

The Seismological Bulletin

of

The Sectional Meteorological Station.

Matsuyama Japan

From *January 1. 1951* to *March 31. 1951.*

November 1951

Notations

1. Nature of the motion : —
i ; Sudden commencement of a phase.
e ; Gradual or indistinct commencement.
2. Amplitude;—
N ; N—S component of amplitude.
E ; E—W component of amplitude.
Z ; Vertical component of amplitude.
Displacements of the north, east and upwards
are regarded as being positive.
3. Scales of seismic intensity ; —
The intensity of the shock is estimated according
to the scales 0—VII.

	No Feeling	Slight	Weak	Rather Strong	Strong	Very Strong	Rather Disastrous	Disastrous
Scale	0	I	II	III	III	V	VI	VII

Matsuyama 1951

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
1	Jan. 6	ep s ef	01	02	37.0 51.6 03 50				0		
2	6	ep i i ef	05	27	35.7 28 25.9 35 31.5 06 04 46				0		
3	8	ep eSN MN ME ef	18	33	57.4 35 16.0 46.4 36 29.9 51 20	-33		3.6 3.8		North part of Tokyo bay. Maximum intensity IV; Yokohama, Tokyo, Chiōshi.	
4	11	ip es ef	04	35	05.1 29.3 38 43	+2, -2			0	Near Funga-nada; 32.1 N 131.9 E	
5	16	ep es MN ME ef	20	23	15.1 40.3 44.3 47.9 26 26	-21		1.1 0.8		Upper part of the River Katsunura Tokushima Pref.	
6	19	ip is MN ME ef	06	35	13.6 31.3 32.7 34.1 36 36	+1 +4 +13 -11		0.7 0.6		South part of Ehime pref.	
7	19	ep es ef	11	43	59.7 44 10.8 45 05				0		
8	24	ep es ef	10	30	55.1 31 10.0 55				0		
9	25	ep is ef	01	33	35.5 52.5 34 48				0		
10	Feb. 1	ep is ef	19	49	12.3 18.0 41				0		

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
11	Feb 2	ep eS eF	21	04	53.8 44.3 20				0	ZNE off Shioyasaki; Fukushima Pref.	
12	4	ip iS MN ME eF	13	50	32.6 51.2 54.1 55.3 53 30	-3, -9 -10 +27 -30		0.8 0.8	0	near Tokushima; Tokushima Pref.	
13	5	ep iS eF	06	24	27.7 30.9 25 04.				0		
14	5	p S eF	08	40	51.9 57.1 41 24				0		
15	6	ep eS eF	09	13	03.8 34.2 15 38				0	South part of Funga-nada	
16	7	ip eS eF	03	40	29.9 41 49.1 04 02 20	-1, +12			0	NNE off Tori-shima	
17	12	ep eL eF	17	28	38.0 38 00.8 18 01 30				0		
18	13	ep iS i i eL eF	22	22	07.2 29 33.7 30 46.6 31 43.3 36 35.1 23 34 20				0	Alaska; 56N, 155 1/2 W	
19	14	ep eS eF	02	08	43.6 49.8 09 28				0	Western part of Gunma Pref.	
20	15	p S MN MZ ME eF	07	12	05.0 35.2 46.7 48.7 13 4.7 24 08.	-47 +17 +27		2.4 3.5 3.8	0		
21	15	ep eS eF	21	29	40.6 48.1 30 45.				0		

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
32	Mar. 10	ep i i is i eL eF	22	06	09.6 23.4 13.0 15.9 01.9 54.5 45				0	E off Shiryasaki Aomori Pref.	
33	11	ip S Mz ME MN eF	12	16	22.8 39.6 41.7 44.7 48.2 27 03	-4, -6, ?	+67	1.4	0	felt at north part of Ehime prefecture Near Tsurugi-yama, Tokushima Pref.	
34	11	ip is MN ME eF	12	47	52.4 09.9 120 19.1 52 33	-2, -15, -1	-26	1.6	0	After shock of No 33	
35	20	ep eS eF	05	02	27.0 38.6 03 37.0				0	Western part of Tokushima Pref.; 33.8N, 133.9E	
36	20	ep eS eF	22	10	46.0 55.5 11 56.				0		
37	21	ep eS eF	11	13	23.4 27.0 14 54				0	Near Matsuyama; Ehime Pref.	
38	22	ep eS eF	17	02	02.5 13.0 03 43				0		
39	23	ep eS eF	04	19	34.2 05 00 42 03 14				0	Near Hachiyo Island.	

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			h.	m.	s.	N	E	Z			
22	Feb 17	ip is isss ef.	21	14	50.1	-6	+3	-8		0	New Guinea; 7°S, 146 E
				20	58.4			-9			
				24	17.7						
				44	57						
23	17	ep is ef	22	36	28.6					0	
					41.0						
				37	41						
24	18	ep es ef	18	22	47.1					0	
				23	14.1						
				24	46						
25	20	ep is ef	17	16	28.8					0	
					33.4						
				17	00						
26	21	ep is ef	2	33	31.5					0	
					36.1	-6	+7				
				34	48						
27	23	ip is MN ME ef	15	21	47.0	+1	+5	-3		0	
					57.4	-6	-6				
					59.9	+14			10		
				22	9.4		-12		0.6		
				24	24						
28	24	ip es ef	10	41	50.6					0	Iyo-nada: Ehime Pref.
				42	20						
				43	9.0						
29	Mar. 4	ip is ME ef	01	20	35.2					0	Near Amami-Oshima maximum intensity IV.
					43.0	+6					
					44.1	-9			0.9		
				21	17						
30	5	ep es el ME MN ef	20	13	21.2					0	Near Amami-Oshima Maximum intensity IV.
				14	28.5						
					54.3						
					57.7	+47			5.5		
				15	11.4	+65					
				47	06						
31	6	ep ef	00	47	04.0					0	
					49 06						

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Matsuyama Japan

From *1st April 1951* to *30th June 1951*

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Z ; Vertical component of amplitude.
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 are regarded as being positive.
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 The intensity of the shock is estimated according
 to the scales 0—VII.

	No Feeling	Slight	Weak	Rather Strong	Strong	Very Strong	Rather Disastrous	Disastrous
Scale	0	I	II	III	III	V	VI	VII

Matsuyama 1951

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
40	Apr. 6	LP iS MN ME eF	23	52	39.0	+3	+4		0	Near Iyo-nada: 132.5E 33.7N	
					45.0	-19	-9				
					48.0	+29					
					48.5		-37				
					53 43.5						
41	14	LP iS ePCS MN eF	13	38	48.0				0		
					43 29.0	+3					
					47 10.0						
					51 32.5						
			14	18	17.5						
42	16	ep eS eF	02	14	48.0				0		
					56.0						
					15 17.0						
43	16	LP iS MN ME epcp iScs eF	19	54	28.0	+2	-3		0	SE off Hachijo-shima: 138.0E, 31.2N H=480K	
					55 37.0			3.0			
					40.5	-35					
					43.0		-47				
					56 24.0						
			20	06	57.5	+5					
					07 48.0						
44	25	LP iS MN ME eF	18	30	50.0	+1	+1		0	South off Sata-misaki: Kagoshima Pref. 130.8E, 30.9N H=120K	
					31 27.5	-28	-30	1.5			
					28.0	+62		0.5			
					29.0		+32				
					36 59.0						
45	May 4	ep eS eF	01	43	26.7				0		
					42.2						
					53.2						
46	4	P i S ME MZ MN eF	11	56	08.6	-1	-1	+3	0		
					57 09.6	-4	-3	-5			
					58 27.1	+4	-1	+4	3.0		
					41.6		+17				
					42.6		+12	3.0			
					45.1	-42		6.0			
			12	09	24.6						
47	9	P S MN eF	20	34	36.5				0		
					37.3	-11		0.5			
					38.0						
					51.5						



No.	Date	Phase	Time(G.C.T)			Amplitude			Period	Scale	Remarks
			h.	m.	s.	N	E	Z			
48	May 10	ep eS MN ME eF	19	58	55.0 40.5 00.5 2.5 01 20.		+4, +5 +8 -7		1.5 1.0	0	
49	22	ep	13	13						0	time unaccuracy
50	27	ep iS ME MN eF	01	46	44.5 47 4.5 9.0 9.5 48 17.5		+1, -3 +9 +6		1.0 1.5	0	MW of Ogasawara-shoto
51	June 4	p S eF	07	47	00.0 20.0 48 06.0					0	
52	4	p S MN ME MZ i(L) eF	10	19	49.0 55.5 56.5 57.0 57.0 20 00.0 21 06.0		+1, +2, +2 +15, +21, -9 +16 +23 +13		0.5 0.5 0.5	0	
53	5	p S MN ME MZ eF	04	02	12.0 18.5 20.0 20.0 20.5 03 07.0		+8, +14, -4 -12 -8 -7		0.5 0.5 0.5	0	
54	5	p S ME MZ eF	05	52	15.5 27.0 31.0 31.0 54 07.0		+1 -3 -10 -4		1.0 0.7	0	
55	5	p S L ME MZ MN i (pwp) i (SoS) eF	16	58	45.2 59 29.7 17 00 21.7 59.7 01 01.2 11.6 10 17.2 13 37.2 30		-15, -3, -7 -24, -55, -40 +120 -70 -240		4.5 6.0	0	New Yakushima; 130E, 30.5 N Maximum intensity III. Kumamoto, Miyazaki, Kagoshima; II,

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No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
56	June 5	p S i ef	17	21	31.2 22 14.7 23 30.7 24 07.0				0	aftershock of No. 55	
57	5	ep es ef	18	12	37.0 13 30.5 16				0		
58	10	p S eL ef	00	09	07.0 48.5 10 30.0 18 40.0				0		
59	20	p S M _N M _Z M _E ef	08	38	32.5 52.5 53.5 53.5 54.0 39 52	-1, -1 -8, -11, -4 +10 -7 +14			0		

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From *July 1st 1951* to *Sept. 30th 1951*

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Matsuyama 1951

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
60	July 2	p S ef	14	52	300 55.0 54 000					0	
61	8	ep e es ef	05	49	50.5 50 03.0 54 45.0 06 13 -					0	
62	9	ep S e MN ME ef	01	32	26.2 33 27.2 29.7 45.2 +11 45.6 +5 40 -			2.0 2.0		0	SSW off Hachijo-shima; 31.5N 138.5E
63	9	p S ef	20	57	17.7 25.7 +1, +1, +1 58 -					0	Iyo-nada, Ehime Pref.
64	10	p S MN ME ef	21	38	51.8 39 05.8 11.3 -9 11.3 +11 41. -					0	NE off Tsurugi-yama, Tokushima Pref.
65	11	p S MN ME MZ e e e e ef	18	23	55.6 -16, +22, -33 25 26.1 -27, +22, -18 35.1 -26.4 35.6 -40.6 36.6 -14.6 28 02.1 30 29.1 31 29.1 34 41.1 19 03 -			4.0 6.0 3.0		0	NW off 200Km apart Ogasawara -shoto; 28N, 140E
66	17	p S MN ME MZ ef	17	22	57.5 - +1, -1 23 08.0 +4, +4, +1 09.5 -13 09.5 +8 10.0 +5 24 23 -			1.5 1.5 1.0		0	Near Amatsubo-mura, Kochi Pref.
67	21	ep S ef	18	40	07.0 15.0 +3, +3, - 52.0					0	



No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
68	July 25	p	20	34	57.0	+7	+4	+12		0	W off Yaku-shima, Kagoshima Pref.; 30.5N 131.8E
		S		35	35.0	+5	+5	-			
		ME			43.5			+10	1.0		
		MN			49.5			+10	1.0		
		EF			40			-			
69	26	ep	10	02	17.0					0	NE off Miyako, Iwate Pref. ; 40N, 142.5E
		es		04	20.5						
		e		05	18.0						
		ef		15	-						
70	26	p	18	40	30.0					0	Near Kyōto city
		S		41	04.0	-4	+3	-			
		L			08.5						
		MZ			09.5			-3	1.5		
		MN			10.0	-9			2.0		
		ME			12.0			+5	1.0		
		EF			42 30-						
71	Aug. 4	p	23	02	51.0					0	Near Kochi city; 133.5E, 33.7N H=20Km
		S		03	00.0	+2	-2	-			
		ME			01.0			+9	0.5		
		MZ			01.5			+3	0.5		
		MN			02.0	-10			0.5		
		EF			30.0						
72	10	p	23	03	37.0					0	Sea of Okhotsk; 145E 45N H=300Km
		S		06	11.5	+10		-9			
		MN			15.0	-12			3.0		
		ME			18.5			+12	3.0		
		EF			12 20-						
103	12	p	06	04	34.5	-	+1	-		0	The lower part of the River Yosh Tokushima Pref; 134.3E, 34.0N
		S			51.0						
		MN			54.0	-13			0.5		
		ME			54.0			+12	0.5		
		EF			06 30-						
104	12	ep	08	55	49.5					0	Near Wakayama city; 135.3E 34.2N
		es		56	15.0						
		ef		58	-						
105	13	ep	18	45	24.5					0	
		es		55	02.5						
		ef	19	04	50-						
73	17	p	15	30	18.0					0	The western part of Ehime Pre.
		S			24.5			+3			
		EF			32 50-						

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No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
74	Aug 20	p s Mz ef	20	09	10.5 26.0 34.5 11. —				0	Near the Tsurugi-yama; 134.1 E 33.7 N	
75	28	ip es MN ME MZ ef	22	09	00.7 04.7 05.7 05.7 05.7 11.20-	-9, +4, -10 +171 +175 +48		0.5 0.5 0.5	1	The upper reaches of the River Yoshino, Kochi Pref; 133.2 E 33.8 N.	
76	30	p s ef	23	58	44.5 51.5 00 00 00.	-2, -3			0	The upper reaches of the River Yoshino, Kochi Pref.	
77	31	ep s ef	00	07	53.2 08 09.2 09 00.				0	Near the SE part of Tokushima Pref.	
78	Sept. 1	ep s ef	17	53	53.0 54 06.0 38.-				0	Near Motoyama-machi, Kochi Pref.	
79	13	ep s ef	11	17	17.5 52.5 19 00				0	Near Wakayama-city	
80	13	ep s ef	12	15	07.0 12.5 16 00.	-2, +5			0	The Eastern part of Ishizuichi- yama	
81	21	p es MN ME ef	20	55	00.8 51.3 54.3 55.3 58 20.	-1, -2, - +22 -10		3.0 4.0	0		
82	23	ep es MN ME MZ ef	10	20	45.5 21 05.5 37.5 38.0 39.0 23 20.	± 5 ± 5 ± 3		0.5 0.5 0.3	0	Near Odaigahara-yama ; E 136.0 N 34.4	

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
83	Sept. 27	P	11	40	49.5	-1,	-2,	+1		0	near kii-shuidō ; E 135.0 N 34.0
		S		41	13.5						
		ME			17.0		-7		0.8		
		MN			17.5		-7		1.0		
		EF			43	00.					
84	28	ep	14	18	10.5					0	the northern part of aki-nada ; E 132.9 N 34.3
		S			17.5		-4,	-2			
		MN			19.5		-9		0.5		
		MZ			20.5			+3	0.3		
		ME			21.0		-5		0.5		
		EF			20	00.					
85	29	P	22	09	21.0	-2,	-5,	+3		0	Near Takamatsu city ; E 134.0 N 34.3
		S			36.5		-24,	-27,	+6		
		ME			38.5			-29	0.5		
		ME			39.0		+46		0.5		
		MN			39.0		+38		0.5		
		EF			11	30					
86	30	ep	10	12	26.5	-1,	-1,	-		0	Near Takamatsu city ; E 134.1 N 34.4
		S			43.5						
		MZ			44.5			-4	0.5		
		MZ			45.0			-11	1.0		
		MN			45.5			-6	1.0		
		EF			14	00					

the End.

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Scale	0	I	II	III	III	V	VI	VII

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No.	Date	Phase	Time(G.C.T)			Amplitude micron			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
87	Sept. 30	ep eS eF	17	10	06.5 31.5 00.0				0	E off Boso-peninsular; chiba pref.	
88	30	ep eS eF	19	04	46.0 03.5 30.0				0		
89	Oct 3	ep S eF	04	04	01.5 11.7 00.0	-3, +4, -2			0		
90	5	ep eS i eF	00	12	14.5 32.0 11.0 00.0				0	SE off muroto-misaki	
91	5	ep ePP S MN ME MB eF	01	21	19.3 21.8 44.8 47.3 50.8 52.3 25 00.0	+2, -1, - -4, -4, +3 +15 +24 +14		1.5 1.5 1.0	0	Near Akaiishi narrow; 134.9 E 34.7 N	
92	6	ep eS eF	01	36	53.5 57.5 00.0				0	Near Matsuyama city, Ehime pref.	
93	6	ep i i eF	02	29	28.4 45.4 06.4 33				0	off muroto-misaki	
94	6	ep eF	04	05	16.6 07 00.0				0	after shock of No. 93	
95	10	ep eS	17	50?	51?				0	Bingo-nada, Hiroshima pref; 133.5 E 34.3 N	
96	14	ep eS eF	07	40	11.0 48.5 43 00.0				0	SE off shio-misaki; 137 E 33 N	
97	15	ip eS MN ME ME eF	21	02	26.9 52.9 20.9 22.4 22.9 18 00.0	-21, +38 +30 +307 +189 +256		0.5 0.5 0.5	1	SE off muroto-misaki; 135 E 33 N	
98	15	ep eS eF	22	07	20.0 45.0 09 00.0				0	aftershock of No 97	
99	17	ep eS eF	16	10	45.0 07.0 13 00.0				0	Near the River hidaka, wakayama pref. ; 135.4 E 33.8 N	
100	16	ep eS eF	03	27	48.6 17.1 30 00.0				0	aftershock of No. 97	

No.	Date	Phase	Time(G.C.T)			Amplitude <i>micron</i>			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
101	Oct. 18	p eS eF	08	28	54.5 01.5 00.0	-1.	-2.	-		0	NE off Kachinohe, Aomori pref. ; 142.0 E 41.2 N
102	19	ep eS eF	14	54	05.9 17.9 30.0					0	aftershock of No. 101
106	21	ep eS eF	13	50	31.3 00.8 30.0	-1.	-1.	-		0	Tanabe bay; 135.4 E 33.7 N
107	21	ep eS e ME ME MN e e eF	21	35	50.7 33.2 38.2 53.2 54.7 56.2 46.2 55.2 40.	-1.	-1.	-		0	North part of Formosa; 121.5 E 24.5 N
108	22	ep eS e MN ME ME MN MN eF	03	32	51.8 34.8 55.8 47.8 39.8 52.8 09.8 49.8 30.	-4.	-4.	+1		0	aftershock of No 107
109	22	ep eS MN ME eF	04	31	33.2 12.2 26.7 24.7 08 30	-2.	-2.	-1		0	"
110	22	ep eS e eF	05	21	08.2 36.7 38.7 41					0	"
111	22	ep eS e MN ME e e eF	05	46	28.7 04.7 24.7 27.2 16.7 50.0 20.0 40	+400				0	"
112	22	ep eS eF	08	20	10.2 23.7 30.0					0	Near Tsurugi-yama; 134.0 E 33.7 N
113	22	ep eS e e eF	11	14	29.0 04.0 40.0 48.0 30					0	aftershock of No 107
114	22	ep eS eF	12	52	09.0 41.5 30.0					0	"

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No.	Date	Phase	Time(G.C.T)			Amplitude micron			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
115	Oct. 22	ep eS e eF	13	04	54.9				0	aftershock of No 107	
116	22	ep eS e eF	14	50	30.7				0	"	
117	22	ep eS e eF	15	33	20.6				0	"	
118	22	ep eS e e e e eF	16	10	30.5				0	"	
119	22	ep eS e e eF	18	46	40.3				0	"	
120	22	ep eS e eF	20	27	10.7				0	"	
121	23	ep eS eF	01	14	18.0				0	the middle part of the River Yoshino; 134.3 E 33.8 N	
122	23	ep eS e e eF	01	23	06.9	-	-	-	0	aftershock of No 107	
124	24	ep eS e e eF	03	42	47.3				0	"	
123	23	ep eS e e e eF	08	58	42.0	-	-	-	0	"	
125	24	ep eS eF	14	35	36.9				0	"	

No.	Date	Phase	Time(G.C.T)			Amplitude micron			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
126	Oct. 25	ep eS e MN ME MZ e e ep	12	23	08.1					0	aftershock of No 107
				25	53.1						
				28	51.1						
				29	53.1	160		130			
				30	01.1		128	13.5			
					42.1		134	10.5			
				33	17.1						
				36	55.1						
				54	30						
127	27	ep eS ep	13	52	29.3					0	
					35.3						
					53	23.3					
128	28	ep eS e ep	01	59	29.4					0	aftershock of No 107
			02	02	08.4						
				05	40.4						
				13	30						
129	28	ep iS ep	13	22	53.0					0	the middle part of the River Yoshino ; 134.4 E 34.0 N
				23	09.5						
				24	40.0						
130	31	ep eS ep	07	04	48.4					0	
				11	30.9						
					37						
132	Nov. 2	ep iS ep	08	25	04.6					0	the south of Ishiguchi-yama; 133E 33.5N
					09.6						
				26	00.0						
133	3	ep eS MN ep	13	45	07.7					0	off the Boso peninsular, Chiba pref. ; 141E 35N
				46	58.2						
				47	18.2	15		4.5			
				50							
134	4	ep eS MN ME e ep	11	14	52.5	-5	-4	-		0	philippine Islands; 125E 11.5N
				18	57.5						
				19	04.5	-11		6.0			
					23.0	+15		6.0			
				26	02.0						
				28							
135	6	ep eS ep	15	01	54.1	-1	-1	+1		0	
				05	57.6						
				08	34.0						
136	6	p eS e MN ME MZ e ep	16	44	46.8	-2	-2	+2		0	Near Chishima Islands; 154E 47N
				48	49.3						
				50	35.8						
				54	33.3	-160		16.0			
					34.3	+120		14.0			
				55	21.3		-52	14.0			
				59	00.3						
				18	14	30					
137	6	p eS ep	18	55	08.7	-2	-2	+3		0	aftershock of No 136
				59	04.7						
				19	11	30					
138	8	ep eS MN ME ep	07	01	54.8					0	off Ashiguri-misaki; 133.2E 32.7N
				02	09.3						
					13.3	5		1.0			
					13.8						
				04	30	9		0.7			

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No.	Date	Phase	Time(G.C.T)			Amplitude micron			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
139	Nov. 12	ip iS L e ef	08	14	10.3	+7	+8	-		0	Near chishima Islands; 154E 47N
				18	11.8						
				20	08.3						
				26	43.3						
				09	20						
140	13	ep eS ef	05	22	19.9					0	Near miyoshi, hinoshima Pref.; 132.8E 34.7N
					33.4						
				23	40						
141	13	ep eS ef	08	36	59.5					0	The upper reaches of the River Ina, heyogo Pref.; 135.4E 34.8N
					37	30.0					
				38	30						
142	14	ep e eS ME MN ef	10	17	09.6					0	The upper reaches of the River Yura, heyogo Pref.; 135.4E 35.2N
					24.6						
					46.6						
					52.6		11		0.5		
					55.1				0.5		
				20	30		12				
143	15	ep eS e e ef	08	31	32.4					0	SE part of Kamchatka peninsular ; 160.5E 52.5N
					36	55.0					
					38	13.4					
					52	43.4					
				09	00	00					
144	15	ep eS ef	09	22	23.3					0	south part of Ishizuchi-yama
					33.3						
				23	30						
145	15	ep eS ef	19	47	47.4					0	after shock of No. 143
					68	15.4					
				20	09	30					
146	15	ep e ef	20	39	13.2					0	Near hashijo-jima; 139.5E 34.0N
					40	12.7					
					50	30					
147	18	ep e e e eS e iL MN ME e ME ef	09	42	39.0					0	Near Tibet plateau
					43	53.0					
					44	51.0					
					47	52.0					
					50	42.5					
					53	22.0					
					55	06.5					
					45.5	44.2			15.0		
					57	19.0			313	15.5	
					58	08.5					
				10	00	01.5					
					57	30	272		08.0		
148	21	ep iS ef	11	01	38.1					0	The low part of the River yoshino; 134.4E 34.1N
					56.6						
					03	00					
149	23	ip iS ef	11	39	55.6	-1	+1	-1		0	Near Ishizuchi-yama
					40	02.6					
					41	00					

No.	Date	Phase	Time(G.C.T)			Amplitude <i>micron</i>			Period s.	Scale	Remarks
			h.	m.	s.	N	E	Z			
150	Nov. 24	ep	18	50	50.0					0	Near Niitaka-yama, Formosa region; 121.3 E 23.4 N
		e		51	35.0						
		eS		53	51.0						
		eL		55	12.0						
		MN	19	01	18.5	1320		14.0			
		MZ			24.0		640	13.0			
		ME			25.0	465		12.0			
		eff	20	03							
151	24	ep	18	54	03.0					0	"
		iS		56	54.0	-24.	-51.	-			
		LR		58	20.0						
		MN	19	02	23.0	1680		13.0			
		MZ			24.0		720	15.0			
		MZ			39.0	600		10.0			
		eff	20	03							
		152	26	ep	06	42	25.7				
eS				45	31.7						
LR				46	47.7						
e				48	29.7						
e				52	17.7						
e				56	47.7						
eff	07			08							
153	26			ep	15	15	31.0				
		eS			46.0						
		eff		17	30						
154	28	ip	05	46	27.7	-1.	-7.	-		0	The east part of Ehime pref. ; 133.6 E 34.0 N
		iS			37.2						
		MN			38.2	67		0.5			
		ME			39.7	55					
		eff			48	30					
155	29	ep	04	52	38.7					0	
		eS		53	00.7						
		eff		54	30						
156	30	ep	07	01	22.0					0	Near the River Naka, Tokushima Pref.; 134.5 E 33.8 N
		iS			44.5						
		eff		02	31						

The Seismological Bulletin

of

The Sectional Meteorological Station.

Matsuyama Japan

From *Dec. 1st 1951* to *Dec. 31st 1951*

Notations

1. Nature of the motion : —
i ; Sudden commencement of a phase.
e ; Gradual or indistinct commencement.
2. Amplitude;—
N ; N—S component of amplitude.
E ; E—W component of amplitude.
Z ; Vertical component of amplitude.
Displacements of the north, east and upwards
are regarded as being positive.
3. Scales of seismic intensity ; —
The intensity of the shock is estimated according
to the scales 0—VII.

	No Feeling	Slight	Weak	Rather Strong	Strong	Very Strong	Rather Disastrous	Disastrous
Scale	0	I	II	III	III	V	VI	VII

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No.	Date	Phase	Time(G.C.T)			Amplitude micron			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
157	Dec. 4	ep es eF	06	23	28.0 35.5 48.0	-	-	-	0	SW part of shikoku district	
158	5	ep es e eF	07	08	31.3 10 48.3 11 54.3 28	-	-	-	0	about Formosa; 122.5 E, 23N	
159	8	ep e e e e e eF	04	27	48.0 31 29.0 33 27.0 37 42.0 38 25.0 40 33.5 05 35 30	-	-	-	0		
160	8	ip is eF	19	20	10.5 21.5 43.0	-	-	-	0	about matsuyama city	
161	11	ip es eF	00	21	57.8 22 10.8 23 04.8	-	-	-	0	SW off Okino-shima, Kochi Pref.	
162	11	ep is eF	09	11	35.0 12 02.5 14 45.0	-	-	-	0	hiuga-nada -3, +4-	
163	12	ep es eF	21	41	13.0 42 11.0 47 30	-	-	-	0	E off Kasunura, chiba pref.; 140.5 E 35.2 N; H=30~40K	
164	13	ep es eF	13	32	56.7 33 22.7 34 31.0	-	-	-	0		
165	18	ep es eF	09	52	38.0 49.0 53 30.0	-	-	-	0	the stream bingo	
166	19	ep es eF	06	58	12.6 26.1 59 30.0	-	-	-	0	about matsuyama city	
167	19	ep es eF	11	01	04.7 31.7 02 30.0	-	-	-	0	hiuga-nada	
168	21	ep e es e (Lg ₁) e (L ₁) e (Lg ₂) e (L ₂) e et	08	43	12.4 44 23.9 47 31.9 49 00.4 40.9 53 07.9 54 50.4 57 26.9	-	-	-	0	Yunnan Province, china; 100 E, 25 N	

No.	Date	Phase	Time(G.C.T)			Amplitude			Period s.	Scale	Remarks
			h.	m.	s	N	E	Z			
169	Dec. 22	ep es ef	11	42	11.6 21.1 43 16.1	-	-	-	0	the upper reaches of the River Yoshino ; 133.5 E, 33.8 N	
170	22	ep es ef	17	20	11.6 19.6 21 14.1	-	-	-	0	about Kochi city	
176	23	ep is ef	18	20	11.6 15.0 48.0	-	-	-	0	about Mastuyama district	
177	24	ep es ef	09	17	25.0 18.010 19 07.0	-	-	-	0	SE off Yaku-shima	
178	26	ep es e ef	16	44	37.5 47 49.0 49 37.0 17 00 00	-	-	-	0		
179	29	ep is ef	05	00	34.2 44.7 01 26.2	-	-	-	0	about mastuyama district	

the end.