



OCT 28 1954

**ANNUAL REPORT
OF THE
METEOROLOGICAL
AND THE
SEISMOLOGICAL OBSERVATIONS
MADE AT THE
INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA
FOR
THE YEAR 1944.**



**LATITUDE 39° 8' N., LONGITUDE 141° 8' E.,
HEIGHT ABOVE MEAN SEA LEVEL 61 METRES.**



**PUBLISHED BY THE INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA.**

1950

The present report gives the results of the meteorological and seismological observations made at this observatory during the year 1944. No alteration has been made in the nature and methods of the observation.

The observations and computations were done by Messrs. S. Sato, I. Kumagai and K. Suzuki under the superintendence of Mr. C. Sugawa.

The followings are to be noted with respect to the meteorological observations:

Hours of observations.—Japanese Central Standard Time (i.e. mean time of the meridian 9h east from Greenwich) is adopted.

Air Pressure.—The barometric readings in millimetres are reduced to the freezing point of water, and the correction to standard gravity are given at the bottom of the page for each month. Those reduced to mean sea level are given in page 26 and 27.

Air and Earth Temperatures.—The degrees are given in Centigrade.

Wind.—The velocity is expressed in metres per second. The direction was observed relative to the sixteen cardinal points of the compass.

Cloud.—The amount is estimated by the scale 0–10, the forms are those of the International classification, and the direction of the motion is indicated relative to the sixteen cardinal points of the compass.

Tension of Water Vapour.—is given in millimetres.

Relative Humidity.—is given in percentages.

Clear and Cloudy Days.—The amount of cloud is less than 2 exclusive, for the former; and more than 8 inclusive, for the latter.

Duration of Sunshine.—is recorded by a Jordan sunshine-recorder.

Amount of Evaporation.—is given in millimetres, for each day,—that is from 10 h of the day in question to 10 h of the next day, according to the instruction of the Central Meteorological Observatory in Tokyo.

The heights of the meteorological instruments are as follows:

Barometer.—63.1 m above mean sea level.

Air temperature thermometer.—1.3 m above the ground.

Anemometer.—16.5 m above the ground.

Wind vane.—16.6 m above the ground.

In recording the meteorological phenomena the following symbols are used:—

●	Rain	↑	Snow drift	♂	Red sky
*	Snow	∞	Haze	○	Unusual visibility
△	Graupel	∞	Haze in the neighbourhood	↙	Gale
▲	Hail	∞	Dust-storm	∞	Yellow dust
≡	Fog	◎	Frozen rain	~~	Wavy cloud
⊖	Ice fog	↔	Ice needles	Ѡ	Mammato-cumulus
≡	Fog in the neighbourhood	☒	Snow coverage	◐	Lenticular cloud
≡	Drizzle	✳	New snow coverage	⊕	Earthquake
=	Mist	□	Freezing	C	Cirrus
□	Hoar frost	☒	Thunder storm	CS	Cirro-stratus
□	Ice columns in ground	⊤	Thunder	CK	Cirro-cumulus
▷	Dew	↖	Lightning	KC	Alto-cumulus
□	Frozen dew	⊕	Solar halo	SC	Alto-stratus
□	Air hoar	○	Solar corona	SK	Strato-cumulus
V	Soft rime	□	Lunar halo	N	Nimbus
V	Hard rime	□	Lunar corona	K	Cumulus
~	Grazed frost	~	Rainbow	KN	Cumulo-nimbus
※	Snow storm	凹	Aurora	S	Stratus

The descriptions of the meteorological instruments and the observing house are found in the annual reports for the years 1902, 1904, 1905, 1910, 1916, 1925, 1936, and 1937.

The seismological instruments in use are two Ômori's horizontal pendulums, of the same type as that described in p. 8 of No. 5, "Publication of the Earthquake Investigation Committee in Foreign Language," are serving to register the EW component, and the other the NS component, of seismological movements.

	EW Component Apparatus	NS Component Apparatus
Period of free oscillation.	16 seconds	36 seconds
Multiplication of the pointer.	100 times	20 times
Weight of heavy cylinder.	45.0 kilograms	17.6 kilograms
Horizontal distance of the centre of the cylinder from the point of support	20 centimetres	75 centimetres
Vertical distance between the points of support and suspension.	104 centimetres	104 centimetres

March, 1950.

T. Ikeda.

Director of the International Latitude Observatory
of Mizusawa.

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.
	{ 1. slight
	2. moderate
	3. rather strong
Felt	4. strong
	5. very strong
	6. disastrous

2. The time adopted in the seismological observations is Japanese Central Standard Time reckoned from midnight.
3. 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, 1944.



No.	Date 1944	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intens.
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S		
1	Jan. 1	h 38 23	m 25	m 28	s 30	m 44	28	e 44	30	m	s	m	s	μ	μ	m 75	s 32	0	
2	2	e 11 00 47	—	—	01 33	—	—	—	—	—	—	—	—	—	—	2 57	0		
3	2	e 11 04 32	e 04 30	04 56	04 55	—	—	—	—	—	—	—	—	—	—	3 00	0		
4	3	e 23 28 23	e 28 23	29 18	29 18	—	—	—	—	—	—	—	—	—	—	11 02	0		
5	4	e 3 00 30	e 00 27	03 34	e 03 33	—	—	—	—	—	—	—	—	—	—	9 39	0		
6	4	e 4 10 58	—	—	12 01	e 11	58	—	—	—	—	—	—	+ 6	—	7 36	0		
7	5	e 11 56 20	e 56 21	? 59 17	59 15	—	—	—	—	—	—	—	—	—	—	11 23	0		
8	5	20 52 21	e 52 18	52 44	52 45	—	—	—	—	—	—	—	—	+ 14	—	3 14	0		
9	5	20 55 52	e 55 54	56 35	e 56 35	—	—	—	—	—	—	—	—	+ 17	—	3 48	0		
10	6	e 6 22 25	e 22 25	e 30 09	e 30 04	—	—	—	—	—	—	—	—	—	—	45 09	0		
11	7	e 11 57 13	e 57 13	? 61 53	? 61 53	—	—	—	—	—	—	—	—	—	—	14 35	0		
12	8	13 30 52	30 55	31 31	31 29	—	—	—	—	—	—	—	—	- 40	+ 38	5 22	0		
13	9	e 9 47 50	e 47 50	50 07	50 04	—	—	—	—	—	—	—	—	- 43	- 33	14 04	0		
14	9	e 17 02 29	—	02 57	—	—	—	—	—	—	—	—	—	—	—	2 29	0		
15	11	8 00 26	e 00 24	00 36	00 33	—	—	—	—	—	—	—	—	± 10	—	2 22	0		
16	11	10 34 33	34 34	34 49	34 49	—	—	—	—	—	—	—	—	⊕	- 1400	10 17	2		
17	11	19 38 53	—	39 10	—	—	—	—	—	—	—	—	—	- 7	—	2 33	0		
18	12	e 13 32 35	—	32 57	—	—	—	—	—	—	—	—	—	- 6	—	2 28	0		
19	13	e 23 35 51	—	36 23	36 20	—	—	—	—	—	—	—	—	- 11	—	3 54	0		
20	16	e 6 07 08	—	07 33	07 34	—	—	—	—	—	—	—	—	- 7	—	3 09	0		
21	16	e 9 09 49	? 09 43	? 13 23	? 13 16	—	—	—	—	—	—	—	—	—	—	9 33	0		
22	16	23	—	e 52 37	—	—	—	—	—	—	—	—	—	—	—	—	—	0	
23	18	23	—	e 38 37	—	—	—	—	—	—	—	—	—	+ 3	—	—	—	0	
24	19	14 32 58	32 51	34 53	34 54	—	—	—	—	—	—	—	—	+ 33	+ 48	8 25	0		
25	20	e 14 33 55	—	34 14	e 34 13	—	—	—	—	—	—	—	—	- 5	—	2 27	0		
26	23	e 4 44 53	—	45 16	e 45 14	—	—	—	—	—	—	—	—	- 6	—	3 15	0		
27	25	4 04 07	—	04 18	—	—	—	—	—	—	—	—	—	—	—	0 58	0		
28	25	4 15 08	—	15 21	—	—	—	—	—	—	—	—	—	—	—	1 14	0		
29	25	4 17 06	—	17 15	—	—	—	—	—	—	—	—	—	—	—	1 08	0		
30	25	e 16 42 19	—	? 49 38	? 49 32	—	—	—	—	—	—	—	—	—	—	17 13	0		
31	26	18 42 28	—	43 06	e 43 06	—	—	—	—	—	—	—	—	- 5	—	3 21	0		
32	27	18	—	11 59	—	—	—	—	—	—	—	—	—	—	—	—	0		
33	28	6 31 22	—	31 42	—	—	—	—	—	—	—	—	—	+ 4	—	1 43	0		
34	28	e 20 07 43	? 07 47	? 12 02	12 04	—	—	—	—	—	—	—	—	—	—	11 36	0		
35	28	e 21 29 13	—	29 42	—	—	—	—	—	—	—	—	—	—	—	2 17	0		
36	29	e 9 51 05	—	e 51 44	—	—	—	—	—	—	—	—	—	—	—	4 18	0		
37	30	6 50 46	e 50 45	52 21	e 52 19	—	—	—	—	—	—	—	—	- 8	+ 13	5 16	0		
38	31	18	—	31 38	—	—	—	—	—	—	—	—	—	+ 5	—	—	0		
39	Feb. 1	e 12 34 29	e 34 33	44 45	44 29	—	—	—	—	55	24	—	—	—	—	81 32	0		
40	1	i 14 17 09	i 17 08	17 47	17 45	—	—	—	—	—	—	—	—	⊕	+ 2255	8 56	2		
41	1	e 23 10 00	—	10 34	—	—	—	—	—	—	—	—	—	—	—	3 31	0		
42	3	e 13 27 11	—	27 33	—	—	—	—	—	—	—	—	—	—	—	3 06	0		
43	4	e 4 13 56	—	15 07	—	—	—	—	—	—	—	—	—	—	—	5 34	0		
44	5	e 4 54 40	—	55 05	—	—	—	—	—	—	—	—	—	—	—	3 08	0		
45	6	1 41 34	—	41 46	—	—	—	—	—	—	—	—	—	- 7	—	1 13	0		
46	6	e 2 25 09	? 24 44	? 32 38	32 38	—	—	—	—	—	—	—	—	—	—	39 08	0		
47	8	e 13 51 24	—	51 54	—	—	—	—	—	—	—	—	—	—	—	2 32	0		
48	9	e 17 34 44	—	34 54	—	—	—	—	—	—	—	—	—	—	—	0 59	0		
49	12	e 0 40 09	—	40 31	—	—	—	—	—	—	—	—	—	—	—	1 59	0		
50	13	e 7 51 34	e 51 34	51 58	52 00	—	—	—	—	—	—	—	—	- 22	- 28	5 59	0		
51	14	e 0 14 50	—	16 03	—	—	—	—	—	—	—	—	—	+ 11	—	6 37	0		
52	14	e 11 55 1																	

EARTHQUAKES, 1944.

No.	Date 1944	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S		
56	Feb. 20	h 5	22	40	-	m	-	23	35	m	-	-	-	-	μ 5	μ -	m 4	s 34	0
57	24	e 12	13	38	-	-	-	13	58	-	-	-	-	-	3	-	3 02	0	
58	24	e 17	45	33	-	-	-	46	08	-	-	-	-	-	-	-	3 54	0	
59	29	e 12	31	06	-	-	-	31	29	e 31	28	-	-	-	+ 22	+ 20	2 53	0	
60	29	e 13	01	02	? 01	06	e 04	33	e 04	41	-	-	-	-	-	-	11 20	0	
61	Mar. 1	1	39	31	e 39	32	e 48	42	e 48	51	-	-	-	-	-	-	24 09	0	
62	2	22	-	-	e 21	03	-	-	-	-	-	-	-	-	-	-	-	0	
63	4	14	44	21	e 44	20	e 44	51	44	51	-	-	-	-	+ 48	- 52	8 44	0	
64	5	e 13	12	00	-	-	12	36	e 12	36	-	-	-	-	-	- 10	4 23	0	
65	5	16	22	33	-	-	22	56	-	-	-	-	-	-	-	-	2 39	0	
66	6	e 2	22	31	? 22	33	26	58	27	55	-	-	-	-	-	-	11 53	0	
67	6	14	-	-	24	44	24	44	-	-	-	-	-	+ 11	- 12	-	-	0	
68	6	17	-	-	54	19	-	-	-	-	-	-	-	-	-	-	-	0	
69	6	19	04	16	e 04	15	04	56	04	55	-	-	-	-	+ 25	- 40	7 12	0	
70	8	e 0	46	14	-	-	46	34	-	-	-	-	-	-	-	-	1 15	0	
71	8	5	-	-	e 37	35	-	-	-	-	-	-	-	-	-	-	-	0	
72	8	e 14	58	22	-	-	59	45	-	-	-	-	-	-	-	-	4 56	0	
73	8	18	07	53	-	-	e 08	21	08	24	-	-	-	-	-	-	3 46	0	
74	8	20	13	46	e 13	47	14	12	e 14	13	-	-	-	-	+ 21	+ 23	5 23	0	
75	10	e 7	20	53	? 20	54	? 29	43	? 29	38	35	23	35	20	+ 76	- 205	106 54	0	
76	10	10	-	-	09	49	-	-	-	-	-	-	-	-	-	-	-	0	
77	10	i 15	40	34	40	30	40	56	40	51	-	-	-	-	⊕	- 1585	19 57	2	
78	10	16	33	45	e 33	43	34	07	e 34	05	-	-	-	-	+ 33	- 43	4 07	0	
79	10	e 17	18	35	-	-	18	58	-	-	-	-	-	-	-	-	1 47	0	
80	10	17	-	-	34	36	-	-	-	-	-	-	-	-	-	-	-	0	
81	10	e 19	21	39	-	-	22	03	22	05	-	-	-	-	-	16	-	3 53	0
82	10	e 21	47	32	-	-	48	01	e 48	04	-	-	-	-	-	-	-	2 52	0
83	10	e 21	58	08	-	-	58	29	-	-	-	-	-	-	-	-	-	2 18	0
84	10	e 22	46	17	-	-	46	40	-	-	-	-	-	-	-	-	-	2 20	0
85	10	e 23	41	48	-	-	42	09	-	-	-	-	-	-	-	-	-	2 00	0
86	11	3	-	-	34	46	-	-	-	-	-	-	-	-	-	-	-	-	0
87	11	e 4	57	53	-	-	58	19	-	-	-	-	-	-	-	-	-	2 53	0
88	11	7	52	53	-	-	53	18	e 53	20	-	-	-	-	+ 15	-	2 54	0	
89	11	17	05	31	05	29	05	42	05	43	-	-	-	-	± 188	± 150	3 50	2	
90	11	18	08	09	-	-	08	34	e 08	33	-	-	-	-	- 6	-	3 18	0	
91	15	18	-	-	? 01	43	-	-	-	-	-	-	-	-	-	-	-	0	
92	17	20	55	25	55	24	55	37	55	36	-	-	-	-	± 90	- 105	6 10	1	
93	19	17	35	02	35	03	35	45	e 35	43	-	-	-	-	+ 16	-	5 35	0	
94	20	e 2	53	37	e 53	39	? 59	34	-	-	-	-	-	-	-	-	16 55	0	
95	22	i 7	10	27	10	28	10	51	10	54	-	-	-	-	⊕	- 1040	15 23	2	
96	22	e 7	33	36	-	-	34	02	-	-	-	-	-	-	-	-	1 54	0	
97	22	7	39	07	-	-	39	32	39	33	-	-	-	-	+ 13	-	3 01	0	
98	22	e 9	30	40	-	-	31	03	-	-	-	-	-	-	-	-	1 26	0	
99	22	9	51	55	51	55	58	49	58	52	-	-	-	-	- 35	-	41 18	0	
100	24	4	20	32	20	32	20	56	20	57	-	-	-	-	+ 122	+ 160	6 48	0	
101	24	e 10	47	31	-	-	48	07	-	-	-	-	-	-	- 5	-	3 46	0	
102	26	e 12	43	22	-	-	e 43	43	-	-	-	-	-	-	-	-	1 53	0	
103	31	e 12	00	02	e 00	01	06	36	e 06	37	-	-	-	-	-	-	37 23	0	
104	Apr. 1	3	59	26	-	-	61	30	e 61	33	-	-	-	-	- 55	- 38	7 46	0	
105	2	0	-	-	e 37	50	-	-	-	-	-	-	-	-	-	-	-	0	
106	5	6	06	45	-	-	07	30	07	29	-	-	-	-	+ 9	-	3 54	0	
107	6	e 15	03	29	-	-	-	-	-	-	-	-	-	-	-	-	1 25	0	
108	7	3	-	-	e 08	53	-	-	-	-	-	-	-	-	-	-	-	0	
109	7	15	49	37	e 49	36	50	01	e 50	01	-	-	-	-	+ 7	-	3 15	0	
110	10	e 3	19	58	e 20	04	24	29	e 24	25	-	-	-	-	- 14	-	15 34	0	

EARTHQUAKES, 1944.



No.	Date 1944	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S		
111	Apr. 10	h	m	s		m	s	m	s	m	s	m	s	+ 6	-	m	s	01	0
112		e 7	33	51	e 33	49	34	53	34	53	-	-	-	-	+ 7	-	2	26	0
113		1	35	08	-	-	e 35	35	e 35	32	-	-	-	-	+ 29	- 38	4	46	0
114		1	42	49	42	48	43	12	43	11	-	-	-	-	-	-	1	49	0
115		e 4	00	48	-	-	01	11	-	-	-	-	-	-	-	-	-	-	0
116	12	7	7		-	e 40	19	-	-	-	-	-	-	+ 38	- 52	5	07	0	
117	12	11	35	56	35	55	36	20	36	20	-	-	-	-	- 6	-	4	01	0
118	12	e 13	47	33	-	-	e 47	51	e 47	49	-	-	-	-	+ 19	+ 23	4	47	0
119	13	1	36	22	e 36	23	36	38	e 36	38	-	-	-	-	+ 10	-	3	33	0
120	15	e 2	29	27	-	-	30	02	29	59	-	-	-	-	-	-	2	12	0
121	16	e 17	30	42	-	-	31	01	-	-	-	-	-	-	-	-	-	-	0
122	16	18	47	51	47	48	50	53	50	54	-	-	-	-	- 71	- 48	9	49	0
123	16	19	-		-	e 30	24	-	-	-	-	-	-	+ 3	-	-	-	-	0
124	16	23	29	10	e 29	09	29	34	29	34	-	-	-	-	+ 11	-	3	29	0
125	17	e 4	13	58	-	-	14	23	-	-	-	-	-	-	+ 5	-	2	03	0
126	17	e 20	37	13	-	-	e 37	36	-	-	-	-	-	-	-	-	-	-	0
127	20	16	-		-	e 34	52	-	-	-	-	-	-	-	-	-	-	-	0
128	20	17	39	55	-	-	40	07	-	-	-	-	-	-	-	-	1	37	0
129	22	12	16	24	e 16	23	16	52	16	52	-	-	-	-	+ 25	- 33	6	39	0
130	24	e 5	16	26	-	-	16	57	e 16	57	-	-	-	-	- 5	-	3	11	0
131	26	e 7	56	50	-	-	57	08	e 57	08	-	-	-	-	- 12	-	3	44	0
132	26	11	01	56	e 01	54	e 08	09	08	04	13	23	13	14	+ 18	-	43	28	0
133	26	e 14	16	28	-	-	17	03	-	-	-	-	-	-	-	-	2	48	0
134	27	8	59	51	59	52	60	04	60	03	-	-	-	-	± 62	± 88	3	46	1
135	27	23	45	50	e 45	51	52	03	52	03	54	56	54	58	-	+ 13	77	45	0
136	May 30	e 14	14	20	-	-	14	38	-	-	-	-	-	-	-	-	1	57	0
137		e 20	50	47	-	-	e 51	15	-	-	-	-	-	-	+ 5	-	2	31	0
138		2	27	05	e 27	07	27	26	27	24	-	-	-	-	+ 69	+ 128	6	05	0
139		6	15	51	e 15	50	16	26	16	26	-	-	-	-	+ 35	+ 43	5	19	0
140		e 2	35	02	-	-	35	25	e 35	27	-	-	-	-	-	-	3	14	0
141	6	e 4	10	24	-	-	e 10	42	-	-	-	-	-	-	-	-	1	17	0
142	6	e 5	01	36	-	-	02	03	-	-	-	-	-	-	- 4	-	2	21	0
143	9	6	-		-	-	e 29	33	-	-	-	-	-	-	- 3	-	-	-	0
144	11	13	38	02	38	01	38	19	38	20	-	-	-	-	- 91	- 115	5	14	0
145	14	5	-		-	-	e 51	29	-	-	-	-	-	-	-	-	-	-	0
146	16	4	01	52	-	-	e 27	00	-	-	-	-	-	-	-	-	-	-	0
147	16	6	01	52	-	-	02	18	-	-	-	-	-	-	+ 6	-	2	33	0
148	16	e 8	13	14	-	-	e 13	47	e 13	49	-	-	-	-	+ 5	-	4	34	0
149	16	10	47	06	-	-	47	42	47	41	-	-	-	-	- 10	-	5	30	0
150	16	e 14	25	30	? 25	32	26	08	26	09	-	-	-	-	- 11	-	6	23	0
151	16	21	-		-	-	e 56	17	-	-	-	-	-	-	-	-	-	-	0
152	17	9	01	23	-	-	01	49	01	47	-	-	-	-	+ 20	+ 33	4	06	0
153	17	15	56	24	-	-	57	19	e 57	19	-	-	-	-	- 10	-	5	21	0
154	18	1	09	04	-	-	09	26	-	-	-	-	-	-	+ 5	-	3	02	0
155	19	? 9	27	36	? 27	34	-	-	37	01	-	-	-	-	-	-	58	45	0
156	19	9	33	39	-	-	34	34	e 34	37	-	-	-	-	+ 22	+ 25	6	10	0
157	20	16	37	53	-	-	38	28	e 38	28	-	-	-	-	- 16	-	3	49	0
158	22	12	-		-	-	e 23	30	-	-	-	-	-	-	-	-	-	-	0
159	23	e 12	24	25	-	-	25	01	-	-	-	-	-	-	-	-	2	52	0
160	25	10	16	54	16	55	25	22	25	23	-	-	-	-	-	-	33	22	0
161	25	e 21	19	29	-	-	19	41	e 19	42	-	-	-	-	-	-	2	20	0
162	25	e 22	06	03	06	04	e 12	09	e 12	12	? 15	43	? 15	35	-	+ 210	136	16	0
163	26	e 15	51	01	-	-	51	30	-</										



EARTHQUAKES, 1944.

No.	Date 1944	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity	
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
166	May 27	h 23	m 57	s 04		m -	s -	m 57	s 17	m -	s -	m -	s -	m -	s -	μ	μ	m 1	s 27	0
167		16	-	-		46	36	-	-	-	-	-	-	-	-	-	-	-	0	
168		22	53	17		53	38	-	-	-	-	-	-	+ 5	-	-	3	42	0	
169		21	44	34		44	45	-	-	-	-	-	-	-	-	-	1	26	0	
170		e 20	04	13		04	51	e 04	49	-	-	-	-	-	-	-	3	04	0	
171	June 2	i 11	27	13		27	16	i 27	37	27	37	-	-	-	-190	-308	11	00	0	
172		i 13	12	36		i 12	37	i 14	13	i 14	14	-	-	+ 56	- 78	8	58	0		
173		e 20	43	06		-	-	44	27	? 44	22	-	-	+ 6	-	14	11	0		
174		e 4	40	44		-	-	? 44	50	-	-	-	-	-	-	9	14	0		
175		i 15	06	21		e 06	18	i 06	35	06	32	-	-	± 19	-	2	23	0		
176	5	16	-	-		e 10	18	-	-	-	-	-	-	-	-	-	-	-	0	
177	5	17	-	-		e 01	17	-	-	-	-	-	-	-	-	-	-	-	0	
178	6	i 20	48	44		i 48	45	i 49	09	i 49	11	-	-	-509	+988	14	00	2		
179	6	e 21	52	09		e 52	10	52	53	e 52	54	-	-	-26	+ 28	7	43	0		
180	7	7	36	40		e 36	43	37	52	e 37	52	-	-	+ 26	+ 18	7	08	0		
181	7	e 19	17	23		e 17	23	19	11	19	09	-	-	-	-	-	10	44	0	
182	8	e 20	06	58		e 06	58	i 07	21	e 07	23	-	-	+ 25	- 40	5	03	0		
183	10	e 5	42	35		e 42	30	e 48	53	48	56	-	-	-	-	-	36	48	0	
184	13	e 23	25	11		-	-	25	42	-	-	-	-	+ 8	-	3	37	0		
185	14	? 8	44	26		-	-	44	55	e 44	55	-	-	+ 7	-	2	58	0		
186	14	e 10	21	54		-	-	22	12	-	-	-	-	-	-	-	1	42	0	
187	15	11	51	27		-	-	51	52	-	-	-	-	-	-	-	2	13	0	
188	15	e 22	41	55		-	-	e 42	21	-	-	-	-	-	-	-	1	48	0	
189	16	i 13	18	09		i 18	09	i 18	45	i 18	46	-	-	-387	-615	7	14	0		
190	19	9	25	35		-	-	25	59	26	00	-	-	+ 45	- 80	5	32	0		
191	20	i 21	17	22		e 17	21	18	00	e 18	00	-	-	-250	-125	5	33	0		
192	20	e 23	08	50		e 08	52	e 09	27	e 09	32	-	-	+ 8	+ 10	5	27	0		
193	21	20	-	-		? 08	26	-	-	? 18	02	-	-	? 27	09	-	80	14	0	
194	21	22	28	23		-	-	28	36	-	-	-	-	-	-	-	1	23	0	
195	22	e 18	51	37		-	-	51	56	-	-	-	-	-	-	-	1	39	0	
196	24	14	41	10		-	-	41	29	e 41	31	-	-	-18	- 20	4	59	0		
197	July 3	e 18	40	16		-	-	40	41	e 40	40	-	-	+ 5	-	3	40	0		
198		e 4	02	29		-	-	e 02	50	-	-	-	-	-	-	-	2	23	0	
199		i 7	40	30		40	31	i 33	24	i 33	27	-	-	-52	- 55	7	10	0		
200		7	18	06	41	-	-	i 53	44	53	42	-	-	-	-	1	44	0		
201	7	19	-	-		32	36	-	-	-	-	-	-	-	-	-	-	0		
202	9	23	-	-		e 14	11	-	-	-	-	-	-	-	-	-	-	0		
203	10	e 3	57	55		-	-	58	37	-	-	-	-	-	-	-	3	27	0	
204	10	i 21	32	37		i 32	38	i 33	24	i 33	27	-	-	+ 109	+ 120	9	41	1		
205	12	11	53	27		-	-	i 53	44	53	42	-	-	-12	-	3	29	0		
206	12	14	02	06		-	-	02	16	-	-	-	-	+ 9	-	1	31	0		
207	13	15	08	55		-	-	i 09	11	-	-	-	-	-12	-	2	56	0		
208	13	e 19	46	57		e 46	58	e 51	03	e 51	02	-	-	-	-190	33	36	0		
209	16	? 8	34	06		e 34	06	e 40	00	? 40	01	-	-	-	-	-	29	20	0	
210	16	? 15	47	13		-	-	e 47	44	-	-	-	-	-	-	-	2	53	0	
211	16	17	20	55		-	-	21	18	e 21	16	-	-	+ 6	-	3	17	0		
212	18	21	-	-		56	34	-	-	-	-	-	-	-	-	-	-	0		
213	19	e 12	42	35		-	-	42	58	-	-	-	-	-	-	-	2	50	0	
214	19	19	22	44		22	43	e 24	37	? 24	32	-	-	-	⊕ -2043	101	42	0		
215	19	e 20	23	04		-	-	e 23	57	-	-	-	-	-9	-	6	12	0		
216	20	e 4	55	09		? 55	09	e 56	00	? 55	59	-	-	-	-	-	12	03	0	
217	20	10	-	-		59	31	-	-	-	-	-	-	-	-	-	-	0		
218	21	e 5	08	43		-	-	09	47	e 09	47	-	-	-8	- 45	16	37	0		
219	22	e 3	52	22		? 52	26	? 53	32	? 53	32	-	-	+ 10	-	9	59	0		
220	23	e 16	52	38		-	-	e 52	59	-	-	-	-	-	-	-	1	29	0	



EARTHQUAKES, 1944.



EARTHQUAKES, 1944.

No.	Date 1944	P				S				L				Maximum Amplitude			Duration of Total Earthquake	Intensity		
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
276	Sept. 17	i 6	h 33	m 09	s	i 33	m 09	i 33	21	i 33	21	m	s	m	s	± 43	- 52	m 3	42	0
277		0	-	-	-	e 05	25	-	-	-	-	-	-	-	-	-	-	-	0	
278		15	-	-	-	e 33	31	-	-	-	-	-	-	-	-	-	-	-	0	
279		11	25	17	-	-	25	27	-	-	-	-	-	-	-	-	1	37	0	
280		e 22	10	32	e 10	35	? 13	24	? 13	12	-	-	-	-	-	-	12	32	0	
281		13	36	45	36	45	37	02	37	02	-	-	-	-	-	72	- 118	4	48	0
282		17	08	13	-	-	08	23	08	21	-	-	-	-	-	-	+ 23	2	28	0
283		4	-	-	-	e 10	29	-	-	-	-	-	-	-	-	-	-	-	0	
284		? 18	12	07	? 12	07	? 15	06	? 15	15	-	-	-	-	-	-	16	53	0	
285		20	-	-	-	e 29	09	-	-	-	-	-	-	-	-	-	-	-	0	
286	23	21	17	45	17	44	21	39	21	33	24	21	23	48	- 285	+ 1665	126	49	0	
287	24	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	
288	24	e 20	00	08	e 00	07	? 04	06	? 04	11	-	-	-	-	-	-	9	34	0	
289	26	1	-	-	-	? 20	09	-	-	-	-	-	-	-	+ 3	-	-	-	0	
290	27	e 18	43	18	-	-	43	26	-	-	-	-	-	-	+ 5	-	0	55	0	
291	28	1	34	06	e 34	08	e 41	16	? 41	14	-	-	-	-	-	-	70	22	0	
292	29	16	-	-	e 44	11	-	-	-	-	-	-	-	-	-	-	-	-	0	
293	29	16	-	-	e 45	53	-	-	-	-	-	-	-	-	-	-	-	-	0	
294	Oct. 3	i 5	30	20	i 30	20	i 30	44	i 30	44	-	-	-	-	⊕	- 2638	23	59	2	
295		6	29	26	-	-	29	49	29	50	-	-	-	-	-	-	60	4	26	0
296	3	e 17	35	07	-	-	35	41	-	-	-	-	-	-	-	-	2	13	0	
297	4	1	-	-	e 53	47	-	-	-	-	-	-	-	-	-	-	-	-	0	
298	4	e 15	49	54	-	-	e 50	09	e 50	10	-	-	-	-	-	-	2	53	0	
299	5	e 2	15	22	-	-	e 15	55	-	-	-	-	-	-	-	-	3	32	0	
300	6	e 2	05	42	? 05	46	? 08	52	? 09	08	-	-	-	-	-	-	6	48	0	
301	6	2	39	20	e 39	21	e 43	53	? 43	35	? 48	08	? 48	09	-	-	32	32	0	
302	6	? 11	47	06	? 47	21	? 57	24	? 57	24	-	-	-	-	-	-	57	56	0	
303	14	? 11	26	42	? 26	43	? 33	07	? 33	24	-	-	-	-	-	-	37	55	0	
304	15	0	17	26	17	25	18	57	19	01	-	-	-	-	+ 22	+ 45	7	55	0	
305	15	5	23	45	e 23	44	29	46	29	47	-	-	-	-	-	-	34	51	0	
306	15	10	02	40	? 02	47	03	06	e 03	07	-	-	-	-	-	+ 25	5	27	0	
307	17	e 6	08	07	-	-	08	39	e 08	40	-	-	-	-	-	7	4	00	0	
308	18	e 3	45	30	e 45	30	52	16	? 52	16	-	-	e 56	27	-	-	45	27	0	
309	18	e 10	04	19	-	-	04	55	-	-	-	-	-	-	-	-	3	27	0	
310	18	11	15	51	15	55	16	25	16	26	-	-	-	-	-	-	55	8	19	0
311	20	e 12	26	24	-	-	26	44	-	-	-	-	-	-	-	-	1	52	0	
312	22	6	41	25	-	-	41	40	-	-	-	-	-	-	-	6	2	01	0	
313	23	3	49	52	-	-	50	24	-	-	-	-	-	-	-	2	3	21	0	
314	26	7	14	16	14	18	14	35	14	35	-	-	-	-	+ 96	- 148	7	56	0	
315	26	17	07	20	-	-	07	40	e 07	41	-	-	-	-	+ 5	-	2	27	0	
316	Nov. 28	16	17	06	17	06	17	10	17	10	-	-	-	-	± 70	± 138	4	13	1	
317		17	26	53	e 26	53	28	52	e 28	53	-	-	-	-	-	-	10	00	0	
318		19	30	53	-	-	31	05	-	-	-	-	-	-	± 5	-	1	14	0	
319		2	00	28	e 00	29	01	03	e 01	09	-	-	-	-	+ 10	-	3	44	0	
320		0	04	36	-	-	04	57	-	-	-	-	-	-	-	8	-	2	10	0
321	5	e 19	23	32	-	-	23	57	e 23	59	-	-	-	-	+ 7	-	3	07	0	
322	6	12	31	13	-	-	31	23	-	-	-	-	-	-	+ 8	-	2	07	0	
323	7	e 18	07	07	-	-	e 07	26	-	-	-	-	-	-	-	-	1	35	0	
324	8	22	-	-	-	-	e 40	06	-	-	-	-	-	-	-	-	-	-	0	
325	14	1	19	52	e 19	50	20	38	e 20	36	-	-	-	-	+ 12	-	10	12	0	
326	16	5	54	07	e 54	08	59	36	e 59	42	e 64	17	e 64	26	-	-	70	48	48	0
327	16	e 21	20	34	? 20	38	? 28	18	e 28	18	-	-	e 35	11	-	+ 200	37	45		

EARTHQUAKES, 1944.



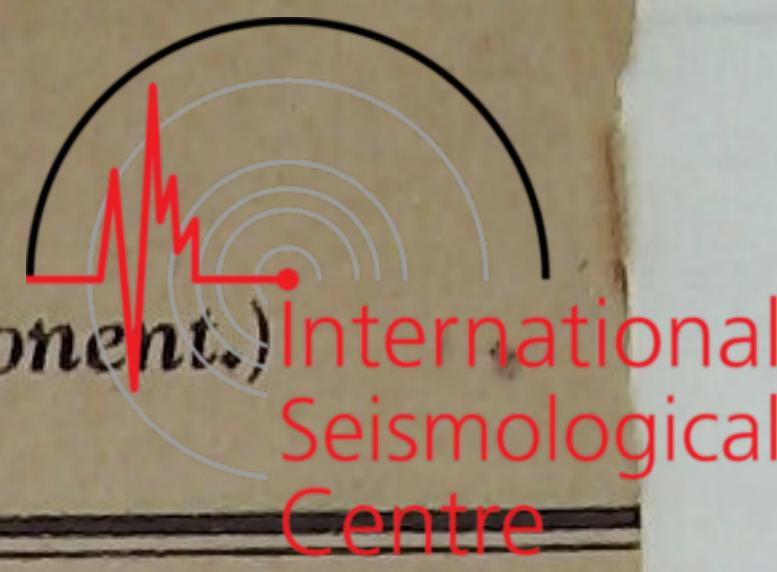
No.	Date 1944	P				S				L				Maximum Amplitude				Duration of Total Earthquake	Intensity		
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S				
331	Nov. 24	h 13	m 59	s 26		m e 59	s 22	m 67	s 43	m 67	s 47	m -	s -	-	μ 46	-	μ 70	m 23	s 18	0	
332	26	4	-	-		e 32	20	-	-	-	-	-	-	-	-	-	-	-	-	0	
333	29	3	55	50		e 55	50	56	49	56	48	-	-	-	-	-	94	-	75	8 42	0
334	30	e 4	44	48		-	-	45	15	e 45	14	-	-	-	-	-	6	-	3 29	0	
335	30	e 6	05	48		-	-	06	08	06	08	-	-	-	-	-	9	-	2 34	0	
336	Dec. 1	23	55	30		55	31	55	40	55	41	-	-	-	⊕ 31	-	⊕ 83	11 30	3		
337	2	2	36	58		e 36	59	37	07	37	06	-	-	-	-	-	31	-	2 11	0	
338	4	e 6	41	04		-	-	41	25	-	-	-	-	-	-	-	-	1 27	0		
339	5	e 5	40	12		e 40	08	e 44	34	e 44	14	-	-	-	-	-	-	11 35	0		
340	5	10	-	-		15	28	-	-	-	-	-	-	-	-	-	-	-	-	0	
341	7	i 1	27	17		i 27	17	27	45	27	43	-	-	-	-	-	517	-	580	11 22	0
342	7	12				e 20	15	-	-	21	34	-	-	-	-	-	+ 25	-	5 34	0	
343	7	13	-	-		37	30	-	-	-	-	-	-	-	-	⊕	⊕	219	55	0	
344	7	? 14	51	28		-	-	? 53	29	-	-	-	-	-	-	-	-	-	-	0	
345	7	e 15	27	17		27	14	e 29	07	29	08	-	-	-	-	-	+ 198	-	-	-	0
346	7	e 15	50	26		-	-	e 52	17	52	15	-	-	-	-	-	39	-	-	-	0
347	7	e 21	41	47		-	-	e 42	17	-	-	-	-	-	-	-	-	-	2 03	0	
348	8	3	02	44		e 02	42	03	26	e 03	25	-	-	-	-	-	+ 10	-	4 51	0	
349	8	e 5	58	25		e 58	25	60	04	60	06	-	-	-	-	-	+ 73	-	44 55	0	
350	8	e 6	24	46		e 24	52	25	41	25	39	-	-	-	-	-	- 14	-	8 31	0	
351	8	e 7	45	02		-	-	45	34	e 45	34	-	-	-	-	-	+ 6	-	2 39	0	
352	8	11	-	-		-	-	50	13	-	-	-	-	-	-	-	-	-	-	0	
353	9	3	22	12		22	13	23	41	23	42	-	-	-	-	-	+ 580	+ 428	22 52	0	
354	9	e 5	50	07		-	-	e 50	57	-	-	-	-	-	-	-	-	-	3 37	0	
355	9	6	08	06		-	-	09	07	-	-	-	-	-	-	-	-	-	4 32	0	
356	9	7	-	-		-	-	04	56	-	-	-	-	-	-	-	-	-	-	0	
357	9	e 9	13	28		-	-	14	09	-	-	-	-	-	-	-	-	-	2 54	0	
358	9	15	38	48		38	49	39	01	39	04	-	-	-	-	-	- 17	-	3 10	0	
359	10	0	24	08		-	-	24	46	24	46	-	-	-	-	-	+ 36	+ 40	5 26	0	
360	10	1	47	17		-	-	e 48	21	-	-	-	-	-	-	-	-	-	4 39	0	
361	10	2	-	-		-	-	02	06	-	-	-	-	-	-	-	-	-	-	0	
362	10	5	01	27		-	-	02	02	e 02	04	-	-	-	-	-	+ 6	-	4 02	0	
363	10	6	04	26		04	28	04	36	04	38	-	-	-	-	-	± 26	± 28	2 29	1	
364	11	e 1	35	22		e 35	22	e 43	51	e 43	45	-	-	-	-	-	-	-	57 22	0	
365	11	e 4	35	02		-	-	e 35	54	-	-	-	-	-	-	-	-	-	4 13	0	
366	12	13	23	21		e 23	17	-	-	28	18	-	-	-	-	-	-	-	18 53	0	
367	12	19	26	44		26	46	28	24	28	21	-	-	-	-	-	- 457	- 283	35 01	0	
368	13	20	00	40		00	41	e 00	48	00	48	-	-	-	-	-	± 31	± 50	2 30	0	
369	16	12	40	35		40	34	41	27	41	21	-	-	-	-	-	+ 6	-	5 35	0	
370	16	16	40	03		-	-	41	11	-	-	-	-	-	-	-	- 5	-	5 05	0	
371	17	0	32	50		e 32	48	34	42	34	43	-	-	-	-	-	+ 12	+ 35	9 52	0	
372	17	e 16	22	19		e 22	15	e 25	31	e 25	30	-	-	-	-	-	-	-	10 10	0	
373	18	e 5	15	45		-	-	16	35	e 16	36	-	-	-	-	-	+ 7	-	5 37	0	
374	18	20	02	10		e 02	14	02	42	02	44	-	-	-	-	-	+ 21	+ 23	6 27	0	
375	18	20	34	13		-	-	34	36	-	-	-	-	-	-	-	-	-	1 50	0	
376	19	17	-	-		07	41	-	-	-	-	-	-	-	-	-	-	-	-	0	
377	19	23	12	07		12	13	14	51	14	50	-	-	-	-	-	-	-	34 49	0	
378	20	5	39	01		38	59	39	58	40	02	-	-	-	-	-	+ 21	+ 23	5 25	0	
379	21	5	18	31		e 18	29	e 20	20	e 20	23	-	-	-	-	-	+ 3	-	4 47	0	
380	23	4	12	21		-	-	12	42	-	-	-	-	-	-	-	-	-	2 04	0	
381	23	7	-	-		e 51	46	-	-	-	-	-									



EARTHQUAKES, 1944.

No.	Date 1944	P				S				L				Maximum Amplitude			Duration of Total Earthquake	Intensity	
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S		
386	Dec. 28	h 10	m 13	s 22		e 13	25	m 13	s 56	m 13	53	m	s	m	s	+ 11	- 13	m 6	8 15 0
387	29	20	03	35		03	38	04	15	04	16	-	-	-	-	- 95	- 75	8	12 0
388	20	e 22	32	01		-	-	e 32	31	-	-	-	-	-	-	-	-	3	16 0
389	31	e 4	41	50		e 41	41	e 43	55	e 43	51	-	-	-	-	-	-	13	26 0
390	31	19	50	44		-	-	51	17	-	-	-	-	-	-	- 7	-	5	25 0
391	31	21	32	19		-	-	32	53	e 32	52	-	-	-	-	- 13	-	6	20 0

PULSATORY OSCILLATIONS, 1944. (EW Component.)



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