

SEISMOLOGICAL BULLETIN  
OF THE  
METEOROLOGICAL OBSERVATORY  
OF THE  
GOVERNMENT OF KARAFUTO

1 9 2 8

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PUBLISHED BY THE METEOROLOGICAL OBSERVATORY,

OOTOMARI.

## Symbols and Notations

0 = No. Feeling    I = Slight    II = Moderate  
III = Rather strong    IV = Strong    V = Very strong  
VI = Disastrous.

### 1. Phase of the Seismogram —

P = 1st Preliminary tremors.

S = 2nd    //    //

L = Principal Phase, Long waves.

M = Max. Amplitude in Principal phase.

C = Prominent waves among after tremors.

F = End of perceptible movement.

### 2. Nature of Motion —

*i* = abrupt commencement, clearly defined.

*e* = gradual Commencement, not clearly defined.

$A_E$  = E—W component of A, and takes as positive eastward.

$A_N$  = N—S component of A, and takes as positive northward.

### 3. Distance of epicenter.

$\Delta$  is calculated by the Omoris Formula.

## SEISMIC BULLETIN

Of the Meteorological Observatory of Ootomari,  
Karafuto, Japan.

$\varphi = 46^{\circ} 39' N$

$h = 35.7m$

$\lambda = 142^{\circ} 46' EGr$

Underground : Tertiary

Instrument : Omori Horizontal Pendulum.

	$T_{\circ}$	$r$	$V$
		$T_{\circ}^2$	
AN	30		20
AE	30		60
AN	10		40
AE	10		40

No.	Date.	Phase	Time Greenwich.			Period.	Amplitude.		$\Delta$ Km	Remarks.			
			h	m	s		AE $\mu$	AN $\mu$					
1	Jan.	1	P	18	45	33	9.7	—	135	818	Nrn. far off Tisima ils.		
			S	18	46	10							
			L	18	47	20							
			M'n	18	47	25							
			M'e	18	47	36						5.8	+ 90
			Ce	18	48	23						5.8	— 55
			Fe	19	6	40							
2	Jan.	6	eP	20	10	56	18.8	+	600	5630	A distant earth quake		
			eS	20	16	37							
			eL	20	23	26							
			M <sup>1</sup>	20	29	56						15.7	+ 183
			M <sup>2</sup>	20	32	58							
			F	21	20	57							
3	Fed.	3	P	13	53	07	13.8	+	42	3583	A distant earthquake Aleutian islands neighbourhood.		
			S	13	57	37							
			eL	14	0	25							
			Mn	14	3	44							
			F	14	27	14							

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No.	Date.	Phase	Time			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
4	Feb. 21	eP	19	55	16	19.7		-1500	4693	A distant earthquake.
		S	20	1	30					
		L	20	5	23					
		M	20	7	31					
		F	20	54	36					
5	Feb. 24	eP	14	21	29	17.5		+ 283	2678	Ditto P Phase faint.
		S	14	23	32					
		L	14	26	28					
		M	14	29	18					
		F	14	52	50					
6	Feb. 26	P	1	35	37	17.6		+ 900	2996	Ditto
		S	1	39	28					
		L	1	41	25					
		M	1	43	06					
		F	2	11	42					
7	Mar. 7	ePn	22	48	59	17.0		+ 178	5270	Ditto The Epicentre Probably South sea
		S	22	57	38					
		L	23	0	35					
		M	23	1	11					
		F	23	34	47					
8	Mar. 9	eP	18	16	48	9.7 14.6		- 175 + 195	4207	Ditto
		S	18	22	04					
		L	18	25	42					
		M <sup>1</sup>	18	26	09					
		M <sup>2</sup>	18	47	12					
		F	19	24	45					
9	Mar. 16	P	5	12	22				7746	Ditto
		S	5	22	05					
		L	5	30	16					
		F	6	44	39					
10	Mar. 29	P	5	9	15	8.1		- 125	1554	Sw off Hatizyo island.
		L	5	12	03					
		M	5	12	14					

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No.	Date.	Phase	Time			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
11	Apr. 14	F	5	43	56	20.9	- 523	6410	A distant earthquake.	
		eP	9	21	25					
		S	9	30	03					
		L	9	35	55					
		M	9	42	42					
		F	10	18	23					
12	Apr. 16	P	8	43	05	18.1	+ 27	409	Far SE, off the cape of Nosafu in Hokkaido.	
		L	8	43	56					
		M	8	44	18					
		F	8	58	06					
13	Apr. 18	P	19	34	44	21.4 17.8	- 850 + 483	6417	A distant earthquake.	
		S	19	44	19					
		L	19	49	15					
		M <sup>1</sup>	20	4	48					
		M <sup>2</sup>	20	11	52					
		F	20	39	44					
14	Apr. 22	P	4	54	48			285	Off the cape of Nosafu.	
		L	4	55	22					
		F	5	9	54					
15	May. 1	eP	19	6	12	14.1	+ 58	2401	A distant earthquake.	
		L	19	10	29					
		M	19	13	35					
		F	19	43	44					
16	May. 8	eP	4	47	29			594	NNE, off Kupaziri island.	
		L	4	48	46					
		C	4	56	22					
		F	5	6	31					
17	May. 19	eP	9	34	47	16.1	+ 33	2554	Near Kasimanada L Phase is not distinct.	
		M	9	39	45					
		F	10	1	25					

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No.	Date.	Phase	Time Greenwich.			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
18	May. 20	eP	16	32	05				1494	NErn part of the Tokyo Bay.
		L	16	34	44					
		F	16	50	30					
19	May. 27	P	9	52	03	1.36			636	NE off Miyako.
		L	9	53	29					
		M	9	55	55					
		F	11	41	21					
20	May. 28	P	15	37	20	16.7			1897	Far Ern off the coast of Iwate provinee.
		S	15	39	42					
		L	15	40	20					
		M	15	42	06					
		F	16	11	28					
21	May. 31	P	7	28	13				1299	Ditto.
		L	7	30	24					
		F	7	49	34					
22	Jun. 1	P	12	25	44				1426	Ditto.
		L	12	28	13					
		F	12	48	12					
23	Jun. 1.	P	13	14	04	19.7			1598	Ditto.
		S	13	16	15					
		L	13	16	59					
		Mn	13	17	42					
		Mn	13	18	49					
		Me	13	20	11					
F	14	21	54	18.3	- 600	-1150				
24	Jun. 3	P	8	35	18	13.0			2849	Wm off si no-koshiki Island, kagoshima provinee.
		S	8	38	43					
		L	8	40	44					
		Mn	8	43	11					
		F	9	5	12					
25	Jun. 15	eP	6	19	60				3186	A distant earthquake.

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No.	Date.	Phase	Time Greenwich.			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
26	Jun. 17	S	6	24	28	19.0	— 117	6384	Ditto.	
		L	6	26	16					
		M	6	40	11					
		F	6	30	35					
		eP	3	36	53	24.4	— 808	6384		
		eS	3	44	18					
		L	3	51	19					
M <sup>1</sup>	4	14	04	18.9	— 900	6384				
M <sup>2</sup>	4	17	22							
F	5	55	22							
27	Jun. 21	P	16	35	11	20.0	— 145	4530	Ditto.	
		S	16	41	26					
		L	16	44	54					
		M <sup>1</sup>	16	48	44					
		M <sup>2</sup>	16	53	13	18.2	— 275	4530		
		M <sup>3</sup>	16	56	26					
		F	17	56	26	16.7	+ 200			
28	Jun. 29	P	—	—	—				P phase is faint Trace of the distant earthquake.	
		eL	23	20	50					
		F	23	37	15					
29	July. 3	eP	0	25	44			424	SE off of the cape of Erin.o.	
		eL	0	26	37					
		F	0	38	10					
30	July 7	P	18	1	34			412	Ditto.	
		eL	18	2	25					
		F	18	16	41					
31	July. 9	P	21	33	24			6430	A distant earthquake	
		S	21	41	26					
		eL	21	47	58					
		F	22	42	38					
32	Aug. 4	eP	18	49	29			6360	L phase is faint A distant earth quake.	

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No.	Date.	Phase	Time GreenWich.			Period.	Amplitude.		△ Km	Remarks.
			h	m	s		AE μ	AN μ		
33	Aug. 23	S	18	57	51	25.9	+ 20	519	NE off Tisima islands	
		L	19	11	30					
		M	19	19	22					
		F	20	7	21					
		P	1	19	20					
34	Aug. 25	S	1	20	24	5.5	+ 125	289	Felt at Nayosi rather strong, at Sikka modera the Epicenter near Nayosi.	
		L	1	20	29					
		M	1	20	31					
		F	1	35	00					
		P	1	49	13					
35	Sept. 1	L	1	49	52	2.2	— 48	289	Felt at Nayosi rather strong, at Sikka modera the Epicenter near Nayosi.	
		M	1	50	40					
		F	2	3	26					
		P	—	—	—					
36	Sept. 22	L	6	42	45	15.6	— 82	6047	P phase is faint the trace of a distant earth quake.	
		M	6	47	50					
		F	7	4	54					
		P	7	46	56					
		S	7	55	18					
37	Oct. 1	L	8	0	30	17.9	+ 233	6047	A distant earth quake South sea.	
		M	8	13	35					
		F	8	50	26					
		eP	12	50	46					
		eL	12	51	20					
38	Oct. 9	F	13	3	05	23.1	+ 350	6619	A distant earthquake.	
		ep	3	22	42					
		eS	3	32	32					
		L	3	37	44					
		M <sup>1</sup>	3	55	29					
		M <sup>2</sup>	4	5	12					
39	Oct. 12	F	5	3	12	22.2	+ 125	656	Near Middle Okhotsk sea.	
		P	7	31	14					



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No.	Date.	Phase	Time Greenwich.			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
40	Oct. 15	L	7	32	43	22.2	—	150	4307	A distant earthquake.
		F	8	13	49					
		P	14	38	00					
		eS	14	43	12					
		L	14	47	09					
		M	14	54	26					
41	Oct. 23	F	15	22	43				979	In North Okhotsk sea.
		P	17	54	48					
		S	17	56	37					
		L	17	57	00					
42	Oct. 30	F	18	13	40	17.0		+ 203		P phase is not distinct probably in the Snn off the cape of Otiisi in Hokkaido.
		eP	—	—	—					
		L	20	5	51					
		M	20	7	44					
43	Nov. 7	F	20	51	18	0.6 0.7	— 35		68	Upper course of the Naihuti River, karafuto felt rather strong at Macka, Toyohara, Takinosawa except Otomari slight.
		P	13	44	51					
		L	13	45	00					
		Me	13	45	01					
		Mn	13	45	04					
44	Dec. 1	F	13	48	59	20.0 17.8 20.0 20.0			9770	A distant earthquake in Chile.
		P	4	26	08					
		S	4	39	48					
		L	4	49	12					
		M <sup>1</sup>	5	24	20					
		M <sup>2</sup>	5	31	27					
		M <sup>3</sup>	5	43	17					
		M <sup>4</sup>	5	51	38					
45	Dec. 19	F	6	48	08	27.3 20.4			3341	A distant earthquake.
		P	11	45	01					
		S	11	50	52					
		L	11	51	41					
		M <sup>1</sup>	11	52	11					
		M <sup>2</sup>	11	56	59					

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No.	Date.	Phase	Time Greenwich.			Period.	Amplitude.		$\Delta$ Km	Remarks.
			h	m	s		AE $\mu$	AN $\mu$		
46	Dec. 28	M <sup>3</sup>	12	5	05	20.4		-1350	3598	Ditto
		F	12	55	36					
		eP	14	27	09					
		eL	14	34	29					
		F	15	16	27					