32 03.5	40.4°	125.2°	3.9	a(R)	6*	Small foreshock
10	Feb 07	10 35 05.9	36° 35.3'	121° 11.8'	3.0	5	7**	Cape Mendocino
	Feb 07	22 35 02.0	40.6°	128.1°	(3.5)	a(R)	3*	Stone Canyon-Bear Valley
11	Feb 08	22 05 44.6	37° 23.3'	121° 46.0'	3.3	7	8	Cape Mendocino
12	Feb 14	04 20 02.4	36° 44.0'	121° 23.7'	2.8	3	7**	NE of San Jose
13	Feb 20	10 55 16.5	36° 37.4'	121° 10.8'	(2.5)	7	7**	Stone Canyon-Bear Valley
14	Feb 22	12 51 31.5	39° 40.2'	119° 12.8'	3.5	16	5	Stone Canyon-Bear Valley
15	Mar 02	08 28 25.4	37° 16.0'	121° 39.2'	3.4	7	8	E of Reno
16	Mar 03	11 37 36.0	41.7°	125.7°	4.4	a(R)	6*	S of Mt. Hamilton
	Mar 07	03 25 41.0	40.7°	127.1°	3.8	a(R)	5*	W of Crescent City
17	Mar 07	13 21 03.3	40° 04.1'	120° 10.7'	3.2	20(R)	5	Cape Mendocino
18	Mar 08	14 23 48.6	40.7°	125.6°	3.7	a(R)	5*	N of Reno
19	Mar 08	18 56 19.1	36° 39.1'	121° 16.7'	2.5	3	7**	Cape Mendocino
19	Mar 08	19 10 14.9	36° 39.2'	121° 16.9'	2.9	4	7**	Stone Canyon-Bear Valley
20	Mar 10	23 21 09.4	37° 16.8'	121° 40.0'	3.0	9	7	Stone Canyon-Bear Valley
21	Mar 12	12 45 28.6	37° 19.0'	122° 15.1'	3.6	10	9	S of Mt. Hamilton
22	Mar 16	15 57 38.8	40° 14.9'	124° 57.9'	4.5	10	5	SW of Palo Alto
23	Mar 16	16 24 21.1	37° 00.0'	121° 43.4'	3.3	8	7	Cape Mendocino. Felt in Fortuna area W of Gilroy

Map No.	Date 1974	Origin Time (G.C.T.)	Latitude North	Longitude West	Magnitude	h	No. of Stas.	Remarks
24	Mar 18	09 59 59.2	36° 30.3'	120° 36.9'	3.1	7	7	W of Fresno
25	Mar 21	21 16 05.3	38° 36.7'	122° 39.8'	3.3	1	5	N of Santa Rosa. Felt in SF, Geyserville and Cloverdale
26	Mar 24	01 37 13.5	37° 07.5'	122° 27.3'	3.1	1(R)	5	W of Granite Creek
27	Mar 24	16 57 09.4	37° 31.2'	121° 52.7'	3.4	5	7	N of San Jose. Felt in Fremont, Berkeley
28	Mar 31	19 50 19.0	40.2°	124.7°	3.2	a(R)	3*	Cape Mendocino
3	Mar 31	23 06 18.0	36° 56.6'	121° 35.7'	3.6	7	10	S of Gilroy
29	Apr 02	00 51 14.7	40° 35.0'	125° 19.7'	3.6	17	5	Cape Mendocino
30	Apr 07	10 47 40.8	36° 34.1'	121° 10.2'	2.5	4	7**	Stone Canyon-Bear Valley
31	Apr 07	11 09 26.1	40° 23.4'	125° 39.6'	4.1	5	5	Cape Mendocino
32	Apr 07	22 07 32.5	36° 34.0'	121° 07.0'	2.5	9	7**	Stone Canyon-Bear Valley
3	Apr 17	19 30 20.4	36° 56.6'	121° 36.4'	3.2	6	10	S of Gilroy. Felt in Hollister, Gilroy
33	Apr 19	15 32 57.7	35° 58.4'	121° 02.4'	2.5	7	6	S of King City
34	Apr 22	08 21 17.9	36° 49.6'	121° 35.7'	2.5	4	5	W of Hollister 2.4 foreshock
35	Apr 22	08 24 51.8	36° 51.0'	121° 35.2'	3.0	6	7	W of Hollister
11	Apr 24	00 06 04.9	37° 23.6'	121° 45.9'	2.6	5	7	NE of San Jose
36	Apr 26	12 26 17.2	40° 47.1'	123° 52.8'	3.4	21	6	SE of FHC. Felt in Arcata, Eureka
37	Apr 27	12 20 31.8	37° 03.5'	121° 29.8'	2.6	6	10	E of Gilroy
38	May 04	03 47 30.6	36° 33.2'	121° 07.2'	3.1	11	7**	Stone Canyon-Bear Valley
39	May 22	16 50 19.5	39.1°	123.6°	3.0	a(R)	4*	SW of Willits
40	May 27	09 19 19.5	39° 52.1'	120° 54.7'	3.8	1	7	SE of Quincy. Felt in Butte County
41	May 28	15 02 33.1	36° 10.5'	120° 47.3'	2.5	9	8	E of King City
42	May 28	19 39 20.7	36° 26.2'	121° 03.2'	2.6	6	7	NE of Paraiso
43	May 31	11 35 41.2	40.8°	125.8°	3.7	a(R)	4*	Cape Mendocino
44	Jun 06	12 13 51.1	38° 22.6'	122° 38.5'	3.1	2	8	E of Santa Rosa. Felt in Santa Rosa
45	Jun 10	00 03 56.5	36° 36.5'	121° 13.4'	(2.8)	10	7**	Stone Canyon-Bear Valley
46	Jun 10	07 35 00.3	40° 18.0'	125° 05.1'	4.4	5	6	Cape Mendocino
47	Jun 10	09 19 05.2	40° 24.8'	125° 16.0'	3.6	8	4	Cape Mendocino

Map No.	Date 1974	Origin Time (G.C.T.)	Latitude North	Longitude West	Magnitude	h	No. of Stas.	Remarks
	Jun 11	03 03 18.0	40.5°	127.5°	(3.6)	a(R)	5*	Cape Mendocino
48	Jun 11	12 41 04.7	38° 07.7'	117° 11.9'	(3.5)	24	6	E of Tonopah
49	Jun 12	06 32 01.2	36° 13.8'	120° 50.0'	2.9	9	9	E of King City
50	Jun 12	18 50 30.2	36° 44.0'	121° 22.2'	2.5	7	7**	Stone Canyon-Bear Valley
50	Jun 12	19 21 51.3	36° 44.2'	121° 22.4'	3.7	6	7**	Stone Canyon-Bear Valley
51	Jun 14	02 49 37.6	36° 51.7'	121° 24.7'	3.0	9	10	NE of Hollister
52	Jun 15	14 10 49.8	36° 51.7'	121° 37.0'	2.6	7	8	NW of Hollister
50	Jun 15	17 49 25.5	36° 43.8'	121° 22.4'	3.0	6	7**	Stone Canyon-Bear Valley
50	Jun 15	19 00 09.8	36° 43.9'	121° 22.6'	(2.5)	6	7**	Stone Canyon-Bear Valley
50	Jun 15	19 29 16.9	36° 43.9'	121° 22.6'	(2.6)	6	7**	Stone Canyon-Bear Valley
53	Jun 15	23 38 52.7	41.2°	121.9°	3.3	a(R)	5*	E of Dunsmuir
54	Jun 16	17 55 55.0	37.4°	118.1°	(3.1)	a(R)	5*	Bishop
55	Jun 19	15 31 32.0	35° 14.0'	121° 18.8'	(3.0)	5	5	W of San Luis [illegible]
56	Jun 20	09 04 50.4	36° 52.4'	121° 25.4'	2.8	9	9	NE of Hollister
57	Jun 20	20 09 21.2	40.6°	125.3°	3.3	a(R)	4*	Cape Mendocino
58	Jun 20	20 44 17.8	40° 50.4'	121° 47.8'	3.2	1(R)	4	N of Burney
50	Jun 23	13 12 27.4	36° 44.1'	121° 22.6'	2.7	6	7**	Stone Canyon-Bear Valley
59	Jun 24	00 36 30.0	36° 41.7'	121° 20.2'	2.8	6	7**	Stone Canyon-Bear Valley
60	Jun 24	00 39 52.5	40° 56.9'	124° 09.3'	4.0	29	5	NE of ARC. Felt in Ferndale
61	Jun 26	01 40 23.3	35° 56.3'	120° 27.3'	3.0	15	7	Parkfield

Explosions at Nevada Test Site

Feb 27	17 00 00.0	37° 06.2'	116° 03.2'	5.4	USGS location
Feb 28	02 56	37° 06.2'	116° 03.2'	3.7	Cavity collapse, [illegible] location
May 22	14 15 00.0	37.1°	116.1°	4.3	USGS location
May 23	13 38 30	37.1°	116.1°	4.7	USGS location
Jun 06	14 40 00.0	37.0°	116.0°	4.2	USGS location
Jun 19	16 00 00.0	37.2°	116.2°	4.7	USGS location

EARTHQUAKES in NORTHERN CALIFORNIA

JANUARY - JUNE 1974

Numbers correspond to list preceding this map

0 80 km

MAGNITUDE

- 3.0-3.4
- 3.5-3.9
- ≥ 4.0

CALIFORNIA

NEVADA

Crescent City
Grants Pass
Yreka
Dunsmuir
Weaverville
Garberville
Alturas
Burney
Willits
Chico
Susanville
Williams
Quincy
Gerlach
Marysville
Truckee
Reno
Lovelock
Placerville
Fallon
Sacramento
Stockton
Livermore
Markleeville
Yerington
Sonora
Austin
Hawthorne
Monterey
Hollister
Merced
Yosemite
Toriopah
King City
Bishop
San Simeon
Coalinga
Tulare
San Luis Obispo
Lone Pine

ARC WDC MLC MIN FHC ORV BKS BRK PCC MHC GCC JAS SAO LLA PRS FRI FRE MNV

16 43 18 31 57 29 47 9 46 22 28 60 36 53 58 2 1 39 25 44 21 27 26 11 20 15 23 3 6 35 8 51 50 10 38 24 4 5 7 54 14 48 61 55 40 17

PART II. REGISTRATION OF EARTHQUAKES

This section tabulates measured arrival times of prominent phases of earthquakes and large explosions recorded at selected stations of the seismographic network operated by the University of California (Berkeley). These stations are BKS (or BRK if the BKS reading is not clear), SAO, JAS, MHC, WDC, PRI, MIN, FRI, FHC. Information regarding these stations and instrumentation will be found in the introductory section of this Bulletin. Earthquakes in the Northern California, Nevada, and Oregon region are included in the following tabulation only if of magnitude 4.0 or over, or if of special interest.

Phase arrival times are G.C.T.

In the column after the P or P' phase arrival time, "C" or "D" indicates initial compression or dilatation of the ground, respectively, from a wave of the compressional type.

S arrival times and arrival times of later phases are given in minutes and seconds after the hour of the P or P' arrival time. When a later phase is recorded at a station, but no P or P' phase, the time in hours and minutes of the first P or P' arrival at the other stations of the network is printed in the P or P' column.

The maximum amplitudes of earth displacement in microns (mu) and periods in seconds (sec) in the indicated phases are given for the Berkeley station, BKS, under the BKS phase arrival times. Total horizontal amplitudes combined from N and E components are designated by "H" (e.g., PH, PPH). Unless otherwise specified, magnitudes given for earthquakes outside the Northern California, Nevada, and Oregon region correspond to the magnitude based on surface waves (M_S). The published value is obtained by combining the value of M_S determined from the amplitude of surface waves of period near 20 seconds with magnitudes determined from body waves according to the formula:

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

where A = 1/2 peak-to-peak ground amplitude in microns,

T = period in seconds

Q is the empirically determined function of distance and depth given by Gutenberg and Richter ("magnitude and Energy of Earthquakes," Annali di Geofisica, 9:1-15, 1956).

The arithmetic average of the available values of m_b for long-period and short-period records of body waves is converted to an equivalent value M_S by

$$M_S = 1.59\ m_b - 3.97.$$

This value is then compared with the value of M_s determined from surface waves. Some events, particularly deep earthquakes and large explosions, give clear body waves, but only weakly developed surface waves. In these cases, the directly determined body-wave magnitude is given, designated MAG (m_b).

Distances are given in degrees from the Berkeley station, BRK. USGS origins are listed as a guide at the end of arrival times of the earthquakes. USGS magnitude is m_b .

All measurements and interpretation of seismograms (i.e., identification of phases, arrival times, directions of initial ground motion, and ground amplitudes and periods) are done at Berkeley. Readings from the remaining stations in the network other than the nine listed are available on request. Requests for additional data or for copies of seismograms should be addressed to the Director.

UNIVERSITY OF CALIFORNIA
SEISMOGRAPHIC STATIONS
BERKELEY, CALIFORNIA 94720
JAN 01 THROUGH JUN 30,1974

* PRECEDING ALPHABET INDICATES LOWER CASE
P† IS TO BE READ AS PKP
N IN THE USGS SOLUTION INDICATES FOCAL
DEPTH RESTRICTED TO 33 KM.

P OR PKP   S   OTHER PHASES

WO WDC JAN 01 08 08 37.9
MI MIN 08 08 40.5 D
BM BKS 08 08 *E 08 44
MH MHC 08 08 47.4 D
JA JAS 08 08 50.5 D
FR FRI 08 08 55.1 D
MM MNV 08 08 58.5 D
USGS 07 57 04.5, 21.6N, 142.9E, H=333 KM, M=5.0
MARIANA ISLANDS REGION

JA JAS JAN 01 12 54 50.6 D
WO WDC 12 54 52.2 D
MI MIN 12 55 *E 55 01
MM MNV 12 54 59.2 D
USGS 12 43 16.1, 23.7S, 179.9E, H=501 KM, M=5.0
SOUTH OF FIJI ISLANDS

WC WDC JAN 01 18 16 03.1 C
BM BKS 18 16 09.8
JA JAS 18 16 15.7 C
FR FRI 18 16 20.2 C
MM MNV 18 16 23.6 C
USGS 18 04 28.8, 21.6N, 143.0E, H=318 KM, M=5.1
MARIANA ISLANDS REGION

FH FHC JAN 01 18 28 56.0 C
WC WDC 18 29 12.3 C
JA JAS 18 29 *E 29 27
USGS 18 28 19.0, 42.0N, 126.7W, H= N KM, M=4.7
OFF COAST OF OREGON

WC WDC JAN 02 00 14 *E 14 09
JM JAS 00 14 11.9 C
USGS 00 01 53.5, 14.6S, 167.3E, H=176 KM, M=5.0
NEW HEBRIDES ISLANDS

WC WDC JAN 02 05 01 18.5 C
MH MHC 05 01 25.6 C
JA JAS 05 01 29.2 C
FR FRI 05 01 32.9 C
MM MNV 05 01 37.5 C
USGS 04 49 04.0, 13.8N, 144.7E, H=119 KM, M=4.8
MARIANA ISLANDS

FR FRI JAN 02 10 54 08.5 D P†P† 21 25
MM MNV 10 54 09.9 D P†P† 21 20
PR PRI 10 54 10.2 D *SP 55 03 PP 57 05 P†P† 21 27
SM SAO 10 54 14.3 D
JA JAS 10 54 15.4 D *PP 54 47 *SP 55 04 PP 57 16
PKKP 13 20 P†P† 21 23
MH MHC 10 54 17.9 D *PP 54 51 *SP 55 08 PP 57 17
BM BKS 10 54 21.2 D 04 11 PCP 54 35 *PP 54 54 *SP 55 12
PP 57 23 PPP 59 08 *E 04 24
*E 05 03 *E 05 36 SS 09 32
SSS 13 36 *E 16 00 P†P† 21 22
MICRON PERIOD
PZ 2.85 1.5
PPZ 21 14
MAXR(Z) 22 22
MAXH(N) 39 22
MAXH(E) 17 22
MI MIN 10 54 26.6 PKKP 13 17 P†P† 21 19
WC WDC 10 54 29.9 D *E 55 06 PKKP 13 23
FH FHC 10 54 37.1 D P†P† 21 20
MAG 6.7, DIST(DEG) 77
USGS 10 42 29.9, 22.5S, 68.4W, H=105 KM, M=6.4
NORTHERN CHILE. 3 INJURED AND DAMAGE TO
BUILDINGS AT CALAMA

MM MNV JAN 02 13 45 31.9 *PP 46 03
PR PRI 13 45 32.1
JM JAS 13 45 37.4 D *PP 46 09
MH MHC 13 45 40
MI MIN 13 45 *PP 46 23
WC WDC 13 45 51.9 D *PP 46 23
NORTHERN CHILE
USGS 13 13 49.6, 22.6S, 68.4W, H= 99 KM, M=5.3

FR FRI JAN 02 13 50 35.4 *E 50 39
MM MNV 13 50 42.7 *E 50 51
PR PRI 13 50 43.9 *E 50 51 *E 51 26
JM JAS 13 50 51.6 51 45 *E 50 57
SM SAO 13 50 52.4
MH MHC 13 50 *E 51 00 *E 52 07
MI MIN 13 50 *E 51 41
MAG 4.3, CHINA LAKE AREA
USGS 13 49 56.8, 35.5N, 117.2W, H= 8 KM, M=4.2
CENTRAL CALIFORNIA

FH FHC JAN 02 14 54 18.6 *E 55 08
WC WDC 14 54 22.9 *E 55 12 SKS 04 58
MI MIN 14 54 26.1 D
BM BKS 14 54 32.0 C 05 12 *E 54 46
MH MHC 14 54 34.2
JM JAS 14 54 35.7 D *E 55 29
FR FRI 14 54 40.2
PR PRI 14 54 40.4
MM MNV 14 54 41.4 D *E 55 35
TAIWAN
USGS 14 41 47.9, 26.0N, 124.4E, H=205 KM, M=5.7

WC WDC JAN 03 04 04 39.2
MI MIN 04 04 41.6 C
JA JAS 04 04 51.7 C
FR FRI 04 04 56.0
MM MNV 04 05 00.0 C
USGS 03 52 50.4, 20.5N, 145.0E, H=139 KM, M=5.1
MARIANA ISLANDS

WC WDC JAN 03 12 55 04
JM JAS 12 55 05.2
USGS 12 42 48.0, 18.9S, 169.4E, H=252 KM, M=5.0
NEW HEBRIDES ISLANDS

MM MNV JAN 04 01 38 00.0 C
JM JAS 01 38 06.5 C
USGS 01 33 19.7, 19.5N, 108.0W, H= N KM, M=4.3
REVILLA GIGEDO ISLANDS REGION

FR FRI JAN 05 08 44 13.7 D
PR PRI 08 44 15.4 D *E 44 38 *E 44 50 *E 45 13
MM MNV 08 44 15.5 D
SM SAO 08 44 20.5
JA JAS 08 44 21.8 D *E 44 46 *E 44 55 *E 45 20
P†P† 13 09 *E 13 34
MH MHC 08 44 24.7 D *E 44 48 *E 44 58 *E 45 24
BM BKS 08 44 29.0 D 53 12 *I 45 02 SS 57 40 SSS 01 00
*E 03 00 P†P† 13 10 P†P† 13 32
MICRON PERIOD
PZ 0.58 1.3
MI MIN 08 44 35.2 D *E 44 44 *E 45 10
WC WDC 08 44 38.8 D *E 45 05 *E 45 14 P†P† 13 04
FH FHC *E 13 25
08 44 47.4 D *E 45 10 *E 45 24
MAG 6.2, DIST(DEG) 68
USGS 08 33 50.7, 12.3S, 76.4W, H= 98 KM, M=6.3
NEAR COAST OF PERU. 10 KILLED, MANY INJURED

FR FRI JAN 05 11 51 *E 51 58
MNV 11 52 06.5
JAS 11 52 09.7 D
MHC 11 52
WDC 11 52 39.0 D *E 52 10
USGS 11 45 31.3, 8.3N, 104.0W, H= N KM, M=5.0
OFF COAST OF MEXICO

WDC JAN 05 14 07 48.1 C
MIN 14 07 53.5 C *PP 08 05
BKS 14 08 *I 08 06
*E 08 03
MICRON PERIOD
PZ 0.02 0.8
MHC 14 08 09.4
JAS 14 08 12.8 C *PP 08 28
FRI 14 08 21.2 C *PP 08 38
MNV 14 08 21.9 C *PP 08 38
PRI 14 08 *E 08 22
USGS 14 00 56.8, 52.2N, 171.4W, H= 41 KM, M=5.4
FOX ISLANDS, ALEUTIAN ISLANDS

FHC JAN 05 15 16 52
WDC 15 17 09
MIN 15 17 17.2
JAS 15 17 *E 17 51
USGS 15 16 14.1, 42.3N, 126.6W, H= N KM, M=4.0
OFF COAST OF OREGON

FHC JAN 05 15 24 46
WDC 15 25 03.5 25 48
MIN 15 25 12.8
JAS 15 25 *E 25 48
USGS 15 24 05.0, 42.3N, 126.9W, H= N KM, M=4.3
OFF COAST OF OREGON

WDC JAN 05 15 31 17
MIN 15 31 17.4
JAS 15 32 *E 32 01
USGS 15 30 24.2, 42.6N, 126.5W, H= N KM, M=4.0
OFF COAST OF OREGON

FHC JAN 05 15 38 01
WDC 15 38 25
MIN 15 38 *E 38 20 *I 38 36
BKS 15 38 52 C LR 40 00
MICRON PERIOD
PZ 1.3 8
MAXR(Z) 9 20
MAXH(N) 9 20
MAXH(E) 12 20
JAS 15 39 09.5
OFF OREGON COAST
USGS 15 37 33.7, 42.6N, 126.4W, H= N KM, M=4.5

FHC JAN 05 15 54 44.4 *E 55 28
WDC 15 54 55.6 *E 55 40
MIN 15 55 06.3 D 55 16
BKS 15 55 24 LR 56 33
MICRON PERIOD
MAXR(Z) 20 20
MAXH(N) 21 20
MAXH(E) 28 20
MHC 15 55 37
JAS 15 55 39.5
MNV 15 55 53
FRI 15 55 *E 55 56
PRI 15 55 *E 55 58
OFF OREGON COAST
USGS 15 54 03.3, 42.5N, 126.6W, H= N KM, M=4.1

FHC JAN 05 16 26 *E 26 36
WDC 16 26 50
JAS 16 27 *E 27 36
MIN 16 27 01.6
USGS 16 25 56.1, 42.4N, 126.6W, H= N KM, M=4.2
OFF COAST OF OREGON

FHC JAN 05 17 43 39
WDC 17 43 54.5
MIN 17 44 03.9
JAS 17 44 38
MHC 17 44 *E 44 35
FRI 17 44 *E 44 55
OFF OREGON COAST
USGS 17 43 02.2, 42.6N, 126.3W, H= N KM, M=4.3

WDC JAN 05 17 50 *E 50 28
MIN 17 50 37.6
JAS 17 50 *E 51 10

JAS JAN 05 21 55 59.2 D
FRI 21 55 59.5
MNV 21 56 09
USGS 21 43 19.1, 14.7S, 166.6E, H= 18 KM, M=5.1
NEW HEBRIDES ISLANDS

FHC JAN 05 23 24 35
WDC 23 24 50.6
MIN 23 25 05.4
MHC 23 25 *E 25 31
JAS 23 25 34.5 C
MNV 23 25 *E 25 48
FRI 23 25 *E 25 50
USGS 23 23 56.8, 42.5N, 126.6W, H= N KM, M=4.4
OFF COAST OF OREGON

FHC JAN 05 23 29 57
WDC 23 30 22.9 D
MIN 23 30 23.5 D *I 31 27
MHC 23 30 *E 30 52
JAS 23 30 56.5 D
MNV 23 31 11.5
FRI 23 31 *E 31 13
PRI 23 31 *E 31 14
OFF OREGON COAST
USGS 23 29 18.6, 42.5N, 126.6W, H= 22 KM, M=5.0

MNV JAN 06 10 16 47.9 D
MIN 10 16 49.5 D
WDC 10 16 51.4 D
JAS 10 16 58.7 D
FRI 10 17 *E 17 02
PRI 10 17 *E 17 11
USGS 10 07 12.6, 57.5N, 33.8W, H= N KM, M=4.9
NORTH ATLANTIC OCEAN

JAS JAN 06 13 55 14.6
MIN JAN 06 13 55 37.0 C
WDC 13 55 40.2 C 55 54
FHC 13 55 55.5
BKS 13 56 15.1 D
MNV 13 56 20.1 C
MHC 13 56 *E 56 25
FRI 13 56 *E 56 32
SAO 13 56 *E 56 33
PRI 13 56 *E 56 43
MAG 4.2, NE OF BURNEY, CALIF

*E 52 06
MHC JAN 06 17 52
PRI 17 52 07.7
WDC 17 52 08.7 D *E 52 42
JAS 17 52 11.0 D
FRI 17 52 12.1 *E 52 50
MNV 17 52 20.2
USGS 17 39 44.1, 14.9S, 167.2E, H=117 KM, M=5.6
NEW HEBRIDES ISLANDS

FHC JAN 06 23 18 09.4 C 18 37
WDC 23 18 25.9 D 19 04
MIN 23 18 35.4 D *I 19 20
BKS 23 18 39.7 D *E 19 31
MHC 23 18 49.4 D 19 47
SAO 23 18 55.6

23 18 58.6 D 20 04
JAS 23 19 09.2 C
PRI 23 19 11.6 D
FRI 23 19 19.0
MNV MAG 4.2, WSW OF FHC

PRI JAN 07 02 27 05.8
MNV 02 27 09.0 D
JAS 02 27 14.5 D
MHC 02 27 17.0
BKS 02 27 22.3 D MICRON PERIOD
0.08 0.7
PZ
MIN 02 27 31.2 D
WDC 02 27 36.0 D
FHC 02 27 45.5 D
USGS 02 18 50.1, 0.0N, 91.5W, H= N KM, M=5.4
GALAPAGOS ISLANDS

PRI JAN 07 06 40 22.4
MNV 06 40 23.7 *E 40 44
JAS 06 40 28.0 D
MHC 06 40 30.0 *E 40 33
BKS 06 40 MICRON PERIOD
0.02 0.5
PZ *I 40 59
WDC 06 40 42.2
USGS 06 29 11.7, 29.7S, 71.1W, H= 35 KM, M=5.3
NEAR COAST OF CENTRAL CHILE

*E 33 08 SCP 39 20
WDC JAN 07 08 32 38.6 D *I 33 13 SCP 39 21
MIN 08 32 43.7 D *E 33 35 SCP 39 30
JAS 08 33 06.0 D SCP 39 32
MNV 08 33 11.4 *E 33 45 SCP 39 34
FRI 08 33 15.5 D
PRI 08 33 19.4
USGS 08 27 03.5, 59.8N, 153.7W, H=128 KM, M=4.9
SOUTHERN ALASKA

MNV JAN 07 09 00 02.6 D
PRI 09 00 02.8 D
JAS 09 00 07.8 D
MHC 09 00 10.4
BKS 09 00 *E 00 14
MICRON PERIOD
PZ 0.01 0.6
WDC 09 00 22.1 D
USGS 08 48 26.7, 22.4S, 67.4W, H=175 KM, M=4.9
CHILE-BOLIVIA BORDER REGION

JAS JAN 07 10 01 23.5
MNV 10 01 23.8
WDC 10 01 39.1

MNV JAN 07 10 15 30.9
JAS 10 15 36.4
USGS 10 07 09.6, 0.4S, 91.4W, H= N KM, M=4.5
GALAPAGOS ISLANDS

PRI JAN 07 16 48 11.0
FRI 16 48 11.8 *E 49 13 PKKP 06 40
MNV 16 48 13.5 *E 49 12 PKKP 06 49
JAS 16 48 18.0 D *E 49 17 PKKP 06 46
MHC 16 48 20.5
BKS 16 48 *E 48 24
MICRON PERIOD
PZ 0.06 1.2
MIN 16 48 29.2
WDC 16 48 32.5 PKKP 06 39
FHC 16 48 38.7
USGS 16 35 57.8, 26.9S, 65.7W, H= 33 KM, M=5.8
TUCUMAN PROVINCE, ARGENTINA

BKS JAN 08 15 36 *E 36 42 *E 36 46
MICRON PERIOD
PZ 0.06 1.0
MHC 15 36 44.1 C
WDC 15 36 45.7
JAS 15 36 48.9 C
FRI 15 36 50.3 C
MNV 15 36 58.0 C
SOLOMON ISLANDS
USGS 15 24 08.4, 10.2S, 161.7E, H= 56 KM, M=5.3

MNV JAN 08 22 07 27.6 C
MIN 22 07 27.7 C P' 08 40 PP 12 28
WDC 22 07 27.9 C *E 08 48 PP 12 38
FRI 22 07 28.2 C
JAS 22 07 28.5 C
PRI 22 07 29.3 C P' 08 45 PP 12 36
MHC 22 07 29.7 C
BKS 22 07
FHC 22 07 30.3 C *E 07 30 *E 05 40
USGS 21 47 21.7, 39.0S, 46.2E, H= N KM, M=6.0
ATLANTIC-INDIAN RISE

FHC JAN 09 02 58
WDC 02 58 59.8 *E 58 53
MIN 02 59 03.4
JAS 02 59 21.5
MNV 02 59
USGS *E 59 40
02 49 46.3, 51.6N, 159.6E, H= N KM, M=5.4
OFF EAST COAST OF KAMCHATKA

MNV JAN 09 22 34 46.5
JAS 22 34 56.1 D
BKS 22 35 06.4 D *E 36 57
*E 35 15
MICRON PERIOD
PZ 0.02 0.8
MIN 22 35 12.2
WDC 22 35 15
USGS *E 37 04
22 27 24.1, 11.0N, 85.8W, H=144 KM, M=4.9
NICARAGUA

WDC JAN 10 00 09 20.5
MIN 00 09 26.7 C
JAS 00 09 44.6 C
FRI 00 09 52.5
USGS 00 02 30.0, 53.1N, 174.4W, H=207 KM, M=4.5
ANDREANOF ISLANDS, ALEUTIAN ISLANDS

PRI JAN 10 00 51 12.5
MHC 00 51 13.1
FRI 00 51 17.2
JAS 00 51 17.8 C
WDC 00 51 20.0 C
MIN 00 51 21.7
MNV 00 51 26.5 C
FIJI ISLANDS AREA

WDC JAN 10 02 46
MIN 02 46 24.5 *E 46 20
JAS 02 46
USGS *E 46 35 *E 46 41
02 37 01.5, 51.7N, 159.6E, H= N KM, M=4.9
OFF EAST COAST OF KAMCHATKA

WDC JAN 10 05 28 09.5
MIN 05 28 19.7
JAS 05 28 28.5
MNV 05 28 35.5
USGS 05 18 54.3, 51.6N, 159.7E, H= N KM, M=5.3
OFF EAST COAST OF KAMCHATKA

FHC JAN 10 09 03
BKS 09 03 43.3 C 14 09 *E 03 43
PP 07 00
*E 18 50 *E 14 40 PPS 15 20
SSS 23 38 SS 19 10 *E 22 00
MICRON PERIOD
PZ 0.09 1.0
MHC 09 03 44.7 C
PRI 09 03 46.3
WDC 09 03 47.2 C P'P' 30 07
*E 04 49 *E 05 12 PKKP 21 54

P'P' 30 01
*I 04 03 PKKP 21 53
MIN 09 03 49.3 *E 04 20 *E 04 57
JAS 09 03 49.6 C PP 07 17 PKKP
FRI 09 03 50.5 C PKKP 21 54 P'P'
MNV 09 03 59.0 C PKKP 21 56 P'P' 30 03
MAG 7.5, DIST(DEG) 86
USGS 08 51 13.3, 14.4S, 166.9E, H= 34 KM, M=6.1
NEW HEBRIDES ISLANDS

*E 13 24
WDC JAN 10 10 13 *E 13 28
JAS 10 13
MIN 10 13 29.6 *E 13 40
PRI 10 13
USGS 10 00 53.8, 13.9S, 166.6E, H= 66 KM, M=5.1
NEW HEBRIDES ISLANDS

FHC JAN 10 10 42 26
WDC 10 42 30.6 *E 42 42
BKS 10 42 MICRON PERIOD
PZ 0.02 0.7
JAS 10 42 47.4 C
FRI 10 42 *E 42 53
USGS 10 31 48.5, 42.4N, 131.0E, H=539 KM, M=4.4
EAST RUSSIA-NE CHINA BORDER REGION

SAO JAN 10 11 22 29.6 D
MHC 11 22 33.1 D
BKS 11 22 43.5 D 22 59
PRI 11 22 45.0 D
JAS 11 22 48.3 C
FRI 11 22 50.4 C
MNV 11 23 *E 23 14
MIN 11 23 17.5 D
WDC 11 23 *E 23 20
MAG 4.4 S OF GILROY, CALIF

WDC JAN 10 12 56 02.4 *E 56 12
MIN 12 56 02.7
FRI 12 56 *E 56 24
JAS 12 56 18.1 D *E 56 28
MNV 12 56 25.5 D *E 56 36
USGS 12 44 44.8, 36.3N, 141.7E, H= 47 KM, M=5.1
NEAR EAST COAST OF HONSHU, JAPAN

MNV JAN 10 22 41 24.2 D
MIN 22 41 25.6 D
WDC 22 41 26.4 D
FHC 22 41 33
JAS 22 41 35.3 D
FRI 22 41 38.2 D
BKS 22 41 *E 41 43
MHC 22 41 43.7 D
PRI 22 41 *E 41 47
USGS 22 31 47.8, 57.3N, 33.6W, H= N KM, M=5.1
NORTH ATLANTIC OCEAN

MIN JAN 11 02 08 55.9 D
MNV 02 08 *E 08 54
JAS 02 08 *E 09 05
USGS 01 59 17.5, 57.3N, 33.5W, H= N KM, M=4.7
NORTH ATLANTIC OCEAN

FRI JAN 11 05 30 18
PRI 05 30 19.0
JAS 05 30 24.2 C
MHC 05 30 26.0
BKS 05 30 29.1 D
MICRON PERIOD
PZ 0.13 1.3
MIN 05 30 35.4
WDC 05 30 37.7 C
USGS 05 18 02.4, 31.8S, 68.4W, H=122 KM, M=5.4
SAN JUAN PROVINCE, ARGENTINA

BKS JAN 11 05 49 03 C 59 30 *E 49 06 *E 00 28
*E 50 44 PS 00 36
LQ 11 10 *E 11 16
MICRON PERIOD
PZ 3.8 14
MAXR(Z) 34 20
MAXH(N) 12 20
MAXH(E) 25 20
PRI 05 49 *E 49 05
MHC 05 49 *E 49 05
WDC 05 49 07.5 PS 00 08
JAS 05 49 09.8 PS 00 08
MIN 05 49 10.1
MNV 05 49 21.5
MAG 6.5, DIST(DEG) 86
NEW HEBRIDES REGION
USGS 05 36 30.8, 14.2S, 166.6E, H= 15 KM, M=5.7

WDC JAN 12 10 36 49.7
MIN 10 36 51.7 D
JAS 10 36 56.2
FRI 10 36 58.5
MNV 10 37 05.5 D
EAST NEW GUINEA
USGS 10 23 55.9, 5.5S, 147.1E, H=219 KM, M=5.5

WDC JAN 12 12 12 52.0 D
MIN 12 13 06.9
JAS 12 13 15.6 D
MNV 12 13 23.7
ANDREANOF ISLANDS

PRI JAN 12 12 17 25.5 C
MNV 12 17 28.2 C
JAS 12 17 47.9 C
USGS 12 10 57.7, 8.6N, 103.6W, H= N KM, M=4.9
OFF COAST OF MEXICO

WDC JAN 12 21 45 40.6
JAS 21 46 16.4
OFF OREGON COAST

JAS JAN 12 23 58 32.0
WDC 23 58 46.3
USGS 23 46 44.2, 22.6S, 68.5W, H= 91 KM, M=4.9
NORTHERN CHILE

MNV JAN 13 21 44 13.9 C
JAS 21 44 23.3 C
USGS 21 31 39.4, 3.7N, 31.6W, H= N KM, M=5.2
CENTRAL MID-ATLANTIC RIDGE

PRI JAN 13 23 48 15.7
MNV 23 48 18.0 C
JAS 23 48 21.6 C *E 48 28
WDC 23 48 35.3 C *E 48 32
*E 48 46
USGS 23 35 45.7, 35.5S, 72.7W, H= 33 KM, M=5.1
NEAR COAST OF CENTRAL CHILE

MNV JAN 14 16 02 57.4
JAS 16 03 06.0
USGS 15 15 47.3, 8.6S, 77.6W, H= 4 KM, M=5.2
PERU

FHC JAN 14 20 41 20.9
WDC 20 41 27.1 C
MHC 20 41 45.2
JAS 20 41 47.6 C
FRI 20 41 54.2 C
PRI 20 41 54.8
MNV 20 41 54.9 C
KURIL ISLANDS
USGS 20 31 43.0, 48.8N, 155.0E, H= 14 KM, M=6.5

BKS JAN 14 23 44 44.0 C
C

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                PZ          0.05          0.8
        23 44 46.0
MHC     23 44 46.8  C
WDC     23 44 48.8
PRI     23 44 50.7  C
JAS     23 44 52.4
FRI     23 45 00.1  C
MNV             USGS  23 32 10.6,  9.6S, 161.2E, H= 53 KM, M=5.6
                      SOLOMON ISLANDS

                                    *E  29 44
PRI JAN 15  07 29
            07 29 51.9
JAS         07 29 52.1
MNV         07 30 10.5
WDC

SAO JAN 15  08 44 44.4
            08 44 45.6  D
PRI         08 44 46.1  D
MHC         08 44 46.1  D
BKS                MICRON        PERIOD
                     0.09           0.7
                PZ                  *E  45 26
            08 44 49.6  D
FRI         08 44 50.8  D
JAS         08 44 53.9  D
WDC         08 44 54.3
MIN         08 44 58.6  D           *E  45 30
MNV             KERMADEC ISLANDS
                USGS  08 32 14.0, 30.9S, 178.9W, H=114 KM, M=5.6

WDC JAN 15  19 12 43.4  C
            19 12 56.0  C
JAS         19 13 00.5  C
FRI         19 13 03.8  C
MNV             MARIANA ISLANDS REGION
                USGS  19 00 59.7, 21.7N, 143.0E, H=217 KM, M=4.9

JAS JAN 16  13 04 12.3
            13 04 21.7
MNV             USGS  12 51 49.1, 11.9S, 166.3E, H= 97 KM, M=4.6
                      SANTA CRUZ ISLANDS

JAS JAN 17  08 49 50
            08 49 56.5  C
MNV             USGS  08 39 06.7, 43.8N, 147.2E, H= 77 KM, M=5.2
                      KURIL ISLANDS

PRI JAN 17  09 26 10.9
MNV         09 26 12.2                *E  26 34
JAS         09 26 16.7  C             *E  26 39
WDC         09 26 30.7  C             *E  26 53
                USGS  09 14 11.5, 28.1S,  70.5W, H= 83 KM, M=5.7
                      CENTRAL CHILE

MHC JAN 17  13 10 46.3
            13 10 47.0  C         PKKP  20 58
JAS         13 10 48.7
PRI         13 10 49.0  C         PKKP  20 57
FRI         13 10 50.8  C           *E  11 01 PKKP  20 52
MNV             USGS  12 52 25.5,  7.8S, 117.5E, H=257 KM, M=5.6
                      BALI SEA

MNV JAN 18  17 01 05.3  C
FRI         17 01 11.6  C
JAS         17 01 17.8  C
MHC         17 01 25.3  C
                USGS  16 52 43.1, 18.8N,  69.4W, H= 82 KM, M=5.3
                      DOMINICAN REPUBLIC REGION

WDC JAN 19  09 00 11.2
BKS         09 00 27.2  D
                   MICRON        PERIOD
                PZ   0.05          0.9
JAS         09 00 36.4
MNV         09 00 45.2
PRI         09 00 45.5
                USGS  08 53 39.1, 52.9N, 168.0W, H= 59 KM, M=5.0
                      FOX ISLANDS, ALEUTIAN ISLANDS

JAS JAN 20  02 20 19.8
FRI         02 20                     *E  20 22
MNV         02 20 28.0  C
                USGS  02 07 17.9,  5.3S, 151.5E, H= 74 KM, M=5.1
                      NEW BRITAIN REGION

BKS JAN 21  12 02 04.7
                   MICRON        PERIOD
                PZ   0.06          1
PRI         12 02                 *E  02 08
MIN         12 02 09.4  C
JAS         12 02 11.0
FRI         12 02 12.8
MNV         12 02 20.3  C
                USGS  11 49 29.7,  8.9S, 160.7E, H= 38 KM, M=5.4
                      SOLOMON ISLANDS

MNV JAN 21  22 55 18.2  C
PRI         22 55 18.5
JAS         22 55 26.5  C
                USGS  22 48 52.1, 14.9N,  93.6W, H= 33 KM, M=5.0
                      NEAR COAST OF CHIAPAS, MEXICO

WDC JAN 22  13 37 15.4
MIN         13 37 18.0
BKS         13 37 31.0  C  44 53    *E  37 40 SCS   47 16   *E  48 28
                                    SS  48 36  L    50 50
                   MICRON        PERIOD
                PZ   0.03          0.6
                MAXR(Z) 2.5        20
                MAXH(N) 1.4        20
                MAXH(E) 2.5        20
JAS         13 37 36.4  C
MNV         13 37 43.3  C
FRI         13 37 44.6
PRI         13 37 47.0
                MAG 5.2, DIST(DEG) 54
                USGS  13 28 20.0, 55.2N, 162.1E, H= N  KM, M=5.7
                      NEAR EAST COAST OF KAMCHATKA

BKS JAN 23  14 02 31.3  C             *E  12 18
                   MICRON        PERIOD
                PZ   0.08          0.8
SAO         14 02 35.0
MHC         14 02 36.5                *E  02 37
PRI         14 02
FRI         14 02 41
JAS         14 02 41.4  C             *E  04 24
WDC         14 02 41.5  C
MIN         14 02 44.4  D
MNV         14 02 45.0                *E  04 34
            14 02 51.1  C
                USGS  13 51 08.8, 22.9S, 179.1W, H=449 KM, M=5.4
                      SOUTH OF FIJI ISLANDS

FRI JAN 23  21 56 05.5
PRI         21 56 06.0                *E  56 42
JAS         21 56 11.8  D             *E  56 42
MHC         21 56 13.5                *E  56 17
BKS         21 56                     PERIOD
                   MICRON               1.2
                PZ   0.06          69.8W, H=115 KM, M=5.2
                USGS  21 43 51.3, 32.3S,
                      MENDOZA PROVINCE, ARGENTINA

WDC JAN 24  18 49                     *E  49 01   *E  49 10
MIN         18 49                     *E  49 14
BKS         18 49 02.5  C             *E  49 22   *E  49 33
JAS         18 49                     *E  49 36
MNV         18 49 25.5  C             *E  49 39
            18 49                     H= 40 KM, M=4.8
                USGS  18 43 26.8, 61.6N, 147.6W,
                      SOUTHERN ALASKA

FHC JAN 24  19 23 34.9  C             *E  23 46

WDC         19 23 40.7  C                 *E  23 50
MIN         19 23 44.9  C                 *E  23 53
BKS         19 23 50.8  D   32 48          *E  24 03   *E  24 24   SS  40 32
                                          LQ  42 00   LR  44 00
                   MICRON        PERIOD
                MAXR(Z) 6.5        20
                MAXH(N) 3.2        20
                MAXH(E) 6.0        20
MHC         19 23
JAS         19 23 58.5  D             *E  23 58   *E  24 08
FRI         19 24 04.8                *E  24 11
MNV         19 24 05.5                *E  24 17
PRI         19 24                     *E  24 18
                                      *E  24 07
                MAG 5.7, DIST(DEG) 69
                USGS  19 12 52.1, 42.1N, 143.9E, H= 45 KM, M=5.9
                      HOKKAIDO, JAPAN REGION

MIN JAN 24  23 49 01.3  C
JAS         23 49 14.5  C
MNV         23 49 22.8                *E  49 27
FRI         23 49                     *E  49 34
                USGS  23 38 08.5, 41.9N, 144.0E, H= 41 KM, M=5.2
                      HOKKAIDO, JAPAN REGION

FHC JAN 25  04 55 06.3
MIN         04 55 34.5  D

FHC JAN 25  20 40 00.2  D             *E  40 37
WDC         20 40 05.5  D             *E  40 42   *E  41 04
MIN         20 40 08.8  D
BKS         20 40 10.7  D   50 06     *E  50 50   *E  56 12   LQ  00 20
                                      LR  04 10
                   MICRON        PERIOD
                PZ   0.3           1.2
                MAXR(Z) 1.6        20
                MAXH(N) 0.9        20
                MAXH(E) 1.25       20
MHC         20 40 14.1  D             *E  40 50
SAO         20 40                     *E  40 16
JAS         20 40 17.6  D             *E  40 54   *E  50 20
PRI         20 40 20.3  D             *E  40 57
FRI         20 40 22.0  D
MNV         20 40 26.0  D
                MAG 5.0, DIST(DEG) 78
                MARIANA ISLANDS
                USGS  20 28 13.0, 18.9N, 145.5E, H=141 KM, M=5.9

PRI JAN 25  22 51 40.3  D
BKS         22 51 40.6                *E  51 54
MHC         22 51 41.0  D
FRI         22 51 46.2
JAS         22 51 47.0  D
MIN         22 51 48.1  D
WDC         22 51 49.3
MNV         22 51 57.3  D
                USGS  22 40 16.1, 16.4S, 172.5W, H= 10 KM, M=5.2
                      SAMOA ISLANDS REGION

WDC JAN 26  03 18 10.5
MIN         03 18 16.4  C
BKS         03 18                     *E  28 16
MHC         03 18 31.7
JAS         03 18 35.3  D
PRI         03 18                     *E  18 42
FRI         03 18 43.5
MNV         03 18 44.3  D
                FOX ISLANDS REGION
                USGS  03 11 20.9, 52.3N, 171.4W, H= 54 KM, M=5.1

PRI JAN 26  05 40 41.3
FRI         05 40 41.5
MNV         05 40 42.5
JAS         05 40 52.5
MHC         05 40                     *E  40 53
BKS         05 41 05      45 40       *PP 41 22   *E  41 31   PP  42 02
                                      *E  45 44   *E  46 00   *E  46 02
                                      *E  47 04
                   MICRON        PERIOD
                PZ   0.08          1.5
MIN         05 41 10.5
WDC         05 41                     *E  41 24
                USGS  05 35 33.6, 18.6N, 103.4W, H= N  KM, M=5.1
                      NEAR COAST OF MICHOACAN, MEXICO

WDC JAN 27  07 17                     *E  17 30
MIN         07 17 32.2
BKS         07 17 36.0  C
MHC         07 17 39.3
JAS         07 17 42.7  D
PRI         07 17 45.6
FRI         07 17 47.2  D
MNV         07 17 50.8  D
                MARIANA ISLANDS
                USGS  07 05 41.6, 21.1N, 144.5E, H=148 KM, M=5.3

JAS JAN 28  02 14 13.7  C
WDC         02 14 14
MNV         02 14 23.1  C
                USGS  02 01 34.5, 15.0S, 166.8E, H= 26 KM, M=5.4
                      NEW HEBRIDES ISLANDS

WDC JAN 28  02 25 40                  *E  25 44
BKS         02 25
MHC         02 25 47
JAS         02 25 50.4                *E  25 53
PRI         02 25
FRI         02 25 54.6  D
MNV         02 25 58.4  C
                USGS  02 13 05.5, 12.1N, 143.0E, H= 59 KM, M=5.5
                      SOUTH OF MARIANA ISLANDS

FRI JAN 28  04 09 04.0
JAS         04 09 04.7  C
WDC         04 09 06
MIN         04 09 07.8
MNV         04 09 13.0  C
                USGS  03 57 44.6, 22.2S, 179.6W, H=572 KM, M=4.7
                      SOUTH OF FIJI ISLANDS

BKS JAN 28  06 15                     *E  15 45
MHC         06 15 45.8
FRI         06 15 50.3
JAS         06 15 50.6  D
MIN         06 15 54.0
MNV         06 15 59.0  D
                USGS  06 04 19.2, 24.3S, 178.7E, H=585 KM, M=4.9
                      SOUTH OF FIJI ISLANDS

WDC JAN 28  12 24 15.7
            12 24 28.0  C
JAS         12 24 36.1  C
MNV             USGS  12 12 25.4, 20.5N, 144.8E, H=144 KM, M=4.7
                      MARIANA ISLANDS

WDC JAN 29  06 15 32.0  C
            06 15 38.5  D             *E  21 14
MIN         06 16                     *E  16 08   *E  16 11   *E  18 34
BKS                                   *E  19 20

JAS         06 16 13.5
            06 16 20.0  C             *E  16 30
MNV         06 16
PRI             USGS  06 13 07.1, 49.3N, 129.1W, H= 14 KM, M=4.7
                      VANCOUVER ISLAND REGION

MNV JAN 29  19 26 23.0  C             *E  26 31
            19 26 28.7  C             *E  26 38
JAS         19 26 33.5                *E  26 45
WDC             MID-ATLANTIC RIDGE

WDC JAN 30  05 09 57.8  C
            05 09 58.1  C             *E  10 10   *E  11 51   *E  12 07
MIN         05 10
BKS
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                                *E  12 16
MNV             05 10 10.6  C
JAS             05 10 10.9  C
MHC             05 10 13.1
FRI             05 10 15.7  C
                EASTERN KAZAKH SSR
                USGS  04 57 02.1, 49.8N,  78.1E, H= 0  KM, M=5.4

BKS JAN 30   10 07 08.4       18 00     *E  07 18   *E  07 43   PP   11 41
                                        *E  20 40   *E  24 45   *E  26 28
                                        *E  27 00   *E  36 02   *E  40 15
                          MICRON        PERIOD
                PZ          1.22         11.2
                MAXR(Z)     8.2          20
                MAXH(N)     2.1          20
                MAXH(E)     6.4          20
MIN             10 07 14.8                *E  10 57   *E  23 14
WDC             10 07 16                  PP  11 44   PKKP 23 06
JAS             10 07 21                PP    11 50   PKKP 23 02
FRI             10 07                     *E  07 27
MNV             10 07 26                PP    12 00   PKKP 22 53
                MAG 6.1, DIST(DEG) 105
                USGS  09 53 12.0,  5.2S, 134.1E, H= N  KM, M=5.9
                ARDE ISLANDS REGION

FRI JAN 31   06 06 35.0                 *E  07 20
MNV             06 06 37.3  D           *E  06 42
JAS             06 06 42.1
                MAG 4.0, RIVERSIDE AREA
                USGS  06 05 28.8, 34.0N, 117.0W, H= 8  KM, M=4.0
                SOUTHERN CALIFORNIA

FHC JAN 31   07 16 05.1                 *E  16 14
WDC             07 16 09.2              *E  16 18
MIN             07 16 12.5  C
BKS             07 16 18.1              *E  16 27   *E  16 30   *E  19 39
                                        *E  26 38   *E  38 30   *E  42 30
MHC             07 16 22.6              *E  16 31
JAS             07 16 24.0              *E  16 34
FRI             07 16 28.7              *E  16 38
PRI             07 16 29.2
MNV             07 16 30.2              *E  16 40
                USGS  07 03 58.1, 31.8N, 131.6E, H= 37 KM, M=5.6
                KYUSHU, JAPAN

SAO JAN 31   15 21 22.4
BKS             15 21 22.5
PRI             15 21 23.2  C           *E  23 24
MHC             15 21 23.2  C
FRI             15 21 28.4  C
JAS             15 21 28.7  C
WDC             15 21 29.9              *E  21 36
MNV             15 21 38.3
                USGS  15 10 20.1, 17.8S, 178.7W, H=584 KM, M=5.3
                FIJI ISLANDS REGION

FHC JAN 31   20 01 52.5
WDC             20 02 04.0  C
MIN             20 02 08.9  C
BKS             20 02 19.5              *E  02 38   *E  02 48
MHC             20 02 25.5
JAS             20 02 29.0  C
FRI             20 02 37.5
PRI             20 02 37.5
MNV             20 02                   *E  02 39
                USGS  19 55 26.2, 52.4N, 168.7W, H= 36 KM, M=5.6
                FOX ISLANDS, ALEUTIAN ISLANDS

BKS JAN 31   20 29                      *E  29 09   *E  29 28   *E  29 37
                                        *E  41 06   *E  53 04   LR  00 25
MHC             20 29 11.2              *E  52 38
WDC             20 29 11.9  C
PRI             20 29 14.0  C
JAS             20 29 15.5  C
FRI             20 29 17.4  C
MNV             20 29 24.2  C
                USGS  20 16 22.5,  7.5S, 156.0E, H= 62 KM, M=5.3
                SOLOMON ISLANDS

WDC JAN 31   23 42 55.0  D
BKS             23 42 55.6  D
                                    PP  46 28   *E  46 41   *E  46 54
                                    *E  52 48   SCS 53 56   PPS 55 04
                                    SS  58 30   *E  03 22   L   06 00
                                    LR  09 41
                          MICRON        PERIOD
MHC                         0.15          1.5
PRI             23 42 56.5  D
JAS             23 43 00.9  D
FRI             23 43 01.0
MNV             23 43 03.2  D           *E  46 40
WDC             23 43 11.1  D           *E  46 40
                23 43 55.0  D
                USGS  23 30 05.3,  7.5S, 155.9E, H= 34 KM, M=6.0
                SOLOMON ISLANDS. TSUNAMI (3.0 TO 4.6 METERS)
                AT CHOISEUL

BKS FEB 01   03 25 22.0  C
                                    *E  25 25   *E  25 34   PP   29 12
                                    *E  36 24   *E  37 32   SS   41 40
                                L       48 40   LR      52 14
MHC             03 25 26.3
MIN             03 25
PRI
JAS             03 25 29.2          *E  25 28   *I  26 04
FRI             03 25 30.5  C
WDC             03 25 32.5          *E  44 24 PtPt  51 26
MNV             03 25 34.5  C
                03 25 39.4  C
                SOLOMON ISLANDS REGION
                USGS  03 12 33.1,  7.4S, 155.6E, H= 40 KM, M=6.2

MNV FEB 01   06 58 38.3  C
JAS             06 58 40.7  C
MIN             06 58 43.2
WDC             06 58 45
                USGS  06 39 37.1, 47.4S,  13.4W, H= N  KM, M=5.7
                SOUTH ATLANTIC RIDGE

BKS FEB 01   08 25 04
                                LQ  37 08   *E  48 46   *E  48 52
JAS             08 25 11.4          *E  49 19   *E  53 48
MNV             08 25 18.5  C
                USGS  08 12 16.3,  7.2S, 155.3E, H= 62 KM, M=5.2
                SOLOMON ISLANDS

WDC FEB 01   15 13 45.8  C
MIN             15 13 49.1  C
MHC             15 14
JAS             15 14 07.5  C           *E  14 05
MNV             15 14 14.8  C
FRI             15 14 15.0
PRI             15 14
                KAMCHATKA               *E  14 22
                USGS  15 04 48.9, 54.4N, 162.2E, H= 30 KM, M=5.1

JAS FEB 01   15 37 01.3
PRI             15 37
FRI             15 37                   *E  37 02
MNV             15 37                   *E  37 05
WDC             15 37 09.8  C
BKS             15 37                   *E  37 55
                                    47 30   PPS 48 45   L   00 30   LR  04 00
                          MICRON        PERIOD
                MAXR(Z)     2.7          20
                MAXH(N)     1.1          20
                MAXH(E)     2.0          20
                MAG 5.5, DIST (DEG) 88
                USGS  15 24 04.6,  7.1S, 155.1E, H= 48 KM, M=5.6
                SOLOMON ISLANDS

JAS FEB 01   23 29 51.5  D
MNV             23 30 00.0  D
                USGS  23 16 55.2,  7.2S, 155.4E, H= 47 KM, M=5.4
                SOLOMON ISLANDS

SAO FEB 02   08 39 50.8  C
BKS             08 39 50.0  C
                          MICRON        PERIOD
                PZ          0.37          1.0
                                        *E  40 10
MHC             08 39 51.5  C
FHC             08 39 51.7  C
PRI             08 39 52.3  C
WDC             08 39 55.2  C
JAS             08 39 56.2  C
FRI             08 39 56.6  C           *E  43 18
MIN             08 39 56.9  C
MNV             08 40 05.0  C
                NEW HEBRIDES ISLANDS
                USGS  08 27 40.2, 19.1S, 169.5E, H=269 KM, M=5.6

WDC FEB 02   11 58 55.5  C                *E  03 10
BKS             11 58                   *E  58 57
JAS             11 59                   *E  59 05   *E  12 32
MNV             11 59 13.0  C                       *E  03 19   LR
MIN             11 59                   *E  59 19
                USGS  11 44 52.9,  5.0S, 134.0E, H= N  KM, M=5.6
                ARDE ISLANDS REGION

WDC FEB 02   15 48                      *E  48 13
PRI             15 48 15
JAS             15 48 16
MNV             15 48 25                *E  48 39
                USGS  15 35 15.6,  7.2S, 155.0E, H= N  KM, M=5.2
                SOLOMON ISLANDS

FHC FEB 02   16 00 52
WDC             16 00 58.8  D           *E  01 18
MIN             16 01 03.0  D           *E  01 16
BKS             16 01 22.0  D           *E  01 42   *E  08 30   *E  15 21
                          MICRON        PERIOD
                PZ          0.07          1.0
JAS             16 01 26.3  D           *E  01 44
MHC             16 01 27.6              *E  01 45
MNV             16 01 30.0  D
FRI             16 01
PRI             16 01 41.0              *E  01 36
                GULF OF ALASKA
                USGS  15 55 28.3, 61.6N, 147.6W, H= 48 KM, M=5.1

MIN FEB 02   20 15 13.9
WDC             20 15
JAS             20 15 20.5              *E  15 15
MNV             20 15 22.0
PRI             20 15
                USGS  19 56 11.4,  6.2S, 104.3E, H= N  KM, M=5.2
                SUNDA STRAIT

PRI FEB 02   21 19 55.4  C
MNV             21 19 55.6  C
JAS             21 20 01.6  C
MHC             21 20 04.2
BKS             21 20 08.0  C
                          MICRON        PERIOD
MIN                         0.06          1.0
WDC             21 20 13.9  C
FHC             21 20 17.8  C
                21 20 26.0
                PERU
                USGS  21 09 01.5, 16.0S,  74.5W, H= 63 KM, M=5.2

FHC FEB 03   10 22 15.8
MIN             10 22 17.1  D
WDC             10 22 19.7  D
BKS             10 22 28.0
MHC             10 22
JAS             10 22 32.2  D           *E  22 30
FRI             10 22                   *E  26 30
MNV             10 22 38.0  D           *E  22 36
                USGS                    *E  26 41
                10 08 48.4, 18.9N, 120.1E, H= 30 KM, M=5.9
                LUZON, PHILIPPINE ISLANDS

WDC FEB 03   16 25
PRI             16 25
JAS             16 25                   *E  25 51
MNV             16 25 56.5  C           *E  25 55
BKS             16 26 05.2  C
                                    36 20   L   49 00   LR  58 20
                USGS  16 12 56.7,  7.3S, 155.5E, H= 43 KM, M=5.4
                SOLOMON ISLANDS

MIN FEB 03   18 59 46.7  C
BKS             18 59 49.1
MHC             18 59 49.5  C
JAS             18 59
FRI             18 59 55.7  C           *E  59 52
MNV             19 00 04.5              *E  59 58
                USGS  18 45 45.7,  5.1S, 133.8E, H= N  KM, M=5.7
                ARDE ISLANDS REGION

PRI FEB 04   09 21 09.0
FRI             09 21 12.0  C
MHC             09 21 17.2  C
JAS             09 21 18.9
MNV             09 21 19.3  C
BKS             09 21
WDC             09 21 34.2  C           *E  21 21   *E  31 16
                USGS  09 09 41.4, 35.6S, 104.8W, H= N  KM, M=5.1
                SOUTHERN PACIFIC OCEAN

BKS FEB 04   20 23 30  C  34 20
                          MICRON        *E  43 20   LR  44 50   *E  51 11
                MAXR(Z)     6.8          PERIOD
                MAXH(N)     2.8          20
                MAXH(E)     8.4          20
WDC             20 23 30.0              20
JAS             20 23 35.0              20
FRI             20 23 36.7              *E  27 06
MNV             20 23 44.7  C           *E  27 19
                USGS  20 10 42.0,  7.3S, 155.8E, H= 55 KM, M=5.4
                SOLOMON ISLANDS

FHC FEB 05   02 30 55.1  D
WDC             02 31 00.6  D
MIN             02 31 04.4  D
BKS             02 31 23.2
                          MICRON        *E  31 20
JAS                         0.06          PERIOD
MHC             02 31 27.6  D             0.8
MNV             02 31 29.3
PRI             02 31 31.3
                02 31 42.4
                USGS  02 25 22.0, 62.7N, 148.9W, H= 75 KM, M=5.0
                CENTRAL ALASKA

WDC FEB 05   22 39                      *E  39 08
JAS             22 39                   *E  39 15
MIN             22 39 09.2  C
MNV             22 39                   *E  32 40
                22 39 19.0  C       33 34   *E  32 57
                USGS                            *E  33 21
                22 27 26.3, 16.2S, 177.7W, H= 62 KM, M=5.0
                FIJI ISLANDS REGION

FHC FEB 06   02 32 22.8
WDC             02 32 37.8
MIN             02 32 47.8
BKS             02 32 56.0
MHC             02 33 06.5
JAS             02 33 12.5
SAO             02 33 12.5
PRI             02 33 27
FRI             02 33 27.3
MNV             02 33
                MAG 4.2, SW OF FHC      *E  33 32

FHC FEB 06   04 10 21.7
WDC             04 10 30.9  C
MIN             04 10                   *E  10 39
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                04 10 46.5  D   16 08     *E  13 42  L    18 08  LR   19 12
BKS             04 10 54.5
WMC             04 10 56.2  D   16 23
JAS             04 11 05.1  D   16 40
MNV             04 11 05.5
FRI             04 11 06.5
PRI                         USGS  04 04 07.2, 53.8N, 164.7W, H= 2  KM, M=5.9
                                  UNIMAK ISLANDS REGION

MIN FEB 07      12 29 46.6
JAS             12 30 17.6

JAS FEB 07      12 45 06                      *E  45 13
MNV             12 45
                            USGS  12 33 38.3, 37.4N, 141.0E, H= 91 KM, M=4.7
                                  NEAR EAST COAST OF HONSHU, JAPAN

JAS FEB 07      13 57 07.1
MNV             13 57 10.2
                            USGS  13 51 54.8, 59.2N, 137.0W, H= N  KM, M=4.0
                                  SOUTHEASTERN ALASKA

WDC FEB 07      19 13 36.9  C
JAS             19 13 58.0
                            USGS  19 04 07.0, 50.0N, 156.4E, H= 46 KM, M=5.0
                                  KURIL ISLANDS

BKS FEB 07      19 19 52.3  C                 *E  32 50
                              MICRON          PERIOD
                    PZ          0.04            1.0
                19 19 53.8  C
WDC             19 19                         *E  19 54
WMC             19 19                         *E  19 56
PRI             19 19 58.3  C
JAS             19 20 07.5  C
MNV                         USGS  19 07 24.7,  8.9S, 159.3E, H=152 KM, M=5.3
                                  SOLOMON ISLANDS

JAS FEB 08      00 45 24.2  C                 *E  45 36
WDC             00 45                         *E  45 27   *E  45 38
MNV             00 45 34.0  C                 *E  45 45
                            USGS  00 33 35.9, 20.3S, 173.8W, H= 37 KM, M=4.9
                                  TONGA ISLANDS

WDC FEB 08      03 26 12.6                    *E  26 21
MNV             03 26                         *E  26 34
JAS                         USGS  03 06 31.0,  9.9S,  66.6E, H= N  KM, M=4.2
                                  MID-INDIAN RISE

WDC FEB 08      14 10 09.0  D
WMC             14 30                         *E  30 31
JAS             14 30 31.9  D
MNV             14 30 39.3  D
PRI             14 30                         *E  30 40
FRI             14 30                         *E  30 42
BKS             14 30                         *E  44 48   *E  45 00
                              MICRON          PERIOD
                    MAXR(Z)     1.43            20
                    MAXH(N)     0.71            20
                    MAXH(E)     1.43            20
                            USGS  14 21 37.4, 54.4N, 167.6E, H= N  KM, M=5.4
                                  KOMANDORSKY ISLANDS REGION

JAS FEB 08      17 22 23                      *E  25 20
BKS             17 22                       LG    24 48  LR   25 30
                              MICRON          PERIOD
                    MAXH(N)     6.9             18
                    MAXH(E)    12.6             18
                                  GULF OF CALIFORNIA
                            USGS  17 19 59.1, 30.3N, 113.3W, H= N  KM, M=4.4

WMC FEB 08      18 37                         *E  37 17
PRI             18 37                         *E  37 17
JAS             18 37 20.5  C
WDC             18 37 21.8  C
FRI             18 37                         *E  37 22
BKS             18 37                         *E  37 23   *E  48 00   *E  53 00
                                              *E  57 12   *E  00 32   *E  04 20
                              MICRON          PERIOD
                    MAXR(Z)     3.45            18
                    MAXH(N)     2.24            18
                    MAXH(E)     2.76            18
MNV             18 37 28.5  C
                            USGS  18 24 32.2, 21.4S, 170.1E, H= N  KM, M=5.4
                                  LOYALTY ISLANDS REGION

WDC FEB 09      01 42 06.5  C
JAS             01 42 07.5  C
MNV             01 42 16.1
                            USGS  01 29 51.1, 18.7S, 169.3E, H=253 KM, M= .
                                  NEW HEBRIDES ISLANDS

JAS FEB 09      13 20 15.1  D
WDC             13 20 28.4  D
                            USGS  13 07 44.2, 35.2S,  70.8W, H=105 KM, M=4.5
                                  CHILE-ARGENTINA BORDER REGION

WDC FEB 09      18 31 38.5  C
MIN             18 31 42.2  C
JAS             18 31 59.5  C                 *E  32 06
MNV             18 31
                            USGS  18 22 14.8, 50.6N, 157.2E, H= 57 KM, M=4.9
                                  KURIL ISLANDS

JAS FEB 10      02 28 12.3
MNV             02 28 21.0  D
                            USGS  02 15 13.7,  7.3S, 155.1E, H= 38 KM, M=5.4
                                  SOLOMON ISLANDS

WDC FEB 10      09 03 19.5                    *E  03 44
MIN             09 03 21.4                    *E  04 00
JAS             09 03 35.8  D
MNV             09 03 42.6  D
                            USGS  08 51 41.2, 35.1N, 136.9E, H= 55 KM, M=5.0
                                  SOUTHERN HONSHU, JAPAN

WDC FEB 10      17 35 01.0
JAS             17 35 41.2

WDC FEB 11      01 59 48.5
WMC             01 59 53.5
JAS             01 59 54.0
FRI             01 59 56.2
PRI             01 59 56.7
MNV             01 59 57.5
                            USGS  01 40 46.2,  6.1S, 104.1E, H= N  KM, M=5.5
                                  SUNDA STRAIT

WDC FEB 11      05 48 48                      *E  48 58
JAS             05 49 05.5                    *E  49 16
                            USGS  05 38 03.3, 42.5N, 142.5E, H=113 KM, M=4.8
                                  HOKKAIDO, JAPAN REGION

JAS FEB 11      17 12 11.5  C
MNV             17 12 18.9  C

WDC FEB 11      21 56 55.2  C                 *E  57 10   *E  30 20   *E  36 40
BKS             21 56 56.8                    *E  57 00
WMC             21 57
JAS             21 57 03.7  C
PRI             21 57 05.7
FRI             21 57 07.1
                            USGS  21 44 38.6, 14.1N, 146.5E, H= 63 KM, M=5.0
                                  MARIANA ISLANDS

                                              *E  46 58
WDC FEB 12      02 46
MIN             02 47 00.1
JAS             02 47 10.0  C
FRI             02 47 14.1
MNV             02 47 17.7  C
                            USGS  02 35 20.5, 21.7N, 142.9E, H=290 KM, M=4.5

WDC FEB 12      07 06 58.3
MIN             07 07 02.0
WMC             07 07 06.4
JAS             07 07 09.3
PRI             07 07 12.0
                            USGS  06 54 46.3, 14.1N, 144.9E, H=123 KM, M=4.7
                                  MARIANA ISLANDS

                                  PKKP  07 45
                                  *E    28 40
                              MICRON      PERIOD
                                0.03        1.0
                                  PKKP  07 36
C                                 PKKP  07 29
                                  NORTHERN CELEBES

                              MICRON      PERIOD
                                0.03        1.0
D
D
D

MNV FEB 14      06 32 06.3
JAS             06 32 10.6
WDC             06 32
                            USGS  06 19 55.8, 26.2S,  66.5W, H= N  KM, M=5.0
                                  CATAMARCA PROVINCE, ARGENTINA

MNV FEB 14      07 58 02.8
JAS             07 58 16.2
MIN             07 58                         *E  58 26
WDC             07 58 29.7                    *E  16 00   *E  20 00
BKS             07 58
                            USGS  07 49 40.3, 19.7N,  70.0W, H= 7  KM, M=5.1
                                  DOMINICAN REPUBLIC REGION

MNV FEB 14      12 11 42.0  C
JAS             12 11 54.2  D
MIN             12 11 56.2  D
PRI             12 11 58.7
WDC             12 11 59.8  C
WMC             12 12 02.0  C
FHC             12 12 09.9  C
                            USGS  12 01 07.0, 22.0N,  44.2W, H= N  KM, M=5.4
                                  NORTH ATLANTIC RIDGE

BKS FEB 15      23 26 26.8
                              MICRON      PERIOD
                                0.02        0.8
                    PZ
MHC             23 26 27.3  C
FRI             23 26                         *E  26 32
JAS             23 26 32.2  C
WDC             23 26 34.0  C
MIN             23 26 35.9
MNV             23 26 40.0
                            USGS  23 15 06.6, 23.5S, 179.9E, H=578 KM, M=4.7
                                  SOUTH OF FIJI ISLANDS

MNV FEB 16      01 38 34.0
PRI             01 38 34.5
JAS             01 38 39.8  D
WMC             01 38 41.8
BKS             01 38 45.5
                              MICRON      PERIOD
                                0.03        1.0
                    PZ
WDC             01 38 54.2
                            USGS  21 26 59.8, 21.3S,  69.9W, H= 74 KM, M=5.3
                                  NORTHERN CHILE

BKS FEB 16      05 51 55.3  C
                              MICRON      PERIOD
                                0.04        0.8
                    PZ
MHC             05 51 55.3
FRI             05 51 58.8                    *E  53 53
JAS             05 51 59.8                    *E  53 58
WDC             05 52 02.6                    *E  54 02
MNV             05 52 07.5
                            USGS  05 39 57.4, 31.5S, 179.1E, H=510 KM, M=5.2
                                  KERMADEC ISLANDS REGION

BKS FEB 16      07 09 59.1  C
                              MICRON      PERIOD
                                0.02        0.7
                    PZ
MHC             07 10 00.2
PRI             07 10 01.4
JAS             07 10 05.0  C
FRI             07 10 05.0  C
WDC             07 10 05.3  C
MIN             07 10                         *E  10 06
MNV             07 10 13.6  C
                            USGS  06 57 28.5, 22.4S, 171.3E, H=110 KM, M=5.1
                                  LOYALTY ISLANDS REGION

JAS FEB 16      13 25 19.0  D
WDC             13 25                         *E  25 38   *E  27 31
                            USGS  13 13 00.1, 31.7S,  69.5W, H=117 KM, M=4.6
                                  SAN JUAN PROVINCE, ARGENTINA

WDC FEB 17      04 45 10.8  D
MIN             04 45 13.6
WMC             04 45 19.1
JAS             04 45 22.7  D
FRI             04 45 26.9  D
MNV             04 45 31.5  D
                            USGS  04 33 11.9, 18.4N, 146.7E, H= 58 KM, M=5.6
                                  MARIANA ISLANDS

JAS FEB 18      09 04 01.0
WDC             09 04 02.8
MIN             09 04 04.8
MNV             09 04 09.5

MIN FEB 18      13 41 37.5  C
WDC             13 41 37.9  C
JAS             13 41 56.5  C
MNV             13 42 04.5  C
                            USGS  13 34 05.1, 51.8N, 179.8E, H=139 KM, M=4.7
                                  RAT ISLANDS, ALEUTIAN ISLANDS

JAS FEB 19      03 44 19.2                    PP  48 30
WDC             03 44 21.2                    PP  48 23
BKS             03 44                         *E  55 40   *E  02 32
                            USGS  03 30 21.8, 13.9N, 122.1E, H= 17 KM, M=5.7
                                  LUZON, PHILIPPINE ISLANDS

FRI FEB 20      03 15                         *E  15 02
PRI             03 15 03.3                    *E  15 33
MNV             03 15 04.4                    *E  15 34
JAS             03 15 08.5  D                 *E  15 38
WMC             03 15 10.7  D
MIN             03 15 18.8
WDC             03 15 22.4  D                 *E  15 52
FHC             03 15 28.9
                            USGS  03 02 51.5, 30.1S,  68.6W, H=115 KM, M=5.5
                                  SAN JUAN PROVINCE, ARGENTINA

FHC FEB 20      08 58 20.6
WDC             08 58 36.6                    *E  59 02
MIN             08 58 47.0                    *E  59 20
JAS             08 58

MNV FEB 20      16 19 48.6  C
JAS             16 20 01.2  C
MIN             16 20 08.9
WDC             16 20 14.4  C
```

USGS 16 11 26.8, 19.6N, 70.0W, H= 18 KM, M=4.9
DOMINICAN REPUBLIC REGION

JAS FEB 20 20 00 38.6

WDC FEB 21 C8 20 19.0
MIN 08 20 22.0
BKS 08 20 23.0
MICRON PERIOD
PZ 0.02 0.8
MHC 08 20 26.0
JAS C8 20 25.8
PRI 08 20 32.2
FRI 08 20 33.9
MNV C8 20 38.4
USGS 08 08 15.1, 16.3N, 147.7E, H= 46 KM, M=5.0
MARIANA ISLANDS REGION

WDC FEB 21 10 47 37.0 *E 48 18
MIN 10 47 40.6
JAS 10 47 49.0 *E 48 30
FRI 10 47 53.5 *E 48 35
MNV 10 47 57.4 *E 48 39
USGS 10 35 45.8, 18.5N, 145.6E, H=167 KM, M=4.7
MARIANA ISLANDS

PRI FEB 21 14 39 32.0
JAS 14 39 37.7 *E 40 00
MHC 14 39 39.0
WDC 14 39 51.2 *E 40 14
USGS 14 27 05.2, 35.2S, 71.0W, H= 87 KM, M=5.1
CENTRAL CHILE

FHC FEB 22 00 47 57.6 C *E 48 00 *E 48 08
WDC 00 48 02.6 C *E 51 03 *E 17 56 *E 50 50
MIN 00 48 05.7 *I 51 11 *E 17 50
BKS 00 48 12.0 57 32 *E 48 24 *E 49 31 *E 48 38
L 07 40
MICRON PERIOD
PZ 0.97 0.7
MHC 00 48 15.4
SAO 00 48 17.3 *E 51 17 *E 17 50
JAS 00 48 17.6 C
*E 48 28 *E 49 53 *E 51 21
FRI 00 48 22.8 C *E 14 09 *E 17 47
PRI 00 48 23.0 *E 51 37
MNV 00 48 24.2 *E 51 31 *E 17 51
HONSHU, JAPAN
USGS 00 36 53.8, 33.2N, 136.9E, H=385 KM, M=6.0

WDC FEB 23 04 25 45.3
MIN 04 25 49.4
JAS 04 26 03.5 C
USGS 04 14 56.7, 42.2N, 143.0E, H= 64 KM, M=5.3
HOKKAIDO, JAPAN REGION

MNV FEB 24 06 32 20.8
JAS 06 32 23.0
USGS 06 12 28.5, 52.7S, 26.1E, H= N KM, M=5.1
SOUTH OF AFRICA

FHC FEB 25 05 56 48.4
WDC 05 56 54.5 C
MIN 05 56 58.8
BKS 05 57 06.5
MICRON *E 16 00
PZ 0.04 PERIOD
MHC 05 57 10.7 0.7
JAS 05 57 13.2 C
MNV 05 57 20.5 C
PRI 05 57 20.5
FRI 05 57 21
USGS 05 46 25.1, 44.0N, 147.8E, H= 12 KM, M=5.9
KURIL ISLANDS

WDC FEB 26 04 12
MIN 04 12 *E 12 24
JAS 04 12 34.8 *E 12 28
FRI 04 12 *E 12 41
MNV 04 12 43.5 *E 12 40
USGS 04 00 18.4, 18.1N, 145.0E, H= 81 KM, M=4.5
MARIANA ISLANDS

WDC FEB 26 06 32 52.2
MIN 06 32 56.5 C *E 33 06
MHC 06 33 12.3 *I 33 03
JAS 06 33 14.3 C *E 23 26 *I 33 11
MNV 06 33 21.4 C *E 33 28
PRI 06 33
FRI 06 33 *E 33 22
KAMCHATKA REGION *E 33 22 *E 33 36
USGS 06 23 45.3, 53.3N, 159.7E, H= 49 KM, M=5.6

FHC FEB 26 10 11
WDC 10 11 *E 11 11
MHC 10 11 *E 11 14
JAS 10 11 24.0 *E 11 20
PRI 10 11
FRI 10 11 28.3 *E 11 27
MNV 10 11 32.0
USGS 09 58 40.4, 12.2N, 143.6E, H= 45 KM, M=5.5
SOUTH OF MARIANA ISLANDS

FHC FEB 26 23 17
WDC 23 17 43.2 *E 17 28
JAS 23 18 24.5
MNV 23 18
USGS 23 16 21.9, 43.9N, 128.4W, H= N KM, M=4.6 *E 18 38
OFF COAST OF OREGON

FHC FEB 26 23 21
WDC 23 21 45.5 *E 21 25
JAS 23 22 26.0
MNV 23 22 39.5
USGS 23 20 24.2, 44.0N, 128.3W, H= N KM, M=4.4
OFF COAST OF OREGON

FHC FEB 27 03 43 05.5
WDC 03 43 24.7 D
MIN 03 44 33.8
JAS 03 44 05.7 D
MHC 03 44
MNV 03 44 15.0 D *E 44 08
FRI 03 44
USGS 03 42 01.4, 43.9N, 128.4W, H= 15 KM, M=5.0 *E 44 20
OFF COAST OF OREGON

FHC FEB 27 03 44 26.5
WDC 03 44 42.3
MIN 03 44 52.9
BKS 03 45 11
JAS 03 45 23.1 *E 47 03
MHC 03 45
MNV 03 45 36.6 *E 45 24
FRI 03 45
USGS 03 43 19.2, 43.8N, 128.6W, H= N KM, M=5.0 *E 45 39
OFF COAST OF OREGON

FHC FEB 27 03 46
WDC 03 46 45.5 *E 46 30
MIN 03 46 56.2
JAS 03 47 26.7
MNV 03 47 40.3
USGS 03 45 26.1, 43.9N, 128.1W, H= N KM, M=4.9
OFF COAST OF OREGON

WDC FEB 27 03 56
JAS 03 57 02 *E 56 27

WDC FEB 27 11 49
JAS 11 49 38.5 *E 49 00

MNV FEB 27 17 00 36.5 C
FRI 17 00 48.3 C
JAS 17 00 57.3 C
PRI 17 01 01.1 C
SAO 17 01 07.8
MHC 17 01 10.0 C *E 01 02
BKS 17 01 16.7 C
MIN 17 01 23.0 C 02 52
FHC 17 01
MAGNITUDE 5.4 *E 01 49
NEVADA TEST SITE
USGS 17 00 00.1, 37.1N, 116.0W, H= 0 KM, M=5.4

FHC FEB 27 18 20 45.7 C
WDC 18 20 46.8 C
MIN 18 20 48.0 C *E 21 00
BKS 18 20 52 C
MICRON PERIOD
PZ 0.11 1.0
MHC 18 20 52.6 C
JAS 18 20 52.7 C
FRI 18 20 55.0 C *E 21 06
MNV 18 20 55.5 C *E 21 08
PRI 18 20 56.0 C *E 21 08
USGS 18 01 48.7, 1.3N, 97.7E, H= N KM, M=5.9
NORTHERN SUMATRA

PRI FEB 27 19 04 25.3
BKS 19 04 26.0 C
MHC 19 04 26.2
FRI 19 04 31.3
JAS 19 04 32.1 D *E 04 36
WDC 19 04 34.5 D *E 04 37
MIN 19 04 36.6 *E 04 39
MNV 19 04 42.4 D
USGS 18 53 04.4, 16.6S, 172.3W, H= N KM, M=5.1 *E 04 46
SAMOA ISLANDS REGION

WDC FEB 27 20 49 30
JAS 20 49 30.5
MNV 20 49 40.2
USGS 20 37 53.9, 17.8S, 173.2W, H= N KM, M=5.1
TONGA ISLANDS

JAS FEB 28 14 12 36.4
FRI 14 12 *E 16 27
MNV 14 12 45.5 *E 12 38
BKS 14 12 *E 16 33
L 23 00 LR 26 00
MICRON PERIOD
MAXR(Z) 7.8 20
MAXH(N) 7.1 20
MAXH(E) 5.4 20
USGS 13 59 17.8, 36.8S, 176.9E, H= 15 KM, M=5.8
OFF EAST COAST OF NORTH ISLAND, NEW ZEALAND

MNV FEB 28 20 28 01.0
FRI 20 28 03.0
PRI 20 28
JAS 20 28 12.0 *E 28 06
MHC 20 28 16.6 *E 30 00
BKS 20 28 20
FHC 20 28 43 *E 30 12
USGS 20 20 10.2, 9.3N, 84.1W, H= 46 KM, M=5.8
COSTA RICA

WDC FEB 28 23 46 32.5
JAS 23 46 35.3
FRI 23 46 36.3
MNV 23 46 44.6
USGS 23 34 38.4, 12.0S, 167.3E, H=302 KM, M=5.0
SANTA CRUZ ISLANDS

FHC MAR 03 05 02 08.3
WDC 05 02 13.0
MIN 05 02
BKS 05 02 26.0 C 11 52 *E 02 17 *I 02 25
*E 02 39 *E 12 23 SCS 12 52
*E 15 44 LQ 21 32 LR 24 ??
MICRON PERIOD
PZ 0.07 0.9
MAXR(Z) 3.6 20
MAXH(N) 2.1 20
MAXH(E) 3.6 20
MHC 05 02 27.5
PRI 05 02 35.4
MNV 05 02 36.8
MAG 5.6, DIST(DEG) 76
KYUSHU, JAPAN
USGS 04 50 48.9, 35.6N, 140.6E, H= 46 KM, M=5.6

FHC MAR 03 11 38 02.6 D 38 24
WDC 11 38 17.9 C
MIN 11 38 28.3 C
BKS 11 38 46.0 C 39 08
MHC 11 38 56.0 D 39 39
SAO 11 39 02.4 C *E 39 57
MNV 11 39 14.3
PRI 11 39
MAG 4.4, W OF CRESCENT CITY, CALIF *E 39 17

SAO MAR 03 14 35 19.3
BKS 14 35 19.5 D 45 39
*E 35 26 *E 35 55 *E 39 03
*E 41 56 PPS 47 03 SS 51 11
*E 51 03 SSS 55 00 LQ 56 33
L 57 55 LR 01 30
MICRON PERIOD
PZ 0.18 0.9
MAXR(Z) 10.7 20
MAXH(N) 6.3 20
MAXH(E) 7.5 20
MHC 14 35 20.8
FHC 14 35 21.3
PRI 14 35 21.6 D
WDC 14 35 24.9 D
MIN 14 35
MNV 14 35 34.1 D *E 35 27
NEW HEBRIDES ISLANDS REGION
USGS 14 22 37.5, 20.1S, 169.7E, H= 17 KM, M=6.1

PRI MAR 03 18 19 51.2
BKS 18 19
MICRON LQ 43 20
MAXR(Z) 1.79 PERIOD
MAXH(N) 1.43 20
WDC MAXH(E) 1.43 20
MNV 18 19 56.5 20
18 20 06.5
USGS 18 07 54.9, 16.7S, 176.8E, H= 90 KM, M=4.9
FIJI ISLANDS REGION

SAO MAR 04 12 49 44.9
BKS 12 49 45.8 D 59 04
MICRON *PP 51 05 *SP 51 52 *SS 52 14
PRI PZ 0.06 PERIOD
MHC 12 49 46.5 D 0.6
FHC 12 49 46.7 D *E 51 12
WDC 12 49 50.2 D *E 51 12
MIN 12 49 53.6 D
MNV 12 49 55.1 D *E 51 20
12 50 02.0 D *I 51 22
FIJI ISLANDS REGION *E 51 29
USGS 12 38 33.6, 18.8S, 177.7W, H=383 KM, M=5.5

WDC MAR 04 18 18 41.7
BKS 18 19 10.2 C
MICRON PERIOD
JAS PZ 0.04 0.9
18 19 23.2
USGS 18 17 34.1, 43.5N, 126.9W, H= N KM, M=5.0
OFF COAST OF OREGON

MNV MAR 06 01 47 40.5 C
PRI 01 47 44.4
*PP 49 14 PCP 49 55 SCP 53 34

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                                   *E   47 50
      01 47                        *PP  48 19 PCP    49 56 SCP    53 36
SAO   01 47 50.5  C                *PP  48 24 SCP    53 49
JAS   01 47 55.3  C   54 03        *PP  48 30  *E    48 56  *E    49 59
MHC   01 48 01.6  C                *E   50 07  *E    51 28 SCP    53 42
BKS                                *E   54 04  *E    55 36  *E    57 29
                                   *E   57 34 SCS    58 10  LR    60 47
                 MICRON           PERIOD
                   1.67              6
            PZ     28.6             21
            SH                     *PP  48 36 *SP    49 49 SCP    53 45
MIN   01 48 06.3  C                *PP  48 39 *SP    49 00 PCP    50 05
WDC   01 48 10.3  C               SCP   53 46
FHC   01 48 21.7                   *PP  48 52 PCP    50 11 SCP    53 52
            USGS   01 40 26.4, 12.3N,  86.4W, H=110 KM, M=5.8
                   NICARAGUA

BKS MAR 06   04 31                 *E   31 50
MHC          04 31 50.8
FHC          04 31 50.8
PRI          04 31 51.7
WDC          04 31 54.5  C
JAS          04 31 55.6  C
MIN          04 31                 *E   31 57
MNV          04 32 04.4
             NEW HEBRIDES ISLANDS REGION
             USGS   04 19 38.0, 19.7S, 169.1E, H=247 KM, M=4.8

WDC MAR 06   20 52 09.7  C
MIN          20 52 13.5  C
JAS          20 52 27.0  C
             USGS   20 40 55.1, 40.3N, 142.2E, H= 59 KM, M=5.0
                    NEAR EAST COAST OF HONSHU, JAPAN

FHC MAR 07   03 26 19.4  C   26 48
WDC          03 26 37.1  C
MIN          03 26 45.9      27 38     *E   26 48
MHC          03 27 03.2
SAO          03 27 10.1
JAS          03 27 10.9
PRI          03 27                     *E   27 26
             MAG 4.0, WEST OF ARC
             OFF COAST OF NORTHERN CALIFORNIA

MIN MAR 07   07 53                     *E   53 19
JAS          07 53 59.2  C
FRI          07 54 11.4
PRI          07 54 18.1
             USGS   07 53 29.0, 50.8N, 129.8W, H= N  KM, M=4.2
                    VANCOUVER ISLAND REGION

FHC MAR 08   09 37 15.5
WDC          09 37 18.8
BKS          09 37 29.2  C
                   MICRON          PERIOD
             PZ      0.06            0.9
MHC          09 37                     *E   37 32
JAS          09 37 34.5                *E   37 50
PRI          09 37 35.4
FRI          09 37 39.5
MNV          09 37 40.8
             KYUSHU, JAPAN
             USGS   09 25 06.1, 33.9N, 131.6E, H= 42 KM,  =5.5

PRI MAR 09   00 55 14.3  C
FRI          00 55 17.8  C
SAO          00 55 23.7  D
JAS          00 55 32.3  C
BKS          00 55 41.7  D   56 35
MNV          00 55 44.6  C
MIN          00 56                     *E   56 10
             MAG 4.7, NEWHALL-NORTH OF L.A
             USGS   00 54 31.6, 34.4N, 118.4W, H= 8  KM, M=4.5
                    SOUTHERN CALIFORNIA

SAO MAR 09   17 53 27.0
BKS          17 53 27.4  C             *E   54 39
                   MICRON          PERIOD
             PZ      0.45            1.2
MHC          17 53 28.4
FHC          17 53 28.6
PRI          17 53 29.3
WDC          17 53 32.3                PP   56 58
JAS          17 53 33.1  C             *E   55 02   PP    57 00
FRI          17 53 33.6
MIN          17 53 35.1  C
MNV          17 53 42.0  C             PP   57 14
             NEW HEBRIDES ISLANDS REGION
             USGS   17 41 20.1, 19.0S, 169.6E, H=246 KM, M=5.4

PRI MAR 09   18 20 15.9
WDC          18 20 18.9
JAS          18 20 19.9  C
FRI          18 20 20.3
MNV          18 20 28.8
             NEW HEBRIDES ISLANDS REGION
             USGS   18 07 59.6, 19.0S, 169.4E, H=224 KM, M= .

FHC MAR 09   20 27                     *E   27 12
WDC          20 27 16.0                *E   27 32   *E   30 53   *E   34 35
BKS          20 27 16.2  C   38 01     PP   30 40   *E   30 58
                   MICRON          PERIOD
             PZ       1.7            3.3
             MAXR(Z) 12.9            20
             MAXH(N)  4.4            20
             MAXH(E) 13.8            20
MHC          20 27 17.0
PRI          20 27 19.2                *E   27 36
JAS          20 27 21.6  C             *E   27 38   *E   31 01   *E   34 43
FRI          20 27 23.3                *E   27 40
MNV          20 27 30.4                *E   31 08   *E   34 50
             MAG 6.2, DIST(DEG) 86
             SOLOMON ISLANDS REGION
             USGS   20 14 28.3,  7.5S, 156.2E, H= 50 KM, M=5.8

WDC MAR 10   00 19 53.3
JAS          00 20 17.0
MNV          00 20 26.4
             USGS   00 12 40.4, 50.5N, 175.1W, H= 28 KM, M=4.7
                    ANDREANOF ISLANDS, ALEUTIAN ISLANDS

WDC MAR 10   08 00 20.3
PRI          08 00 22.5
JAS          08 00 23.0
MNV          08 00 32.5
             USGS   07 47 32.6,  7.4S, 156.0E, H= 54 KM, M=5.3
                    SOLOMON ISLANDS

WDC MAR 10   10 05 56.4  D
MIN          10 06 01.2  D
JAS          10 06 23.4  D
MNV          10 06 27.3
             USGS   10 00 14.1, 63.2N, 150.5W, H=117 KM, M=4.5
                    CENTRAL ALASKA

MNV MAR 10   16 26 15.6
PRI          16 26 17.0
JAS          16 26 23.2
FRI          16 26                     *E   26 25
MHC          16 26 27.3                *E   26 32
BKS          16 26           34 14     *E   26 41
WDC          16 26                     *E   26 45
MIN          16 26                     *E   26 50
FHC          16 26
             USGS   16 17 08.8,  0.4N,  80.0W, H= 43 KM, M=5.1
                    NEAR COAST OF ECUADOR

FHC MAR 11   11 47 02.5  D             *E   47 48
WDC          11 47 08.7  D
MIN          11 47 13.1  D                  02 28
BKS          11 47 23.2  C   55 25   L
                  MICRON           PERIOD
             PZ      0.13            0.6
MHC          11 47 26.4
JAS          11 47 28.7  D             *E   48 10
SAO          11 47 28.9                *E   48 17   *E   48 35 [illegible]  16 50
FRI          11 47 35.6
MNV          11 47 36.0  D
PRI          11 47 36.1
             DISTANCE(DEG) 63          *E   48 17
             KURIL ISLANDS REGION
             USGS   11 37 33.5, 48.3N, 153.2E, H=169 KM, M=5.9

MNV MAR 11   17 13 13.9  D
PRI          17 13                     *E   13 30
JAS          17 13 20.2  D             *E   13 14
MHC          17 13 23.0                *E   13 37
WDC          17 13 38.1  D
FHC          17 13 47.2
             USGS   17 03 13.1,  9.4S,  78.4W, H= 97 KM, M=5.1
                    NEAR COAST OF NORTHERN PERU

WDC MAR 12   03 51 54.8  C
MIN          03 51 58.7
JAS          03 52 15.6
MNV          03 52 22.7  C
             USGS   03 42 35.3, 50.8N, 155.4E, H=164 KM, M=4.2
                    KURIL ISLANDS

FHC MAR 12   05 18 34.7
WDC          05 18 37.2  C
MIN          05 18 46.0
JAS          05 19 17.4  C             *I   18 54
MNV          05 19 31.6
             USGS   05 17 15.6, 44.1N, 128.1W, H= 26 KM, M=4.5
                    OFF COAST OF OREGON

WDC MAR 12   07 51 06.0
JAS          07 51 10.0
PRI          07 51 10.5
MNV          07 51 18.5  C
             USGS   07 38 14.5,  6.6S, 154.9E, H= 10 KM, M=5.1
                    SOLOMON ISLANDS

FHC MAR 12   15 23                     *E   23 22
WDC          15 23 23.1
BKS          15 23                     *E   23 25
                   MICRON          PERIOD
             PZ      0.13            1.2
MHC          15 23                     *E   23 28
JAS          15 23 32.2
PRI          15 23 33.0
FRI          15 23 35.5
MNV          15 23 41.0  C
             USGS   15 11 05.5,  8.0N, 150.9E, H= N  KM, M=5.5
                    CAROLINE ISLANDS REGION

SAO MAR 13   08 42                     *E   42 56
PRI          08 42 57.1  C
BKS          08 42 57.3
                   MICRON          PERIOD
             PZ      0.07            0.9
MHC          08 42 57.5  C
FRI          08 43 02.0  C
JAS          08 43 02.6  C
WDC          08 43 04.4  C
MNV          08 43 11.0  C
             FIJI ISLANDS REGION
             USGS   08 31 29.2, 23.5S, 180.0E, H=494 KM, M=4.8

JAS MAR 13   10 18 21.5  C
FRI          10 18 23.0
MNV          10 18 31.2  C
             USGS   10 06 09.2, 10.7S, 166.1E, H=162 KM, M=4.6
                    SANTA CRUZ ISLANDS

FRI MAR 13   11 42                     *E   42 42
MNV          11 42 42.3  C             *E   45 11
PRI          11 42                     *E   42 45
JAS          11 42 51.5                *E   45 14
MHC          11 42                     *E   42 56
MIN          11 43 10.8                *I   43 19
WDC          11 43 12.4
FHC          11 43 26.0  C
             USGS   11 35 50.8, 13.1N,  90.0W, H= 95 KM, M=4.9
                    NEAR COAST OF GUATEMALA

JAS MAR 13   22 00 47.6
WDC          22 01 06.2

BKS MAR 14   10 25                     *E   25 12
MHC          10 25 12.5
PRI          10 25                     *E   25 15
WDC          10 25 16.7
JAS          10 25 17.4
FRI          10 25 17.5
MNV          10 25 26.1                *E   25 36
             USGS   10 12 27.6, 20.2S, 170.0E, H= 1  KM, M=5.2
                    NEW HEBRIDES ISLANDS

JAS MAR 14   12 57 53.3
MIN          12 58                     *E   58 34

JAS MAR 14   14 37 53.8
WDC          14 37 53.9
FRI          14 37 54.6
MIN          14 37 55.3
             USGS   14 25 02.5, 17.3S, 168.0E, H= 15 KM, M=4.8
                    NEW HEBRIDES ISLANDS

BKS MAR 14   21 11 22                  PPS  22 58   SS   25 50   SCS   30 10
                                       *E   31 C8   *E   36 40
                   MICRON          PERIOD
             MAXR(Z) 12              20
             MAXH(N)  5.3            20
             MAXH(E)  9.7            20
WDC          21 11 32
JAS          21 11 33.3
FRI          21 11 35
MIN          21 11                     *E   11 48
             MAG 6.1, DIST (DEG) 83
             USGS   20 58 54.8, 13.9S, 166.8E, H= 18 KM, M=5.6
                    NEW HEBRIDES ISLANDS

WDC MAR 14   21 48 11.5
JAS          21 48 12.3
FRI          21 48                     *E   48 13
MIN          21 48 13.3
MNV          21 48 21.0
             USGS   21 35 23.0, 19.2S, 167.7E, H= N  KM, M=5.2
                    NEW HEBRIDES ISLANDS

BKS MAR 14   23 05 05.2
                   MICRON          PERIOD
             PZ      0.09            0.6
PRI          23 05 08.5
MHC          23 05 09.5
FRI          23 05 13.7
JAS          23 05 14.1
WDC          23 05 15.5
MNV          23 05 23.7
             USGS   22 54 09.0, 19.2S, 177.8W, H=542 KM, M=5.0
                    FIJI ISLANDS REGION

WDC MAR 15   08 03 04.5
JAS          08 03 05.5
FRI          08 03                     *E   03 06
MIN          08 03 06.7
MNV          08 03 14.3
             USGS   07 50 12.8, 19.2S, 167.8E, H= 7  KM, M=4.9
                    NEW HEBRIDES ISLANDS

WDC MAR 15   22 20 54.0  C
MIN          22 20 58.7
```

JAS 22 21 14.7 C
MNV 22 21 22.1 C
USGS 22 11 29.4, 49.4N, 158.5E, H= 35 KM, M=5.0
KURIL ISLANDS REGION

WDC MAR 16 09 31 27.3 *E 31 38
BKS 09 31
MICRON PERIOD
PZ 0.02 0.8
JAS 09 31 41.0
MNV 09 31 48.7
USGS 09 19 40.8, 28.7N, 142.7E, H= 12 KM, M=4.7
BONIN ISLANDS REGION

FHC MAR 16 13 18 32.2 *E 19 40 *E 20 22
WDC 13 18 40.0 C *E 20 23
MIN 13 18 45.0 C *E 18 55
BKS 13 18 *E 19 00
MHC 13 19 *E 20 48
JAS 13 19 03.4 C
PRI 13 19 11.7
MNV 13 19 11.8 C
FRI 13 19 12.0
USGS 13 11 14.8, 52.2N, 179.5E, H=168 KM, M=4.7
RAT ISLANDS, ALEUTIAN ISLANDS

FHC MAR 16 15 57 55.6 C
WDC 15 58 09.7 C
MIN 15 58 19.5 C 58 57
BKS 15 58 28.2 D *I 58 29
MHC 15 58 39.0
JAS 15 58 44.2 D
SAO 15 58 45.4 C
PRI 15 58 58.6
MNV 15 59 *E 59 03
MAG 4.5, WEST OF CAPE MENDOCINO

WDC MAR 17 04 15 59.8
FHC 04 15 *E 16 00
BKS 04 16 04.8 C
MHC 04 16 05.7
JAS 04 16 05.9 *E 18 07 *E 29 13
FRI 04 16 08.1
MNV 04 16 08.6
PRI 04 16 08.9
SUMATRA
USGS 03 57 07.1, 1.3N, 98.6E, H= 61 KM, M=5.7

FHC MAR 17 16 24 55.0
WDC 16 24 59.0
MIN 16 25 02.1
MHC 16 25 *E 25 10
JAS 16 25 12.2
FRI 16 25 *E 25 17
USGS 16 12 24.6, 27.3N, 128.0E, H= 74 KM, M=5.2
RYUKYU ISLANDS

PRI MAR 17 17 26 *E 26 40
MHC 17 26 *E 26 42
JAS 17 26 45.4
FRI 17 26 *E 26 47
WDC 17 26 48.2
MNV 17 26 54.7
USGS 17 14 42.6, 22.7S, 175.0W, H= N KM, M=5.0
TONGA ISLANDS REGION

JAS MAR 17 19 46 21.6 C
WDC 19 46 23.4
MNV 19 46 30.1

FHC MAR 17 20 34 *E 34 09
WDC 20 34 26.0
JAS 20 35 05.0
MNV 20 35 *E 35 19

FHC MAR 18 10 48 *E 49 51
WDC 10 48 *E 48 56
MIN 10 49 *E 49 00
JAS 10 49 11.4
PRI 10 49 *E 49 17
FRI 10 49 *E 49 18
MNV 10 49 18.0
HONSHU, JAPAN
USGS 10 37 45.7, 35.2N, 137.1E, H=301 KM, M=4.7

PRI MAR 18 10 51 *E 51 56
MHC 10 51 56.2
FRI 10 52 00.8
JAS 10 52 01.1
WDC 10 52 02.5
MIN 10 52 04.3
MNV 10 52 09.5
FIJI ISLANDS AREA
USGS 10 40 34.1, 23.3S, 178.9E, H=592 KM, M=5.0

SAO MAR 18 11 07 27.1 *E 07 36
PRI 11 07 28.9 *E 07 37 P'P' 35 28
MHC 11 07 29.4 *E 07 37 P'P' 35 27
BKS 11 07 31 C 16 46 *E 17 16 *E 19 24 SS 20 00
L 25 40 LR 28 00
MICRON PERIOD
PZ 3.3 6
MAXH(Z) 13 20
MAXH(N) 10 20
MAXH(E) 11 20
FHC 11 07 33.8 *E 07 42
FRI 11 07 35.0 *E 07 43
JAS 11 07 35.5 D *E 07 44
WDC 11 07 37.5 D *E 07 46 *E 09 05 P'P' 35 23
MIN 11 07 39.8 D *E 09 08
MNV 11 07 46.0 *I 07 48 *I 07 55
MAG 6.1, DIST(DEG) 73
USGS 10 56 12.4, 14.9S, 172.8W, H= 27 KM, M=5.9
SAMOA ISLANDS

MNV MAR 18 12 14 59.1 C
JAS 12 15 22.3 *E 15 24 *E 15 32
MIN 12 15 35.6 C 16 22 *I 15 38
FRI 12 15 *E 13 36 *E 15 40
WDC 12 15 *E 15 47
MHC 12 15 *E 15 50
PRI 12 16 *E 16 00
MAG 4.4, EAST OF MNV
USGS 12 14 26.0, 40.2N, 116.7W, H= 5 KM, M= .
NEVADA

WDC MAR 19 12 12 16.6 C
MIN 12 12 20.7
BKS 12 12 21.7 C
MICRON PERIOD
PZ 0.02 0.6
JAS 12 12 33.3 C
FRI 12 12 39.1 C
MNV 12 12 40.5 C
USGS 12 00 53.6, 35.3N, 140.8E, H= 58 KM, M=5.0
NEAR EAST COAST OF HONSHU, JAPAN

JAS MAR 20 15 43 11.8
USGS 15 35 58.6, 52.4N, 172.0W, H= 38 KM, M=4.3
ANDREANOF ISLANDS, ALEUTIAN ISLANDS

MIN MAR 20 17 07 *E 07 04
JAS 17 07 17.2
MNV 17 07 25.0 C
USGS 16 54 27.5, 11.9N, 142.7E, H= N KM, M=5.0
SOUTH OF MARIANA ISLANDS

BKS MAR 20 22 12 *E 12 45
JAS 22 12 51.7
USGS 22 01 02.3, 32.1N, 140.5E, H= 77 KM, M=5.0
SOUTH OF HONSHU, JAPAN

JAS MAR 20 22 26 50.8

JAS MAR 21 01 23 42.4
BKS 01 23 *E 23 46
MIN 01 23 *E 23 47

JAS MAR 21 05 48 03.5
MIN 05 48 08.2
USGS 05 36 50.1, 13.7N, 45.0W, H= N KM, M=4.5
NORTH ATLANTIC RIDGE

WDC MAR 21 06 00 08.2
BKS 06 00 18.7 C
MICRON PERIOD
PZ 0.04 0.9
MHC 06 00 21.5
JAS 06 00 24.1
PRI 06 00 30.0
FRI 06 00 30.1
MNV 06 00 31.4
USGS 05 48 52.7, 36.9N, 141.7E, H= 43 KM, M=5.1
NEAR EAST COAST OF HONSHU, JAPAN

MNV MAR 21 09 37 37.0
JAS 09 37 41.2
USGS 09 32 26.3, 17.4N, 105.6W, H= N KM, M=4.4
OFF COAST OF JALISCO, MEXICO

MIN MAR 22 07 10 *E 10 22
WDC 07 10 *E 10 36
JAS 07 10 43.0
PRI 07 10 *E 10 45
USGS 07 04 06.2, 53.6N, 163.4W, H= N KM, M=5.1
UNIMAK ISLAND REGION

FHC MAR 22 18 26 13.3
WDC 18 26 15.1
MIN 18 26 17.5
BKS 18 26 29.3
MICRON PERIOD
PZ 0.02 0.8
JAS 18 26 30.6
MNV 18 26 31.2
FRI 18 26 35.8
PRI 18 26 35.8
USGS 18 13 40.6, 49.9N, 90.8E, H= N KM, M=5.5
USSR-MONGOLIA BORDER REGION

WDC MAR 22 19 20 17.0
MIN 19 20 17.5
MNV 19 20 22.2
JAS 19 20 30.3
BKS 19 20 40.0
MICRON PERIOD
PZ 0.04 1.1
MHC 19 20 *E 20 40
FRI 19 20 *E 20 43
PRI 19 20 44.6
JAN MAYEN ISLAND REGION
USGS 19 10 27.6, 70.7N, 14.7W, H= 22 KM, M=5.0

FRI MAR 23 01 46 56.0
PRI 01 46 56.6
MNV 01 46 57.0
JAS 01 46 58.7 C
MHC 01 46 59.3
BKS 01 47 01.0 D
MICRON PERIOD
PZ 0.02 0.7
MIN 01 47 02.8 C *I 47 12
WDC 01 47 03.2
FHC 01 47 *E 47 06
SOUTH SANDWICH ISLAND REGION
USGS 01 28 05.3, 58.7S, 25.0W, H= 61 KM, M=5.1

MNV MAR 23 07 28 52.4 D
MIN 07 28 55.1
WDC 07 28 57.2
FHC 07 29 *E 29 03
JAS 07 29 04.2 D *E 31 26
FRI 07 29 06.5 D
MHC 07 29 *E 29 12
PRI 07 29 15.3
USGS 07 19 14.2, 53.8N, 35.4W, H= N KM, M=5.1
NORTH ATLANTIC OCEAN

JAS MAR 23 11 52 27.8
MIN 11 52 *E 52 28
WDC 11 52 *E 52 48
MNV 11 52 *E 52 59
USGS 11 39 53.5, 13.6S, 166.8E, H= 42 KM, M=5.5
NEW HEBRIDES ISLANDS

SAO MAR 23 14 40 01.2 C
PRI 14 40 01.5 C PKKP 59 30 P'P' 09 13
MHC 14 40 01.9 C 49 40 *PP 42 02 *SP 43 20
BKS 14 40 02.1 49 34 *PP 41 54 *SP 42 50 PP 43 12
*SPP 45 46 SP 50 10 *L 51 33
SS 55 12 L 01 44 *F C9 04
MICRON PERIOD
FHC PZ 0.8 1.0
FRI 14 40 05.8 C *PP 42 12 P'P' 57 12
JAS 14 40 06.3 C P'P' C7 08
14 40 06.9 C 49 53 *E 42 12 *E 43 13 PKKP 51 22
WDC 14 40 08.8 C P'P' 09 10
MIN 14 40 09.6 C *I 49 53 P'P' C9 06 *E 49 53
MNV 14 40 15.3 C *I 42 12 *I 41 32 09 01
*PP 42 15 SP 43 15 P'P'
SOUTH OF FIJI ISLANDS
USGS 14 28 35.4, 23.9S, 179.8E, H=535 KM, M=6.1

SAO MAR 23 15 05 36.1
PRI 15 05 37.0
MHC 15 05 37.1 *E 06 16
BKS 15 05 37.3 D *E 06 34
MICRON PERIOD
FHC PZ 0.2 0.7
FRI 15 05 41.6 *E 06 36
JAS 15 05 41.6
WDC 15 05 42.0 D *I 06 33
MIN 15 05 43.7 D *I 06 29
MNV 15 05 46.6 *I 06 27
15 05 50.5 D
FIJI ISLANDS AFTERSHOCK
USGS 14 54 11.3, 23.8S, 178.8E, H=569 KM, M=5.6

BKS MAR 23 15 12 30.3 *E 12 55
MICRON PERIOD
PRI PZ 0.04 0.8
JAS 15 12 30.5 *E 12 56
WDC 15 12 35.5 *I 13 01
15 12 37.3
FIJI ISLANDS AFTERSHOCK

BKS MAR 23 15 23 *E 23 48
MICRON PERIOD
JAS PZ 0.02 0.7
WDC 15 23 53.8 C
MNV 15 23 55.8 C
15 24 02.2 C
FIJI ISLANDS AFTERSHOCK

JAS MAR 23 16 16 14.0
WDC 16 16 17.3
MNV 16 16 22.5

JAS MAR 23 18 25 08.2 C
WDC 18 25 09.8 C
MIN 18 25 11.6
MNV 18 25 16.6
FIJI ISLANDS AFTERSHOCK
USGS 18 13 35.7, 23.9S, 179.7E, H=531 KM, M=4.0

PRI MAR 23 20 23 02.6
BKS 20 23 03.0 C MICRON PERIOD
PZ 0.04 0.7
FRI 20 23 07.9
JAS 20 23 08.0 C
MIN 20 23 09.3
WDC 20 23 10.0
MNV 20 23 16.5
USGS 20 11 36.4, 23.9S, 179.7E, H=532 KM, M=4.7
SOUTH OF FIJI ISLANDS

MHC MAR 23 20 38 22.5
BKS 20 38 24.5 C 48 56 PS 49 52 SS 54 32 L 01 00
*E 03 10
MICRON PERIOD
PZ 0.04 0.9
MAXR(Z) 2.8 20
MAXH(N) 2.8 20
MAXH(E) 2.8 20
PRI 20 38 25.4
JAS 20 38 28.8 D *I 38 37
FRI 20 38 29.7 *I 38 37
WDC 20 38 30.2 *I 38 37
MIN 20 38 30.8
MNV 20 38 38.4 *I 38 46
USGS 20 25 51.8, 21.9S, 173.7E, H= N KM, M=5.7
NEW HEBRIDES ISLANDS REGION

SAO MAR 23 21 03 *E 03 34
PRI 21 03 34.7
BKS 21 03 35.0 MICRON PERIOD
PZ 0.07 0.7
MHC 21 03 35.3
FRI 21 03 35.8
JAS 21 03 40.1
WDC 21 03 42.0
MIN 21 03 42.6
MNV 21 03 48.8
FIJI ISLANDS AFTERSHOCK
USGS 20 52 06.8, 23.9S, 179.5E, H=521 KM, M=5.0

PRI MAR 23 21 58 01.3
MHC 21 58 01.8
BKS 21 58 02 C MICRON PERIOD
PZ 0.04 1
FRI 21 58 07.C
JAS 21 58 07.2
WDC 21 58 09.9
MIN 21 58 12.1
MNV 21 58 17.3
USGS 21 46 12.0, 20.7S, 175.2W, H= N KM, M=5.3
TONGA ISLANDS

PRI MAR 24 00 24 11.0
MHC 00 24 *E 24 11
JAS 00 24 15.5 *E 26 50
WDC 00 24 16.0
BKS 00 24 *E 24 16
MICRON PERIOD
PZ 0.02 0.7
FRI 00 24 *E 24 17
FIJI ISLANDS AFTERSHOCK
USGS 00 12 46.0, 21.1S, 175.7E, H=600 KM, M=4.6

FHC MAR 24 04 33 27.5
WDC 04 33 31.7
MIN 04 33 34.7 C *E 36 54
BKS 04 33 35.7 43 58 PP 36 56 *E 44 50
MICRON PERIOD
PZ 0.18 1.3
MHC 04 33 38.5
JAS 04 33 42.4 *E 36 50 *E 44 20
PRI 04 33 44.5
FRI 04 33 46.0
MNV 04 33 50.6 *E 37 20 *E 44 10
USGS 04 21 05.8, 12.6N, 144.3E, H= 79 KM, M=5.9
SOUTH OF MARIANA ISLANDS

PRI MAR 24 10 21 01.7
MNV 10 21 03.2
JAS 10 21 07.0
MHC 10 21 08.5
BKS 10 21 11.5 D
MICRON PERIOD
PZ 0.04 1.0
MIN 10 21 17.8
WDC 10 21 20.5
FHC 10 21 26.8
USGS 10 08 43.1, 33.0S, 70.3W, H=104 KM, M=5.3
CHILE-ARGENTINA BORDER REGION

PRI MAR 24 16 54 43.2
JAS 16 54 48.0
WDC 16 54 *E 55 02
USGS 16 42 56.8, 24.0S, 66.8W, H=156 KM, M= .
SALTA PROVINCE, ARGENTINA

JAS MAR 24 19 51 39.0
WDC 19 51 41.0
MIN 19 51 *E 51 43
MNV 19 51 49.2
USGS 19 40 14.8, 17.8S, 174.2W, H=165 KM, M=4.8
TONGA ISLANDS

FRI MAR 25 07 42 16.2
PRI 07 42 16.9
MNV 07 42 20.7
JAS 07 42 27.4
MHC 07 42 30.0
BKS 07 42 30 47 15 *E 44 52
MICRON PERIOD
MAXR(Z) 7 20
MAXH(N) 7 20
MAXH(E) 8 20
MIN 07 42 49.7 *E 43 03
WDC 07 42 *E 43 27
USGS 07 37 12.3, 18.2N, 103.3W, H= 87 KM, M=4.7
NEAR COAST OF MICHOACAN, MEXICO

MHC MAR 26 00 20 *E 20 10
PRI 00 20 *E 20 12
JAS 00 20 15.2
WDC 00 20 17.0
MIN 00 20 17.7
MNV 00 20 23.5

PRI MAR 27 03 19 36.7
MHC 03 19 37.8 *E 19 50
BKS 03 19 38.0 MICRON PERIOD
PZ 0.21 1.4
FRI 03 19 41.8 *E 19 54
JAS 03 19 43.0 D *E 19 58
WDC 03 19 46.4 D
MIN 03 19 47.1 D *E 20 03
MNV 03 19 51.5 D
USGS 03 07 22.3, 27.3S, 175.3W, H= 44 KM, M=5.7
KERMADEC ISLANDS AREA

50 02 *E 49 12
PRI MAR 27 06 48 55 *E 49 02
FRI 06 48 58.5
MNV 06 49 00.6 C *E 49 22
JAS 06 49 08.5 50 27 *E 49 16
SAO 06 49
MAG 4.0, BARSTOW AREA
USGS 06 47 57.3, 34.5N, 116.5W, H= 0 KM, M=4.0
SOUTHERN CALIFORNIA

FRI MAR 27 07 05 22
PRI 07 05 25.7 06 33 *E 05 32
MNV 07 05 *E 05 43
JAS 07 05 38.3 06 57 *E 05 30
MHC 07 05 *E 05 52
SAO 07 05 *E 05 43
*E 05 47
MAG 4.1, BARSTOW AREA
USGS 07 04 27.6, 34.5N, 116.5W, H= 0 KM, M=4.5
SOUTHERN CALIFORNIA

JAS MAR 27 16 25 32.9
WDC 16 25 35.1
MIN 16 25 37.0
USGS 16 14 15.8, 15.7S, 173.7W, H=136 KM, M=4.8
TONGA ISLANDS

FHC MAR 27 16 36 16.0
WDC 16 36 24.0
MIN 16 36 29.4 D *I 36 46
BKS 16 36 37.7 D *PP 36 48 PCP 38 32
MICRON PERIOD
PZ 0.12 0.6
MHC 16 36 43.7 D
SAO 16 36 47.1
JAS 16 36 47.2 D *E 37 00 *E 37 12
FRI 16 36 55.1 D
PRI 16 36 55.1
MNV 16 36 56.4 D *E 37 14 *E 37 26
ANDREANOF ISLANDS
USGS 16 28 47.3, 50.1N, 179.7W, H= 37 KM, M=5.6

FHC MAR 28 01 57 05.9
WDC 01 57 20.5
JAS 01 58 03.0
OFF COAST OF OREGON
USGS 01 56 26.9, 42.6N, 126.4W, H= N KM, M=4.6

JAS MAR 28 02 11 14.3 D *E 12 21
WDC 02 11 16.0 C *E 12 24
MNV 02 11 23.5 *E 12 32
USGS 01 59 42.4, 20.4S, 177.0W, H=287 KM, M=5.0
FIJI ISLANDS REGION

MNV MAR 28 12 43 03.9
JAS 12 43 08.6
WDC 12 43 15.6
USGS 12 37 56.7, 17.7N, 105.9W, H= N KM, M=4.4
OFF COAST OF JALISCO, MEXICO

PRI MAR 29 16 57 36.0
MHC 16 57 38.6
JAS 16 57 44.3 C
WDC 16 57 46.7
MNV 16 57 53.5 C
USGS 16 45 46.6, 21.9S, 175.6W, H= 68 KM, M=5.0
TONGA ISLANDS

FHC MAR 29 21 56 02.5 *PP 56 19
WDC 21 56 09.9 *PP 56 23 *SP 57 00 PCP 59 33
MIN 21 56 15.2 D *I 56 27
MHC 21 56 34.8 *PP 56 53
JAS 21 56 37.4 *PP 56 56 *SP 57 44 PCP 59 41
BKS 21 56 *E 56 42 *E 56 48 *E 56 51
*E 01 28 *E 04 00 *E 04 09
MNV 21 56 43.8 PCP 59 43
FRI 21 56 46.7 *PP 57 03 PCP 59 44
PRI 21 56 50.0 *PP 57 07 PCP 59 45
KODIAK ISLAND REGION
USGS 21 50 35.3, 57.6N, 153.9W, H= 44 KM, M=5.7

MHC MAR 30 02 03 21.6
FRI 02 03 26.3
JAS 02 03 26.7
WDC 02 03 28.8
MNV 02 03 35.3
USGS 01 52 01.0, 23.5S, 180.0E, H=572 KM, M=4.7
SOUTH OF FIJI ISLANDS

PRI MAR 30 02 26 46.7
JAS 02 26 51.2
MHC 02 26 54.6
USGS 02 15 15.8, 19.9S, 68.9W, H= 78 KM, M=4.8
CHILE-BOLIVIA BORDER REGION

JAS MAR 30 21 45 25.0
USGS 21 33 04.3, 18.9S, 169.5E, H=229 KM, M=5.3
NEW HEBRIDES ISLANDS

*E 00 48
PRI MAR 31 05 00 22.0 *E 00 50
FRI 05 00 24.3
MHC 05 00 30.0 *E 00 57
JAS 05 00 31.5 D *E 00 58
MNV 05 00 31.8 *E 00 38
BKS 05 00 *E 00 47
MIN 05 00
SOUTH PACIFIC OCEAN
USGS 04 48 50.2, 36.0S, 103.2W, H= N KM, M=5.2

*E 01 22 *E 14 18 *C 19 54
BKS MAR 31 07 01 *E 32 24 *F 35 44 *E 42 25
*E 05 31
JAS 07 01 28.0 *E 05 42
MNV 07 01 35.6
USGS 06 47 45.0, 2.2S, 139.1E, H= N KM, M=5.3
NEAR NORTH COAST OF WEST NEW GUINEA

FRI MAR 31 21 21 00.5
MNV 21 21 00.9 C PCP 23 16
PRI 21 21 03.2 PCP 21 18
JAS 21 21 09.5 PCP 21 20
MHC 21 21 14.2
MIN 21 21 27.3
FHC 21 21 41.8
USGS 21 13 45.8, 11.8N, 87.9W, H= 49 KM, M=5.0
NEAR COAST OF NICARAGUA

MNV MAR 31 21 25 11.0
MIN 21 25 20.9
JAS 21 25 21.5
PRI 21 25 25.5
MHC 21 25 27.8

JAS APR 02 04 15 32.2
MNV 04 15 37.8 *E 15 51
PRI 04 15 *E 27 20 *E 40 40 *E 43 52
BKS 04 15
USGS 04 02 33.6, 6.9S, 155.3E, H= 47 KM, M=5.4
SOLOMON ISLANDS

MHC APR 02 07 22 06.0
JAS 07 22 08.7 C
PRI 07 22 10.3
FRI 07 22 11.4 *E 22 16
BKS 07 22
MNV 07 22 16.9 C
USGS 07 09 23.8, 11.7N, 144.6E, H= 21 KM, M=5.3
SOUTH OF MARIANA ISLANDS

FRI APR 02 19 48 56.8 D
PRI 19 48 58.0 D
MNV 19 48 58.5 D
JAS 19 49 03.1 D
MHC 19 49 05.0 D
BKS 19 49 08.5 C
MICRON PERIOD
PZ 0.13 1.2
MIN 19 49 13.3 D
WDC 19 49 *E 49 16
FHC 19 49 22.5
USGS 19 36 42.0, 30.8S, 65.2W, H=166 KM, M=5.5
CORDOBA PROVINCE, ARGENTINA

MNV APR 03 23 10 12.6

JAS 23 10 29.3
USGS 23 05 02.5, 38.6N, 88.1W, H= 11 KM, M=4.5
SOUTHERN ILLINOIS. MINOR DAMAGE

*E 48 41
MIN APR 04 07 48 15.3 *E 48 23
BKS 07 48
JAS 07 48 28.3
FRI 07 48 34.2
MNV 07 48 34.8
USGS 07 37 02.6, 37.7N, 140.8E, H= 97 KM, M=5.3
HONSHU, JAPAN

*PP 59 49
FHC APR 06 01 59 39.2 *PP 59 57
WDC 01 39 47.3
MIN 01 59 52.6 *PP 00 23 PCP 03 02 SCP 06 40
JAS C2 00 13.0 05 12 *E 00 16 *E 01 08 *E 02 13
BKS 02 00 L 07 00
*E 00 20 PCP 03 04 SCP 06 43
MNV 02 00 *E 00 20
MHC 02 00 *E 00 25 SCP 06 45
PRI 02 00 *E 00 30 SCP 06 44
FRI 02 00
USGS 01 53 47.3, 55.1N, 160.4W, H= 27 KM, M=5.7
ALASKA PENINSULA. MINOR DAMAGE AT SAND POINT

MHC APR 06 02 24 16.4
PRI 02 24 18.2 34 15 LQ 45 00 LR 49 00
BKS 02 24 19.0 MICRON PERIOD
PZ 0.03 0.8
JAS 02 24 21.7
WDC 02 24 *E 24 23
FRI 02 24 *E 24 26
MNV 02 24 31.0
USGS 02 11 40.3, 14.6S, 166.8E, H= 8 KM, M=5.3
NEW HEBRIDES ISLANDS

PRI APR 06 02 56 02
JAS 02 56 05.0
WDC 02 56 *E 56 05
MNV 02 56 *E 56 13
USGS 02 43 25.2, 14.6S, 166.7E, H= 16 KM, M=5.4
NEW HEBRIDES ISLANDS

JAS APR 06 03 56 25.0
MNV 03 56 *E 56 34
USGS 03 43 46.2, 14.6S, 166.8E, H= 19 KM, M=5.2
NEW HEBRIDES ISLANDS

FHC APR 06 04 01 51 *PP 02 02 PCP 05 05
WDC 04 01 59 *PP 02 10 PCP 05 06 SCP 08 44
MIN 04 02 *E 02 05
BKS 04 02 16.5 07 23 *PP 02 28 *SP 02 36 *E 03 11
PCP 05 12 LQ 08 40 LR 09 50
MICRON PERIOD
MAXR(Z) 6.2 20
MAXH(N) 3.2 20
MAXH(E) 4.6 20
MHC 04 02 23.5 *PP 02 35 PCP 05 14
JAS 04 02 26.0 D *PP 02 37 PCP 05 14 SCP 08 53
PCS 09 18
MNV 04 02 33.9 D *PP 02 45 PCP 05 18 SCP 08 56
PCS 09 20
FRI 04 02 35.0 C *PP 02 46 PCP 05 17 SCP 08 57
PRI 04 02 *E 02 36 SCP 08 58
MAG 5, DIST(DEG) 31
USGS 03 56 01.8, 55.1N, 160.4W, H= 40 KM, M=6.0
ALASKA PENINSULA

MIN APR 06 05 18 03.4
JAS 05 18 25.8
MNV 05 18 32
USGS 05 12 26.4, 57.8N, 153.5W, H= 53 KM, M=4.6
KODIAK ISLAND REGION

PRI APR 06 06 12 13.4
MHC 06 12 13.6
JAS 06 12 19.0
FRI 06 12 19.4
WDC 06 12 20.7
MIN 06 12 22.5
MNV 06 12 28.3
FIJI ISLANDS REGION
USGS 06 01 11.4, 20.4S, 178.2W, H=579 KM, M=4.7

BKS APR 06 08 03 *E 03 59 LQ 20 30
JAS 08 04 01.5 C
WDC 08 04 01.5
PRI 08 04 *E 04 02
FRI 08 04 02.0
MIN 08 04 04.6
USGS 07 51 21.2, 14.7S, 166.7E, H= 18 KM, M=5.3
NEW HEBRIDES ISLANDS

JAS APR 06 10 08 28.5
MNV 10 08 37.0
USGS 09 55 38.3, 18.8S, 167.5E, H= 21 KM, M=4.6
NEW HEBRIDES ISLANDS

MHC APR 07 03 27 42.2
FRI 03 27 46.5 *E 28 29
JAS 03 27 47.1 D *E 28 29
WDC 03 27 49.8 *E 28 32
MIN 03 27 51.0 *E 28 33
MNV 03 27 55.5 *E 28 38
USGS 03 15 32.9, 27.4S, 177.7W, H=170 KM, M=5.2
KERMADEC ISLANDS REGION

FHC APR 07 11 09 49.9 C
WDC 11 10 04.5 C
MIN 11 10 14.1 C *E 10 47
BKS 11 10 23.6
MHC 11 10 33.0
SAU 11 10 39.2
JAS 11 10 39.3 C
FRI 11 10 *E 10 54
PRI 11 10 *E 10 56
MNV 11 10 *E 10 59
MAG 4.1, CAPE MENDOCINO

JAS APR 07 19 36 28
USGS 19 24 08.0, 31.5S, 69.3W, H=111 KM, M=4.7
SAN JUAN PROVINCE, ARGENTINA

PRI APR 09 11 04 27.0
MNV 11 04 28.7 C
JAS 11 04 32.8 C
WDC 11 04 46.6 C
USGS 10 52 14.5, 31.5S, 71.0W, H= 84 KM, M=5.1
NEAR COAST OF CENTRAL CHILE

WDC APR 09 13 21 29.4 C
MIN 13 21 33.6 C
JAS 13 21 48.5 C
MNV 13 21 55.5 C
FRI 13 21 *E 21 56
PRI 13 21 *E 22 02
USGS 13 11 21.6, 45.5N, 148.3E, H=139 KM, M= .
KURIL ISLANDS

WDC APR 09 17 42 36.7 *E 42 48
JAS 17 42 49.3 *E 43 01
FRI 17 42 53.9
MNV 17 42 57.9 D *E 43 10
USGS 17 30 43.7, 20.1N, 147.2E, H= 43 KM, M=5.2
MARIANA ISLANDS REGION

WDC APR 09 20 38 *E 38 20
JAS 20 38 25
MNV 20 38 34.4 D
USGS 20 25 36.0, 10.1S, 160.5E, H= 25 KM, M=5.1
SOLOMON ISLANDS

JAS APR 10 19 36 15.4
WDC 19 36 16.3
MNV 19 36 24.6
USGS 19 23 44.0, 12.6S, 166.5E, H= 48 KM, M=5.1
SANTA CRUZ ISLANDS

MNV APR 10 22 49 28.8 D *PP 49 48 PCP 52 12 *PPCP 52 31
SCP 55 52
FRI 22 49 32.4 PCP 52 14 *PPCP 52 33
PRI 22 49 35.2 PCP 52 13
JAS 22 49 42.0 D *PP 50 00 PCP 52 16 *PPCP 52 34
SCP 55 57
MHC 22 49 46.5 *PP 50 02
BKS 22 49 51 55 30 *PP 50 12 *SP 50 22 PCP 52 1
*PPCP 52 38 *SPCP 52 55 SCP 55 5
LG 58 00
MICRON PERIOD
MAXR(Z) 2 20
MAXH(N) 2.7 20
MAXH(E) 5.4 20
MIN 22 49 58.3 *E 50 16 *E 50 31
WDC 22 50 03.5 PCP 52 24 *PPCP 52 42 SCP 56 06
FHC 22 50 16.0 *PP 50 32
GUATEMALA
USGS 22 43 00.6, 14.5N, 91.6W, H=108 KM, M=5.4

JAS APR 11 02 37 20.0

FHC APR 11 21 48 *E 48 29
WDC 21 48 34.4
MIN 21 48 38.3 C
JAS 21 48 52.6 C
MNV 21 48 59.5
USGS 21 37 53.0, 42.4N, 144.4E, H= 75 KM, M=5.1
HOKKAIDO, JAPAN REGION

BKS APR 12 12 28 27.6
MHC 12 28 28.4
PRI 12 28 31.0
WDC 12 28 32.1
JAS 12 28 33.1
FRI 12 28 33.8
MIN 12 28 34.5
MNV 12 28 42.0
USGS 12 16 15.3, 18.6S, 169.2E, H=244 KM, M=5.1
NEW HEBRIDES ISLANDS

WDC APR 12 17 58 18.5
JAS 17 58 29.7
FRI 17 58 33.8
MNV 17 58 36.8
USGS 17 45 19.1, 14.3N, 134.3E, H= N KM, M=5.5
PHILIPPINE SEA

MIN APR 13 05 13 11.1
JAS 05 13 26.0
MNV 05 13 28.5
USGS 05 01 35.6, 55.7N, 111.0E, H= N KM, M=4.9
LAKE BAIKAL REGION

WDC APR 14 01 24 12.8
JAS 01 24 13.5
MIN 01 24 14.7
MNV 01 24 22.0
USGS 01 11 15.1, 20.9S, 168.7E, H= 4 KM, M=4.4
LOYALTY ISLANDS

FRI APR 14 07 01 30.8 PCP 04 09
MNV 07 01 31.4 C *PP 01 57 *SP 02 17
PRI 07 01 33.8 PCP 04 11
JAS 07 01 40.3 C *PP 02 05 *SP 02 26 PCP 04 12
SCP 07 49
MHC 07 01 44.9 C *PP 02 09 PCP 04 14
BKS 07 01 50.6 C *SP 02 14 PCP 04 16
MIN 07 01 57.7 C PCP 04 18
WDC 07 02 02.0 C PCP 04 20
GUATEMALA REGION
USGS 06 55 01.8, 14.7N, 91.3W, H=138 KM, M=5.3

MNV APR 14 11 42 04.1
JAS 11 42 08.0
USGS 11 37 28.7, 19.6N, 109.3W, H= N KM, M=4.3
REVILLA GIGEDO ISLANDS REGION

MNV APR 14 14 08 26.5
JAS 14 08 30.8
MIN 14 08 57.8
USGS 14 03 53.0, 20.0N, 109.0W, H= N KM, M=4.3
REVILLA GIGEDO ISLANDS REGION

WDC APR 14 15 50 *E 50 26
JAS 15 50 51.0
USGS 15 43 10.6, 64.2N, 174.0W, H= N KM, M=4.5
EASTERN SIBERIA

PRI APR 15 22 14 52.1 C
FRI 22 14 53.0 C
MNV 22 15 01.4 C
JAS 22 15 05.2 C
MHC 22 15 06.0 C
BKS 22 15 13.8 C *E 19 18
MICRON PERIOD
MIN PZ 0.19 1.6
22 15 *E 15 20
USGS 22 10 26.7, 19.8N, 109.0W, H= N KM, M=4.8
REVILLA GIGEDO ISLANDS REGION

JAS APR 16 11 04 23.7
MNV 11 04 32.0

MNV APR 17 00 42 55.0
JAS 00 43 06.0
MIN 00 43 09.0
USGS 00 32 21.4, 35.2N, 35.3W, H= N KM, M=5.1
NORTH ATLANTIC RIDGE

WDC APR 17 00 46 42.5
MIN 00 46 48.9 *E 46 56
JAS 00 47 07.0
MNV 00 47 15.2 *E 47 19
ANDREANOF ISLANDS REGION *E 47 28
USGS 00 39 40.7, 51.7N, 173.5W, H= 46 KM, M=4.9

JAS APR 18 01 28 35.6
USGS 01 19 22.6, 6.9N, 72.9W, H= 24 KM, M=5.0
NORTHERN COLOMBIA. 3 DEATHS. DAMAGE

WDC APR 18 07 48 23.7
PRI 07 48 24.1
JAS 07 48 26.7
MNV 07 48 36.0
USGS 07 35 54.9, 10.8S, 163.2E, H= 90 KM, M=4.9
SOLOMON ISLANDS

WDC APR 18 10 39 55.8
JAS 10 40 18.0
MNV 10 40 25.4
USGS 10 31 06.2, 53.9N, 163.6E, H= 40 KM, M=5.0
OFF EAST COAST OF KAMCHATKA

PRI APR 18 20 45 00.0
MHC 20 45 06
JAS 20 45 07.9
WDC 20 45 23.2
USGS 20 33 01.4, 38.3S, 93.8W, H= N KM, M=5.1
WEST CHILE RISE

PRI APR 18 21 17 57
MNV 21 18 03.5
JAS 21 18 04.5
MIN 21 18 18.6

```
                21 18 20.0
WDC             21 18                    *E   18 23
WMC                   USGS  21 05 58.5, 38.2S,  93.7W, H= N  KM, M=5.5
                            WEST CHILE RISE

SAC APR 19      07 16 33.5
BKS             07 16 34.5
                          MICRON      PERIOD
                      PZ    0.20         0.7
                07 16 34.6
PRI             07 16 34.7                *E   18 32
WMC             07 16 39.2
FRI             07 16 39.7  D             *E   18 47
JAS             07 16 41.3  D             *E   18 49
WDC             07 16 41.6                *I   16 50    *E   18 51
MIN             07 16 48.0                *E   18 57
MNV             07 16                     *E   16 50
FMC                   USGS  07 05 09.1, 24.0S, 178.5E, H=596 KM, M=5.5
                            SOUTH OF FIJI ISLANDS

WDC APR 20      02 13 48.3
JAS             02 13 48.6  D
MIN             02 13                     *E   13 50
MNV             02 13 55.8
BKS             02 13                     *E   52 00
                      USGS  02 01 00.7, 22.9S, 171.8E, H= N  KM, M=5.1
                            LOYALTY ISLANDS REGION

WDC APR 20      03 01 45.5                *E   03 22
FMC             03 01                     *E   01 47    *E   02 03    *E   03 29
MIN             03 01                     *E   01 48
MNV             03 02 20.0
JAS             03 02 23.0                *E   04 50
BKS             03 02          05 28
                      USGS  03 00 09.3, 46.8N, 121.5W, H= 5  KM, M=4.8
                            WASHINGTON, USA

BKS APR 20      03 22 52.0       34 28    *E   34 40  SSS   43 00  L     46 18
                                        LR   50 00
                          MICRON      PERIOD
                      MAXR(Z)  3.0        20
                      MAXH(N)  2.31       20
                      MAXH(E)  2.31       20
PRI             03 22                     *E   22 52
WMC             03 22                     *E   22 52
FRI             03 22                     *E   22 57
WDC             03 22 57.0
JAS             03 22 57.2                *E   25 12
MIN             03 22 59.0
MNV             03 23 04.0                *E   25 21
                      MAG 5.7, DIST(DEG) 88
                      USGS  03 10 07.9, 23.0S, 171.8E, H= N  KM, M=5.2
                            LOYALTY ISLANDS REGION

MNV APR 20      07 48 20.2  D
JAS             07 48 29.0  D
MIN             07 48                     *E   48 46
WDC             07 48 50.3
BKS             07 48                     *E   03 46    *E   04 20
                      USGS  07 41 20.7, 13.0N,  90.0W, H= 23 KM, M=4.7
                            NEAR COAST OF GUATEMALA

WDC APR 20      08 28 51.5
JAS             08 29 14.5
MNV             08 29                     *E   29 26
BKS             08 29                     *E   40 56
                      USGS  08 22 21.3, 51.0N, 167.4W, H= 42 KM, M=4.3
                            FOX ISLANDS, ALEUTIAN ISLANDS

WMC APR 20      08 39 58.1
PRI             08 39                     *E   39 59
JAS             08 40 03.0                *E   40 29
WDC             08 40 03.0                *E   40 29
FRI             08 40                     *E   40 03
MIN             08 40                     *E   40 05
MNV             08 40 11.0
BKS             08 40          50 28      *E   51 34    *E   51 46  SS    56 18
                                          *E   03 06    LR   07 00
                          MICRON      PERIOD
                      MAXR(Z)  4.3        20
                      MAXH(N)  2.8        20
                      MAXH(E)  3.6        20
                      MAG 5.8, DIST(DEG) 86
                      USGS  08 27 15.4, 22.8S, 171.9E, H= N  KM, M=5.1
                            LOYALTY ISLANDS REGION

JAS APR 20      09 51 06.0
WDC             09 51 06.1
MIN             09 51 08.8
MNV             09 51 14.8
BKS             09 51                     L    14 16  LR   19 34
                      USGS  09 38 18.8, 23.0S, 172.0E, H= N  KM, M=4.9
                            LOYALTY ISLANDS REGION

WDC APR 20      16 13 46.7
MIN             16 13 50.5
JAS             16 14 04.6
MNV             16 14 11.5
                      USGS  16 02 58.3, 42.4N, 143.0E, H= 66 KM, M=5.1
                            HOKKAIDO, JAPAN REGION

WMC APR 21      01 06 12.7
PRI             01 06 13.0
BKS             01 06 16.0       16 40    *E   18 00  SS    21 36  L     29 12
                                        LR   33 08
                          MICRON      PERIOD
                      MAXR(Z)  6.8        20
                      MAXH(N)  3.6        20
                      MAXH(E)  3.7        20
JAS             01 06 17.5  C
WDC             01 06 17.5  C
FRI             01 06 17.5
MIN             01 06 19.0
MNV             01 06 26.0  C
                      MAG 6.0, DIST(DEG) 88
                      USGS  00 53 30.0, 22.8S, 171.7E, H= N  KM, M=5.3
                            LOYALTY ISLANDS REGION

WDC APR 21      02 18 32.0                *E   18 40
MIN             02 18 35.8                *I   18 45
JAS             02 18 51.2  C             *E   19 00
MNV             02 18 57.8                *E   19 07
                      USGS  02 08 02.9, 46.2N, 145.4E, H= 28 KM, M=5.3
                            SEA OF OKHOTSK

WDC APR 21      05 33                     *E   33 33
JAS             05 33 33.0
MIN             05 33 33.9
MNV             05 33 41.5                *E   01 00
BKS             05 33
                      USGS  05 20 47.7, 23.0S, 171.7E, H= 47 KM, M=4.7
                            LOYALTY ISLANDS REGION

WDC APR 21      15 20 03.8
MIN             15 20 05.9
JAS             15 20 16.8  C
MNV             15 20 22.4  C
                      USGS  15 07 20.1, 25.2N, 122.1E, H=210 KM, M=4.9
                            TAIWAN REGION

WDC APR 22      00 42 10.0
JAS             00 42 23.8  C             *E   42 30
MNV             00 42
                      USGS  00 29 19.8, 31.6N, 119.2E, H= N  KM, M=5.2
                            EASTERN CHINA

JAS APR 22      02 18 08.1
WDC             02 18 08.1
MIN             02 18 08.6
MNV             02 18 17.6                LR   45 16
BKS             02 18
                          MICRON      PERIOD
                      MAXR(Z)  1.8        20
                      MAXH(N)  1.2        20
                      MAXH(E)  1.1        20
                      MAG 5.5, DIST(DEG) 85
                      USGS  02 05 21.7, 22.9S, 171.8E, H= 38 KM, M=5.2
                            LOYALTY ISLANDS REGION

WDC APR 22      02 36 52.8                *E   37 06
MIN             02 36                     *E   36 58
JAS             02 37 17.0
MNV             02 37 25.5                *E   37 39
                      USGS  02 29 40.1, 52.0N, 176.1W, H= 70 KM, M=4.9
                            ANDREANOF ISLANDS, ALEUTIAN ISLANDS

MNV APR 22      09 22 19.4
JAS             09 22 28.8                *E   26 18
MIN             09 23 04.7                *E   26 16
WDC             09 23 16.5
BKS             09 23                     LR   24 50
                          MICRON      PERIOD
                      MAXR(Z)  1.25       20
                      MAXH(N)  2.3        20
                      MAXH(E)  4.65       20
                      USGS  09 19 58.9, 29.5N, 113.3W, H= N  KM, M=4.4
                            GULF OF CALIFORNIA

WDC APR 22      13 51 18.2                *E   51 32
MIN             13 51                     *E   51 36
JAS             13 51 39.3                *E   51 53
MNV             13 51 47.5                *E   52 00
                      USGS  13 41 50.4, 50.3N, 156.7E, H= 45 KM, M=4.9
                            KURIL ISLANDS

FRI APR 23      11 48                     *E   48 00  PCP   50 43
MNV             11 48 02.0  C                  PCP   50 42
JAS             11 48 11.7  C                  PCP   50 46
MIN             11 48 29.3
WDC             11 48 34.1                PCP   50 53
                      USGS  11 41 40.9, 15.0N,  91.7W, H=180 KM, M=4.8
                            MEXICO-GUATEMALA BORDER REGION

WMC APR 24      01 19 43.0
PRI             01 19                     *E   19 43
JAS             01 19 48.9
WDC             01 19 50.2
MIN             01 19 53.0
MNV             01 19 59.0
                      USGS  01 08 42.7, 16.2S, 175.1W, H=336 KM, M=4.8
                            TONGA ISLANDS

WDC APR 25      00 06 29.3
JAS             00 06 49.6
                      USGS  23 56 45.0, 48.1N, 153.9E, H= 64 KM, M=4.8
                            KURIL ISLANDS

MNV APR 25      09 08 00.4  D
PRI             09 08 01.0  D
WMC             09 08 09.0
BKS             09 08 13.0
MIN             09 08 17.6
WDC             09 08 22.0  D
                      USGS  08 56 44.0, 17.0S,  70.7W, H= N  KM, M=5.3
                            NEAR COAST OF PERU

PRI APR 26      06 24 09.2  D
MNV             06 24 09.5
JAS             06 24 14.0  C             *E   24 34
WMC             06 24 16.2                *E   24 39
BKS             06 24 18.0                *E   24 41
MIN             06 24 24.7  C             *E   24 45
WDC             06 24 28.5  C             *E   24 50
FMC             06 24                     *E   24 54
                                          *E   25 01
                      USGS  06 12 20.0, 24.5S,  68.9W, H= 97 KM, M=5.5
                            CHILE-ARGENTINA BORDER REGION

FRI APR 27      06 12 37.8
MNV             06 12 39.0  D             *E   13 10
PRI             06 12 39.4  D
JAS             06 12 45.3  D             *E   13 16
WMC             06 12 48.2  D
BKS             06 12 52.4  D             *PP  13 23  SCS   22 32  SSS   27 39
                          MICRON      PERIOD
                      PZ    0.76         2
MIN             06 12 57.5  D
WDC             06 13 01.1  D             *E   13 32
FMC             06 13 09.4  D
                      USGS  06 01 47.3, 15.0S,  72.2W, H=113 KM, M=5.8
                            SOUTHERN PERU

WMC APR 27      06 29 49.0
PRI             06 29 49.0
FRI             06 29 54.2
JAS             06 29 54.5  C
WDC             06 29 55.5
MIN             06 29 57.8
MNV             06 30 04.0  C
                      USGS  06 18 55.2, 17.9S, 179.4W, H=579 KM, M=4.5
                            FIJI ISLANDS REGION

SAO APR 27      07 37                     *E   37 04
PRI             07 37 05.3                *PP  37 18
WMC             07 37 06.3                *PP  37 20
BKS             07 37 07.0  D    47 15    PP   40 15  PPS   44 08  SS    52 39
                                          L    58 00  LR   01 12
                      PZ        0.23          1.2
                      MAXR(Z)   7.3           20
                      MAXH(N)   4.9           20
                      MAXH(E)   4.7           20
FRI             07 37 10.5                *PP  37 24
JAS             07 37 11.5  D             *PP  37 24    *E   38 09  PP    40 23
                                          P*P* 01 52
FMC             07 37 11.8
WDC             07 37 14.6  D             *PP  37 28    *E   38 08  P*P*  01 48
MIN             07 37 15.8  D             *PP  37 29  P*P*  03 44
MNV             07 37 20.8                P*P* 03 49
                      MAG 6.2, DIST(DEG) 80
                      USGS  07 24 54.0, 26.2S, 175.9W, H= 45 KM, M=6.1
                            SOUTH OF TONGA ISLANDS

WDC APR 27      10 09 52
MIN             10 09 59.0
JAS             10 10 15.0
MNV             10 10 21.6
                      USGS  10 01 02.2, 55.9N, 162.9E, H= 26 KM, M=5.0
                            NEAR EAST COAST OF KAMCHATKA

PRI APR 27      10 14 16.3
WMC             10 14 19.9
BKS             10 14 20.3  D
                          MICRON      PERIOD
                      PZ    0.06         0.8
FRI             10 14 24.5
JAS             10 14 24.8  C
WDC             10 14 26.7  C
MIN             10 14 27.8
MNV             10 14 33.1
                      USGS  10 02 48.1, 25.1S, 179.8E, H=519 KM, M=4.8
                            SOUTH OF FIJI ISLANDS

JAS APR 28      03 30 57.7  C
WDC             03 31 20.3
BKS             03 31                     *E   44 00
                      USGS  03 22 41.6,  3.8S, 102.9W, H= N  KM, M=4.4
                            NORTHERN EASTER ISLAND CORDILLERA

PRI APR 28      04 05 47.1
FRI             04 05 49.5
MNV             04 05 57.7
WMC             04 05                     *E   05 58
JAS             04 05 59.6  C
MIN             04 06 18.4
WDC             04 06 22.0  C
```

04 06 29.3 12 36 LQ 16 22 LR 19 00
FHC 04 06 MICRON PERIOD
BKS
MAXR(Z) 7.04 20
MAXH(N) 6.95 20
MAXH(E) 1.43 20
USGS 03 57 49.9, 3.9S, 104.0W, H= N KM, M=5.1
NORTHERN EASTER ISLAND CORDILLERA

WDC APR 28 17 12 53.0
JAS 17 12 53.3 *E 40 00
BKS 17 12
USGS 17 00 04.7, 22.9S, 171.8E, H= 29 KM, M=4.9
LOYALTY ISLANDS REGION

WDC APR 29 14 29 32.8
JAS 14 29 45.6 *E 29 48
PRI 14 29
FRI 14 29 49.9
MNV 14 29 53.6
USGS 14 17 38.3, 20.6N, 146.8E, H= N KM, M=5.1
MARIANA ISLANDS REGION

FHC APR 29 16 15 50.3 *E 16 40 L 18 20
WDC 16 16 02.3 *E 18 46
BKS 16 16 14.0 C 18 00 LQ 19 17
MICRON PERIOD
0.03 0.7
PZ
MHC 16 16 44.8
JAS 16 16 46.7
MNV 16 16 59.5 *E 17 02
FRI 16 16
PRI 16 17 02.2
USGS 16 15 00.2, 43.4N, 126.7W, H= N KM, M=4.5
OFF COAST OF OREGON

MNV APR 29 22 29 47.0
JAS 22 29 56.4 C
WDC 22 30 13.4 C
USGS 22 20 52.2, 4.8N, 76.1W, H= 87 KM, M=5.1
COLOMBIA

PRI APR 30 19 42 10.8
MHC 19 42 11.1
JAS 19 42 16.6 C
WDC 19 42 18.1
MNV 19 42 25.7
USGS 19 31 07.4, 20.3S, 177.9W, H=550 KM, M=4.3
FIJI ISLANDS REGION

WDC APR 30 19 54 42.0
JAS 19 55 06.0
MNV 19 55 15.5
USGS 19 47 39.8, 51.1N, 172.7W, H= 12 KM, M=4.8
ANDREANOF ISLANDS, ALEUTIAN ISLANDS

MHC APR 30 20 08 *E 08 18
PRI 20 08 *E 08 19
WDC 20 08 21.7
JAS 20 08 22.5 C
MNV 20 08 31.2
USGS 19 55 52.1, 19.7S, 169.2E, H=158 KM, M=5.0
NEW HEBRIDES ISLANDS

PRI MAY 01 05 10 *E 10 09
JAS 05 10 15.5
WDC 05 10 18.5
MIN 05 10 19.9
USGS 04 57 57.4, 26.3S, 175.6W, H= 44 KM, M=5.0
SOUTH OF TONGA ISLANDS

WDC MAY 01 10 26 37.6
MIN 10 26 42.7 D
USGS 10 21 52.9, 58.7N, 137.6W, H= 17 KM, M=3.6
SOUTHEASTERN ALASKA

BKS MAY 01 11 43 16.5
MICRON PERIOD
PZ 0.05 1.0
MHC 11 43 19.0
PRI 11 43 19.7
WDC 11 43 20.2 C
MIN 11 43 22.2
JAS 11 43 22.9 C
FRI 11 43 24
MNV 11 43 32.2

JAS MAY 01 13 02 42.3
WDC 13 02 47.0
PRI 13 02 *E 02 48
MIN 13 02 *E 02 52
USGS 12 43 46.7, 58.8S, 25.3W, H= 36 KM, M=5.1
SOUTH SANDWICH ISLANDS REGION

FHC MAY 01 15 33 42.5
WDC 15 33 47.6 D *E 34 07
MIN 15 33 51.0 D *I 33 55 *I 34 19
BKS 15 33 52.5
MICRON PERIOD
PZ 0.24 0.7
MHC 15 33 56.0 D *E 34 11
JAS 15 33 59.4 D *E 34 23 *F 36 07
PRI 15 34 02.0 D *E 37 24
FRI 15 34 03.5 D *E 35 15
MNV 15 34 07.5 D *E 34 24 *E 34 42
USGS 15 22 24.7, 18.3N, 145.2E, H=455 KM, M=5.5
MARIANA ISLANDS

PRI MAY 01 18 47 17.8
MHC 18 47 18.2
JAS 18 47 23.1
WDC 18 47 24.9
MIN 18 47 27.0
MNV 18 47 31.0
USGS 18 35 51.2, 23.8S, 179.9E, H=522 KM, M=4.8
SOUTH OF FIJI ISLANDS

MNV MAY 02 03 58 36.1
JAS 03 58
MIN 03 59 *E 58 45
FHC 03 59 *E 59 03
USGS *E 59 20
03 51 50.4, 13.9N, 90.5W, H= 65 KM, M=4.6
NEAR COAST OF GUATEMALA

MNV MAY 02 09 04 15.0
JAS 09 04
MHC 09 04 *E 04 24
MIN 09 04 37.3 C *E 04 30
WDC 09 04
FHC 09 04 *E 04 42
USGS *E 04 52
08 55 23.1, 6.8N, 73.0W, H=159 KM, M=4.9
NORTHERN COLOMBIA

WDC MAY 02 09 52 22.5
MIN 09 52
JAS 09 52 35.4 *E 52 33
FRI 09 52 40.0 *E 52 26
MNV 09 52 43.6 *E 52 46 *E 53 05
USGS 09 40 32.2, 20.6N, 145.4E, H=110 KM, M=4.9
MARIANA ISLANDS

WDC MAY 03 12 30 56.0
JAS 12 30 58.5
MIN 12 30 58.8
MNV 12 31 08
USGS 12 18 25.5, 13.5S, 166.7E, H= 50 KM, M=5.3
NEW HEBRIDES ISLANDS

WDC MAY 04 08 07 30.5
MIN 08 07
MNV 08 07 *E 07 36
*E 08 05
JAS 08 07 57.8
USGS 08 02 00.2, 56.3N, 153.3W, H= 10 KM, M=4.5
KODIAK ISLAND REGION

JAS MAY 04 09 21 38.8 C *E 23 43
WDC 09 21 40.7 C *E 25 02
MNV 09 21 47.0 C
MIN 09 21 42.1
USGS 09 10 01.9, 24.8S, 178.9E, H=545 KM, M=5.2
SOUTH OF FIJI ISLANDS

PRI MAY 04 10 58 *E 58 26
JAS 10 58 31.3
MHC 10 58 *E 58 34
WDC 10 58 45.7
USGS 10 46 39.3, 23.7S, 68.0W, H=109 KM, M=4.7
NORTHERN CHILE

BKS MAY 04 12 58 37.4 D PCP 58 52 *PP 00 42
*E 12 12 *E 12 14 *E 07 54
MICRON PERIOD
PZ 0.04 0.7
SAD 12 58 38.0
MHC 12 58 38.5 *E 00 43
FHC 12 58 39
PRI 12 58 40.5 *E 00 45
WDC 12 58 42.5 *E 00 48
JAS 12 58 43.4 08 07 PCP 58 49 *E 09 06 *PP 00 48 *SP 02 05
*E 02 16
FRI 12 58 44.7 *E 00 50
MIN 12 58 45.2 D PCP 58 50 *PP 59 07
*E 04 08
MNV 12 58 53.0 *E 00 58 *E 02 00
USGS 12 47 28.3, 13.9S, 172.6E, H=602 KM, M=5.5
NEW HEBRIDES ISLANDS REGION

MNV MAY 04 13 17 11.7
MIN 13 17 *E 17 14
MHC 13 17 *E 17 38
JAS 13 17 15.0

MNV MAY 04 18 02 17.0
PRI 18 02 20.0
JAS 18 02 27.4
MHC 18 02 30.6
WDC 18 02 53.4
USGS 17 54 07.0, 7.7N, 82.6W, H= N KM, M=5.2
SOUTH OF PANAMA

WDC MAY 05 06 10 51.7
MIN 06 10 55.1
JAS 06 11 04.8
USGS 05 57 35.1, 22.3N, 121.5E, H= 26 KM, M=5.5
TAIWAN REGION

BKS MAY 05 11 39 37.8
MICRON PERIOD
PZ 0.04 0.7
MHC 11 39 39.0
PRI 11 39 40.3
WDC 11 39 42.8
JAS 11 39 44.1 D
MIN 11 39 45.0
MNV 11 39 53.7 D
USGS 11 28 28.6, 14.0S, 172.7E, H=597 KM, M=4.8
NEW HEBRIDES ISLANDS REGION

WDC MAY 05 14 30 23.5 C *E 30 36
MIN 14 30 27.3 C *I 30 42
BKS 14 30 33.5
MICRON PERIOD
PZ 0.06 1.0
MHC 14 30 37.8
JAS 14 30 40.4 C *I 30 53
FRI 14 30 46.1 C
PRI 14 30 46.2
MNV 14 30 47.5 C
USGS 14 19 12.0, 37.7N, 141.7E, H= 48 KM, M=5.6
NEAR COAST OF HONSHU, JAPAN

WDC MAY 05 19 20 40.5
MIN 19 20 *E 20 45
JAS 19 21 00.1 C
FRI 19 21 04.1
MNV 19 21 07.7
USGS 19 10 40.0, 46.2N, 149.2E, H=143 KM, M=5.1
KURIL ISLANDS

SAD MAY 06 11 49 40.7
BKS 11 49 41.5 *E 10 40
MICRON PERIOD
PZ 0.1 1.0
PRI 11 49 42.0
MHC 11 49 42.2 D
FHC 11 49 46.7
FRI 11 49 47.8
JAS 11 49 48.4 D
WDC 11 49 50.1 D
MIN 11 49 *E 49 52
MNV 11 49 58.9 D
USGS 11 38 19.7, 15.2S, 173.4W, H= 13 KM, M=5.7
TONGA ISLANDS

BKS MAY 07 02 36 *E 36 51 *E 40 34 *E 46 50
MICRON PERIOD
MAXR(Z) 1.8 20
MAXH(N) 7.0 20
MAXH(E) 5.2 20
MHC 02 36 54.2
PRI 02 36 54.4
FRI 02 37 00.0
JAS 02 37 00.0 C
MIN 02 37 00.4
WDC 02 37 01.3 C
MNV 02 37 10.2
USGS 02 25 10.8, 16.7S, 177.3W, H= N KM, M=5.5
FIJI ISLANDS REGION

MNV MAY 07 12 02 37.2
FRI 12 02 38.3
JAS 12 02 47.2
MHC 12 02 51.5
BKS 12 02 57
WDC 12 03 05.7
FHC 12 03 16.5
USGS 11 54 32.5, 8.6N, 82.5W, H= N KM, M=5.0
PANAMA-COSTA RICA BORDER REGION

WDC MAY 08 04 33 10.0 *E 33 31
MIN 04 33 13.7
JAS 04 33 37.0 *E 33 53
MNV 04 33 40.0
USGS 04 27 13.1, 63.7N, 150.7W, H= 11 KM, M=4.6
CENTRAL ALASKA

JAS MAY 08 11 39 05.5 *E 39 20
MNV 11 39 05.5 *E 39 19
BKS 11 39 *E 39 08
MHC 11 39 *E 39 08
WDC 11 39 *E 39 22
USGS 11 20 10.7, 58.8S, 25.5W, H= N KM, M=5.3
SOUTH SANDWICH ISLANDS REGION

MHC MAY 08 12 03 15.4
JAS 12 03 20.8
WDC 12 03 23.2
MIN 12 03 24.6
MNV 12 03 30.2
USGS 11 52 26.5, 18.0S, 178.3W, H=614 KM, M=4.5
FIJI ISLANDS REGION

WDC MAY 08 23 45 06.7

BKS 23 45 16.3 55 05 SS 56 15 LQ 05 00 LR 00 08
MICRON PERIOD
PZ 0.06 0.7
MAXR(Z) 14.3 20
MAXH(N) 20.0 20
MAXH(E) 13.6 20
23 45 20.3
MHC 23 45 22.4
JAS 23 45 *E 48 19 *E 48 37
SAO 23 45 28.1 *E 45 23
PRI 23 45 28.2 *E 48 27
FRI 23 45 29.6 *E 48 20 *E 48 39
MNV MAG 6.4, DIST(DEG) 76
USGS 23 33 25.2, 34.5N, 138.7E, H= 2 KM, M=6.0
NEAR COAST OF HONSHU, JAPAN. 27 KILLED

JAS MAY 10 00 16 33.5 *E 17 16 *E 21 13
MNV 00 16 35.5
WDC 00 16 37.1 *E 21 40
USGS 23 56 38.0, 46.0S, 35.3E, H= N KM, M=5.7
PRINCE EDWARD ISLANDS REGION

SAO MAY 10 02 16 *E 16 04
PRI 02 16 05.2
BKS 02 16 06.0 D
MICRON PERIOD
PZ 0.08 1.0
MHC 02 16 06.1
FRI 02 16 09.8
JAS 02 16 10.7 D *E 17 11
FHC 02 16 11.1
WDC 02 16 13.7 D
MIN 02 16 *E 16 15
MNV 02 16 15.6 D
USGS 02 03 46.1, 30.7S, 179.6W, H=227 KM, M=5.3
KERMADEC ISLANDS REGION

PRI MAY 10 08 20 12.0 D
FRI 08 20 13.5 D
SAO 08 20 17.7
MHC 08 20 23.4 D
JAS 08 20 23.9 D *E 20 34 *E 21 03 *E 22 03
BKS 08 20 28.7 27 18 PP 22 12 *E 31 00 *E 31 40
*E 34 00
MICRON PERIOD
PZ 0.10 1.1
MAXR(Z) 25.2 20
MAXH(N) 25.0 20
MAXH(E) 11.6 20
MIN 08 20 42.7
WDC 08 20 46.4 D
FHC 08 20 53.7 D
MAG 6.0, DIST(DEG) 46
USGS 08 12 05.0, 4.4S, 102.1W, H= N KM, M=6.1
NORTHERN EASTER ISLAND CORDILLERA

WDC MAY 10 19 39 01.0 *E 41 55 PP 43 08 PKKP 55 21
JAS 19 39 13.6 *E 42 15 PP 43 26 PKKP 55 40
P'P' 03 30
BKS 19 39 50 49 PS 52 24 SS 57 38 *E 58 00
*E 04 55 LQ 09 00 LR 12 00
MICRON PERIOD
MAXR(Z) 20.4 22
MAXH(N) 20.0 22
MAXH(E) 18.6 20
MNV 19 39 PKKP 55 15
MAG 5.7, DIST(DEG) 102
USGS 19 25 15.0, 28.2N, 104.0E, H= 11 KM, M=6.2
SZECHWAN PROVINCE, CHINA

WDC MAY 11 00 57 51.5 C PP 02 09 PKKP 13 54
MHC 00 57 *E 57 59
JAS 00 58 01.6 C PP 02 26 *E 13 30 PKKP 13 45
MIN 00 58 03.6 PP 02 12 PKKP 13 52
FRI 00 58 05.7
MNV 00 58 08.9 PP 02 30 PKKP 13 38
BKS 00 58 PP 02 13 SP 11 22 *E 12 45
SS 17 00 LQ 27 00 LR 31 00
MICRON PERIOD
MAXR(Z) 3.6 20
MAXH(N) 1.4 20
MAXH(E) 3.6 20
MAG 5.8, DIST(DEG) 103
USGS 00 43 44.9, 1.7N, 126.4E, H= N KM, M=6.0
MOLUCCA PASSAGE

MHC MAY 11 02 29 *E 29 01
JAS 02 29 07.0 C
WDC 02 29 08.5 C
MIN 02 29 10.7
MNV 02 29 16.8
USGS 02 18 00.0, 17.5S, 177.0W, H=418 KM, M=4.8
FIJI ISLANDS REGION

FHC MAY 11 06 26 02.5
WDC 06 26 07.9 C *E 26 37
MIN 06 26 10.6 C *I 26 28 *I 27 10
BKS 06 26 13.6 D 36 08 *E 26 32 PP 28 56 PPP 31 00
*E 40 36 SS 41 14 SSS 44 42
LQ 46 28 LR 49 00
MICRON PERIOD
PZ 0.44 1.0
MAXRZ) 13.9 20
MAXH(N) 6.4 20
MAXH(E) 9.6 20
MHC 06 26 16.9
SAO 06 26 17.7
JAS 06 26 20.4 C *E 26 49
PRI 06 26 23.2
FRI 06 26 25.0
MNV 06 26 28.6
MAG 6.0, DIST(DEG) 78
USGS 06 14 08.7, 19.7N, 147.3E, H= 6 KM, M=6.4
MARIANA ISLANDS REGION

MNV MAY 11 13 20 *E 20 21
JAS 13 20 23.0 *E 23 52
MIN 13 20 *E 20 28
WDC 13 20 *E 20 30 *E 00 00
USGS 13 01 05.4, 57.9S, 7.3W, H= N KM, M=5.8
SOUTHWESTERN ATLANTIC OCEAN

WDC MAY 11 19 16 15 *E 16 21
MIN 19 16
JAS 19 16 43
USGS 19 10 47.8, 56.5N, 153.1W, H= 27 KM, M=4.9
KODIAK ISLAND REGION

*PP 17 46
FRI MAY 12 10 17 18.5 *PP 17 48
MNV 10 17 19.9 *PP 17 48
PRI 10 17 20.4 *PP 17 54
JAS 10 17 25.6 C *PP 17 57
MHC 10 17 28.4 *PP 19 01 *SS 27 58 LR 44 00
BKS 10 17 32.2 D 27 08 *E 17 36
MIN 10 17 *PP 18 09
WDC 10 17 40.3 C *PP 18 16
FHC 10 17 48.2
USGS 10 05 55.4, 19.6S, 69.0W, H=112 KM, M=5.8
NORTHERN CHILE

WDC MAY 13 01 51 44.0
JAS 01 52 04.7
MNV 01 52 12.0
USGS 01 42 28.6, 51.0N, 155.9E, H=177 KM, M=4.3
NORTHWEST OF KURIL ISLANDS

WDC MAY 13 05 16 39.9
MIN 05 16 44.9 D
JAS 05 17 06.2 D
MNV 05 17 13.7 D
FRI 05 17 15.3 *E 17 19
PRI 05 17

USGS 05 10 49.8, 55.9N, 158.5W, H= 41 KM, M=4.9
ALASKA PENINSULA

WDC MAY 13 12 05
JAS 12 05 53.0 *E 05 27
BKS 12 05
MNV 12 06 02.0 *E 17 44 LR 33 00
USGS 11 52 55.9, 7.3S, 155.5E, H= 33 KM, M=5.6
SOLOMON ISLANDS

JAS MAY 15 09 43 05.0
WDC 09 43 06.7
MIN 09 43 09.2
MNV 09 43 15.0 *I 17 17 *E 44 50
USGS 09 31 41.9, 15.7S, 172.1W, H= N KM, M=4.8
SAMOA ISLANDS REGION

WDC MAY 15 13 10 42
MIN 13 10 45.9
JAS 13 11 06
USGS 13 04 04.1, 52.4N, 169.8W, H= 44 KM, M=5.0
FOX ISLANDS, ALEUTIAN ISLANDS

JAS MAY 15 13 47 39.5
MIN 13 47 41.2
WDC 13 47 43.5 *E 54 40
USGS 13 37 11.1, 27.4N, 44.3W, H= N KM, M=5.0
NORTH ATLANTIC RIDGE

MNV MAY 15 18 58 57.6
JAS 18 59 00.2 D
MHC 18 59 00.6
BKS 18 59 02.5 D
MIN 18 59 04.2 D
WDC 18 59 05.2
USGS 18 40 29.0, 56.1S, 27.5W, H=132 KM, M=5.2
SOUTH SANDWICH ISLANDS REGION

FHC MAY 15 19 09 19.6
WDC 19 09 26.0 C *E 39 32 *E 40 12
MIN 19 09 29.6 C
BKS 19 09 39.3 17 31 *E 09 54 SS 21 22 LQ 23 36
LR 26 20
MICRON PERIOD
MAXR(Z) 22 20
MAXH(N) 7 20
MAXH(E) 25 20
MHC 19 09 44.0
JAS 19 09 46.4 C P'P' 39 25
FRI 19 09 53.2
MNV 19 09 53.7
PRI 19 09 54.0
MAG 6.2, DIST(DEG) 58
KURIL ISLANDS
USGS 18 59 55.9, 50.0N, 156.1E, H= 56 KM, M=6.1

JAS MAY 15 22 32 10.0
USGS 22 21 39.4, 27.4N, 44.3W, H= N KM, M=4.8
NORTH ATLANTIC RIDGE

WDC MAY 16 03 15 52.2
JAS 03 16 06.7
USGS 03 02 57.3, 49.7N, 78.2E, H= 0 KM, M=5.3
EASTERN KAZAKH, SSR

WDC MAY 16 05 31 43.0
JAS 05 31 44.1 C
MIN 05 31 *E 30 45
MNV 05 31 51.6
USGS 05 19 23.9, 19.5S, 169.0E, H=225 KM, M=4.4
NEW HEBRIDES ISLANDS REGION

BKS MAY 16 08 09 25
WDC 08 09 26.5 *E 09 43
MIN 08 09 29.5
JAS 08 09 30.3 *E 09 47
MNV 08 09 40.0 *E 09 57
USGS 07 56 49.7, 10.4S, 161.1E, H= 77 KM, M=5.2
SOLOMON ISLANDS

FHC MAY 16 20 11 *E 11 05
WDC 20 11 12.0
MIN 20 11 *E 11 14
MNV 20 11 *E 11 20
BKS 20 11 20
MICRON PERIOD
PZ 0.03 0.9
MHC 20 11 *E 11 24
JAS 20 11 26.0 *E 13 10 *E 14 39
FRI 20 11 *E 11 28
USGS 20 00 01.5, 27.2N, 140.1E, H=471 KM, M=5.3
BONIN ISLANDS REGION

MNV MAY 16 23 15 16.7 *E 15 28 *E 17 25
FRI 23 15 17.0 *E 17 25
PRI 23 15 *E 15 20
JAS 23 15 26.2 *E 17 29 *E 21 20
SAO 23 15 *E 15 28
MHC 23 15 31.0
BKS 23 15 37.1 22 04 PP 17 34 LQ 27 20 LR 30 30
MICRON PERIOD
PZ 0.18 0.9
MAXR(Z) 6.1 20
MAXH(N) 7.5 20
MAXH(E) 10.7 22
MIN 23 15 41.6 *I 15 53 *E 17 34
FHC 23 15 *E 15 58 *E 16 08 *E 17 43
MAG 5.7, DIST(DEG) 43
USGS 23 07 46.6, 11.2N, 86.0W, H= 16 KM, M=5.5
NEAR COAST OF NICARAGUA

BKS MAY 17 04 04 04 *E 04 21
MHC 04 04 05.5 *E 04 22
WDC 04 04 06.7 *E 04 23
PRI 04 04 08.0
MIN 04 04 08.5
JAS 04 04 10.2 *E 04 26 *E 04 49
FRI 04 04 11.8
MNV 04 04 19.7 *E 04 35 *E 04 43
USGS 03 51 29.6, 10.8S, 161.9E, H= 58 KM, M=5.4
SOLOMON ISLANDS

FRI MAY 17 15 32 28.5 *E 32 57
MNV 15 32 29.5 C *E 32 57 P'P' 01 29
PRI 15 32 30.1
JAS 15 32 36.0 D *E 33 05 *E 33 20 P'P' 01 26
SAO 15 32 36.8
MHC 15 32 39.4 *E 33 08 *E 33 20
BKS 15 32 45.3 LR 41 27
MICRON PERIOD
PZ 0.48 1.3
WDC 15 32 52.8 *E 33 22 P'P' 01 16
FHC 15 33 01.7 *E 33 30
PERU
USGS 15 22 07.4, 11.2S, 75.1W, H=111 KM, M=6.0

FHC MAY 17 17 24 42.8
WDC 17 24 46.8 PP 28 33
MIN 17 24 *E 24 50
MHC 17 24 58.3
JAS 17 25 00.0 C PP 28 38
FRI 17 25 04.5
PRI 17 25 04.8
MNV 17 25 06.0
RYUKYU ISLANDS
USGS 17 11 50.8, 25.1N, 125.6E, H= 18 KM, M=5.8

FHC MAY 17 21 13 55.8
WDC 21 13 56.8 D *E 15 38 *E 27 29
MIN 21 13 58.6 D
MHC 21 14 01.5
JAS 21 14 02.2 *E 15 42 *E 27 28

FRI 21 14 04.2
PRI 21 14 04.5
MNV 21 14 05.5
USGS 20 55 11.2, 6.5S, 106.8E, H=131 KM, M=6.0
JAVA

SAO MAY 17 23 18 22.8
PRI 23 18 23.1
BKS 23 18 23.6 D
MICRON PERIOD
PZ C.06 0.9
MHC 23 18 23.7
FRI 23 18 27.9
JAS 21 18 28.5 D *E 20 20
WDC 23 18 30.7 D *E 20 20
MIN 23 18 *E 18 37 *E 20 21
MNV 23 18 36.7 D
USGS 21 06 44.1, 26.1S, 179.5E, H=494 KM, M=5.3
SOUTH OF FIJI ISLANDS

MHC MAY 18 12 10 36.2 *E 10 50
BKS 12 10 *E 10 50
FRI 12 10 39.7 *E 10 53
JAS 12 10 40.9 *E 10 54
WDC 12 10 44.0 *E 10 57
PRI 12 10 *E 10 48
MNV 12 10 49.1 *E 11 02
MICRON PERIOD
PZ 0.04 0.8
MIN 12 10 *E 10 58
KERMADEC ISLANDS REGION
USGS 11 57 55.4, 31.5S, 178.5W, H= 46 KM, M=5.1

MIN MAY 18 23 49 *E 49 49
WDC 23 49 51.0
MNV 23 49 53.0
JAS 23 50 01.5

WDC MAY 19 01 46 43
JAS 01 46 44
MNV 01 46 53
USGS 01 35 18.0, 14.9S, 173.5W, H= N KM, M=4.8
SAMOA ISLANDS REGION

JAS MAY 22 09 25 36.5
WDC 09 25 38.5
MIN 09 25 40.5
MNV 09 25 46.5
USGS 09 13 53.0, 17.4S, 175.2W, H= 21 KM, M=4.7
TONGA ISLANDS

MNV MAY 22 14 15 36.1 C
FRI 14 15 48.0 C *E 16 32
JAS 14 15 57.0 C
PRI 14 16 01.8
SAO 14 16
MHC 14 16 *E 16 09
MIN 14 16 *E 16 11
BKS 14 16 *E 16 22
WDC 14 16 *E 16 25
*E 16 32
MAG 4.3, NEVADA TEST SITE
USGS 14 15 00.5, 37.1N, 116.1W, H= 5 KM, M=4.4

JAS MAY 22 15 00 46.8
WDC 15 00 47.4
USGS 14 48 06.7, 22.6S, 172.3E, H= 71 KM, M=5.2
LOYALTY ISLANDS

MNV MAY 23 11 18 43.2
JAS 11 18 53.4 *E 20 56
MIN 11 18 54.4 *E 21 13
WDC 11 18 57.1
FHC 11 19 06.1
BKS 11 19
*E 27 57 *E 37 16 *E 39 28
USGS 11 08 24.4, 27.3N, 44.4W, H= N KM, M=5.1
NORTH ATLANTIC RIDGE

MNV MAY 23 13 39 06.4 C
FRI 13 39 17.9 C
JAS 13 39 27.0 C
PRI 13 39 31.7
SAC 13 39 36.6
MHC 13 39 40.9
BKS 13 39 48.7
MIN 13 39
WDC 13 40 *I 39 53
*E 40 02
MAG 4.7, NEVADA TEST SITE
USGS 13 38 30.2, 37.1N, 116.1W, H= 5 KM, M=4.8

WDC MAY 24 22 35 43.0
JAS 22 36 10.3
MNV 22 36
*E 36 16
USGS 22 30 02.0, 58.1N, 156.8W, H=126 KM, M=4.5
ALASKA PENINSULA

MHC MAY 26 01 44
BKS 01 44 53.1 D 55 18 *E 44 53
*E 46 06 PPS 56 36 SS 01 37
L 07 34 LR 11 26
MICRON PERIOD
PZ 0.36 1.8
MAXR(Z) 9.9 20
MAXH(N) 5.0 20
MAXH(E) 6.8 20
PRI 01 44
WDC 01 44 56.5 *E 44 54
MIN 01 44
JAS 01 44 58.0 *E 44 58
FRI 01 45 00
MNV 01 45 06.5
MAG 6.0, DIST(DEG) 86
USGS 01 32 11.2, 17.7S, 167.8E, H= 13 KM, M=5.8
NEW HEBRIDES ISLANDS

MIN MAY 26 02 28
WDC 02 28 10.0 *E 28 03
JAS 02 28 11.5
USGS 02 15 26.4, 17.8S, 167.5E, H= 31 KM, M=5.2
NEW HEBRIDES ISLANDS

SAC MAY 26 05 58 42.2 C
BKS 05 58 43.5 C
MICRON PERIOD
PZ 0.09 0.7
PRI 05 58 43.6 C
MHC 05 58 44.0 C
FRI 05 58 48.5
JAS 05 58 49.3 C
MIN 05 58 52.1 C
WDC 05 58 51.0 C *E 59 06
MNV 05 58 58.4 C
FIJI ISLANDS AREA
USGS 05 47 36.9, 20.8S, 178.5W, H=565 KM, M=5.7

WDC MAY 26 11 36 59.2
FRI 11 37 01.5
JAS 11 37 00.5
MIN 11 37 00.9
MNV 11 37 09.3
USGS 11 24 14.0, 17.7S, 167.7E, H= 19 KM, M=4.6
NEW HEBRIDES ISLANDS

WDC MAY 27 04 50 47.1 C
MIN 04 50 51.8 C *E 51 00
BKS 04 51 02 D 58 51 *I 51 06
*E 51 10 *E 51 14 *E 59 32
L 05 11 LR 07 42
MICRON PERIOD
PZ 1.7 8
MAXR(Z) 3.15 20
MAXH(N) 1.4 20
MAXH(E) 2.7 20
JAS 04 51 08.4
MNV 04 51 15.5 C
*E 51 30

FRI 04 51 15.5
MAG 5.2, DIST(DEG) 56
USGS 04 41 23.6, 50.8N, 157.3E, H= 47 KM, M=5.4
KURIL ISLANDS

MNV MAY 27 05 06 51.0
PRI 05 06 51.0
JAS 05 06 59.0
MIN 05 06
*E 07 22
USGS 05 01 11.3, 17.3N, 98.9W, H= 50 KM, M=5.3
GUERRERO, MEXICO

FHC MAY 27 14 06 58
WDC 14 07 04
BKS 14 07 27.1 C *E 12 08 LR 14 40
JAS 14 07 32
MHC 14 07 33
PRI 14 07 47
USGS 14 01 43.5, 60.3N, 146.0W, H= 21 KM, M=5.5
SOUTHERN ALASKA

MNV MAY 29 19 24 13.0 C
FRI 19 24 22.4
JAS 19 24 41.2 25 32
BKS 19 25
*E 25 09
MAG 4.0, PAHRANAGAT RIDGE
USGS 19 23 32.8, 36.8N, 115.9W, H= 11 KM, M=4.0
CALIFORNIA-NEVADA BORDER REGION

WDC MAY 30 01 02 12.0
MIN 01 02 20.1
MNV 01 03 00.7 *I 02 34
BKS 01 03
*E 05 14
USGS 00 59 56.1, 49.1N, 128.4W, H= N KM, M=4.8
VANCOUVER ISLAND REGION

WDC MAY 31 02 06 03.9
MIN 02 06 09.2
BKS 02 06
MHC 02 06 *E 06 20
JAS 02 06 26.0 *E 06 24
MNV 02 06 33.0
USGS 01 57 03.2, 54.0N, 159.2E, H=111 KM, M=4.9
NEAR EAST COAST OF KAMCHATKA

FHC MAY 31 03 39 *E 39 50
WDC 03 39 50.4 C
MIN 03 39 52.4 C
BKS 03 40 04.3
MNV 03 40 04.5 C
JAS 03 40 05.0
MHC 03 40 07.0
FRI 03 40 10
PRI 03 40 13.8
EASTERN KAZAKH SSR
USGS 03 26 57.4, 50.0N, 78.8E, H= 0 KM, M=5.9

FHC MAY 31 07 55
BKS 07 55 12 *E 55 12
*E 05 16 *E 14 26 LR 17 00
MICRON PERIOD
PZ 1.2 9
MAXR(Z) 2.3 20
MAXH(N) 1.25 20
MAXH(E) 1.9 20
JAS 07 55 17.5
WDC 07 55 17.9
MNV 07 55 27.0
MAG 5.2, DIST(DEG) 75
USGS 07 43 38.5, 14.9S, 177.3W, H= N KM, M=5.?
FIJI ISLANDS REGION

PRI MAY 31 14 07
FRI 14 07 *E 07 52
MNV 14 08 *E 07 53
JAS 14 08 *E 08 00
MHC 14 08 *E 08 06 *E 12 21
BKS 14 08 20 *E 08 12
11 02
MICRON PERIOD
PZ 6.8 12
PE 5.5 16
MIN 14 08 40.1 *E 13 28
WDC 14 08 *E 08 52
FHC 14 09 *E 09 02
MAG 6.3, DIST(DEG) 16
GULF OF CALIF.
USGS 14 04 59.9, 27.2N, 111.2W, H= N KM, M=5.3

PRI JUN 01 06 38 38.5
JAS 06 38 50.0
MNV 06 38 50.5
WDC 06 39 13.0
USGS 06 30 12.4, 8.9S, 108.8W, H= N KM, M=4.9
NORTHERN EASTER ISLAND CORDILLERA

WDC JUN 01 20 31
MNV 20 31 *E 31 58
MIN 20 32 01.0 *E 31 59
JAS 20 32
*E 32 12
USGS 20 22 23.0, 55.3N, 35.3W, H= N KM, M=4.7
NORTH ATLANTIC OCEAN

MNV JUN 01 21 20 47.7
JAS 21 20 55.2
WDC 21 21 13.2
USGS 21 11 26.1, 2.6S, 80.2W, H= 14 KM, M=4.9
NEAR COAST OF ECUADOR

JAS JUN 02 12 28 58.0
WDC 12 29 00
MIN 12 29 01.8
MHC 12 29 *E 29 07
PRI 12 29 *E 29 07
MNV 12 29 08.0
USGS 12 17 22.9, 16.6S, 173.0W, H= 7 KM, M=5.?
TONGA ISLANDS

MNV JUN 02 23 12 36.2 D
PRI 23 12 *E 12 41
JAS 23 12 46.0
MHC 23 12 50.6
BKS 23 12 55.6
MICRON PERIOD
PZ 0.06 0.9
WDC 23 13 03.1 D *E 48 42
FHC 23 13 13.9
USGS 23 03 46.2, 5.3N, 76.9W, H= 64 KM, M=5.2
COLOMBIA

JAS JUN 03 06 26 04.7 D
WDC 06 26 06.5
MIN 06 26 *E 26 09
MNV 06 26 15.0
USGS 06 14 38.5, 15.4S, 173.3W, H= N KM, M=5.4
TONGA ISLANDS

JAS JUN 03 15 18 07.1 C
WDC 15 19 *E 19 05
USGS 14 59 22.8, 52.5S, 13.1E, H= N KM, M=5.1
SOUTHWEST OF AFRICA

SAO JUN 04 04 25 16.4
BKS 04 25 17.2 C 34 17 *PP 26 21 *SP 26 48 *E 39 00
*E 44 00
MICRON PERIOD
PZ 0.06 1.0
PRI 04 25 17.9 *I 26 26 *E 34 26
MHC 04 25 18.1 *I 26 19
FHC 04 25 21.9
FRI 04 25 23.6
JAS 04 25 23.8 D *PP 26 27 *I 28 11 *E 34 31
*E 52 58
WDC 04 25 25.2 D *PP 26 29 *I 28 15

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                04 25 27.1                *PP  26 30    *E  52 49
MIN             04 25 34.0  D             *PP  26 41    *I  28 27
MNV                     USGS  04 14 15.9, 15.8S, 175.1W, H=276 KM, M=6.0
                              TONGA ISLANDS

                            *E  25 27
MNV JUN 04      15 25
                15 25 37.9  *I  25 49
JAS             15 25 44.8
WDC                     USGS  15 14 03.4, 10.8N,  42.6W, H= N  KM, M=5.0
                              NORTH ATLANTIC RIDGE

WDC JUN 05      05 32 35.4
JAS             05 32 37.6
MIN             05 32 38.3
MNV             05 32 48.1
                        USGS  05 20 16.7, 14.6S, 167.3E, H=159 KM, M=5.0
                              NEW HEBRIDES ISLANDS

BKS JUN 05      08 29
                            *E  29 49
MHC             08 29 46.1
FRI             08 29 54.1
JAS             08 29 54.5
WDC             08 29 56.2
MIN             08 29 58.0
MNV             08 30 03.8
                        USGS  08 18 24.9, 20.7S, 177.7W, H=345 KM, M=4.8
                              FIJI ISLANDS REGION

JAS JUN 05      22 12 14.6
WDC             22 12 17.5
MNV             22 12 25.7
                        USGS  22 00 49.2, 15.0S, 173.8W, H= N  KM, M=5.0
                              TONGA ISLANDS

MNV JUN 06      11 39 00.6
FRI             11 39 00.7
JAS             11 39 06.2
MHC             11 39 08.8
WDC             11 39 20.8
PHC             11 39 28.5
                        USGS  11 27 26.2, 21.4S,  68.5W, H=116 KM, M=5.1
                              CHILE-BOLIVIA BORDER REGION

MNV JUN 06      14 40 38.0  C
FRI             14 40 49.0
JAS             14 40 58.5
PRI             14 41 00.6
SAO             14 41 08.7
MHC             14 41
                            *E  41 16
                        USGS  14 40 00.0, 37.0N, 116.0W, H= 2  KM, M=4.4
                              SOUTHERN NEVADA

BKS JUN 06      18 28
                            *E  39 32   *E  45 50   *E  52 30
WDC             18 28 34.6
JAS             18 28 43.5  *E  32 40
MNV             18 28 52.4
                        USGS  18 15 33.4,  2.9S, 149.1E, H= 37 KM, M=5.3
                              NEW IRELAND REGION

BKS JUN 06      20 12
                            *E  12 04
JAS             20 12 11.0  D
WDC             20 12 12.7
MIN             20 12
                            *E  12 15
MNV             20 12 21.4  D
                        USGS  20 00 45.0, 15.2S, 173.5W, H= N  KM, M=5.2
                              TONGA ISLANDS

BKS JUN 07      06 59
                            *E  08 40   *E  09 22   *E  15 24
                            *E  16 16
                            *E  59 08
MHC             06 59
FRI             06 59 13.0
JAS             06 59 13.6  C
WDC             06 59 14.7  C
PHC             06 59 16.8
MNV             06 59 24.0  C
                        USGS  06 47 36.2, 19.4S, 175.3W, H= N  KM, M=5.2
                              TONGA ISLANDS

JAS JUN 07      22 40
                            *E  40 16
WDC             22 40 19.2
FRI             22 40
                            *E  40 21
MNV             22 40 24
                        USGS  22 28 26.1, 24.3S, 177.5W, H=280 KM, M=4.6
                              SOUTH OF FIJI ISLANDS

MNV JUN 07      22 57 11.3
JAS             22 57 19.8
MHC             22 57
                            *E  57 25
BKS             22 57       *E  57 28   LR   12 00
                    04 36
FRI             22 57       *E  57 38
WDC             22 57       *E  57 40
PHC             22 57       *E  57 59
                        USGS  22 48 48.5,  5.7N,  82.6W, H= N  KM, M=5.4
                              SOUTH OF PANAMA

WDC JUN 08      14 14 20
JAS             14 15 04
                        USGS  14 13 27.5, 42.8N, 126.2W, H= 33 KM, M=4.1
                              OFF COAST OF OREGON

JAS JUN 08      15 04 10
                            *E  04 55
WDC             15 04 25.0  D
                        USGS  14 52 24.2, 22.7S,  68.6W, H=106 KM, M=5.0
                              NORTHERN CHILE

WDC JUN 08      17 28 24.0
JAS             17 28 24.3
MNV             17 28 33
                        USGS  17 15 25.1,  7.2S, 155.1E, H= 33 KM, M=5.1
                              SOLOMON ISLANDS

                            *E  08 46
MHC JUN 08      22 08
WDC             22 08 46.2
MIN             22 08 48.8
JAS             22 08 49.0
                            *E  08 52
FRI             22 08       *E  09 08
MNV             22 08
                        USGS  21 56 05.2,  9.9S, 160.7E, H= 34 KM, M=5.4
                              SOLOMON ISLANDS

                            *E  12 57
MHC JUN 09      03 12
MNV             03 13 12.8
JAS             03 13 03.0
WDC             03 13 05.0
MIN             03 13 06.1
                        USGS  03 01 33.4, 16.5S, 172.7W, H= N  KM, M=5.1
                              SAMOA ISLANDS REGION

MNV JUN 09      10 50 58.0
JAS             10 51 04.6
MIN             10 51 20.2
WDC             10 51 22.5
                            *E  51 26
MHC             10 51       5.8S,  80.9W, H= 52 KM, M=5.1
                        USGS  10 41 22.1,
                              NEAR EAST COAST OF NORTHERN PERU

MNV JUN 09      14 25 38.7
JAS             14 25 45.6
MHC             14 25 48.4
                            *E  26 35
MIN             14 26 00.5
WDC             14 26 03.7  *E  26 13
PHC             14 26       5.8S,  81.0W, H= 50 KM, M=5.7
                        USGS  14 16 03.7,
                              NEAR COAST OF NORTHERN PERU

FRI JUN 09      22 28 14.5  C   28 44   *E  28 28
MNV             22 28 20.5             *E  28 30   *E  28 33
SAO             22 28 27
JAS             22 28
MHC             22 28 32.5             *E  29 55
BKS             22 28 45.5  C          *E  28 57
WDC             22 28

MIN             22 28
                            *I  29 11   *I  30 28
                        USGS  22 27 33.7, 35.5N, 117.4W, H= 8  KM, M=4.0
                              CENTRAL CALIFORNIA

FRI JUN 10      06 44 50.8  C           *E  45 20
MNV             06 44 56.8  D
SAO             06 45 03.5
JAS             06 45 04.3
MHC             06 45 08.9              *I  45 09
BKS             06 45 21.5
MIN             06 45 44.9  D           *E  46 28
WDC             06 46                   *I  45 55   *I  47 11
                                        *E  46 03
                        USGS  06 44 09.9, 35.5N, 117.4W, H= 8  KM, M=4.2
                              CENTRAL CALIFORNIA

FHC JUN 10      07 35 18.4  C
MNV             07 35 26.5
WDC             07 35 33.2  C
MIN             07 35 42.8  C   36 12   *I  36 16
BKS             07 35 51.3  C           *E  36 00   *E  36 30
MHC             07 36 00.7              *I  36 02
JAS             07 36 07.5  D
SAO             07 36 07.7
FRI             07 36 23.0
                        MAG 4.4, CAPE MENDOCINO

JAS JUN 11      00 27 13.9  D           *E  27 48
MHC             00 27 15.9
WDC             00 27 26.9
                        USGS  00 15 04.3, 28.3S,  67.4W, H=132 KM, M=5.1
                              LA RIOJA PROVINCE, ARGENTINA

MNV JUN 11      12 41 19.5  C           *E  41 24   *E  41 44
FRI             12 41 40.0              *E  41 45
JAS             12 41 43.7      42 52   *E  41 54   *E  42 02
MHC             12 42                   *E  42 02
MIN             12 42                   *E  42 05   *I  42 26   *I  43 29
SAO             12 42                   *E  42 10
WDC             12 42                   *E  42 15
BKS             12 42                   *E  42 20
                        MAG 4.1, EAST OF TNP
                        USGS  12 40 40.9, 37.7N, 115.3W, H= 18 KM, M=4.4
                              SOUTHERN NEVADA

JAS JUN 11      21 08 29.5
MNV             21 08 31.5
WDC             21 08 47.0
                        USGS  20 58 09.2, 24.3S, 116.0W, H= N  KM, M=4.6
                              EASTER ISLAND CORDILLERA

MHC JUN 11      22 27                   *E  27 57
FRI             22 28                   *E  28 01
JAS             22 28 02.0
WDC             22 28 04.5
MNV             22 28 10
MIN             22 28                   *E  28 10
                        USGS  22 15 12.5, 29.9S, 178.5W, H= 16 KM, M=4.7
                              KERMADEC ISLANDS

JAS JUN 12      06 12 12.0
MNV             06 12 14.6
WDC             06 12                   *E  12 28
                        USGS  06 01 57.1, 23.7S, 115.3W, H= N  KM, M=4.6
                              EASTER ISLAND CORDILLERA

MNV JUN 12      13 52 23.4  C           *E  01 17
FRI             13 52                   *E  52 24
JAS             13 52 30.6  C           *E  01 50
BKS             13 52 48        LR  00 20
                        USGS  13 46 41.4, 16.8N,  99.2W, H= 49 KM, M=5.0
                              NEAR COAST OF GUERRERO, MEXICO

WDC JUN 12      16 18 55.8
JAS             16 19 07.5
                        USGS  16 08 58.7, 64.9N,  20.8W, H= 16 KM, M=4.8
                              ICELAND

MNV JUN 12      16 35 25.6
FRI             16 35 31
JAS             16 35 37.0
MHC             16 35 43.4
BKS             16 35 46.5      43 56   SS  48 12  L   SS 44   *E  54 00
                            MICRON      PERIOD
                        MAXR(Z)  9.1        20
                        MAXH(N) 12.2        20
                        MAXH(E)  9.6        20
WDC             16 35 50.9
PHC             16 36 00.3
                        DISTANCE(DEG) 61
                        OFF NORTHERN COAST OF VENEZUELA
                        USGS  16 25 47.6, 10.6N,  61.4W, H= 14 KM, M=5.7

WDC JUN 12      16 53 18.9
MHC             16 53 40.0
JAS             16 53 42.8
MNV             16 53 51.9
                        USGS  16 46 34.3, 52.4N, 170.2W, H= 46 KM, M=5.2
                              FOX ISLANDS, ALEUTIAN ISLANDS

WDC JUN 12      18 05 06.6
MNV             18 05 08
PHC             18 05 09
JAS             18 05 16.3
FRI             18 05 21.4
MHC             18 05 24
BKS             18 05                   *E  05 53
                        USGS  17 55 08.7, 64.8N,  21.0W, H= 13 KM, M=5.5
                              ICELAND

MHC JUN 12      19 14 30.6
JAS             19 14 33
MNV             19 14 34.8
WDC             19 14 53.4

MHC JUN 12      21 40 01.8
WDC             21 40 02.7
PRI             21 40 04.2
JAS             21 40 06.5
                        SOLOMON ISLANDS REGION
                        USGS  21 27 21.2, 10.2S, 160.9E, H= N  KM, M=5.4

MNV JUN 13      12 03 01.0              *E  03 01
PRI             12 03
JAS             12 03 09
MHC             12 03 12
WDC             12 03 33
PHC             12 03 44
                        USGS  11 57 17.3, 16.8N,  97.9W, H= 96 KM, M=5.0
                              OAXACC, MEXICO

BKS JUN 14      18 50 30.5
                            MICRON      PERIOD
                        PZ      0.04        1
PRI             18 50 30.5
MHC             18 50 30.8
PHC             18 50 34.7
FRI             18 50 35.6
JAS             18 50 36.0  C
WDC             18 50 37.6  C
MNV             18 50 44.8  C
                        FIJI ISLANDS
                        USGS  18 39 18.8, 22.1S, 179.7W, H=603 KM, M=5.1

FHC JUN 15      02 44 36.1  C           *E  46 12
WDC             02 44 43.6  C           *E  46 21   *E  50 12
BKS             02 44 58.6  C   51 12   *PP  45 35  PCP  46 40   *SS 52 29
                                        SS  54 35   *E  55 38
                            MICRON      PERIOD
                        PZ      0.41        1
MHC             02 45 04.2  C           *E  46 46
JAS             02 45 07.2  C           *E  46 51   *E  50 24
SAO             02 45 07.5
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                02 45 15.1  C
FRI             02 45 15.4  C
MNV             02 45 15.6  C
PRI                   USGS  02 37 13.8, 52.3N, 178.8E, H=157 KM, M=5.7
                            RAT ISLANDS, ALEUTIAN ISLANDS

WDC JUN 17      16 47 33.0
JAS             16 47 50.0
                      USGS  16 36 37.9, 41.3N, 142.5E, H= 60 KM, M= .
                            HOKKAIDO, JAPAN REGION
                        *E  43 11

BKS JUN 18      08 43
JAS             08 43 15.4
WDC             08 43 17.3
MNV             08 43 23.7
                      USGS  08 31 38.4, 24.8S, 179.9E, H=506 KM, M=5.0
                            SOUTH OF FIJI ISLANDS
                        *E  18 55
                        *E  19 18

WDC JUN 19      03 18
MHC             03 19
JAS             03 19 18.1
MNV             03 19 22.1
                        *E  19 26
FRI             03 19
PRI             03 19 28.8
                      USGS  03 09 39.0, 63.2N, 150.9E, H= N  KM, M=5.0
                            EASTERN SIBERIA
                        *E  12 30  LQ   19 58  LR   21 20

BKS JUN 19      15 12
MHC             15 12 33.2
PRI             15 12 36.7
WDC             15 12 39.3
JAS             15 12 42.1
                      USGS  15 05 42.0, 19.4N, 155.4W, H= 10 KM, M=5.1
                            HAWAII. MINOR DAMAGE

MNV JUN 19      16 00 34.4  C
FRI             16 00 46.7  C
JAS             16 00 56.4  C
PRI             16 01 00.5
SAO             16 01 06.0
MHC             16 01 08.2  C
BKS             16 01 14.6  C
WDC             16 01 30.6  C
                      USGS  15 59 59.9, 37.2N, 116.2W, H= 5  KM, M=5.0
                            SOUTHERN NEVADA

FHC JUN 19      18 27 17.0
WDC             18 27 34.0

FHC JUN 19      19 11 44.0
WDC             19 12 02.0

FHC JUN 29      19 22 24.8  C
WDC             19 22 39.2  C
BKS             19 23 04    C   24 12    *E  24 16
MHC             19 22                    *E  23 14
JAS             19 23 18.0
FRI             19 22                    *E  23 34
PRI             19 23                    *E  23 37
MNV             19 23 35.5
                      OFF OREGON COAST
                      USGS  19 21 48.9, 41.9N, 126.8W, H= N  KM, M=4.9

FHC JUN 19      19 33 03.7
WDC             19 33 20.0
JAS             19 33                    *E  34 02
                      OFF OREGON COAST

FHC JUN 20      00 28 26.3
WDC             00 28 42.5               *E  29 30
MHC             00 29                    *E  29 19
JAS             00 29 22.0
FRI             00 29                    *E  29 38
BKS             00 30                    *E  30 20
                      OFF OREGON COAST
                      USGS  00 27 51.0, 41.8N, 126.8W, H= N  KM, M=4.4

JAS JUN 20      02 57 06.4
                      USGS  02 44 19.8,  3.1N,  31.3W, H= N  KM, M=5.0
                            CENTRAL MID-ATLANTIC RIDGE

SAO JUN 20      06 47 27.3  C
PRI             06 47 28.4  C
BKS             06 47 28.6  C
                  MICRON      PERIOD
                PZ  0.13        0.9
MHC             06 47 29.0  C
FHC             06 47 32.8
FRI             06 47 33.0  C
JAS             06 47 33.6  C
WDC             06 47 35.7  C           *E  49 36
MNV             06 47 41.8  C           *E  49 34
                      USGS  06 35 52.7, 26.0S, 179.3E, H=540 KM, M=5.3
                            SOUTH OF FIJI ISLANDS

MNV JUN 20      07 50 23.4  C
PRI             07 50
JAS             07 50 30.7              *E  50 25
MHC             07 50                   *E  50 40
                      USGS  07 44 43.1, 16.9N,  99.1W, H= 66 KM, M=4.7
                            NEAR COAST OF GUERRERO, MEXICO

JAS JUN 20      09 10 01.0
MNV             09 10 04.0
                      USGS  09 03 20.9, 43.9S,  88.6W, H= N  KM, M=4.8
                            SOUTHERN PACIFIC OCEAN

BKS JUN 20      17 03 42.0  D
MHC             17 03 42.3
PRI             17 03 42.3
FRI             17 03 42.3
JAS             17 03 48.2
WDC             17 03 48.7  D
MNV             17 03 50.6
                17 03 55.2  D
                      USGS  16 52 22.3, 15.2S, 173.5W, H= 31 KM, M=5.4
                            TONGA ISLANDS

MNV JUN 21      06 19 27.0  C
FRI             06 19
JAS             06 19 39.9              *E  19 34
                      USGS  06 10 48.1, 18.9N,  67.0W, H= 46 KM, M=4.9
                            MONA PASSAGE

BKS JUN 21      07 37 43.5
PRI             07 36 44.0  C
FRI             07 36 49.8
JAS             07 36 50.0  C
WDC             07 36 50.9
MNV             07 37 00.0  C
                      USGS  07 25 45.7, 15.0S, 176.2W, H=314 KM, M=4.9
                            FIJI ISLANDS REGION

MNV JUN 21      08 56 23.9
WDC             08 56 24.6
JAS             08 56 34.8
                      USGS  08 46 45.0, 57.8N,  32.6W, H= N  KM, M=4.8
                            NORTH ATLANTIC OCEAN

FHC JUN 21      21 07 56.5
WDC             21 08 04.1
BKS             21 08 19.0

JAS               PZ  MICRON      PERIOD
MHC             21 08 23.1  0.06    1.0
MNV             21 08 23.3  D
FRI             21 08 25.7  D
PRI             21 08 28.0
                21 08 32.3  D
                      EASTERN RUSSIA
                      USGS  20 56 48.7, 56.5N, 117.3E, H= N  KM, M=5.3
                            EAST OF LAKE BAIKAL

WDC JUN 22      05 23 58.5
JAS             05 24 40.0

PRI JUN 22      07 23 08.9
MHC             07 23 09.8
BKS             07 23 10.0  C
                  MICRON      PERIOD
                PZ  0.06        0.7
FRI             07 23 13.8
FHC             07 23 14.7
JAS             07 23 14.8  D
WDC             07 23 17.7  D
MNV             07 23 23.0  D
                      KERMADEC ISLANDS REGION
                      USGS  07 10 58.3, 27.7S, 178.0W, H=164 KM, M=5.2

PRI JUN 22      08 22 41.9                  P↑P↑   52 30
FRI             08 22 45.8  C               P↑P↑   52 29
SAO             08 22                       *E     22 47
MHC             08 22 51.0  C               P↑P↑   52 30
JAS             08 22 53.7  C               *E     24 36  P↑P↑   52 26
BKS             08 22 54.5        31 14     *I     22 56  SS     35 12  LQ  38 00
                                            LR     41 10
                  MICRON      PERIOD
                PZ  0.47        2.0
                MAXR(Z) 13.2    20
                MAXH(N)  5.3    20
                MAXH(E)  2.3    20
MNV             08 22 56.0  C               P↑P↑   52 28
WDC             08 23 11.8  C               P↑P↑   52 28
FHC             08 23 15.7
                      MAG 5.6, DIST(DEG) 62
                      EASTER ISLANDS
                      USGS  08 12 47.5, 22.1S, 113.6W, H= N  KM, M=5.9

WDC JUN 22      10 11 35.3                  *E     13 18
MHC             10 11                       *E     11 40
JAS             10 11 45.8
MNV             10 11 55.5
                      USGS  09 59 53.0, 20.8S, 174.4W, H= N  KM, M=5.1
                            TONGA ISLANDS

JAS JUN 22      13 15 34
MNV             13 15 41.5
                      USGS  13 03 39.1, 29.8N, 141.2E, H= 69 KM, M=4.6
                            SOUTH OF HONSHU, JAPAN

WDC JUN 22      19 33 16.3                  *E  33 44
BKS             19 33 21.5
                  MICRON      PERIOD
                PZ  0.04        0.8
JAS             19 33 28.5                  *E  33 57
MNV             19 33 37.0                  *E  34 05
                      USGS  19 21 21.5, 18.8N, 146.0E, H=103 KM, M=5.1
                            MARIANA ISLANDS

JAS JUN 22      00 45 38.9
WDC             00 45 52.6
                      USGS  00 33 18.0, 32.3S,  69.3W, H=126 KM, M=4.9
                            MENDOZA PROVINCE, ARGENTINA

WDC JUN 23      05 21 32.3
JAS             05 21 56.7
MNV             05 22 05.5
                      USGS  05 14 53.8, 52.5N, 169.0W, H= 42 KM, M=5.0
                            FOX ISLANDS, ALEUTIAN ISLANDS

FHC JUN 24      00 39 58.3  D   40 02
MIN             00 40 23.4  C   40 48
BKS             00 40 45.6  C               *E  41 21
MHC             00 40 53.7
JAS             00 40 54.5
SAO             00 41 00.5
MNV             00 41                       *E  41 09
PRI             00 41                       *E  41 14
                      MAG 4.0, NEAR ARCATA, CALIF

WDC JUN 24      19 12 49.7  C               PP     15 46
MIN             19 12 52.9
BKS             19 12 58.4
                  MICRON      PERIOD
                PZ  0.25        0.8
MHC             19 13 02.3
SAO             19 13 04.0
JAS             19 13 04.6  C               PP     16 09
PRI             19 13 09.5
FRI             19 13 09.7
MNV             19 13 11.4
                      USGS  19 01 40.0, 32.8N, 137.0E, H=373 KM, M=5.3
                            SOUTH OF HONSHU, JAPAN

FRI JUN 24      20 53 20.5                  PKS    56 47
PRI             20 53 21.0                  PKS    56 48
JAS             20 53 22.5  C               PKS    56 50
MHC             20 53 23.4                  PKS    56 51
BKS             20 53 24.4                  PKS    56 51
                  MICRON      PERIOD
                PZ  0.14        1.0
MIN             20 53 26.3                  *I     53 54  PKS  56 53
WDC             20 53 27.3                  PKS    56 54
                      SOUTH SANDWICH ISLANDS
                      USGS  20 34 35.4, 55.8S,  27.5W, H= 40 KM, M=6.0

WDC JUN 24      21 48 37.4                  *E     52 39   *E   59 05
JAS             21 48 44.8                  *E     52 45
MNV             21 48 53.3
                      USGS  21 35 09.8,  2.3S, 141.1E, H= N  KM, M=5.7
                            NEAR NORTH COAST OF NEW GUINEA

WDC JUN 25      03 56 13.5
JAS             03 56 33.9  C
MNV             03 56 40.7
                      USGS  03 45 54.1, 44.5N, 144.5E, H=189 KM, M=4.7
                            HOKKAIDO, JAPAN REGION

WDC JUN 25      04 24 50.0  D
MIN             04 24 51.8
BKS             04 24 58.5  D
                  MICRON      PERIOD
                PZ  0.09        0.8
MHC             04 24 59.2  D
PRI             04 25 05.7
FRI             04 25 07.2
MNV             04 25 10.8  D
                      USGS  04 13 03.7, 21.0N, 144.4E, H=173 KM, M=5.5
                            MARIANA ISLANDS REGION

MNV JUN 25      05 07 13.0                  *E  10 12
FRI             05 07 16.4                  *E  18 28
PRI             05 07 16.8                  *E  18 24
JAS             05 07 24.3                  *E  10 14   *E  14 30
MIN             05 07 45.8                                          *E  16 32
WDC             05 07 49.7                              *E  15 00
BKS             05 07                       *E  12 50
                                            *E  16 58
                      USGS  05 00 58.9, 15.5N,  95.4W, H= 35 KM, M=5.3
                            NEAR COAST OF OAXACA, MEXICO

FRI JUN 25      08 50 58
MNV             08 50 58.5                  *I  51 06  PCP  53 56
PRI             08 51 00.0
JAS             08 51 06.5                  *E  51 13  PCP  54 00
MHC             08 51 11.3
MIN             08 51 26.2
WDC             08 51 31.3                  PCP    54 07   *E   59 46
BKS             08 51                       *E     56 58
                      USGS  08 44 45.3, 15.4N,  95.5W, H= 10 KM, M=5.6
                            NEAR COAST OF OAXACA, MEXICO

WDC JUN 25      17 42 07.6                  *E  42 32   *E  46 07   *E  05 50
BKS             17 42 10.5                  *E  47 18   *E  53 00   *E  22 43
                                            *E  07 28   *E  14 04
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MHC                 17 42 11.7                    *E  45 20
JAS                 17 42 12.3  C
FRI                 17 42 13.2                    *E  42 46    *E  46 20
MNV                 17 42 14.0
                    17 42 14.7  C                 *E  46 23
                          USGS                    *E  46 30
                    17 22 19.3, 26.1S,  84.3E, H= N  KM, M=6.2
                    SOUTH INDIAN OCEAN

WDC JUN  25         22 33 56
JAS                 22 34 02
BKS                 22 34
                          USGS                    *E  57 32
                    22 23 46.2, 64.6N,  17.7W, H= 76 KM, M=5.1
                    ICELAND

PRI JUN  26         13 55
JAS                 13 55 26.4                    *E  55 15
MNV                 13 55 27.1
MHC                 13 55
BKS                 13 55 32.0      05 24   SS    10 25  LQ   16 19
WDC                 13 55 41.9
MIN                 13 55 42.4
FHC                 13 55 47
                          USGS
                    13 43 35.3, 36.6S,  98.2W, H= N  KM, M=5.4
                    SOUTHERN PACIFIC OCEAN

SAO JUN  26         23 44 53.9  D
PRI                 23 44 55.4  D
BKS                 23 44 55.4  D   54 30
                                MICRON      PERIOD
                          PZ      0.18        0.8
MHC                 23 44 55.7  D
FHC                 23 44 59.5  D
FRI                 23 45 00.2  D
JAS                 23 45 00.7  D             *E  47 02
WDC                 23 45 02.4  D             *E  47 02
MIN                 23 45 03.2
MNV                 23 45 09.2  D
                          USGS
                    23 33 28.7, 23.9S, 179.2E, H=551 KM, M=5.4
                    SOUTH OF FIJI ISLANDS

FHC JUN  27         02 00 42.3
WDC                 02 00 47.7
MIN                 02 00
BKS                 02 00 58.0      10 18   SS    15 00  LQ   20 44  LR   23 40
                                MICRON      PERIOD
                          PZ      0.33        1.5
                          MAXR(Z) 6.5         20
                          MAXH(N) 9.0         20
                          MAXH(E) 6.0         20
JAS                 02 01 04                  *E  04 01
MHC                 02 01                     *E  01 01
PRI                 02 01 09.0
FRI                 02 01 09.8
MNV                 02 01 10.8
                    MAG 6.1, DIST(DEG) 78
                          USGS  01 49 08.1, 33.8N, 139.2E, H= 16 KM, M=5.7
                                SOUTH OF HONSHU, JAPAN

BKS JUN  27         03 43 37.1
                                MICRON      PERIOD
                          PZ      0.07        0.9
MHC                 03 43 37.5
JAS                 03 43 42.3
WDC                 03 43 44.2  C
MIN                 03 43 46.5
MNV                 03 43 50.5  C
                          USGS  03 32 02.5, 25.3S, 179.9E, H=500 KM, M=5.0
                                SOUTH OF FIJI ISLANDS

WDC JUN  27         04 29 53.5
                          USGS  04 18 11.9, 33.9N, 139.1E, H= N  KM, M=4.3
                                SOUTH OF HONSHU, JAPAN

FHC JUN  27         07 58 57
BKS                 07 59 00.2      09 28   *E  11 00  SS   16 00  *E  19 28
                                                LQ  22 58  LR   26 36
                                MICRON      PERIOD
                          MAXR(Z) 8.9         20
                          MAXH(N) 1.8         20
                          MAXH(E) 6.5         20
WDC                 07 59 02                  *E  02 31
MIN                 07 59 04.6
PRI                 07 59 07.5
JAS                 07 59 08.5                *E  02 41    *E  09 38
FRI                 07 59 11                  *E  02 46
MNV                 07 59 16.7  C
                    MAG 5.9, DIST(DEG) 88
                          USGS  07 46 11.9,  4.7S, 152.5E, H= 70 KM, M=6.1
                                NEW BRITAIN REGION

BKS JUN  27         12 41 58.0      54 16   SS  59 00    *E  02 36  LQ  06 00
                                            LR  09 00
                                MICRON      PERIOD
                          MAXR(Z) 1.25        20
                          MAXH(N) 0.43        20
                          MAXH(E) 1.1         20
WDC                 12 41 58
JAS                 12 42 05
MNV                 12 42 13
                          USGS  12 29 08.4,  6.6S, 154.7E, H= 50 KM, M=5.1
                                SOLOMON ISLANDS

BKS JUN  27         17 00 36                  *E  06 16
                                MICRON      PERIOD
                          MAXR(Z) 2.1         20
                          MAXH(N) 1.4         20
                          MAXH(E) 1.1         20
JAS                 17 00 45.5                *E  05 43
WDC                 17 00                     *E  00 56
                          USGS  16 47 51.2, 33.3S, 178.5W, H= N  KM, M=4.9
                                SOUTH OF KERMADEC ISLANDS

MNV JUN  27         18 59                     *E  59 10
JAS                 18 59 18.5
BKS                 18 59 20.0
                          USGS  18 46 25.7,  1.5N,  30.8W, H= N  KM, M=5.4
                                CENTRAL MID-ATLANTIC RIDGE

WDC JUN  27         23 27 39.7
JAS                 23 28 04.2
MNV                 23 28 13.0

JAS JUN  28         02 45 44.1
WDC                 02 45 45.0
                          USGS  02 32 50.3, 33.3S, 178.5W, H= 38 KM, M=5.0
                                SOUTH OF KERMADEC ISLANDS

JAS JUN  28         18 19 20.8
MNV                 18 19 29.7                *E  45 44
BKS                 18 19
                          USGS  18 06 35.2, 18.0S, 167.3E, H= 26 KM, M=5.1
                                NEW HEBRIDES ISLANDS

MHC JUN  30         08 46 20.5
PRI                 08 46 22.0      56 42   L   09 44  LR   12 40
BKS                 08 46 23
                                MICRON      PERIOD
                          PZ      0.13        1.0
                          MAXR(Z) 1.96        20
                          MAXH(N) 0.71        20
                          MAXH(E) 1.43        20
WDC                 08 46 25.5
JAS                 08 46 25.9                *I  46 38
MIN                 08 46 25.7                *E  46 26
FRI                 08 46
MNV                 08 46 34.5
                    NEW HEBRIDES ISLANDS REGION
                          USGS  08 33 46.5, 18.0S, 168.3E, H= 61 KM, M=5.7
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MODIFIED MERCALLI INTENSITY SCALE OF 1931
(Abridged)

I. Not felt except by a very few under especially favorable circumstances.

II. Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.

III. Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.

IV. During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls made cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.

V. Felt by nearly everyone; many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbance of trees, poles and other tall objects sometimes noticed. Pendulum clocks may stop.

VI. Felt by all; many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.

VII. Everybody runs outdoors. Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.

VIII. Damage slight in specially designed structures; considerable in ordinary substantial buildings with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Disturbed persons driving motor cars.

IX. Damage considerable in specially designed structures; well designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.

X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.

XI. Few, if any (masonry), structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipe lines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.

XII. Damage total. Waves seen on ground surfaces. Lines of sight and level distorted. Objects thrown upward into the air.