

ANNUAL REPORT
OF THE
METEOROLOGICAL
AND THE
SEISMOLOGICAL OBSERVATIONS
MADE AT THE
INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA
FOR
THE YEAR 1934.

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.

1935.

1934

The present report gives the results of the meteorological and seismological observations made at this observatory during the year 1934. No alteration has been made in the nature and methods of observation. The observations and the calculations were made by Messrs. M. Uchida, S. Satô, and I. Kumagai, under the superintendence of Mr. T. Ikeda.

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

Hours of observation—*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, the corrections to sea level and to standard gravity are given at the bottom of the page for each month.

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 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 motion is indicated relative to the sixteen points of the compass.

Tension of Water Vapour.—is given in millimetres.

Relative Humidity.—is given in percentages.

Precipitation.—The amount is given in millimetres.

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 10h of the day in question to 10h of the next day, according to the instruction of the Central Meteorological Observatory in Tôkyô.

The heights of the meteorological instruments are as follows,

Barometer.—63.1 m above sea level.

Air temperature thermometer.—1.3 m above the ground.

Anemometer.—15.4 m above the ground.

Wind vane—16.6 m above the ground.

* Note :—The wind velocity is measured by the Robinson anemometer. Since January first of the year 1925 a new factor for this instrument has been used. The ratio of the new factor to the old one is 0.7/1.0.

In recording meteorological phenomena the following symbols are used:—

●	Rain	∇	Silver thaw	≡	Oceanic noise
✖	Snow	~	Glazed frost	∞	Yellow dust
⊠	Thunder storm	⊠	Ice	0	Unusual visibility
⊥	Thunder without lightning	⊕	Snow drift	∞	Red sky
⋈	Lightning without thunder	←	Ice crystals	C	Cirrus
△	Graupel	⊕	Earthquake	CS	Cirro-stratus
▲	Hail	⊙	Solar corona	CK	Cirro-Cumulus
≡	Mist, Fog	⊕	Solar halo	KC	Alto-Cumulus
⊠	Hoar frost	∪	Lunar Corona	SC	Alto-stratus
⊥	Ice column in ground	∪	Lunar halo	SK	Strato-cumulus
∩	Dew	∩	Gale	N	Nimbus
⊠	Frozen dew	∩	Rainbow	K	Cumulus
⊕	Frozen rain	∩	Aurora	KN	Cumulo-nimbus
∞	Wave cloud	∩	Zodiacal light	S	Stratus
⊠	Snow lying	∞	Haze		

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

The seismological instruments in use are two Omori'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," one 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

July, 1935

H. KIMURA, *Rigakuhakushi*
Director of the International Latitude Observatory
in Mizusawa.

SEISMOLOGICAL OBSERVATIONS

Remarks :—

- 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

- 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.
- The time adopted in the Seismological observations is Greenwich Civil Time.
- Symbols and notations.
 - i* Sudden beginning of the motion.
 - e* Gradual beginning of the motion.
 - ? Doubtful phase.
 - * Time is not accurate due to the disorder of the instrument.
 - ⊕ Out of the range of the instrument.

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion				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. 3	i 9 46 05		e 46 03	i 49 08	e 49 08	-	-	-	-	0.39	0.08	18.6	0	SW off Kamtchatka					
2	4	e 20 57 47		-	e 58 56	-	-	-	-	0.00	-	4.2	0							
3	5	e 10 43 35		-	i 44 10	e 44 10	-	-	-	0.02	0.03	4.2	0							
4	8	e 11 20 41		-	i 21 09	e 21 09	-	-	-	0.02	-	3.8	0							
5	8	e 13 45 02		-	i 45 28	-	-	-	-	0.01	-	3.4	0							
6	8	e 23 09 03		-	i 10 29	e 10 29	-	-	-	0.01	0.02	9.8	0							
7	9	e 14 32 32		-	i 32 41	e 32 41	-	-	-	0.02	-	1.9	1	Hirota Bay						
8	10	11		-	i 59 46	e 59 44	-	-	-	0.01	0.01	3.9	0							
9	10	23		-	e 32 32	-	-	-	-	0.01	-	1.6	0							
10	12	12		-	e 11 25	-	-	-	-	0.00	-	1.4	0							
11	12	13		-	-	-	-	? 50	15	? 50	27	0.01	0.05	-	0					
12	14	e 6 33 36		-	i 33 48	e 33 49	-	-	-	0.02	-	2.2	0							
13	15	4		-	e 40 44	-	-	-	-	0.00	-	4.2	0							
14	15	i 8 51 50	e 51 50	i 58 44	e 58 42	69	28	70	53	-	-	183.0	0	Calcutta						
15	15	e 16 43 46		-	i 43 56	e 43 57	-	-	-	0.05	0.03	3.0	0	Neighbourhood of Tayama						
16	15	e 20 25 45		-	i 25 56	e 25 57	-	-	-	0.02	-	2.0	0							
17	16	e 18 46 50	e 46 46	i 50 32	-	-	-	-	-	-	-	23.4	0							
18	17	9		-	e 20 26	-	-	-	-	0.01	-	1.7	0							
19	18	1		-	e 52 00	-	-	-	-	0.01	-	4.7	0							
20	18	2		-	e 13 16	-	-	-	-	0.00	-	1.9	0							
21	18	8		-	e 38 28	-	-	-	-	-	-	1.7	0							
22	19	e 5 55 53		-	e 56 21	-	-	-	-	0.00	-	2.4	0							
23	19	e 8 49 32		-	e 49 57	-	-	-	-	-	-	2.3	0							
24	19	e 9 36 08		-	e 36 37	e 36 39	-	-	-	0.01	-	3.2	0							
25	19	12		-	e 40 33	-	-	-	-	0.01	-	3.7	0							
26	20	? 18 01 32	? 01 45	? 07 51	? 08 07	-	-	-	-	-	-	19.3	0							
27	20	19		-	e 27 49	-	-	-	-	0.01	-	2.0	0							
28	21	i 5 39 45	e 39 46	i 40 11	i 40 11	-	-	-	-	0.03	0.05	4.5	0	NE off Miyako						
29	23	e 1 47 40		-	i 47 49	-	-	-	-	0.01	-	1.0	0							
30	23	e 15 41 53		-	e 42 31	-	-	-	-	0.01	0.01	3.8	0							
31	24	e 21 42 08	e 42 05	i 42 30	e 42 32	-	-	-	-	0.04	0.07	5.5	0	E off Cape Sioya						
32	25	i 13 39 13	e 39 12	i 39 22	i 39 22	-	-	-	-	0.02	0.01	1.9	0	Hirota Bay						
33	26	i 9 32 55	e 32 56	i 33 15	e 33 15	-	-	-	-	0.07	0.06	4.8	0	Neighbourhood of Kakunodate						
34	26	e 16 35 03		-	e 35 41	-	-	-	-	0.01	-	3.1	0							
35	27	? 0 02 44		-	? 03 09	-	-	-	-	-	-	2.7	0							
36	27	e 0 41 16		-	e 41 56	e 42 00	-	-	-	0.00	-	4.0	0							
37	27	e 4 21 38		-	i 21 52	-	-	-	-	0.01	-	2.0	0	Morioka						
38	27	e 11 37 30		-	e 37 58	e 37 54	-	-	-	0.00	-	3.0	0							
39	27	e 20 45 04		-	e 45 47	-	-	-	-	-	-	3.6	0							
40	28	e 5 49 19		-	i 50 02	e 50 00	-	-	-	0.01	0.02	5.6	0							
41	28	8		-	-	-	-	-	-	-	-	-	0							
42	28	e 13 46 14		-	e 46 48	-	-	-	-	0.01	0.02	6.6	0							
43	28	? 20 08 11		-	? 15 39	? 15 17	-	-	-	-	0.03	31.1	0							
44	29	i 12 35 32	e 35 32	i 36 10	i 36 08	-	-	-	-	0.08	0.15	12.1	0	ESE off Kinkwasan						
45	30	e 7 03 51		-	i 04 03	-	-	-	-	0.01	-	2.0	0							
46	31	? 10 17 44		-	-	-	-	-	-	-	-	31.9	0							
47	31	i 16 13 53	e 13 53	i 14 07	e 14 08	-	-	-	-	0.08	0.05	5.7	0	Upper part of R. Yonesiro						
48	31	18		-	i 47 50	e 47 49	-	-	-	0.01	-	1.8	0							
49	31	e 23 37 21		-	i 37 38	e 37 37	-	-	-	0.01	-	2.0	0							
50	Feb. 1	e 0 16 57	e 16 57	i 17 42	i 17 42	-	-	-	-	0.02	0.02	5.3	0							
51	1	15		-	e 31 27	-	-	-	-	0.01	-	2.3	0							
52	2	18		-	-	-	-	-	-	-	-	-	0							
53	3	e 14 41 21	e 41 34	-	-	? 48 15	-	-	? 54 23	-	-	54.1	0							
54	3	? 16 27 04		-	? 27 44	-	-	-	-	0.01	-	4.8	0							
55	4	? 3 15 21	? 15 27	? 16 53	? 16 50	-	-	-	-	0.01	0.01	8.3	0							

EARTHQUAKES, 1934.

International
Seismological
Centre

No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
56	Feb. 4	e 18	23	11	-	-	e 23	18	-	-	-	-	-	-	0.01	-	1.0	0		
57	4	e 22	09	34	e 09	34	e 16	12	e 16	15	-	-	-	-	-	-	22.6	0		
58	5	e 7	58	45	-	-	e 59	19	e 59	25	-	-	-	-	0.01	-	4.5	0		
59	5	e 23	00	22	-	-	i 00	49	-	-	-	-	-	-	0.01	-	2.4	0		
60	6	e 17	56	31	-	-	e 57	01	e 57	03	-	-	-	-	0.01	0.01	4.1	0		
61	8	e 15	54	00	-	-	e 54	34	-	-	-	-	-	-	0.01	-	5.2	0		
62	9	e 0	52	02	-	-	e 52	33	e 52	36	-	-	-	-	0.01	-	3.4	0		
63	9	e 9	36	32	-	-	e 37	15	e 37	17	-	-	-	-	0.01	-	5.1	0		
64	10	e 5	48	18	-	-	i 48	27	i 48	26	-	-	-	-	0.02	-	2.4	0		
65	10	15	-	-	-	-	e 22	52	-	-	-	-	-	-	0.00	-	-	0		
66	10	15	-	-	-	-	e 24	31	e 24	31	-	-	-	-	0.01	-	3.7	0		
67	10	i 22	02	26	i 02	25	i 02	54	i 02	53	-	-	-	-	0.43	0.45	10.7	0	NE off Cape Sioya	
68	11	e 16	24	21	-	-	e 24	54	e 24	48	-	-	-	-	0.01	0.02	4.2	0		
69	12	e 5	25	14	-	-	e 25	47	-	-	-	-	-	-	0.01	-	3.1	0		
70	12	e 7	31	22	-	-	i 31	39	-	-	-	-	-	-	0.01	-	1.3	0		
71	12	? 11	27	25	? 26	30	? 38	53	-	-	-	-	-	-	0.05	-	42.7	0		
72	12	? 14	33	05	-	-	e 33	38	-	-	-	-	-	-	0.00	-	2.3	0		
73	12	e 21	45	43	-	-	i 46	47	e 46	47	-	-	-	-	0.01	0.03	6.2	0		
74	14	i 4	05	38	e 05	38	e 10	11	e 10	14	13	45	13	37	0.08	1.34	79.2	0	W off Philippine	
75	15	23	-	-	-	-	? 30	48	-	-	-	-	-	-	0.01	-	2.3	0		
76	17	e 3	11	00	-	-	i 11	35	e 11	37	-	-	-	-	0.05	0.05	7.9	0		
77	17	e 6	15	10	e 15	06	i 15	32	e 15	33	-	-	-	-	0.03	0.05	4.5	0		
78	17	e 7	05	55	-	-	i 06	07	-	-	-	-	-	-	0.01	-	1.8	0		
79	17	i 9	17	07	e 17	07	i 17	48	e 17	44	-	-	-	-	0.08	0.06	8.2	0	Kasima Nada	
80	17	e 12	07	09	-	-	i 07	44	e 07	45	-	-	-	-	0.02	0.03	6.3	0		
81	17	17	-	-	-	-	i 08	05	-	-	-	-	-	-	0.01	-	2.4	0		
82	18	e 15	14	19	-	-	e 14	49	e 14	48	-	-	-	-	0.01	0.01	4.4	0		
83	21	6	-	-	-	-	e 49	11	-	-	-	-	-	-	0.00	-	3.3	0		
84	22	e 1	50	40	-	-	i 51	12	e 51	12	-	-	-	-	0.02	0.03	5.3	0		
85	23	e 4	21	07	e 21	07	i 21	38	e 21	38	-	-	-	-	0.02	0.03	6.9	0	Cape Sioya	
86	24	i 6	27	41	e 27	33	i 30	37	e 30	40	31	17	? 31	22	1.10	1.73	106.1	0	SSE off Titizima (deep)	
87	27	e 21	38	11	-	-	e 39	00	-	-	-	-	-	-	0.01	-	4.5	0		
88	28	e 3	03	48	-	-	e 04	40	-	-	-	-	-	-	0.01	-	6.4	0		
89	28	e 3	19	14	-	-	e 20	01	-	-	-	-	-	-	0.00	-	3.6	0		
90	28	e 7	01	22	-	-	e 02	03	-	-	-	-	-	-	0.01	-	4.4	0		
91	Mar. 28	e 14	30	05	e 30	02	e 37	04	e 37	08	? 44	36	? 45	19	0.01	0.53	52.3	0	New Guinea	
92	1	e 4	16	32	-	-	i 17	03	e 17	02	-	-	-	-	0.01	-	2.2	0		
93	1	6	-	-	-	-	i 51	29	-	-	-	-	-	-	-	-	0.6	0		
94	1	i 7	51	52	e 51	49	i 52	02	i 52	03	-	-	-	-	0.02	0.03	3.4	0	NE off Kinkwasan	
95	1	e 18	43	31	-	-	e 43	51	e 43	53	-	-	-	-	0.02	0.02	4.6	0		
96	1	19	-	-	-	-	e 49	55	-	-	-	-	-	-	0.01	-	33.2	0		
97	1	e 22	04	48	-	-	e 05	30	-	-	-	-	-	-	0.01	0.01	7.8	0		
98	2	6	-	-	-	-	e 04	13	-	-	-	-	-	-	-	-	3.1	0		
99	2	e 12	41	58	-	-	e 42	53	-	-	-	-	-	-	-	-	3.5	0		
100	3	14	-	-	-	-	e 45	39	-	-	-	-	-	-	0.01	-	2.4	0		
101	3	21	-	-	-	-	i 10	28	-	-	-	-	-	-	-	-	1.8	0		
102	4	e 6	04	17	-	-	e 05	23	e 05	19	-	-	-	-	0.01	0.02	5.3	0		
103	4	e 11	22	37	e 22	39	e 26	41	e 26	41	28	41	28	12	-	0.05	26.9	0		
104	4	i 19	16	38	-	-	i 16	49	-	-	-	-	-	-	0.01	-	2.4	0	Off Hirota Bay	
105	5	e 4	29	28	-	-	30	00	-	-	-	-	-	-	0.01	-	3.5	0		
106	5	e 11	58	41	e 58	40	e 69	09	e 69	14	-	-	-	-	-	-	99.9	0		
107	6	e 14	47	47	-	-	e 48	36	-	-	-	-	-	-	-	-	4.1	0		
108	8	15	-	-	-	-	e 11	56	-	-	-	-	-	-	-	-	2.0	0		
109	9	e 23	55	29	-	-	i 56	18	e 56	15	-	-	-	-	0.00	-	4.4	0		
110	11	e 10	44	46	-	-	e 45	23	e 45	29	-	-	-	-	0.01	-	4.2	0		

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
111	Mar. 12	h 18	m 15	s 31	m 15	s 29	i 16	s 17	e 16	s 16	-	-	-	-	0.06	0.06	5.4	0		
112	13	e 13	21	32	e 21	23	? 28	53	? 28	44	34	18	34	13	0.01	0.09	50.4	0		
113	14	11	-	-	-	-	e 15	09	-	-	-	-	-	-	0.01	-	1.8	0		
114	15	17	-	-	-	-	i 05	05	-	-	-	-	-	-	0.01	-	1.3	0		
115	16	e 14	21	44	e 21	43	i 28	21	e 28	20	-	-	-	-	0.02	0.04	16.9	0		
116	16	i 18	05	04	e 05	04	i 05	16	i 05	16	-	-	-	-	0.02	0.02	2.7	0	Off Kinkwasan	
117	16	e 21	26	15	-	-	e 26	34	-	-	-	-	-	-	-	-	2.0	0		
118	17	e 18	37	53	-	-	i 38	32	e 38	33	-	-	-	-	0.02	0.02	7.2	0	Off Kuzyukuri Coast	
119	18	e 0	58	29	e 58	28	i 58	59	e 58	59	-	-	-	-	0.02	0.01	4.3	0		
120	18	e 4	36	35	e 36	36	i 39	48	e 39	49	? 41	50	? 41	51	-	-	13.7	0	S part of Okhotsk Sea	
121	19	i 11	26	51	e 26	56	i 27	23	i 27	27	-	-	-	-	0.12	0.11	7.5	0	E far off Kamaisi	
122	20	2	-	-	-	-	e 47	32	-	-	-	-	-	-	0.00	-	3.1	0	Mabuti	
123	20	i 13	27	59	e 27	59	i 28	16	i 28	16	-	-	-	-	0.12	0.13	4.5	1	E off the mouth of R.]	
124	21	i 0	54	39	i 54	40	i 55	26	i 55	25	-	-	-	-	⊕	0.48	15.6	0	Off Miyako	
125	21	e 3	41	06	e 41	00	i 42	02	e 42	01	-	-	-	-	0.06	0.07	7.6	0		
126	21	e 5	29	31	-	-	i 30	08	e 30	07	-	-	-	-	0.02	0.04	4.0	0		
127	21	i 5	39	01	e 39	02	i 39	31	i 39	33	-	-	-	-	0.36	0.56	8.4	0	E off Miyako	
128	21	e 5	51	03	-	-	e 51	30	e 51	30	-	-	-	-	0.01	-	2.4	0		
129	21	e 5	56	41	-	-	i 57	12	e 57	13	-	-	-	-	0.02	0.03	3.0	0	E off Miyako	
130	21	10	-	-	-	-	? 20	23	-	-	-	-	-	-	-	-	1.2	0		
131	22	e 0	41	29	-	-	i 41	56	e 41	53	-	-	-	-	0.02	0.03	3.4	0	Off Miyako	
132	24	e 12	13	46	e 13	36	e 21	09	e 21	06	27	05	26	54	-	0.29	49.0	0	Distant	
133	24	e 14	54	05	-	-	i 54	17	-	-	-	-	-	-	0.01	-	1.8	0		
134	24	21	-	-	-	-	i 48	55	-	-	-	-	-	-	-	-	1.0	0		
135	25	e 22	08	47	-	-	i 09	16	e 09	15	-	-	-	-	0.02	0.03	4.1	0	Off Miyako	
136	27	e 20	16	24	-	-	e 16	42	-	-	-	-	-	-	0.00	-	1.9	0		
137	28	8	-	-	-	-	e 18	03	-	-	-	-	-	-	0.01	-	1.2	0		
138	28	9	-	-	-	-	e 07	05	-	-	-	-	-	-	-	-	0.9	0		
139	29	e 5	48	12	-	-	i 48	42	e 48	42	-	-	-	-	0.01	-	3.5	0		
140	29	e 7	41	57	-	-	e 42	23	e 42	23	-	-	-	-	0.01	-	3.3	0		
141	29	e 11	25	19	-	-	i 25	46	e 25	46	-	-	-	-	0.03	0.02	4.4	0		
142	29	20	-	-	-	-	e 18	52	-	-	-	-	-	-	0.00	-	2.8	0		
143	31	e 0	26	47	-	-	i 27	46	e 27	45	-	-	-	-	0.02	0.03	4.5	0		
144	Apr. 1	23	-	-	-	-	e 36	30	-	-	-	-	-	-	-	-	1.5	0		
145	2	e 19	46	36	-	-	i 47	01	-	-	-	-	-	-	0.01	-	1.8	0		
146	3	e 1	11	06	-	-	e 12	02	e 11	58	-	-	-	-	0.01	0.02	6.2	0	Neighbourhood of	
147	3	e 22	36	22	e 36	21	e 38	39	e 38	29	-	-	-	-	-	0.05	9.8	0	Cape Inubo	
148	5	e 8	57	52	-	-	e 58	35	e 58	37	-	-	-	-	0.03	0.03	7.1	0	Off Kuzyukuri Coast	
149	6	e 10	48	12	-	-	i 49	15	e 49	14	-	-	-	-	0.01	-	4.2	0		
150	6	i 19	10	07	i 10	07	i 10	26	i 10	25	-	-	-	-	⊕	3.02	9.4	2	NE off Cape Sioya	
151	7	e 16	21	51	-	-	e 22	11	-	-	-	-	-	-	0.00	-	2.1	0		
152	11	e 10	54	44	-	-	e 55	32	e 55	42	-	-	-	-	0.01	0.02	4.4	0		
153	11	e 21	21	32	-	-	e 22	23	-	-	-	-	-	-	0.01	-	6.0	0		
154	11	21	-	-	-	-	i 30	46	e 30	46	-	-	-	-	0.03	0.06	3.4	0		
155	13	22	-	-	-	-	i 11	29	e 11	29	-	-	-	-	0.01	0.01	3.4	0		
156	14	i 5	22	42	e 22	43	i 22	55	i 22	57	-	-	-	-	0.12	0.10	4.3	0	Neighbourhood of	
157	14	e 14	03	16	-	-	i 03	33	-	-	-	-	-	-	0.01	-	2.1	0	Yamada Bay	
158	15	i 10	34	29	e 34	29	i 35	20	i 35	22	-	-	-	-	0.20	0.22	13.1	0	SSE off Cape Nozima	
159	15	i 22	22	01	e 22	01	e 27	22	e 27	21	29	44	29	45	0.04	0.74	26.5	0	Neighbourhood of	
160	16	13	-	-	-	-	e 45	45	-	-	-	-	-	-	0.01	-	3.5	0	Mindanao I.	
161	18	1	-	-	-	-	e 56	56	-	-	-	-	-	-	0.01	-	3.6	0		
162	19	e 2	39	27	-	-	e 40	12	-	-	-	-	-	-	0.01	-	4.5	0		
163	19	i 16	15	41	i 15	41	i 17	23	i 17	25	-	-	-	-	0.30	0.29	10.3	0	S off Hatizyo I. (deep)	
164	19	19	-	-	-	-	e 47	37	-	-	-	-	-	-	-	-	1.5	0		
165	21	e 10	34	26	e 34	30	i 34	55	e 34	56	-	-	-	-	0.02	0.04	5.4	0	Off Miyako	

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
166	Apr. 25	h 1 35 33				m - -	s - -	i 35 48	e 35 49					0.01	0.01			1.4	0	NE off Miyako
167	25	e 3 13 11				e 13 13		i 13 44	e 13 45					0.02	0.03			3.6	0	
168	25	e 5 10 52						i 11 19	? 11 17					0.01	0.02			3.0	0	
169	25	10						e 33 21						0.00				1.0	0	
170	25	12						i 33 02						0.01				1.6	0	
171	26	17																4.6	0	S off Cape Nozima SSW off Cape Erimo SE off Miyako
172	26	21						e 10 23										4.6	0	
173	26	e 22 48 51				e 48 48		i 49 44	e 49 34					0.03	0.05			7.5	0	
174	27	e 6 11 12				e 11 14		i 11 37	11 38					0.06	0.05			6.9	0	
175	27	i 9 17 15				17 17		i 17 50	17 53					0.18				10.9	0	
176	28	e 15 16 11						i 16 40						0.01				3.5	0	E off Miyako S off Titizima
177	28	e 18 43 54						e 44 17						0.01				1.7	0	
178	28	i 23 26 25				e 26 25		i 27 02	i 27 02					0.16	0.15			10.9	0	
179	30	e 15 23 22				e 23 22		i 26 02	i 26 06					0.08	0.06			8.5	0	
180	May 1	1						i 25 14						0.01				1.8	0	
181	1	i 7 14 02				e 14 01		? 18 58	? 19 07					0.01	0.02			7.9	0	Sizugawa Bay NNW off Titizima
182	2	e 9 28 24						i 29 08	e 29 08					0.02	0.02			4.2	0	
183	2	i 18 54 42				i 54 41		i 54 49	i 54 49					0.16	0.10			5.1	1	
184	3	e 1 34 06				e 34 06		i 35 55	e 35 54					0.03	0.08			23.2	0	
185	3	e 3 44 24						e 44 56										3.2	0	
186	4	1						e 22 53						0.00				3.1	0	E off Cape Siroya
187	4	e 4 44 45				e 44 44		i 51 39	i 51 38					0.04				44.9	0	
188	4	12						e 18 03						0.00				1.8	0	
189	4	e 12 55 00				e 55 03		i 55 28	i 55 28					0.04	0.05			5.0	0	
190	5	e 13 25 28						e 26 01						0.00				2.9	0	
191	5	16						e 51 11						0.01				1.9	0	S part of Okhotsk sea
192	5	20																0.8	0	
193	7	6						e 37 28										2.4	0	
194	9	e 10 08 49						i 09 21	e 09 17					0.01				4.1	0	
195	9	e 16 16 37						i 18 55	e 18 55					0.01	0.03			12.1	0	
196	11	3																2.2	0	E off Cape Ezan
197	12	e 15 30 28						e 31 03						0.01				3.2	0	
198	13	e 1 56 15						e 56 44						0.01				3.2	0	
199	13	e 2 07 27						e 07 59										3.2	0	
200	13	e 9 10 22						e 10 50						0.01				4.2	0	
201	13	e 16 13 37						e 14 34						0.01				5.4	0	E off Cape Ezan
202	13	? 23 10 37						e 12 35	e 12 38					0.02	0.03			6.2	0	
203	14	22						? 21 11						0.01				3.4	0	
204	17	e 11 54 34						e 55 13	e 55 14					0.01	0.01			5.5	0	
205	17	e 21 27 11						i 27 36	i 27 35					0.02	0.02			3.9	0	
206	18	e 21 10 03						i 10 17						0.01				1.8	0	ESE off Miyako
207	19	e 10 48 14						e 48 56						0.00				3.8	0	
208	20	i 7 02 37				i 02 38		i 03 09	i 03 06					0.15	0.31			8.9	0	
209	21	6						e 40 58										2.3	0	
210	25	e 12 15 51						e 16 19						0.01				3.0	0	
211	25	e 16 21 37				e 21 36		i 23 34	i 23 33					0.05	0.06			5.8	0	SSE off Hatizyo I.
212	27	e 1 30 04						i 30 25						0.01				2.7	0	
213	27	i 2 54 34						i 54 46	e 54 44					0.02				2.8	0	
214	28	e 5 34 58				e 34 58		i 36 33	i 36 32					0.03	0.05			7.2	0	
215	29	21						e 44 04						0.01	0.01			2.0	0	
216	30	i 23 04 40				i 04 40		i 05 12	i 05 11					0.28	0.25			13.7	1	Neighbourhood of Mito
217	31	2						e 38 08										1.8	0	
218	31	6						e 53 06										1.5	0	
219	31	e 8 02 16						e 02 29						0.01				1.4	0	
220	June 1	e 1 36 50				e 36 47		i 37 42	e 37 42					0.03	0.03			7.6	0	

EARTHQUAKES, 1934.

No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
221	June 1	h	m	s	m	s	m	s	m	s	m	s	mm	mm	m	0	Neighbourhood of Sawara			
222	2	e	5	41	29	-	-	e	39	59	-	-	0.01	-	1.8	0				
223	2	? 6	02	10	? 02	10	? 08	06	? 08	05	-	-	0.01	-	17.4	0				
224	2	21	-	-	-	-	-	e	01	30	-	-	0.00	-	3.2	0				
225	3	e	7	18	05	e	18	06	e	18	41	e	18	41	0.08	0.06		8.2	0	
226	3	? 21	05	07	-	-	-	e	06	47	-	-	0.01	-	5.0	0				
227	4	2	-	-	-	-	-	e	35	52	-	-	-	-	2.9	0				
228	4	11	-	-	-	-	-	e	42	20	-	-	-	-	2.3	0				
229	5	12	-	-	-	-	-	e	39	51	-	-	-	-	2.0	0				
230	5	i	18	45	52	e	45	51	i	46	36	i	46	36	0.10	0.10		7.0	0	
231	6	3	-	-	-	-	-	e	38	46	-	-	0.00	-	2.9	0				
232	6	e	6	25	21	e	25	17	e	26	22	e	26	22	0.02	0.03		9.1	0	
233	6	e	11	43	48	-	-	i	44	51	e	44	49	-	0.02	0.03		6.3	0	
234	6	e	16	36	48	-	-	e	37	51	e	37	48	-	0.01	0.02		7.4	0	
235	6	e	17	00	50	-	-	e	01	39	-	-	0.01	-	4.4	0				
236	6	17	-	-	-	-	-	e	44	29	-	-	-	-	2.8	0				
237	6	e	18	48	53	-	-	e	49	40	-	-	0.01	-	4.1	0				
238	7	4	-	-	-	-	-	e	57	33	-	-	-	-	2.4	0				
239	7	21	-	-	-	-	-	i	57	00	-	-	0.01	-	0.7	0				
240	9	7	-	-	-	-	-	e	31	13	-	-	-	-	1.1	0				
241	9	i	13	06	56	i	06	56	i	13	24	i	13	26	0.15	0.06		16.9	0	
242	9	e	16	29	31	-	-	i	29	43	-	-	0.02	-	2.1	0				
243	9	17	-	-	-	-	-	e	02	26	-	-	-	-	1.4	0				
244	12	2	-	-	-	-	-	e	56	05	-	-	0.01	-	2.7	0				
245	12	4	-	-	-	-	-	e	35	09	-	-	-	-	1.5	0				
246	12	e	7	58	23	-	-	e	58	52	-	-	0.01	-	2.8	0				
247	12	e	12	47	11	-	-	e	47	31	-	-	-	-	2.2	0				
248	12	e	13	07	42	-	-	e	08	04	-	-	0.01	-	2.6	0				
249	12	e	23	43	40	-	-	i	43	50	-	-	0.01	-	2.1	0				
250	13	e	1	24	02	-	-	e	24	39	-	-	0.01	-	4.7	0				
251	13	i	1	52	34	e	52	36	i	53	47	i	53	47	0.80	0.47	37.1	2		
252	13	i	22	20	59	e	21	02	i	29	36	i	29	31	0.04	0.05	47.1	0		
253	14	e	19	15	49	e	15	46	i	16	27	i	16	26	0.07	0.08	5.7	0		
254	15	3	-	-	-	-	-	e	00	55	-	-	0.00	-	2.4	0				
255	15	e	5	32	28	e	32	28	i	33	03	e	33	02	0.05	0.05	5.7	0		
256	16	e	5	15	01	-	-	e	17	23	-	-	-	-	7.4	0				
257	17	e	3	21	17	-	-	e	21	56	-	-	0.00	-	3.5	0				
258	18	e	9	22	09	-	-	e	22	50	-	-	0.00	-	4.2	0				
259	19	3	-	-	-	-	-	e	54	47	-	-	0.00	0.01	9.1	0				
260	19	e	10	20	47	-	-	e	22	19	-	-	0.00	-	3.8	0				
261	19	i	15	49	17	e	49	17	i	50	59	i	50	59	0.15	0.10	8.9	0		
262	21	0	-	-	-	-	-	e	00	36	-	-	0.01	-	3.7	0				
263	22	e	16	38	14	e	38	12	i	38	36	e	38	37	0.01	0.02	3.2	0		
264	23	e	4	43	31	-	-	e	47	13	-	-	-	-	10.2	0				
265	23	5	-	-	-	-	-	-	-	-	? 38	42	-	0.04	11.4	0				
266	24	? 6	16	33	-	-	-	e	19	18	e	19	19	0.02	0.02	12.2	0			
267	24	12	-	-	-	-	-	e	56	03	-	-	-	-	2.0	0				
268	26	e	4	55	57	-	-	e	56	28	e	56	28	0.01	0.01	3.5	0			
269	26	e	20	39	56	e	39	55	i	40	25	e	40	29	0.12	0.11	8.4	0		
270	27	e	3	30	29	-	-	i	30	41	-	-	-	-	1.3	0				
271	27	e	8	47	11	-	-	i	47	29	-	-	0.01	0.02	2.4	0				
272	28	e	1	23	02	-	-	e	23	42	e	23	42	0.01	0.01	4.4	0			
273	28	18	-	-	-	-	-	i	28	44	-	-	-	-	0.8	0				
274	29	e	0	59	55	-	-	i	60	08	-	-	0.01	-	1.3	0				
275	29	i	8	33	07	i	33	06	i	39	22	i	39	22	0.27	0.19	22.7	0		

Neighbouring sea of
New Guinea

EARTHQUAKES, 1934.

No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
276	June 29	h e12	m 42	s 36	m	s	i 48	s 45	e 48	s 45	m	s	m	s	mm 0.01	mm 0.02	m 13.3	0		
277	29	e13	07	14	-	-	i07	32	-	-	-	-	-	-	0.01	-	2.6	0		
278	29	e22	35	57	-	-	e36	14	-	-	-	-	-	-	0.01	-	1.5	0		
279	30	e17	10	14	-	-	e11	18	e11	01	-	-	-	-	0.01	0.01	8.1	0		
280	July 1	e23	31	16	-	-	i31	54	-	-	-	-	-	-	0.01	0.02	4.2	0		
281	3	i13	12	56	-	-	i13	24	-	-	-	-	-	-	0.00	-	2.4	0		
282	3	20	-	-	-	-	e02	37	-	-	-	-	-	-	0.00	-	3.0	0		
283	4	e23	43	37	-	-	e43	49	-	-	-	-	-	-	-	-	1.0	0		
284	5	11	-	-	-	-	e28	59	-	-	-	-	-	-	0.01	-	2.6	0		
285	5	15	-	-	-	-	e18	12	-	-	-	-	-	-	0.01	-	2.6	0		
286	6	i18	39	49	e39	50	i40	18	e40	16	-	-	-	-	0.19	0.20	8.9	0	Mabuti Off the mouth of R.]	
287	6	e21	39	57	-	-	i40	25	e40	27	-	-	-	-	0.02	0.02	4.0	0	" "	
288	6	e23	52	28	-	-	e52	54	-	-	-	-	-	-	0.01	-	2.7	0		
289	7	e2	04	46	-	-	i05	03	-	-	-	-	-	-	-	-	1.5	0		
290	8	e14	08	23	e08	23	i08	56	e08	55	-	-	-	-	0.13	0.11	9.3	0	Neighbourhood of Cape Erimo	
291	9	e1	17	41	e17	41	i18	07	e18	07	-	-	-	-	0.02	0.03	4.6	0	Neighbourhood of Tairadate Str.	
292	10	e19	38	29	-	-	e38	54	-	-	-	-	-	-	0.01	-	2.3	0		
293	11	e5	43	05	-	-	e43	23	-	-	-	-	-	-	0.00	-	1.8	0		
294	11	e9	42	21	-	-	i42	30	-	-	-	-	-	-	0.02	-	1.4	0		
295	12	1	-	-	-	-	e11	35	-	-	-	-	-	-	0.00	-	2.2	0		
296	12	i9	52	24	i52	24	i52	59	i52	57	-	-	-	-	0.30	0.29	15.8	0	Off Kinkwasan	
297	12	e21	15	49	-	-	e16	18	e16	16	-	-	-	-	0.02	0.02	6.1	0		
298	13	1	-	-	-	-	e41	33	-	-	-	-	-	-	0.00	-	3.3	0		
299	15	3	-	-	-	-	e17	41	-	-	-	-	-	-	0.01	0.01	2.1	0		
300	16	2	-	-	-	-	e54	36	-	-	-	-	-	-	0.01	-	1.8	0		
301	16	7	-	-	-	-	e03	56	-	-	-	-	-	-	-	-	1.2	0		
302	16	e16	15	18	-	-	e15	58	e15	59	-	-	-	-	0.01	0.01	4.2	0		
303	16	e18	45	59	-	-	e46	44	-	-	-	-	-	-	0.01	0.01	4.4	0		
304	18	e0	37	06	-	-	i37	16	e37	16	-	-	-	-	0.02	-	2.4	0	Off Kamaisi	
305	18	0	-	-	-	-	e57	19	e57	20	-	-	-	-	0.01	-	2.0	0		
306	18	1	?55	58	-	-	-	-	?63	53	-	-	-	-	-	-	89.9	0		
307	18	e13	42	03	-	-	e42	17	-	-	-	-	-	-	0.00	-	0.8	0		
308	18	e19	49	56	e49	58	e57	44	e57	45	63	35	63	28	⊕	7.48	143.5	0	Distant	
309	18	21	-	-	-	-	e39	26	-	-	-	-	-	-	0.00	-	2.4	0		
310	19	0	-	-	-	-	-	-	-	-	-	-	-	-	0.01	-	4.8	0		
311	19	e1	35	13	e35	11	?41	13	?41	09	47	17	46	51	-	-	51.4	0		
312	19	e7	46	44	e46	47	e54	39	e54	38	-	-	62	07	-	0.09	59.9	0		
313	19	i20	16	47	-	-	i16	58	-	-	-	-	-	-	0.01	-	2.0	0		
314	19	e23	25	04	-	-	e25	12	-	-	-	-	-	-	0.01	-	0.8	0		
315	20	2	-	-	-	-	e24	08	-	-	-	-	-	-	0.00	-	1.0	0		
316	20	2	-	-	-	-	e56	19	-	-	-	-	-	-	0.00	-	2.0	0		
317	20	8	-	-	-	-	e08	39	-	-	-	-	-	-	0.00	-	1.5	0		
318	20	8	-	-	-	-	i11	07	-	-	-	-	-	-	-	-	0.4	0		
319	20	e13	40	03	-	-	e40	37	e40	38	-	-	-	-	0.03	0.03	5.4	0	Neighbourhood of Sawara (Tiba)	
320	20	19	-	-	-	-	-	-	?09	48	-	-	-	-	-	0.05	35.5	0		
321	21	e6	27	52	e27	53	e35	43	e35	40	41	13	41	00	1.83	0.85	141.6	0	Distant	
322	21	e7	32	21	?31	58	e39	12	?38	28	?45	02	43	35	-	-	12.7	0		
323	21	10	-	-	-	-	e30	17	-	-	-	-	-	-	0.00	-	0.9	0		
324	21	22	-	-	-	-	e50	28	-	-	-	-	-	-	-	-	1.1	0		
325	22	3	-	-	-	-	e07	31	-	-	-	-	-	-	-	-	2.6	0		
326	22	9	-	-	-	-	e45	22	-	-	-	-	-	-	0.00	-	1.4	0		
327	22	e9	51	10	-	-	i51	20	-	-	-	-	-	-	0.02	-	2.5	0		
328	22	e20	06	01	?05	00	e14	36	?14	38	-	-	-	-	0.01	-	22.3	0		
329	23	e9	37	26	-	-	i37	43	-	-	-	-	-	-	0.01	-	1.2	0		
330	23	e16	27	59	-	-	i28	14	-	-	-	-	-	-	0.01	-	1.8	0		

EARTHQUAKES, 1934.

No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
331	July 24	h	m	s	m	s	m	s	m	s	m	s	m	s	mm	mm	m	0		
332	24	e 10	14	16	-	-	e 14	55	-	-	-	-	-	-	0.01	-	3.4	0		
333	25	e 17	19	55	-	-	e 20	37	-	-	-	-	-	-	0.01	-	4.6	0		
334	26	e 2	32	09	-	-	i 32	54	e 32	54	e 07	19	-	-	0.01	-	3.0	0	Off Cape Otiisi	
335	26	e 11	06	54	e 06	54	i 07	19	i 07	19	-	-	-	-	0.05	0.04	4.9	0	Off Cape Sioya	
336	26	e 15	28	15	-	-	e 28	41	-	-	-	-	-	-	0.01	-	2.8	0		
337	27	e 4	44	02	-	-	e 41	48	-	-	-	-	-	-	0.00	-	1.1	0		
338	27	e 8	09	44	-	-	i 44	18	e 44	19	-	-	-	-	0.01	0.01	2.9	0		
339	27	e 18	-	-	-	-	e 10	10	-	-	-	-	-	-	0.00	-	2.0	0		
340	28	? 5	24	55	? 25	02	? 28	12	? 28	31	-	-	-	-	-	-	11.2	0		
341	28	e 6	09	40	-	-	e 10	12	-	-	-	-	-	-	-	-	2.3	0		
342	28	i 12	13	17	i 13	17	i 13	35	i 13	33	-	-	-	-	0.17	0.26	8.6	1	Off the mouth of R.	
343	28	? 21	45	07	? 45	03	-	-	? 51	35	-	-	-	-	0.01	0.07	37.0	0	Abukuma	
344	29	e 14	49	27	-	-	e 49	50	e 50	00	-	-	-	-	-	-	0.8	0		
345	29	e 14	49	27	-	-	e 49	50	e 50	00	-	-	-	-	0.01	0.01	5.4	0		
346	29	e 19	27	31	-	-	e 27	57	-	-	-	-	-	-	0.01	-	3.4	0		
347	31	e 2	-	-	-	-	e 55	33	-	-	-	-	-	-	-	-	1.7	0		
348	31	e 6	-	-	-	-	e 04	50	-	-	-	-	-	-	-	-	2.9	0		
349	31	e 19	-	-	-	-	e 52	20	-	-	-	-	-	-	0.00	-	1.8	0		
350	Aug. 1	e 7	-	-	-	-	e 30	46	-	-	-	-	-	-	0.00	-	1.8	0		
351	1	e 14	32	17	-	-	e 32	27	-	-	-	-	-	-	0.00	-	2.0	0		
352	3	i 9	36	31	i 36	31	i 36	49	i 36	49	-	-	-	-	1.14	0.94	10.0	2	E off Kuzi	
353	3	e 10	-	-	-	-	e 07	52	-	-	-	-	-	-	-	-	1.5	0		
354	3	i 12	25	10	e 25	10	i 25	46	i 25	47	-	-	-	-	0.10	0.11	8.9	0	Neighbourhood of	
355	3	e 18	14	04	-	-	e 14	18	-	-	-	-	-	-	-	-	1.7	0	Tateno (Ibaragi)	
356	4	e 10	-	-	-	-	? 29	34	-	-	-	-	-	-	-	-	0.8	0		
357	5	e 3	58	10	i 58	10	58	28	i 58	28	-	-	-	-	0.17	0.15	4.9	1	Off Kuzi	
358	5	e 9	-	-	-	-	e 26	57	-	-	-	-	-	-	-	-	1.1	0		
359	7	e 1	08	43	-	-	i 09	09	e 09	09	-	-	-	-	0.01	-	3.6	0		
360	7	e 3	50	00	e 49	48	? 56	34	? 56	39	-	-	? 63	56	-	0.05	52.7	0		
361	7	e 20	48	10	-	-	e 48	30	-	-	-	-	-	-	0.01	-	2.8	0		
362	10	e 12	-	-	-	-	e 03	16	-	-	-	-	-	-	0.00	-	1.7	0		
363	11	e 8	23	21	e 23	44	? 27	28	? 27	28	? 31	24	? 30	28	0.01	0.06	24.8	0		
364	12	e 9	-	-	-	-	e 32	40	-	-	-	-	-	-	-	-	1.3	0		
365	12	e 23	56	03	e 55	59	e 61	23	e 61	22	-	-	-	-	-	0.05	23.4	0		
366	13	e 0	20	28	e 20	32	e 24	27	e 24	24	-	-	-	-	0.01	0.02	33.3	0		
367	13	e 1	-	-	-	-	e 34	22	-	-	-	-	-	-	-	-	0.5	0		
368	13	e 5	02	55	-	-	i 03	12	-	-	-	-	-	-	0.01	-	1.1	0		
369	13	e 9	03	13	-	-	e 03	35	-	-	-	-	-	-	0.00	-	1.9	0		
370	15	e 12	19	09	-	-	e 19	37	-	-	-	-	-	-	0.01	-	2.7	0		
371	15	e 21	-	-	-	-	e 19	06	-	-	-	-	-	-	-	-	0.9	0		
372	16	e 22	-	-	-	-	e 42	55	-	-	-	-	-	-	-	-	0.8	0		
373	16	e 23	-	-	-	-	e 44	46	-	-	-	-	-	-	-	-	0.8	0		
374	17	i 19	26	41	-	-	i 26	52	i 26	52	-	-	-	-	0.03	-	2.1	0	Off Kamaisi	
375	18	i 2	39	58	39	58	i 40	53	? 40	58	-	-	-	-	0.22	0.11	12.4	0	Neighbourhood of Hatiman (Gihu)	
376	18	e 10	22	20	-	-	i 23	24	e 23	24	-	-	-	-	0.02	0.02	5.0	0	S off Cape Nagaturo	
377	18	e 14	07	21	-	-	e 07	39	-	-	-	-	-	-	-	-	1.3	0		
378	18	e 19	25	52	-	-	i 26	04	e 26	06	-	-	-	-	0.01	-	1.8	0		
379	19	e 3	52	05	e 52	04	i 53	05	e 53	05	-	-	-	-	0.04	0.03	5.8	0	Neighbourhood of	
380	19	e 11	49	50	-	-	e 50	12	e 50	13	-	-	-	-	0.01	-	3.0	0	Cape Keramui	
381	19	e 15	49	18	-	-	i 49	28	-	-	-	-	-	-	0.02	-	1.2	0		
382	20	e 1	-	-	-	-	e 00	20	-	-	-	-	-	-	0.01	-	1.8	0		
383	20	e 13	13	37	-	-	i 14	20	-	-	-	-	-	-	0.02	-	3.8	0		
384	21	e 2	-	-	-	-	i 56	49	-	-	-	-	-	-	0.01	-	2.0	0		
385	21	e 7	31	57	-	-	i 32	14	-	-	-	-	-	-	0.08	-	4.0	0		

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
386	Aug. 21	h	m	s	m	s	m	s	m	s	m	s	m	s	mm	mm	m	0	E off Cape Sioya	
387	23	e 19	35	19	-	-	e 36	04	-	-	-	-	-	-	-	0.01	-	3.6		0
388	23	e 7	43	33	-	-	i 44	11	e 44	09	-	-	-	-	-	0.01	-	4.0		0
389	23	e 15	57	59	-	-	e 58	20	-	-	-	-	-	-	-	0.01	-	2.4		0
390	23	e 22	35	02	e 35	01	i 35	33	e 35	37	-	-	-	-	-	0.28	0.20	16.1		0
		23			-	-	e 58	42	-	-	-	-	-	-	-	0.00	-	2.5	0	
391	24	5			-	-	e 59	46	-	-	-	-	-	-	-	0.01	-	2.0	0	
392	24	e 14	53	30	e 53	30	i 53	58	e 53	58	-	-	-	-	-	0.03	0.04	4.6	0	
393	24	23			-	-	e 24	15	-	-	-	-	-	-	-	0.00	-	2.3	0	
394	25	15			-	-	i 25	42	-	-	-	-	-	-	-	0.01	-	1.8	0	
395	26	i 9	19	49	e 19	50	i 20	17	e 20	23	-	-	-	-	-	0.28	0.19	10.2	0	
396	26	e 21	32	50	-	-	i 33	04	-	-	-	-	-	-	-	0.01	-	1.4	0	
397	27	23			-	-	e 06	29	-	-	-	-	-	-	-	-	-	1.0	0	
398	28	e 13	34	26	e 34	20	i 38	06	e 38	07	-	-	-	-	-	0.01	-	9.0	0	
399	28	e 17	47	48	-	-	i 48	47	-	-	-	-	-	-	-	0.01	-	3.4	0	
400	30	e 0	37	05	-	-	e 37	37	e 37	39	-	-	-	-	-	0.01	0.03	6.7	0	
401	30	e 16	30	21	e 30	26	e 34	02	e 34	00	-	-	-	-	-	0.01	-	9.7	0	
402	31	e 5	13	41	? 13	36	-	-	? 21	46	-	-	-	-	-	0.01	-	49.2	0	
403	Sept. 1	e 2	21	30	-	-	e 21	51	-	-	-	-	-	-	-	0.00	-	2.1	0	
404	1	e 6	57	06	-	-	i 57	27	-	-	-	-	-	-	-	0.02	-	8.2	0	
405	1	e 11	18	23	-	-	i 18	56	-	-	-	-	-	-	-	0.07	-	6.8	0	
406	2	e 11	30	28	-	-	i 30	59	-	-	-	-	-	-	-	0.01	-	3.5	0	
407	3	e 18	43	10	-	-	e 44	14	e 44	16	-	-	-	-	-	0.01	-	4.8	0	
408	3	19			-	-	e 11	12	-	-	-	-	-	-	-	-	-	1.9	0	
409	4	18			-	-	e 21	07	-	-	-	-	-	-	-	-	-	0.9	0	
410	5	0			-	-	e 25	54	-	-	-	-	-	-	-	-	-	1.0	0	
411	5	e 4	59	14	-	-	i 60	16	e 60	13	-	-	-	-	-	0.02	0.02	6.2	0	
412	5	15			-	-	e 47	23	-	-	-	-	-	-	-	-	-	1.1	0	
413	6	e 6	36	30	-	-	e 36	48	-	-	-	-	-	-	-	0.01	-	2.1	0	
414	6	9			-	-	e 57	12	-	-	-	-	-	-	-	0.01	-	3.2	0	
415	6	17			-	-	e 48	22	-	-	-	-	-	-	-	-	-	2.3	0	
416	9	16			-	-	e 49	03	-	-	-	-	-	-	-	-	-	1.1	0	
417	10	e 14	40	38	-	-	e 40	55	-	-	-	-	-	-	-	0.01	-	1.6	0	
418	10	e 17	36	58	-	-	e 37	32	-	-	-	-	-	-	-	0.01	-	3.3	0	
419	11	e 23	34	48	-	-	i 36	03	e 36	01	-	-	-	-	-	0.02	-	5.4	0	
420	12	e 9	13	51	-	-	e 14	16	-	-	-	-	-	-	-	0.00	-	1.7	0	
421	12	e 9	19	01	-	-	e 19	26	-	-	-	-	-	-	-	0.01	-	2.5	0	
422	12	e 13	24	21	-	-	e 24	45	-	-	-	-	-	-	-	0.01	-	3.0	0	
423	12	14			-	-	-	-	? 29	54	-	-	? 34	26	-	-	-	16.5	0	
424	15	e 11	08	25	-	-	i 08	42	i 08	43	-	-	-	-	-	0.02	0.03	3.8	0	
425	15	12			-	-	-	-	-	-	-	-	-	-	-	-	-	2.3	0	
426	15	14			-	-	e 34	14	-	-	-	-	-	-	-	-	-	1.2	0	
427	15	e 18	58	31	-	-	e 58	59	-	-	-	-	-	-	-	-	-	1.7	0	
428	15	e 21	24	57	-	-	e 25	19	-	-	-	-	-	-	-	0.00	-	2.4	0	
429	16	e 0	16	19	-	-	i 16	49	e 16	44	-	-	-	-	-	0.01	-	5.1	0	
430	16	5			-	-	e 03	58	-	-	-	-	-	-	-	-	-	1.1	0	
431	17	e 0	31	16	-	-	i 31	56	e 31	59	-	-	-	-	-	0.03	-	6.1	0	
432	17	e 9	46	38	-	-	i 46	48	-	-	-	-	-	-	-	0.01	-	1.5	0	
433	18	e 19	47	07	-	-	i 47	35	e 47	37	-	-	-	-	-	0.01	-	3.1	0	
434	18	e 19	53	20	-	-	i 53	36	e 53	36	-	-	-	-	-	0.02	-	2.7	0	
435	18	21			-	-	e 47	46	-	-	-	-	-	-	-	0.00	-	2.6	0	
436	19	e 15	18	09	e 18	08	i 18	39	e 18	38	-	-	-	-	-	0.03	0.04	4.2	0	
437	19	17			-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0	
438	19	19			-	-	e 22	59	-	-	-	-	-	-	-	0.01	-	2.0	0	
439	20	e 4	23	46	-	-	i 23	51	-	-	-	-	-	-	-	0.02	-	0.5	0	
440	20	e 22	06	36	-	-	e 07	08	-	-	-	-	-	-	-	0.01	-	2.5	0	

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion			Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N			
496	Nov. 4	h	m	s	m	s	m	s	m	s	m	s	m	s	mm	mm	m	0	SE off Cape Siriya
497	4	i 6 19 27	e 19 27	i 19 52	i 19 51	-	-	-	-	-	-	-	-	0.11	0.06	7.0	0		
498	4	e 10 38 43	-	i 39 15	-	-	-	-	-	-	-	-	-	0.01	-	2.8	0		
499	4	12	-	e 52 39	-	-	-	-	-	-	-	-	-	-	-	0.9	0		
500	5	i 19 59 52	-	i 60 04	e 60 02	-	-	-	-	-	-	-	-	0.02	-	3.1	1	Off Yoshihama Bay	
		i 1 51 13	-	i 51 25	-	-	-	-	-	-	-	-	-	-	-	1.9	0		
501	5	e 3 39 16	-	e 39 43	-	-	-	-	-	-	-	-	-	0.00	-	2.4	0		
502	5	4	-	e 41 08	-	-	-	-	-	-	-	-	-	-	-	1.5	0		
503	6	i 4 38 51	-	i 39 20	-	-	-	-	-	-	-	-	-	0.01	-	2.6	0		
504	6	i 8 11 10	e 11 09	i 11 28	e 11 25	-	-	-	-	-	-	-	-	0.05	0.05	5.3	0		
505	6	e 19 40 21	-	e 40 35	-	-	-	-	-	-	-	-	-	0.01	-	2.9	0		
506	6	i 20 07 34	e 07 33	i 07 49	i 07 50	-	-	-	-	-	-	-	-	0.03	0.03	3.2	0	Abukuma Off the mouth of R.]	
507	7	e 11 30 42	e 30 42	i 31 08	i 31 06	-	-	-	-	-	-	-	-	0.17	0.15	7.8	0	ENE off Cape Sioya	
508	8	0	-	e 31 27	-	-	-	-	-	-	-	-	-	0.01	-	1.6	0		
509	8	1	-	e 07 00	-	-	-	-	-	-	-	-	-	0.01	-	2.2	0		
510	8	e 3 26 41	e 26 39	i 27 25	e 27 25	-	-	-	-	-	-	-	-	0.26	0.29	9.1	0	Off Nadati (Niigata)	
511	8	4	-	e 45 12	e 45 16	-	-	-	-	-	-	-	-	0.01	0.02	2.5	0		
512	10	11	-	e 25 43	-	-	-	-	-	-	-	-	-	0.01	-	2.9	0		
513	10	e 16 29 30	-	i 30 00	e 29 58	-	-	-	-	-	-	-	-	0.02	-	3.9	0		
514	12	i 3 42 24	-	i 42 35	e 42 33	-	-	-	-	-	-	-	-	0.01	-	2.8	0		
515	13	e 16 22 26	-	e 22 53	-	-	-	-	-	-	-	-	-	0.01	-	2.2	0		
516	15	e 2 14 29	e 14 28	i 15 33	i 15 33	-	-	-	-	-	-	-	-	0.03	0.04	5.1	0	SE off Cape Erimo	
517	15	e 10 44 52	-	i 45 17	e 45 16	-	-	-	-	-	-	-	-	0.02	-	3.1	0	E off Kinkwasan	
518	16	13	-	e 51 54	-	-	-	-	-	-	-	-	-	0.01	-	4.3	0		
519	17	e 11 54 18	-	e 54 39	-	-	-	-	-	-	-	-	-	0.01	-	2.4	0		
520	17	e 13 46 24	-	e 46 54	-	-	-	-	-	-	-	-	-	0.01	-	3.0	0		
521	18	e 2 39 47	-	e 40 29	e 40 30	-	-	-	-	-	-	-	-	0.02	0.01	5.4	0		
522	18	e 3 30 27	-	e 31 20	e 31 16	-	-	-	-	-	-	-	-	0.02	0.02	6.3	0		
523	18	e 3 38 05	-	e 39 26	-	-	-	-	-	-	-	-	-	0.00	-	4.7	0		
524	18	e 9 23 08	e 23 07	e 26 49	e 26 49	-	-	-	-	-	-	-	-	0.01	0.01	11.0	0		
525	18	i 22 48 29	? 48 20	-	-	? 54 50	-	-	? 58 35	-	-	-	-	-	0.04	17.6	0		
526	19	e 10 50 38	-	e 51 02	-	-	-	-	-	-	-	-	-	0.01	-	2.7	0		
527	20	e 0 08 56	-	e 09 19	-	-	-	-	-	-	-	-	-	0.01	-	2.5	0		
528	22	21	-	e 30 45	-	-	-	-	-	-	-	-	-	-	-	1.1	0		
529	23	i 12 36 12	-	i 36 39	e 36 39	-	-	-	-	-	-	-	-	0.02	0.04	4.5	0	ENE off Kinkwasan	
530	24	i 5 07 29	-	e 07 41	-	-	-	-	-	-	-	-	-	0.00	-	1.2	0		
531	24	e 12 32 06	-	e 32 19	-	-	-	-	-	-	-	-	-	-	-	1.0	0		
532	26	e 3 27 28	-	e 27 47	-	-	-	-	-	-	-	-	-	0.01	-	2.5	0		
533	26	e 3 39 29	-	e 40 04	-	-	-	-	-	-	-	-	-	0.00	-	2.8	0		
534	26	e 12 15 30	-	e 16 30	-	-	-	-	-	-	-	-	-	0.01	0.02	4.3	0		
535	27	e 1 28 57	-	i 29 15	-	-	-	-	-	-	-	-	-	0.01	-	2.7	0		
536	27	e 5 50 52	⊕	i 51 34	⊕	-	-	-	-	-	-	-	-	0.08	⊕	8.3	0	Kuzyukuri Coast	
537	27	e 6 21 40	⊕	i 27 33	⊕	-	-	-	-	-	-	-	-	-	-	16.0	0		
538	27	e 15 37 19	-	e 38 15	-	-	-	-	-	-	-	-	-	0.01	-	4.8	0		
539	27	e 15 57 29	-	i 58 05	e 58 05	-	-	-	-	-	-	-	-	0.04	-	5.6	0	Neighbourhood of Simotuma (Ibaragi)	
540	28	e 3 03 57	-	i 04 17	-	-	-	-	-	-	-	-	-	-	-	2.2	0		
541	28	e 8 46 28	-	i 47 10	-	-	-	-	-	-	-	-	-	0.02	-	5.1	0		
542	28	i 12 02 33	-	i 08 00	-	-	-	-	-	-	-	-	-	0.06	-	4.9	0	Tugaru Str.	
543	28	e 18 33 29	-	e 34 11	e 34 17	-	-	-	-	-	-	-	-	0.01	-	6.8	0		
544	29	e 12 56 25	-	i 57 28	e 57 28	-	-	-	-	-	-	-	-	0.02	0.02	7.5	0		
545	Dec. 1	e 11 37 17	-	i 37 41	-	-	-	-	-	-	-	-	-	0.01	-	2.9	0		
546	1	e 13 32 04	-	i 32 32	e 32 32	-	-	-	-	-	-	-	-	0.03	0.03	5.1	0	N part of Kasima Nada	
547	2	e 18 36 45	-	i 37 27	-	-	-	-	-	-	-	-	-	0.01	-	4.0	0		
548	2	18	-	e 58 28	-	-	-	-	-	-	-	-	-	-	-	1.4	0		
549	4	e 17 44 03	-	e 44 45	-	-	-	-	-	-	-	-	-	0.01	-	3.9	0		
550	7	e 1 49 25	-	i 49 34	-	-	-	-	-	-	-	-	-	0.01	-	1.6	0		

EARTHQUAKES, 1934.



No.	Date 1934	P				S				L				Maximum Range of Motion				Duration of Total Earthquake	Intensity	Approximate Epicenter
		E	W	N	S	E	W	N	S	E	W	N	S	E	W	N	S			
551	Dec. 7	h	m	s	m	s	m	s	m	s	m	s	m	s	mm	mm	m	0	Lower valley of R. Hei (Iwate) Mabuchi E off the mouth of R. R. Ootuti (Iwate)	
552	8	15			-	-	e 25	37	-	-	-	-	-	-	-	-	1.8	0		
553	9	16			-	-	e 29	37	-	-	-	-	-	-	-	-	1.1	0		
554	9	9			-	-	e 02	04	-	-	-	-	-	-	-	-	1.0	0		
555	9	16			-	-	e 57	09	-	-	-	-	-	0.00	-	-	2.3	0		
555	9	e 23	26	03	-	-	i 26	14	e 26	15	-	-	-	0.04	0.03	2.5	0			
556	9	e 23	38	36	-	-	e 38	55	e 38	57	-	-	-	0.02	-	3.1	0			
557	10	i 0	22	20	e 22	20	i 22	30	i 22	30	-	-	-	0.61	0.61	7.3	2			
558	10	e 2	09	16	⊕		e 09	41	⊕		-	-	-	0.01	-	2.2	0			
559	10	e 10	03	28	-	-	e 04	14	-	-	-	-	-	0.01	-	4.8	0			
560	10	e 19	10	42	-	-	e 11	09	-	-	-	-	-	-	-	2.7	0			
561	11	e 3	50	19	-	-	e 50	48	e 50	45	-	-	-	0.03	0.02	4.1	0	N part of Kasima Nada		
562	12	e 3	09	16	-	-	e 09	36	-	-	-	-	-	0.00	-	2.5	0			
563	14	e 9	09	55	-	-	e 10	30	-	-	-	-	-	-	-	2.4	0			
564	14	e 9	55	16	-	-	i 55	45	e 55	42	-	-	-	0.02	0.02	3.1	0	Off Miyako		
565	15	e 2	05	29	e 05	15	e 12	07	e 12	00	-	-	17	52	-	1.68	53.3	0		
566	15	e 19	25	03	-	-	e 25	31	-	-	-	-	-	0.01	-	4.0	0			
567	15	19			-	-	e 33	47	e 33	46	-	-	-	0.01	-	3.1	0			
568	16	e 8	23	14	-	-	e 23	48	-	-	-	-	-	0.00	-	4.3	0			
569	17	e 16	00	46	e 00	40	? 05	33	? 05	38	10	07	10	34	-	0.08	33.2	0		
570	19	9	⊕		-	-	⊕		e 02	29	-	-	-	⊕	0.02	3.1	0			
571	25	e 3	45	26	-	-	e 46	07	-	-	-	-	-	0.01	-	3.7	0			
572	25	e 6	32	11	e 32	06	e 36	03	? 36	21	-	-	? 39	09	-	-	22.6	0		
573	25	7			-	-	-	-	-	-	-	-	-	0.01	-	2.3	0			
574	26	e 21	38	36	-	-	e 39	08	-	-	-	-	-	0.01	-	3.1	0			
575	28	7			-	-	-	-	-	-	-	-	-	0.00	-	2.8	0			
576	31	i 21	14	39	e 14	40	i 14	59	i 15	02	-	-	-	0.13	0.09	6.2	0	ENE off Miyako		

CHIEF EARTHQUAKES OBSERVED WITH NASU'S SEISMOGRAPH, 1934.



Instrument; Nasu's seismograph with three components.

Remarks:

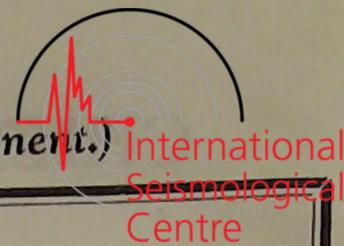
Instrumental constants

Component	V	T ₀	γ/T_0^2	Mass
E-W	25	6.1 s	0.007	7.2 kgr.
N-S	25	6.0	0.013	7.2
Vertical	25	5.3	0.048	4.4

1. Direction of the earth's displacement; positive towards north, east, and upward respectively.
2. \oplus out of the range of the instrument.
3. \times too feeble to measure.
4. \times out of order of the instrument.

No.	Date	P			S			Maximum Amplitude			First Motion			Approximate epicenter
		mean of 3 comp.			mean of 3 comp.			E-W	N-S	Vertical	E-W	N-S	Vertical	
1 44	Jan. 3 29	h	m	s	m	s	μ	μ	μ	μ	μ	μ		SW off Kamtchatka ESE off Kinkwasan
		9	46	04	49	07	- 420	+ 71	- 28	\times	\times	\times		
		12	35	32	36	08	+ 70	- 186	\times	\times	\times			
67 86	Feb. 10 24	22	02	26	02	52	- 340	- 448	- 184	- 12	+ 18	+ 28	NE off Cape Sioya SSE off Titizima (deep)	
		6	27	33	30	47	- 622	- 496	+ 70	\times	\times	\times		
123 124 127	Mar. 20 21 21	13	27	58	28	16	- 70	- 64	- 32	\times	\times	\times	E off the mouth of R. Mabuchi Off Miyako E off Miyako	
		0	54	40	25	17	+ 346	- 770	+ 200	- 20	- 2	+ 18		
		5	39	01	39	26	+ 260	+ 530	+ 130	- 18	- 7	+ 10		
150 156 158 163	Apr. 6 14 15 19	19	10	07	10	26	\oplus	\oplus	\oplus	- 22	+ 166	+ 78	NE off Cape Sioya Neighbourhood of Yamada Bay SSE off Cape Nozima S off Hatizyo I. (deep)	
		5	22	43	22	57	+ 50	- 50	+ 36	\times	\times	\times		
		10	34	29	35	21	- 274	+ 358	- 70	\times	\times	\times		
		16	15	42	17	23	+ 320	- 410	- 150	- 8	+ 76	+ 64		
183 208 216	May 2 20 30	18	54	40	54	49	- 68	+ 50	- 40	+ 27	- 14	- 48	Sizugawa Bay ESE off Miyako Neighbourhood of Mito	
		7	02	36	03	05	+ 94	- 368	+ 70	- 22	+ 3	+ 33		
		23	04	40	05	10	- 450	- 274	- 98	+ 2	+ 5	+ 5		
251 261 275	June 13 19 29	1	52	35	53	48	+ 548	- 410	+ 298	\times	\times	\times	Neighbourhood of Sikotan I. S off Hatizyo I. Neighbouring sea of New Guinea	
		15	49	17	50	58	- 128	+ 140	- 40	\times	\times	\times		
		8	33	05	39	22	- 220	- 290	- 28	+ 4	- 13	- 40		
296 342	July 12 28	9	52	24	52	57	+ 310	- 286	+ 100	- 80	+ 22	+ 70	Off Kinkwasan Off the mouth of R. Abukuma	
		12	13	18	13	35	100	80	200	\times	\times	\times		
352 357 375 389 395	Aug. 3 5 18 23 26	9	36	31	36	48	+ 660	+ 730	+ 252	+ 18	+ 18	- 36	E off Kuzi Off Kuzi Neighbourhood of Hatiman (Gifu) E off Cape Sioya E off Miyako	
		3	58	10	58	28	+ 82	- 122	- 40	- 5	- 16	+ 16		
		2	39	57	40	58	\times	- 188	+ 50	\times	\times	\times		
		22	35	01	35	38	+ 166	+ 208	+ 40	\times	\times	\times		
		9	19	49	20	15	+ 140	+ 224	+ 68	- 14	0	+ 12		
444	Sept. 23	21	41	22	41	39	+ 586	+ 492	\times	- 40	- 52	\times	ENE off Miyako	
458 469 477 483	Oct. 5 17 23 29	20	26	44	27	21	+1212	+1216	- 200	\times	\times	\times	S off Cape Erimo NE off Miyako ESE off Cape Siriya W part of Tugaru Str.	
		15	28	48	29	07	+ 140	- 172	- 120	+ 4	+ 4	- 10		
		22	24	15	24	40	+ 140	- 220	+ 120	\times	\times	\times		
		17	23	37	24	06	- 200	- 370	- 88	+ 4	- 14	+ 10		
496 499 510	Nov. 4 4 8	6	19	26	19	52	- 64	- 88	+ 60	\times	\times	\times	SE off Cape Siriya Off Yoshihama Bay Off Nadati (Niigata)	
		19	59	52	60	04	6	- 8	- 20	\times	\times	\times		
		3	26	36	27	26	+ 210	+ 270	+ 188	\times	\times	\times		
557	Dec. 10	0	22	20	22	30	+ 216	+ 268	- 138	- 20	- 9	+ 20	R. Ootuti (Iwate)	

PULSATORY OSCILLATIONS, 1934 (EW Component.)



No.	Beginning			Ending			Maximum				Double Amplitude
	Date			Date			Date				
	Month	Day	Hour	Month	Day	Hour	Day	Hour	Day	Hour	
1	January	3	12	January	6	20	3	15	3	18	7
2		8	9		9	17	8	15	8	17	4
3		10	20		15	20	13	22	13	24	5
4		16	14		18	21	17	5	17	7	6
5		19	12		25	23	20	7	20	11	18
6		28	21		31	12	29	22	29	24	3
7	February	2	20	February	7	23	3	6	3	9	5
8		14	0		17	5	14	17	14	20	5
9		18	17		21	14	19	12	19	15	10
10		22	11		26	10	23	4	23	6	4
11	March	1	2	March	2	22	1	18	1	20	4
12		8	1		11	24	8	23	9	2	5
13		12	9		16	18	14	1	14	3	13
14		18	15		20	13	19	6	19	9	10
15		21	2		23	15	21	15	21	17	20
16		24	0		25	18	24	10	24	13	10
17		26	20		28	2	27	11	27	13	5
18	April	1	0	April	2	12	1	15	1	17	5
19		3	16		6	13	5	0	5	2	6
20		9	0		10	14	9	21	9	23	5
21		11	19		13	15	12	17	12	19	4
22		16	2		18	5	16	12	16	15	4
23		24	1		26	15	24	23	25	1	6
24		29	22	May	1	11	1	7	1	9	7
25	May	8	22		10	8	9	0	9	2	3
26		13	3		15	20	13	16	13	18	6
27	June	20	4	June	22	16	21	8	21	10	6
28	July	9	18	July	12	17	11	23	12	1	5
29	August	29	11	August	31	15	29	22	30	1	5
30	September	5	15	September	7	8	6	9	6	11	7
31		8	19		11	4	9	12	9	14	5
32		13	22		15	5	14	13	14	15	4
33		20	20		23	12	21	20	21	22	65
34	October	7	4	October	10	13	8	8	8	10	6
35		11	19		13	9	12	6	12	9	5
36		15	0		16	8	15	7	15	9	6
37		24	1		25	23	25	1	25	3	11
38	November	1	3	November	3	20	2	5	2	7	8
39		6	23		8	12	7	13	7	15	12
40		18	21		20	14	19	4	19	6	11
41		27	3		29	22	27	17	27	19	16
42	December	1	5	December	2	15	2	1	2	3	3
43		10	0		12	1	11	5	11	9	4
44		13	23		15	9	14	13	14	17	3
45		23	1		24	19	23	13	23	15	8
46		31	14	January (1935)	3	4	31	22	31	24	11