

OCT 28 1954

ANNUAL REPORT
OF THE
METEOROLOGICAL
AND THE
SEISMOLOGICAL OBSERVATIONS
MADE AT THE
INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA
FOR
THE YEAR 1941.

LATITUDE $39^{\circ} 8'$ N., LONGITUDE $141^{\circ} 8'$ E.,
HEIGHT ABOVE MEAN SEA LEVEL 61 METRES.

—
PUBLISHED BY THE INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA.

—
1943

SEISMOLOGICAL OBSERVATIONS

Remarks :—

1. The intensities of the earthquakes are divided into the following seven classes according to the Central Meteorological Observatory of Japan.

Not felt	0.
Felt	1. slight
	2. moderate
	3. rather strong
	4. strong
	5. very strong
	6. disastrous

2. The approximate epicentres of the chief earthquakes are given, which are extracted from the "Kisyô-Yôran" issued monthly by the Central Meteorological Observatory of Japan.
3. The time adopted in the Seismological observations is Greenwich Civil Time.
4. Symbols and notations.
 - i* Sudden beginning of the motion.
 - e* Gradual beginning of the motion.
 - ? Doubtful phase.
 - × Out of order of the instrument.
 - ⊕ Out of the range of the instrument.

EARTHQUAKES, 1941.



No.	Date 1941	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
1	Jan. 1	h 1	m 50	s 31	m -	s -	m 51	s 56	m 51	s 55	m -	s -	m -	s -	+ 10	-	6	31	0	SE off Cape Otisi
2	2	e 16	36	27	-	-	36	41	-	-	-	-	-	-	-	-	1	09	0	
3	2	i 16	56	32	e 56	32	e 61	57	e 62	03	-	-	-	-	- 11	-	11	36	0	Philippine
4	3	2	-	-	-	-	e 24	02	e 24	04	-	-	-	-	-	-	-	-	0	
5	4	e 21	28	47	-	-	29	32	29	32	-	-	-	-	- 6	-	6	15	0	SW off Urakawa
6	5	e 18	54	44	e 54	42	60	53	60	48	-	-	66	37	+ 8	-	35	02	0	SW off Parao
7	6	e 8	08	07	-	-	08	31	e 08	33	-	-	-	-	-	-	2	31	0	
8	7	10	45	26	e 45	24	47	55	e 47	57	-	-	-	-	-	-	8	50	0	
9	8	e 5	02	06	-	-	03	28	03	29	-	-	-	-	- 9	-	5	47	0	SE off Cape Otisi
10	8	e 9	20	06	e 20	06	21	27	21	28	-	-	-	-	- 10	-	4	49	0	" "
11	8	e 12	06	08	e 06	07	06	44	e 06	45	-	-	-	-	+ 15	-	6	57	0	E off Cape Ezan
12	10	e 12	44	47	-	-	45	14	-	-	-	-	-	-	-	-	3	52	0	
13	12	e 1	20	54	e 20	55	i 21	28	21	27	-	-	-	-	+ 22	-	6	04	0	ENE off Cape Siriya
14	12	e 14	58	40	-	-	58	59	-	-	-	-	-	-	-	-	1	41	0	
15	13	e 16	35	55	e 35	54	42	20	42	19	? 45	54	? 45	54	-	-	64	57	0	Direction of Solomon Is
16	14	e 8	28	45	-	-	28	55	-	-	-	-	-	-	-	-	0	55	0	
17	15	e 2	50	05	-	-	50	44	e 50	44	-	-	-	-	- 5	-	4	36	0	
18	19	e 1	18	24	-	-	18	56	e 18	56	-	-	-	-	-	-	3	49	0	
19	21	12	49	36	e 49	40	55	45	e 55	31	-	-	-	-	-	-	29	35	0	Distant
20	22	e 1	17	39	-	-	18	08	e 18	09	-	-	-	-	-	-	3	13	0	
21	22	e 11	34	55	-	-	35	13	-	-	-	-	-	-	-	-	1	33	0	
22	26	e 11	01	49	e 01	49	i 02	17	02	16	-	-	-	-	- 6	-	2	55	0	
23	27	e 6	15	45	-	-	15	58	-	-	-	-	-	-	-	-	0	45	0	
24	28	e 17	04	00	-	-	04	30	e 04	30	-	-	-	-	- 5	-	2	33	0	
25	28	e 23	15	40	-	-	16	19	e 16	17	-	-	-	-	+ 6	-	3	53	0	
26	31	2	46	46	e 46	47	53	09	53	10	-	-	-	-	- 12	-	24	03	0	Direction of Borneo
27	Feb. 1	9	55	30	e 55	32	55	41	55	42	-	-	-	-	- 6	-	2	51	0	Off Cape Hirota
28	3	e 3	46	10	-	-	e 46	22	-	-	-	-	-	-	-	-	1	16	0	
29	4	e 9	35	08	-	-	35	31	e 35	32	-	-	-	-	- 5	-	3	31	0	
30	4	i 11	56	21	i 56	21	i 56	47	i 56	46	-	-	-	-	- 184	- 278	12	08	1	ESE off Kinkwasan
31	4	14	09	05	e 09	05	13	33	13	33	-	-	-	-	+ 52	- 50	33	25	0	Philippine Is.
32	4	e 20	07	09	-	-	i 08	23	e 08	24	-	-	-	-	- 11	-	5	51	0	W off Hatizyo Is.
33	5	8	-	-	-	-	e 02	30	02	30	-	-	-	-	-	-	-	-	0	
34	6	e 11	08	54	-	-	09	06	e 09	06	-	-	-	-	-	-	1	38	0	
35	7	e 12	06	47	e 06	47	i 08	12	08	12	-	-	-	-	- 8	-	5	43	0	SE off Cape Otisi
36	7	e 12	22	00	e 22	01	i 23	24	23	24	-	-	-	-	- 9	-	4	29	0	SE off Cape Otisi
37	7	e 12	27	13	e 27	10	i 28	27	28	27	-	-	-	-	- 6	-	5	05	0	" "
38	7	e 14	19	22	e 19	21	i 20	46	e 20	48	-	-	-	-	- 5	-	6	41	0	" "
39	7	e 15	18	33	e 18	35	22	37	e 22	37	-	-	-	-	- 6	-	23	20	0	
40	8	e 2	50	09	-	-	50	21	-	-	-	-	-	-	-	-	1	22	0	
41	8	e 18	54	03	e 54	03	e 60	13	e 60	17	-	-	-	-	-	-	16	24	0	Distant
42	9	4	16	44	16	44	i 17	25	i 17	26	-	-	-	-	+ 205	- 358	17	50	0	S off Cape Inubo
43	9	i 8	11	25	i 11	25	i 11	57	i 11	57	-	-	-	-	+ 180	+ 280	13	07	0	NE off Cape Siriya
44	9	e 19	27	45	e 27	45	-	-	-	-	-	-	-	-	-	-	5	27	0	
45	11	e 12	24	54	-	-	25	38	-	-	-	-	-	-	+ 6	- 10	2	39	0	
46	13	e 22	44	36	e 44	35	i 45	05	45	08	-	-	-	-	- 15	- 25	5	33	0	ESE off Cape Siriya
47	14	1	16	26	-	-	i 16	37	-	-	-	-	-	-	-	-	2	14	0	
48	14	e 10	11	04	-	-	11	40	e 11	41	-	-	-	-	- 6	-	5	49	0	
49	15	e 1	25	59	-	-	26	26	-	-	-	-	-	-	-	-	3	46	0	
50	16	e 5	23	00	-	-	i 23	18	-	-	-	-	-	-	- 11	-	2	52	0	
51	19	e 10	15	36	-	-	15	54	-	-	-	-	-	-	- 3	-	2	21	0	
52	19	e 15	37	04	-	-	37	36	-	-	-	-	-	-	+ 5	-	2	53	0	
53	20	e 7	31	02	-	-	31	20	-	-	-	-	-	-	-	-	2	26	0	
54	22	e 6	44	34	-	-	44	46	-	-	-	-	-	-	-	-	1	23	0	
55	23	? 22	39	00	? 39	00	-	-	-	-	-	-	-	-	+ 4	-	3	36	0	

EARTHQUAKES, 1941.



No.	Date 1941	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter		
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S					
111	Apr. 2	h	m	s	m	s	m	s	m	s	m	s	m	s	μ	μ	m	s	0			
112	3	e15	41	02	e41	01	-	-	-	-	-	-	-	-	-	-	7	45	0			
113	4	e20	58	18	-	-	60	31	?60	29	-	-	-	-	-	-	9	25	0			
114	5	e11	11	57	-	-	12	50	e12	49	-	-	-	-	-	-	8	18	0			
115	5	e14	39	31	-	-	39	44	-	-	-	-	-	-	-	-	2	13	0			
116	5	e16	51	56	e51	55	53	48	53	47	-	-	-	-	-	-	11	01	0	Near Susa (Yamaguti)		
117	6	e14	58	40	-	-	59	11	-	-	-	-	-	-	-	-	2	07	0			
118	7	e 6	09	04	e09	06	i09	22	09	23	-	-	-	-	-	-	4	24	0	S off Kinkwasan		
119	8	? 0	07	59	-	-	?19	33	-	-	?28	49	?28	53	-	-	57	44	0			
120	10	e 2	50	46	e50	47	i51	13	51	13	-	-	-	-	-	-	3	24	0	NE off Hatinohe		
121	11	e 0	23	48	-	-	24	13	e24	12	-	-	-	-	-	-	2	03	0			
122	12	e21	44	07	-	-	44	24	e44	23	-	-	-	-	-	-	2	35	0			
123	12	e22	50	42	e50	42	i51	19	51	18	-	-	-	-	-	-	3	35	0	E off Cape Ezan		
124	14	e 2	59	01	-	-	59	41	-	-	-	-	-	-	-	-	3	36	0			
125	15	e19	23	28	e23	26	34	26	34	27	-	-	-	-	-	-	11	75	120	04	Mexico	
126	16	22	-	-	-	-	e55	44	-	-	-	-	-	-	-	-	-	-	0			
127	17	e 2	53	45	* *	* *	i54	46	* *	* *	-	-	-	-	-	-	5	26	0			
128	17	e10	33	30	-	-	i33	50	-	-	-	-	-	-	-	-	2	54	0			
129	19	i15	25	44	-	-	i26	07	-	-	-	-	-	-	-	-	3	41	0	E off Hokusima		
130	19	i20	17	31	e17	33	i17	44	i17	46	-	-	-	-	-	-	4	23	1	SE off Kinkwasan		
131	20	e17	47	48	e47	49	55	18	55	16	-	-	-	-	-	-	5	30	36	31	0	
132	20	e18	50	56	-	-	51	18	e51	18	-	-	-	-	-	-	2	34	0			
133	22	e 8	15	22	-	-	16	09	-	-	-	-	-	-	-	-	3	51	0			
134	23	e 1	55	43	-	-	56	26	-	-	-	-	-	-	-	-	3	47	0			
135	24	e 1	51	23	-	-	52	19	-	-	-	-	-	-	-	-	3	34	0			
136	24	e13	18	36	-	-	18	46	-	-	-	-	-	-	-	-	1	05	0			
137	24	e21	01	19	-	-	i02	39	e02	39	-	-	-	-	-	-	5	16	0	E off Cape Otisi		
138	25	e 4	00	15	-	-	i01	03	e01	05	-	-	-	-	-	-	20	23	5	51	0	Near Simotuma
139	25	5	49	58	-	-	50	12	-	-	-	-	-	-	-	-	4	-	2	42	0	
140	27	e10	43	29	-	-	44	18	e44	17	-	-	-	-	-	-	4	-	3	46	0	
141	28	e 8	02	37	-	-	03	28	e03	28	-	-	-	-	-	-	4	-	3	46	0	Near Teganuma
142	30	9	47	03	e47	03	i48	00	i48	01	-	-	-	-	-	-	36	48	13	30	0	SE off Bôsô Penin.
143	30	e13	47	04	-	-	47	27	-	-	-	-	-	-	-	-	-	-	1	36	0	
144	30	i22	46	14	e46	14	i46	49	i46	50	-	-	-	-	-	-	57	75	11	08	0	
145	May 2	e 8	47	00	e47	00	47	34	e47	35	-	-	-	-	-	-	26	25	8	15	0	E off Hokusima
146	2	e 9	45	52	-	-	i47	14	-	-	-	-	-	-	-	-	7	-	4	26	0	
147	3	e19	24	37	-	-	24	50	-	-	-	-	-	-	-	-	-	-	1	31	0	
148	4	e21	34	26	-	-	35	03	-	-	-	-	-	-	-	-	10	-	5	36	0	Near Mt. Tukuba
149	5	e15	21	31	e21	31	24	02	24	04	-	-	-	-	-	-	17	68	19	02	0	
150	7	e19	35	23	e35	23	i36	20	36	21	-	-	-	-	-	-	16	-	5	32	0	SSE off Cape Otisi
151	8	e10	31	55	e31	53	e40	06	e40	07	-	-	-	-	-	-	-	-	52	17	0	
152	9	e 5	38	39	-	-	e45	37	e44	30	-	-	-	-	-	-	-	-	34	10	0	
153	9	9	32	47	32	46	33	20	33	18	-	-	-	-	-	-	-	-	-	-	0	Philippine Kasimanada
154	9	? 9	38	57	38	58	39	43	39	44	-	-	-	-	-	-	243	350	14	56	0	
155	9	9	-	-	-	-	e49	10	-	-	-	-	-	-	-	-	-	-	-	-	0	"
156	9	10	-	-	-	-	18	38	-	-	-	-	-	-	-	-	-	-	-	-	0	
157	9	e10	20	42	-	-	21	15	-	-	-	-	-	-	-	-	-	-	3	08	0	
158	9	e13	14	56	e14	58	15	29	15	29	-	-	-	-	-	-	15	-	5	07	0	Near the mouth of R Naka.
159	10	e 1	58	57	-	-	59	19	-	-	-	-	-	-	-	-	4	-	4	05	0	
160	10	e 3	22	53	-	-	23	26	-	-	-	-	-	-	-	-	-	-	3	06	0	
161	11	e22	28	00	-	-	28	38	-	-	-	-	-	-	-	-	-	-	3	35	0	
162	13	e15	53	24	-	-	i54	07	-	-	-	-	-	-	-	-	-	-	3	04	0	
163	14	e 4	53	36	e53	38	54	49	e54	48	-	-	-	-	-	-	9	-	5	32	0	
164	16	7	21	54	e21	57	27	48	?27	47	-	-	-	-	-	-	-	-	-	-	0	
165	16	e14	33	25	-	-	33	51	-	-	-	-	-	-	-	-	-	-	3	42	0	

EARTHQUAKES, 1941.



No.	Date 1941		P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter
			E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
166	May	17	h 2 34 24		m 34 27	m 39 45	m 39 42	47 18	47 19	-	597	+ 665	75 06		0	Distant					
167		17	e 9 36 26		- -	36 47	e 36 49	- -	- -	-	-	-	3 47		0						
168		18	e 1 51 47		e 51 48	i 52 02	52 03	- -	- -	-	-	-	2 47		0						
169		19	i 5 13 58		i 13 59	i 14 09	i 14 08	- -	- -	-	-	⊕ -1160	11 21		3	Hirota Bay					
170		20	e 15 12 34		- -	13 30	e 13 29	- -	- -	-	-	-	3 31		0						
171		21	e 2 29 48		- -	30 10	- -	- -	- -	-	-	-	1 31		0						
172		21	e 9 28 27		28 28	i 28 45	i 28 47	- -	- -	-	-	- 35 + 43	3 44		0	Off Kuzi (Iwate)					
173		21	23 - -		- -	e 41 48	- -	- -	- -	-	-	-	2 53		0						
174		22	e 16 42 25		- -	42 39	- -	- -	- -	-	-	-	2 53		0						
175		26	e 2 40 33		e 40 34	i 40 58	i 40 58	- -	- -	-	-	+ 30 + 35	9 02		0	E off Cape Sioya					
176		26	e 5 01 34		- -	i 02 01	02 01	- -	- -	-	-	- 8 -	4 19		0	ENE off Cape Sioya					
177		26	e 14 38 17		- -	i 40 20	- -	- -	- -	-	-	+ 7 -	7 32		0	Nw off Titizima					
178		28	e 8 25 52		- -	26 11	- -	- -	- -	-	-	-	1 29		0						
179		28	e 15 27 05		- -	27 23	- -	- -	- -	-	-	- 5 -	1 55		0						
180		28	e 17 34 35		- -	35 08	35 07	- -	- -	-	-	+ 7 -	3 12		0						
181		29	e 10 21 37		- -	22 10	- -	- -	- -	-	-	- 5 -	4 04		0						
182		31	e 10 13 52		- -	14 03	- -	- -	- -	-	-	-	1 50		0						
183		31	e 21 18 20		e 18 22	i 18 50	18 50	- -	- -	-	-	+ 10 - 10	4 20		0						
184	June	1	e 23 24 08		- -	24 31	e 24 40	- -	- -	-	-	- 5 -	2 04		0						
185		2	e 2 17 10		e 17 09	? 18 50	? 18 51	- -	- -	-	-	-	7 12		0						
186		2	e 5 55 53		e 55 53	i 56 14	56 14	- -	- -	-	-	- 7 -	3 19		0	Off Cape Hirota					
187		2	8 34 46		e 34 46	i 34 57	34 56	- -	- -	-	-	+ 51 - 18	3 27		0						
188		2	e 17 44 23		- -	44 59	e 44 59	- -	- -	-	-	+ 3 -	3 17		0						
189		3	e 19 13 24		e 13 24	i 14 04	14 05	- -	- -	-	-	- 17 + 25	5 03		0	Near Inbanuma					
190		6	e 13 57 51		- -	58 12	- -	- -	- -	-	-	-	2 40		0						
191		10	e 7 59 08		e 59 08	i 59 53	59 54	- -	- -	-	-	+ 15 - 15	3 51		0	Off Kuzyukurihama					
192		11	e 15 39 23		e 39 23	40 28	40 29	- -	- -	-	-	- 15 + 28	6 20		0	S off Cape Inubo					
193		11	e 19 34 34		e 34 34	35 30	35 30	- -	- -	-	-	+ 22 - 33	6 45		0						
194		13	e 21 49 20		e 49 20	49 43	49 44	- -	- -	-	-	-	3 55		0						
195		13	e 22 18 31		e 18 31	22 18	22 18	- -	- -	-	-	-	9 12		0						
196		15	e 3 04 53		e 04 54	i 05 24	05 24	- -	- -	-	-	- 12 - 33	4 51		0	Near Kasama					
197		16	e 10 32 40		e 32 40	i 33 12	i 33 13	- -	- -	-	-	+ 75 + 80	8 52		0						
198		16	e 11 34 08		- -	e 35 09	35 10	- -	- -	-	-	-	4 57		0						
199		18	e 12 12 36		e 12 36	i 13 04	13 03	- -	- -	-	-	+ 13 + 18	4 02		0	SE off Cape Siriya					
200		18	e 20 06 49		- -	e 07 20	- -	- -	- -	-	-	-	3 30		0						
201		19	e 9 49 39		- -	e 50 00	- -	- -	- -	-	-	-	1 44		0						
202		20	e 7 52 07		- -	52 21	52 21	- -	- -	-	-	-	1 45		0						
203		21	? 3 15 02		- -	? 16 13	- -	- -	- -	-	-	-	7 31		0						
204		21	e 17 51 57		- -	- -	- -	- -	- -	-	-	-	5 24		0						
205		22	e 11 07 47		- -	08 11	e 08 11	- -	- -	-	-	- 4 -	2 55		0						
206		23	e 12 16 58		e 16 50	17 20	17 20	- -	- -	-	-	+ 10 -	3 33		0						
207		24	e 17 56 26		- -	56 45	e 56 45	- -	- -	-	-	+ 5 -	3 57		0						
208		25	e 6 46 02		e 46 02	i 46 40	46 42	- -	- -	-	-	+ 7 -	3 10		0	S off Okusirizima					
209		26	e 21 29 08		- -	29 40	e 29 41	- -	- -	-	-	+ 5 -	4 15		0						
210		26	i 12 01 00		e 01 01	i 08 13	i 08 14	- -	- -	-	-	? 15 57 - 1105	⊕ 92 48		0						
211		27	e 0 58 03		- -	58 55	e 58 54	- -	- -	-	-	+ 7 -	4 06		0						
212		29	e 21 00 42		- -	01 05	- -	- -	- -	-	-	-	2 22		0						
213	July	1	e 15 11 05		- -	11 32	e 11 32	- -	- -	-	-	+ 3 -	2 46		0						
214		1	e 16 41 19		e 41 20	41 55	e 41 53	- -	- -	-	-	+ 16 + 15	5 18		0						
215		2	e 1 16 36		- -	17 14	e 17 14	- -	- -	-	-	- 3 -	6 59		0						
216		3	e 3 04 37		e 04 36	i 05 10	05 11	- -	- -	-	-	- 11 - 20	4 33		0	E off Cape Sioya					
217		4	e 15 29 15		- -	29 34	- -	- -	- -	-	-	-	1 34		0						
218		4	e 22 48 15		e 48 15	i 48 46	48 45	- -	- -	-	-	- 11 + 15	4 53		0	SSE off Cape Erimo					
219		5	e 3 19 28		e 19 27	i 20 05	20 05	- -	- -	-	-	-	4 15		0	Kikonai (Hokkaido)					
220		6	i 0 36 20		i 36 20	i 37 39	i 37 39	- -	- -	-	-	+ 6 + 35	9 35		0	SSE off Hatizyozima					

EARTHQUAKES, 1941.



No.	Date 1941	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
276	Aug. 20	h	m	s	m	s	m	s	m	s	m	s	μ	μ	m	s	0	Off Kuzi (Iwate)		
277	21	e 8 08 27	-	-	e 23 54	-	-	e 09 41	-	-	-	-	- 3	-	5 04	0				
278	22	e 22 52 45	-	-	53 10	-	-	-	-	-	-	-	- 3	-	2 50	0				
279	25	e 23 10 52	-	-	11 34	e 11 33	-	-	-	-	-	-	- 6	-	4 08	0				
280	26	e 11 40 19	-	-	i 40 34	i 40 35	-	-	-	-	-	-	- 15	- 30	3 30	0				
281	27	e 2 15 47	-	-	e 16 09	-	-	-	-	-	-	-	- 6	-	2 18	0	ENE off Cape Siriya			
282	27	e 11 44 27	-	-	i 44 54	-	-	-	-	-	-	-	- 7	-	3 50	0				
283	28	e 22 41 20	-	-	i 41 44	-	-	-	-	-	-	-	+ 7	-	2 48	0				
284	29	e 2 41 42	-	-	42 08	e 42 09	-	-	-	-	-	-	-	-	3 13	0				
285	29	e 6 56 08	-	-	i 56 29	56 27	-	-	-	-	-	-	- 18	-	8 11	0				
286	30	e 5 30 20	-	-	i 30 40	e 30 39	-	-	-	-	-	-	- 10	-	4 36	0	Hunakawa (Akita) Mariana			
287	30	e 9 41 07	e 41 08	-	45 01	e 45 00	-	-	-	-	-	-	+ 7	-	31 18	0				
288	30	e 13 11 41	e 11 42	-	15 36	15 36	-	-	-	-	-	-	- 17	-	30 52	0				
289	30	e 14 10 59	-	-	-	-	-	-	-	-	-	-	-	-	3 04	0				
290	30	e 23 14 08	-	-	e 14 45	-	-	-	-	-	-	-	-	-	2 03	0				
291	Sept. 1	e 12 54 18	e 54 18	-	i 54 55	54 55	-	-	-	-	-	-	- 18	+ 25	7 22	0	E off Cape Ezan			
292	3	e 4 14 01	-	-	e 14 37	14 35	-	-	-	-	-	-	-	-	4 05	0				
293	4	7	-	-	e 03 56	-	-	-	-	-	-	-	-	-	-	0	Solomon Is.			
294	4	8 05 48	-	-	06 01	-	-	-	-	-	-	-	-	-	2 30	0				
295	4	e 10 30 01	e 29 55	-	36 28	36 20	39 47	39 44	+ 26	-	-	-	-	-	40 37	0				
296	7	e 11 25 11	-	-	15 46	-	-	-	-	-	-	-	-	-	3 05	0	Solomon Is.			
297	9	e 5 26 17	-	-	e 26 47	-	-	-	-	-	-	-	-	-	3 15	0				
298	9	e 7 28 15	e 28 16	-	34 33	e 34 30	38 58	e 38 55	-	-	-	-	-	-	45 48	0				
299	10	e 19 32 07	-	-	32 32	-	-	-	-	-	-	-	-	-	1 53	0				
300	11	e 18 16 28	e 16 29	-	i 17 05	17 05	-	-	-	-	-	-	- 11	+ 23	4 35	0				
301	12	e 7 09 24	e 09 28	-	? 15 33	e 15 40	-	-	? 21 29	-	-	-	-	- 20	32 44	0	NE off Cape Nasyappu E off Cape Siriya			
302	12	e 10 47 50	-	-	e 48 12	-	-	-	-	-	-	-	-	-	1 23	0				
303	12	e 16 03 03	-	-	i 04 16	04 14	-	-	-	-	-	-	+ 20	-	5 00	0				
304	12	e 16 51 35	e 51 36	-	i 52 03	52 03	-	-	-	-	-	-	+ 8	-	3 44	0				
305	13	e 19 09 10	-	-	i 09 48	09 48	-	-	-	-	-	-	+ 5	-	3 57	0				
306	14	e 3 36 09	-	-	36 58	-	-	-	-	-	-	-	- 6	-	5 32	0	New Guinea			
307	14	? 4 16 00	-	-	? 22 23	-	-	-	-	-	-	-	-	-	23 55	0				
308	14	e 13 41 58	e 41 51	-	? 49 06	? 49 03	-	-	-	-	-	-	- 4	-	24 37	0				
309	16	e 21 51 03	e 51 05	-	? 61 20	? 61 24	-	-	? 71 31	-	-	-	+ 68	-	61 41	0				
310	17	e 6 55 38	e 55 38	-	i 61 42	i 61 36	65 10	65 04	- 18	-	-	-	- 85	-	25 02	0				
311	20	i 12 24 42	i 24 41	-	i 25 07	i 25 07	-	-	-	-	-	-	- 50	+ 75	5 23	0	Near Tanakura			
312	20	e 16 44 15	-	-	i 44 56	e 44 56	-	-	-	-	-	-	- 8	-	3 28	0				
313	22	e 0 42 34	-	-	e 43 52	e 43 52	-	-	-	-	-	-	-	-	2 22	0				
314	23	e 9 08 53	-	-	i 09 03	09 07	-	-	-	-	-	-	± 27	-	2 19	0				
315	23	e 11 51 12	e 51 11	-	e 51 52	e 51 52	-	-	-	-	-	-	+ 10	-	5 48	0				
316	24	e 1 04 58	e 04 57	-	i 07 45	07 51	-	-	-	-	-	-	+ 19	-	48 16	0	Near Paramosiri I.			
317	25	e 7 32 10	-	-	e 32 51	-	-	-	-	-	-	-	-	-	2 13	0				
318	26	e 22 12 49	-	-	13 19	-	-	-	-	-	-	-	-	-	2 17	0				
319	27	e 23 39 01	e 39 02	-	40 53	e 40 50	-	-	-	-	-	-	-	-	6 57	0				
320	28	e 12 07 08	e 07 08	-	07 44	07 43	-	-	-	-	-	-	- 7	-	4 20	0				
321	Oct. 29	i 13 36 29	i 36 31	-	i 36 44	36 45	-	-	-	-	-	-	- 164	- 305	9 51	3	Off Kinkwasan Off Tomioka E off Hatizyo I. Off the mouth of R. Naka NW part of Oga Penin			
322	3	e 16 30 50	e 30 50	-	i 31 11	31 10	-	-	-	-	-	-	- 12	-	4 08	0				
323	5	e 20 44 09	e 44 09	-	45 33	e 45 32	-	-	-	-	-	-	- 5	-	7 54	0				
324	6	e 23 48 13	e 48 14	-	i 48 45	i 48 45	-	-	-	-	-	-	+ 51	- 55	8 01	0				
325	8	e 0 19 31	e 19 30	-	i 19 58	i 19 57	-	-	-	-	-	-	- 121	+ 108	8 52	0				
326	8	e 5 26 58	-	-	i 28 37	e 28 39	-	-	-	-	-	-	-	-	36 32	0	SW off Titizima			
327	9	e 6 33 26	-	-	33 55	-	-	-	-	-	-	-	-	-	2 50	0				
328	10	i 1 30 57	e 30 56	-	i 31 07	31 07	-	-	-	-	-	-	-	-	2 51	0	Near Miyako			
329	10	e 21 27 04	-	-	27 47	-	-	-	-	-	-	-	- 12	-	2 27	0				
330	11	e 21 45 38	-	-	46 13	-	-	-	-	-	-	-	-	-	1 35	0				

EARTHQUAKES, 1941.



No.	Date 1941	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
331	Oct. 14	e 9 53 20		e 53 21		53 37		53 38									1 50	0		
332	15	e 1 28 32				29 04											1 42	0		
333	18	e 0 25 46				26 30											4 45	0		
334	19	e 2 50 12				50 45											3 40	0		
335	19	e 10 36 10		e 36 14		i 36 59		36 59									5 27	0	Off Kusiro	
336	19	e 15 04 54				05 24											2 43	0		
337	21	e 4 35 16		35 16		i 35 32		i 35 34									4 28	0	SSE off Kinkwasan	
338	23	e 5 57 33				57 40											0 39	0		
339	23	e 6 48 58				49 46											3 41	0		
340	23	e 18 56 41				57 31											3 42	0		
341	24	e 4 38 48		e 38 51		i 39 01		i 39 02									4 28	0	Near Miyako	
342	25	e 2 39 27		e 39 29		i 39 51		39 52									7 54	0	NE off Hatinohé	
343	25	e 12 34 16				34 51											2 13	0		
344	29	e 0 49 48				50 31											3 55	0		
345	29	e 9 09 38				i 10 17		e 10 19									6 24	0	S off Cape Erimo	
346	30	i 4 37 22		e 37 20		i 37 34		i 37 34									2 36	0		
347	30	e 7 12 13		e 12 12		i 13 48		i 13 51									6 40	0	S off Hatizyo I.	
348	31	? 6 46 50				i 48 41		e 48 40									18 09	0		
349	Nov. 1	e 3 37 31				38 06											3 59	0		
350	1	e 4 59 07				59 49		e 59 48									7 02	0	Kasima-Nada	
351	1	e 19 37 01				37 56											3 06	0		
352	2	8				e 56 52												0		
353	3	e 16 28 39				e 29 22		e 29 22									3 40	0		
354	4	e 2 52 09				53 37											4 36	0		
355	4	e 13 59 16		e 59 16		i 59 57		i 59 56									8 40	0	Kasima Nada	
356	5	e 17 45 02		e 45 02		50 01		49 56									53 31	0		
357	6	e 7 14 18		e 14 15		21 07		e 21 01									35 51	0		
358	7	e 5 20 05				i 20 22		20 22									2 37	0		
359	8	e 4 11 32				i 12 11											4 13	0		
360	8	i 23 45 15		i 45 17		i 51 29		i 51 31		54 39		54 44					44 38	0	SW off Palau	
361	10	22 08 35				i 08 45		08 45									1 52	0		
362	11	e 6 57 10				i 58 33		e 58 33									6 49	0	Bay of Ôzuti	
363	12	i 7 00 35		e 00 31		e 07 30		e 07 34									22 50	0		
364	13	e 19 33 13				33 32											2 39	0		
365	13	e 21 35 44				e 36 14											3 48	0		
366	14	e 6 51 02		e 51 02		i 52 25		i 52 26									11 18	0	E off Sikotan Is.	
367	15	17				e 15 04												0		
368	16	e 21 29 01				e 29 24		29 25									3 04	0		
369	18	16 48 55		48 56		i 50 49		i 50 48									78 32	0	Hyūga-Nada	
370	19	13 55 06		e 55 06		i 55 32		i 55 32									5 15	1	E off Miyako	
371	20	i 2 15 48		15 47		i 16 31		i 16 31									8 07	0	SW off Cape Erimo	
372	21	e 14 41 02				i 41 34		e 41 33									5 12	0		
373	22	e 5 45 45		e 45 45		i 46 19		i 46 20									5 31	0	SW off Cape Erimo	
374	22	e 7 36 18		e 36 15		e 40 06		e 40 08									18 03	0		
375	24	13				? 06 42												0		
376	24	17				e 27 38												0		
377	24	22		? 07 35				? 19 17									43 58	0		
378	25	15 20 43		i 20 42		i 21 23		i 21 23									24 17	0	Kasima-Nada	
379	25	? 18 22 05		? 22 00		? 30 39		e 30 27									76 44	0		
380	25	e 21 16 52		e 16 52		17 23		e 17 21									7 04	0	Kasima-Nada	
381	27	e 8 45 45		e 45 38		52 15		52 16									18 52	0		
382	27	e 23 08 55				i 10 08		10 08									8 22	0	SW off Etoroff I.	
383	28	e 17 42 03				42 38											2 58	0		
384	Dec. 1	e 16 35 04				35 29		e 35 29									3 52	0		
385	2	e 6 48 54				e 49 40											4 34	0		

EARTHQUAKES, 1941.

No	Date 1941	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
386	Dec. 2	e 7 41 42				e 42 13												2 41	0	Kasima-Nada
387	2	e 9 46 12	e 46 10			i 46 46	46 44						- 21	+ 40					0	
388	2	e 9 49 48				50 16	e 50 15						+ 7				4 41	0		
389	2	e 11 04 59	e 05 02			i 05 42	05 41						- 10	- 18			3 50	0		
390	2	e 17 16 37	e 16 38			i 17 04	17 02						- 9	+ 4			4 15	0		
391	3	e 3 16 16				16 40											2 15	0	NE off Hatinohe	
392	3	e 18 37 45				e 39 24											3 33	0		
393	3	18 50 59	e 50 59			i 51 27	i 51 26						+ 65	- 128			6 14	1		
394	3	e 21 06 09				06 27	e 06 27						- 5				1 53	0		
395	3	e 21 08 35				09 02											2 26	0		
396	5	? 21 03 01	? 02 51			? 14 16	? 14 15										111 57	0	Off Kuzi (Iwate) E off Miyako	
397	6	i 21 46 19	i 46 18			i 46 35	i 46 36						- 106	+ 200			9 23	1		
398	7	e 5 05 13				05 55	05 56						+ 15	- 25			7 59	0		
399	8	e 21 43 28				44 01	e 44 03										3 37	0		
400	10	e 2 58 20				58 46											3 53	0		
401	10	e 7 42 49				43 17							+ 4				3 44	0	Off Cape Sioya	
402	10	12 28 28	e 28 28			i 28 51	i 28 52						- 34	+ 45			5 45	0		
403	10	e 16 33 34				34 07	e 34 06						+ 5				3 29	0		
404	11	e 10 04 43				05 10											2 36	0		
405	13	e 4 22 16				22 50											2 07	0		
406	13	4 40 29	e 40 28			i 41 05	41 05						+ 38	+ 53			7 17	0	Off Cape Erimo	
407	13	e 13 43 48				i 44 20	e 44 20						+ 10				2 56	0		
408	14	e 9 59 09				59 49	e 59 49										3 26	0		
409	15	e 16 03 38				i 03 54	e 03 55						+ 5				2 04	0		
410	15	e 21 49 29				i 49 59	e 50 00						- 5				2 09	0		
411	16	e 13 33 29				33 39											1 40	0	E off Miyako Near Kagi (Formosa)	
412	16	i 13 39 16	e 39 19			i 39 45	i 39 45						- 21	- 25			6 32	0		
413	16	e 19 24 50	e 24 52			i 29 05	i 29 07						- 342	- 805			67 50	0		
414	16	e 20 38 58				39 30											3 37	0		
415	17	e 2 29 26				29 52	e 29 54						- 10				5 03	0		
416	19	e 4 03 08				i 03 20											2 32	0		
417	20	e 13 47 38	e 47 37			i 48 00	47 59						+ 10	- 10			2 23	0		
418	21	e 6 49 09				49 31											1 24	0		
419	22	e 23 46 50				47 07											1 21	0		
420	24	e 18 12 27				12 59											2 17	0		
421	25	e 9 32 59	e 32 59			? 34 37	? 34 37						- 7				7 56	0	E off Miyako	
422	25	15 41 19	e 41 20			i 41 47	41 48						- 20	+ 28			7 10	0		
423	26	e 14 55 31	? 55 29			? 61 25	? 61 25						+ 33				62 42	0		
424	27	e 4 14 55				i 15 16	e 15 16										1 47	0		



CHIEF EARTHQUAKES OBSERVED WITH NASU'S SEISMOGRAPH, 1941.

Instrument; Nasu's seismograph with three components.

Remarks;

Instrumental constants;

Component	V	T ₀	γ/T ₀ ²	Mass
E-W	25	4.5	0.06	7.2 kg.
N-S	25	5.4	0.03	7.2 kg.
Vertical	25	5.3	0.06	4.4 kg.

1. Direction of the earth's displacement is taken to be positive towards north, east, and upward respectively.
2. ⊕ Out of the range of the instrument.
3. × Too feeble to measure.
4. ✕ Out of order of the instrument.

No.	Date	P			S		Maximum Amplitude			First Motion			Epicenter	
		Mean of 3 comp.			Mean of 3 comp.		E-W	N-S	Vertical	E-W	N-S	Vertical	λ° (E)	φ° (N)
		h	m	s	m	s	μ	μ	μ	μ	μ	μ		
30	Feb. 4	11	56	22.3	56	46.9	- 370	- 436	+ 132	- 8	+ 16	+ 16	142.6	37.8
42	9	4	16	45.2	17	24.9	- 540	- 466	- 212	×	+ 12	+ 8	140.8	35.3
43	9	8	11	24.7	11	57.5	- 241	+ 320	- 152	+ 2	+ 8	- 2	141.9	41.7
62	28	8	13	7.9	13	33.3	- 150	- 96	+ 54	×	×	+ 8	142.4	40.7
73	Mar. 12	14	7	7.2	7	33.3	+1428	2440<	- 620	- 112	- 16	+ 60	143.5	39.6
76	12	21	37	23.4	37	47.9	-1040	+2464	- 610	- 92	- 12	+ 60	143.5	39.6
83	13	19	31	58.6	32	21.3	- 270	- 284	- 138	- 20	- 0	+ 8	143.6	39.6
88	14	14	31	15.7	31	37.3	-1118	-1130	- 626	- 168	- 32	+ 144	143.5	39.7
91	14	e15	34	39.5	e35	3.8	+ 46	- 58	+ 30	×	×	×	E off Miyako (Iwate)	
93	15	19	8	12.6	8	40.7	- 562	- 726	+ 160	- 32	+ 24	- 72	139.3	40.6
98	19	2	45	27.0	45	47.8	2600<	-1762	+ 642	+ 120	+ 52	- 40	143.0	39.6
111	Apr. 2	18	5	43.6	6	23.0	- 184	- 140	+ 66	- 4	+ 8	- 12	138.6	41.8
130	19	20	17	31.2	17	43.9	- 50	- 46	+ 20	+ 2	- 4	- 6	141.8	38.1
153	May 9	9	32	47.8	33	36.5	+1120	+ 668	+ 126	+ 8	- 40	- 4	142.1	36.2
169	19	5	13	58.8	14	8.5	-1700	±2560	+ 704	- 120	+ 68	+ 280	141.7	38.9
172	21	9	28	26.6	28	45.5	- 50	- 40	- 28	×	×	×	Off Kuzi (Iwate)	
197	June 16	e10	32	39.2	33	10.9	- 156	- 102	- 44	×	×	×	140.3	36.4
220	July 6	0	36	20.8	37	39.1	- 60	- 50	+ 22	×	×	×	140.5	31.8
229	15	14	46	20.5	47	10.0	- 486	- 704	+ 48	×	×	×	138°16'	36°42'
236	20	1	48	18.1	48	41.6	+ 110	- 140	- 60	×	×	×	Off Hatinohe (Iwate)	
258	Aug. 3	11	30	37.1	30	49.1	- 60	- 76	+ 36	×	×	×	Bay of Hirota	
311	Sept. 20	12	24	43.1	25	9.8	+ 54	- 58	- 24	×	×	×	140.5	37.0
321	29	13	36	30.1	36	43.9	- 186	- 230	- 108	+ 8	- 20	- 28	141.6	38.3
323	Oct. 5	e20	44	12.6	e44	44.2	- 80	+ 90	+ 30	×	×	×	E off Hatizyô Is.	
325	8	e 0	19	33.2	19	58.7	- 240	- 206	- 72	×	×	×	139.4	40.2
355	Nov. 4	13	59	16.5	60	3.7	- 60	- 50	- 26	- 2	+ 4	+ 4	141.2	36.1
366	14	6	51	5.4	52	24.9	- 450	- 320	⊕	×	×	⊕	148.8	43.7
369	18	16	48	53.0	50	43.0	⊕	⊕	⊕	×	×	⊕	132.4	32.3
378	25	15	20	44.9	21	22.0	+1326	-1686	- 258	+ 12	+ 40	- 12	141.4	36.5
393	Dec. 3	18	50	58.8	51	27.1	- 90	- 150	+ 64	×	×	×	NE off Hatinohe	
397	6	21	46	18.3	46	35.8	+ 186	+ 264	- 60	- 8	- 12	+ 12	142.2	40.1
402	10	12	28	27.2	28	51.2	- 72	- 50	+ 24	×	×	×	141.2	37.1

PULSATORY OSCILLATIONS, 1941. (EW Component.)

No.	Beginning			Ending			Maximum				Double Amplitude
	Date			Date			Date				
	Month	Day	Hour	Month	Day	Hour	Day	Hour	Day	Hour	
1	January	5	1	January	6	18	5	6	5	10	10
2		8	13		10	20	9	21	10	5	5
3		11	7		14	16	12	18	12	23	8
4		16	4		17	14	16	21	17	4	5
5		17	16		18	7	18	1	18	4	4
6		19	7		22	12	21	2	21	8	12
7		22	21		23	15	23	3	23	6	7
8		23	20		25	16	24	14	24	17	8
9		29	3		30	6	29	19	29	23	10
10		30	15		31	22	31	5	31	11	6
11	February	5	20	February	8	4	7	2	7	6	9
12		10	2		13	14	12	4	12	7	6
13		16	1		16	24	16	3	16	6	10
14		19	15		21	2	20	7	20	10	12
15		21	14		23	14	22	6	22	10	14
16		28	0	March	1	9	28	9	28	13	10
17	March	2	21		5	2	3	11	3	14	5
18		6	20		9	24	7	18	7	21	15
19		11	5		12	16	12	3	12	5	30
20		13	0		13	24	13	4	13	7	5
21		14	2		14	17	14	10	14	12	4
22		19	1		20	13	19	6	19	9	10
23		21	0		22	15	22	0	22	2	6
24		27	3		29	7	27	23	28	2	24
25		30	22	April	1	21	31	3	31	5	9
26	April	3	17		5	12	4	10	4	14	5
27		9	15		11	18	10	5	10	8	9
28		13	13		14	14	13	21	13	24	10
29		18	0		19	13	18	15	18	18	10
30		21	4		23	9	21	23	22	2	8
31	May	3	20	May	6	21	4	6	4	8	20
32		23	0		24	10	23	18	23	20	5
33		26	0		28	13	27	11	27	14	19
34	June	5	20	June	8	14	7	0	7	5	14
35	July	11	16	July	12	10	12	2	12	5	7
36		12	13		14	6	13	8	13	10	21
37		16	8		17	15	16	21	16	24	8
38		22	0		25	8	23	14	23	17	19
39	September	5	1	September	6	21	5	23	6	2	7
40		17	19		20	10	18	3	18	5	10
41		24	23		26	15	25	5	25	9	4
42	October	1	13	October	4	1	2	7	2	14	26
43		18	14		21	15	18	19	19	1	10
44		25	22		27	12	26	9	26	12	11
45	November	19	15	November	20	11	19	23	20	2	13
46		24	0		25	12	24	22	24	24	4
47		27	20		29	13	28	8	28	12	18
48	December	4	2	December	5	10	4	23	5	2	5
49		9	20		10	14	10	2	10	5	6
50		11	6		12	11	11	22	12	2	5
51		17	4		18	13	17	15	17	18	9
52		21	20		24	5	22	5	22	8	6
53		24	2		25	8	24	10	24	13	5