

APR 27 1955

COAST & GEODETIC SURVEY SEISMOLOGICAL BULLETIN



of
 1955 APR 27 The MANUSUOIRO SEISMOLOGICAL OBSERVATORY,
 for
 January , 1955.

Latitude 36° 32' 30" N.
 Longitude 138° 12' 32" E.
 Height(M.S.L.) 440 M.

Instrument	Comp.	M (Kg.)	T (Sec.)	V	v	g/T^2	M^2	T_g (Sec)	M/g
Wiechert	N	200	5.8	72	5.5	0.0140			
	E	200	5.7	67	5.4	.0071			
	Z	80	3.3	69	7.0	.0216			
1000 Kg. (C.M.O.type)	N	1000	27.0	104	2.8	0.0048			
	E	1000	29.3	104	2.9	.0034			
Galitzin	N		14.9				near	15.3	ordinary
	E		17.0				critical	15.3	damping
	Z		15				"	12.8	"

te	Phase (comp.)	Time (G.M.T.)	Remark
1	eP? (N) eS? (NE) eL? (N) eL (N)	17 ^h 02 ^m 56 ^s 12 15 28 22 33 20	
1	e (N) eL (NE) eL (Z)	18 12 04 17 18 20 15	51N., 178.5W. Andreanof Is., Aleutian Is. H=18 03 08 U.S.C.G.S.
3	ePKP(Z) esPP?(Z) ePKP?(NE?) e (E) e (N) PSPS?(N) e (E) S ₃ SS ₃ S?(N) SSS (E) e (E) e (E) e (E) e (N) e (E) e (N) e (Z) eLq (N) eLr (E) eLr (N) Lr (Z)	19 01 27 04 40 53 11 23 18 46 22 47 23 14 24 56 26 50 28 20 29 17 31 28 40 34 42 37 43 09 44 10 47 48 48 07 30	Near coast of Peru. h, about 60 km H= 18 41 50 U.S.C.G.S.
4	eP (Z) eS? (E) S (N) S? (Z) i (E)	12 09 03 47 48 50 53	
5	iP(Z)eP(N) eP (E) i (Z) i (N) i (E) PP? (N) PP (E) PPP? (E) iS (N) PS? (E) iSS (N) iSS (E) e (E) Lq? (E) Lr? (N) Lr (Z)	01 03 13 17 21 22 04 17 06 32 47 08 21 13 52 15 11 20 00 10 22 47 26 47 30 13 32 41	z:(+) 50S., 162.5E. Off coast of South Is., New Zealand. H=00 50 12 U.S.C.G.S.

ate	Phase (comp.)	Time (G.M.T.)	Remarks
5	eP (EZ) i (Z) S (N) S (E) Lq (NE) Lr (Z)	15 ^h 33 ^m 40 ^s 49 37 58 59 39 37 41 37	54,5N., 161E. Near east coast of Kamchatka. H= 15 28 18 U.S.C.G.S.
5	P (NEZ) PP? (NE) i (Z) PPP? (NE) iS (NE) i (NE) SS (N) Lq? (E) Lq? (N) Lr (N) Lr (Z) Lr (E)	17 58 42 18 00 31 02 20 24 06 50 07 28 11 08 13 02 19 16 41 17 29 41	16S., 167.5E. New Hebrides Is. H= 17 48 35 U.S.C.G.S.
5	P (Z) P (NE) PP? (N) i (E) PPP? (E) S (N) S? (E) i (E) i (Z) Lq (NE) Lr (E) Lr (Z)	23 52 15 17 54 01 57 56 31 00 00 25 32 01 02 07 12 18 09 36 10 06	16S., 167.5E. New Hebrides Is. H= 23 42 03 U.S.C.G.S.
6	eP (Z) eS? (N) eS (E) e (N) e (Z) L ₁ ? (E) Lr? (E) Lr (Z)	02 32 40 40 26 48 41 32 47 29 48 02 50 21 39	New Hebrides aftershock. H= 02 22 35 U.S.C.G.S.
6	eP? (NEZ) eS (E) Xi (N)	05 06 10 07 32 08 20	41.6N., 143.5E. h:20Km. Off southeast coast of Erimo-misaki, Hokkaido Japan; C.M.O.

	Phase (comp.)	Time (G.M.T.)	Remarks
6	eP (N) e (E) S (NE) i (E) L (NE)	09 ^h 58 ^m 21 ^s 10 04 06 06 23 08 24 13 05	16S., 167.5E. New Hebrides. aftershock. H=09 48 19 U.S.C.G.S.
7	eP (Z) S (NE) S (Z) e (E) e (N) e (N) L (E) L (N)	09 56 34 10 06 21 29 16 49 17 06 20 24 24 16 44	16.5S., 78E. Indian Ocean. H=09 44 28 U.S.C.G.S.
8	P (N) P (E) i (NEZ) i (N) i (N) iPPP (EZ) eS? (E) S? (Z) i (E) Lq (E) i (Z) Lr (Z) Lr (E)	07 43 03 08 27 44 20 46 12 20 50 27 35 53 27 56 46 57 29 59 27 38	11.5S., 166.5E. Santa Cruz Is. h; about 60 Km. H=07 33 36 U.S.C.G.S.
8	eP (NEZ) eS (NE) e (Z) e (N)	09 01 58 03 03 ^h 03 ^m 03 ^s 06 14	31.5N., 141E. Off south coast of Honshu. H=09 00 32 U.S.C.G.S.
9	eP (Z) e (NE) eS? (NE) L? (E) eL? (N)	07 55 21? 35 58 44 08 00 04 09	
11	P (NEZ) S (NE)	07 36 07 25	36.2N., 140.0E. h = 60 Km. South-west part of Ibaragi Pref. Japan. C.M.O.
11	P (NE) iS (NE) L (E)	13 51 36 54 12 34	27N., 127.5E. Ryukyu Is. H=13 48 11 U.S.C.G.S.
12	P (Z) i (Z) S (Z) i (Z)	07 19 12 26 46 20 08	37.2N., 141.6E. h=60 Km. Off east coast of Fukushima Pref. Japan. C.M.O.

Date	Phase (comp.)	Time (G.M.T.)	Remarks
13	iP (NEZ)	02 ^h 11 ^m 27 ^s $\begin{cases} N(-) \\ E(-) \\ Z(+) \end{cases}$	53N., 167.5W. Fox Is, Aleutian Is. H=02 03 43 U.S.C.G.S.
	epP (Z)	12 12	
	PPorPcP(Z)	13 09	
	pPPorPPP(Z)	46	
	eScP (Z)	16 39	
	S (NEZ)	17 20	
	Lq (E)	20 44	
	Lq (Z)	56	
	Lq (N)	21 03	
	Lr (Z)	23 41	
15	P (NEZ)	19 55 59	35N., 141E. Near east coast of Honshu, Japan. H=19 55 14 U.S.C.G.S.
	i (NEZ)	56 02	
	i (Z)	23	
	S (NEZ)	43	
	i (NEZ)	57 02	
17	P (NEZ)	02 22 23 $\begin{cases} N(-) \\ E(+) \\ Z(-) \end{cases}$	35.8N., 140.2E. h=35 Km. North part of Chiba pref. Japan. C.M.O.
	S (NE)	45	
17	eP (NE)	17 53 28	
	eS (NE)	57 13	
	i (NE)	33	
	eL (NE)	56	
18	e (E)	17 13 58	36.5S., 98.5W. Southeast of Easter I Is. H=16 51 26 U.S.C.G.S.
	e (E)	24 51	
	e (E)	28 55	
	L (E)	47 28	
	L (E)	54 21	
	L (E)	18 06 11	
18	eP (E)	19 53 45	Santa Cruz Is region. H=19 48 36 U.S.C.G.S.
	eS (E)	20 00 51	
	eSS? (E)	05 55	
	eL (E)	09 12	
20	e (NE)	04 13 23	
	e (E)	15 51	
	e (E)	21 34	
	eL? (E)	35 17	
21	eP (E)	14 26 33	53N., 168W. Fox Is, Aleutian Is. H=14 18 33 U.S.C.G.S.
	e (E)	27 37	
	eS (E)	32 17	
	e (E)	35 35	
	eL (E)	38 01	

Station	Phase (comp.)	Time (G.M.T.)	Remarks
21	P (NEZ) S (Z) S (NE)	18 ^k 01 ^m 44 ^s 02 04 05	36.8N., 139.8E. h=85Km. North part of Tochigi Pref. Japan. C.M.O.
23	eP (N) eS? (N) eL (E)	22 30 15 37 33 42 32	Near southwest coast of Java. H=22 21 14 U.S.C.G.S.
25	eP (EZ) e (NE) S (N) S (Z)	16 33 09 32 34 35	36.7N., 140.9E. h=40 Km. Kashimanada, Japan. C.M.O.
27	P (NE) e (E) S (NE) i (N)	16 17 45 18 05 48 20 14	42.4N., 140.7E. h:shallow Hokkaido, Japan. C.M.O.
27	eP (N) S (N) e (E) e (E)	18 48 45 57 24 58 21 19 08 08	17.5S., 177W. Fiji Is. region. h:about 400 km. H=18 38 20 U.S.C.G.S.
28	iP (Z) PP (E) S (NEZ) ScS? (E) ScS? (N) ScS? (Z) eL (Z) eL (NE)	17 10 54 Z(+) 12 49 17 32 20 54 21 03 06 23 21 25 02	33N., 82.5E. Tibet. H=17 02 33 U.S.C.G.S.
29	iP (NEZ) S (E) L (E) eLr (Z)	17 08 26 {N(-) E(-) Z(+)} 12 20 13 40 14 20	51.5N., 159.5E. Off southeast coast of Kamchatka. H=17 03 35 U.S.C.G.S.
1	P (NE) i (N) iS (E) L (NE)	16 05 40 44 08 42 09 20	46.5N., 153E. Kurile Is. H=16 02 07 U.S.C.G.S.

K. Sagisaka

K. Sagisaka
chief.



JUN 17 1955



SEISMOLOGICAL BULLETIN

of

The MATSUSHIRO SEISMOLOGICAL OBSERVATORY

JAPAN

for

Feb. , 1955

Latitude 36° 32' 30" N.
 Longitude 138° 12' 32" E.
 Height(M.S.L.) 440 M.

Instrument	Comp.	M (Kg.)	T (Sec.)	V	v	f/T^2	μ^2	T_0 (Sec.)	M^2
Wiechert	N	200	5.8	69	6.3	0.011			
	E	200	5.6	67	7.8	.009			
	Z	80	4.0	68	6.2	.023			
1000Kg. (C.M.O.type)	N	1000	28.9	104	2.9	0.005			
	E	1000	29.3	104	2.9	.003			
Galitzin	N		14.9				near Critical	15.3	Ordinary damping
	E		17.0				"	15.3	"
	Z		15.				"	12.8	"

A New high magnification seismograph started operating from April, 1955.

Feb. 1955



Date	Phase (component)	Time (GMT)		Remarks
1	iP (Z) e (E) e (E) S (N) e (E)	19 ^h 17 ^m 46. ^s 18 17 36 54 19 03	Z(-)	41.7 N, 143.1 E h: 60 km. Off coast of Urakawa, Hokkaido. CMO.
2	eP (N) eS (E) e (E) eL ? (N) e (E) e (E)	07 32 45 42 14 48 35 53 17 57 48 08 10 30 01		Tonga Islands. h: about 100 km. H= 07 22 32 USCGS.
3	eP (E) ePPP (E) eS ? (E) eL ? (N)	12 52 22 57 12 13 01 20 13 08		44 N, 128.5 W. about 200 miles off coast of Oregon. H= 12 41 24 USCGS.
4	P (EZ) ePP ? (E) S (E) S (N) L ₁ (NE) L ₂ (E)	07 34 31 37 42 44 01 06 57 50 08 01 32	Z(+)	
5	eL ? (N) eL (E)	05 50 10 51 47		47 N, 154 E. Kuvile Is. H= 05 42 14 USCGS
5	P (NE) ePP ? (NE) eS (E) i (NE) L (NE)	20 45 22 53 48 03 24 50 59	N(+), E(+), Z(+)	
6	e (N) e (E) eL (E)	02 48 26 56 41 03 05 53		
7	eP (NE) eS (E) i (ME)	19 57 38 58 14 27		34.5 N, 141 E. Near coast of Honshu, Japan H= 19 56 40 USCGS
8	P (NEZ) S (E) S(N) i (NE)	15 44 05 48 52 45 05		Near south coast of Honshu, Japan. H=15 43 07 USCGS

Date	Phase (comp.)	Time (G.M.T.)	Remarks
9	eS (E) e (E) eL (E)	10 ^h 50 ^m 00 ^s 53 49 59 29	P: unknown 33N., 83E. Tibet. H=10 55 24 U.S.C.G.S.
10	eL?(N) eL?(E) e (N)	00 13 28 14 47 18 22	50N., 156E. Northern Kurile Is. h: about 60 km. U.S.C.G.S.
10	eS (E) eL ₁ (E) eL ₂ (E)	09 56 26 10 08 47 14 53	Tonga Is. H=09 36 41 U.S.C.G.S.
12	iP (NEZ) eS (NEZ)	01 48 14.2 38	34.9N., 136.9E. h=20 km. Chita Peninsula, Aichi Pref. Japan. C.M.O.
12	iP (EZ) eP (N) eS (NE) i (NZ)	05 20 02.5 02.5 15 24	35.1N., 137.1E. H=20 km. Central part of Aichi Pref. Japan. C.M.O.
13	e (E) e (N) e (E) e (N)	20 02 45 03 20 05 08 14 33	
14	eP (NZ) PP (Z) PPP? (NE) e (E) e (N) eS (NE) i (Z) Lq (NE) Lr (NZ)	17 00 04 01 37 02 00 05 01 04 34 07 05 08 04 11 22	2N., 126.5E. Molucca Passage. H= 16 53 09 U.S.C.G.S.
14	ePP? (N) eS? (E) iL (NE) eL (Z)	19 34 58 39 22 41 56 42 40	3N., 126.5E. Molucca Passage. H=19 27 04 U.S.C.G.S.
15	eP (N) eS (N)	06 29 25 37 23	13.5S., 160.5E. New Hebrides Is. h; about 60 km. H=06 20 18 U.S.C.G.S.
15	iP (NEZ) PP (Z) eS (N) eSS (Z) eSS (N) eL (N) eL (EZ)	06 31 05 33 06 38 38 42 43 42 47 46 34 47 59	14S., 160.5E. New Hebrides Is. H=06 21 22 U.S.C.G.S.

Date	Phase (comp.)	Time (G.M.T.)	REmarks
16	eP (N) eL (NE) eL (N) eL (E)	11 ^h 37 ^m 29 ^s 44 08 47 39 44	7S., 130E. Banda Sea. h, about 150 H=11 29 54 U.S.C.G.S.
17	eP (NEZ) eS (NEZ)	08 06 44 07 05	36.ON., 130.OE. h=20 km. Fukui Pref. Japan. U.M.O.
19	eL (E)	15 33 16	12N., 125E. Samar, Phillipine Is. H=15 21 40 U.S.C.G.S.
20	e (Z) e (E)	00 58 59 01 03 36	15.5N., 121E. Luzon Is, Phillipine Is. H=00 52 20 U.S.C.G.S.
23	e (E) e (NE) e (E) e (N)	19 05 28 19 31 23 00 22	34S., 54.5E. Indian Ocean. H=18 31 45 U.S.C.G.S.
23	P (NEZ) i (Z) iS (NE) i (Z)	20 03 03 {E(+) Z(-)} 04 03 34 46	
24	e (N) e (E) e (N)	09 20 36 50 21 23	44.5N., 149E. Kurile Is. H=09 15 02 U.S.C.G.S.
26	e (E) e (Z)	03 10 05 14 49	54N., 153.W. Near south coast of Unimak Is. H=02 52 04 U.S.C.G.S.
27	eP (N) eS? (NE)	10 36 10 40 39	Northern Kurile Is. H=10 32 28 U.S.C.G.S.
27	iP (NEZ) i (NEZ) iS (NE) i (NE) i (Z)	17 00 41 {E(+) Z(-)} 55 58 01 01 05	
27	iP (NEZ) iS (NEZ)	19 22 17 {N(+) E(+) Z(+)}? 23 07	

Date	Phase (comp.)	Time (G;M;S.)	Remarks	
27	iP(NEZ)	20 ^h 55 ^m 22.7 ^s { N+5 ^M E-2 ^M	27.5S., 176W. Kermadec Is region. H=20 43 24 U.S.C.G.S.	
	i (E)	32		
	e (NE)	56 10		
	eS (N)	21 05 11		
	iS (E)	16.7		
	iS (N)	20.0		
	i (E)	06 51		
	iSS (NE)	10 15		
	i (E)	11 30		
	e (N)	13 31		
	eLq (NE)	15 15ca		
	Lq (E)	15 40ca T=60 sec		
	Lr (E)	18 40ca T=48 sec		
	Lr (N)	45ca T=35 sec		
	M (E)	20 16 T=30 sec, A=860 ^M		
	M (N)	21 48 T=33 sec, A=1310 ^M		
	28	eP (Z)	20 54 59	11S., 66.5E. Indian Ocean.
		eS (E)	21 05 09	H=20 40 31 U.S.C.G.S.
eL (NE)		22 15ca		
eL (N)		23 25ca		
eL (N)		28 25ca		

K. Sagisaka

K. Sagisaka
chief

20

Seismological Bulletin

for March 1 to April 30, 1955



March		Time (G.M.T.)				
1.	P	Z	04	52	47	
	P	NE			49	
	ePP	Z		54	54	
	iS	NEZ	05	00	43	
	eSS	E		04	41	
	eLq	N		08	00	
	Lr	NE		12	07	
	Lr	Z			10	
	P:N,E,compression. 65N.,135W. Yukon. H:04 42 59 USCGS					
1.	e	E	14	30	16	
	e	E		37	12	
1.	iP	NEZ	14	43	28.4	
	i	N		44	34.6	
	S	N		45	06	
	L	E			38	
	iP:N,W,dilatation					
1.	e	E	17	43	45	
	e	E		50	43	
	e	E		54	25	
1.	iP	NEZ	22	17	38.6	
	iS	NE			54.1	
	iP:S,E,dilatation					
1.	iP	NEZ	22	20	49.6	
	iS	NEZ		21	45.2	
	iP:S,E,dilatation					
1.	P	N	22	25	48	
2.	P	Z	01	44	45	
	PP	Z		46	50	
	S	NE		51	05	
	Lq	NE		54	28	
	Lr	N		57	53	
	4S.,152.5E New Britain. H:01 35 45 USCGS					
3.	eP	Z	08	27	59	
	eS?	Z		28	27	
5.	eP	NEZ	05	41	52	
	e(S?)	Z		43	20	
	e	E		44	38	
	e	Z			43	
6.	eS	NE	06	34	35	
	e	N		37	02	
	Lq	E		40	30	
	2.5S.,100E. Near south coast of Sumatra H:06 18 01 USCGS					
6.	P	Z	11	01	41	
	iPP	Z		02	59	
	e	N		06	15	
	eS	NZ			48	
	(cont.)					
6.	continued					
	L	E	11	08	57	
	9.5N.,122.5E Philippine Is. H:10 55 28 USCGS					
6.	iP	Z	13	39	45	
	iPP	Z		40	51	
	i	NE		43	38	
	S	N		44	49	
	L	E		47	05	
	iP:compression. 9.5N.,122.5E Negros Is. H:13 33 31 USCGS					
7.	S	N	05	02	46	
	Lr	E		10	39	
	Lq			15	24	
	18S.,169E New Hebrides Is. H:04 44 44 USCGS					
7.	Lr	N	15	20	11	
	L	N		24	46	
	Lr	E		27	48	
	27.5S.,176W Kermadec Is. region H:14 47 10 USCGS					
7.	P	Z	20	23	57	
	e	Z		24	32	
	e	Z			54	
8.	iP	Z	23	34	35	
	eS	N		37	57	
	eL	E		40	01	
	iP:dilatation.					
9.	e	E	03	46	05	
	e	E		53	24	
9.	eP	EZ	05	58	26	
	eS?	E	06	03	12	
	eL?	E		04	24	
9.	P	E	09	23	31	
	S	E		26	57	
	Off north coast of Formosa. H:09 19 13 USCGS					
10.	eP	NE	21	21	40	
	eS	NE		30	25	
	eL	N		38	45	
	13.5S.,173.5W Samoa Is. H:21 10 20					
11	P	Z	21	48	13	
	S	E		51	56	
	S	N		52	01	
	L	E		54	00	
	L	NZ		55	48	
	P:compression. 52N.,158E Kamchatka. H:21 43 40 USCGS					



11 eP Z 23 39 10
 ePP Z 40 14
 ePP? N 15
 eS NZ 44 12
 eL NE 45 59
 L Z 48 29
 8N., 124E. Near northwest coast of Mindanao.
 H:23 32 46 USCGS

12 e NE 23 14 32
 e Z 48

13 iP Z 04 07 54
 S EZ 11 23
 S N 29
 L E 13 19
 L NZ 58
 iP:dilatation
 49.5N., 155.5E Kurile Is.
 h:60kmca. H:04 03 53
 USCGS

13 P Z 10 48 58
 e N 49 02

14 P E 13 19 10
 P Z 11
 pP Z 31
 sP NZ 54
 pPP NZ 20 46
 i NZ 21 18
 iPcP E 21
 i Z 21 47
 S N 24 35
 S E 45
 i Z 54
 i Z 25 33
 i N 46
 L N 27 30
 L Z 35
 L E 51
 pP:dilatation,
 sP:N,compression,
 pPP:compression,
 52.5N., 173.5W Andreanof Is.
 h:100kmca. H:13 12 04
 USCGS

15 e Z 11 48 26
 e NE 50 26

15 e NEZ 15 54 26ca

15 P NEZ 16 10 01.7
 e E 15.3
 i NZ 16.6
 e N 20
 e Z 42
 P:E,dilatation

16 eP Z 08 24 07

16 P Z 20 16 55
 S NZ 20 30
 Lq EZ 22 26
 Lq N 56
 Lr E 23 52
 Lr N 24 54

(cont.)

16 continued
 P:compression
 Off east coast of Formosa.
 H:20 12 22 USCGS

17 S? N 17 49 20
 e NE 52 59
 L E 54 05
 L N 55 35
 New Britain.
 H:17 34 24 USCGS

18 iP NEZ 00 11 57
 PP E 12 32
 PPP E 47
 i NE 15 45
 S E 16 08
 S N 10
 L NE 17 32
 L NE 18 04
 L? Z 19 04
 M E 20 09

micron.sec.

iP N 27 S
 iP E small W
 iP Z 16 compression
 M E 52 24
 54.5N., 161E.
 Near east coast of Kamchatka.
 H:00 06 42 USCGS

18 P E 09 00 01
 i NEZ 12
 i NE 38
 i E 44
 i N 50
 i Z 01 19

18 eP Z 09 13 07
 eS E 17 18
 i E 20 04
 55N., 161.5E Kamchatka.
 h:100kmca. H:09 08 10
 USCGS

19 e E 04 39 56
 eL? E 45 06

19 e E 10 00 38
 e E 03 01

19 e N 11 45 55
 S? N 46 19
 S? E 26
 Kermadec Is. region
 H:11 25 10

19 e E 12 22 01ca
 e N 26 20ca
 e N 30 00ca

19 iP NEZ 17 16 38.6
 e E 52.2
 i Z 53.9
 S NE 55.9

iP N small S
 iP E 5 E
 iP Z 6 dilatation



19 e NE 23 51 ca
 e E 52 30ca

20 e NEZ 00 49 20
 changing records.

21 P Z 04 57 12
 eS E 05 01 06
 eS N 08
 eL N 02 48
 eL E 05 32

21 eS N 13 14 ca
 eL N 16 30ca
 eL N 18 ca
 26N., 98.5E China-Buruma
 border h:100kmca.
 H:13 02 05 USCGS

22 iP Z 06 20 57
 ePP Z 22 20
 ePPP E 46
 eS NE 26 28
 L N 29 06
 eL N 30 52
 i Z 34 16
 i N 22
 iP:dilatation

22 iP Z 14 15 33
 i Z 17 32
 ePP E 18 05
 iS N 24 08
 ScS NEZ 25 33
 eL E 31 07
 eL N 32
 eL E 34 03
 iP:compression
 8.5S., 92E Indian Ocean.
 H:14 05 04 USCGS

22 eP Z 23 25 33
 e Z 26 37
 e Z 44

23 iP Z 05 04 59
 e Z 12 56
 eL E 25 51
 eL NE 29 02
 iP:compression
 Indian Ocean (aftershock)
 H:04 54 31 USCGS

23 eP Z 17 29 36
 ePP Z 33 16
 eS N 40 07
 eS E 16
 ScSorSKKS E 48
 SKKS? N 51
 ScS Z 56
 SS? N 47 04
 eL NE 54 04
 eL NZ 18 02 50
 56.5S., 147E Southwest of
 Macquarie Is.
 H:17 16 17 USCGS

23 eL NE 22 40 01

24 e(L?) E 04 44 38
 (cont.)

24 e NEZ 17 59 00

25 e(L?) E 02 33 39

25 iP Z 20 13 05.9
 eS? N 53.7

25 eS NE 23 00 28

27 iP Z 09 38 28.9
 e Z 35
 i Z 40.8
 iP:compression

27 eS? NE 09 42 28
 eL E 44 54
 53.5N., 162E
 Near east coast of Kamchatka.
 h:60kmca.
 H:09 33 18 USCGS

27 eP Z 14 04 33
 eS N 08 25
 eL N 12 17
 22.5N., 120.5E
 Near south coast of Formosa.
 H:13 59 40

27 P Z 14 46 23
 ePP EZ 48 03
 S N 52 37
 L N 55 43
 eL N 57 11
 30N., 90E Eastern Tibet.
 H:14 38 44 USCGS

27 e E 17 34 52

27 P Z 20 55 51.4
 e NE 56 16.
 S? N 30.1

28 eP NE 09 14 44
 i NE 49
 eS NE 16 44
 e NE 17 33
 29N., 130E Ryukyu Is.
 H:09 12 09 USCGS

28 P? N 15 03 30
 eS NE 07 39
 eL E 09 56
 53N., 160E Off east coast
 of Kamchatka.
 H:14 58 28 USCGS

30 e(P) E 01 25 43
 e E 56

30 e N 04 56 41
 e N 05 01 50
 55N., 164E Near east coast
 of Kamchatka.
 H:04 51 43 USCGS

30 eP Z 12 12 25
 ePPP Z 13 14
 eS NE 16 37
 eL Z 18 26
 eL E 53

(cont.)



30 continued
52N.,160.5E
Off east coast of Kamchatka.
H:12 07 24 USCGS

30 e Z 13 13 52
e Z 14 23
i Z 15 29.5
In previous shock.

30 eP Z 17 21 10
e Z 32
e Z 45
i Z 57
e Z 22 20

31 e(P?) Z 04 41 15
e Z 23
i Z 50
i Z 42 15

31 e N 06 25 09

31 eP NE 18 23 20
eP NE 28
i NE 39
PP N 24 36
ePP E 41
S E 28 40
L E 30 11
L N 19
M E 31 16ca
L N 32 14
M N 33 20ca
e E 20 35 ca

micron sec
M N 910 26
M E 870 33

8N.,124E Near south-west coast of Mindano.
H:18 17 00 USCGS

31 eP NE 20 59 09
PP N 21 00 10
e N 02 28
eS N 04 09
eL N 06 19
L E 07 49

8N.,124.5E
Mindano (aftershock).
H:20 52 39 USCGS

31 eP E 23 47 04
ePPP NE 48 22
eL N 52 15
8N.,124.5E
Mindano (aftershock).
H:23 40 53 USCGS

April
1 e E 09 05 00
e E 07 22
4 iP NEZ 11 16 09
ePP N 52
e Z 19 11
S NEZ 20 06
Lq E 22 16
Lq N 45
Lr E 24 50
Lr N 25 45

(cont.)

4 continued
22N.,121E Near south coast of Formosa.
H:11 11 21 USCGS

4 e NE 20 14 07
e E 19 49

5 iP NEZ 11 28 42
eSP? Z 29 14
PP Z 41
S NE 32 39
i NE 33 17
L NE 34 38

13N.,142.5E Marianas Is. region.
H:11 23 27 USCGS

5 P NEZ 14 07 29
i NEZ 35
i Z 46
i Z 08 15
S NE 11 19
eL E 13 19ca
eL N 48ca

23N.,121E Formosa.
H:14 02 46 USCGS

5 eP NEZ 15 22 25.5
i Z 32
S NEZ 33 03
eG? NE 46 41
eL Z 50 08ca

eG?: 50sec.
25N.,110W. Gulf of California.
H:15 09 15 USCGS

6 P NZ 13 03 41
S NE 14 13
L NE 26 49

P:dilatation
17.5S.,66.5E
Mascarene Is. region
H:12 50 50 USCGS

6 P EZ 20 01 23
S NE 11 49

P:compression
33.5S.,87E. Indian Ocean.
H:19 48 46 USCGS

7 e E 04 26 00ca
e E 37 00ca

7 P Z 22 56 10
S NEZ 59 50
L NE 23 00 55

Kurile Is.
H:22 52 08 USCGS

8 e Z 03 13 24
e Z 20 50
e Z 22 26

8 e Z 16 04 50
e Z 11 00

8 e Z 16 48 35
e Z 54 20



8	e	Z	17	25	10
	e	Z		30	26
9	P	Z	08	34	46
	S	Z		35	20
	i	Z			53
9	eP?	Z	21	47	06
	e	NZ		50	25
	e	Z			43
10	eP	Z	02	10	32
	S	NEZ		11	19
	i	Z			30
	i	NE			37
	i	Z			39
10	P	Z	17	44	33
	i	Z			39
	PP	Z		45	39
	S	EZ		49	25
	i	Z			46
	L	Z		51	28
	L	N			33
	L	Z		53	23
	8N.,125E Philippines aftershock. H:17 38 12 USCGS				
11	iP	NZ	00	58	28
	i	Z			50
	eS	NE	01	04	39
	eS?	Z			50
	eLq?	E		07	50
	eLq?	N			57
	e	E		09	26
	eLr	Z		10	45
	eLr	N			52
	iP:S,compression 6S.,147.5E Near north-east coast of New Guinea. H:00 50 21 USCGS				
11	eL?	NZ	09	45	42
11	e(L?)	NZ	16	43	03
12	P	Z	03	08	19
	eS?	NE		09	03
	e	Z			08
	e	E			34
	i	Z		10	27
12	e	Z	13	41	22
	e	NEZ		42	25
	eL?	E		48	28
	eL?	Z			49
	eL	Z		50	22
12	P	Z	17	11	34
	i	Z			43
	e	NE			54
	S	N		12	00
	i	Z			24
12	eP	Z	18	09	40
	eS	NE		15	41
	e	Z			54
	eLq	N		18	27
	eLr?	Z		21	51

(cont.)

12	continued 52N.,170W Fox Is. Aleutian Is. H:18 0203 USCGS				
13	P	Z	11	44	52
	S	Z		48	46
	24N.,120.5E Near east coast of Formosa. H:11 40 20 USCGS				
13	e	Z	20	58	23
	e	Z	21	10	02
	e	N		32	39
	e	NE		34	56
	eL?	Z		42	54
14	iP	EZ	01	35	18.4
	eP	N			18
	PP	EZ		36	21
	PP	N			22
	i	Z		37	32
	e	E		38	23
	i	Z			36
	e	N		39	45
	e	Z			49
	i	N		40	00
	iS	E			10
	S	N			18
	i	N		42	07
	i	E			33
	Lq	N		43	21
	Lq	E			27
	Lr	Z		46	09
	M	Z			33
	M	N			58
	M	E		48	15
	P:N,W,dilatation micron sec				
	M Z	48		20	
	M N	339		18	
	M E	156		14	
	30N.,101.5E Sikang Province, China. H:01 28 58 USCGS				
14	eP	Z	06	47	03
	eS?	EZ			22
	e	N			31
	e	Z			58
14	P?	NZ	07	32	02
	eS?	Z		33	17
14	e	NE	13	53	32
	e	E		54	28
	e	N		57	58
15	iP	Z	03	49	40.6
	P	NE			41.6
	i	Z			42.7
	iPP	NZ		51	34
	PP	E			36
	S	E		56	47
	iS	NZ			49
	i	Z		57	02
	i	Z	04	00	44
	i	Z		02	10
	Lq?	N			40
	Lq?	E		03	14
	i	N		07	38

(cont.)



15	continued					18	P	Z	12	24	03
	i	E	04	07	44						
	iLr	Z		09	11	19	P?	Z	16	36	30
	iP:compression						eS?	Z		39	30
	P:S,E						eS?	NE			36
	40N.,47.5E						L	E		42	05
	H:03 40 52						L	Z			08
15	P	Z	04	22	12	19	iP	Z	16	59	49
	i	Z			15.9		ePP	Z	17	02	55
	L	NE		39	42ca		i	Z		09	41
	Lr	Z		42	39		S	NE		10	12
	40N.,75E						eL	Z		30	12
	Kirghiz, aftershock.						eL	NE		32	23
	H:04 13 23						39.5N.,23E				
							Near east coast of Greece.				
							H:16 47 17				USCGS
15	iP	Z	04	53	26.2						
	i	Z		54	07.2						
15	P	Z	14	20	25.1						
	S?	Z		22	20	19	iPKP	Z	20	43	58
							i	Z		44	08
15	iP	Z	22	08	59.4		ePKP2?	E			23
	iS?	NE		09	27		e	N			37
	i	Z			29		i	N		46	52
	i	N			35		i	Z		49	43
	i	Z			41		i	Z		52	30
							i	Z		56	08
16	iP	Z	21	45	48.7		i	E	21	03	09
	i	Z		46	04		i	E		08	31
	i	Z			46		(Period 55 sec)				
	S	NE		50	07		i	E		13	01
	L	E		52	00		(Period 35 sec)				
	L	N			53		e	E		18	56
	53.5N.,162E						Lq?	NE		27	37
	Near east coast of Kamchatka.						(Period 62 sec)				
	H:21 40 30						iPKP: dilatation?				
							30S.,72W				
							Near coast of Central Chile.				
							H:20 24 05				USCGS
17	P	Z	02	16	23						
17	P	Z	12	53	42ca	20	eL?	E	01	33	41
	S	NE		57	46		eL?	N			43
	L	N		59	54		eL	Z			49
	L	E			59	20	ePKP	Z	02	32	27
	L	Z	13	00	49		i	Z			53
	Near east coast of Kamchatka.						i	Z			36
	H:12 48 55						30.5S.,72.5W				
							Near coast of Central Chile.				
							H:02 12 26				USCGS
17	iP	NZ	18	40	16.3						
	i	Z			21	20	PKP	Z	06	08	27
	i	Z			27		i	E		18	45
	iS	E		44	23		i	E		32	22
	iS	N			28		i	E		37	01
	L	N		46	12		i	E		38	06
	L	E			40		L	E		58	23
	L	Z		47	31		L	Z			45
	iP:S,compression						L	N		59	00
	52N.,159.25E						30.5S.,72.5W				
	Off south coast of Kamchatka.						Near coast of Central Chile.				
	h:60kmca.						H:05 48 27				USCGS
	H:18 35 27										
17	S	NZ	23	24	14	20	iP	Z	09	51	16.8
	P:unknown.						iPP?	Z		52	46
	38N.,140E						i	Z		56	34
	Bonin Is. region						S	N			44
	h:350kmca.						S	E			57
	H:23 20 33						i	NE		59	32
							i	Z			40
18	eP	Z	00	06	27		L	NE	10	01	53
18	e	NE	08	55	13ca		L	Z		02	08

continued
 1N., 126E Molucca Passage.
 H:09 44 07 USCGS

20 P Z 17 00 25.6
 S? Z 37.5

21 iP Z 07 30 50
 S NE 41 13
 eL NEZ 08 03 40
 iP:dilatation
 39.5N., 23E Near east coast
 of Greece.
 H:07 18 17 USCGS

21 eP Z 14 14 54ca
 iS Z 15 35

22 e NE 02 27 ca

22 e N 04 28 00ca

22 iP Z 13 57 22.5
 i Z 27.8

22 iP Z 16 30 38
 i Z 47
 iS E 32 56
 i EZ 22
 iP:dilatation
 46N., 150.5E Kurile Is.
 h:100kmca.
 H:16 27 31 USCGS

22 P Z 19 05 58.3

22 iP Z 22 44 19.1
 iP:compression

23 P Z 01 40 16.5

23 eP Z 02 36 39
 eS Z 39 48
 eS E 52

23 eP Z 03 51 23
 i Z 33.5
 S NE 52 35

23 ePKP? Z 04 18 03
 e Z 22 13
 e Z 31 23
 Chile aftershock?
 H:03 58 03

23 eP Z 04 38 19
 Kermadec Is, region.
 h:300kmca.
 H:04 27 00 USCGS

23 P Z 05 05 22

23 e Z 05 46 -

23 P Z 05 52 17
 i Z 30

23 P Z 08 04 21

23 eP Z 09 16 51

23 P Z 10 52 41

23 iP NEZ 16 41 14.1
 i Z 42 23
 i NEZ 42 41
 iS NEZ 55
 ScS NE 53 05
 iP:N, compression
 27.5N., 139.5E Bonin Is.
 region h:500kmca.
 H:16 39 04 USCGS

23 iPP Z 18 48 56
 PSorSP EZ 58 50
 eSS NE 19 05 20
 L N 17 40
 L E 22 40
 L Z 23 38
 L N 40sec.
 24.5S 113W Easter Is region.
 H:18 28 47 USCGS

24 e Z 02 20 31

24 eP Z 09 32 19

24 iP Z 13 04 52
 e NE 07 20
 eL Z 09 23

24 e(P?) Z 13 07 02
 i Z 08 45
 eL NE 20 13
 45N., 86E Sinkiang Province,
 china.
 H:12 59 00 USCGS

24 eP Z 18 27 13
 S Z 27

25 P Z 06 54 55

25 e Z 08 52 38ca
 e NE 56 50
 e N 58 02

26 iP Z 00 03 37
 compression

26 iP Z 03 11 06

26 e N 03 18 50ca
 e E 32 55ca
 e N 52 30ca
 e E 04 03 55ca
 13.5N., 89.5W Near coast of
 El Salvador.
 H:03 03 34 USCGS

27 eP1 Z 03 55 17
 iP2 Z 21.7
 iS1 EZ 43
 iS2 NEZ 56

28 iP Z 08 27 54.0
 iS Z 28 16.7

28 iP NEZ 19 11 50.5
 ePP NE 13 00



(cont.)



28 continued
 eS? NE 19 16 55ca
 eL NEZ 19 45ca
 iP:S,W,compression
 51N.,178.5W
 H:19 04 59 USCGS

28	e	Z	20	50	31
28	iP	Z	21	27	08
29	eP	Z	03	31	34
	i	Z			37
	S	NEZ		32	11
29	P	Z	05	30	44
	S	Z			58
29	P	Z	08	27	26
	e	E		33	30ca
30	e	N	02	22	18
	e	Z		28	34
	e	N		29	36
30	iP	Z	11	27	16
30	iP	NEZ	14	06	30.4
	iS	NZ		07	32.0
	M	N		08	21
	i	E		08	27
	M	E			31
	iP:S,W,compression				
		micron	sec		
	M N	45	19		
	M E	31	14		
30	P	Z	18	17	27

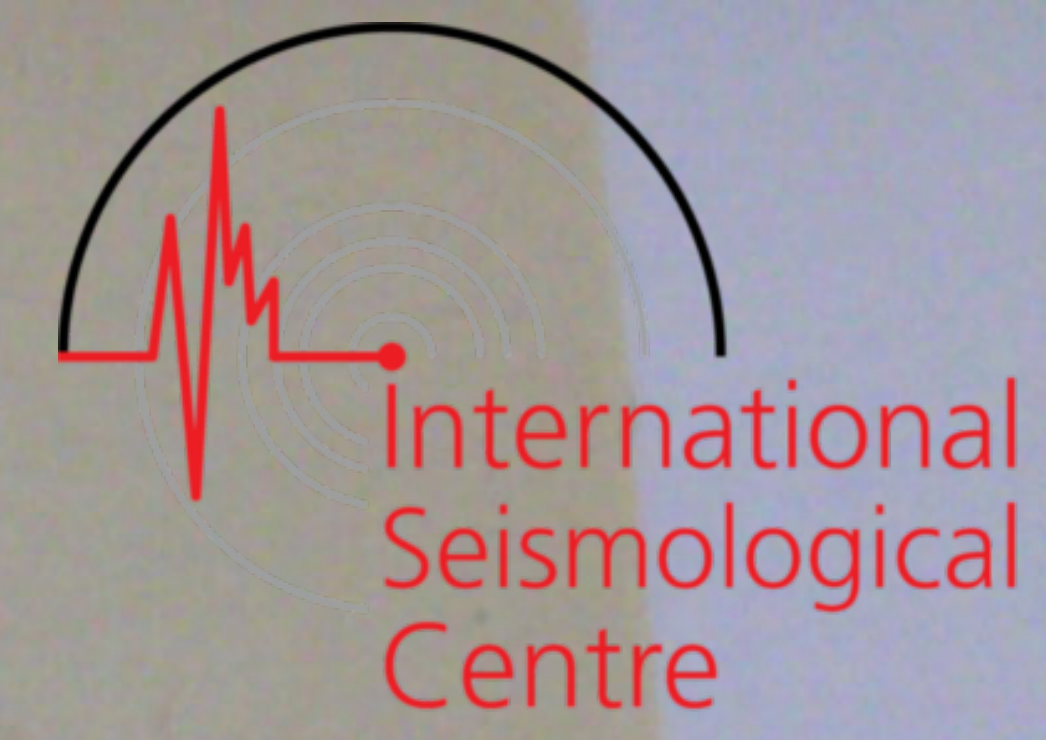
The Matsushiro Seismological Observatory is happy to announce the initiation of publishing the Bulletin. The Bulletin will be published monthly hereafter and will carry all the data registered at the observatory except very minor traces.

The introduction of the seismographs and equipments of the observatory is expected to be published in the Geophysical Magazine, Central Meteorological Observatory, Japan very soon, and the future progress report of the observatory will be published either in this bulletin or the Geophysical Magazine.

We should be very grateful if you could send us your bulletin in exchange.

Location of the Matsushiro Seismological Observatory

36° 32' 30" N 138° 12' 32" E Height 440 m



May		Time (G.M.T.)							
1.	iP	NEZ	09	56	41.9	5.	P	Z	01 44 16
	iS	Ne		57	42.3				
	i(L?)	N		58	09	5.	e	Z	06 23 59
	i(L?)	E			21		e	N	32 54
	iP:S,W,compression. clear record					5.	P	Z	07 17 46
1.	eP	Z	12	00	17	5.	P	Z	18 13 11
1.	iP	NEZ	14	00	07.7	6.	iP	E	00 05 58
	S	Ne		01	12		eS	Z	06 55
	L?	NE			40		i	E	07 08
	iP:S,W,compression						e	NEZ	28 ca
							iP:W.		
1.	P	Z	16	47	45	6.	L	NE	12 37 34
	P:compression						L	NE	41 00
1.	P	Z	17	59	11		35.5N.,36W. North Atlantic Ocean.		
	P:compression						H:11 39 53 USCGS		
2.	iP	Z	12	43	24.8	6.	e(S?)	NE	13 49 34
	S	NE		46	50				
	L	NE		48	55	6.	eL	N	16 50 ca
	iP:dilatation						weak.		
	19N.,145E. Marianas Is.						51N.,180. Andreanof Is.		
	H:12 38 56 USCGS						h=100kmca. H:16 35 57 USCGS		
3.	eP	Z	01	51	09				
3.	eP	Z	08	51	35	8.	eP	Z	06 15 12
							iS	Z	26
3.	iP	NZ	17	08	53.6	8.	eP	Z	12 57 37
	S	N		09	57		local shock.		
	i	NE		10	29	8.	eP	Z	13 19 49
	iP:S,compression						iS	Z	59
	iP:South 2 micron						local shock.		
4.	P?	Z	00	24	05	9.	iP	Z	20 16 56.7
	ePP?	E		25	34		i	Z	17 04.5
	ePPP?	N			46		S	NE	18 12
	e	E		28	17		i	Z	28.5
	eL	N		32	28		i	E	33.8
	eL	N		34	26		L	NE	19 07
	L	E		36	04		L	Z	19
	28N.,96.5E. Northern Assam.						iP:compression		
	H:00 16 59 USCGS						Near coast of northern Honshu		
4.	P	Z	01	59	05				
4.	iP	Z	16	04	15	11.	iP	Z	02 23 51.3
	iS	NZ			21		iP:dilatation		
	iP:compression								
4.	iP	Z	16	41	07.6	11.	eP	Z	02 49 55
	S	NE		42	08		e(L?)	E	56 51
	L	NE			49	11.	eP	Z	05 20 53
	iP:compressin						e(L?)	N	27 20
4.	P	Z	19	59	54.8	11.	P'l	Z	11 23 14
	i	NE		20	39		PP	Z	25 25
	P:dilatation						i	Z	26 41
4.	P	Z	21	00	06.1		eL	E	12 08 16
	e	N		01	33		eL:Period 44sec. (cont.)		

11.	contin O., 78W. Ecuador H:11 04 00	USCGS						
11.	P	Z	12	59	25			
11.	iP	NEZ	15	49	41.7			
	S?	N		50	27			
	iP:N,W, compression							
11.	P	Z	16	42	12			
	eS	E		46	18			
	eL	E		47	20			
	L	N		49	29			
	P:dilatation 19.5N., 121.5E. Off north coast of Luzon. H:16 37 10 USCGS							
11.	P	Z	19	31	17			
	PcP?	Z		32	48			
	pPorPP			33	13			
	S	NEZ		37	13			
	7S., 123.5E. Banda Sea. h=700km. H:19 23 58 USCGS							
12.	P	Z	01	02	43			
	eS	E		04	29			
	e	N		05	16			
12.	e(P'?)	Z	07	37	59ca			
	e	Z		38	57ca			
	22S., 68W. Chili-Bolivia border H:07 18 00 USCGS							
12	P	Z	08	33	17			
	S	N		34	25			
	L	N			53			
12.	iP	Z	08	36	45.9			
	S	NZ		37	18			
	iP:compression							
12.	eP	Z	18	54	15			
	e	Z			38			
12	P	Z	18	58	15			
	eS	N			55			
	e	E		59	04			
12.	eP	Z	19	56	40			
	e	Z		57	03			
	eL	NE	20	00	09			
13.	iP(Z)eP(NE)		01	59	41.8			
	eS	N	02	00	01			
	e	E			13			
	iP:compression eP:N,W,							
13.	e	Z	03	59	03ca			
	e	Z			52ca			
	e	E	04	00	17ca			
13.	e	Z	04	29	53ca			
	e	E		30	37ca			
	e(L?)	E		35	45ca			
	e(L)			39	15ca			
13.	e(L?)		21	53	22ca			
	e(L?)			55	52ca			
14.	P	Z	03	43	25			
	eS	N		46	06ca			
	eL	E		47	03ca			
14.	iP(Z)P(NE)		06	06	23			
	sP	N		07	54			
	S	E		08	04			
	e	E		10	11			
	eScS			18	12			
	iP:compression P:N,W. 28N., 139.5E. Bonin Is. region h=500km. H:06 04 14 USCGS							
14.	P	Z	13	44	35			
	PcP?	Z		45	26			
	eS	E		51	44			
	esS?			53	18			
	eSSS?			57	48			
	37N., 71.5E. Hindu kusk. h=200km. H:13 35 38 USCGS							
14.	P	Z	20	11	58			
15.	e	Z	04	21	21			
	e	Z		22	06			
15.	eP	Z	06	01	30			
	eS	Z			32			
	local shock.							
15.	eP	Z	06	31	36			
	eS	Z			39			
	local shock.							
15.	P	Z	09	44	14			
	e	Z			27			
	eS	Z			51			
15.	P	Z	09	47	31			
	e				47			
15.	iP(Z),eP(NE)		10	44	51.8			
	e	N		45	09			
	e	Z			14			
	iP:compression							
15.	P	Z	11	11	53			
	S	NEZ		15	41			
	eL	N		17	54			
15.	e	Z	12	12	13			
	e	Z			30			
15.	eP	Z	15	06	12			
15.	P	Z	21	24	19			
	S	Z			45			
	P:compression							
15.	P	Z	23	01	46			
	e	Z		02	08			
	e	Z			41			
	P:dilatation							
16.	eP	Z	01	22	25			
	e	Z			38			
	e	Z			56			
	e	Z		23	13			





16. P Z 03 35 58.9
 S E* 36 57
 e(L) E 37 34

16. P Z 11 17 43

17. i Z 02 55 30.2
 local shock type

17 P1 Z 02 57 30
 iP2 Z 32.0
 S N 56
 e Z 58 01
 iP2:dilatation

17. e E 08 13 26
 e N 14 07
 e E 16 10
 weak

17. P? Z 14 16 21
 56N.,156.5W. Off south coast
 of Alaska. Peninsula
 H:14 07 43 USCGS

17 iP NEZ 14 58 47
 i N 15 00 46
 PP Z 56
 i E 05 14
 i E 43
 S N 55
 i EZ 06 00
 SS E 09 22
 Lr NE 13 07
 i N 14 52
 M N 18 22
 M E 32
 iP:S,W. dilatation
 micron sec
 Lr(N) 32
 M(N) 430 23
 M(E) 290 22
 7N.,94.5E. Nicobar Is.
 H:14 49 47 USCGS

17. iP NEZ 21 24 41.2
 iS NE 25 30.3
 iP:N,W, dilatation

18. P Z 04 40 24
 i Z 33
 S NE 41 21
 i E 32
 i N 40
 Microseisms

18. P Z 05 30 52
 S N 34 50
 eL N 38 01
 23N.,121.5E. Near coast of
 Formosa.
 H:05 26 14 USCGS

18. eP Z 07 27 49
 S E 31 36
 i N 39
 Formosa aftershock
 H:07 23 00 USCGS

18. eP Z 08 48 46
 S? N 52 32

18. P Z 11 54 36
 S? N 55 59

18 P Z 15 54 10
 eS E 16 00 40
 sS? N 01 41
 e N 03 19
 L? E 05 27
 5S.,150E. New Britain.
 H:15 46 04 USCGS

18. e E 21 47 38
 e(L?) N 50 31
 e E 54 05
 microseisms.

19 iP' Z 07 26 56
 pP' Z 27 22
 e E 46 07
 e E 47 47
 e E 49 54
 iP':compression
 19S.,69W. Northern Chile.
 h=100km. H:07 07 13
 USCGS

19. e E 16 25 42
 e N 26 01

19. e E 19 52 20
 e(L?) E 53 45
 microseisms

20. e E 12 24 23
 e E 27 29
 e(L?) N 30 16
 weak

20. e(L?) E 14 29 29

20. P Z 16 58 16
 S Z 39

20. P Z 20 17 33
 e E 18 10
 e Z 47

21. iP Z 01 32 16
 eS NE 34 00
 eL NE 37
 iP:compression
 29N.,140E. Bonin Is. aftershock
 H:01 30 15 USCGS

21. eP Z 01 55 36
 weak

21. iP NEZ 03 32 10
 eS E 33 41
 i NE 56
 L NE 34
 iP:N,W, compression
 29N.,140.5E. Bonin Is. region
 H:03 30 06 USCGS

21. e E 08 53 36
 e(L?) NE 54 31

21. eP Z 08 54 52
 eS Z 55 18
 disturbed by forshock

21. P Z 15 36 27
 eS NE 43 53
 eL NE 50 21
 P:dilatation
 Eastern Java.
 H:15 27 10 USCGS

21. eP Z 15 50 28
 eS NEZ 59 33
 eL E 16 07 23
 eL N 45
 15.5S., 173W. Samoa Is.
 h=100km.
 H:15 39 24 USCGS

21. P NEZ 20 04 57
 eS NE 05 43
 i NE 47

22. e Z 03 19 35
 e Z 27 48

22. e Z 06 26 39
 small

22. iP NZ 14 10 17
 PP Z 11 01
 i Z 11 40
 iS NEZ 14 09
 i NEZ 35
 e E 17 29
 e Z 18 33
 iP:N,compression
 18N., 147.5E. Marianas Is.
 H:14 05 35 USCGS.

22. iP Z 14 56 07
 iP:compression

23. P' Z 00 04 36
 ePP Z 07 55
 ePPP Z 10 56
 e Z 14 40
 11S., 74W. Central Peru.
 h=100km. H:23 45 17 USCGS

23. eP Z 05 36 50

23. eP Z 08 35 23
 small.

23. eP Z 09 39 29
 i Z 34
 i(S?) Z 55

23. e Z 16 36 29
 e N 40 35
 e E 41 20
 Near east coast of Formosa.
 H:16 32 38 USCGS

23. eP Z 17 52 03
 e Z 56 35
 i Z 59 40
 eS NZ 18 00 15
 eL E 07 20
 eL N 23
 eL Z 09 48
 18S., 169E. New Hebrides.
 H:17 41 40 USCGS

24. eP NZ 01 15 43

continued
 24. eS NEZ 01 18 35
 Kurile Is.region
 H:01 12 11 USCGS

24. eP Z 08 09 27
 weak

24. iP Z 13 57 27
 S Z 44
 i Z 55
 iP:dilatation

24. P Z 23 21 48
 small

25. P Z 00 24 51
 small

25. iP Z 04 06 29
 eS E 12 30
 eL E 16 19
 eL N 30
 eL Z 18 51
 iP:compression
 54N., 165.5E. Fox Is.
 H:03 58 36 USCGS

25. iP Z 08 24 44
 i Z 49
 i Z 25 14
 iP:dilatation

25. P Z 18 25 05
 i EZ 11
 PP Z 32
 S EZ 28 34
 S N 38
 eL E 31 02
 eL N 10
 i(L) Z 34 22
 48N., 157E. Northern Kurile Is.
 H:18 20 53 USCGS

26. eP Z 02 56 53
 small

26. eP Z 05 37 35
 small.

26. eP Z 10 48 54
 e Z 49 21
 e N 26
 L? N 50 01
 L? Z 05

26. iP Z 12 46 25
 eS EZ 56
 i N 59
 i Z 47 03
 iP:dilatation

26. eP Z 13 25 33
 eS? Z 33 35
 e N 35 24
 e E 27
 eL N 39 45
 eL E 41 29
 eL Z 40
 Nicobar Is.region
 H:13 15 12 USCGS



26. iP NEZ 16 32 12
i Z 33 17
ePP Z 34 21
iS NEZ 39 29
Lq Z 43 51
Lq E 58
eLr NEZ 47 15
iP:N,W,compression
10S.,161E. Solomon Is.
H:16 23 10 USCGS

26. iP EZ 20 18 50
eS 19 08
iP:E,dilatation

26. e(S?) Z 20 25 51
eL EZ 29 44
eL N 47

26. eP Z 21 24 12
e Z 29 37
eS E 52
L N 32 56
L EZ 34 39
Sinkiang Province (China).
H:21 18 09 USCGS

26. eP Z 21 30 00
disturbed by foreshock.

27. eP Z 12 35 43
eS NE 43 00
eL E 50 33
eL N 51 13
10S.,160.5E. Solomon Is.
H:12 26 39 USCGS

27. P Z 19 14 57
PP Z 15 49
S Z 19 52
eL E 21 39
eL Z 45

28. P' Z 06 40 18
iP'2 Z 57
pP' Z 41 19
isP' Z 44
ePP Z 44 38
pPP Z 45 24
e N 50 15
e Z 56 11
eSS E 07 04 38
eSSS NE 10 23
eL? E 18 23
iP'2:compression
30.5S.,65W. Cordoba Province
(Argentina). h=200km.
H:06 20 40 USCGS

29. eP Z 01 25 33
weak

29. iP Z 02 35 01
i Z 14
iS EZ 37 51
eL N 38 43
iP:compression
50N.,151E. Sea of Okhotsk.
h=400km H:02 31 34
USCGS

29. eP Z 11 10 19
PP Z 45
eS NE 13 55
L N 15 21
L E 29
49N.,157E.
Northern Kurile Is.
H:11 05 50 USCGS

29. eP Z 13 40 10
eS NE 47 11
eL E 50 04
eL N 08
56N.,155W. Near south coast
of Kodiak Is.
H:13 31 26 USCGS

29. iP Z 15 43 23
ePP Z 45 29
eS NE 50 49
eSS N 54 48
eLq N 58 15
eLq E 40
eLr N 16 02 14
eLr Z 40
i(P'P'?)Z 12 55
i E 13 05
iP:dilatation
10.5S.,110.5E.
Off south coast of Java.
H:15 34 00 USCGS

29. eS NE 21 18 40
eL NE 22 05
56N.,155W. Kodiak Is.
(aftershock) H:21 03 07
USCGS

30. eP Z 07 59 04
e Z 08 00 31
Volcano Is. region
H:07 55 50 USCGS

30. iP NEZ 12 34 29.2
M Z 34
i NZ 36 19
i NE 33
iS E 44
M N 59
M E 37 02
iP:N,W,compression
micron sec
PN 142
PE 28
PZ 26
MZ 122 4
MN 568 9
ME 365 11
24.5N.,142.5E. Volcano Is.
h=600km.
H:12 31 41 USCGS

30. e Z 13 09 55
disturbed by foreshock

30. e Z 13 17 39
disturbed by foreshock

30. e Z 13 38 50
disturbed by foreshock



30.	eP weak.	Z	16	49	27	1.	P i i	Z Z Z	12	14	07			
30.	P small.	Z	17	05	07	1.	P	Z	12	57	41			
30.	iP i PP S eLq eLr eLr eLr	Z Z Z NE NE E Z N	23	34	27 34 36 40 43 46 58 47	27 34 00 17 20 30 58 21	1.	P i S?	Z Z Z	13	48	20 36 12		
	iP:compression 3S.,137E. Western New Guinea. H:23 26 50								15	29	46 04 22 27			
									24.5N.,122.5E. Near east coast of Formosa. H:15 25 32		USCGS			
31.	e(L?)	N	02	19	17	1.	iP pP? PP e S e e eL	NEZ Z NEZ N NZ Z N NE	16	17	29.0 49 50 46 07 36 39 07			
31.	iP eS iP:dilatation	Z NEZ	07	23	28 08									
31.	eP eS e eL eL	Z NEZ N E N	09	42	26 48 54 13 36									
	27S.,177.5W. Kermadec Is. region h=100km. H:09 30 44								1.5N.,128E. Halmahera. h:100kmca. H:16 10 32		USCGS			
31.	iP i i S iP:S,compression	NZ NE NE NE	14	45	42 11 35 17									
									1.	e e	Z Z	21 14	12 03	49
31.	iP i i S iP:S,compression	NZ NE NE NE	14	45	42 11 35 17				2.	iP iPP iS Lq Lr	NEZ EZ NE NE N	00	25	37.4 43 56 57 42
31.	eP eS eL eL	Z E E N	16	37	46 45 15 24									
	Bismarck Sea. H:16 30 18								51.5N.180 Andreanof Is. Aleutian Is. H:00 18 56					USCGS
31.	eSKS e e e e SSS eLq L L	Z Z E N N E NE N E	18	23	30 22 10 21 15 34 14 16 13				2.	iP eS eL	Z E N	02	08	50.7 01 31
	O.,92W. Galapegos Is. H:17 57 12													
31.	iP iS iP:compression	Z	23	49	10 31				2.	iP iS	Z Z	19	38	55 07
June.														
1.	e e e	N N N	09	11	03 19 01				2.	P	Z	20	31	09
1.	P i	Z Z	10	34	32 34				3.	iP iS iP:N,E,dilatation.	NEZ NEZ	01	36	02.6 41



3.	eP iS	Z Z	03 24	17 46		5.					24.5N.122E. Near NE coast of Formosa. H:06 11 18 USCGS
3.	P eL	Z N	05 23	27 31	12	5.	e	N	15	47	16
	51.5N.,179W. Andreanof Is. Aleutian Is. h:100kmca. H:05 16 56 USCGS					5.	iP	Z	15	51	51
							eL?	E	16	05	01
							iP:compression?				
3.	iP	Z	17	39	58.7	5.	iP	Z	17	12	46
	i	Z		40	18		iS	Z		13	01
	eS	E		44	05		iP:compression?				
	eL	E		46	21						
	iP:dilatation.?					5.	P	Z	22	50	42
							PP	Z		51	38
4.	iP	Z	12	48	16.5		eS	N		55	11
	iP:compression						eL	EZ		57	12
4.	iP	Z	12	48	53.2		Marianas Is. H:22 45 17 USCGS				
	S	NE		49	51	6.	iP	NZ	01	22	34.4
	iP:compression.						ePP	Z		23	32
4.	iP	Z	14	40	34.5		eS	N		27	04
	iS	NEZ		41	14		eL	E		29	27
	iP:compression						12N.144E. Marianas Is. H:01 17 09 USCGS				
4.	iP	Z	15	29	37.8						
	i	Z		30	31	6.	iP	E	06	00	26
	iP:compression						iS	E		01	29
4.	iP	NEZ	16	52	38.9	6.	P	Z	14	30	13
	iS	NEZ		53	38	6.	eP	Z	14	45	58
	iP:S,W,compression.						eS	E		53	27
4.	iP	NEZ	17	23	49.8		eL	E		59	14
	iS	NEZ		24	47		11S.162E. Solomon Is. H:14 36 49 USCGS				
	iP:S,W,compression.					6.	iP	Z	17	05	32
4.	eP?	Z	19	17	26		iS?	Z			59
	eS	N		26	32	6.	e	E	21	20	07
	eL	N		35	23		e	E		25	12
	eL	E		38	20		e	E		32	19
	eL	Z			28	6.	eP	Z	21	54	20
	16S.,173W. Samoa Is. H:19 06 15 USCGS					6.	eP	Z	22	13	25
5.	iP	NEZ	01	59	56.9	7.	iP	EZ	00	55	26
	iPP	E	02	01	07		iPP	Z		56	58
	iS	NE		05	19		iS	E	01	00	37
	eLq	Z		07	29		L	E		03	23
	eLq	NE			38		L	N		06	56
	eL	Z		09	08		iP:E,compression 27.5N.101E Sikang Province,China. H:00 48 56 USCGS				
	eLr	Z			44						
	51.5N.180 Andreanof Is. H:01 53 16 USCGS					7.	eP	Z	08	08	16
	iP:S,W,compression					7.	iP	Z	11	33	10.0
5.	P	Z	02	06	22		iS	Z			33
	P:compression?					7.	P	Z	12	18	24
5.	iP	Z	02	20	24		iS	Z			42
	compression					7.	P	Z	15	36	54
5.	P	Z	03	58	14		PP?	Z		38	11
	i	Z			24		eS	N		42	09
						7.	eL	N		44	23
5.	iP	NEZ	06	15	39.9						
	iS	NE		19	04						
	L	NE		20	29						
	iP:N,E,compression										



Continued
 7. 27N.100.5E.
 Sikang Province, China.
 H:15 30 15 USCGS

7. iP Z 16 26 39.0
 iS Z 55
 iP:dilatation

7. P Z 18 22 32

7. iP Z 20 40 17

7. e E 22 21 13
 e E 24 33
 e E 28 16

7. P Z 23 41 44

8. P Z 01 27 52

8. eP Z 02 48 21
 eS E 52 53
 eL Z 54 53

8. P Z 13 21 22
 S? Z 46

8. iP Z 13 49 26
 i Z 50 14
 iP:dilatation

8. e Z 13 53 47
 e E 59 21

8. iP Z 22 25 21
 i(Z)e(E) 35 06
 13S.167E. New Hebrides Is.
 h:200kmca. H:22 16 03
 USCGS

9. iP Z 01 52 50.3
 iS Z 53 12
 iP:dilatation

9. P Z 03 14 12

9. iP Z 04 16 12.7
 i Z 41
 iP:compression

9. iP Z 05 03 40

9. P Z 09 00 13

9. iP Z 12 02 41
 i Z 03 06
 i Z 27
 i Z 40
 i Z 04 17
 iP:dilatation

9. iP Z 20 12 01.5
 i Z 18
 iP:dilatation

9. eP Z 21 06 31

9. eP Z 22 53 29

10. e Z 00 51 00
 e Z 01 00 38
 eL? N 06 24

10. iP Z 03 41 01.8
 i Z 32
 iP:compression

10. iP Z 05 16 49.4
 iS? Z 17 30
 iP:compression.

10. e Z 16 41 37
 e Z 53 16

10. eP Z 22 11 26
 eS N 20 33
 eSS N 25 26
 eL N 29 06
 15S.177.5W. Fiji Is.
 H:21 59 31 USCGS

11. eP Z 03 46 54
 Santa Cruz Is. H:03 37 19
 USCGS

11. P Z 08 53 33
 i Z 49

11. iP Z 10 45 31.2
 e E 33
 i Z 37
 i(N),e(E) 39
 Explosion of Mt.Asama.

11. e Z 15 09 52

11. e Z 19 23 45

11. P Z 21 22 20
 epP Z 24 31
 eS N 30 31
 P:dilatation.
 16.5S.179W. Fiji Is.
 h:650kmca. H:21 12 27
 USCGS

11. iPKP Z 22 38 34
 i Z 50
 iPKP2? Z 39 16
 pPKP Z 40 48
 esPKP2 Z 42 34
 e Z 43 00
 ePPP Z 47 08
 ipPPP E 48 50
 e NE 53 47
 eSS? NE 23 03 22ca
 iPKP:dilatation
 27S.63W.
 Santiags del Estero Province,
 Argentina. h:600kmca.
 H:22 19 40 USCGS

11. iP? Z 23 12 18
 i Z 48
 Off coast of Luzon, Philippine
 Is. H:23 06 18 USCGS

12. eP Z 05 19 11
 49N.156E. Kurile Is.
 H:05 14 58 USCGS

12. iP Z 06 52 17.1
 49N.156E. Kurile Is.
 H:05 14 58 USCGS

12. iP1 Z 20 34 44

continued
12. iP2 NEZ 20 34 45
i Z 38 08
iS NE 12
iS? Z 22
L NE 39 19ca
iL Z 40 29ca
iL E 33ca
iP1: compression.
iP2: S,W, compression
49N.155E. Kurile Is.
H: 20 30 45 USCGS

13. P Z 05 08 01
e Z 15
iS? Z 10 31
29.5N.130E. Ryukyu Is.
H: 05 05 28 USCGS

13. eP? Z 09 23 31
S? Z 24 10

13. eP? Z 09 52 27
e Z 54 06
e Z 37
e N 55 19
e NZ 56 47

13. eP? Z 11 08 32

13. iP NZ 13 57 11.6
e Z 58 47
S? NZ 14 00 03
i NZ 07
e N 01 55
iP: N, dilatation
47N.151E. Kurile Is.
H: 13 52 59 USCGS

13. eP Z 19 21 42
eS N 25 05
e N 26 21
e Z 45
24N.122.5E.
Off coast of Formosa.
H: 19 17 21 USCGS

13. iP Z 19 56 25.4
S NZ 20 02 02
i Z 12
i NZ 05 38
e Z 08 06
iP: compression
Northern Celebes.
H: 19 49 00 USCGS

13. iP(Z), eP(N) 21 46 42.7
e Z 56 55ca
e Z 22 07 09ca
21.5S.170.5E.
Loyalty Is. region
h: 100km. H: 21 36 06
USCGS

14. P Z 02 59 42
e Z 03 01 34
eS? N 49
i NZ 03 39
P: dilatation
Bonin Is. region
H: 02 57 37 USCGS

14. P Z 06 24 58
i Z 25 13
i Z 26 34
iPP Z 29 01
e Z 33 51
eSKS NE 35 32
PS? EZ 37 37
SS E 43 09
e E 46 40
Lq N 50 20
Lq E 51 38
Lr Z 55 37
Lr E 55ca

P: dilatation.
20N.107W. Off coast of
Colima Mexico.
H: 06 11 18 USCGS

14. eP Z 16 05 48
e Z 06 05
e Z 30
eS E 10 20
e Z 41
13.5N.120E. Near Mindoro Is.
Philippine
H: 15 59 48 USCGS

14. iP EZ 16 35 46.5
i Z 36 10
iS? NE 40
i Z 53
iP: compression

14. iP NEZ 17 22 46.6
e Z 23 18
iS? NE 36
i Z 43
M E 54
M N 24 02
iP: N,W, compression
micron sec
ME 90 17
MN 90 16

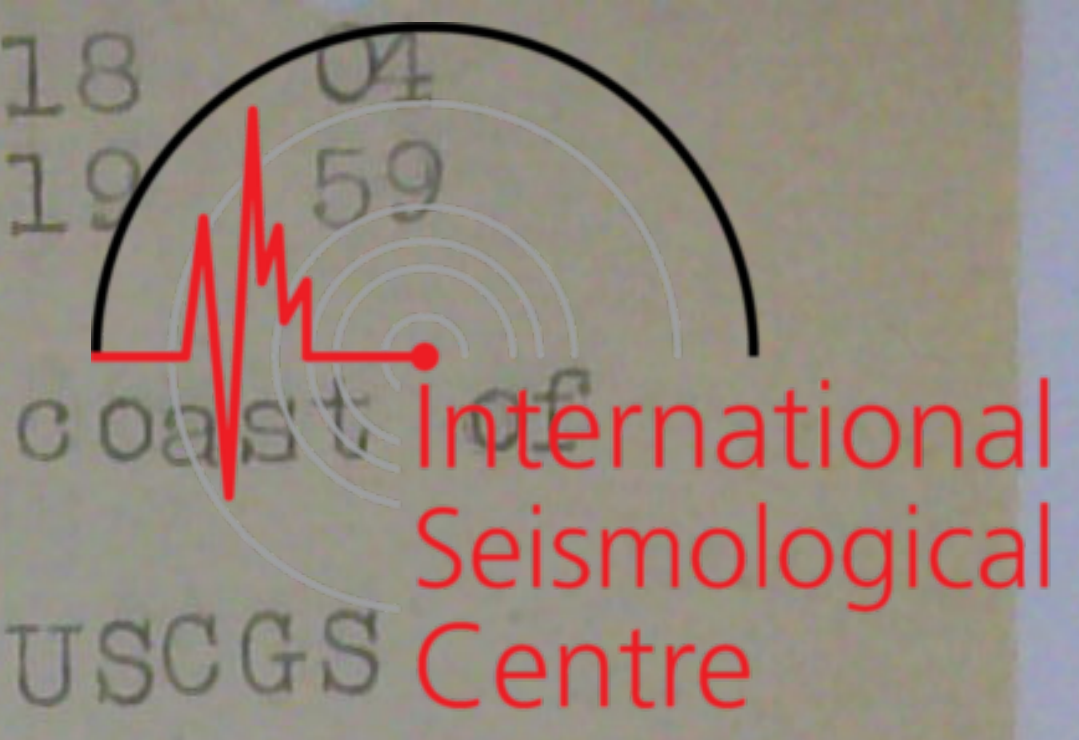
14. iP Z 19 27 40
i Z 28 31

15. P Z 01 13 06
39.5N.71E. Tadzhik S.S.R.
H: 01 03 56 USCGS

15. P NZ 03 11 46
S Z 20 07
S E 09
e N 38
eLr? Z 33 36
21S,169E. Loyalty Is.
H: 03 01 05 USCGS

15. iP? Z 03 35 32

15. iP(Z)P(NE) 12 33 13.1
iPP Z 39
e Z 35 05
S E 36 47
S Nz 49
L E 38 00
L N 50
L Z 39 26
P: S,E, dilatation
Marianas Is.
H: 12 28 36 USCGS

15.	iP	NEZ	12	59	09.2	17.	L	Z	08	18	04	 International Seismological Centre
	iS	NEZ			26		L	E		19	59	
	iP:compression						iP:dilatation					
15.	P	Z	13	13	57ca		22N.122E. Near E coast of Formosa.					
							H:08 06 31					USCGS
15.	iP	Z	15	44	16.6	17.	iP	Z	09	23	13.0	
	iPcP?	Z		46	07		iS	NEZ			54	
	ePPP?	Z			20		iP:compression					
	eScP	Z		49	50	17.	e	Z	10	54	07ca	
	eS	Z		50	37		e	Z			49	
	eSS?	NE		53	48	17.						
	i	Z		54	24							
	L	E		55	02	17.	e	Z	17	41	36	
	L	N		57	10		e	Z		42	20	
	L	Z			40							
	3S.153E. New Ireland.						20.5S.175W. Tonga Is.					
	h:100kmca H:15 36 27					17.	h:200kmca. H:17 59 48					USCGS
15.	iP	Z	16	44	54.5							
	S?	Z		45	25							
15.	iP	Z	19	00	07.5	18.	iP	Z	00	35	33	
							i	Z			38	
16.	e	Z	04	28	28		Kurile Is. H:00 31 45					USCGS
16.	P	Z	04	58	36	18.	eP	Z	04	47	17	
	e	Z	05	01	07		e	E		50	37	
	S	N		02	54		e	N			55	
	S	E			56		eL?	Z		51	49	
	L	E		03	57		eL?	E		52	06	
	L	N		04	34		46.5N.155E. Kurile Is. region					
	L	Z			54		H:04 43 26					USCGS
	L	Z		06	36							
	P:dilatation?											
16.	iP	Z	05	22	48.2	18.	eP	Z	09	20	25ca	
	S	N		23	10		i	Z			28	
	i	Z			14	18.	P	Z	16	11	51	
16.	iP	Z	06	09	57.7		i	N			56	
	e	Z		13	59		i	Z			59	
	iS	NE			15		eS	E		15	25	
	L?	E		15	11		eS	N			27	
	L	N		16	11		L	Z		17	09	
	L	Z		18	03		L	N			16	
	iP:compression						L	E		18	01	
	Marianas Is. region						e	Z	17	22	57	
	H:06 04 36						P:compression					
							24N.122E. Near E coast of Formosa. H:16 07 20					USCGS
16.	P	Z	06	28	10							
	L	Z		36	21							
16.	eP	Z	06	48	04	19.	e	Z	10	10	51	
	i	Z			12	19.	iP	Z	12	53	44.0	
16.	eSKKS?	E	13	02	11		i	Z			56	
	e	E		07	10							
	e	Z			16	19.	e	Z	16	58	26	
	e	N		15	10		i	Z			28	
	eL	Z		18	12	19.	P	Z	19	43	56	
	eL	N			25		S	EZ		50	11	
16.	e	Z	17	27	19		L	N		53	13	
							L	Z		56	52	
17.	iP	Z	08	11	11.4		53N.166.5W. Fox Is. Aleutian Is					
	P	NE			12		H:19 36 14					USCGS
	i	Z		13	21	19.	iP	Z	21	33	02	
	iS	NEZ		15	00		eS	EZ		39	17	
	L?	N			46		L	NE		42	26	
	L	E		16	12		L	Z		44	16	

19. continued
 iP:compression
 53.5N.166W. Fox Is. Aleutian Is.
 H:21 25 21
 USCGS

20. P NE 12 14 08
 i NE 19
 ePP N 15 08
 iPP E 16
 i E 19 10
 iS NEZ 25
 i Z 20 31
 i N 21 25
 i Z 47
 L N 49
 L E 54
 L Z 22 40
 LN 26 sec
 LE 19 sec
 LZ 24 sec

51.5N.180
 Andreanof Is. Aleutian Is.
 H:12 07 25
 USCGS

21. e Z 00 42 12
 21. eP? Z 02 18 52
 eS E 23 09
 eL E 26 02
 21. P? Z 09 41 12
 21. iP Z 10 56 07.5
 S E 11 00 18
 eL N 02 58

iP:dilatation
 52N.161.5E. Off coast of
 Kamchatka.
 H:10 51 00
 USCGS

21. iP Z 12 42 22
 i Z 43 27
 S E 46
 S N 48
 iP:compression
 29N.139.5E. Bonin Is. region
 h:350kmca. H:12 40 28
 USCGS

21. iP Z 16 04 20.4
 eS E 08 52
 eL E 10 55
 iP:compression
 12N.144E. Marianas Is.
 H:15 58 55
 USCGS

21. eP? Z 19 24 25
 eS? Z 25 02

21. e Z 22 38 00ca
 surface waves?

22. P Z 10 22 45
 i Z 51
 eS? Z 23 03

22. eP? Z 11 22 04
 eL N 39 06
 Fiji Is. region
 H:11 11 25
 USCGS

23. e(P?) Z 05 05 47
 e Z 50
 e Z 06 15 (11)

23. iP Z 08 40 29.4
 i E 44
 S N 41 03
 iP:N,E,dilatation

23. P Z 09 36 57
 e Z 37 07

23. eP Z 11 28 21
 e Z 28
 e N 48 00
 42N.71E. Kirghiz S.S.R.
 H:11 19 18
 USCGS

23. eP? Z 13 20 06
 i Z 20
 eS Z 21 00
 e NZ 14

25. eP Z 13 42 32
 i Z 47
 i Z 43 26
 e N 36
 S NEZ 41

23. eP? Z 14 14 30

23. iP Z 22 16 09
 i NZ 18
 S NE 18 04
 i Z 18
 eL N 19 03

iP:compression
 44.5N.149E. Kurile Is.
 H:22 13 31
 USCGS

24. iP Z 04 45 30
 e E 05 07 13

iP:compression
 Bangka Is. Netherlands Indies.
 H:04 36 20
 USCGS

24. e(P) Z 05 49 10
 e Z 06 28 10

24. P Z 08 46 48
 iS? Z 47 02

24. eP? Z 19 43 20
 e N 42

25. eP? Z 17 47 48

26. e(P) Z 01 51 26

27. eP Z 04 22 10
 i Z 12
 S Z 40

27. iP Z 10 22 55.6
 PP Z 24 53
 S NE 29 54
 i NZ 30 02
 SS NE 33 41
 eL N 35 43

iP:dilatation
 32N.78.5E.
 India-Tibet Border.

27. e Z 10 26 37
 In Previous shock.

27. P Z 13 55 00



International
 Seismological
 Centre

27. 31.5N.78.5E. India-Tibet Border. USCGS
 H:13 46 10

27. e Z 14 51 31

27. P NZ 16 18 51
 i Z 19 13
 e N 30
 ePP NZ 20 15
 S NE 24 30
 L E 27 06

1N.128.5E. Halmahra Is. USCGS
 H:16 11 44

27. e(P) Z 19 58 55
 eL Z 20 07 -

27. eP? Z 21 09 47
 eS? Z 53

27. P Z 21 47 44ca

28. P Z 04 37 17
 i Z 22
 ePP Z 39 24
 eS N 44 32
 e E 53
 e E 46 23
 e N 45
 SS N 48 32
 eL E 50 21

86.5N.70E. North Polar region. USCGS
 H:04 28 07

28. eL E 05 39 24
 eL Z 42 52

28. P Z 21 32 12
 e Z 38
 e(S) NE 33 13

29. P Z 01 27 07
 e Z 19
 e Z 37

29. eP Z 03 30 16
 eS NE 34 48
 eL E 36 01

8.5N.127E. Off E coast of Mindanao Is. USCGS
 H:03 23 58

29. eP Z 03 40 19
 eL? Z 46 55

10N.126.5E. USCGS
 H:03 34 22

29. P Z 04 57 20
 i Z 59
 eS E 59 11
 eS N 14
 eL Z 05 00 30
 L NE 01 25

30.5N.130E. Ryukyu Is. USCGS
 H:04 55 02

29. e Z 06 46 12
 e N 48 08
 e E 49 22

29. eP Z 07 12 52

29. e surface waves?
 29.1 iP Z 10 01 48
 e Z 58
 eS NE 08 17
 eL? E 11 43

iP:compression
 6.5S.148E. New Guinea
 H:09 53 38 USCGS

29. eP Z 14 30 58
 e Z 31 03
 e E 42 57

29. e E 15 50 32
 eL E 52 17

29. eP Z 17 34 51
 i Z 53
 e N 35 26
 e NE 30
 e N 32

29. e(P) Z 17 39 17

30. e Z 00 44 25
 e Z 33

30. P Z 01 46 40
 eS NE 47 22
 i N 32

30. e(P?) Z 02 07 48

30. e(P?) 02 42 00
 eL E 50 18

30. eP Z 04 11 15
 i Z 20
 eS NE 14 28
 eL E 15 14

48.5N.155.5E. Kurile Is. USCGS
 H:04 07 16

30. P Z 06 03 00
 e Z 08
 i Z 12
 i Z 58
 i(S?) Z 04 01

30. eP Z 09 05 07

30. e Z 12 12 14ca

30. eP Z 15 02 13

30. iP Z 15 28 34.4
 iS Z 37
 iP:dilatation

30. e Z 18 39 44
 eL E 54 34

30. e Z 20 26 30

30. e Z 21 04 37

30. eP Z 22 08 08
 ePP E 09 09
 eS N 12 38
 eL E 14 37

10N.126E. Mindanao Is. USCGS
 H:22 02 04





July	Time (G.M.T.)				
1.	i(P?) i:compression	Z	02	51	37
1.	eP eS e	Z NE NE	08	12 13 14	28 42 33
1.	e(L?)	NEZ	11	23	03
1.	P e	Z Z	12	27	02 31
1.	iP e P:compression	Z Z	12	35 36	20 36
1.	e e e e	E Z Z E	13	49 52 53 54	35ca 00ca 25ca 30
1.	e	Z	17	10	40
1.	eP e eS	Z Z EZ	17	19 20 27	47 15 55
2.	e e	Z E	06	42 49	03 12
2.	eP eS	Z NEZ	16	07 11	49 53
2.	eP	Z	17	11	48
2.	iP i P:compression	Z Z	19	13	34 47
2.	e e	Z Z	20	07 08	34 06
3.	e(L?)	NEZ	08	01	00
3.	iP i i eS eL P:dilatation 51N.,177E. Rat Is. H=08 00 53	Z Z Z NE NE	08	07 09 12 13	19 27 30 22 32
					USCGS
3.	e e	Z Z	09	07 09	37 04
3.	eP 37N.,71E. Hindu kush? H=14 01 46	Z	14	10	09
					USCGS
3.	iP i P:compression	Z Z	14	11	01 32
3.	iP i e e eS	NEZ Z Z Z NE	14	32 33 35 37 38	53 02 25 21 01

(cont.)

3.	eL P:compression 52N.,178E. Rat Is. H=14 26 32	NZ	14	39	
3.	P e	Z Z	18	28 29	50 40
3.	iP e P:compression	Z Z	19	40 41	55 38
4.	eP i	Z Z	07	17	20 25
4.	iP i eS eL L P:S,W,compression 51.5N.,177E. Rat Is. H=14 19 44	NEZ Z NE NE NE	14	26 31 33	07 17 07 10 59
					USCGS
4.	P P:compression	Z	14	34	54
4.	e Distat _n type	E	21	21	13
4.	eP eS eL	Z E E	23	01 06 07	40 22 49
					Near east coast of Midanao. USCGS
5.	eP e	Z Z	02	45	03 06
5.	iP P:compression Distant type	Z	08	37	04
5.	iP P:compression Distant type	Z	09	00	51
5.	eP	Z	09	03	36
5.	e	Z	11	09	32
5.	iP e P:compression	Z Z	12	35 36	58 31
5.	iP i e	Z Z Z	13	58 59	36 36
5.	iP i iS i	Z Z Z Z	16	03 04	55 06 13 21
5.	eP e e	Z Z Z	16	33 34	21 56 01
6.	eP	Z	00	51	56

(cont.)



6. continued
 i 2 00 52 04
 e 2 30
 e 2 51
 e F 55 19
 e E 25
 e Z 28

6. iP NEZ 01 58 54
 i(pP?) EZ 59 01
 iTP Z 35
 e EZ 02 00 14
 i E 02 38
 iS NZ 41
 iS E 46
 i Z 03 19
 eL N 40
 L EZ 04 50
 Lr EZ 05 37
 P:S,W,compression
 51N.,158E. Kamchatka.
 H=01 54 17 USCGS
 L M : 42 sec
 L E 22 sec
 LrE 24sec

6. iP Z 10 37 46
 e Z 40 47
 e Z 43 32
 eL Z 50 47
 54.5N.,162.5W. Near south
 coast of Alaska Peninsula.
 H=10 29 40 USCGS

6. eP Z 11 57 04
 i Z 06
 iS Z 29
 i Z 39

6. iP Z 15 10 52
 ipP Z 11 21
 PP Z 13 35
 eS NEZ 20 51
 e E 25 57
 L Z 29 10
 L E 30 30
 24.5S.,177W. Tonga Is. region
 h:about 100 kmca.
 H=14 59 21 USCGS

6. eP Z 17 45 37
 i Z 44
 e N 46 22
 e E 37

7. P Z 00 58 11
 i Z 19
 e(S?) EZ 50
 e NE 59 03

7. eP Z 01 50 46

7. eP Z 03 08 09

7. eP Z 05 04 54

7. e(L?) NEZ 05 57 15ca

7. eP Z 06 53 34

7. e Z 08 42 10
 e Z 59 12

7. iP Z 09 12 33
 PP? Z 14 33

7. continued
 e E 09 19 22
 e E 24 01
 e E 25 39
 eL? NEZ
 P:compression
 unknown

7. eP Z 09 53 05
 e Z 11

7. e E 10 11 30ca
 31N.,93E. China-Tibet border.
 H=09 51 19 USCGS

7. e Z 18 16 27
 Bot Is?.

7. e Z 21 11 51
 e E 12 28
 e NE 13 11

7. P Z 23 14 22
 P:compression

7. P Z 21 57 57

8. eP Z 04 47 42
 e Z 48 30

8. e Z 14 12 16

8. e E 14 34 09
 e E 35 50
 20.5N.,97E. Sikkim Province.

8. iP Z,eP NE 18 30 52
 e Z 32 30
 e Z 34 25
 P:S,E,dilatation
 S phase,no appearance
 21S.,179.5W. Fiji Is.
 (Foreshock) h:about 600 kmca.
 H=13 20 11 USCGS

8. iP NEZ 18 49 32
 PcP? Z 49
 ipP Z 51 29
 i Z 34
 i(P?) Z 52 17
 i Z 22
 i Z 29
 S NE 58 02
 S NE 50
 e NE 50 17
 sS EZ 19 01 12
 e NEZ 02 05
 e NEZ 09 00ca
 P:S.,E. dilatation
 20.5S.,179.5W. Fiji Is.
 h:about 600 kmca.
 H=13 39 11 USCGS

8. iP NEZ 19 11 10

ipP Z 12 59

e Z 14 16

sPP 15 20

iS NEZ 17 31

S S 19 59

iS Z 20 08

e NE 51

e S S NE 21 11

e NEZ 51ca

e NEZ

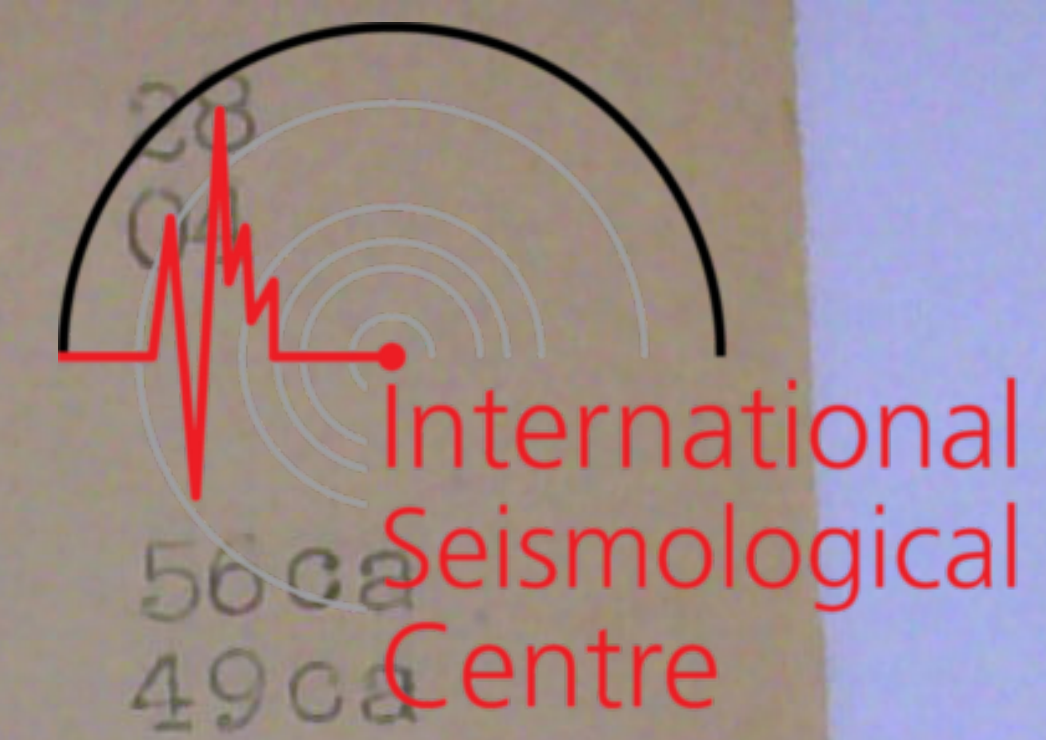
e NEZ

e NEZ

5S., 110E. Java Sea.
 H: about 600 kmca.
 H=19 03 09 USCGS



8.	eP	Z	22	09	13	10.	P	Z	18	49	16
							e	Z		50	38
9.	eP	Z	01	01	36	10.	iP	Z	22	44	21
	Near Kenai Peninsula?					10.	P	Z	23	20	50
							e	Z		21	15
							iS	Z			13
9.	e	Z	07	04	56	10.	eP	Z	23	35	12
	e	Z		06	04		Distant type				
9.	eP	Z	08	58	42	11.	eP	Z	00	46	02
	e	Z			46	11.	P	Z	01	34	15
	e	Z			59	01					
	eS	E	09	02	14	11.	eP	Z	02	37	12
	eL	NEZ		03	37		e	Z			59
9.	eP	Z	09	57	58	11.	P	Z	05	17	12
	S	E		58	31		e	Z		18	23
9.	iP	NEZ	10	05	13.7	11.	Near south coast of Sumatra. H=05 08 00 USCGS				
	iS	NEZ			33	11.	P	Z	05	50	49
	i	E			35		e	Z		53	56
	i	N			36	11.	eP	Z	12	58	01
	i	Z			37	11.	P	Z	17	18	20
	P:S., E. dilatation					11.	eP	Z	20	11	47
9.	iP	Z	12	42	22	11.	PKP	Z	20	40	48
	S	Z			52		ePP?	Z		43	15
	P:dilatation						PKS	Z		44	25
9.	e	Z	18	44	24		SKSP	Z		53	46
10.	e(L?)	E	00	28	56		e	Z		56	38
	e(L?)	NE		39	30ca		L	E	21	27	30ca
	40.5N., 22E. Northern Greece. H=28 53 20 USCGS						L	Z		32	ca
10.	eP	Z	01	17	05		1.5S., 13W. Atlantic Ocean. H=20 21 20 USCGS				
	e	Z			11	11.	P	Z	21	23	53
	Distant type					12.	P	Z	00	53	02
10.	eP	Z	02	42	11	12.	P	Z	06	34	22
	P:dilatation						i	Z			28
10.	iP	Z	03	46	45	12.	P	Z	12	21	51
	i	Z		47	02	12.	P	Z	17	20	53
	i	Z			14	12.	P	Z	17	34	36
	i	Z			20	12.	P	Z	18	08	22
	P:dilatation						S	NE		17	29
10.	iP	Z	06	36	05		L	N		28	35
	e	Z			52		L	E		29	24
	P:dilatation						11.5S., 173W. Samoa Is. region H=17 57 18 USCGS				
10.	e	Z	08	23	14		P:compression				
10.	eP	Z	12	04	37	13.	P	Z	01	37	14
	e	E		07	37	13.	P	Z	01	40	07
	e	Z		09	07						
10.	iP	Z, eP	14	32	20						
	S	EZ		41	08						
	e	NE		42	16						
	eL	NE		51	13ca						
	eL	NE		59ca							
	P:N, W. compression 20S., 175.5W. Tonga Is. H=14 20 52 USCGS										
10.	eP	Z	15	17	15						



13. P Z 02 52 07
 eS NEZ 56 07
 eL E 58 26
 L NE 03 00 26ca
 P:dilatation

13. P Z 06 28 21ca

13. P Z 10 06 21ca

13. P Z 18 00 30

13. P Z 18 25 04

13. P Z 18 48 52
 S NE 56 00
 L E 59 33
 P:compression
 6S.,154.5E. Solomon Is.
 H=18 40 34 USCGS

13. PKP Z 20 36 20
 PKP2 Z 56
 pPKP Z 37 19
 pPKP2 Z 36
 sPKP Z 38 05
 c Z 39 15
 PP Z 40 32
 SS E 59 51
 L E 21 15 51
 Sandwich Is. region
 H=20 16 28 USCGS

13. iP Z 21 27 59
 i Z 29 18
 P:compression

14. eP Z 04 02 20
 S E 10 35
 L E 13 00
 6S.,154.5E. Solomon Is.
 H=03 54 02 USCGS

14. eP Z 07 32 13

14. P Z 08 39 15

14. P Z 09 09 03

14. P Z 10 00 26
 S NE 10 59
 i Z 11 34
 L NE 14 56
 8.5N.,94E. Nicobar Is.
 H=09 51 37 USCGS

14. iP Z 10 18 06
 iS 36
 P:compression
 Near east coast of Honshu
 (Japan)

14. L 11 57 ca
 changing record

14. P Z 15 08 33ca

14. P Z 15 12 34ca
 e(S?) E 13 43

14. P Z 15 57 21
 S NEZ 59
 P:dilatation

14. P Z 17 49 28
 e(S?) 55
 P:compression

15. e N 03 11 56ca
 e(L?) N 22 49ca

15. P Z 09 50 43
 i Z 52
 P:compression

15. P Z 11 56 37ca
 e E 58 24ca

15. P Z 19 55 53

15. e Z 20 59 31ca

15. P Z 23 18 23
 eS E 20 06
 eL E 22 20

16. P Z 02 09 06

16. P Z 02 15 25
 e(L?) N 19 42

16. P Z 02 24 36

16. P Z 02 28 12
 e(L?) E 32 ca

16. P Z 03 19 36

16. P Z 04 47 29

16. iP Z 05 03 29
 i Z 50
 P:dilatation

16. iP Z 06 58 31
 e E 07 02 47
 P:compression

16. iP NEZ 07 19 35
 i NZ 53
 pP Z 20 40
 i Z 21 26
 i Z 23 20
 S NEZ 29 50
 i Z 30 19
 PS Z 42
 eS 07 30 46
 L NE 41 18
 L NE 47 27
 P:N.,W. dilatation
 37.5N.,27E. Dodecanese Is.
 H=07 07 08 USCGS

16. P Z 07 30 19
 local shock

16. P Z 07 39 49

16. P Z 07 41 00

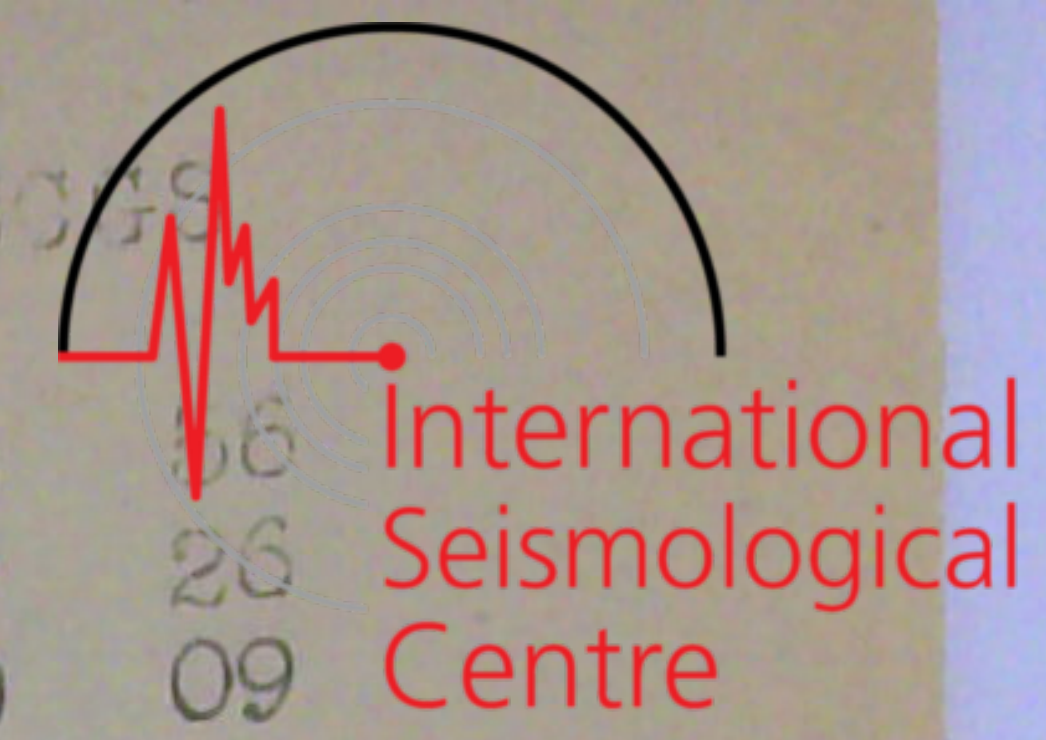
16. e Z 07 49 36

16. P Z 08 45 44

16. P Z 09 44 19
 e E 45 52

16. e Z 12 25 12ca
 16. eP? Z 12 28 23ca
 Tonga Is.
 H=12 17 04 USCGS
 16. P Z 12 29 56
 i Z 30 28
 16. P Z 14 08 38
 16. P Z 17 19 43ca
 16. P Z 23 13 00
 i Z 07
 i Z 33
 16. eP Z 23 35 40
 17. P Z 00 53 19ca
 17. P Z 01 39 14
 17. iP Z 07 16 23
 P:compression
 New Hebrides Is.
 H=07 06 00 USCGS
 17. iP Z 07 32 06
 S Z 28
 P:compression
 17. P Z 07 57 32
 i Z 49
 S E 08 00 40
 L E 01 18
 46.5N.,153E. Kurile Is.
 H=07 54 02 USCGS
 17. iP Z 08 03 42
 i(S?) Z 04 03
 P:compression
 17. P Z 12 29 12
 eL E 43 30ca
 53N.,170W. Fox Is.
 H=12 21 42 USCGS
 17. P Z 13 31 13
 17. P Z 22 06 17
 S E 12 03
 eL E 13 39
 L E 15 08
 54N.,168W. Fox Is.
 H=21 58 25 USCGS
 17. iP Z 22 30 52
 P:compression
 17. P Z 22 57 54
 18. iP Z 01 05 05
 e E 11 05
 S NE 13 07
 eScS E 14 38
 L E 20 21
 P:compression
 18S.,170E. New Hebrides Is.
 H=00 54 37 USCGS
 18. P Z 02 22 30
 (cont.)

eL E
 52.5N.,169W. Fox Is.
 H=02 14 59 USCGS
 18. P Z 10 16 06
 eS E 19 26
 eL E 20 09
 44.5N.,149E. Kurile Is.
 H=10 14 14 USCGS
 18. P Z 10 29 06
 45N.,149E. Kurile Is.
 H=10 26 26 USCGS
 18. P Z 10 39 03
 eS E 42 32
 44.5N.,149E. Kurile Is.
 H=10 36 34 USCGS
 18. P Z 10 43 38
 eL? E 47 57
 44.5N.,149E. Kurile Is.
 H=10 40 55 USCGS
 18. iP Z 11 39 36
 sP Z 40 17
 PcP? Z 28
 i Z 41 18
 PP Z 54
 pPPP Z 43 19
 i 37
 ScP Z 44 17
 S NE 47 00
 sS NE 48 26
 ScS NE 49 04
 13.5S.,167E. New Hebrides Is.
 h:about 150 kmca.
 H=11 29 58 USCGS
 18. e Z 12 08 40ca
 19. eP Z 00 39 28
 eL E 44 00
 Kurile Is.
 H=00 36 52 USCGS
 19. e Z 01 40 30
 e Z 43 19
 19. i Z 04 08 42
 19. P Z 08 57 02
 i Z 06
 L E 09 17 22
 L Z 20 30ca
 40N.,68E. Uzbek S.S.R.
 H=08 47 36
 19. iP Z 15 56 28
 eS E 16 00 40
 eL E 01 50
 P:compression
 12N.,143E. Marianas Is.
 region H=15 51 06 USCGS
 19. eP Z 16 30 15
 60.5N.,145.5W.
 Near south coast of Kodiak.
 H=15 21 05 USCGS
 19. eP Z 16 53 32
 e E 56 42
 (cont.)



19. continued
60.5N., 146W.
Southern Alaska.
H=16 44 24 USCGS

19. iP Z 19 53 42
e E 20 07 41
P:dilatation
52.5N., 178E. Rat Is.
h:about 60 kmca.
H=19 52 15 USCGS

20. iP Z 00 01 12
changing record
P:compression
56.5N., 153W.
Near south coast of Kodiak Is.
H=23 52 25 USCGS

20. e E 04 14 35ca
Andreanof Is.
H=04 07 53

20. P Z 07 39 33ca
Fox Is.
H=07 31 45 USCGS

20. iP Z 16 56 49
eS E 58 12
P:compression

20. P Z 17 28 13
eS E 29 47

20. P Z 22 10 16

20. P Z 22 26 15
eL? E 29 27

21. PKP 1 Z 12 05 08
PKP 2 Z 35
i Z 42
PP Z 08 57
pPP Z 12 20 17
sSS? E 27 17
L EZ 53 17ca
PKP 1 :dilatation
PKP 2 :dilatation
25S., 74W. Southern Peru.
h:about 100 kmca.
H=11 45 40 USCGS

21. eP Z 17 40 24ca

22. eP Z 03 09 51

22. eP Z 03 49 52
e Z 50 37

22. iP Z 03 53 15
i NZ 40
i Z, e E 48
i N 52
i E 54 00
P:compression

22. eP Z 04 31 02

22. eP 1 Z 04 36 28
P 2 Z 30
iS NEZ 37 00
i EZ 13
i(L?) NEZ 27
P 1 : compression
P 2 : dilatation

22. iP Z 04 58 16
P:compression

22. eP Z 05 03 54

22. iP Z 05 08 27
iS NEZ 58
L? 09 27
P:dilatation

22. P Z 05 23 27

22. eP Z 05 19 13

22. eP Z 05 32 37

22. eP Z 05 37 52
e Z 38 27

22. eP Z 05 54 51

22. e Z 06 55 01

22. iP Z 08 43 41
P:compression
local shock.

22. e Z 10 06 03
e Z 07 57

22. e Z 10 16 00
e Z 17 21
e Z 19 12

22. e Z 15 50 57
e Z 51 08
e Z 25
e(S?) NE 55 01
e(L?) NZ 16 00 53

22. e Z 18 42 13ca

23. e Z 00 15 07
e Z 51
e Z 19 58

23. eL? 02 10 18ca

23. P Z 05 51 44
P:dilatation

23. e Z 06 29 21
eS? E 32 02
L E 33 41
L Z 34 40
Negros Is.
H=06 20 06 USCGS

23. iP Z 06 37 16
iS EZ 49
P:compression

23. e Z 07 15 01

23. iP Z 07 15 22
i Z 45
S EZ 52
P:compression

23. ePKP Z 10 39 33
e Z 40 35
e Z 42 13



ePP? Z 47 18
 PP Z 47 18
 Sandwich Is. region
 H=10 19 49 USCGS

23. L EZ 11 36 18ca
 Negros Is. (foreshock)
 H=11 23 08 USCGS

23. iP Z 11 46 05
 P: dilatation
 local shock.

23. iP Z 12 56 45
 epPP NEZ 58 43
 eS N 13 03 08
 eS EZ 19
 ScS? Z 06 36
 ScS? NE 46
 P: compression
 7S., 128.5E. Banda Sea.
 H=12 48 28 USCGS

23. eP NEZ 14 03 18ca
 ePP NEZ 04 24
 e Z 06 22
 eS NEZ 08 25
 L? NEZ 11 04ca
 L Z 12 08ca
 L Z 18 48ca
 9.5N., 122.5E. Negros Is.
 H=13 57 04 USCGS

23. P Z 14 35 02

23. eP Z 22 56 42

23. iP Z 23 03 11
 e Z 05 28
 e E 06 11
 L E 07 59
 i Z 12 07
 P: dilatation

24. eP Z 01 15 53
 S E 24 51
 ScS? Z 25 56
 eL E 32 53
 iLr NEZ 35 50
 14S., 175W. Samoa Is.
 H=01 04 56 USCGS

24. iP NEZ 11 02 47.2
 i N 03 00
 i E 06
 i N 08
 i Z 13.5
 M Z 23ca
 M E 41ca
 P: amp. direction
 11 Micron South
 19 " East
 11 " dilatation
 amp. period.
 M Z 72 Micron 3.3 Sec
 M E 130 " 12.0 Sec
 Southern Honshu (Japan)

24. eP Z 12 00 46

24. e Z 12 05 15

24. P 1 Z 16 24 35
 (cont.)

e Z
 S NEZ
 L NE
 L Z

24N., 122E. Near east coast
 of Formosa.

H=16 20 03 USCGS
 P 1 : compression
 P 2 : dilatation

24. e Z 19 14 53

25. e Z 01 29 29

25. ePKP 1 Z 11 42 25
 i Z 38
 iPKP 2 Z 48

PKP 2 : compression
 22.5S., 69.5W.
 Northern Chile.
 h: about 200 kmca.

H=11 22 52 USCGS

25. e Z 18 01 31
 i Z 48

25. e Z 19 32 59
 e Z 33 16
 e Z 45

25. i Z 22 02 42
 i Z 03 02
 i Z 20
 very small.

25. iP Z 22 04 51
 i Z 05 10
 L? Z 23
 L? E 23
 L? NZ 31
 P: compression

26. e Z 01 38 16
 e Z 53

26. iP Z 04 13 09
 S NEZ 20 15
 e Z 21 56
 e E 22 36
 e N 47
 L NEZ 25 47
 P: compression

56.5N., 153W. Kodiak Is.
 H=04 04 18 USCGS

26. eP Z 05 25 31
 L? Z 38 21ca
 13S., 166.5E. New Hebrides Is.
 H=05 15 50 USCGS

27. iP NEZ 01 21 57.2
 i NE 13.0
 i NE 22 44.7
 i Z 23 08
 M Z 19
 M E 22

P: direction amp.
 South 1.5 Micron
 West 2 "

dilatation -
 MZ 65 Micron 3.3 sec.
 ME 457 " 15. sec
 Shikoku. (Japan)





27. e Z 03 35 17

27. iP Z 05 10 14
 PP Z 12 04
 PPP Z 43
 S EZ 16 57
 L Z 19 32
 L E 20 23
 P:dilatation

27. e Z 05 22 15
 i Z 29
 i Z 23 22
 i Z 54
 S E 25 22
 eL E 29 22
 L EZ 32 35ca

27. L E 07 29 28
 L Z 30 22ca

27. e Z 13 56 32
 e Z 57 19

27. iP Z 15 42 03
 P:dilatation

27. e Z 15 49 41

27. iP Z,P E 18 28 00
 i Z 08
 PP? Z 30 20
 e Z 34 34
 S NEZ 35 07
 i N 37 33
 ScS? Z 38 03
 SS E 37
 Lq Z 39 17
 eL N 40 22ca
 iLr NEZ 41 37
 P:W.compression
 56.5N.,153W.
 Near south coast of Kodiak.
 H=18 19 08 USCGS

27. P Z 21 48 37
 P:compression

28. eP Z 00 06 53
 eS EZ 10 45
 L EZ 13 36

28. iP Z 09 51 47
 i Z 59
 i Z 53 21
 i E 45
 P:dilatation

28. e Z 00 55 38
 i Z 56 37
 e Z 57 58

28. e Z 02 07 04ca
 PP EZ 38ca
 ePcP? Z 09 22ca
 e E 10 47
 S Z 12 08
 Lq E 13 22ca
 Lr Z 14 22ca
 L Z 21 22ca
 Negros Is.(aftershock)
 H=02 00 10 USCGS

28. PKP Z 02 19 58
 40.5S.,71.5W.
 Chile-Argentina border
 H=01 59 30 USCGS

28. iP Z 11 44 49
 P:dilatation
 Changing records

28. iP Z 12 02 34.9
 iS Z 03 52
 P:compression
 Near south coast of Hokkaido.

28. e Z 13 48 38

28. i(P?) Z 15 40 15
 i:dilatation

28. e Z 17 56 31

28. eP Z 18 19 01
 i Z 19
 S E 20 04
 iS NZ 08
 i Z 21 17
 Shikoku.(Japan proper)

28. iP Z 22 28 51
 P:dilatation

28. iP Z 22 31 50
 P:dilatation

29. iP Z,P NE 21 58 00
 i Z 11
 PcP? EZ 22 02 03
 PcP? N 09
 L N 03 22
 L EZ 04 12
 P:S,W.compression
 51.5N.,158E.
 Near south coast of Kamchatka.
 H=21 53 13 USCGS

29. iP Z 22 49 56.9
 i Z 50 13.0
 i Z 45.3
 i NEZ 51 06

30. e Z 04 02 54

30. e Z 11 24 16

30. e Z 11 36 17

30. iP Z 20 05 44
 i Z 55
 e Z 06 51
 iP 1 : dilatation

31. iP Z 01 10 0
 P:dilatation

31. e Z 02 38 52
 i Z 39 04
 e NEZ 45 47
 L N 52 52ca
 L Z 53 52ca
 L E 55 52ca

31. eP Z 03 23 11

31. eP Z 04 13 01

31.	e(P?)	Z	13	44	03	e ^o	Z	55	45
	e	Z		47	28	eL	E	58	34
	e(L?)	EZ		54	48	Off southeast coast of Mindanao, Philippine Is. h:200 kmca H=21 44 59 USCGS			
31.	iP	Z	14	48	40.9				
	iS	Z			59				
	P:dilatation					2.	P	Z	03 18 13
31.	e	Z	15	55	25	2.	e	Z	04 16 42ca
31.	e	Z	18	28	36	2.	P	Z	06 59 06
							e	E	07 01 40
31.	e	Z	17	45	54		S	E	05 56
	i	Z		47	10		eL	E	09 27
	e	Z		48	18	P:compression? Nicobar Is.region H=06 50 16 USCGS			
	e	Z		50	16				
	e(L?)	EZ		53	22ca				
31.	P?	Z	20	41	34	2.	iP	Z	07 00 30
						compression			
August									
1.	iP	Z	02	38	59	2.	eP	Z	08 21 30
	eL	E		47	26		e	Z	22 25
	iP:compression					2.	eP	Z	08 34 34
1.	ePKP	Z	03	35	34	2.	iP	Z	12 40 35
	eSS?	E		59	57		e	E	44 38
	e(L?)	E	04	33	08		eL	E	47 10
	Sandwich Is.region					iP:compression			
	H=03 15 40					USCGS			
1.	iP	Z	05	45	07.7	2.	iP?	Z	15 58 10
	i	Z			22		i	Z	25
	eS	Z		46	01	2.	eP	Z	17 41 06
	e	E			10	2.	eP	Z	18 40 41
	i	NZ			19		i	Z	44
	iP:dilatation					3.	e	Z	01 33 08
1.	e	E	06	34	36		e	E	39 26
1.	e	E	08	06	55	3.	P	Z	03 08 39
1.	e	E	08	36	52		e	Z	59
1.	eP?	Z	08	51	21		e	E	12 27
1.	P	Z	12	01	28	3.	eP	Z	09 39 51
1.	e	Z	13	31	27		i	Z	41 42
1.	P	Z	14	13	05		eS?	E	56
	e	E			41	3.	iP	Z	11 12 09
1.	iP	Z	14	34	17.2		e	Z	56
	S	NEZ			39		e	E	17 46
	iP:dilatation						e	E	21 32
1.	eP	Z	14	51	14	3.	P	Z	12 02 13
1.	iP	Z	19	28	10.7		i	Z	19
	i	Z			24		S	E	03 15
	i	Z			52	3.	P	Z	12 50 05
	eS	E		29	10		e	E	56 10
	i	Z			39	3.	P	Z	15 05 49
1.	eP?	Z	20	36	23		e	E	10 42
	i	Z			27		eL	E	13 06
	e	Z		39	01				





3.	iP	Z	16	44	10.1			
	i	Z			26			
	i	Z			40			
	i	Z			53			
	iP:dilatation							
3.	iP?	Z	16	53	11			
3.	eP?	Z	17	17	41			
	e	E			26	08		
	eL	E			30	08		
3.	iP	Z	19	51	56			
	eS	E			57	22		
	eL	E			59	26		
	iP:compression							
	52N.,179.5W. Andreanof Is.							
	Aleutian Is.							
	H=19 45 20 USCGS							
3.	eP	Z	20	24	59			
	e	E			36	20		
	New Ireland region.							
	H=20 16 54 USCGS							
3.	PKP?	Z	22	43	04			
	i	Z			21			
	Santiago del Estero, Argentina.							
	H=22 22 40 USCGS							
3.	iP	Z	22	48	24			
	eS	E			53	16		
	eL	E			58	38		
	iP:dilatation							
	Sinkang province, China.							
	H=22 42 08 USCGS							
3.	P	Z	23	51	36			
	i	Z			38			
4.	iP	Z	06	48	47			
	PP	Z			50	31		
	eS	NE			54	56		
	eL	E			58	48		
	iP:dilatation							
	30.5N.,86.5E. Tibet.							
	H=06 40 46 USCGS							
4.	e	Z	09	08	27			
4.	eP?	Z	09	11	36			
	e	Z			12	13		
4.	P	Z	11	01	07			
	ePP	Z			02	55		
	eS	E			07	06		
	e	E			10	49		
	L	E			11	39		
	5S.,152.5E. Near east coast							
	of New Britain							
	H=10 53 01 USCGS							
4.	P	Z	12	21	00			
	S	NE			23	46		
	L	NE			24	47		
4.	eP	Z	14	22	17			
	e	E			25	37		
	35.5N.,125E. Ryukyu Is.							
	H=14 18 20 USCGS							
4.	e	Z	15	16	29			
	e	NE			18	59		
5.	e	Z	05	08	03			
5.	P	Z	06	15	21			
5.	P	Z	13	30	41			
	e	E			33	13		
5.	iP	Z	16	03	39			
	S	NE			04	12		
	iP:compression							
5.	eP	Z	16	56	28			
	i	Z				36		
	e	N	17	01	01			
	eS	NE			05	04		
	eL	N			12	18		
	16S.,174E. Fiji Is. region							
	H=16 46 01 USCGS							
5.	e	Z	19	04	23			
6.	P	Z	02	08	22			
	i	Z			09	26		
	e	N				35		
	i	E				40		
	eL	NE			10	33		
6.	iP	Z	08	42	10			
	ipP	Z			43	29		
	ipP	NE				30		
	SP	Z			44	12		
	i	Z				30		
	PP	Z				53		
	pPP	Z			46	02		
	i	Z			48	25		
	iS	N			50	54		
	iS	E				55		
	isS	E			53	21		
	sSPorsPS	Z			54	17		
	i	E	09	01	01			
	PKPPKP	Z			10	00		
	iP:dilatation							
	21.5S.,177.5W. Tonga Is. region							
	h:350kmca.							
	H=08 31 25 USCGS							
6.	P	Z	13	13	54			
	e	N			18	44		
	e	N			19	32		
	e	N			24	50		
6.	e	N	19	51	48			
6.	e	Z	21	29	28			
7.	iP	Z	03	50	05.2			
	iS	Z			07.3			
	iP:compression							
7.	P	Z	06	23	08			
7.	e	Z	10	17	53			
7.	P	Z	10	39	35			
	i	Z			53			
7.	eP	Z	12	42	25			
	e(S?)	E			48	24		
	eL	E			51	43		
7.	eP?	Z	13	28	22			
7.	eP	Z	17	42	12			
	e	E			44	23		
	Off south coast of Honshu,							
	Japan.							



15. eP Z 13 59 02
 eS Z 27

15. eP Z 15 06 33
 eS N 12 32
 eL E 16 29
 eL N 18 17
 3.5S., 149.5E. New Britain
 region
 H=14 58 27 USCGS

15. c Z 15 22 10

15. eP Z 16 05 11

15. eP Z 16 51 15
 c E 56 19
 i E 17 00 20
 cL N 02 55
 27N., 95E. Assam India.
 H=16 44 07 USCGS

15. eP Z 17 09 43

15. iP Z 22 07 30
 e Z 08 56

16. P Z 03 26 17
 eS NEZ 27 33
 eL NE 28 35

16. iP Z 10 41 09.0
 eS? Z 30
 iP:compression

16. iP NE 11 55 04
 epPP E 57 30
 S NE 12 01 31
 esS? N 03 14
 ScS E 04 43
 i N 50
 i Z 56
 SS Z 05 08
 i E 06 49
 i N 55
 iP:S,E (small)
 6S., 155E. Solomon Is.
 h:200 kmca.
 H=11 46 58 USCGS

16. c Z 18 05 50

16. eP Z 20 45 58

16. iP Z 22 46 20
 compression

17. iP Z 01 18 09
 cS? Z 31
 iP:dilatation

17. P Z 03 42 32

17. eP Z 04 43 33

17. P Z 08 36 47
 cS Z 37 00

17. ePKP Z 11 01 51
 epPPP Z 08 30
 8.5S., 76W. Central Peru.
 h:150 kmca.
 H=10 42 37 USCGS

17. eP Z 12 12 17

17. eP Z 14 46 51
 eS NE 52 52
 eL E 53 09
 eL N 50
 eL Z 50
 Marianas Is. region
 H=14 42 00 USCGS

17. iP Z 17 31 41.7
 i Z 32 26
 eS Z 33 03
 eL N 56
 eL E 34 02
 iP:compression

17. eP Z 17 58 01

17. P Z 21 42 30

18. eP Z 00 07 40
 eS N 12 47
 7N., 127E. Near east coast
 of Mindanao, Philippine Is.
 H=00 01 10 USCGS

18. eP Z 03 00 38

18. eP Z 04 26 24
 e E 30 45
 e NZ 51

18. eP Z 04 49 10
 e(L?) E 52 29

18. eP Z 08 36 43
 New Hebrides Is.
 H=08 26 25 USCGS

18. eP Z 10 55 52
 e Z 56 53

18. eP Z 11 28 56

18. eP Z 11 37 20

19. iP? Z 03 40 29
 dilatation

19. iP Z 06 28 22.8
 eS EZ 29 10
 iP:compression

19. eP Z 06 55 40
 eS Z 49

19. eP Z 10 13 42
 i Z 49
 eP:dilatation?

19. e Z 15 24 08

19. eP Z 15 49 18

19. iP Z 16 21 39
 eS NEZ 22 43

19. ePKP Z 16 47 14
 e Z 59 36
 e N 17 02 09
 9S., 71W. Acre, Brazil.
 h:650 kmca.
 H=16 28 50 USCGS



19. e 19 09 34
 19. e Z 21 18 33
 e Z 48
 19. e Z 21 31 35
 20. eP Z 01 53 54
 e Z 54 56
 20. eP Z 02 23 35
 20. iP NEZ 03 14 06.1
 S NZ 13
 iP:E,compression
 20. eP Z 06 17 44
 e N 20 35
 e E 21 33
 eS N 22 05
 eL NE 57
 12N.,126E.Samor Is.
 Philippines Is.
 H=06 11 38 USCGS
 20. e Z 09 18 45
 20. eP Z 09 45 44
 eS? Z 46 04
 20. iP Z 10 53 52
 dilatation
 20. iP Z 13 43 20
 dilatation
 20. P Z 17 40 28
 20. eP? Z 19 08 39
 eS? N 17 47
 20.5S.,176.5W. Tonga Is.
 h:200 kmca.
 H=18 57 28 USCGS
 20. e Z 19 40 14
 e N 46 25
 e N 52 53
 e N 59 39
 20. e E 20 45 44
 e N 51
 20. iP Z 21 03 20
 dilatation
 20. e N 21 49 25
 e 55 28
 21. eP Z 01 16 13
 e Z 17 03
 21. eP Z 01 51 44
 e Z 52 45ca
 21. P Z 02 43 09
 e Z 36
 e Z 52
 21. eP Z 09 03 59ca
 eS N 13 34"
 eL E 26 44"
 e N 36 38"
 e E 49 44"
 Tonga Is. H=08 52 44 USCGS

SS E 20 05
 SS Z 20 15
 L N 23 21
 Lr Z 26 18
 P:compression
 24N.,96.5E. Burma.
 H=16 04 01 USCGS
 21. iP NZ 17 41 29
 iPP NZ 43 21
 iS NZ 47 28
 SS E 49 56
 L E 50 54
 i N 52 50
 i N 54 34
 w 2 Z 20 08 07
 iP:S,dilatation,E-W comp.
 small.
 3S.,137.5E. New Guinea.
 H=17 33 58 USCGS
 22. eP Z 01 40 43
 e Z 41 26
 22. eP Z 02 48 21
 e N 50 45
 e N 52 54
 22. e N 04 01 32ca
 e N 02 12ca
 22. e N 05 52 52ca
 22. e N 06 36 49
 e(L?) N 38 27
 22. e N 08 36 33ca
 40 35ca
 22. eP? Z 10 33 16ca
 eL? E 47 53
 eL? N 49 37
 22. e N 13 54 40
 e N 56 55
 e N 58 59
 22. P Z 15 30 40
 dilatation
 23. e Z 13 38 08
 e E 39 30
 e N 45
 23. eP Z 14 17 33
 23. eP? Z 14 18 40
 e N 21 37ca
 eS? N 25 38ca
 eL? N 39 20ca
 31N.,71.5E. Central Pakistan.
 H=14 09 17 USCGS
 23. P Z 15 43 46
 ePP Z 46 30
 S 52 52
 i(SSS?) 16 00 39
 L Z 01 57
 P:dilatation
 43.5N.,128W.About 170 miles
 off coast of Oregon.
 H=15 32 40 USCGS



International
Seismological
Centre

23.	P	Z	18	16	18	25.	T	Z	07	38	25	
	e	E		21	28		S	Z			40	
	e	E		23	43		T:dilatation					
	Molucca Passage. H=18 09 38						25.	e	N	10	06	57
				USCGS				o	N		10	20
23	e	N	21	30	59ca			oL	E		11	10
	e	E		32	44ca			oL	Z		13	21
23.	iP	Z	21	42	26.9	25.	e	N	13	47	59	
	e	Z			43		e	N		48	23	
	iP=compression						25.	P	Z	13	55	36
							S	N			59	
23.	eP	Z	22	48	18ca		i	N	14	00	13	
	ePP	N		49	06ca		P:N?,E?,dilatation					
	e	E		51	57ca		25.	P	Z	14	06	56
	eS	E		52	47ca							
	eL	N		53	43ca		25.	e	Z	16	10	38
	12.5N.,126.5E. Off coast of Samar,Philippine Is. H=22 42 36							e	N		16	47
				USCGS				e	N		19	59
								e	E		20	47
24.	p	Z	05	58	30		25.	e	Z	17	34	04
	e	EZ			40			e	Z			07
	e(S?)	E	06	04	56ca		25.	P	Z	22	18	57
	e(L?)	E		08.4			S	E		23	58	
	P:compression						L	E		26	24	
24.	eP	Z	07	07	13		P:dilatation? 52N.,176E. Rat Is. Aleutian Is. H=22 12 43					
	eS	N		16	09							
	eL	N		23	47		25.	P	Z	22	34	35
	44.5N.,129.5W. Off coast of Oregon. H=06 56 20							e	Z		35	16
				USCGS				e	Z			19
24.	e	Z	09	16	29ca		26.	eP	Z	01	51	01
	e	E		17	52ca			e	Z			03
	e(L?)	N		19	34ca			e	Z			38
24.	P	Z	10	16	55		26.	e	N	02	58	36
	compression						26.	e	Z	03	18	45ca
24.	e	Z	14	16	10			e	Z		19	10ca
24.	P	Z	15	50	11			e	Z			25ca
	ePcP	Z			39		26.	eP	Z	03	20	35
	P:compression							e	Z		21	02
	18S.,178W. Fiji Is.							e	Z			13
				USCGS			26.	e	N	09	23	09
24.	e	Z	17	07	54			e	E		24	38
	e	Z		08	10			e	N		29	48
24.	eP	Z	17	26	33			e	N		31	34
	e	Z			36			L	E		40	23
	e	N		29	37			L	Z		46.3	
24.	e	N	18	25	13		26.	eP	E	11	13	12ca
	e	N		27	07			e	N		17	28ca
24.	e	N	19	27	39			e	E		18	35ca
24.	P	Z	19	45	17		26.	P	Z	15	22	57
	i	Z			43		dilatation					
	eS	NE			48		26.	eP	Z	18	48	24
	e	N		47	33			e	Z			49
25.	e	Z	05	57	49ca			e	Z		49	26
	e	N		59	47ca		26.	eP	Z	21	04	08
25.	e	N	06	27	47ca		16S.,177.5E. Fiji Is.region H:000 kpa					
	c	N		32	25ca							

Seismological Bulletin

for September 1 to October 31, 1955



September			Time (G.M.T.)		
1.	iP	NEZ	00	29	38
	iS	NEZ	30	04	
	iP:E, compression				
1.	eL	E	04	41	00ca
	eL	N	42	50	ca
1.	P	Z	05	31	22
1.	iP	Z	05	33	01
	iP:compression				
1.	e	E	06	02	ca
	eL	NEZ	05	15	ca
1.	e	E	13	36	ca
1.	eL	E	18	32	50ca
1.	e	Z	21	49	54
1.	iP	Z	22	44	32
	eS	Z	47	43	
	P:compression				
	52.5N., 153E.				
	Sea of Okhotsk.				
	h:about 400 kmca.				
	H=22 40 15 USCGS				
2.	iP	Z	05	32	23
	P:compression				
2.	e	NE	18	16	34
2.	eP?	Z	21	19	26
	PP?	N	21	16	
	e	E	25	21	
2.	S?	N	21	25	58
	e	E	28	44	
	e	N	29	02	
	Western New Guinea				
	H=21 11 56 USCGS				
3.	iP	Z	01	25	20
	e	Z			40
	P:dilatation				
3.	eP	Z	03	56	21
	21.5S., 175W. Tonga Is.				
	h:about 300 kmca.				
	H=03 45 27 USCGS				
3.	iP	Z	08	51	03
	P=dilatation				
3.	P	Z	12	50	50
	PKP	Z		54	25
	PP	Z		55	30

(cont.)

3.	e	NEZ	13	05	06
	eSS	E		10	59
	eSSS?	E		15	50ca
	L	NEZ		28	55ca
	14N., 91W. Guatemala.				
	h:about 100 kmca.				
	H=12 36 20 USCGS				
3.	e	Z	16	01	50ca
3.	iP	NEZ	16	30	27
	pP	Z		31	28
	PP	Z			52
	iS	E		35	58
	iS	N		36	05
	SS	NE		39	07
	i	Z			21
	e	Z	17	02	27
	P:S,W,dilatation				
	1N., 123E. Celebes.				
	H=16 22 52 USCGS				
3.	e	Z	17	47	10ca
4.	e	Z	00	23	45
4.	eP	Z	02	07	15
	e	Z			27
4.	e	N	05	20	20
4.	eP	Z	06	59	35
4.	iPKP 1	Z	11	49	30
	iPKP 2	Z			40
	pPKP 1	Z			54
	pPKP 2	Z		50	05
	PP	Z		53	10
	changing record				
	eSS	N	12	12	32
	PKP 1:dilatation				
	22S., 69W. Northern Chile.				
	h:about 100 kmca.				
	H=11 29 40 USCGS				
4.	iP z, eP	NE	19	11	31
	eS	Z		12	52
	eL	NEZ		13	55ca
	P:compression				
	Hokkaido Japan.				
4.	e	NE	22	30	ca
5.	P	Z	02	13	04
	e	E		24	20
	L	NEZ		33	ca
	P:compression				
	37.5N., 122W.				
	Santa clara county				
	(california)				
	H=02 01 15 USCGS				

5. e Z 03 57 38
e Z 58 02

5. iP Z 07 11 09
iP:compression
24S.,180. South of Fiji Is.
h: about 550 kmca.
H=07 00 35 USCGS

5. eP Z 15 02 26
Distant type

5. eL E 16 59 30
eL N 45
eL Z 17 00 ca

5. P Z 17 21 05
e Z 22 28
S NE 27 02
S Z 18
7S.,120.5 Flores Sea.
h: about 600 kmca.
H=17 13 24 USCGS

5. e Z 22 31 12

6. eP Z 01 35 40

6. iP Z 04 54 22
iS Z 55 19
P:dilatation

6. iP Z 09 22 36
eS NEZ 24 15
P:compression
28N.,139E. Bonin Is.region
h: about 550 kmca.
H=09 20 30 USCGS

6. iP Z 21 06 15
e Z 10 22
eL Z 19 ca
53.5N.,166W. Fox Is.
H=20 58 47 USCGS

7. iP,Z eP NE, 03 31 08
iS EZ,eS N, 40 48
L NEZ 56 ca
P:compression
2S.,68E. Chagos Is.region
H=03 19 21 USCGS

7. e Z 03 59 05
eS? Z 30

7. e Z 05 45 30

7. e Z 05 50 55

7. iP Z 06 13 10
e E 22 00ca

7. iP Z 14 03 57
iP:dilatation

7. eP Z 20 41 36
e Z 44 05
e Z 53

8. P Z,eP N, 00 39 43
eS NE 43 05
eL N 45 35ca
eL EZ 46 30ca
P:compression

8. ePKP Z 02 23 11
e Z 24 07
PP Z 26 50
e N 29 55
ePPP Z 30 30ca
e N 34 40ca
e Z 35 21ca
SKSP Z 37 17ca
PPS? Z 40 47ca
SS? E 46 29ca
eSS N 58
SSS NE 52 16
L NE 03 16 40ca
Sandwich Is.region
H=02 03 15 USCGS

8. iP Z,P N, 03 35 43
eS NE 42 27
eL NE 45 33
eL NE 51 29
P:N,compression
7S.,155.5E. Solomon Is.
H=03 27 14 USCGS

8. eP Z 04 52 37
disturbed by foreshock
25N.,95E. Northern Burma.
h: about 150 kmca.
H=04 45 26 USCGS

8. e Z 06 37 51

8. iP Z 09 48 10
iS Z 35

8. iP Z 11 04 18
iS Z,eS NE, 08 19
eL EZ 11 30ca
iP:dilatation
53.5N.,160E. Near east
coast of Kamchatka.
H=10 59 15 USCGS

8. P Z 12 19 43
P:dilatation

8. eP Z 17 04 09
19S.,176.5W. Tonga Is.
h: 250 kmca.
H=16 53 15 USCGS

8. iP Z 18 13 21
eL? E 21 35
P:dilatation

8. o Z 19 08 03

8. o Z 22 45 12

9. eL N 03 13 ca
eL EZ 23 30ca
weak

9. e Z 03 14 49

9. e Z 08 05 29

9. iP NEZ 09 51 11
eS E 58 21
eS Z 26
eS N 29
L NE 10 02 51
L NEZ 10 ca
P:N.E.compression
2S.,100E. Near south coast
of Sumatra.
H=09 41 57 USCGS

9. e Z 14 56 52
e Z 57 41

9. e Z 15 58 59

9. eP NZ 16 29 35
eS NE 36 13
eS Z 21
eL? E 42 07
7S.,155E. Solomon Is.
H=16 21 12 USCGS

9. i NEZ 18 55 19

10. iP Z 05 59 58
eS N 06 04 50
iL Z 05 38
P:compression
54.5N.,169E. Komandorskie Is.
H=05 54 08 USCGS

10. eP Z 09 36 27
eS E 42 11
L N 45 27
eL Z 47 07
50.5N.,173.5W. Andreanof Is.
H=09 29 15 USCGS

10. iP Z 13 21 47
P:compression

10. iP Z 21 10 49
eS NE 15 47
eL E 17 30ca
eL? Z 19 40ca
10N.,123E. Negros Is.
H=21 04 40 USCGS

11. iP Z 08 24 15
iS *EZ 19
P:dilatation

11. iP? Z 12 08 14
P:compression?

11. iP Z 12 17 24
i Z 25
i Z 18 15
S NE 17
P:compression
Off south coast of Honshu
(Japan)

11. iP Z,eP N, 18 02 51
pP Z 03 29
PP Z 04 32
eS NE 09 33
SS? NE 12 39ca
L E 14 14ca
P:compression
7N.,155E. Solomon Is.
H=17 54 28 USCGS

11. P Z 18 12 43
7S.,155E. Solomon Is.
H=18 04 16 USCGS

12. iP NEZ 06 21 53
pP Z 22 26
iS N 32 09
iS EZ 10
i Z 52
i NE 43 56
Lq E 45.0
Lr NZ 51 36
P:S,E,compression
32.5N.,30E.
Off coast of Egypt.
H=06 09 20 USCGS

12. P Z 12 32 50
o NE 33 35

13. iP NEZ 02 07 41
PP? Z 08 49
e Z 11 01
iS NE 13 14
Lq NEZ 15 49
Lr Z 17.6
ScS? NE 18 16
P:S,W,compression
52N.,176W. Andreanof Is.
h:60 kmca.
H=02 00 43 USCGS

13. P Z 02 31 47
S? 57

13. iP Z 06 28 53
eS E 29 16
i Z 30
P:dilatation

13. iP Z 13 30 46
S EZ 31 05
P:dilatation

13. iP Z 17 44 03
i Z 24
S NEZ 49 42
L NE 52 28
L NZ 55 56
0.5N.,125E. Near coast of
Celebes.
H=17 36 41 USCGS

14. eP? Z 07 05 10
i NE 06 54

14. e Z 09 48 48

14.	e	Z	10	37	07
14.	P	Z	15	01	40
	i	EZ			54
	i	N			55
	iS	EZ			59
14.	eP?	Z	18	10	38ca
15.	eP?	Z	11	55	12
15.	iP1Z, eP	NE.	12	38	15
	iP 2.	Z			18
	ePP	Z		39	55
	iPPP	Z		40	14
	e	Z		41	07
	S?	N		43	53
	S	E		44	12
	L	E		46.8	
	i	E		48	31
	Lr	NZ		51	03
	P:dilatation				
	P2:compression				
	5S.,134.5E. Off coast of				
	Western New Guinea.				
	H=12 30 27 USCGS				
15.	eP?	Z	16	44	11ca
15.	P	Z	17	50	23
16.	P	Z	04	54	35
	eS	NE	05	04	35
	L	NE		22.1	
	30S.,178.5W. Kermadec Is.				
	H=04 42 30 USCGS				
16.	P	Z	09	06	09
	i	Z			14
	iS	NZ			29
	P:dilatation?				
16.	P?	Z	09	14	33
16.	P	Z	13	24	02
	eS?	NE			22
	e	EZ			31
16.	P	Z	20	56	13
	P:dilatation				
16.	eP?	Z	23	30	43
	eS?	NE		31	28
17.	iP	Z	07	38	12
	ePP?	Z		39	41
	S	NEZ		43	38
	e	Z			42
	e	NE		46	29
	P:compression				
17.	iP Z, eP	N,	12	05	42
	PP?	Z		08	24
	PPP?	Z		09	26
	eS ?	NE		13	31
	e	E		15	19
	eL	E		21	21
	P:compression				

17.	continued				
	17.5S.,168.5E.				
	New Hebrides Is.				
	H=11 55 26 USCGS				
17.	iP	Z	14	59	55
	e	N	15	07	12
	eS	E		08	05
	e	NE		09	18
	eSS?	E		11	55
	eL	E		15	04
	P:compression				
	17.5S.,168E. New Hebrides Is.				
	H=14 49 40 USCGS				
17.	P	Z	18	08	36
	e	NE		10	32
	e	NE		11	31
	eL?	E		23.2	
	eL?	NZ		24.6	
17.	P	Z	18	26	51
	17.5S.,168.5E.				
	New Hebrides Is.				
	H=18 16 35 USCGS				
17.	iP	EZ	18	51	56
	iS	E			59
	P:compression				
17.	P	Z	20	08	55
	eS	NE		18	46
	e	N		23	37
	eL	NZ		36	37
18.	P	Z	01	25	58
	eS?	NE		34	02
	e	E		35	57
	eL?	NE		41.1	
	eL?	Z		44	48
	eL?	NE		45	10
	17.5S.,167.5E.				
	New Hebrides Is.				
	H=01 15 46 USCGS				
18.	eP	Z	06	45	01
18.	P	Z	09	07	54
18.	iP	Z	09	15	48
	i	Z			57
	eS?	NE		16	55
	i	Z		17	31
18.	iP	NEZ	11	34	29
	iS	NEZ		36	01
	e	N		37	12
	e	NE		38	52
	P:N,W,dilatation				
	39N.,129E.				
	Off east coast of Korea.				
	h:600 kmca.				
	H=11 32 32 USCGS				
18.	eP	NZ	15	20	42
	iP*	Z			56
	iS	Z		21	34

18. continued
iS?* Z 15 21 53
Tokushima Pref. Shikoku,
Japan.

18. eP Z 16 57 06

18. P Z 21 54 55

19. iP Z 18 38 00ca
i Z 39 10
P:compression

19. eP Z 20 25 28

19. iP EZ 22 33 40
iS E 34 04
i E 22
P:S?,E,dilatation

19. P Z 22 48 05

20. e E 06 21 55
e E 26 01
eL? NE 32 46

20. iP Z 10 23 45
i Z 49

20. iP NEZ 13 32 28
e NE 38 34
S E 42 30
iS N 33
SS N 47 33
L NE 53.5
Lr Z 14 04 45
P:N,W,compression
32S.,178W. Kermadec Is.
H=13 20 19 USCGS

20 eS N 20 35 14ca
eL NE 44 42
27.5N.,90E. Bhutan.
H=20 21 13 USCGS

21. iP NEZ 06 49 54
i Z 55
S NE 58 10
eSS N 07 02 33
eL E 04 01
P:N,W,compression
17.5S.,169E. New Hebrides Is.
H=06 39 38 USCGS

21. PKF Z 07 31 39
ePP Z 35 07
14S.,14.5W. Atlantic Ocean.
H=07 11 52 USCGS

21. eP Z 13 40 46
eS N 50 45
eS? E 51 04
eL N 14 04 51
32S.,178.5W. Kermadec Is.
H=13 28 35 USCGS

21. P Z 18 30 59
P:dilatation

21. iP Z 22 51 00
i Z 06
P:dilatation
6S.,148E. Bismark sea.
H=22 42 55 USCGS

21. eP Z 23 24 52

22. iP NEZ 03 29 19
iS NE 32 51
L NEZ 33 53
M N 36 05
M E 18
P:S,W,dilatation
M N 200 micron,28 sec
M E 130 " ,25 "
24N.,123E.
Off east coast of Formosa.
H=03 25 03 USCGS

22. iP NZ 05 42 32
i N 48 37
S N 49 12
L NE 52 55
P:S,dilatation
New Britain.
H=05 34 26 USCGS

23. P Z 08 59 44

23. iP Z,P NE, 15 12 46
iPP EZ 13 48
iS EZ 17 57
i E 18 13
i Z 44
Lq E 20 54
Lr N 21 25ca
M N 24 46
M E 27 00
P:N,E,compression
M N, 250 micron 20 sec
M E, 110 " 20 "
27N.,101.5E.
Yunnan Province.
H=15 06 19 USCGS

23. iP Z 17 16 04
P:compression

23. iP Z 19 27 52
i Z 28 43
e N 36 01
P:dilatation

23. iP Z 23 18 00
i Z 20
i Z 48
P:compression

24. iP Z 02 12 53
S N 22 40
S E 23 02
eSS? N 29 21
SSS E 31 20
eL N 34 57
L Z 42 40
P:dilatation
32S.,178W. Kermadec Is.
H=02 00 45 USCGS

24. iP NEZ 10 26 08
 iS NZ 29 59
 iS E 30 01
 PcP? E 16
 L N 32 15
 L E 33.0
 L Z 15ca
 P:S,W,dilatation
 22N.,122E.
 Off east coast of Formosa.
 H=10 21 29 USCGS

24. PKP 1 Z 17 10 36
 pPKP 1 Z 50
 i Z 11 18
 pPKP 2 Z 29
 23S.,68W. Northern Chile
 h: 100 kmca.
 H=16 50 45 USCGS

24. P Z 19 59 53
 eL E 20 10 50
 Solomon Is.
 H=19 51 43 USCGS

25. P Z 03 52 30

25. P Z 09 14 22
 P:dilatation

25. P Z 13 26 13
 i Z 27 21
 P:compression

25. P Z 13 48 33

25. P Z 14 46 42

25. P Z 15 24 45
 i Z 25 12

25. iP Z,eP N, 19 05 45
 pP NZ 59
 sPP NZ 07 10
 iS E 10 48
 L NE 12 50
 P:dilatation
 6N.,127.5E. Off east coast
 of Mindanao.
 h: 100 kmca.
 H=18 59 22 USCGS

26. P Z 06 13 01

26. P Z 07 45 54

26. P Z 08 42 37
 i Z 43 29
 pPP Z 47 53
 SKS NE 52 49
 iS NE 54 29
 sPP NE 57 13
 iPKKP Z 56
 SS NE 09 01 59
 sSS NE 03 33
 SSS NE 06 35

(cont.)

26. continued
 L NE 09 12 46
 15.5N.,92.5W. Chipas (Mexico)
 h:200 kmca.
 H=08 28 20 USCGS

26. iP Z 12 30 37
 i Z 55
 P:dilatation

26. P Z 12 50 45
 i Z 51 25

26. P Z 17 20 06

26. P Z 20 12 00

26. P Z 22 54 06

27. P Z 01 36 03

27. P Z 01 53 06

27. P Z 10 41 54

27. P Z 14 52 51

27. iP Z 15 31 37
 i Z 49
 P:dilatation

27. P Z 16 29 04

27. P Z 16 32 13

27. P Z 18 44 02

27. P Z 18 49 43

27. P Z 18 57 18

27. P Z 20 49 11
 Kermadec Is.
 H=20 37 12 USCGS

27. P Z 22 28 41

27. P Z 22 32 08

28. P Z 01 53 06
 eS E 58 33
 Lq N 02 01 43
 27N.,101.5E. Yunnan Province
 H=01 46 36 USCGS

28. iP Z 03 51 36
 i Z 54
 i Z 52 02
 i Z 20
 P:dilatation

28. iP Z 04 27 47
 iS NE 31 39
 eL E 33 23
 P:compression



28. iP Z 09 40 29
i Z 41 15

28. iP Z 11 54 53

28. iP Z 14 59 09
S Z 15 00 02
P:compression

28. eP Z 19 52 02
20N.,146E. Marianas Is.
H=19 47 47 USCGS

28. P Z 20 35 18
e Z 36

29. P Z 02 59 28

29. iP Z 08 43 27
e N 48 16
eL E 49 51
P:dilatation
Near east coast of Kamchatka.
H=08 38 28 USCGS

29. eP Z 13 04 52
eL N 14 48
eL E 16.5
28N.,101E.
Sikang Province
H=12 58 29 USCGS

29. iP Z 14 05 55
i Z 06 24
P:compression

29. iP NEZ 19 59 30
i N 20 00 02
iS NE 17
P:S,W,compression

29. e Z 23 11 28

30. iP Z 03 15 03
ePPP? Z 16 26
8N.,126.5E. Mindanao
(foreshock)
H=03 08 46 USCGS

30. eP Z 03 29 07
PPP Z 30 48
i Z 31 01
Andreanof Is.
H=03 22 12 USCGS

30. P Z 04 43 00
P:compression

30. eP? Z 05 33 09
e Z 49

30. iP Z 07 07 40
L NE 15 59
P:compression
7.5N.,126.5E.
Near east coast of Mindanao.
H=07 01 22 USCGS

30. P Z 10 25 44

30. P Z 13 54 36
P:dilatation
51.5N.,176.5W. Andreanof Is.
(foreshock)
H=13 47 37 USCGS

30. iP Z 15 28 20
P:compression

30. P Z 19 21 23
i Z 40
51.5N.,176.5W.
Andreanof Is.
H=19 14 24 USCGS

30. P Z 22 23 37

October

1. iP Z 00 18 19
P:compression
53.5N.,170E.
Komandorskie Is.region
H=00 12 29 USCGS

1. e Z 02 58 20

1. oP? Z 03 09 45

1. eP? Z 06 10 29

1. P Z 06 36 17
eS? E 42 06
e N 43 11
Lq N 44 28
Lq E 45 48
Lr NZ 47.0
P:dilatation
30N.,101E. Sikang Province
H=06 29 54 USCGS

1. iP Z 10 23 50.9
e N 24 49
i Z 25 06
i EZ 09
iP:compression
Tsugaru strait, Japan.

1. e Z 10 49 40

1. e Z 12 22 15

1. iP Z 14 09 58.6
iS? NE 10 00.2
iP:dilatation

1. e Z 18 51 28ca

1. iP Z 18 59 47.5
eS NE 19 08 23
eL N 20 12
eL E 21
iP:dilatation
19S.,169E. New Hebrides Is.
H=18 49 10 USCGS

1.	eP	Z	19	18	46	5.	eP?	Z	04	20	39.3
	i	Z		19	01.2	5.	iP	NEZ	09	03	06.3
	i	Z		20	07		iPPP	NEZ		04	06
1.	e	Z	20	47	27		i	Z		05	39
1.	iP	Z	23	12	14.9		iS	NEZ		07	16.5
	iS?	Z		13	15.0		i	Z			20
							i	Z			30
1.	e	Z	23	15	45		L	N	08	12	
	e	E		20	58ca		L	E			36
	L	NE		24	28ca		iP:S,W,compression 53.5N.,161E. Near east coast of Kamohatka. H=08 57 55 USCGS				
2.	eP	N	06	03	19	5.	iP	Z	09	16	12.6
	S	Z			52		dilatation				
	S?	N		04	04	5.	eP	Z	10	30	30
2.	i	Z	12	24	09		i	Z		31	27
	i	Z			16	5.	iP	Z	10	58	00.1
2.	iP	Z	16	00	03.2		compression				
	dilatation					5.	P?	Z	11	30	28
2.	eL	NE	20	07	08ca		compression				
3.	eP?	Z	16	21	46	5.	eP	NZ	22	21	43
	i	Z			53		e	NZ			46
3.	eP	Z	17	48	17		i	NZ			49
	esP	Z			54	6.	eP	Z	00	13	12
	esPP?	Z		50	37	6.	eP	Z	04	38	46
	e	Z		51	07	6.	eP	Z	05	38	39
	56N.,162W. Alaska Peninsula. H=17 40 00 USCGS					6.	iP	Z	05	42	06.0
3.	iP	Z	21	10	23.2		iS?	Z			13.3
	compression					6.	iP	Z	05	46	41.3
3.	iP	Z	22	31	30.4		i	NEZ			57
	compression						iS?	E		47	12
4.	eP?	Z	01	15	55		iS?	N			14
4.	iP	Z	04	19	38.0		i	NE			46
	dilatation					6.	P	Z	06	16	35
4.	eP?	Z	07	38	42	6.	P?	Z	06	36	31
	e	Z		50	14	6.	iP	Z	07	58	55.8
	e	NEZ		51	18		iS?	Z		59	17
	L	NE		57	26ca		iP:dilatation				
	Tonga Is.region H=07 26 57 USCGS					6.	iPKP 1	Z	11	22	53
4.	iP	Z	10	12	53.7		compression				
	iS.	Z			58.2		i	Z		23	04
	iP:compression						iPKP 2 or pPKP 12				24
4.	iP	Z	21	13	27		isPKP?	Z		24	06.4
	i	Z		14	06		compression				
	i	Z			16		sPKP?	Z			23
	e	EZ			53		PP	Z		27	04
4.	eP?	Z	22	42	11		sPP?				48
4.	iP	Z	23	01	28.9		i	N		31	04
	iS	Z			30.6		e	NZ		32	06
	iP:compression						eSS or esSS N			46	24
5.	P	Z	00	57	54		e	E		47	54
	23.5S.,178W. Tonga Is.region H=00 46 42 USCGS						L	E	12	14	ca
							L	E		21	ca
							36S.,70W. Mendoza Province, Argentina. h:150 kmca. H=11 03 16 USCGS				

6. P Z 23 56 58
dilatation

7. eP? Z 02 01 45

7. P Z 03 44 10
i Z 59
P:compression

7. i Z 03 49 47

7. iP Z 04 14 47

7. e Z 05 13 01

7. e Z 05 14 54

7. iP Z 06 02 36.6
i Z 52
iP:dilatation

7. iP Z 07 32 02
S N 41 17
e E 42 13
eL NE 50 53ca
L NE 54 59
iP:dilatation
19S.,173.5W. Tonga Is.
H=07 20 36 USCGS

7. e Z 09 57 04

7. iP Z 12 16 11.0
i Z 28
iP:dilatation

7. P? Z 21 08 08

7. iP? Z 21 14 14
e Z 15 08

7. eP 1 Z 21 24 25
iP 2 Z 27.5
i Z 36
i Z 25 00
iP 2:compression

7. eP? Z 22 46 11
iS? Z 36

7. eP? Z 23 38 25

8. P Z 07 10 01
e Z 30

8. iP Z 07 55 30.9
iS? Z 50
iP:dilatation

8. P 1 Z 16 24 09
iP 2 Z 10.6
i Z 36
i Z 25 04
P 1:compression
iP 2:dilatation

8. eP? Z 16 26 44

8. eP Z 16 37 45
i Z 38 19

9. P Z 01 15 30

9. iP Z 14 23 11
compression

9. iP Z 17 48 14
pP Z 40
i Z 49 03
pPP Z 50 00
e NZ 51 43
e Z 54 05ca
S NZ 51
e E 57 43
e NZ 59
L E 59 21
L N 18 00 21
L Z 01 21
iP:compression
5S.,153E. New Britain.
H=17 40 09 USCGS

9. iP Z 23 20 05
e Z 23 12
eS N 24 59
eS E 25 12
L NE 27 20
L Z 28 08
iP:compression
50.5N.,176W.
Near Is.Aleutian Is.
H=23 13 32 USCGS

10. iP 1 Z 01 18 57
iP 2 Z 19 01
L NE 20 44
Near south coast of Hokkaido,
Japan.

10. iP Z 09 05 50.8
P NE 51
PP Z 07 38
i E 11 28
i Z 36
i Z 42
i N 52
S 1 N 12 34
S 2 NE 36
i N 15 13
i E 20
Lq E 17 22
Lq N 26
iLr N 18 38
Lr Z 19 20
iL E 19 50
M N 20 37ca
M E 45ca
iP:compression
M N: 937 micron 18 sec
M E: 394 " 25 "
5S,153E. New Britain.
H=08 57 44 USCGS

10. iP Z 10 07 36

10. iP? Z 12 39 07

10. eP Z 15 25 43
i Z 26 08

10. iP Z 16 03 40

10.	iP	Z	19	21	35	13.	eP	Z	11	31	09	
10.	eP	Z	20	37	22		i	Z			51	
10.	iP	NZ	23	04	35.7		eS	Z		32	08	
	P	E			36		i	Z			11	
	iS	NEZ		05	14			NEZ				
	P:N,E?,dilatation											
11.	iP	Z	01	21	54	13.	eP	Z	16	31	54	
	compression											
11.	eP	Z	04	14	53		eS	N		41	50	
11.	e	Z	04	16	54		es	SPorsPS E		43	42	
11.	eP	Z	04	21	49		e	E		52	03	
11.	iP	Z	13	32	54		e	N			35	
	compression											
11.	eP	Z	16	01	58		36S.,177.5E. Off coast of North Islands,New Zealand. h:200 kmca. H=16 19 51					USCGS
11.	e	Z	16	25	09	13.	eP	Z	17	54	41	
11.	e	Z	17	04	51		e	Z			50	
11.	e	Z	17	28	23		e	N		57	40	
11.	eP	Z	20	34	22		eS	E		58	05	
12.	eP	Z	09	22	57		eL	E			35	
	eS?	Z		23	38		eL	N			37	
12.	e	Z	14	08	33		24N.,121E. Formosa. H=17 50 16					USCGS
	e	Z			55	13.	eP	Z	20	10	27	
12.	iP	Z	18	45	21		e	Z			37	
12.	iP	Z	22	14	57.7	13.	e	Z	22	04	38	
	dilatation											
13.	eP	Z	00	02	09	13.	eP	Z	22	18	55	
13.	e	Z	01	19	57		e	E		51	36	
	e	N		24	40	14.	e	Z	00	30	33	
	e	N		31	25		e	Z		31	03	
	e	E			31	14.	eP	Z	01	07	07	
13.	eP	Z	01	57	23		ePPP	Z		11	19	
13.	iP	Z	03	18	57.9		eS	N		16	26	
	dilatation											
13.	e	Z	05	41	49		eL	N		24	40	
	e	Z		42	24		eL	E			55	
13.	iP	NZ,eP E,	09	35	47.2		16.5S.,172W. Tonga Is. H=00 55 55					USCGS
	PcP	Z		37	04	14.	e	Z	05	31	03	
	ePP	Z			29		e	Z		32	40	
	PcS?	Z		40	59	14.	e	Z	06	35	04ca	
	i	Z		42	51	14.	e	Z	06	58	12	
	S	NE		43	00	14.	ePKP?	Z	09	01	50	
	eSS	NE		46	41		ePP	Z		03	20	
	eL	N		48	33		PS	E		12	14	
	eL	E		50	44		e	Z		14	53	
	P:N,compression											
	9.5S.,161E. Solomon Is. H=09 26 44											USCGS
13	e	Z	10	43	24		eSS	N		17	35	
							i	E		18	19	
							e	Z		29	32	
							Lr	E		35	07	
							Lr	Z			24	
							Lr	N			26	
	3S.,103.5W. Pacific Ocean, west of Galapagos Is. H=08 43 00											USCGS
						14.	iP	Z	14	38	48.7	
							iS	Z,eS N,		39	21	
							iP:compression					
						14.	eP	Z	14	55	18	
							24.5S.,176.5W. Tonga Is.region H=14 43 41					USCGS

14.	eP	Z	21	22	54ca	17.	iP	Z	01	16	
							i	Z		17	
15.	P	Z	10	53	22		PP	Z		18	06
	e	Z			39		eS	Z		22	48
15.	iP	Z	14	49	44.7		eL	Z		26	32
	iS	Z			52.6		eL	N			34
15.	e	Z	17	09	29		iP:dilatation 6S.,154E. Solomon Is. H=01 08 07 USCGS				
15.	eP	Z	18	08	02	17.	iP	Z	01	57	14
15.	eP	Z	18	13	22		dilatation				
15.	eP	Z	21	36	51	17.	e	Z	04	11	15
16.	iP	Z	02	02	17.7	17.	e	Z	05	10	44
	eS	Z			39						
	i	Z			43	17.	eP	Z	05	21	53
	iP:dilatation						eS?	Z		25	09
16.	iP	Z	03	22	54.6		e	E			36
	e	Z			23 00		e	N			46
	iP:compression					17.	e	Z	06	29	23
16.	eP	Z	05	01	08	17.	e	Z	08	08	43
	eS	Z			25	17.	iP	Z	08	42	22
16.	iP	Z	09	42	46		i	Z		43	06
	eS?	Z			43 02	17.	e	Z	09	37	01
	iP:compression					17.	e	Z	09	39	16
16.	iP	Z	09	56	44.5	17.	e	Z	14	08	46
	i	Z			58	17.	eP	Z	14	23	48
	eS	EZ			57 05		e	Z	14	36	58ca
	iP:dilatation					17.	e	Z	18	43	19
16.	P	Z	10	47	03	17.	P	Z	20	21	23
	i	Z			17		17.5N.,43.5E. Southern Saudi Arabia. H=20 08 54 USCGS				
	i	Z			21	17.	eP	Z	20	28	32
	i	Z			28	17.	e	Z	21	55	22
16.	eP	Z	14	48	14		e	Z			37
	i	Z			42	18.	e	Z	00	20	04
16.	e	Z	15	34	15	18.	P	Z	01	10	40
	e	Z			35 34		PP?	Z		12	24
16.	eP	Z	17	21	01		eS?	E		16	16
	eS	E			24 46		e	N			27
	eL	E			26 53		eL?	N		19	51
	Near south coast of Kamchatka. H=17 16 38 USCGS					18.	iP	Z	01	19	38
16.	e	Z	18	02	43		cS	E		25	21
	e	Z			03 30		eS	N			22
16.	e	Z	18	32	24		eL	E		28	14
	e	Z			37 54		eL	N			16
16.	iP	Z	19	22	34.0		iP:compression				
	e	E			23 52	18.	P	Z	03	56	09ca
	e	NE			25 02		eS?	NE			39
	iP:compression					18.	iP	Z	13	56	08
16.	eP	Z	20	15	23						
	e	Z			41						
16.	eP	Z	20	51	25						
	i	Z			32						
16.	e	Z	22	35	38						

18.	eP?	Z	15	40	04	19.	i	Z	12	52	22
18.	e	Z	20	23	34	19.	e	Z	12	56	17
18.	e	Z	22	57	18	19.	e	N	13	00	15
19.	iP	NEZ	01	46	32.2	19.	iP	Z	15	21	07
	i	Z			45.4	19.	e	Z	15	30	00
	i	E	47	11		19.	e	Z			32
	i	Z		12		19.	iP	Z	17	01	39.6
	eS?	N		23		19.	eS?	NE	02	28	
	i	EZ		31			iP:dilatation				
	i	E		44		19.	iP	Z	17	11	43.7
	i	N		50			compression Local shock				
	i	Z	48	03		19.	eP	Z	18	38	22
	iP:S,W,compression					19.	eS	Z			29
19.	eP?	Z	01	51	59	19.	iP	Z	20	04	12.4
19.	iP	Z	01	59	07		compression Local shock				
	i	Z		33		19.	eP	Z	20	40	44
19.	eP	Z	02	02	07		i	Z			53
19.	iP	Z	02	04	58	19.	eS	N		44	01
	e	NEZ		05	39		eL	N		45	24
19.	e	Z	02	12	42		eL	E			32
19.	iP	Z	02	59	45		Northern Kurile Is. H=20 36 30 USCGS				
	i	Z	03	00	04	19.	eP	Z	21	08	12
	iP:compression					19.	e	Z		15	39
19.	eP	Z	03	19	21	19.	e	Z	22	38	00
	S?	Z		54		20.	e	Z	00	41	23
19.	e	Z	04	39	54	20.	e	Z	01	03	00
19.	iP	Z	04	59	48	20.	e	Z	01	06	08ca
	S	Z	05	00	15	20.	i	Z	01	54	18
19.	eP	Z	05	07	09ca	20.	eP	Z	02	49	21
19.	e	Z	06	25	27	20.	P	Z	03	20	37
19.	eP	Z	06	40	20	20.	iP	Z	07	33	03
19.	eP	Z	08	08	43		eS	E		37	06
	e	Z		09	25		eL	E		38	54
19.	eP	Z	08	59	17		iP:dilatation 52.5N.,159E. Near east coast of Kamchatka. H=07 27 58 USCGS				
19.	e	Z	09	25	21	20.	P	Z	09	17	06
19.	iP	NEZ	09	58	54.8		i	Z			26
	i	Z	10	00	24	20.	eP	Z	09	35	23
	iS	NE		02	16	20.	e	Z	10	50	08ca
	eL	NE			58	20.	e	Z	12	19	36
	eL	E	04	37		20.	iP	NEZ	13	11	16.6
	eL	N		44			iS?	NZ		11	44
	49.5N.,155E. Northern Kurile Is. H=09 54 43 USCGS						iS?	E			47
	P:S,W,compression						(cont.)				
19.	i	Z	11	44	56						
19.	P	Z	11	55	56						
19.	iP	Z	12	15	26						
	eS	Z		45							



2 continued
 i NE 13 12 01
 i EZ 09
 i N 11
 iP:N,W,compression

20. iP Z 14 57 38.8
 eS N 58 19
 eS E 21
 iP:dilatation

20. e Z 15 02 28

20. e Z 15 04 34

20. eP Z 15 25 18

20. e Z 15 41 44

20. i Z 16 09 58

20. eP Z 16 42 21
 e Z 29
 eS Z 43 03

20. e Z 17 19 52

20. iP Z 20 37 23

20. e Z 20 41 34

20. iP Z 22 04 05.4
 dilatation

21. iP Z 01 35 29.3
 compression

21. iP Z 04 41 05.4
 PcP Z 42 22
 i Z 44
 PP? Z 43 00
 PcS Z 46 13
 S NE 48 21
 ScS NE 50 53
 L NE 52 26
 iP:compression
 4N.,95E. Near coast of Sumatra.
 H=04 32 03 USCGS

21. iP Z 05 07 03

21. eP Z 05 51 53

21. eP Z 08 21 31

21. iP Z 09 41 01
 eS NE 47 27
 L NE 51 25
 iP:compression

21. iP Z 17 12 03.7
 compression

21. P Z 17 44 04

21. P Z 19 07 02
 i Z 03.2

21. iP NEZ 19 12 52.3
 pP NEZ 15 13
 PP NEZ 16 08
 (cont.)

21. continued
 S NEZ 19 21 00
 sS NE 25 00
 PKPPKP Z 40 40
 iP:S,E,dilatation
 21S.,179W. Fiji Is.
 h:650kmca.
 H=19 02 40 USCGS

21. P Z 20 44 41

21. P Z 21 36 17
 i Z 20.0

21. iP Z 23 17 10
 PcP or PPP Z 19 17
 S Z 23 03
 0.5S.,123.5E.
 Northern Celebes.
 H=23 09 38 USCGS

22. P Z 00 04 56

22. P Z 01 06 31

22. P Z 02 28 48

22. iP Z 03 07 29.8

22. P Z 03 31 42

22. iP Z 03 44 13
 eS? NE 50 40
 eL E 55 15
 eL N 57 51

22. iP Z 05 23 57

22. iP Z 06 02 32
 esP? Z 03 39
 eS NE 08 56
 eL E 12 18
 eL N 15 08
 iP:compression

22. iP Z 07 00 33.5
 iS Z 47
 iP:dilatation

22. iP Z 07 35 02
 e E 37 46

22. P Z 07 45 13
 i Z 48 34

22. iP Z 09 15 18

22. iP Z 10 02 54.4
 compression

22. P Z 10 12 24
 i Z 39
 eS NE 15 34
 46N.,156E. Kurile Is.
 H=10 09 20 USCGS

22. P Z 11 25 56
 eL? Z 35 48

22. eL? NZ 13 00 00

22. e Z 15 00 12
i Z 13

22. P Z 16 27 08

22. iP Z 16 56 44.7
dilatation

22. P Z 17 02 39

22. P Z 17 02 39

22. P Z 17 33 53

22. iP Z 19 16 17.1
compression

22. iP Z 20 34 13
dilatation

22. iP NEZ 22 15 02.2
i NE 21 09
S NE 33
L E 24 52
iP:S,E,dilatation
6S.,149E. New Britain.
H=22 06 56 USCGS

22. P Z 22 43 35
15S.,176W. Fiji Is.region
h:300 kmca.
H=22 33 10 USCGS

22. iP Z 22 57 11
epP Z 33
eS? N 23 03 31
eL? N 10 13
iP:dilatation
S,L,waves disturbed by
previous shock.

22. P Z 23 33 33

23. iP NEZ 00 09 30.3
i N 44
i EZ 47
iP:N,E,compression
changing record.

23. P Z 02 50 19
i Z 28

23. eP Z 03 12 17

23. P Z 03 19 39

23. P Z 03 39 41

23. iP Z 03 47 45.4
iS? Z 48 13
iP:dilatation

23. iP Z 06 00 48
i Z 52
eL E 06 43
eL N 07 07

23. iP Z 06 17 01
iS? Z 33

23. eP Z 06 56 19

23. iP Z 08 12 07
e Z 09 41 07
P Z 10 48 51

23. iP Z 11 04 25.6
compression

23. P Z 11 13 38

23. iP Z 11 48 59.1
i Z 49 45
e NE 50 07
iP:compression

23. eP Z 12 10 20

23. eP? Z 13 27 27
i Z 35

23. P Z 13 56 28

23. P Z 14 05 30

23. iP Z 16 14 14
eS? N 16 13

23. P Z 16 26 09

23. iP Z 17 13 30
i Z 37
eS NE 21 09
eL E 26 40
iP:compression
11.5S.,163E. Solomon Is.
H=17 04 09 USCGS

23. iP Z 18 02 38.2
i Z 40.1

23. iP NEZ 18 40 37.7
S E 39.0
iP:S,W,compression

23. eP Z 20 23 59

23. eP Z 20 36 59

23. eP Z 23 04 29

24. iP Z 00 27 56.4
eS E 33 54
iP:dilatation
4.5S.,150E.
Off coast of New Britain
H=00 19 52 USCGS

24. iP Z 03 14 51.7
i Z 15 00
i Z 06

24. eP Z 03 50 12

24. eP Z 04 22 16

24. iP Z 05 15 32
dilatation
Kermadec Is.
H=05 03 34 USCGS



24.	e	Z	05	43	20
24.	e	Z	06	28	12
24.	e	Z	09	33	32
24.	e	Z	09	40	54
24.	e	Z	09	49	51
24.	e	Z	10	00	32
24.	iP	Z	14	16	05.3
	iS?	Z			13.8
	iP:compression				
24.	e	Z	15	31	34
24.	iP	Z	15	37	20.5
	dilatation				
24.	iP	Z	15	42	06
24.	iP	Z	19	52	56
	compression				
24.	P	Z	20	21	44
24.	iP?	Z	20	22	55.4
24.	eP	Z	20	44	00
24.	e	Z	21	11	59
24.	eP?	Z	22	35	03
24.	iP	Z	23	04	31.9
	compression				
25.	P	Z	00	12	51
	iS?	Z			53
25.	P	Z	01	06	12
25.	iP	Z	05	26	13.8
	compression				
25.	P	Z	06	28	47
	i	Z		30	34.7
25.	P	Z	07	15	45
25.	e	Z	09	01	02
25.	eP?	Z	09	38	40
25.	e	Z	09	59	56
25.	iP	Z	10	31	19.2
	iS?	Z			41
	iP:dilatation				
25.	P	Z	12	25	53
	i	Z		26	03
25.	iP	Z	15	22	59.1
	dilatation				
25.	eP	Z	20	28	50
	e	Z		30	24

25.	P	Z	21	15	42.2
	iS?	Z			54.5
25.	iP	Z	21	17	44.7
	i	Z			50.3
	iP:dilatation				
25.	eP	Z	21	45	12
25.	iP	Z	22	02	45.7
	i	Z			55
26.	iP	Z	02	51	19
26.	eP	Z	04	17	33
26.	P	Z	08	19	54
	i	Z		20	21
	eL?	N		29	25
26.	eP	Z	11	16	51
	e	NE		20	33
	eL	NE		21	27
	24.5N.,122.5E.				
	Near east coast of Formosa.				
	H=11 12 39 USCGS				
26.	iP	Z	13	02	51.1
	compression				
26.	eP?	Z	14	01	13
26.	P	Z	14	25	51
	iS?	Z		26	09
26.	P	Z	19	51	46
26.	eP	Z	20	47	25
26.	eP	Z	22	05	56
26.	iP	Z	22	15	56.8
	S	Z		16	29
	iP:compression				
26.	P	Z	22	23	01
26.	eP	Z	22	37	10
26.	eP	Z	23	02	40ca
26.	P	Z	23	11	29.2
	i	Z		12	01
27.	iP	Z	00	10	41.8
	pP	Z		11	03
	iPcP	Z		13	22
	eS	NE		16	00
	iP:dilatation				
	52N.,179.5W.				
	Andreanof Is. h:100 kmca.				
	H=00 04 10 USCGS				
27.	eP	Z	00	31	42
27.	P	Z	01	47	00
	17S.,179W. Fiji Is.				
	h:600 kmca.				
	H=01 36 58 USCGS				
27.	eP	Z	03	16	05

27.	iP	Z	03	27	54.2	28.	e	Z	22	22	
	dilatation										
27.	eP	Z	03	32	30	29.	eP	Z	00	08	19
27.	iP	Z	03	38	40.9	29.	e	Z	02	28	53
	compression						eL	E	37	07	
	49N.,157.5E. Kurile Is.region					29.	iP	Z	03	20	54
	H=03 34 17						Off east coast of Kamchatka.				
							H=03 14 40				USCGS
27.	eP	Z	07	06	07ca	29.	e	Z	03	54	40
27.	eP	Z	10	48	27	29.	iP	Z	05	04	15
27.	iP	Z	11	15	58		Compression				
	i	Z		16	11	29.	e	Z	05	21	39
	L	NE		31	57	29.	e	Z	15	02	11
	10.5S.,166E. Santa Cruz Is.					29.	iP	Z	19	54	24.2
	H=11 06 32						iS	Z			32.5
27.	eP	Z	12	29	42	29.	iP	Z	20	11	50.2
27.	P	Z	12	50	06		eS	Z	12	17	
27.	P	Z	13	12	00		iP:dilatation				
27.	P	Z	13	51	02	29.	e	Z	20	45	43
27.	eP	Z	14	28	49	29.	iP	Z	21	01	30.9
	i	Z		29	56		eS	E	05	54	
27.	eP	Z	16	05	51		iP:compression				
27.	eP	Z	18	46	53		54.5N.,161.5E. Near east coast				
	i	Z		47	22		of Kamchatka.				
							H=20 56 07				USCGS
28.	eP	Z	00	29	41	29.	iP	Z	21	10	31.7
	i	Z			42		iS	Z			40.2
	i	Z			49		iP:compression				
28.	P	Z	05	16	24	30.	eP	Z	01	32	18
	i	Z			26.0	30.	iP	Z	02	13	37
	iS?	Z			38.4		compression				
28.	i	Z	05	49	34		29.5S.,178.5W.				
	i	Z			46		Kermadec Is.				
28.	e	Z	06	26	38		H=02 01 39				USCGS
	e	Z		28	14	30.	iP	Z	03	13	25.6
28.	e	Z	06	48	46		dilatation				
28.	eP	Z	07	20	05	30.	e	Z	03	53	51
28.	iP	Z	07	33	59	30.	eP	Z	05	16	11
28.	iP	Z	09	30	53.2	30.	iP	Z	07	33	01.8
	eS?	E		32	03		eS?	Z			28
	e	Z			53		iP:compression				
	iP:compression					30.	iP	Z	08	32	27.5
28.	e	Z	09	43	19		iS	Z			35.6
28.	P	Z	12	27	48		iP:compression				
28.	eP	Z	16	01	52	30.	iP	Z	11	42	13
28.	P	Z	18	28	49		compression				
28.	eP	Z	21	43	03		0.5S.,123.5E.				
	i	Z			04		Northern Celebes.				
							H=11 34 40				USCGS
28.	eP	Z	21	43	03	30.	iP	Z	13	10	55.1
	i	Z			04		compression				

30.	iP	Z	15	44	03.1
	compression				
30.	eP	Z	17	52	35
30.	e	Z	17	55	27
30.	iP	Z	19	06	12.5
	i	Z			21
	i	Z			37
	iP:compression				
30.	iP	Z	19	30	59.3
	i	Z		32	33
	iP:dilatation				
	19S.,180. Fiji Is.				
	h:650 kmca.				
	H=19 20 50 USCGS				
30.	e	Z	21	12	19
30.	eP	Z	23	23	34
31.	eP	Z	00	18	01
31.	P	Z	00	52	24
31.	iP	Z	01	12	57
	PP	Z		14	19
	S	NEZ		18	36
	L	NEZ		21	16
	iP:compression				
	52N.,175.5W. Andreanof Is.				
	H=01 05 53 USCGS				
31.	P	Z	02	24	39
31.	eP	Z	04	22	48
	i	Z			51
31.	e	Z	06	25	33ca
31.	eL	NE	08	55	06
31.	eP	Z	18	53	52
	i	Z			58
31.	eP	Z	21	00	31

K.Sagisaka
Chief

Seismological Bulletin

for November 1 to December 31, 1955



Month	Type	Time (G.M.T.)	Location	Depth (H)	Station	Phase	Time	Time	Time
November	e	Z 05 37 38ca							
1.	P	Z 06 50 12							
1.	eP	Z 10 20 20ca							
1.	ePP	Z 22 05							
1.	L ?	EZ 29 56							
			5S., 153E. New Britain region.						
			H=10 12 09						
			USCGS						
1.	iP	Z 11 51 25.7							
1.	eS?	NE 55 26							
1.	eL?	E 57 28							
1.	P:dilatation								
1.	eP	Z 12 37 30							
1.	eP?	Z 15 24 52							
1.	eS?	E 32 57							
			Loyalty Is.						
			H=15 14 18						
			USCGS						
1.	e	Z 22 50 30ca							
1.	i	Z 51 44							
1.	e	Z 54 44ca							
1.	iP	NEZ 23 47 47.4							
1.	i	NEZ 48 08							
1.	i	N 37							
1.	iS NE, eS Z								
1.	i	N 49 24							
			P: S, W, compression						
			Off east coast of Sanriku						
			(Japan)						
2.	P	Z 04 50 01							
2.	S?	Z 29							
2.	iP 1	Z 07 39 14.8							
2.	iP 2	Z 15.8							
			P 1 : compression						
			P 2 : dilatation						
			Near North-east of Iwate						
			Pref. (Japan)						
2.	eP	Z 07 47 05							
2.	iP	Z 17 15 38.6							
2.	P?	Z 17 24 30							
2.	P	Z 18 42 42							
2.	i	Z 43 03							
2.	e	EZ 47 25							
2.	eL?	Z 52.2							
			5N., 126E. Off south coast						
			of Mindanao. (Philippine Is.)						
			H=18 36 00						
			USCGS						
2.	e	Z 19 33 09							
2.	iP	Z 19 58 57.9							
2.	i	Z 59 23							
2.	iS	Z 32							
2.	i	EZ 52							
			P compression						
2.	iP	Z 21 36 36.3							
2.	e	Z 37 39							
			P: dilatation						
2.	iP	Z 22 34 38.2							
2.	e	Z 35 31 ca							
			P: dilatation						
2.	iP	Z 22 39 23.8							
2.	e	EZ 53							
			P: dilatation						
3.	P	Z 10 39 11							
3.	P	Z 12 46 23							
3.	e	Z 58							
3.	iPKP	Z 12 59 47							
3.	ipPKP?	Z 13 00 18							
			PKP: dilatation						
			Bolivia-Chile border.						
			h: 100kmca. H=12 39 56						
			USCGS						
3.	e	EZ 23 33 22							
4.	iP	Z 00 33 24.7							
			iP: dilatation						
4.	eP?	Z 02 02 53							
4.	e	E 08 20							
4.	eL?	E 11 29							
4.	P	Z 02 39 04							
4.	i	Z 05.6							
4.	iS?	EZ 06.9							
4.	i	Z 06 08 46							
4.	iP	Z 12 37 37.3							
4.	i	Z 44.6							
4.	i	Z 51							
			iP: dilatation						
4.	eP	Z 16 32 28							
4.	iP	Z 20 04 35.5							
			iP: compression						
4.	iP	Z 20 06 10.6							
4.	iS	E 13.6							
			P: dilatation						
4.	P	Z 21 48 15.3							
4.	iS	Z 44.8							
4.	iP	Z 22 33 17.1							
4.	iS?	Z 25.1							
			P: compression						
4.	PKP 1	Z 23 03 44							
4.	ipPKP 2?	Z 04 14							
4.	upPKP 2, or								
4.	sPKP 2	Z 52							
4.	ePP	Z 07 48							
4.	esPP	08 30							
4.	orepPP								



4.	continued e N 23 14 29ca e N 18 24 e E 23 17 35.5S., 69.5W. Mendoza Province (Argentina) h:100 kmca. H=22 43 50	USCGS	9.	P Z 00 52 17 i Z 24.1
5.	P Z 04 03 57 S EZ 12 12ca L E 19 28ca 19.5S., 169W. New Hebrides Is. h:150kmca. H=03 53 38	USCGS	9.	iP Z 01 53 00.1 iS? Z 01.9 P:compression
5.	eP? Z 04 28 01		9.	eP Z 04 41 17 i Z 40
5.	eP Z 07 32 34 eL N 57 27ca eL E 08 01 59ca 24.5N., 109W. Southern Gulf of California. H=07 19 23	USCGS	9.	eP Z 06 24 18 i Z 22
5.	P Z 12 27 35		9.	eP Z 15 26 46 eS? Z 27 21
5.	eP Z 12 29 33 e NE 36 25 eL? Z 41.8		9.	eP Z 17 49 14 i Z 54
5.	iP Z 18 15 04.7 P:dilatation		9.	eP? Z 18 40 15 e Z 41 17
6.	P Z 01 12 23		9.	eP Z 23 08 24
6.	eP Z 02 07 10		10.	iP Z 00 53 27.5 i Z 41.3 S? Z 48
6.	iP Z 06 18 19.4 P:dilatation		10.	e Z 00 56 19
6.	P Z 17 32 48		10.	eP Z 01 21 05 e Z 23
7.	eP Z 08 47 01		10.	P NZ 01 32 40 PP Z 34 29 e E 38 18 S? E 30 05 eL? Z 42.6 eL? E 42.8 L NZ 46 13 P:dilatation 5S., 152E. New Britain region H=01 24 20
7.	P Z 08 58 41 i Z 46		10.	P Z 01 55 04 i Z 06 ipP Z 33 iS NZ 02 03 56 S E 59 iScS E 04 49 L E 11 22 L N 28 L NZ 16.5 iPKPPKP Z 23 15 15S., 174W. Samoa Is. h:100kmca. H=01 44 04
7.	e N 16 56 04ca			USCGS
7.	iP Z 16 59 41.6 iS Z 47.0 P:compression		10.	eP Z 04 02 20 47.5N., 152.5E. Kurile Is. H=03 58 46
7.	eP Z 19 05 34 S Z 06 02			USCGS
7.	iP Z 20 43 03.5 P:compression		10.	P Z 05 22 13 28.5S., 178.5W. Kermadec Is. region. H=05 10 20
8.	e NEZ 03 56 06ca			USCGS
8.	iP Z 17 17 51.8 i Z 18 02.3 iS? Z 04 P:compression		10.	iPKP? Z 09 12 01.0 i Z 17.7 PKP:compression 25S., 65W. Salta Province (Argentina) h:150kmca. H=08 52 04
8.	P Z 19 33 51			USCGS
8.	iP Z 20 00 26.5 i Z 32. P:dilatation			
9.	e Z 00 40 58			



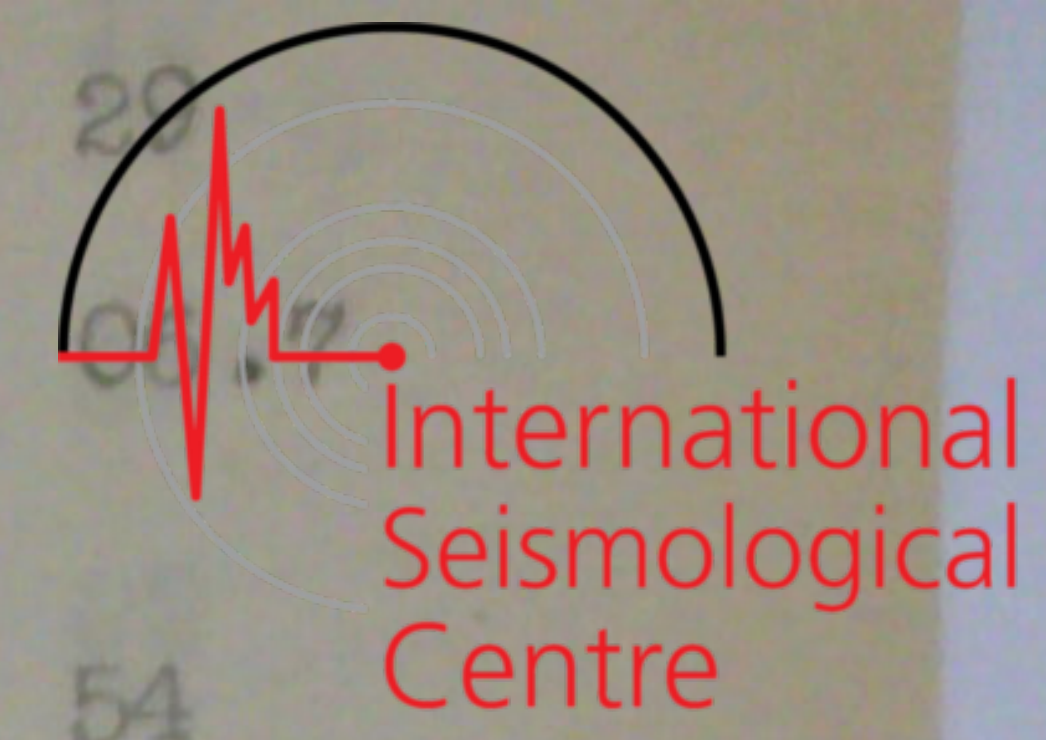
10.	eP i	Z Z	13	51	40 42.3
10.	eP	Z	19	25	05
11.	e	Z	08	51	37
11.	e eS? eL?	Z E E	09	08 14 21	28 46 14
11.	e eL? eL?	Z N E	09	41 48 52	31 59 56
11.	eP? e eSS eL	Z N E E	10 11	48 58 02 07	23 24 31 22
Tonga Is. region H=10 37 03 USCGS					
11.	eP eS	Z Z	11	28 29	58 22ca
11.	eP eL	Z N	11	34 42	36 42
11.	P S? P:compression	Z Z	16	16	18.9 47.3
11.	iP i i	Z N E	17	50	09.6 10.5 12.5
11.	eP S?	Z Z	18	36	23 24
11.	eP eS? eL?	Z N N	19	12 15 19	46 32 18
11.	P e P:compression	Z Z	22	13	23 24
11.	eP e	Z Z	22	24 25	34 13
12.	e e	Z Z	00	42	15ca 21
12.	e e e	Z Z Z	02	10	24 27 40
12.	eP eL? eL?	Z N N	02 03	32 52 03	58 41 09
12.	P i i P:compression	Z Z Z	03	18	09.1 36.9 53.8
12.	e e	Z Z	03	51	28ca 49
12.	iP eS eS SS	Z E N N	05 06	44 55 00	53.9 08ca 17 33

(cont.)

12.	SSS? Lq e e P:dilatation 26N.,35E. Northern Red Sea. H=05 32 18	N NE N E	06	04	53 53 51 32
12.	P S P:compression	Z Z	07	19	26.2 27.9
12.	eP e eL eL	Z E N E	09	00	03 33 16 42
12.	eP eL?	Z E	09	07	47 15 14
12.	iP i epP? S L L P:dilatation 5S.,152.5E. New Britain. h:60km. H=10 07 47	Z Z Z E E E	10	15	56.0 00.2 22 10 52 18ca
12.	iP eS P:compression	Z Z	10	25	47.6 20
12.	iP iPP? e S L L P:compression 11.5N.,125.5E. Samar Is. (Philippine) H=11 12 25	Z Z N N E NZ	11	18	13.4 09 50 59 13 25.5
12.	eP ScS? 22.5S.,179E. South of Fiji Is. h:600km. H=12 19 44	Z N	12	30	09 50
12.	e e	Z Z	13	00	48 05
12.	eP e eS L L New Britain region. H=13 43 00	NZ Z N N E	13	51	09 14 26 31 36ca
12.	eP i	Z Z	14	21	11 15.2
12.	eP S L Lr? 17.5S.,167.5E. New Hebrides Is. region. H=15 45 34	Z NE N N	15 16	55	46ca 01 39ca 54



12.	e	Z	16	23	08	14.	e	Z	06	54	31ca
	e	Z			11						
	e	Z			24	14.	eP	Z	08	19	57
					28ca		e	Z			59
							e	Z			07
12.	eP	Z	17	09	00ca						
	eS?	N		11	40	14.	Pn		12	37	39.1
12.	eP	Z	18	19	24		Pg				43.1
12.	iP	Z	20	09	22.0		Sn		38	06	
	eL	N		12	49		Sg				10.4
	P:compression						Pn:dilatation				
12.	eL?	N	21	10	05	14.	eP	Z	13	16	17
12.	eL?	E	23	04	28		e	N		21	56
13.	eL?	E	02	50	24ca		S	N		22	52
13.	eL?	E	04	17	59ca		L	E		25	52
13.	eS?	N	05	34	55ca		5.5S.,152.5E.				
	eL?	N		40	45ca		Near coast of New Britain				
	e	N		43	43		H=13 08 07 USCGS				
13.	eP	Z	08	35	53ca	14.	iP	Z	13	27	35.4
13.	e	N	09	11	06ca		i	Z			37.3
	eL?	N		21	47ca		pP	Z		28	08
13.	eP	Z	09	40	27		iS	NE		31	50.9
	e	Z			28		L	N	13	32	41ca
	e	Z			41		L	E			57ca
13.	eP	Z	11	10	11		17.5N.,145.5E. Marianas Is.				
	e	Z			58		h:150km.				
13.	eP	Z	22	54	34ca	14.	P	Z	13	37	36
	e	Z			38ca						
	eS	N	23	03	26	14.	e	Z	14	11	49
	eL?	N		10	32ca		e	Z		12	03
	eLr?	N		15	01ca	14.	e	Z	20	24	30
	Fiji Is. region					15.	eP	Z	03	24	44
	H=22 43 40 USCGS						eL?	E		34	28ca
13.	iP	Z	23	32	50.7	15.	5S.,154E. Solomon Is. region				
	S	E		33	04		H=03 16 32 USCGS				
	P:compression					15.	e	Z	04	40	25ca
14.	eP	Z	00	20	20	15.	eL?	E	07	44.0	
	i	Z			25		eL?	N		56.0	
14.	eP	Z	01	20	29	15.	iP	Z	09	10	03.2
	i	Z			31.4		i	Z			11.2
	eS	E		24	03		e	Z			43
	eS	Z			10	15.	P	Z	10	15	24.3
	17.5N.,146E. Marianas Is.						i	Z			28.3
	h:100km. USCGS						iPP	Z		17	31.4
14.	iP	NZ	03	18	43.0		iS	NE		22	22.5
	pP	Z		19	28		SS	NE		25	51
	eS	N		26	14		L	E		27	53
	eL	E		32	33		Lr?	E		30	16ca
	P:N,compression						P:dilatation				
	14S.,167E. New Hebrides Is.						55.5N.,155W. Off south coast				
	h:200km						of Alaska Pen.				
	H=03 09 10 USCGS					15.	eP?	E	15	28	30ca
14.	eP	Z	03	34	07		eL?	NE		32	35
14.	e	Z	04	35	47ca	15.	P	Z	19	43	54.4
14.	e	Z	06	23	30		i	Z			55.9
							e	Z		44	47



15.	eP?	Z	22	18	28ca	18.	eP	Z	16	43	28
	eL?	N			31.7						
	43.5N., 87E.			Sikang Province		18.	iP	Z	19	13	01
	(China)						P:compression				
	H=22 10 53			USCGS		18.	eP	Z	20	11	54
16.	iP	Z	06	17	59.2		eL?	E		29	11
	e	Z		18	36	18.	e	E	22	38.9	
	eL?	N		51.4			21S., 173W. Tonga Is.				
	eL	N		52.8			H=21 56 10			USCGS	
	P:dilatation										
16.	eP	Z	09	26	22	19.	eP	Z	00	47	23
	Sandwich Is.					19.	e	Z	04	14	57
	H=09 05 54			USCGS			e	E		20	01
16.	eP	Z	09	34	24	19.	iP	Z	04	40	49.4
	e	Z			27		i	Z		41	08
	eL?	E		49	58ca		P:compression				
	eL?	E	10	05.5		19.	P	Z	05	49	53
17.	eP	Z	06	02	46		S	N		58	31
	e	Z		03	01		SS	E	06	03	01
17.	ePKP 1	Z	07	13	24		Lq?	E		05	53
	PKP 2	Z			52		Lr?	E		09	04
	PP	EZ		17	17		i	E		14	06
	SKKS	E		23	34ca		i E : 20 sec				
	PSKS?	E		27	35ca		LrE : 32 sec				
	e	E		32	02		14S., 179W. Fiji Is. region				
	SS	N		36	48ca		H=05 39 08				
	sSS?	E		37	34		USCGS				
	e	E		50	48	19.	e	Z	07	47	ca
	G?	E		53	48	19.	iP	Z	08	35	58.4
	iLr	E	08	04	01		iS	NE		44	09.3
	PSKS E : 20 sec						iL	E		51	26
	Lr E : 32 sec						P:compression				
	26.5S., 69W. Northern Chile.						17.5S., 168E. New Hebrides Is.				
	h:60 kmca						H=08 25 32				
	H=06 53 27						USCGS				
17.	eP	Z	14	03	29	19.	iP	Z	13	15	18.4
	e	Z			46		iS	Z			27.5
	eS?	E		06	23	19.	P	Z	13	48	34.6
	eL?	E		08	12		e	Z		50	23
17.	P	Z	14	17	32.7		P:compression				
	e	E		20	05	19.	eP	Z	14	37	41
	e	E		26	32	19.	iP	Z	14	53	09.8
	P:dilatation										
17.	e	Z	14	35	00		Distance type				
17.	iP	Z	17	45	24.1		P:compression				
	e	Z		46	03	19.	eP	Z	18	05	46
	P:dilatation										
17.	e	E	22	12	05		e	Z		06	06
17.	eP	Z	22	28	25	19.	e	E	22	56	05
	e	Z		29	03		e	Z			56
18.	eL	E	07	37	23	19.	iP	Z	23	12	07.8
	Tonga Is. 16S., 173W.						eL?	E		26	13
	H=07 05 40			USCGS			eL?	N		31	57
	Solomon Is.										
	H=23 03 01										
	USCGS										
18.	e	N	11	43	35	20.	e	Z	02	20	50ca
18.	e	N	13	05	29		e	Z		22	23
18.	eP	Z	13	50	51		eL?	N		56	12
							eL	N	03	00	30ca
						20.	eL?	E	06	05	45ca



20.	P	Z	06	40	35.6	22.	P	Z	21	50	17
	iS?	Z		41	00.2		i	Z		51	04
	P:compression										
20.	e	N	15	24	48ca	22.	eP	Z	22	13	18
	Distant type										
20.	P	Z	20	48	51	22.	e	Z	22	49	52
	eL?	N		54	46	22.	e	Z	23	21	10
20.	eL?	N	21	53	34ca	23.	e	Z	00	25	30
							e	Z		27	53
21.	P	Z	05	25	53.0		e	Z	01	28	25
	e	Z		26	07		Southern Colombia.				
							H=00 04 40 USCGS				
21.	e	Z	06	58	11	23.	e	Z	00	56	14
21.	iP	Z	17	42	08.2	23.	iP	Z	01	10	18.9
	e	Z			19		i	Z			35.0
	P:dilatation										
21.	P	Z	18	43	55.4		i	Z			38.8
							e	Z			47
	P:compression										
21.	eP	Z	20	37	30	23.	iP	Z	01	40	22.1
	eS	N		47	27		i	Z			36.5
	eL	E	21	03	21		i	Z		41	03
	39.4N.,118W. Fallon.(Nevada)										
	H=20 25 34.5 USCGS										
21.	eL	E	21	26	47		e	E			07
	35.5N.,118.5W.										
	Southern California.										
	H=20 55 30 USCGS										
21.	P	Z	21	15	45.2	23.	iP	Z	02	11	41.4
	S	Z		16	20.7		iS	Z			49.8
							P:dilatation				
22.	PP	Z	03	43	20	23.	P	Z	02	31	29
	e	E		49	38						
	PS	NE		52	55	23.	eP	Z	02	41	46ca
	i	E		58	58		e	N		55	35
	PSPS	NE		59	14		24.5N.,90E. Bhutan-Pakistan.				
	eL	N	04	09	44		border H=02 33 47 USCGS				
	24.5S.,123W. Eastern Tuamotu										
	Archipelgo.										
	H=03 24 00 USCGS										
22.	eP	Z	05	22	44	23.	eL	E	04	14	58
22.	P	Z	12	11	36.9	23.	e	Z	05	11	24
	S?	Z		12	45.9	23.	e	Z	05	24	42
22.	eP?	Z	17	13	36	23.	iP	NEZ	06	33	56.0
	eS?	N		19	45		S	E		37	30.0
	eL	E		25	16		Lq	E		38	32
	New Britain										
22.	e	Z	18	00	23		Lr	E		39	48
							Lr	N			59
							i	E		41	01
	P:S,W,compression										
	50.5N.,157E. Near south coast										
	of Kamchatka.										
	h:60kmca.										
	H=06 29 29 USCGS										
22.	iP	Z	20	54	02.9	23.	iP	Z	06	54	36.7
	e	Z		55	32		i	Z		55	56
	i	Z			34						
	P:compression										
22.	e	Z	21	36	31	23.	P	Z	06	56	53
22.	P	Z	21	39	48.2	23.	e	Z	07	46	33
	i	Z			49.2						
	i	E		40	00.9	23.	P	Z	07	59	06.0
	S	E			18.9		e	Z			15
	i	E		41	10						
22.	e	Z	21	42	55						



23.	eP	Z	08	34	45
23.	eP	Z	08	38	46
23.	eP	Z	09	00	26
23.	eP	Z	09	34	26
	eS	Z		35	12
23.	e	Z	13	29	08
	e	Z			26
	eL?	N		39	52
23.	eP	Z	15	31	24
	e	E		33	48
	e	E		36	16
23.	iP	Z	17	26	45.2
	i	Z		27	36
	e	E		30	39
	eS	NE			47
	L	E		31	44
	P:dilatation				
23.	P	Z	17	32	09
24.	eP	Z	00	09	23
	S	Z			25.6
24.	e	Z	00	24	19
24.	e	Z	02	04	27
24.	e	Z	02	32	47
24.	e	Z	02	45	44
24.	P	Z	02	53	11
24.	e	Z	03	50	33
24.	iP	Z	04	56	26.5
	e	E	05	00	34
	L	E			48
	P:dilatation				
	19N.,120.5E. Near north coast				
	of Luzon.				
	H=04 51 20 USCGS				
24.	e	Z	06	25	58
24.	e	Z	06	30	11
24.	e	Z	07	24	59
24.	P	Z	07	59	54.2
	eL	E	08	08	01
24.	e	Z	09	46	00
24.	iP	Z	11	15	02.7
	iS	NEZ		18	39
	eL	NE		19	39
	P:compression				
	51N.,157E. Near south				
	coast of Kamchatka.				
	H=11 10 32 USCGS				
24.	eP	Z	13	17	06
	e	E		18	59
24.	eP	Z	15	08	11
	S?	Z			51

24.	iP	Z	15	37	25.6
	P:dilatation				
24.	e	N	18	27	06
	e	N			56
24.	e	Z	18	50	43
24.	P	Z	20	31	39
	S	Z		32	02
24.	P	Z	20	35	24
	S	Z			42
24.	e	Z	22	04	54
25.	P	Z	01	42	47.0
	iS	Z			48.7
25.	e	Z	02	08	00
25.	e	Z	07	53	17
25.	iP	Z	08	34	59.2
	i	Z		35	02.0
	S	E		36	08.0
	L	E			58
	P:dilatation				
	Hokkaido (Japan)				
25.	P	Z	09	07	31.0
	e	NE			54
	i	E		08	22
25.	iP	Z	13	53	19.1
	eL	E	14	23	21
	P:dilatation				
25.	eP	Z	14	33	05
	eS	NE		40	01
	e	NE		42	54
	eL	E		43	42
	Alaska Peninsula.				
	H=14 24 26 USCGS				
25.	e	Z	16	09	27
25.	eP	Z	16	58	02
	eL	E	17	08	21
	Alaska Peninsula.				
	H=16 49 30 USCGS				
25.	e	Z	18	15	28
	i	Z			31
25.	e	Z	18	37	38
	e	Z			59
25.	P	Z	18	43	51.7
	iS				53.4
25.	e	Z	19	25	52
26.	e	Z	00	32	45
26.	e	Z	00	41	16
26.	P	Z	01	41	45.0
	i	Z			47.1
	e	Z		42	12
26.	e	Z	03	00	15
	i	Z			25



26.	e	Z	06	31	40
	i	Z			44
26.	P	Z	06	48	33.3
	i	Z			37.1
	e	Z		49	08
26.	eP	Z	08	43	36
26.	e	Z	10	01	29
26.	eP	Z	12	28	05
26.	e	Z	12	42	40
26.	eP	Z	13	17	49
26.	P	Z	13	34	16.3
	e	N		39	22
	eS	N		42	31
	eL	N		47	45
Santa Cruz Is.					
H=13 24 47					
USCGS					
26.	eP	Z	15	06	53
26.	e	Z	15	20	42
26.	P	Z	15	53	05
26.	eP	Z	16	00	31
26.	eS	N	17	58	53
	e	E		59	49
	eSS	N	18	03	54
	eL	N		10	39
	eL	E		28	26
	e	E		36	40
32N., 116W. Northern Lower California.					
H=17 36 00					
USCGS					
26.	P	Z	18	46	14
	i	Z			40
	i	Z			50
26.	P	Z	19	19	39.2
26.	eP	Z	20	20	35
26.	e	Z	20	33	24
	e	E		38	26
26.	e	E	21	48	43
	eL	NE		55	41
	eL	E	22	19	28
26.	e	Z	23	02	01
27.	P	Z	00	26	26.4
	i	Z			51.0
27.	e	E	01	54	44
	eL	E		57	12
	eL	N	02	02	11
27.	e	Z	06	25	02
27.	pP	Z	07	16	56
	e	Z		19	41
	e	N		24	49
	e	NE		26	06
	eSS	E		30	27

(cont.)

27.	Continued				
	sSS	N	07	31	14
	eL	E		35	14
24.5S., 177.5W.					
Tonga Is. region					
h:100 kmca.					
H=07 05 07					
USCGS					
27.	e	Z	07	33	24
27.	e	Z	07	59	12
27.	eP?	Z	11	54	40
27.	e	Z	12	40	02
27.	eP	Z	12	54	59
	i	Z		55	02
	i	Z			11
	e	Z		58	48
	e	E	13	00	16
27.	eP	Z	13	15	28
57.5N., 156.5W.					
Alaska Peninsula.					
H=13 06 50					
USCGS					
27.	e	Z	13	35	12
27.	P	Z	15	27	24
27.	eP	Z	16	17	14
	e	Z			34
27.	iP	Z	17	21	10.0
	eS	NZ		23	59
	L?	Z		24	12
P:dilatation					
19N., 145E. Marianas Is.					
h:600 kmca.					
H=17 17 24					
USCGS					
27.	iP	Z, P E.	19	34	53.4
	S	NE		38	11.6
	i	NEZ			25
	L	E		39	22
P:W.dilatation					
23N., 124.5E. Off east coast of Formosa.					
H=19 30 35					
USCGS					
27.	eP	Z	20	05	53
27.	P	Z	20	17	21
	S	Z			38
27.	iP	Z	21	26	38.2
P:dilatation					
27.	iP	Z	21	36	24.2
	pP	Z		37	54.1
	PP	Z		38	17
	ScP	Z		40	57
	eS?	N		42	08
	e?			45	26
P:dilatation					
Banda Sea.					
h:500 kmca.					
H=21 29 05					
USCGS					
27.	iP	Z	22	04	14.6
P:dilatation					



27.	P	Z	22	47	48
	i	Z			51.6
27.	e	Z	23	01	09
27.	P	Z	23	12	46.1
	i	Z			46.3
	i	Z		13	06
28.	iP	Z	01	00	13.2
	e	Z			30
	i	Z			32.6
	P:compression				
28.	iP	Z	01	35	40.1
	e	Z		36	42
	eS?	Z		39	55
	eS	NE		40	06
	eL	NE		41	56
	P:dilatation				
	Near coast of Kamchatka.				
	H=01 30 26 USCGS				
28.	P	Z	02	02	39
28.	e	Z	03	11	46
28.	e	Z	03	49	33
28.	eP	Z	04	31	56
	Andreanof Is.				
	H=04 24 43 USCGS				
28.	e	Z	08	01	04
28.	iP	Z	08	29	38.3
	eS	NE		36	35
	P:dilatation				
28.	P	Z	09	12	25
	S?	Z			27
28.	iP	Z	09	31	48.7
	S	Z			50.7
	P:dilatation				
28.	e	Z	09	35	42
28.	e	Z	10	16	18
28.	e	Z	11	14	59
	e	Z		15	03
	e	Z			07
28.	e	Z	12	05	04
28.	e	Z	16	13	31
28.	P	Z	17	08	09.5
	i	Z			25.3
	e	Z			57
	eS	NE		09	07
28.	eP?	Z	18	32	39
	S	NE		41	34
	eL	NE		48	52
	Samoa Is. region				
	H=18 21 39 USCGS				
28.	P	Z	20	48	16
28.	e	Z	22	02	11

29.	eP	Z	02	39	34
29.	e	Z	02	59	05
	e	E	03	04	12
29.	e	Z	03	17	57
29.	iP	Z	03	37	49.9
	P:compression				
29.	e	Z	03	47	00
	e	Z		48	04
29.	P	Z	04	03	02.2
	i	Z			21.1
	eS	NE		07	05
	eL	NE		09	22
	eL	N		25	52
	19.5N.,121E. Off north coast of Luzon.				
	H=03 57 57 USCGS				
29.	e	Z	06	27	15
29.	e	Z	06	48	28
	e	Z			40
29.	P	Z	09	39	24.0
	i	Z			40.7
	eS	N		45	55
	eL	E		49	15
	Solomon Is.				
	H=09 31 12 USCGS				
29.	e	Z	10	01	33
29.	e	Z	10	47	25
29.	iP	Z	12	33	44.4
	S	Z		34	09
	P:compression				
29.	eP	Z	13	37	23
	i	Z			24.2
29.	P	Z	16	20	07.9
	e	Z			12.0
	e	N		21	32
	i	E		22	04
29.	P	Z	16	35	03.4
	e	N		43	51
	18.5S.,175W.				
	Tonga Is.region h:about 200km.				
	H=16 24 05 USCGS				
29.	P	Z	17	50	35
29.	e	E	19	35	15
29.	e	Z	21	15	57
	e	E		16	21
29.	e	E	22	16	46
30.	P	Z	00	20	50.9
	i	Z			54ca
	eS	E		29	46
	SS	E		34	07
	eLq	E		37	02
	Lr	N		41	53
	P:dilatation 21S.,174.5E.				
	Fiji Is.region H=00 09 51				

Time	Type	Station	Mag	Lat	Long	Date	Type	Station	Mag	Lat	Long
30.	e	Z	00	56	39	December					
	e	E		59	10	1.	P	Z	06	45	58
30.	e	Z	02	28	20	1.	P	Z	07	25	28
	e	Z			38	1.	iP	Z	22	57	59.7
30.	e	N	03	04	27		i	Z		58	24
	eL?	N		06	30		iP:dilatation				
30.	P	Z	04	28	51.4	1.	P	Z	23	36	55
	e	Z		29	14	2.	eP?	Z	00	59	25
	e	Z			25		eL	NE	01	10	54
30.	eP	Z	06	36	40	2.	iP	Z	06	20	28
	i	Z			44		e	Z		21	36
	eS?	E		46	03		e	Z			46
	eL?	E		57	29						
	Fiji Is.region					2.	P	Z	09	18	29
	H=06 25 50										
	USCGS										
30.	eP	Z	07	34	03	2.	iP	Z	13	29	14
							i	Z			17
							iP:dilatation				
30.	iP	Z	07	40	58.1						
	e	Z		41	19	2.	eP	Z	14	01	16
	P:compression						i	Z			18
30.	eP	Z	08	56	51ca	2.	iP	Z	14	27	18.2
	Southern Yukon.						i	Z			28
	H=08 46 50						iS	NZ			48
	USCGS						iP:compression				
30.	e	Z	10	40	46						
	e	Z		41	19	2.	P	Z	16	25	35
30.	eP	Z	15	00	29		i	Z		26	44
	i	Z			38		eL	E		35	07
	i	Z			47	2.	P	Z	21	32	01
	eS	N		03	37						
	e	E			59	3.	iP	Z	00	15	12.1
30.	eP	Z	17	24	06		i	Z			21
	eS?	E		31	27		i	Z			37
	eL	E		40	23		iP:compression				
	11S.,166E. Santa Cruz Is.					3.	eP	Z	03	49	56
	H=17 14 36						i	Z		50	03
	USCGS						i	Z			13
30.	P	Z	17	41	22.2	3.	iP	Z	04	30	17
	e	N		51	01ca		i	Z			24
	eL?	E	18	00	33ca		i	Z			31
30.	e	N	21	20	53ca	3.	eP	Z	06	25	25
	eS?	N		24	58ca						
	e	E		29	26	3.	P	Z	09	38	24
30.	e	Z	21	50	26		e	Z		39	25
	e	Z			50						
	e	Z		51	51	3.	P	Z	13	32	07
	e	Z		52	14		i	Z			14
30.	eP	Z	22	58	21ca	3.	P	Z	14	24	00
	S				38ca		i	Z			13
							iS?	Z		25	00
						3.	iPn	NEZ	14	28	46.6
							Pg	NEZ			59.9
							iSn	NE	29	40.9	
							i	Z			48
							iSg	NE			52.9

iPn : N,E,compression
Pg : S,W,dilatation
Southern Honshu, Japan.



3.	iP	Z	14	42	03
	i	Z			16
	i	Z		43	03
3.	eP?	Z	20	22	16
3.	eP	Z	21	28	32
	i	Z			42
	i	Z			53
3.	P	Z	22	19	40
3.	P	Z	22	57	53
	eL	E	23	05	57
	eL	N		07	19
3.	iP	Z	23	18	45.9
	i	Z		19	02
	iP:dilatation				
4.	eP	Z	00	22	51
	i	Z			57
4.	eP	Z	01	56	19
4.	P	Z	02	13	46
	S	E		24	31
	eSS	E		29	07
	eL	E		35	39ca
	eL	E		39	29ca
	33.5S., 180. Kermadec Is. region H=02 01 34 USCGS				
4.	iP	Z	02	47	37
	dilatation				
4.	P	Z	03	13	32
	e	Z			58
4.	eP	Z	03	38	04
	e	Z			14
4.	eP	Z	06	24	32
	e	Z		25	04
4.	eP	Z	08	01	21
4.	eP	Z	11	07	16
	i	Z			38
4.	iP	Z	11	11	20
	i	Z			38
4.	eP	Z	11	19	57
	e	Z		20	14
4.	P	Z	13	13	58
4.	eP	Z	14	13	21
	eS	NE		22	38
	eSS	E		27	13
	eL	E		30	56
	L	NE		40	40
	34N., 49E. Central Iran. H=14 02 08 USCGS				
4.	eP	Z	14	56	00
4.	eP	Z	16	19	10
4.	P	Z	16	57	11

4.	P	Z	17	02	05
4.	eP	Z	21	33	03
	e	Z			20
	i	Z			36
5.	P	Z	02	37	24
	e	N		38	31
	eS?	NE		41	36
	e	N		43	07
	eL	E			34
5.	iP	Z	04	14	00
	i	Z			07
	iP:dilatation				
5.	eS	N	07	43	41
	eL	N		48	00
	eL	E			42
	Southeastern Tibet. H=07 27 22 USCGS				
5.	iP	Z	13	32	10.9
	i	Z			24.3
	S	NEZ		33	07
	i	NEZ			21
	i	Z			29
	iP:dilatation				
5.	PKP 1	Z	14	46	36
	PKP 2	Z			50
	pPKP?	Z		47	21
	sPKP?	Z			37
	23.5S., 67W. Argentina. h:150 kmca. H=14 26 46 USCGS				
5.	P	Z	15	10	58
5.	P	Z	15	22	07
	i	Z			12
	e	E			52
	i	Z			57
5.	P	Z	20	07	37
5.	eP	Z	20	18	34
	eS	N		22	06
	eL	N		23	25
	24N., 122.5E. Off east coast of Formosa. H=20 14 18 USCGS				
5.	P	Z	23	09	23
6.	iP	Z	03	41	46.6
	i	Z		42	09
	iP:compression				
6.	iPKP	Z	04	50	53
	PP	Z		54	26
	SKKS?	NE	05	01	14
	eSKSP	N		04	50
	esPSorsSP?	E		07	58
	eSS	NE		13	48
	eSSS	NE		19	44
	eL	E		31	42
	iPKP:dilatation 20S., 70W. Northern Chile. H=04 31 00 USCGS				
6.	P	Z	08	20	52



6. P Z 08 36 04

7. P Z 14 37 20
15S., 173.5W. Samoa Is. region
H=14 26 26 USCGS

7. iP NEZ 15 05 48.5
iS E 07 44
iS N 45
L N 08 18ca
L E 35ca
M E 09 21ca
iP:N,W,compression
ME : 180 micron, T:20sec.
26.5N., 142.5E. Bonin Is.
H=15 03 11 USCGS

7. e Z 15 28 01
In previous shock.

7. iP Z 16 05 46.2
dilatation
In previous shock.

7. iP Z 16 20 37.3
dilatation
In previous shock.

7. iP Z 16 31 10.9
compression
In previous shock.

7. P Z 16 33 09
In previous shock.

7. iP Z 16 36 22
Disturbed by previous shock.

7. iP Z 18 51 05.2
i Z 10
i Z,e E(S?) 50
iP:compression

7. P Z 19 33 36
i Z 35 35
e E 48
eL E 36 26

8. eP Z 22 57 01
eS NE 59 54
eL NE 23 01 22
26N., 128.5E. Ryukyu Is.
H=22 53 27 USCGS

8. P Z 00 26 52
dilatation

8. iP Z 00 45 56.0
i Z 46 05
eS NE 31
i NZ 43

8. iP Z 02 17 27
e Z 20 35

8. eP? Z 04 57 47

8. iP Z 12 46 14
i Z 41
Disturbed by microseisms.

8. iP Z 12 41 24
i Z 42 33
Disturbed by microseisms.

3. iP Z 17 43 09.7
i Z 14
pP Z 44 57
iScP Z 48 05
iP:compression
4S., 152E. New Britain region
h:500 kmca.
H=17 36 00 USCGS

8. P Z 19 26 56
e Z 27 07

8. e Z 21 50 01
i Z 07

8. P Z 23 48 29

9. iP Z 06 26 06.9
S? Z 29 10
eL E 30 32
iP:compression

9. P Z 07 24 38
S? Z 26 35
eL E 27 34

9. eP Z 09 10 13
Kermadec Is.
H=08 58 08 USCGS

9. eP Z 09 41 36
e Z 42 04
e E 43 57
e E 46 25

9. e Z 10 22 12
i Z 33
e E 24 59
e N 26 21

9. P Z 10 43 24
eS NE 45 35
L E 46 12

9. P Z 13 15 14
eS? E 19 29
eL? E 21 53

9. iP Z 14 41 36.1
i Z 54
iP:dilatation

9. eP Z 17 38 17

9. e Z 19 57 06

9. P Z 21 04 47

9. e Z 21 08 20

9. iP Z 21 19 24.3
i Z 20 05
iS Z 58

10. eP Z 03 10 33

10. P Z 05 05 03

10. P Z 07 51 28
i Z 53 10

10. iP Z 11 29 31
i Z 40
i Z 30 36



10. eP Z 14 01 36
 10. P Z 14 48 59
 e Z 50 24
 10. iP Z 15 08 26.8
 S? Z 09 30
 iP:dilatation
 10. iP Z 18 41 47.8
 i NE 42 11
 iS NEZ 19.2
 iP:compression
 10. e Z 19 31 45
 10. P Z 19 41 21
 10. P Z 20 30 14
 64.5N.,154E.
 Northeastern Siberia.
 H=20 24 14
 11. eP Z 03 39 32
 i Z 46
 eS NE 41 34
 eL NE 42 10
 eL N 19
 11. eP Z 04 52 45
 11. eP Z 05 51 40
 11. eP Z 08 13 12
 11. iP Z 08 34 32.5
 i Z 35 57
 iP:compression
 Near east coast of Honshu,
 Japan.
 11. P Z 10 07 35
 i Z 08 09
 11. iP Z 11 14 15.7
 compression
 11. eP Z 11 31 17
 11. eL? N 12 56 ca
 11. eP Z 20 29 22
 i Z 27
 12. eP Z 02 39 25
 12. iP Z 02 52 51.0
 i Z 53 00
 iP:compression
 12. iP Z 05 07 21.6
 i Z 27
 i Z 29
 iP:compression
 12. iP Z 09 05 30
 S NE 10 38
 L NE 12 51
 iP:compression
 5N.,126E. Near south coast
 of Mindanao,Philippine.
 H=08 58 49 USCGS

11. iP NEZ 09 29 36.2
 i E 55.7
 S NE 30 00
 i Z 26
 i Z 51
 iP:N,W,compression
 Kashima-nada,Japan.
 12. iP Z 14 20 15.9
 S Z 36
 iP:dilatation
 12. P Z 15 41 05
 S? Z 33
 12. iP Z 18 44 43
 dilatation
 13. eP Z 02 31 41
 13. eP Z 04 52 06
 13. eP Z 11 57 05
 13. eP Z 13 44 53
 i Z 45 22
 eS NE 50 49
 eL E 53 15
 eL E 14 03 35ca
 O,123.5E. Northern Celebes.
 H=13 37 24 USCGS
 13. P Z 17 18 49
 13. eP Z 21 25 52
 13. e Z 21 34 29
 13. eP Z 21 48 31
 13. eP Z 21 58 24
 14. eP Z 00 23 36
 14. e Z 00 43 04
 14. e Z 01 28 56
 14. P Z 01 31 56
 14. e Z 06 29 50
 14. iP Z 10 59 39.3
 pP? Z 43
 sP? Z 11 00 21
 i Z 33
 S NE 05 55
 L E 09 10ca
 22N.,92.5E.
 Pakistan-Burma border.
 H=10 51 44 USCGS
 14. eP Z 11 16 08
 14. e Z 12 06 38
 14. P Z 12 28 37
 51.5N.,178E. Rat Is.
 H=12 22 15 USCGS
 14. P Z 13 02 10
 i Z 16



14. P Z 13 09 15
 i Z 24
 S NE 12 48
 i E 13 17
 L E 47
 Marianas Is. region
 H=13 04 20 USCGS

14. P Z 15 06 56
 compression

14. eP Z 15 41 50

14. P Z 15 58 44

14. P Z 16 51 13
 i Z 41

14. P Z 20 05 44
 i Z 45

14. P Z 22 30 48

14. eP Z 22 55 14

14. eP Z 23 29 08

14. P Z 23 32 06

15. P Z 01 27 40

15. ePS? E 01 48 33
 SS N 54 33
 e EZ 02 06 58
 eL EZ 12 ca
 Easter Is. region
 H=01 19 00 USCGS

15. P Z 08 34 53
 i Z 54
 S NE 35 13

15. eP Z 10 00 28

15. eP Z 10 19 20

15. eP Z 12 46 36

15. iP Z 14 00 56
 iS? Z 02 13
 Bonin Is. region
 H=13 58 32 USCGS

15. P Z 14 11 28
 i Z 37
 i Z 12 14

15. eP Z 18 14 00

15. eP NE 19 09 55
 e NE 12 13
 e E 13 22
 eS? NE 16 05
 i NE 42
 L N 19 07
 L E 20 01
 3.5S. 149E. Bismark Sea.
 H=19 02 43 USCGS

15. eP Z 23 03 43

16. iP Z 09 15 37
 dilatation Near east coast

16. eP Z 23 19 45

17. eP Z 04 14 21

17. eP Z 08 25 02
 e Z 28

17. P Z 08 40 11
 i Z 28

17. P Z 08 59 25
 S? Z 49

17. iP Z 14 12 08.8
 i E 18
 S EZ 40
 iP:dilatation
 Near east coast of Honshu,
 Japan.

17. iP Z 15 15 13
 compression

17. P Z 22 46 10
 i Z 12

17. eP Z 22 59 35

17. e Z 23 42 27

18. iP Z 04 02 53.3
 S? Z 03 40
 iP:compression
 Near east coast of Honshu,
 Japan.

18. iP Z 05 33 32.1
 i Z 33.0
 S NZ 50

18. iP Z 06 28 39
 i Z 40
 i NEZ 29 18
 S NEZ 24
 iP:compression

18. eP Z 07 02 50

18. P Z 10 14 58
 Near northeast coast of
 New Guinea. h:200kmca.
 H=10 07 04 USCGS

18. P Z 15 29 36
 i Z 37
 i Z 30 00

18. iP Z 23 26 32
 iS? Z 49

19. P Z 03 19 55
 PPP? Z 21 25
 i Z 23 07
 S NE 24 45
 i N 25 08
 L NE 26 09
 eL NE 28 45

8.5N., 127E. Near east coast
 of Mindanao, Philippine.
 H=06 13 46 USCGS

19. iP Z 06 28 37



19.	P	Z	06	46	45	22.	eP	Z	11	35	36
							e	Z		36	05
19.	P	Z	12	48	15	22.	eP	Z	20	33	13
19.	P	Z	14	10	02						
19.	P	Z	15	36	12						
	i	Z			13	22.	L	NE	22	12	-
19.	iP	Z	18	10	25	22.	eP	Z	22	30	19
	i	Z			35	22.	P	Z	23	06	34
	i	Z			45						
	iS?	Z			59	23.	eP	Z	05	30	28
	iP:compression					23.	eP	Z	05	43	47
	Central Honshu, Japan.					23.	iP	Z	08	17	29.1
19.	P	Z	19	35	08		iS	Z			48.1
	iS?	Z			37		iP:compression				
19.	P	Z	20	00	15	23.	eP	Z	09	03	10
19.	P	Z	21	51	25		eS	N		04	01
20.	e	Z	02	03	44		eL	N			53
20.	P	Z	14	00	36	23.	eP	Z	11	22	58
20.	iP	Z	17	55	03	23.	eP	Z	12	33	51
	i	Z			25		eS?	N		34	51
	iP:compression					23.	eP	NEZ	17	41	50
20.	iP	Z	20	21	31.3		eS?	E		42	44
	S	E			48		eL	E		43	09
	iP:compression					23.	eL	NE	20	23	21
21.	iP	Z	01	47	52.2	23.	eL	NE	23	34	17
	compression					24.	eP	Z	01	22	41
21.	eP	Z	03	08	02	24.	eP	Z	06	47	07
	Central Kamchatka.					24.	eL	NE	07	39	-
	H=03	03	32			24.	eL	NE	08	22	57
21.	iP	Z	03	11	15.1	24.	eP	Z	13	18	49
	dilatation					24.	eP	Z	14	00	46
21.	eP	Z	03	51	51	24.	eP	Z	15	54	36
21.	eP	Z	04	05	34		eS	N	16	04	03
21.	P	Z	04	37	09		eS	E			28
21.	P	Z	05	28	41	24.	iP	Z	16	17	09.9
21.	P	Z	05	42	02		compression				
21.	eP	Z	06	49	07	24.	iP	Z	18	03	43
	eS?	Z			29		i	Z			48
22.	eP	Z	06	44	58		eL	E		08	51ca
22.	iP	Z	08	32	14.1		iP:compression				
	i	NE			50	24.	eL	E	19	17	-
	S	NE			33		eL	N		18	-
	iP:compression					24.	eP	Z	21	35	24
22.	iP	Z	09	13	40.0	24.	eP	Z	21	55	06
	dilatation						iS?	Z			07.3
22.	eP	Z	10	20	40	24.	eP	Z	22	13	26
	18S.,176W. Tonga Is.region					24.	eP	Z	23	45	12
	h:150 kmca.										
	H=10 09 37										

25. eP Z 00 52 38

25. eP Z 03 04 46
i Z 05 10

25. eL E 04 25 47
eL N 26 27

25. eP Z 05 25 47
eL E 29 47
eL N 30 27

25. eP Z 08 47 36

25. eP Z 09 05 30

25. eP Z 10 43 44
eS NE 47 52
L E 49 48
Near southeast coast of
Kamchatka.
H=10 38 49 USCGS

25. eP Z 11 27 59

25. eP Z 18 04 11

26. eP Z 07 44 48

26. eP Z 09 11 02
e Z 29
Off south coast of Kyushu,
Japan.

26. eP Z 11 06 22

27. eP Z 02 39 17
26S., 177W. Kermadec Is.
region h:200 kmca.
H=02 27 54 USCGS

27. eP Z 06 34 38

27. iP Z 07 21 54.5
iS Z 22 00.1
iP:compression

27. eP Z 08 02 00

27. eP Z 08 52 23
eP NE 26
i Z 27
e N 54 28
e N 55 40
S NE 56 42
14N., 145E. Marianas Is.
h:100 kmca
H=08 47 15 USCGS

27. eP Z 09 28 26

27. eP Z 10 04 44

27. eP Z 12 01 02

28. iP Z 14 27 22.6
iS? Z 35

29. eP Z 03 17 52

29. iP Z 04 56 21
i Z 23
i Z 32

29. continued Z 04 56 39
i Z 58 39
eS NE
iP:dilatation
Kurile Is.region

29. eP Z 06 32 24

29. eP Z 08 33 09
eS NE 39 19
eL NE 42 29
e NE 46 09
30N., 90.5 E. Eastern Tibet.
H=08 25 33 USCGS

29. eP Z 09 10 51
i Z 52.1
Off east coast of Honshu,
Japan.

29. eP Z 14 29 21

29. iP Z 15 20 37.1
iS? Z 37.6
iP:dilatation

29. iP Z 16 13 24.0
dilatation

29. eP Z 16 57 53
i Z 54
eS? Z 58 14

29. eP Z 17 06 37

29. eP Z 23 58 29

30. eP Z 05 28 12
i Z 17

30. eP Z 07 04 57
0.5N., 126E. Molucca Passage.
H=06 57 51 USCGS

30. eP Z 09 36 31
Fiji Is.region h:600 kmca
H=09 26 13 USCGS

30. eP Z 09 52 30

30. iP Z 10 50 44
i Z 53
iS? Z 51 26
Wakayama Pref. Japan.

30. eP Z 17 56 33

30. eP Z 19 27 21
i Z 23
iS Z 42

31. iP Z 01 51 07.9
e Z 31
iP:dilatation

31. eP Z 02 00 23

31. iP Z 05 19 54
dilatation
18S., 69.5 W.
Peru-Chile border
H=05 00 06 USCGS

31. eP Z 17 00 47
i Z 57
Off east coast of Kyushu,
Japan.

31. eP Z 18 17 39

31. eL NE 19 01 -

31. eP Z 21 15 42
i Z 43.5
e E 16 29
S NEZ 48
Near south coast of Hokkaido,
Japan.

31. eP Z 21 26 19
i Z 31
Mie Pref. Japan.

31. eP Z 23 09 41

K. Sagisaka
Chief