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ANNUAL REPORT
OF THE
METEOROLOGICAL
AND THE
SEISMOLOGICAL OBSERVATIONS
MADE AT THE
INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA
FOR
THE YEAR 1953.

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

PUBLISHED BY THE INTERNATIONAL LATITUDE OBSERVATORY
OF MIZUSAWA.

—
1955

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JUL 9 1955

ERRATA

Page	Date	Column	Error	Correction
2	12	M.S.L. Pressure	992.2	992.2
2	30	Day	20	30
3	23	Evaporation in the Shelter	1.0	1.2
7	16	Remarks A.M.	*	*
11	26	" P.M.	△, ○, ▲	△, ○, ▲, T
13	2, 10 ^h	Forms of Cloud	Su	cu
15	16 2 ^h	"	ac	as
"	19	Remarks A.M.	○, ▲	○, ▲, T
"	29	" P.M.	▲, ○	▲, ○, T
17	11	" P.M.	▲	▲, T
"	12	" P.M.	▲, ○	▲, ○, T
"	14	" A.M.	○, ▲	○, ▲, T
23	18, 18 ^h	Forms of Cloud	cs, as, cs	cs, as, sc
25	26, 2 ^h	"	— — — sc	— — — sc
"	9	Remarks A.M.	日, □, 0	日, □, 0, ∞
"	30	" P.M.	○, *, □, 日	○, *, □, 日, *
31	Annual	NUMBER OF DAYS with $\geq 30^\circ$	—	9
34	No. 14	Earthquaks S, NS	89 58	39 58
36	No. 153	" S, EW	37 43	e 37 43
38	No. 221	" S, NS	44 54	e 44 54

1956
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Introduction

This annual report gives the results of the meteorological and seismological observations made at the International Latitude Station of Mizusawa during 1953 which may serve to investigate the meteorological effect on the latitude observations. The majority of the meteorological instruments are situated in the observation field about 10 meters north of the zenith telescope room. In this field there are the motor-driven aspiration psychrometer, maximum and minimum thermometers, thermograph, hygrograph, pluviograph, Hellman's chionograph, rain gauges, evapometer, L-tube earth thermometers, Simon's earth thermometers, snow measuring plates and Robitzsch actinograph. The Fortin's mercurial barometer, three barographs, and anemograph are set in the seismograph room where is placed about 100 meters NNE of the zenith telescope room. The Robinson's anemometer, recording wind vane and Jordan's sunshine recorder are fixed on the roof of the observing tower above the seismograph room. Observations are made generally six times a day, that is, at 2^h, 6^h, 10^h, 14^h, 18^h and 22^h of J.S.T. (9^h east from Greenwich). This distribution of time of observation seems to be convenient for the purpose of discussing the meteorological effect on the latitude variation, since the latitude observations are made on the average between 22^h and 2^h. The followings are to be noted as regards the meteorological observations.

Air Pressure.—The barometric readings in the unit of millibars are corrected for the freezing point of water and standard gravity (980.616 dynes). The observed gravity at Mizusawa is 980.16 dynes. These corrected values are defined as the station pressure. Moreover those reduced to mean sea level (M.S.L. Pressure) are given in the next columns.

Air Temperature.—The dry-bulb thermometer of the motor-driven aspiration psychrometer is adopted as standard. The variability of daily mean air temperature is defined as follows.

$$V = \frac{\sum_{i=1}^n |t_i - t_{i-1}|}{n}$$

where | | denotes the absolute value, t_i the daily mean air temperature of i -th day and n the number of the days in a month.

Wind.—The wind velocity in this report means the ten minutes' mean velocity before the time of observation and then that multiplied by the constant C determined by the following formula. $\log C = 0.3411 - 0.2151 \log(V+10)$, where V represents the wind velocity. This formula was derived experimentaly from the wind-tunnel at the Central Meteorological Observatory of Japan.

Relative Humidity and Vapour Pressure.—The motor-driven aspiration psychrometer is used. Sprung's psychrometric formula is applied to derive the vapour pressure (in mb).

Cloud.—The cloud forms are observed separately according to the high (H), middle (M) and low (L) clouds. They are denoted according to the International Classification. (Ten genera of cloud forms)

Duration of Sunshine—It is recorded with Jordan's sunshine recorder and given in the unit of hour.

Total Solar and Sky Radiation on the Horizontal Surface.—It is measured by the Robitzsch actinograph and the instrumental constant K corresponding to 1 cm of displacement of the pen is 0.550 gr. cal/cm². min.

Amount of Evaporation.—It is observed with the evapometer with 20 cm diameter at 10^h once a day. The bracket represents the day with precipitation.

Earth Temperature.—The earth-surface thermometer, L-type thermometers of 0.05, 0.1, 0.2

and 0.3 meters depth and Simon's earth thermometers of 0.5, 1.0, 2.0, 3.0, 5.0 and 6.0 meters depth are employed.

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

Sunless Days.—It means the days not recorded on Jordan's sunshine recorder throughout whole day.

Horizontal Visibility.—Maximum visible distances are divided into the International Classification (0–9). The frequencies of each class in a month observed six times every day are given as for the four cardinal points.

The heights of the meteorological instruments are as follows:

Barometer.—63.7 m above mean sea level.

Air Temperature Thermometer.—1.3 m above the ground.

Anemometer.—16.5 m above the ground.

Anemoscope.—16.6 m above the ground.

Rain Gauge.—0.6 m above the ground.

On recording the meteorological phenomena, the following weather symbols are used:

●	Rain	□	Hoar frost	☽	Zodiacal light
*	Snow	□	Ice columns	☽	Red sky
⌚	Drizzle	□	Air hoar	○	Clear
▲	Grain of ice	▽	Soft rime	○	Fine (partly cloudy)
△	Granular snow	▽	Hard rime	○	High cloud overcast
↔	Ice needles	∞	Glaze	○	Middle cloud overcast
≡	Fog	▣	Snow coverage	○	Low cloud overcast
≡≡	Fog in the neighbourhood	▣	Thunder and lightning	○	Earthquake
Ⓜ	Ice fog	◀	Lightning	〽	Undulatus
=	Mist, damp haze	■	Thunder	〽	Mammatus
∞	Haze	○	Pure air	〽	Lenticularis
Ⓜ≡	Haze in the neighbourhood	○	Solar corona	Ci	Cirrus
▽	Showers	○	Lunar corona	Cs	Cirro-stratus
✖	Soft halo	≡	Iridescence	Cc	Cirro-cumulus
△	Small halo	⊕	Solar halo	Ac	Alto-cumulus
▲	Hail	⊕	Lunar halo	As	Alto-stratus
⌚	Dust storm	~	Rainbow	Sc	Strato-cumulus
↑	Blowing snow	▣	Yellow sand	Ns	Nimbo-stratus
→	Drifting snow	▣	Freezing	Cu	Cumulus
↑	Snow storm	▢	Dust devil	Cb	Cumulo-nimbus
◐	Dew	▢	Land-spout	St	Stratus
▼	Gale	▢	Aurora		

The seismological instruments in use are two Omori's horizontal seismographs.

Constants of two seismographs are given as follows:

	NS-Component	EW-Component
Proper Period	16 sec.	36 sec.
Dynamical magnification	100	20
Mass of Weight	45.0 kg	17.6 kg
Horizontal distance of the center of the cylinder from the pivot	20 cm	75 cm
Vertical distance between the points of support and suspension	104 cm	104 cm

The pulsatory oscillations are observed only with EW-Component seismograph. The observations and computations are worked out by Messers, S. Sato, I. Kumagai, K. Suzuki and Miss. M. Segawa under the superintendence of Mr. C. Sugawa.

Nov. 1954.

Dr. T. Ikeda.

Director of the International Latitude Observatory
of Mizusawa.



METEOROGICAL OBSERVATIONS

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.



JANUARY, 1953.

Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	10.1	4.8	999.8	1.5	10.3	13.0	6.6	18.3	13.1	7.8	9.5	18.4	21.1	14.7	-7.3	-12.0	-3.7	-0.1	-3.3	-5.1	-5.3
2	15.3	16.8	18.0	17.5	18.4	19.1	17.5	23.5	25.1	26.1	25.6	26.7	27.4	25.7	-6.3	-6.8	-4.3	-3.7	-5.0	-5.5	-5.3
3	19.4	18.4	19.3	17.7	18.7	20.4	19.0	27.5	26.7	27.5	25.9	27.1	28.7	27.2	-5.5	-6.5	-4.6	-1.7	-9.9	-8.5	-6.1
4	21.0	21.2	22.1	22.1	22.6	23.0	22.0	29.5	29.6	30.4	30.3	30.9	31.3	30.3	-12.8	-10.4	-7.1	-1.8	-4.3	-4.5	-6.8
5	22.3	21.7	19.9	16.8	18.7	9.0	17.2	30.6	30.0	28.0	24.3	21.9	17.0	25.3	-6.1	-6.2	-3.3	-1.6	-3.1	-3.1	-3.9
6	2.1	995.5	992.3	993.2	993.9	996.6	995.6	10.1	3.5	0.0	1.1	1.7	4.6	3.5	-2.5	-2.1	1.7	-0.3	-1.1	-0.4	-0.8
7	998.1	0.0	1.9	0.8	0.4	999.8	0.1	6.1	8.2	9.9	8.2	8.4	7.8	8.1	-1.3	-6.7	-0.8	-0.9	-6.1	-4.9	-3.5
8	998.4	0.0	2.3	2.6	7.1	9.2	3.3	6.4	8.2	10.3	10.6	15.1	17.2	11.3	-4.1	-6.1	-4.5	-0.5	-2.3	-1.9	-3.2
9	11.8	13.9	16.0	15.1	16.3	15.3	14.7	19.9	22.1	24.0	23.1	24.3	23.4	22.8	-3.3	-4.3	-1.5	2.4	-0.5	-0.7	-1.3
10	13.1	10.7	7.1	1.3	4.2	6.9	7.2	21.1	19.0	15.1	9.2	12.0	14.7	15.2	-1.2	-8.8	-4.1	3.6	2.1	4.2	-0.7
11	8.6	11.4	10.6	11.3	10.4	9.7	10.3	16.4	19.4	18.6	19.1	18.4	17.9	18.3	2.3	2.2	2.9	2.7	-0.5	-5.3	0.7
12	6.0	0.2	994.4	989.1	984.3	984.3	993.1	13.8	8.2	2.3	995.7	992.2	992.0	0.7	-2.7	-3.3	-2.2	-0.5	0.8	2.1	-1.0
13	984.4	984.6	987.3	986.7	989.5	990.7	987.2	992.2	992.4	995.1	994.6	997.3	998.7	995.1	-0.8	-2.5	-1.2	-2.5	-3.3	-3.3	-2.3
14	992.7	993.3	995.0	994.7	996.8	998.0	995.1	0.6	1.3	2.9	2.6	4.8	6.0	3.0	-3.3	-2.9	-2.1	-1.2	-2.9	-6.6	-3.2
15	999.7	0.8	2.7	1.9	4.2	4.4	2.3	7.7	8.8	10.7	9.7	12.2	12.4	10.3	-3.0	-3.5	-0.5	2.3	-0.4	-1.2	-1.1
16	5.5	6.7	8.8	6.9	9.3	10.9	8.0	13.5	14.9	17.0	14.9	17.3	19.0	16.1	-1.4	-7.5	-4.6	1.5	-1.2	-2.9	-2.7
17	11.1	11.4	12.8	10.9	11.8	12.7	11.8	19.3	19.5	20.8	18.9	19.9	21.0	19.9	-2.7	-4.1	-1.2	0.3	-4.3	-6.9	-3.2
18	14.1	14.4	15.5	13.9	15.1	16.6	14.9	22.4	22.7	23.8	21.9	23.4	25.0	23.2	-7.9	-7.9	-5.3	-0.3	-8.3	-13.3	-7.2
19	16.6	16.3	16.7	14.9	15.8	17.0	16.2	25.1	24.8	25.0	22.9	25.0	25.0	24.6	-15.5	-13.7	-7.1	2.5	1.5	0.7	-5.3
20	16.8	16.3	15.4	11.7	10.0	7.3	12.9	25.0	24.6	23.5	19.5	18.1	15.4	21.0	-2.3	-8.5	-2.5	3.7	-4.3	-4.5	-3.1
21	4.0	3.1	6.9	7.1	9.2	9.1	6.6	12.0	11.0	14.7	15.1	17.3	17.3	14.6	-2.3	0.5	-0.7	-1.5	-7.5	-9.5	-3.5
22	7.3	5.2	1.3	993.6	994.3	995.8	999.6	15.4	12.3	9.3	1.5	6.1	3.8	8.1	-8.9	-13.1	-2.9	0.0	-0.2	-2.3	-4.6
23	994.7	995.1	997.7	998.3	4.6	7.3	999.6	1.5	3.1	5.7	6.3	12.7	15.5	7.5	-3.7	-4.8	-2.1	-1.3	-7.4	-9.2	-4.8
24	7.9	8.6	8.3	5.5	5.3	4.4	6.7	16.0	16.7	16.3	13.5	13.3	12.6	14.7	-4.3	-3.3	-1.5	-0.9	-2.0	-7.3	-3.2
25	1.6	0.2	0.4	999.7	1.9	3.9	1.3	9.6	8.3	8.4	7.5	9.7	11.9	9.2	-4.5	-6.1	-1.9	1.2	-1.1	-2.9	-2.6
26	3.1	4.6	4.6	3.3	5.1	6.1	4.5	11.3	12.6	12.6	11.3	13.1	14.3	12.5	-3.7	-3.1	-1.3	-0.9	-2.6	-6.7	-3.1
27	6.0	7.1	8.4	8.0	9.1	10.9	8.3	14.3	15.4	16.4	16.0	17.2	19.0	16.4	-10.1	-10.6	-1.8	-1.0	-4.0	-6.7	-5.7
28	10.7	10.4	10.3	6.7	5.5	2.7	7.7	19.0	18.7	18.4	14.7	13.6	10.7	15.9	-9.3	-9.5	-4.7	-0.4	-2.5	-2.5	-4.8
29	999.9	996.8	998.9	999.0	0.4	1.3	999.4	7.9	4.8	6.7	6.9	8.3	9.3	7.3	-2.3	-1.6	1.5	1.1	-0.5	-1.3	-0.5
30	3.9	6.4	8.2	7.4	9.9	9.5	7.6	11.9	14.4	16.2	15.4	18.3	17.6	15.6	-1.9	-2.0	-0.5	-1.1	-4.0	-5.1	-2.4
31	9.1	9.6	10.4	8.7	8.4	7.5	9.0	17.2	17.7	18.4	16.7	16.6	15.7	17.1	-6.1	-4.9	-1.9	-3.1	-4.6	-5.2	-4.3
Mean	6.9	6.6	6.9	5.4	6.7	7.2	6.6	15.0	14.7	14.9	13.3	14.9	15.3	14.7	-4.7	-5.8	-2.4	-0.1	-3.0	-4.2	-3.4

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND											
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.				
1	2.4	-12.4	-5.0	14.8	SW	1.3	E	0.7	SE	3.4						

JANUARY, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0—10)						FORMS OF CLOUD																		
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L					
1	3.3	2.2	4.5	5.3	4.2	3.8	3.9	0	10	10	10	10	10	8.3	—	—	—	—	ac	—	—	ns	—	—	ns	—	—	ns			
2	3.6	3.2	3.4	3.8	3.7	3.6	3.6	10	3	7	7	10	10	7.8	—	—	ns	—	—	st	—	—	st,sc	—	—	sc	—	—	st,sc		
3	3.9	3.5	3.9	4.5	2.6	2.6	3.5	10	10	8	9	5	6	8.0	—	—	ns	—	—	st,ns	—	—	st	cs	—	sc	—	—	sc		
4	1.9	2.4	2.6	3.7	3.9	3.8	3.1	4	8	10	10	10	10	8.7	—	—	sc	—	—	sc	—	—	sc	—	—	sc, st	—	—	ns, sc		
5	3.7	3.6	4.1	4.3	4.3	4.5	4.1	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	st	—	—	st	—	—	st		
6	5.0	5.1	6.1	6.0	5.5	5.1	5.5	10	10	8	10	10	10	9.7	—	—	ns	—	—	ns	—	—	ns	—	—	ns	—	—	ns		
7	4.6	3.0	3.9	3.7	3.1	3.5	3.6	10	4	5	10	10	10	8.2	—	—	sc	—	ac	sc	cs, ci	—	sc	—	as	—	—	as	—	—	as
8	3.4	3.4	3.4	4.6	4.8	4.6	4.0	10	10	6	8	10	10	9.0	—	—	st	—	as	—	—	as	—	—	st, sc	—	—	ns	—	—	ns
9	4.4	4.2	4.6	5.5	5.2	5.2	4.9	9	10	10	4	10	10	8.8	—	—	st, sc	—	ns	—	—	ns	—	—	sc	—	—	sc			
10	4.9	2.9	3.9	7.1	7.1	7.1	5.5	3	5	10	10	10	5	7.2	cs	ac	sc	—	ac	sc	cc, cs	ac	—	—	ns	—	—	ns			
11	5.9	4.9	7.3	6.7	5.6	3.7	5.7	0	10	4	5	5	3	4.5	—	—	sc	—	—	sc	cs	—	sc	—	—	sc	—	—	sc		
12	4.5	4.6	5.0	5.9	6.4	5.3	5.3	10	10	10	10	10	10	10.0	—	—	st	—	—	ns	—	—	ns	—	—	st	—	—	st		
13	5.4	5.0	3.8	4.6	4.6	4.4	4.6	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	ns	—	—	ns		
14	4.4	4.2	4.3	4.4	3.8	2.9	4.0	10	10	10	10	6	3	8.2	—	—	ns	—	—	ns	—	—	ns	—	—	sc	—	—	sc		
15	4.3	4.5	4.9	5.6	5.7	5.4	5.1	10	10	4	8	10	10	8.7	—	—	st, sc	—	—	st, sc	—	ac	sc	—	—	ns	—	—	ns		
16	5.3	3.2	3.5	4.5	5.5	4.6	4.4	10	8	10	10	10	5	8.8	—	—	ns	cs	—	sc	ci, cs	—	—	cs	—	cu	—	—	ns		
17	4.5	4.0	4.2	5.6	4.1	3.2	4.3	10	6	3	10	3	10	7.0	—	—	ns	—	—	sc	—	—	st	—	—	sc	—	—	as st		
18	3.1	3.1	3.2	4.2	2.8	1.9	3.1	5	9	1	1	10	0	4.3	—	—	sc	—	—	sc, st	—	—	sc	—	eu	—	ac	—	—	—	
19	1.6	1.9	3.0	4.4	5.9	5.4	3.7	0	5	9	10	10	10	7.3	—	—	sc	—	—	st, sc	—	—	ns, sc	—	—	sc	—	—	st		
20	4.4	3.0	4.4	5.5	4.1	4.1	4.3	10	0	3	5	3	10	5.2	—	—	st	—	ac	—	—	sc	—	—	sc	—	—	as			
21	4.8	4.7	4.3	3.8	2.6	2.6	3.8	10	10	10	4	2	1	6.2	—	—	st	—	—	st, sc	—	—	ns, sc	—	—	sc	—	—	ac		
22	2.9	2.0	3.6	6.0	5.9	4.7	4.2	10	9	10	10	10	10	9.8	—	—	sc	—	ac	sc	—	as, ac	—	—	ns	—	—	ns			
23	4.3	3.8	4.3	4.7	2.4	2.5	3.7	10	9	4	4	0	5	5.3	—	—	ns	cs	—	ns, sc	—	—	ns	—	cu	—	—	sc			
24	3.3	3.9	4.4	5.5	5.2	3.3	4.3	10	10	10	10	10	10	10.0	—	—	sc	—	—	ns	—	—	ns	—	—	=	—	—	ns		
25	4.2	3.6	5.2	6.1	5.6	4.5	4.9	10	10	10	10	10	10	10.0	—	—	ns	—	—	st	—	—	≡	—	—	ns	—	—	ns		
26	4.1	3.7	4.0	3.9	3.7	2.8	3.7	0	2	5	6	7	5	4.2	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	ac sc		
27	2.4	2.5	3.9	4.1	3.1	2.7	3.1	5	10	9	7	0	9	6.7	—	—	sc	cs	—	sc	—	—	sc, st	—	—	sc	—	—	sc		
28	2.5	2.7	3.2	3.7	4.0	4.9	3.5	10	10	5	10	10	10	9.2	—	—	sc	—	ci, cs	—	cu	—	as	—	—	—	—	—	ns		
29	5.1	5.4	5.8	5.8	4.7	5.5	5.4	10	10	5	10	3	10	8.0	—	—	ns	—	—	sc	—	—	ns	—	—	ns	—	—	ns		
30	5.0	4.1	4.8	4.0	4.4	3.1	4.2	10	8	5	5	8	3	6.5	—	—	ns	—	—	sc	—	—	st, sc	—	—	ns, sc	—	—	st, sc		
31	3.2	2.9	3.2	4.1	4.0	3.7	3.5	3	3	5	10	10	10	6.8	—	—	sc	—	—	sc	—	—	ns	—	—	ns	—	—	ns		
	4.0	3.6	4.2	4.9	4.5	4.0	4.2	7.7	8.0	7.3	8.2	7.8	7.9	7.8																	

Day	Duration of Sunshine (in hours)	Total Solar and Sky Radiation (Cal./cm²)	Open Air	in the Shelter	RELATIVE HUMID					

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.



FEBRUARY, 1953.

Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	7.1	6.3	5.6	4.3	4.8	4.2	5.4	15.4	14.6	13.6	12.3	12.8	12.4	13.5	-6.0	-6.4	-3.1	-2.8	-5.7	-10.5	-5.8
2	6.1	9.7	11.8	11.1	13.5	14.4	11.1	14.6	18.1	19.9	19.1	21.6	22.9	19.4	-11.5	-12.3	-3.1	0.1	-3.7	-10.9	-6.9
3	14.0	14.3	15.7	13.3	14.3	15.4	14.5	22.6	23.0	23.8	21.5	22.4	23.7	22.8	-14.9	-16.7	-6.4	-1.3	-4.0	-4.4	-8.0
4	15.3	15.0	14.9	12.2	12.3	12.2	13.7	23.5	23.3	23.0	20.2	20.4	20.3	21.8	-8.2	-8.9	-3.9	-1.9	-3.1	-4.4	-5.1
5	11.1	10.6	11.1	10.1	12.7	15.0	11.8	19.3	18.7	19.3	18.3	21.0	23.3	20.0	-3.5	-4.5	-3.2	-3.7	-5.7	-5.8	-4.4
6	14.7	15.3	15.7	13.1	13.6	12.0	14.1	23.0	23.7	23.8	21.1	21.9	20.3	22.3	-8.7	-9.9	-4.0	-1.3	-5.5	-7.1	-6.1
7	8.8	6.7	5.3	1.9	4.0	3.5	5.0	17.0	14.9	13.5	9.9	12.0	11.7	13.2	-4.9	-6.6	-4.1	-0.3	-3.6	-4.7	-4.0
8	2.4	2.6	3.1	3.7	5.2	7.0	4.0	10.7	10.9	11.1	11.7	13.2	15.1	12.1	-9.7	-9.6	-3.3	-2.4	-4.6	-4.5	-5.7
9	7.8	8.8	10.1	8.4	9.7	12.0	9.5	15.9	17.0	18.1	16.6	17.7	20.3	17.6	-4.9	-4.9	-2.9	-2.5	-2.1	-4.4	-3.6
10	13.6	15.8	18.0	16.8	17.5	17.6	16.6	22.0	23.9	26.0	24.8	25.6	25.7	24.7	-8.7	-4.9	-1.1	1.8	-0.4	0.8	-2.1
11	15.0	11.7	9.7	5.1	4.8	6.6	8.8	23.0	19.8	17.7	13.0	12.7	14.4	16.8	1.5	-3.9	0.7	6.0	4.3	3.1	2.0
12	7.3	9.5	12.2	10.1	11.8	12.6	10.6	15.1	17.5	20.0	18.0	19.8	20.7	18.5	2.7	0.3	4.5	4.7	1.5	-1.3	2.1
13	12.0	12.7	14.3	13.0	13.5	13.9	13.2	20.0	20.7	22.3	20.8	21.5	22.0	21.2	-0.6	0.7	1.6	1.7	-0.1	-1.3	0.3
14	14.1	14.6	15.3	13.2	11.5	9.5	13.0	22.3	22.9	23.5	21.2	19.7	17.5	21.2	-3.5	-8.7	-3.0	1.2	-2.5	-3.3	-3.3
15	7.5	9.2	8.0	5.5	7.8	9.9	8.0	15.5	17.2	16.0	13.5	15.8	18.0	16.0	-2.5	-4.3	0.1	-1.1	-4.1	-5.3	-2.9
16	11.9	14.9	16.6	15.0	15.4	15.4	14.9	20.0	23.1	24.8	23.0	23.5	23.5	23.0	-6.1	-5.5	-4.8	-1.5	-2.9	-4.0	-4.1
17	13.9	9.7	6.4	3.7	5.3	7.1	7.7	22.1	18.1	14.6	11.5	13.3	15.3	15.8	-7.9	-13.1	-2.3	0.8	-2.1	-3.9	-4.8
18	7.9	8.4	11.8	13.2	14.6	15.3	11.9	16.0	16.6	19.9	21.3	22.7	23.5	20.0	-5.3	-6.3	-3.3	-5.0	-6.1	-7.1	-5.5
19	15.1	15.1	15.8	15.0	15.9	16.4	15.6	23.4	23.4	24.0	23.1	24.2	24.7	23.8	-7.3	-8.3	-4.6	-4.3	-5.9	-6.2	-6.1
20	17.3	18.1	19.9	18.3	20.3	20.8	19.1	25.6	26.3	28.2	25.1	28.6	29.2	27.2	-5.6	-6.4	-3.5	-2.5	-6.6	-10.9	-5.9
21	19.5	19.1	18.4	14.6	12.6	10.3	15.8	27.8	27.5	26.6	22.7	20.7	18.4	24.0	-7.7	-7.3	-3.3	-0.6	-3.3	-4.9	-4.5
22	7.5	7.7	8.7	10.0	13.0	17.0	10.7	15.7	15.8	16.8	18.0	21.1	25.1	18.8	-4.8	-5.4	-2.0	-1.2	-2.9	-3.5	-3.3
23	19.5	22.6	25.6	23.9	23.9	22.9	23.1	27.8	30.9	33.7	31.9	31.9	31.0	31.2	-3.7	-4.3	-1.2	1.7	-0.7	-0.3	-1.4
24	21.2	19.9	19.0	17.0	17.3	17.2	18.6	29.3	28.0	27.1	24.8	25.2	25.2	26.6	-2.9	-5.3	0.4	7.6	3.6	2.4	1.0
25	17.3	17.9	18.4	16.2	16.7	17.5	17.3	25.5	25.9	26.3	24.2	24.7	25.7	25.4	1.5	0.1	4.4	3.4	-0.2	-4.9	0.7
26	16.2	15.3	14.7	11.3	11.3	11.7	13.4	24.4	23.5	22.9	19.3	19.3	19.8	21.5	-7.0	-7.3	-1.4	3.7	0.3	-3.8	-2.6
27	12.4	15.0	17.7	16.6	18.0	18.1	16.8	20.4	23.1	25.7	24.6	26.0	26.3	24.4	-1.3	-2.7	0.5	4.8	0.1	-4.3	-0.5
28	17.6	16.2	15.3	11.5	9.6	8.7	13.2	24.6	24.4	23.3	19.1	17.5	16.6	20.9	-5.1	-8.2	0.6	11.4	6.3	4.8	1.6
Mean	12.6	13.0	13.5	11.7	12.5	13.0	12.7	20.8	21.2	21.6	19.7	20.6	21.2	20.8	-5.2	-6.5	-1.9	0.6	-2.1	-4.0	-3.2

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s) OF THE WIND													
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.						
1	-2.1	-11.4	-6.8	9.3	SE	2.8	S	0.9	SW	3.0	N	1.7	SSW	1.3	WNW	1.1	1.8	1.9
2	0.4	-14.7	-7.2	15.1	W	1.1	WNW	1.3	NNW	0.7	NW	2.4	WSW	5.9	SSE	0.9	2.1	2.2
3	-0.8	-17.4	-9.1	16.6	W	0.7	—	0.4	NW	0.7	WNW	5.4	—	0.2	NNW	2.6	1.7	2.1
4	-1.2	-10.6	-5.9	9.4	E	0.7	—	0.0	NE	0.9	ESE	1.1	NNW	1.7	—	0.0	0.7	1.5
5	-2.																	

FEBRUARY, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD															
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L		
1	3.6	3.6	3.8	4.3	3.6	2.2	3.5	10	10	8	7	6	10	8.5	—	—	ns	—	—	ns,sc	—	—	st,sc	—	—	st		
2	2.1	2.0	3.7	3.7	4.3	2.4	3.0	8	7	10	6	7	0	6.3	ci,cs	—	—	as st	—	—	sc	cs	ac	sc,eu	cs	—	sc	
3	1.7	1.4	3.6	4.0	3.1	3.9	3.0	0	1	4	4	10	9	4.7	—	—	—	sc	—	—	sc	—	—	st,eu	—	—	sc	
4	3.0	2.9	4.0	4.3	4.5	4.2	3.8	10	10	8	8	8	10	9.0	cs	—	—	ns	—	—	st,ns,ec	—	—	st,sc	—	—	ns	
5	4.2	4.0	3.7	3.5	3.2	3.3	3.7	10	10	10	10	1	0	6.8	—	—	ns	—	—	st,ns	—	—	ns	—	—	st		
6	2.7	2.6	3.3	4.0	3.3	3.2	3.2	10	10	10	9	2	10	8.5	—	—	ns	—	—	ns,sc	—	—	sc	—	—	ns		
7	4.0	3.4	4.0	5.4	4.0	3.4	4.0	10	10	10	10	1	0	6.8	—	—	ns	—	—	as st	—	—	ns	—	—	sc		
8	2.5	2.7	4.3	3.7	4.1	3.5	3.5	0	10	10	10	10	10	8.3	—	—	sc	—	—	as st	—	—	ns,sc	—	—	ns		
9	3.4	3.2	3.8	4.8	4.1	3.2	3.8	10	10	10	9	10	3	8.7	—	—	ns	—	—	ns	—	—	sc	—	—	sc		
10	2.9	3.7	3.8	4.1	4.9	5.5	4.2	3	10	3	7	10	10	7.2	—	—	st	—	—	ns	—	—	cu	—	—	sc		
11	6.1	4.3	5.4	6.2	7.2	7.2	6.1	10	4	4	10	10	10	8.0	—	—	sc	cs,cc	—	—	ac	—	—	sc	—	—	ns	
12	5.4	4.9	4.3	4.0	4.4	4.5	4.6	3	3	10	10	0	0	4.3	—	—	sc	ci	—	cu	ci,cs	—	cu	—	—	sc		
13	4.8	4.7	5.1	5.5	5.0	4.9	5.0	0	10	10	10	10	10	8.3	—	—	ci	—	sc	—	—	as	sc	—	—	st		
14	4.1	2.7	3.5	3.6	4.6	4.5	3.8	0	5	2	2	3	10	3.7	—	—	sc	cc	ac	—	cs	—	—	sc	—	—	as	
15	5.0	4.1	3.7	3.2	3.0	2.7	3.6	10	10	1	7	10	0	6.3	—	—	ns	ac	st,sc	ci	—	cu	cs	—	eu	—	—	as
16	3.3	2.9	3.8	4.0	4.4	3.9	3.7	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns,sc	—	—	ns	—	—	ns		
17	3.0	2.0	4.7	4.6	4.1	3.8	3.7	0	6	10	9	5	4	5.7	—	—	ac	—	—	ns	—	—	ns,st,sc	cs	—	sc		
18	3.7	3.6	3.8	3.3	3.3	3.4	3.5	5	10	10	3	10	10	8.0	—	—	st,sc	—	—	st,sc	—	—	ns,eu	—	—	ns		
19	3.0	3.0	3.6	3.3	3.5	3.6	3.3	10	10	10	9	10	10	9.8	—	—	ns	—	—	st,sc	ci	—	st,eu	—	—	st		
20	3.8	3.3	2.9	3.1	2.6	2.4	3.0	10	9	3	3	3	4	5.3	—	—	ns	—	—	st,sc	—	—	sc	—	—	sc		
21	2.8	3.1	3.8	3.6	3.1	3.4	3.4	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	—	as	—	—	as		
22	3.0	2.9	3.1	3.8	4.0	3.5	3.4	10	10	0	4	10	10	7.3	—	—	as	—	—	as	ac	cu	—	—	cu,st			
23	3.4	3.3	3.8	4.2	4.6	5.1	4.1	9	8	0	10	10	10	7.8	—	—	sc	—	—	cu	cs	—	cu	es	—	—	ac	
24	4.3	3.8	4.8	6.3	6.7	5.5	5.2	10	6	9	9	2	2	6.3	—	—	sc	—	—	sc	—	—	sc,eu	—	—	sc		
25	4.7	4.6	6.2	4.3	4.2	3.3	4.6	0	10	10	9	10	3	7.0	—	—	cu	cs	—	eu	—	—	as	—	cs	—	ci	—
26	2.9	2.9	3.6	4.1	3.8	3.9	3.5	9	9	7	9	0	7	6.8	—	—	sc	—	—	sc	cs	—	—	—	eu	—	—	sc
27	5.5	4.9	5.3	4.6	4.6	4.0	4.8	10	10	0	0	0	9	4.8	—	—	ns	—	—	—	—	—	—	cs	—	—	cs	
28	3.8	3.0	5.3	5.9	5.5	5.8	4.9	10	5	4	5	7	10	6.8	cs	—	—	cs	—	—	cu	cs	—	eu	—	—	as	
	3.7	3.3	4.1	4.3	4.2	3.9	3.9	7.0	8.3	6.9	7.5	6.6	6.8	7.2														

Day	Duration of Sunshine (in hours)	Total Solar and Sky Radiation (Cal./cm²)	Amount of Evaporation mm	RELATIVE HUMIDITY %						PRECIPITATION mm						REMARKS					
				Open Air	in the Shelter	2	6	10	14	18	22	Mean	22-2	2-6	6-10	10-14	14-18	18-22	Total	A. M.	P. M.
1	5.8	—	(1.7)	0.6	98	100	81	88	93	90	92	92	0.8	1.0	1.1	0.0	—	—	2.9	□, *, □, □	* , □, □, □
2	6.3	303	2.2	0.9	93	93	79	60	96	100	87	87	1.3	—	—	—	0.0	0.0	1.3</		

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.

MARCH, 1953.



Day	STATION PRESSURE (1000mb +)							M.S.L. PRESSURE (1000mb +)							AIR TEMPERATURE °C						
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	6.4	7.3	8.2	9.5	11.9	12.8	9.4	14.3	15.0	15.8	17.2	19.7	20.8	17.1	5.7	6.6	10.4	10.2	5.7	2.5	6.9
2	12.4	10.4	10.3	4.0	1.9	998.7	6.3	20.4	18.4	18.1	11.8	9.7	6.6	14.2	-0.2	-1.1	4.3	5.3	0.6	0.3	1.5
3	993.7	994.0	997.3	1.3	2.3	4.8	998.9	1.5	1.7	5.1	9.2	10.1	12.8	6.7	1.5	2.5	5.9	6.1	3.5	0.3	3.3
4	7.0	10.6	12.7	12.4	14.3	14.4	11.9	15.0	18.6	20.7	20.4	22.3	22.6	19.9	0.3	0.0	1.1	1.9	0.7	-0.1	0.7
5	13.9	13.2	12.0	9.1	8.4	8.7	10.9	22.0	21.3	20.0	17.0	16.4	16.7	18.9	-2.0	-3.2	2.1	4.9	0.9	0.4	0.5
6	8.8	11.4	13.2	14.1	16.3	17.3	13.5	16.7	19.4	21.1	22.0	24.6	25.5	21.6	0.2	-1.1	2.2	2.3	-0.4	-3.5	-0.1
7	15.8	13.7	12.6	7.1	4.6	1.6	9.2	23.9	22.0	20.4	14.9	12.3	9.3	17.1	-3.9	-4.0	4.7	10.9	7.9	6.2	3.6
8	997.1	995.9	999.3	999.8	4.0	6.0	0.4	4.8	3.8	7.0	7.5	11.9	14.0	8.2	6.4	4.7	5.9	5.8	2.3	1.9	4.5
9	7.4	9.2	11.3	11.3	12.4	13.7	10.9	15.4	17.2	19.0	19.0	20.4	21.6	18.8	2.0	2.1	5.0	6.1	3.6	2.7	3.6
10	13.2	13.0	12.0	9.2	10.0	11.1	11.4	21.2	21.1	19.8	17.0	17.9	19.0	19.3	-0.1	-1.3	9.1	11.0	5.9	4.5	4.9
11	10.4	10.0	8.8	2.0	995.4	986.9	2.3	18.3	17.9	16.7	9.9	3.3	994.6	10.1	3.1	3.1	4.1	4.5	1.8	2.5	3.2
12	987.0	994.1	998.6	999.8	0.4	2.3	997.0	994.7	1.9	6.3	7.7	8.3	10.1	4.8	2.2	2.9	4.8	4.3	3.1	1.9	3.2
13	1.7	3.5	6.0	7.4	9.9	12.2	6.8	9.6	11.5	13.9	15.3	17.7	20.2	14.7	0.4	0.2	4.9	5.0	2.7	-1.1	2.0
14	12.0	12.7	13.2	10.3	11.1	12.0	11.9	20.0	20.8	21.1	18.0	19.1	20.0	19.8	-0.7	-1.1	4.5	7.6	3.5	2.2	2.7
15	12.7	14.0	15.1	13.9	14.7	14.6	14.2	20.7	21.9	23.0	21.6	22.7	22.6	22.1	0.4	0.7	4.4	7.0	2.9	0.5	2.7
16	13.6	14.3	14.9	12.8	12.6	13.6	13.6	21.5	22.3	22.7	20.7	20.6	21.6	21.6	1.8	1.4	3.5	5.8	3.2	1.7	2.9
17	13.8	14.9	16.8	15.9	17.9	20.3	16.6	22.0	23.0	24.8	23.8	25.9	28.4	24.7	-0.3	-0.7	2.2	5.5	1.7	-1.7	1.1
18	20.7	21.9	22.4	20.7	22.0	23.7	21.9	28.8	30.0	30.4	28.7	30.1	31.8	30.0	-2.1	-1.9	1.0	2.4	2.4	-0.2	0.3
19	23.1	23.8	23.4	19.8	18.1	17.3	20.9	31.3	31.9	31.4	27.5	26.0	25.3	28.9	-1.2	-1.7	2.0	9.5	7.7	3.3	3.3
20	14.8	12.2	8.0	3.3	998.4	992.3	4.8	22.9	20.0	15.9	10.9	6.0	0.0	12.6	-0.3	1.1	7.6	8.5	7.5	7.2	5.3
21	988.4	987.3	990.9	995.4	4.2	10.4	996.1	996.0	994.9	998.4	3.1	11.9	18.4	3.8	6.8	6.3	7.0	7.3	4.8	2.5	5.8
22	13.7	15.3	16.3	14.0	13.1	13.1	14.3	21.9	23.3	24.3	21.6	20.8	21.1	22.2	1.0	-1.3	6.5	13.0	7.1	3.7	5.0
23	11.8	9.5	7.8	5.7	6.0	6.9	8.0	19.3	17.5	15.5	13.5	13.6	14.7	15.7	0.7	1.9	8.0	9.7	8.9	4.9	5.7
24	6.1	7.4	7.3	4.2	5.3	6.4	6.1	14.0	15.4	15.0	11.7	13.1	14.1	13.9	2.3	1.5	10.1	14.0	10.2	5.8	7.3
25	4.8	5.7	3.7	999.4	996.3	993.2	0.5	12.7	13.6	11.4	7.1	3.9	0.8	8.3	2.3	3.9	7.7	10.7	9.6	8.3	7.1
Mean	6.2	7.0	7.6	6.2	6.8	7.2	6.8	14.1	14.9	15.5	14.0	14.7	15.1	14.7	1.5	1.3	5.1	6.9	4.3	2.4	3.6

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND													
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.						
1	10.9	0.7	5.8	10.2	SE	2.2	NNW	4.0	N	2.0	NNE	6.7	N	2.8	—	0.2	3.0	2.8
2	8.0	-2.0	3.0	10.0	WSW	2.8	SSE	4.2	—	0.2	SE	7.4	S	4.4	ESE	2.4	3.6	2.9
3	7.7	-0.4	3.7	8.1	WNW	5.4	W	5.7	NNW	3.6	W	3.0	NNW	5.9	ENE	1.1	4.1	3.0
4	2.2	-0.4	0.9	2.6	WNW	2.2	WNW	8.5	WNW	5.9	NNW	3.2	WNW	1.3	—	0.4	3.6	5.5
5	5.4	-3.6	0.9	9.0	SW	1.3	—	0.0	S	2.8	SSW	5.4	NNW	3.6	NNE	2.8	2.7	2.8
6	2.8	-4.0	-0.6	6.8	NW	5.2	NNW	4.2	WNW	5.4	WNW	6.5	WNW	2.6	—	0.0	4.0	3.6
7	11.9	-5.4	3.3	17.3	—	0.2	WNW	0.7	—	0.0	SSE	5.0	SSE	4.8	SSE	0.7	1.9	3.1
8	7.4	0.4	3.9	7.0	—	0.2	W	1.3	W	10.1	WNW	8.2	W	3.8	WSW	5.7	4.9	4.4
9	7.8	0.8																

MARCH, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0—10)						FORMS OF CLOUD						H M L		H M L		H M L		H M L						
	2 6 10			14 18 22			Mean			2 6 10			14 18 22			Mean			H	M	L	H	M	L	H	M	L				
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L					
1	7.0	8.3	9.0	7.1	6.3	5.4	7.2	10	10	6	1	7	10	7.3	—	as	—	—	sc	—	—	sc	—	ac	sc	cs	ac	—			
2	5.5	5.2	7.1	6.1	6.0	6.0	6.0	10	6	10	10	10	10	9.3	—	ac	—	cs	—	sc	—	—	sc, st	—	as	—	—	ns	—		
3	6.5	6.6	6.0	6.1	5.9	6.2	6.2	9	2	6	7	10	10	7.3	—	—	sc	—	ac	sc	—	—	sc	—	—	ac	sc	—	—	st	
4	4.9	4.5	5.3	4.5	4.9	5.2	4.9	8	8	10	10	10	10	9.3	—	—	sc	—	—	ns, sc	—	—	st, sc	—	—	st	—	—	sc		
5	4.4	4.1	4.4	4.9	6.3	6.2	5.1	5	10	10	10	10	10	9.2	cs	—	sc	cs	—	—	cs, ac	—	—	as	—	—	—	ns	—	—	sc
6	4.8	3.7	4.3	4.6	3.6	3.7	4.1	4	2	10	5	0	0	3.5	—	—	sc	—	—	st, sc	—	—	sc, cu	—	—	sc	—	—	—	—	
7	3.8	4.1	5.6	5.4	8.7	8.3	6.0	0	10	2	4	5	10	5.2	—	—	sc	ci	—	—	cs	—	—	sc	—	—	sc	—	—	sc	
8	7.8	7.9	5.4	4.2	5.0	4.5	5.8	10	10	9	9	10	5	8.8	—	—	st	—	—	ns	—	as	sc	—	—	sc, st	—	ac	st		
9	4.8	4.7	4.9	4.7	5.6	4.5	4.9	10	8	8	8	6	2	7.0	—	—	st	—	—	sc	cs	—	sc, cu	—	ac	sc	—	—	sc		
10	4.8	5.1	5.7	5.6	6.7	8.0	6.0	6	8	8	10	9	10	8.5	—	—	sc	cs	ac	sc	cs	—	sc	—	ac	sc	—	—	ns		
11	7.3	6.2	6.5	6.0	6.8	7.2	6.7	10	10	10	10	10	10	10.0	—	—	st	—	as	—	—	ns, sc	—	as	—	—	ns	—	—	ns	
12	6.8	5.9	6.0	6.0	6.5	6.2	6.2	10	10	10	10	10	10	10.0	—	—	ns	—	—	sc	—	—	sc	—	as	sc	—	—	ns		
13	5.8	6.0	5.3	5.5	5.2	4.8	5.4	10	10	9	9	8	0	7.7	—	—	ns	—	—	sc, st	—	—	sc	—	—	sc	—	—	—		
14	5.2	5.2	4.3	4.3	6.9	6.8	5.5	6	7	2	10	10	10	7.5	—	—	sc	—	—	cu	—	—	sc	—	—	ns	—	—	ns		
15	6.1	6.0	4.7	4.7	4.4	4.7	5.1	3	10	7	7	3	4	5.7	—	—	sc	—	—	sc	—	—	cu	cs	—	—	sc	—	—		
16	5.7	5.5	4.3	4.9	4.5	4.0	4.8	10	10	10	10	10	10	10.0	—	—	st	—	—	sc	cs	—	sc	—	as	—	—	as	—		
17	3.5	3.5	3.8	3.9	4.4	4.2	3.9	10	10	10	2	8	0	6.7	—	—	sc	cs	—	cu	cs	—	cu	cs, ci	—	—	—				
18	4.5	5.0	5.7	6.5	6.5	5.9	5.7	10	10	10	10	3	10	8.8	cs	—	—	ns	—	as	sc	—	—	st	—	—	st				
19	5.5	5.3	6.2	6.3	7.6	6.4	6.2	10	10	8	10	10	3	8.5	—	—	≡	—	—	=sc	ci	ac	cu, sc	—	ac	—	—	sc			
20	5.7	6.4	7.4	10.1	9.8	10.0	8.2	10	10	10	10	10	10	10.0	—	—	—	as	—	cc	—	sc	—	—	ns	—	—	ns			
21	9.7	9.2	9.1	6.7	6.6	5.6	7.8	10	10	10	10	10	0	8.3	—	—	st	—	—	sc, st	—	—	as	st	—	as	sc	—	—		
22	4.7	5.1	5.6	4.7	6.3	6.4	5.5	0	0	0	1	10	10	3.5	—	—	—	ci	—	—	ci	—	—	cs	—	—	cs	—	—		
23	6.0	6.4	7.4	8.0	7.8	7.7	7.2	10	10	10	10	8	9	9.5	cs	—	—	ac	—	—	as	sc	—	as	sc	—	—	sc			
24	6.7	6.7	7.3	5.8	7.5	7.1	6.9	2	9	10	10	10	3	7.3	—	—	sc	cc, cs	—	—	cs	—	cu	cs	—	—	sc	—	ac	—	
25	6.7	7.5	8.1	10.2	11.2	10.8	9.1	10	10	10	10	10	10	10.0	—	—	sc	—	—	sc	—	—	sc	—	—	ns	—	—			
26	8.4	7.2	7.0	6.7	7.2	6.9	7.2	10	10	10	10	10	10	10.0	—	—	sc	—	—	ns	es	—	sc	—	—	ns, sc	—	—	st, sc		
27	6.3	6.0	6.2	5.8	5.4	4.5	5.7	10	10	10	10	9	9	9.7	—	—	ns	—	—	ns, sc	—	—	sc, st	—	—	ns	—	—	sc		
28	4.6	4.4	4.7	5.7	6.1	5.5	5.2	9	7	6	10	10	10	8.7	—	—	sc	cc	—	sc	cc	—	sc	cs	—	sc	—	ac	—		
29	5.3	5.8	6.2	6.2	6.6	6.2	6.1	10	10	10	10	10	10	10.0	—	as	—	—	ns	—	—	ns	—	—	ns	—	—	as, ac			
30	6.0	6.1	7.3	7.2	6.9	7.2	6.8	10	10	10	10	10	10	10.0	—	—	sc	es, cc	—	—	st	es	—	cu	—	as	sc	—	as	sc	
31	6.9	7.2	7.3	7.4	6.5	5.9	6.9	10																							

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.

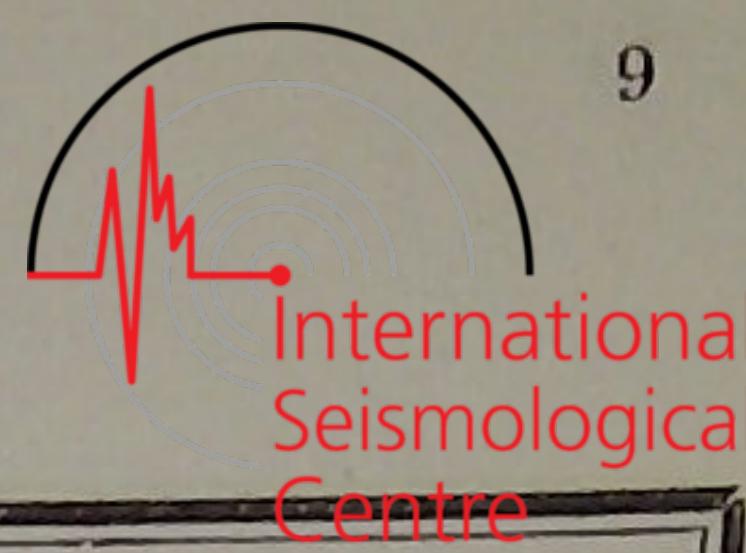
APRIL, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	14.4	15.9	17.1	17.0	17.9	19.4	17.0	22.4	23.9	25.0	24.7	25.7	27.5	24.9	-0.3	1.4	7.2	8.0	5.3	1.5	3.9
2	19.1	18.7	18.6	16.8	16.6	16.2	17.7	27.1	26.9	26.4	24.7	24.4	24.0	25.6	1.5	1.3	7.1	7.5	5.2	3.5	4.4
3	14.0	13.1	13.2	10.5	9.3	8.4	11.4	21.9	21.0	21.0	18.1	17.0	16.3	19.2	4.1	4.0	8.7	13.1	10.1	7.4	7.9
4	6.4	5.1	4.2	2.4	3.7	4.3	4.4	14.1	12.8	11.7	10.3	11.3	12.0	12.0	6.5	6.0	11.7	12.5	9.3	7.3	8.9
5	6.5	8.6	10.5	11.0	12.3	13.9	10.5	14.3	16.4	18.3	18.8	20.2	21.7	18.3	5.0	5.7	9.7	9.5	6.9	5.0	7.0
6	13.5	14.1	13.3	10.0	9.6	10.1	11.8	21.3	22.0	21.0	17.6	17.3	17.9	19.5	2.9	2.8	12.8	14.1	11.0	8.6	8.7
7	10.5	12.0	12.0	11.4	11.9	12.8	11.8	18.3	19.9	19.6	19.0	19.6	20.7	19.5	6.5	4.6	12.1	15.0	10.9	5.7	9.1
8	13.2	13.5	13.2	10.5	12.4	14.6	12.9	21.1	21.3	20.8	18.1	20.2	22.6	20.7	6.1	3.5	12.3	16.1	9.5	4.8	8.7
9	14.6	15.6	15.3	12.7	13.1	13.6	14.2	22.6	23.6	23.0	20.3	20.7	21.3	21.9	1.1	1.4	11.1	16.3	11.7	8.7	8.4
10	12.3	12.6	11.7	9.3	9.7	9.7	10.9	20.2	20.4	19.4	16.8	17.2	17.5	18.6	4.6	5.0	11.3	18.3	14.4	11.7	10.9
11	8.0	7.4	6.1	1.5	0.0	999.4	3.7	15.7	15.2	14.0	9.2	7.7	7.2	11.5	9.2	7.0	6.3	7.5	7.7	7.5	7.5
12	997.2	999.2	0.3	999.4	1.3	3.4	0.1	5.0	6.8	8.0	7.0	9.1	11.3	7.9	7.2	7.3	7.7	8.7	5.1	2.1	6.4
13	2.1	1.7	5.9	5.0	5.2	7.7	4.6	10.0	9.6	13.7	12.8	13.1	15.7	12.5	2.9	2.7	3.1	7.7	4.1	2.1	3.8
14	8.6	9.1	9.9	9.7	11.3	13.3	10.3	16.4	17.1	17.7	17.5	19.2	21.2	18.2	0.4	1.8	5.4	7.7	4.5	3.8	3.9
15	10.0	14.0	12.7	8.8	6.4	5.6	9.6	20.8	22.0	20.3	16.4	14.0	13.3	17.8	4.0	1.5	10.6	12.0	10.7	7.0	7.6
16	4.8	5.5	4.6	1.1	1.0	3.2	3.4	12.7	13.3	12.3	8.7	8.7	11.0	11.1	5.3	4.1	7.4	10.6	6.5	3.5	6.2
17	3.0	3.7	3.6	3.0	3.3	5.9	3.8	11.0	11.6	11.3	10.8	11.0	13.7	11.6	1.3	2.0	6.9	7.4	6.5	3.7	4.6
18	6.0	7.2	6.6	6.8	8.0	9.6	7.4	14.0	15.2	14.4	14.4	15.7	17.6	15.2	2.0	2.3	9.0	10.1	7.4	1.7	5.4
19	9.6	10.1	10.1	9.7	12.0	13.2	10.8	17.5	18.1	17.9	17.3	19.7	21.2	18.6	2.3	2.1	9.2	12.4	7.6	1.8	5.9
20	13.5	14.6	13.9	11.3	10.8	12.4	12.8	21.5	22.6	21.6	18.9	18.5	20.3	20.6	-1.7	-1.0	10.5	13.5	10.7	4.5	6.1
21	8.8	7.0	4.8	5.1	6.4	7.6	6.6	16.7	14.9	12.4	26.0	14.1	15.4	16.6	4.7	5.1	11.9	11.5	8.0	5.8	7.8
22	7.2	7.3	7.2	6.9	7.9	8.3	7.5	15.0	15.2	14.9	14.5	15.6	16.2	15.2	2.1	2.7	10.2	12.4	7.5	0.9	6.0
23	6.0	5.6	3.7	999.3	997.7	997.6	1.7	14.0	13.6	11.3	6.9	5.3	5.3	9.4	-1.4	0.1	11.4	12.1	9.9	4.9	6.2
24	994.6	994.1	995.3	997.2	1.2	4.7	997.9	2.4	1.9	2.9	5.1	9.1	12.6	5.7	5.3	3.4	8.1	7.5	3.7	3.0	5.2
25	5.6	7.7	9.6	7.9	8.7	11.0	8.4	13.5	15.6	17.3	15.4	16.3	18.9	16.2	2.3	2.4	9.9	13.2	11.1	6.9	7.6
26	8.6	8.7	7.3	5.0	6.0	8.0	7.3	16.4	16.6	14.9	12.4	13.6	15.6	14.9	4.6	4.5	14.0	20.5	15.5	11.9	11.8
27	6.8	9.5	9.8	8.3	11.6	13.9	10.0	14.5	17.2	17.5	15.7	19.2	21.7	17.6	8.4	8.9	17.3	19.6	15.7	8.6	13.1
28	14.4	14.8	13.7	10.9	9.9	9.6	12.2	22.3	22.6	21.2	18.3	17.5	17.2	19.9	3.4	4.7	18.4	22.5	17.2	13.5	13.3
29	7.3	5.7	4.4	4.8	5.1	5.0	5.4	14.9	13.3	11.9	12.3	12.6	12.6	12.9	13.2	13.2	17.9	17.8	14.9	12.8	15.0
30	3.6	2.9	1.9	1.2	0.7	3.2	2.3	11.2	10.5	9.5	9.0	8.6	10.9	10.0	11.8	11.2	10.9	6.8	4.7	5.1	8.4
Mean	8.3	8.8	8.7	7.2	7.7	8.9	8.3	16.3	16.7	16.4	15.2	15.4	16.7	16.1	4.2	4.1	10.3	12.4	9.1	5.8	7.7

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND												
	Max.	Min.	Mean	Range	2	6	10	14	18	22	Mean	6 obs.	24 h.				
1	9.1	-0.8	4.2	9.9	NNW	1.5	NNE	3.0	NW	5.4	4.6	WSW	4.8	SW	2.4	3.6	3.6
2	9.0	0.6	4.8	8.4	—	0.2	—	0.0	SSE	4.2	6.5	SE	3.				

APRIL, 1953.



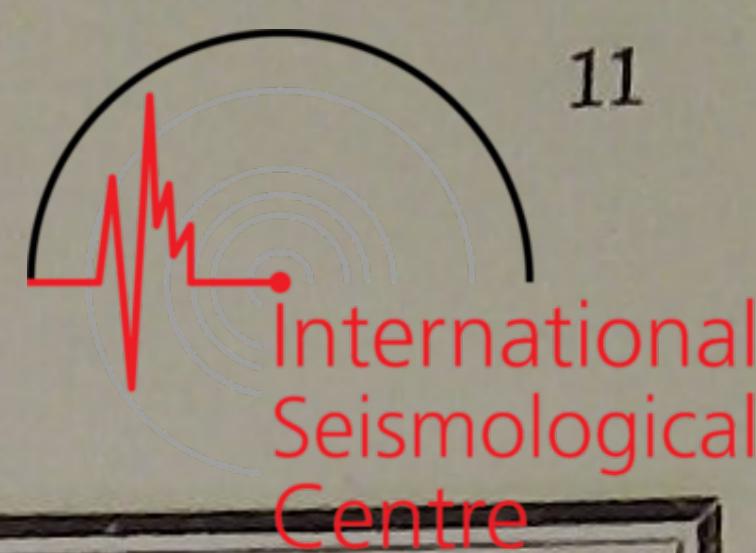
Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD						H M L			H M L			H M L			H M L					
	2 6 10			14 18 22			Mean			2 6 10			14 18 22			Mean			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
	2	6	10	14	18	22				2	6	10	14	18	22				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
1	5.5	5.4	5.0	4.8	5.0	5.9	5.3	0	2	3	1	5	2	2.2	—	—	sc	—	—	sc	—	—	sc,eu	—	—	cu	cs	—	sc	cs	—	sc	
2	6.1	6.3	6.5	6.1	6.3	7.2	6.4	10	10	10	10	10	10	10.0	—	—	sc	—	as	sc	—	—	sc	ci	as	—	—	as	—	—	sc		
3	7.5	7.6	9.0	9.5	9.5	9.1	8.7	10	10	10	5	10	10	9.2	—	—	st	—	—	st	—	—	sc	—	—	sc	—	ac	—	—	ns		
4	9.1	9.0	7.8	7.6	7.8	7.8	8.2	10	10	10	10	10	0	8.3	—	—	ns	—	—	st	ci	—	eu	cs	—	sc,eu	cs	—	sc	—	—	cu	
5	7.3	7.4	7.5	6.9	8.1	7.6	7.5	9	9	7	5	8	4	7.0	—	—	—	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	sc	
6	7.0	7.1	7.2	7.3	9.1	7.5	7.5	10	10	7	9	10	10	9.3	—	—	sc	—	—	sc	—	—	st,sc	—	—	sc,eu	—	—	sc	—	—	—	
7	7.6	7.6	7.0	7.9	8.6	7.5	7.7	5	4	2	2	8	2	3.8	—	—	—	—	—	sc	ci	—	—	cs	—	—	sc	—	—	sc			
8	8.8	7.4	6.6	6.6	6.1	7.5	7.2	10	0	0	0	0	0	1.7	—	—	st	—	—	ns	—	as	sc	—	—	sc	—	—	st	—	—	sc	
9	6.3	6.6	8.5	8.8	10.2	9.3	8.3	0	10	0	1	4	10	4.2	—	—	st	—	—	sc	cs	—	sc	es	—	sc,eu	—	—	sc	—	—	sc	
10	7.7	8.3	10.1	10.1	10.4	11.7	9.7	10	10	10	10	10	10	10.0	—	—	sc	cs	ac	sc	cs	—	sc	—	ac	sc	—	—	ns	—	—	ns	
11	10.5	9.6	9.3	10.1	10.2	10.1	10.0	10	10	10	10	10	10	10.0	—	—	st	—	as	—	—	ns,sc	—	as	—	—	ns	—	—	ns	—	—	ns
12	10.0	6.6	5.4	4.7	4.4	4.8	6.0	10	10	10	7	7	10	9.0	—	—	ns	—	—	sc	—	—	sc	—	as	sc	—	—	ns	—	—	ns	
13	4.6	4.2	5.9	4.2	4.2	5.4	4.8	10	4	10	3	3	10	6.7	—	—	ns	—	—	sc,st	—	—	sc	—	—	sc	—	—	sc	—	—	sc	
14	5.7	4.5	4.9	6.0	4.0	4.1	4.9	10	4	9	2	2	1	4.7	—	—	sc	—	—	cu	—	—	sc	—	—	ns	—	—	ns	—	—	ns	
15	4.1	4.6	4.8	6.0	8.5	8.2	6.0	0	0	2	10	10	10	5.3	—	—	sc	—	ns,sc	cs	—	sc	cs	—	cu	es	—	—	sc	—	—	sc	
16	8.0	5.8	5.3	4.9	5.0	4.8	5.6	10	10	10	3	2	0	5.8	—	—	st	—	—	sc	es	—	sc	cs	—	sc	—	as	—	—	as		
17	5.1	5.6	5.3	5.8	5.7	6.2	5.6	0	0	9	9	9	10	6.2	—	—	sc	cs	—	—	cs	—	cu	cs,ci	—	—	—	—	—	—	—	—	—
18	6.6	6.7	6.4	6.4	5.9	5.8	6.3	10	9	6	6	3	10	7.3	cs	—	—	ns	—	as	sc	—	—	st	—	—	st	—	—	—			
19	6.5	6.8	6.7	5.9	5.1	5.2	6.0	10	10	6	6	0	0	5.3	—	—	≡	—	—	sc,=	—	ci	ac	cu,sc	—	ac	—	—	sc	—	—	sc	
20	4.9	5.0	4.7	4.7	5.2	6.5	5.2	0	0	0	0	1	8	1.5	cs	—	—	as	—	cs	—	sc	—	—	ns	—	—	ns	—	—	ns		
21	8.0	8.5	9.7	6.2	5.2	4.9	7.1	10	10	6	6	3	3	6.3	—	—	st	—	—	sc,st	—	—	ns	—	as	st	—	as	sc	—	—	sc	
22	5.5	6.1	5.0	5.9	5.4	5.3	5.5	0	8	7	7	0	0	3.7	—	—	—	—	ci	—	—	ci	—	—	cs	—	—	cs	—	—	sc		
23	5.1	5.9	6.4	6.2	6.3	7.4	6.2	1	2	8	10	1	1	3.8	cs	—	—	ac	—	as	sc	—	as	sc	—	ac	sc	—	—	sc	—	—	sc
24	7.4	7.4	8.0	7.1	6.8	6.4	7.2	10	10	9	6	6	3	7.3	—	—	sc	cc,cs	—	cs	—	cu	cs	—	cu	—	—	sc	—	—	ac		
25	5.6	6.1	5.7	5.5	5.7	6.4	5.8	4	0	0	0	10	10	4.0	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	ns	—	—	ns	
26	7.0	7.2	8.3	9.3	9.1	10.3	8.5	9	0	1	2	1	4	2.8	—	—	sc	—	—	ns	cs	—	sc	—	as	sc	—	—	ns,sc	—	—	st,sc	
27	10.3	11.1	10.6	10.1	11.2	8.8	10.4	10	5	10	4	2	0	5.2	—	—	ns	—	—	ns,sc	—	—	sc,st	—	—	ns	—	—	sc	—	—	sc	
28	7.2	7.7	10.2	11.5	14.0	14.5	10.9	0	0	0	1	10	10	3.5	—	—	sc	cc	—	sc	cc	—	sc	cs									



MAY, 1953.

Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C										
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean		
1	6.9	10.0	11.4	10.9	12.3	16.4	11.3	14.6	17.9	19.1	18.6	20.2	24.4	19.1	4.7	4.1	11.1	13.0	7.7	4.6	7.5		
2	16.6	17.1	16.4	14.6	14.1	16.2	15.8	24.8	25.1	24.2	22.3	22.0	24.2	23.8	1.1	1.5	9.1	13.3	7.3	2.3	5.8		
3	16.3	17.6	16.8	14.4	14.1	16.8	16.0	24.4	25.7	24.6	21.9	21.7	24.7	23.8	-0.5	-0.1	10.3	16.4	12.5	5.1	7.3		
4	16.6	17.9	17.3	14.4	15.4	16.2	16.3	24.7	25.9	25.0	21.9	23.0	23.9	24.1	0.5	1.9	14.8	21.4	15.7	9.2	10.6		
5	15.0	16.0	14.4	12.3	12.3	13.3	13.9	22.8	23.9	22.0	19.8	19.9	21.0	21.6	5.1	5.3	17.1	21.5	17.1	13.0	13.2		
6	12.6	13.2	13.6	10.4	9.6	10.3	11.6	20.3	21.0	21.2	18.0	17.2	18.0	19.3	10.4	11.0	14.9	17.8	15.5	10.4	13.3		
7	9.2	8.4	7.5	4.4	3.9	4.2	6.3	17.0	16.3	15.0	11.8	11.4	11.8	13.9	7.5	8.3	17.6	20.8	15.5	12.6	13.7		
8	2.3	2.1	1.1	999.7	999.4	997.9	0.4	9.7	9.7	8.6	7.1	6.8	5.3	7.9	11.8	11.5	18.8	15.8	14.4	13.0	14.2		
9	994.7	995.3	996.7	995.8	999.1	1.9	997.3	2.1	2.7	4.3	3.1	6.6	9.5	4.7	12.7	11.6	13.3	18.3	12.9	9.8	13.1		
10	2.7	6.3	8.7	9.7	10.9	12.8	8.5	10.4	14.0	16.3	17.3	18.4	20.6	16.2	9.3	9.6	15.6	17.6	16.4	10.1	13.1		
11	12.8	14.0	12.8	11.9	11.1	10.9	12.3	20.6	21.7	20.4	19.4	18.7	18.6	19.9	7.6	7.4	16.1	18.2	15.9	14.7	13.3		
12	9.7	8.7	7.7	6.1	4.3	5.6	7.0	17.3	16.3	15.1	13.6	11.8	14.6	14.8	14.2	14.2	17.9	20.5	18.5	15.3	16.8		
13	5.1	4.3	3.1	999.1	998.6	996.6	1.1	12.7	11.9	10.6	6.3	5.9	3.9	8.6	11.7	13.5	20.8	22.6	19.2	16.6	17.4		
14	993.5	994.7	995.0	994.6	994.3	995.9	994.7	1.0	2.1	2.4	2.0	1.6	3.7	2.1	16.6	14.5	14.7	17.5	16.6	9.0	14.8		
15	996.0	996.6	994.6	996.4	999.4	1.9	997.5	3.8	4.3	1.9	3.9	7.0	9.6	5.1	6.3	6.7	17.3	16.6	14.5	8.7	11.7		
16	0.7	0.2	3.1	3.8	6.7	10.0	4.1	8.6	7.9	10.6	11.3	14.1	17.7	11.7	6.6	9.3	14.7	18.3	14.5	10.5	12.3		
17	10.7	12.8	13.3	11.9	13.2	15.5	12.9	18.4	20.6	21.0	19.5	20.8	23.4	20.6	9.3	10.6	14.7	17.9	11.8	7.5	12.0		
18	15.8	17.0	16.4	15.3	15.9	17.9	16.4	23.7	24.8	24.2	22.9	23.7	25.6	24.2	7.5	7.5	14.5	16.1	11.0	9.5	11.0		
19	17.2	17.9	16.7	14.0	13.9	16.4	16.0	25.1	25.6	24.3	21.5	21.5	24.3	23.7	6.0	7.8	14.5	18.6	15.8	9.4	12.0		
20	15.5	16.0	15.0	12.2	13.1	14.0	14.3	23.4	23.9	22.6	19.7	20.7	21.7	22.0	3.9	6.2	17.1	22.1	15.7	9.7	12.5		
21	13.7	14.7	14.4	13.0	13.2	15.8	14.1	21.5	22.4	21.9	20.4	20.8	23.5	21.8	6.1	9.6	19.3	21.8	17.5	11.5	14.3		
22	15.0	15.1	13.7	10.6	10.4	10.6	12.6	22.9	23.0	21.2	18.0	17.9	18.1	20.2	7.1	8.7	19.8	21.7	17.4	12.6	14.6		
23	8.0	7.9	7.0	5.9	6.3	6.4	6.9	15.7	15.5	14.4	13.3	13.9	14.0	14.5	13.3	16.2	19.2	16.3	15.1	14.3	15.7		
24	4.7	3.5	2.9	1.5	0.7	2.9	2.7	12.3	11.0	10.3	9.0	8.2	10.4	10.2	15.3	14.5	15.3	17.1	17.6	11.3	15.2		
25	3.7	3.5	3.1	1.0	2.1	1.7	2.5	11.4	11.1	10.6	8.3	9.6	9.3	10.1	6.7	8.9	18.8	22.9	17.9	13.8	14.8		
26	1.5	999.9	997.9	994.9	997.1	997.9	998.2	9.1	7.4	5.2	2.1	4.6	5.5	5.7	11.8	12.0	21.1	23.4	14.9	13.4	16.1		
27	997.3	998.9	1.0	2.6	2.9	4.8	1.3	4.8	6.3	8.3	10.0	10.4	12.4	8.7	14.5	14.9	18.4	17.8	14.9	11.5	15.3		
28	4.8	6.1	5.7	5.7	7.1	8.7	6.4	12.4	13.9	13.2	13.2	14.7	16.4	14.0	10.8	10.6	18.6	19.5	14.1	12.0	14.3		
29	7.3	6.0	4.4	0.2	996.4	989.7	0.7	14.9	13.6	12.0	7.8	3.9	997.2	8.2	11.4	11.2	12.3	15.1	14.9	14.5	13.2		
30	986.6	986.6	990.1	995.4	0.3	5.1	994.0	993.9	994.0	997.5	2.7	7.8	12.7	1.4	14.7	14.9	18.3	17.9	13.9	12.5	15.4		
31	6.1	7.9	7.7	6.1	6.6	5.2	6.6	13.7	15.5	15.3	13.5	14.0	12.8	14.1	12.4	12.6	16.4	21.4	17.6	14.3	15.8		
Mean	7.1	7.6	7.4	6.1	6.6	7.7	7.1	14.8	15.3	14.9	13.6	14.2	15.4	14.7	8.9	9.6	16.2	18.7	15.0	11.1	13.2		
Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND																		
	Max.	Min.	Mean	Range	2	6	10	14	18	22	2	6	10	14	18	22	2	6	10	14	18	22	Mean
																						6 obs.	24 h.
1	13.2	3.0	8.1	10.2	NNW	8.0	NW	2.4	WNW	8.0	W	6.5	W	5.2	N	2.2	5.4	5.9					
2	14.6	-1.4	6.6	16.0	WNW	0.9	NNW	1.1	N	3.0	S	1.5	SE	6.5									

MAY, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD						H M L		H M L		H M L		H M L						
	2 6 10			14 18 22			Mean			2 6 10			14 18 22			Mean			H	M	L	H	M	L	H	M	L				
	2	6	10	14	18	22				2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L			
1	6.3	7.0	7.0	7.4	6.3	5.7	6.6	8	2	2	0	9	0	3.5	—	—	sc	—	—	sc	—	—	cu	—	—	cu	ci	—	sc		
2	5.7	5.8	4.8	5.4	6.8	6.3	5.8	0	0	0	1	0	0	0.2	—	—	—	cs	—	—	—	—	—	cu	—	—	cu	—	—	—	
3	5.5	6.1	7.0	5.5	8.0	7.5	6.6	0	10	0	0	3	0	2.2	—	—	—	ci	—	—	—	—	—	—	—	—	—	es	—	—	
4	6.0	5.6	6.7	7.7	7.3	9.9	7.2	10	3	2	8	10	0	5.5	ci	—	—	—	ac	—	—	ci	—	—	cu	es	—	—			
5	7.9	8.3	10.1	9.1	13.1	11.2	10.0	8	10	10	10	10	10	9.7	cs	—	—	—	as	—	—	cs	—	—	cu	cs	—	sc			
6	11.4	11.8	12.9	12.1	12.0	11.3	11.9	10	10	10	5	10	0	7.5	—	—	sc	—	—	ns	—	—	sc	—	—	sc	—	—	—		
7	10.0	10.8	13.1	12.3	13.5	13.0	12.1	1	10	10	10	10	10	8.5	—	—	sc	—	—	≡	cs	—	—	as	—	—	as	—	—	st	
8	13.1	13.1	12.0	14.1	14.9	14.5	13.6	10	10	10	10	10	10	10.0	—	—	st	cs	ac	st	cs	—	—	sc	—	—	ns	—	—	ns	
9	14.0	13.2	14.0	12.3	14.1	11.7	13.2	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	as	sc, st	—	—	ns	—	—	ns	
10	11.4	11.5	13.2	12.4	11.4	10.9	11.8	10	10	4	4	3	0	5.2	—	—	ns	—	—	st	ci	—	cu	ci	—	cu	—	—	—		
11	10.4	10.3	13.6	15.8	15.7	15.0	13.5	10	10	10	10	10	10	10.0	—	—	≡	—	—	≡	es, cc	ac	—	—	as	—	—	st	—	—	st
12	14.8	15.0	16.0	17.4	17.4	16.3	16.2	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	—	sc	—	—	sc	—	—	sc		
13	13.0	15.1	18.6	18.2	19.6	18.0	17.1	0	10	10	10	10	5	7.5	—	—	—	—	—	≡	cs	—	cu	—	—	sc	—	—	sc		
14	18.0	12.1	9.3	8.4	12.1	9.2	11.5	10	10	10	10	10	0	8.3	—	—	ns	—	—	as	st	—	—	as	sc	—	—	sc	—	—	—
15	8.8	8.8	10.1	9.0	8.0	8.1	8.8	0	3	9	8	6	0	4.3	—	—	—	—	—	=	—	—	sc, ns	—	—	sc	—	—	—		
16	8.0	8.9	11.3	9.2	8.1	8.9	9.1	3	10	3	2	10	3	5.2	—	—	sc	—	—	sc	cs	—	cu	—	—	cu	ci	—	sc		
17	8.9	9.7	8.2	8.5	10.0	9.3	9.1	3	3	5	2	1	10	4.0	—	—	sc	—	—	cu	—	—	cu	cc	—	cu	—	—	sc		
18	9.0	8.3	9.1	10.3	9.3	9.0	9.2	10	10	6	6	9	10	8.5	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	sc		
19	8.4	9.2	8.8	9.8	10.8	10.4	9.6	10	5	0	0	3	0	3.0	—	—	sc	—	—	sc	—	—	eu	ci	—	cu	—	—	sc		
20	7.7	8.7	9.2	8.2	9.2	8.7	8.6	3	3	10	10	10	7	7.2	es	—	—	—	=cu	—	—	cs	—	—	cu	—	—	ns, sc			
21	8.6	10.5	10.9	10.4	12.5	11.7	10.8	0	0	1	4	2	0	1.2	—	—	—	—	—	—	—	—	—	—	ci	—	eu	—	—	—	
22	9.5	10.4	11.2	12.0	13.7	13.0	11.6	0	6	7	7	10	10	6.7	—	—	—	cc, cs, ci	—	—	ci	—	—	—	cc, es	—	—	ci	—	—	—
23	14.1	16.6	15.0	16.7	16.3	15.6	15.7	10	10	10	10	10	10	10.0	—	—	—	as	st	es	as	sc	es	—	—	ns	—	—	ns		
24	16.7	16.2	16.7	18.6	16.4	12.3	16.2	10	10	10	10	6	3	8.2	—	—	ns	—	—	ns	—	—	ns	—	—	sc	—	—	sc		
25	9.3	9.7	12.8	13.1	9.6	11.4	11.0	0	2	0	0	3	10	2.5	—	—	—	cs	—	—	—	—	—	—	—	—	—	—	—	—	—
26	12.6	13.2	15.4	17.3	15.2	14.5	14.7	10	4	6	10	10	2	7.0	—	—	sc	—	—	ac	sc	—	—	sc	—	—	cu	—	—	sc	
27	10.5	11.6	12.9	12.6	11.3	12.0	11.8	1	3	7	6	3	6	4.3	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	sc		
28	11.0	11.1	13.4	15.3	12.6	11.5	12.5	3	4	5	10	10	10	7.0	—	—	sc	—	—	ci	—	—	cu	cs	—	—	sc	—	—	as, st	
29	11.6	11.6	13.0	15.1	15.7	15.8	13.8	10	10	10	10	10	10	10.0	—	—	as	sc	—	—	as	sc	—	—	ns	—	—	st	—	—	ns
30	16.2	15.9	15.9	14.1	12.0	11.5	14.3	10																							

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.

JUNE, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C									
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	
1	2.9	999.9	997.0	993.3	993.5	992.6	996.5	10.4	7.5	4.3	0.7	0.8	0.0	4.0	13.5	13.8	17.0	17.9	18.3	16.1	16.1	
2	992.7	994.9	995.4	996.0	0.3	2.7	997.0	0.2	2.3	2.7	3.3	7.7	10.3	4.4	18.5	18.0	21.4	21.9	17.6	14.5	18.7	
3	3.0	5.1	6.9	6.0	6.9	10.0	6.3	10.6	12.7	14.3	13.3	14.3	17.7	13.8	12.9	13.1	17.7	18.7	17.1	12.6	15.4	
4	9.6	11.8	11.4	9.5	9.6	11.1	10.5	17.2	19.5	19.0	17.0	17.1	18.7	18.1	12.1	12.9	16.5	21.2	16.1	14.1	15.5	
5	9.2	7.4	3.7	998.0	994.1	992.8	0.9	16.8	15.0	11.1	5.5	1.6	0.2	8.4	13.9	14.3	15.8	15.1	16.9	16.7	15.5	
6	994.1	998.9	0.7	2.6	3.9	5.9	1.0	1.5	6.3	8.0	9.9	11.4	13.3	8.4	17.6	16.3	18.9	20.6	18.9	15.5	18.0	
7	4.4	5.2	4.7	3.7	3.3	2.4	4.0	11.9	12.8	12.2	11.1	10.9	9.9	11.5	14.3	13.4	14.9	15.6	14.7	14.5	14.6	
8	999.4	999.9	999.5	997.7	994.0	990.9	996.9	6.9	7.4	7.0	5.2	1.5	998.3	4.4	14.0	14.3	15.4	15.1	13.6	12.1	14.1	
9	990.9	995.5	997.9	999.1	1.6	3.4	998.1	998.3	3.1	5.3	6.7	9.2	11.0	5.6	12.3	13.3	14.2	14.8	11.3	10.6	12.8	
10	2.3	2.9	3.5	2.4	1.6	3.7	2.7	9.9	10.6	11.1	9.9	9.1	11.3	10.3	9.3	9.4	13.1	15.9	15.7	13.2	12.8	
11	1.3	1.2	0.3	998.3	997.5	999.4	999.7	9.0	8.7	7.8	5.6	4.8	6.9	7.1	12.9	13.2	17.0	21.8	20.8	16.1	17.0	
12	999.0	999.5	999.1	998.1	999.0	1.5	999.4	6.4	7.1	6.4	5.5	6.6	9.1	6.9	14.1	12.3	17.4	17.8	14.0	12.2	14.6	
13	1.2	4.3	4.7	5.1	6.9	9.2	5.2	8.8	11.9	12.2	12.4	14.3	16.8	12.7	11.9	12.7	18.9	22.2	20.1	14.1	16.7	
14	10.7	11.8	11.1	9.7	9.5	9.9	10.5	18.4	19.4	18.6	17.1	16.8	17.3	17.9	12.9	11.9	20.8	23.5	20.7	18.3	18.0	
15	9.7	9.7	9.7	7.7	7.4	8.2	8.7	17.2	17.2	17.1	15.0	14.9	15.7	16.2	16.5	16.7	22.3	24.5	22.2	16.1	19.7	
16	7.9	7.9	6.9	5.0	4.7	5.6	6.3	15.5	15.5	14.1	12.3	12.0	13.2	13.8	14.2	15.4	23.8	25.9	23.7	16.5	19.9	
17	5.6	6.3	5.2	3.5	4.0	5.9	5.1	13.2	13.9	12.4	10.7	11.4	13.3	12.5	14.8	15.6	25.2	29.0	26.0	19.9	21.8	
18	5.9	7.0	7.5	6.6	6.9	7.1	6.8	13.3	14.4	14.9	13.7	14.3	14.6	14.2	16.8	16.7	23.4	24.2	17.1	16.1	19.1	
19	5.9	5.3	5.7	5.0	3.9	4.3	5.0	13.3	13.0	13.2	12.3	11.3	11.8	12.5	15.9	15.4	17.6	20.3	20.2	18.3	18.0	
20	2.7	2.1	1.0	999.4	998.7	999.9	0.6	10.1	9.6	8.3	6.7	6.0	7.4	8.0	17.4	18.0	21.3	22.3	20.8	17.9	19.6	
21	999.0	1.2	1.5	1.5	2.1	5.2	1.8	6.4	8.7	9.0	8.8	9.5	12.8	9.2	16.2	16.8	20.7	23.1	19.9	13.4	18.4	
22	4.0	5.2	5.6	3.1	4.3	6.3	4.8	11.7	12.8	13.1	10.4	11.8	13.9	12.3	11.4	12.1	14.4	19.6	16.3	12.9	14.5	
23	5.3	6.9	7.0	6.0	5.6	5.0	6.0	13.0	14.4	14.4	13.5	13.2	12.6	13.5	12.5	13.0	16.6	16.8	14.5	13.5	14.5	
24	3.1	2.7	2.3	999.9	997.7	997.3	0.5	10.7	10.1	9.7	7.4	5.1	4.7	8.0	14.2	16.3	17.6	17.3	17.6	16.8	16.6	
25	996.2	997.3	997.0	996.0	996.0	997.0	996.6	3.7	4.8	4.2	3.3	3.3	4.3	3.9	16.5	18.1	24.6	24.8	23.1	20.2	21.2	
26	994.9	994.3	993.6	990.4	993.2	995.4	993.6	2.1	1.6	1.0	997.6	0.4	2.9	0.9	19.1	19.5	21.7	25.0	23.6	17.7	21.1	
27	995.9	996.8	998.6	998.9	0.8	3.1	999.0	3.4	4.6	5.9	6.0	8.2	10.6	6.5	16.3	17.6	23.5	24.5	19.9	17.0	19.8	
28	2.4	3.8	4.2	2.9	2.3	3.0	3.1	9.9	11.4	11.5	10.1	10.0	10.4	10.6	16.4	16.1	20.9	22.7	18.3	16.3	18.5	
29	0.8	1.0	999.9	998.7	998.7	999.9	999.8	8.3	8.4	7.3	6.0	6.0	7.4	7.2	15.8	16.1	18.7	21.5	20.7	18.0	18.5	
30	999.3	0.2	999.7	998.7	998.7	0.0	999.4	6.6	7.7	7.0	5.9	6.0	7.4	6.8	17.1	17.9	22.1	24.7	22.4	19.0	20.5	
Mean	2.0	2.9	2.7	1.4	1.6	2.6	2.2	9.5	10.4	10.1	8.8	9.0	10.1	9.6	14.7	15.0	19.1	20.9	18.7	15.7	17.4	
Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND																	
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.	Mean	2	6	10	14	18	22	Mean		
1	19.2	13.5	16.4	5.7	N	1.5	SSE	0.5	S	6.5	S	2.0	ESE	1.7	2.4	2.1						
2	23.8	13.1	18.5	10.7	SW	3.4	NE	3.2	N	3.0	NNW	4.6	N	5.2	WNW	1.5	3.5	3.3				
3	19.4	12.0	15.7	7.4	NW	0.7	—	0.0	S	5.5	SSE	7.8	SSE	5.9	S	5.0	4.2	4.4				
4	21.6	11.9	16.8	9.7	S	1.7	S	1.1	SE	2.4	S	5.9										

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.

13



JUNE, 1953.

Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD																			
	2 6 10			14 18 22			Mean			2 6 10			14 18 22			Mean			H M L			H M L			H M L			H M L				
	2	6	10	14	18	22				2	6	10	14	18	22				H	M	L	H	M	L	H	M	L	H	M	L		
1	13.8	15.1	16.3	16.4	17.0	16.7	15.9	10	10	10	10	10	8	9.7	—	—	st	—	—	ns	—	—	st	—	—	sc	—	—	sc			
2	13.2	13.9	15.2	16.1	13.9	13.8	14.4	8	9	8	8	10	10	8.8	—	as	cu	cs	—	sc, cu	cs	—	sc	cs	—	sc	—	as	sc	—	as	
3	14.1	13.9	15.0	15.7	15.5	13.3	14.6	10	10	7	2	3	10	7.0	—	as	sc	—	as	—	ci	—	sc, cu	—	—	cu	—	—	sc, cu	—	—	st
4	13.3	13.9	15.2	18.7	16.5	15.2	15.5	10	10	10	10	10	10	10.0	—	—	st	cs	—	st	—	—	cu	—	as	st	—	—	st			
5	15.0	15.6	17.6	16.5	18.9	18.6	17.0	10	10	10	10	10	10	10.0	—	—	st	—	—	ns	—	—	ns	—	—	ns	—	—	st			
6	17.3	15.0	15.4	15.1	15.7	14.3	15.5	10	10	10	10	10	3	8.8	—	—	ns	es, ci	—	sc	es	—	sc	cs	as	sc	cs	—	—	—		
7	14.6	14.9	16.1	15.9	16.2	15.8	15.6	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	st	—	—	ns	—	—	ns			
8	15.6	15.6	16.4	15.9	14.4	13.5	15.2	10	10	10	10	10	10	10.0	—	—	ns	—	—	st	—	—	ns	—	—	ns	—	—	ns			
9	10.6	10.5	11.3	11.8	12.6	12.3	11.5	10	6	10	10	10	10	9.3	—	—	ns	—	as	sc	—	as	ns	—	—	ns	—	—	ns			
10	11.4	11.4	13.1	14.9	15.4	14.4	13.4	10	10	10	10	10	10	10.0	—	—	ns	—	—	st	—	—	sc, st	—	—	st	—	—	st			
11	14.6	14.7	15.9	18.3	15.9	16.5	16.0	10	10	10	6	5	10	8.5	—	—	st	—	—	st	—	—	sc, cu	cc	—	sc, cb	cs	—	—			
12	13.4	12.7	15.6	15.4	13.5	12.6	13.9	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	—	sc, st	—	—	st, sc	—	—	st			
13	13.1	13.9	14.3	13.9	13.8	14.1	13.9	10	10	2	2	6	0	5.0	—	—	st	—	ac	st	cc	—	—	cu, sc	ci	—	cu	—	—	—		
14	14.4	12.1	17.8	19.8	20.2	19.8	17.4	10	10	10	10	6	10	9.3	—	as	—	—	as	st	cs	—	—	sc	cs	ac	sc	cs	—	—		
15	17.3	17.3	17.6	17.3	16.9	16.0	17.1	10	10	10	7	10	0	7.8	—	—	sc	—	as	—	cs	—	—	cu	ci	—	cu	—	—	sc		
16	15.3	16.1	18.2	18.6	18.2	15.5	17.0	0	0	2	1	0	0	0.5	—	—	sc	—	—	cu	—	—	sc, cu	ci	—	sc	—	—	—			
17	16.0	15.6	17.6	18.9	17.1	16.1	16.9	0	2	8	3	6	4	3.8	—	—	—	ci	—	—	ci	—	—	ci	es	—	cu	es	—	—		
18	16.6	17.5	18.8	20.4	16.5	15.8	17.6	0	10	10	10	10	10	8.3	—	—	—	cs	—	—	es, ci	ac	—	cs, ci	—	cu	es	as, ac	—	as		
19	16.3	16.4	18.8	20.7	19.4	17.4	18.2	10	10	10	10	10	10	10.0	—	as	—	—	as	st	—	—	st	—	—	ns	es	—	sc, st	—	st	
20	17.1	16.8	17.5	20.0	17.0	13.9	17.1	10	6	10	10	7	8	8.5	—	—	st	—	ac	sc	—	—	sc	—	—	sc	—	—	sc			
21	15.0	14.8	16.5	15.9	17.1	13.9	15.5	10	10	10	10	10	9	9.8	—	—	sc	cs	—	sc	—	—	sc	es	ci	—	cu	cs, cc	—	—		
22	12.2	12.4	13.2	14.9	15.0	12.6	13.4	10	10	10	8	10	10	9.7	es	—	—	st	—	ac	sc	—	ac	cu	—	as	—	—	st			
23	12.4	12.6	14.1	15.0	15.0	15.0	14.0	10	10	10	10	10	10	10.0	—	—	st	—	as	st	—	—	sc	—	—	ns	—	—	ns			
24	15.9	17.6	17.8	19.0	19.5	18.6	18.1	10	10	10	10	10	3	8.8	—	—	ns	—	—	ns	—	—	ns	—	—	ns	cc	—	—			
25	18.4	20.0	19.7	20.8	21.5	21.8	20.4	10	10	8	9	10	10	9.5	—	—	st	—	—	sc, cu	—	—	sc	—	ac	sc	—	as	sc			
26	21.3	21.8	22.5	21.6	19.3	17.2	20.6	10	10	10	8	2	2	7.0	—	—	sc	—	—	=	—	—	sc	—	—	cu	—	ac	cu			
27	16.7	18.2	17.8	21.5	18.8	16.6	18.3	4	2	3	10	10	10	6.5	—	—	sc	—	—	sc	—	—	cu	—	—	sc, eu	—	sc	—	as		
28	16.3	17.4	18.1	19.3	17.8	16.9	17.6	10	10	10	10	10	10	10.0	—	—	st	—	as	st	es	—	sc	es	—	—	sc	—	—	st		
29	16.5	16.9	17.5	19.7	19.6	18.9																										



JULY, 1953.

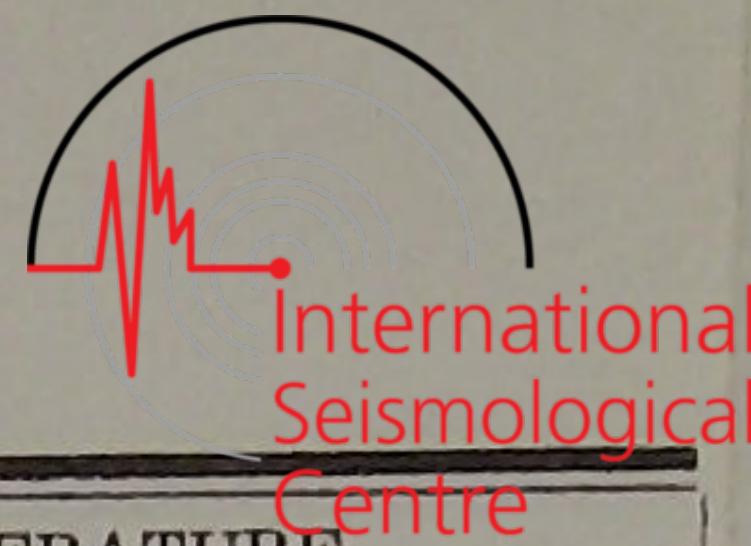
Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	998.9	0.4	999.5	998.6	999.4	1.5	999.7	6.3	7.9	6.7	5.7	6.6	9.0	7.0	18.5	18.4	26.0	29.2	26.3	18.7	22.9
2	1.3	2.9	2.1	1.2	0.8	2.4	1.8	8.8	10.3	9.5	8.3	8.2	9.9	9.2	15.5	16.9	24.4	28.1	24.4	19.7	21.5
3	1.7	1.6	1.0	999.0	998.6	999.5	0.2	9.2	9.0	8.3	6.1	5.9	6.9	7.6	19.6	18.0	19.3	21.8	20.9	19.3	19.8
4	998.1	999.4	999.0	998.3	0.6	3.4	999.8	5.6	6.9	6.1	5.5	7.9	10.9	7.2	18.4	18.7	23.3	26.9	20.9	18.3	21.1
5	2.9	3.8	2.9	1.9	2.4	4.2	3.0	10.3	11.3	10.1	9.1	9.7	11.5	10.3	17.6	18.3	22.5	25.7	22.7	19.9	21.1
6	3.4	5.1	5.7	5.6	6.0	7.4	5.5	10.7	12.6	13.1	12.8	13.3	14.9	12.9	20.4	18.7	23.5	25.1	20.7	18.1	21.1
7	7.5	7.0	7.3	4.0	0.4	998.4	4.1	15.1	14.6	14.7	11.5	7.9	5.7	11.6	16.4	15.5	16.7	16.2	16.3	16.9	16.3
8	994.6	994.4	993.6	992.6	991.8	993.1	993.4	2.0	1.7	0.8	999.8	997.7	0.3	0.4	19.5	19.9	21.5	23.2	23.4	21.3	21.5
9	993.3	994.9	996.3	995.8	997.7	0.0	996.3	0.7	2.0	3.5	3.1	5.1	7.4	3.6	20.5	20.7	24.0	22.9	20.7	19.3	21.4
10	0.8	3.8	4.3	5.2	5.9	7.1	4.5	8.3	11.3	11.7	12.6	13.3	14.7	12.0	18.3	18.6	21.8	22.0	19.0	16.8	19.4
11	7.7	8.0	8.3	7.5	7.9	9.1	8.1	15.3	15.7	15.8	15.0	15.4	16.7	15.7	15.6	16.1	19.3	21.1	18.1	16.3	17.8
12	9.0	9.3	8.7	7.5	8.6	9.1	8.7	16.6	17.0	16.2	14.9	15.9	16.6	16.2	15.5	15.9	21.2	23.4	21.1	16.1	18.9
13	8.6	9.1	9.2	8.3	7.7	9.3	8.7	16.0	16.6	16.6	15.7	15.1	16.8	16.1	16.5	18.1	23.3	23.9	21.1	16.3	19.9
14	8.6	8.4	7.4	5.9	5.1	6.3	7.0	16.2	15.9	14.9	13.2	12.6	13.9	14.5	15.7	16.6	23.5	24.0	20.4	15.5	19.3
15	4.3	3.9	3.0	1.2	1.2	1.6	2.5	11.9	11.5	10.3	8.6	8.6	9.1	10.0	12.5	14.3	21.1	24.4	21.1	17.7	18.5
16	1.1	1.7	1.5	1.2	0.8	0.7	1.1	8.6	9.2	9.0	8.6	7.7	8.2	8.6	16.4	17.1	21.1	22.5	21.0	20.3	19.7
17	999.3	999.3	0.4	999.4	999.1	0.2	999.6	6.6	6.6	7.8	6.6	6.3	7.5	6.9	19.3	19.7	22.3	26.6	23.9	22.4	22.4
18	999.3	998.9	999.3	999.0	998.9	1.2	999.4	6.6	6.0	6.6	6.1	6.0	8.6	6.7	22.1	22.2	26.7	27.0	25.4	23.0	24.4
19	999.7	999.4	999.8	999.9	1.1	2.3	0.4	7.0	6.7	7.1	7.3	8.4	9.6	7.7	22.6	21.5	22.9	22.5	20.9	20.1	21.8
20	2.9	4.2	4.8	3.4	3.7	5.5	4.1	10.3	11.5	12.2	10.7	11.0	12.8	11.4	19.6	19.3	21.3	23.2	22.9	20.2	21.1
21	4.7	6.7	6.9	5.1	4.0	3.4	5.1	12.0	14.1	14.1	12.4	11.4	10.7	12.5	20.6	20.7	22.1	22.8	21.3	20.8	21.4
22	2.0	3.7	4.2	3.9	4.0	5.6	3.9	9.3	11.0	11.4	11.1	11.4	13.1	11.2	20.8	21.2	23.0	25.4	24.7	22.7	23.0
23	4.8	5.1	5.9	4.8	5.2	5.6	5.2	12.2	12.4	13.3	12.2	12.7	13.1	12.7	22.3	22.6	22.2	23.2	22.7	21.1	22.4
24	5.5	6.3	5.9	4.7	4.8	5.3	5.4	12.8	13.6	13.2	11.9	12.2	12.7	12.7	20.8	22.0	26.7	30.1	26.7	23.1	24.9
25	4.3	3.5	3.1	1.0	0.2	999.4	1.9	11.7	10.9	10.4	8.3	7.5	6.7	9.3	22.3	22.0	22.8	24.4	24.0	22.7	23.0
26	998.6	999.7	999.3	998.9	998.9	0.3	999.3	5.7	7.0	6.4	6.0	6.0	7.7	6.5	22.5	23.3	25.1	26.7	25.9	22.2	24.3
27	0.3	1.7	1.7	1.3	2.6	4.7	2.1	7.7	9.1	9.0	8.4	9.7	11.9	9.3	21.7	21.9	30.3	32.3	27.5	24.1	26.3
28	4.3	5.6	6.1	4.8	6.4	8.4	5.9	11.5	13.0	13.3	12.0	13.7	15.7	13.2	24.3	24.0	27.6	31.6	24.6	24.4	26.1
29	8.0	8.8	8.7	8.2	8.4	9.0	8.5	15.4	16.2	15.9	15.5	15.8	16.3	15.9	23.8	23.5	28.3	25.0	23.9	22.8	24.6
30	7.9	7.8	8.3	5.7	5.9	7.3	7.2	15.3	15.3	15.7	12.8	13.1	14.6	14.5	22.7	22.3	26.3	30.3	25.9	24.1	25.3
31	5.3	6.1	5.9	3.3	4.2	4.3	4.9	12.7	13.5	13.1	10.3	11.4	11.5	12.1	23.3	22.9	27.1	30.1	26.3	24.0	25.6
Mean	2.9	3.6	3.6	2.5	2.6	3.7	3.1	10.3	11.0	10.9	9.7	9.9	11.1	10.5	19.5	19.7	23.5	25.2	22.7	20.3	21.8

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND											
	Max.	Min.	Mean	Rangø	2	6	10	14	18	22</						

JULY, 1953.

Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD						H M L						H M L									
	2 6 10			14 18 22			Mean			2 6 10			14 18 22			Mean			H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
	2	6	10	14	18	22				2	6	10	14	18	22				H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	
1	20.3	19.2	19.0	19.7	18.6	18.0	19.1	10	10	5	2	6	1	5.7	—	—	st	—	—	st	ci,cc	—	—	cc	—	cu	cs	—	sc	cc	—	sc		
2	15.8	16.3	19.0	19.9	21.7	20.5	18.9	0	2	10	10	10	10	10	10	7.0	—	—	—	ci	—	st	cs	—	—	ci,cs	—	as	—	—	—	sc		
3	21.4	19.5	18.6	20.3	20.1	20.8	20.1	10	10	10	10	10	10	10	10	10.0	—	—	st,sc	—	—	ns	—	as	ns	—	as	sc	—	as	—	—	sc	
4	20.2	21.0	21.6	23.4	19.9	18.1	20.7	10	10	10	4	10	10	9.0	cs	—	—	st	—	—	st	ci	—	sc	ei	—	cu	es	—	sc	—	—	sc	
5	18.4	19.1	20.7	21.1	23.3	22.0	20.8	10	10	9	10	10	10	10	10	9.8	—	—	st	—	—	st	cs	—	sc	es	—	sc	es	—	sc	cs	—	sc
6	18.3	20.0	20.0	19.8	19.8	17.0	19.2	4	10	10	10	10	10	10	10	9.0	cs	—	sc	cs,ci	—	sc	—	—	sc,eu	—	—	sc,eu	ci	—	sc	—	—	as
7	16.8	16.9	16.5	17.3	18.2	18.9	17.4	10	10	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	—	ns	—	—	ns	—	—	ns	—	—	ns
8	22.5	23.0	24.8	25.9	25.7	24.5	24.4	10	10	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	sc	—	—	ac	sc	—	sc
9	23.3	23.8	20.9	23.6	22.7	21.2	22.6	10	10	10	10	10	10	10	10	10.0	—	—	ac	sc	—	—	sc,st	—	—	sc,eu	—	—	ns,sc	—	—	ns		
10	20.4	20.4	19.5	17.6	17.8	16.9	18.8	10	10	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ac	sc	—	—	sc	—	—	sc		
11	16.3	15.8	14.0	15.1	14.1	15.3	15.1	10	10	10	6	9	10	9.2	—	—	sc	—	—	as	—	—	sc	—	—	sc	—	—	sc	—	—	sc		
12	15.8	16.3	16.6	16.8	17.8	16.3	16.6	10	10	3	4	1	0	4.7	—	—	sc	—	—	sc	—	—	cu	—	—	cu	—	—	—	—	—	—		
13	17.5	17.5	16.1	17.7	18.0	16.7	17.3	10	8	8	3	8	0	6.2	—	—	st	ci	—	sc	—	—	cu	es	—	sc	—	—	—	—	—	—		
14	16.8	17.2	18.4	17.6	17.5	16.2	17.3	10	10	7	5	2	0	5.7	—	—	st	cs	—	sc	—	—	eu	—	—	eu,sc	—	—	ac	sc	—	eu		
15	13.8	15.3	17.6	17.2	17.8	17.6	16.6	0	10	9	4	9	10	7.0	—	—	—	ci	ac	cu	ci	—	eu	ci	—	sc	cs	—	—	—	—	—	—	
16	17.2	18.0	19.0	21.5	21.3	21.5	19.8	10	10	10	10	10	10	10	10	10.0	—	ac	—	—	ac	st	—	—	st	—	—	sc	—	—	st	—	—	st
17	21.6	22.3	24.9	26.7	25.2	25.9	24.4	10	10	10	10	9	10	9.8	—	—	ns	—	—	ns	—	—	sc	—	—	sc	—	—	as	—	—	—		
18	25.9	26.3	29.0	28.8	27.7	26.2	27.3	10	10	10	10	10	7	9.5	—	—	ns	—	—	ns	ci	—	sc,st,eu	cs	—	eu,st	es	—	—	—	—	—		
19	26.7	24.8	26.3	24.1	22.6	22.5	24.5	10	10	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	as	—	—	sc			
20	22.2	21.8	22.9	26.3	25.6	22.8	23.6	10	10	9	10	8	7	9.0	—	—	st	—	—	as	st	—	—	ns,sc	—	—	ns,sc	es	—	ac	sc	—	ac	
21	24.0	24.0	24.6	26.6	24.4	24.3	24.7	10	10	10	10	10	10	10	10	10.0	—	—	≡	—	—	st	—	—	ns,sc	—	—	ns	—	—	ns			
22	24.3	24.9	26.5	27.2	28.2	26.2	26.2	10	10	10	10	10	10	10	10	10.0	—	—	ns	—	—	st	cs	—	sc	es	—	sc	—	—	sc			
23	26.2	26.3	25.6	27.7	27.1	23.9	26.1	10	10	10	10	10	7	9.5	—	—	sc	—	—	sc	—	—	ns	—	—	sc,st	cc	—	sc					
24	23.9	25.3	26.8	25.5	26.3	26.2	25.7	10	10	6	5	10	10	8.5	—	—	sc	—	—	sc	—	—	sc	es	—	sc,ns	es	—	sc	—	—	sc		
25	25.8	25.5	26.6	29.1	27.7	26.2	26.8	10	10	10	10	10	6	9.3	—	—	ns	—	—	ns	—	—	ns	as	ns	ci	—	sc	ci,cc	eu				
26	26.3	26.3	26.5	26.1	26.6	25.6	26.2	10	10	10	8	3	0	6.8	—	—	sc	cc	—	sc	cc	—	sc	—	—	sc	ci	—	sc	—	—	sc		
27	25.1	25.6	26.6	29.2	28.0	27.8	27.1	9	6	8																								

AUGUST, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	4.3	4.4	4.2	1.7	2.0	1.5	3.0	11.7	11.8	11.4	9.0	9.2	8.8	10.3	23.5	23.7	26.6	26.9	24.5	23.7	24.8
2	0.2	999.7	998.9	995.7	995.1	996.8	997.7	7.4	7.0	6.0	2.7	2.3	4.2	4.9	23.5	23.2	26.2	27.4	25.6	21.2	24.5
3	998.3	1.7	3.5	3.7	3.9	7.0	3.0	5.7	9.1	10.9	10.9	11.3	14.4	10.4	19.6	20.7	24.6	26.5	23.9	19.4	22.5
4	6.7	7.9	8.8	8.0	8.4	9.9	8.3	14.1	15.4	16.3	15.4	15.9	17.2	15.7	18.0	18.1	21.9	24.7	21.4	20.2	20.7
5	9.1	9.7	9.7	7.9	8.4	9.5	9.1	16.6	17.2	17.0	15.1	15.8	16.8	16.4	19.7	20.3	25.0	27.7	24.7	22.4	23.3
6	7.1	7.3	7.0	5.0	4.3	4.8	5.9	14.4	14.6	14.3	12.2	11.7	12.2	13.2	22.1	22.5	27.1	27.7	24.7	22.1	24.4
7	4.0	3.0	1.7	0.2	999.1	0.3	1.4	11.4	10.3	9.1	7.5	6.3	7.7	8.7	21.8	21.3	22.7	24.0	23.5	21.3	22.4
8	999.1	999.4	999.1	997.6	997.3	998.1	998.4	6.4	6.7	6.3	4.8	4.6	5.5	5.7	21.3	21.1	25.4	24.4	24.8	22.4	23.2
9	997.1	998.0	999.1	999.7	0.8	2.1	999.5	4.6	5.3	6.3	7.0	8.2	9.5	6.8	20.7	21.0	24.3	24.2	22.5	22.1	22.5
10	1.7	3.1	3.3	2.0	2.9	4.3	2.9	9.1	10.4	10.6	9.2	10.0	11.5	10.1	21.7	22.1	26.5	29.5	27.2	24.4	25.2
11	4.4	5.1	4.3	2.6	2.7	3.5	3.8	11.8	12.3	11.5	9.6	9.9	10.7	11.0	23.8	23.6	26.6	30.9	27.4	25.4	26.3
12	2.9	3.3	3.3	1.0	1.6	2.7	2.5	10.1	10.6	10.4	8.2	9.0	10.0	9.7	24.1	24.1	28.1	30.5	24.3	24.0	25.9
13	1.3	2.6	2.4	0.3	999.0	999.3	0.8	8.7	9.7	9.7	7.5	6.1	6.6	8.1	23.1	23.2	26.8	29.4	25.5	21.9	25.0
14	997.3	996.4	995.8	993.9	995.1	997.7	996.0	4.7	3.8	3.1	1.1	2.4	5.1	3.4	21.6	20.5	20.5	22.9	23.6	22.0	21.9
15	997.7	999.0	0.7	999.8	1.3	3.8	0.4	5.1	6.3	8.0	7.0	8.7	11.1	7.7	18.7	19.0	23.0	27.5	22.9	18.9	21.7
16	4.3	3.8	4.7	4.0	5.0	6.7	4.8	11.8	11.3	11.9	11.3	12.4	14.0	12.1	16.9	18.1	27.1	28.0	23.5	20.0	22.3
17	5.7	5.2	4.2	1.2	0.0	999.5	2.6	13.2	12.7	11.5	8.4	7.3	6.9	10.0	17.3	17.4	21.8	23.5	24.1	24.3	21.4
18	999.0	999.4	998.9	997.6	996.7	0.0	998.6	6.3	6.6	6.0	4.8	3.9	7.4	5.8	23.9	24.4	23.3	26.6	24.7	21.0	24.0
19	999.9	1.2	2.1	1.3	1.7	2.9	1.5	7.3	8.7	9.5	8.6	9.1	10.3	8.9	20.7	19.0	23.7	24.4	22.2	20.1	21.7
20	1.9	2.6	1.5	999.1	999.1	999.1	0.6	9.2	10.0	8.8	6.3	6.3	6.3	7.8	20.0	18.4	21.1	27.3	26.0	27.7	23.4
21	997.0	997.1	999.0	999.9	2.1	3.5	999.8	4.2	4.4	6.1	7.3	9.3	10.9	7.0	24.4	25.4	26.2	24.7	23.9	21.0	24.3
22	3.7	3.3	3.7	3.0	5.1	6.6	4.2	11.1	10.7	11.0	10.3	12.6	14.1	11.6	19.9	19.9	25.7	23.6	20.0	14.5	20.6
23	6.4	7.0	7.7	5.5	5.1	4.8	6.1	14.0	14.4	15.1	13.0	12.6	12.3	13.6	13.8	14.5	17.9	20.5	19.1	17.7	17.3
24	1.2	999.8	999.0	998.4	999.9	2.0	0.1	8.7	7.3	6.3	5.7	7.4	9.5	7.5	16.9	17.1	18.8	19.9	18.4	15.3	17.7
25	2.3	2.9	3.0	1.6	1.5	1.9	2.2	9.7	10.4	10.4	9.0	9.0	9.5	9.7	12.2	12.6	19.5	20.3	17.8	13.6	16.0
26	1.2	1.2	1.3	0.3	0.4	1.6	1.0	8.8	8.8	8.8	7.7	7.8	9.1	8.5	12.1	12.5	17.2	22.0	18.9	17.5	16.7
27	1.1	1.1	2.3	1.6	2.6	2.7	1.9	8.6	8.6	9.7	9.1	10.0	10.1	9.4	15.9	16.2	17.1	16.9	16.3	15.7	16.4
28	2.7	4.3	5.5	5.6	8.7	11.1	6.3	10.3	11.9	13.0	13.0	16.2	18.7	13.9	15.3	14.7	19.5	21.3	19.9	16.3	17.8
29	12.3	14.6	15.8	15.0	15.9	17.2	15.1	20.0	22.3	23.3	22.3	23.4	24.8	22.7	12.7	12.6	20.1	21.9	19.8	17.9	17.5
30	17.1	17.3	18.1	16.6	16.0	16.8	17.0	24.7	25.0	25.6	24.0	23.7	24.4	24.6	15.0	14.8	20.0	22.4	17.8	14.1	17.4
31	15.9	15.8	14.9	12.2	11.5	11.7	13.7	23.5	23.5	22.3	19.5	19.0	19.1	21.2	12.1	10.9	21.6	24.5	18.8	17.1	17.5
Mean	3.3	3.8	4.0	2.6	3.0	4.2	3.5	10.7	11.2	11.3	9.9	10.4	11.6	10.9	19.1	19.1	23.1	24.9	22.5	20.2	21.5

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND											
	Max.	Min.	Mean	Range	2	6	10	14								

AUGUST, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD																
	2		6		10		14		18		22		Mean		2	6	L	H	M	L	H	M	L	H	M	L			
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L			
1	27.5	27.4	29.3	30.2	29.0	28.6	28.7	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	—	sc,ns	—	—	ns			
2	28.2	27.7	28.4	28.8	26.6	23.2	27.2	10	10	10	10	10	10	10.0	—	as	sc	—	—	st	ci	—	sc,eu	—	—	sc,eu			
3	21.2	20.2	20.5	20.1	21.2	20.7	20.7	2	10	7	2	2	4	4.5	es	—	—	cs	—	—	sc	—	—	cu	cc	—	cu		
4	19.7	19.6	22.5	23.3	21.0	21.0	21.2	5	10	10	10	10	10	9.2	—	—	sc	—	ac	st	—	—	sc	—	—	sc			
5	21.7	22.1	24.4	27.1	27.2	25.5	24.7	10	10	10	9	8	0	7.8	—	—	sc	—	—	sc	—	—	cu	cc	—	cu			
6	25.9	26.6	28.0	27.6	26.7	25.0	26.6	10	10	10	10	10	7	9.5	—	—	st	—	—	st	cs	—	sc,st,eu	—	—	sc,st			
7	25.4	24.9	26.2	26.5	26.1	24.5	25.6	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	sc	—	—	st			
8	24.7	24.4	26.7	27.4	28.3	24.6	26.0	10	10	10	10	10	10	10.0	—	—	st	—	—	ns	ci	—	sc	cs	—	sc			
9	22.9	22.5	24.0	26.1	25.0	24.8	24.2	10	10	10	10	10	10	10.0	—	—	sc	—	as	sc	cs	—	as	sc	—	st			
10	25.3	26.1	29.9	30.5	31.0	29.8	28.8	10	10	10	4	10	10	9.0	—	—	st	—	—	ns	—	—	sc	—	—	ac			
11	29.0	28.9	30.6	30.9	33.0	29.6	30.3	10	10	10	10	10	10	10.0	—	as	—	—	ns	—	—	st	cc	ac	eu	ci	ac	eu	
12	28.3	27.6	32.0	30.1	28.9	28.6	29.3	10	10	10	9	10	10	9.8	—	—	st	—	—	sc,st	es	—	cu	—	—	sc,ns			
13	27.8	27.7	27.2	28.5	27.1	25.2	27.3	10	10	10	9	10	10	9.8	—	—	st	—	—	st	—	ac	eu	cs	—	sc	—	ns	
14	25.1	23.7	23.7	27.2	27.0	24.9	25.3	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	ci	—	ns,sc	cc	ac	sc	—	sc	
15	20.4	21.4	21.8	19.3	21.2	19.8	20.7	6	10	10	3	9	0	6.3	—	—	—	cc,cs	—	sc	es	—	ac	sc	—	ac	sc	—	—
16	18.3	20.2	19.7	23.8	21.5	21.5	20.8	0	6	3	7	7	6	4.8	—	—	—	cc	—	sc	es	—	cu	es	—	sc	es	—	—
17	19.0	19.3	24.1	26.4	29.0	28.9	24.5	2	10	10	10	10	10	8.7	es	—	eu	—	—	st	—	—	ns,sc	—	—	sc,ns	—	—	ns
18	26.1	23.9	22.3	25.2	20.9	17.7	22.7	8	10	10	10	10	9	9.5	—	—	sc	—	as	sc	—	as	sc	cs	ac	sc	—	sc	
19	17.9	18.6	19.7	21.5	23.2	21.4	20.4	1	10	10	10	10	10	8.5	—	—	sc	—	as	sc	cs	as	sc	—	as	sc	—	sc	
20	22.1	20.6	22.6	27.9	29.5	24.3	24.5	10	10	10	9	10	7	9.3	—	—	ns	—	—	st	ci	—	cu	ei	—	cu	—	—	
21	22.8	26.3	27.6	24.4	21.9	19.4	23.7	1	10	10	9	9	3	7.0	—	—	eu	ci	—	sc,eu	—	as	sc	cs	—	sc	cc,ci	ac	sc
22	20.8	21.2	18.1	18.1	17.8	15.5	18.6	9	9	9	10	7	4	8.0	—	—	sc	—	ac	sc	cs	ac	sc	—	as	eu	—	sc	
23	15.3	15.8	18.0	19.0	18.7	18.0	17.5	10	10	10	10	10	10	10.0	—	ac	—	—	as	—	as	sc	—	as	sc	—	sc,st	—	as
24	18.9	19.1	20.1	20.2	19.1	14.6	18.7	10	10	10	10	10	1	8.5	—	—	ns	—	—	ns	—	—	st	—	—	sc	—	sc	
25	13.4	14.4	16.8	16.8	16.4	14.6	15.4	6	10	10	8	1	2	6.2	—	ac	—	—	—	—	—	—	—	—	—	—	—	—	—
26	13.6	14.2	16.7	18.0	19.3	18.8	16.8	10	10	10	9	10	10	9.8	—	ac	—	—	—	—	—	—	—	—	—	—	—	—	—
27	17.3	17.9	18.6	17.8	17.6	17.3	17.8	10	10	10	10	10	10	10.0	—	as	—	—	sc	—	—	ns	—	—	sc	—	—	as	sc
28	17.0	16.2	17.5	19.0	20.0	16.7	17.7	10	10	10	9	8	4	8.5	—	—	ns	—	—	st	—	—	sc	cc	—	sc	—	sc	
29	14.0	14.3	15.2	19.2	20.2	18.6	16.9	0	5	10	10	10	10	7.5	—	—	—	—	sc	ci	—	sc	—	as	sc	ci	—	sc	
30	16.5	16.3	17.0	18.1	16.1	15.1	16.5	10	10	8	6	6	10	8.3	cs	—	—	—	as	sc,	—	as	sc	cc	—	sc	—	sc	
31	13.8	12.7	18.0	18.5	17.6	17.8	16.4	5	4	2	2	4	10	4.5	cs	—	—	—	sc,st	—	—	cu	—	—	sc	cc	ac	sc	—

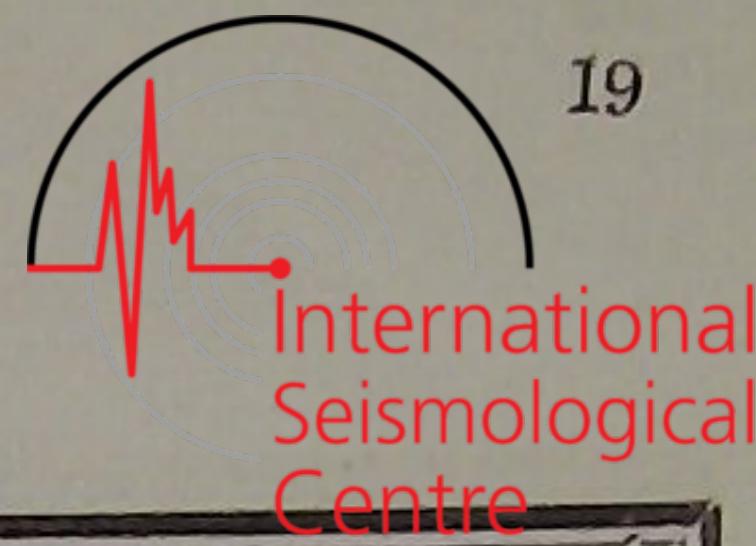
SEPTEMBER, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	10.9	10.3	10.1	9.5	8.8	9.3	9.8	18.4	17.9	17.6	17.0	16.3	16.8	17.3	15.3	15.9	19.6	20.2	19.4	17.9	18.1
2	8.4	8.6	8.2	6.7	6.1	6.7	7.5	15.9	16.0	15.5	14.0	13.5	14.1	14.8	17.4	17.6	22.6	25.3	21.1	18.2	20.4
3	4.7	2.3	0.2	998.7	1.2	3.5	1.8	12.2	9.7	7.7	6.0	8.6	11.0	9.2	16.8	17.3	18.7	21.5	19.5	15.1	18.2
4	3.5	6.6	5.3	3.9	3.9	3.4	4.4	11.1	14.1	12.8	11.3	11.4	11.0	12.0	13.3	13.3	21.6	22.4	17.3	14.8	17.1
5	1.9	1.2	0.8	998.9	997.7	999.8	0.1	9.3	8.8	8.3	6.0	5.1	7.3	7.5	14.2	14.1	16.9	24.0	20.9	18.0	18.0
6	999.9	1.9	2.7	1.3	2.6	4.7	2.2	7.4	9.3	10.0	8.7	9.9	12.2	9.6	14.5	14.3	21.4	22.9	19.2	15.9	18.0
7	5.0	5.1	5.1	4.0	4.3	5.1	4.8	12.4	12.6	12.4	11.4	11.8	12.6	12.2	14.7	14.6	18.8	19.3	18.3	16.2	17.0
8	4.7	5.2	4.4	2.4	3.0	4.7	4.1	12.2	12.8	11.9	9.6	10.4	12.2	11.5	16.2	15.8	19.2	25.2	19.9	17.5	19.0
9	4.8	6.1	7.0	6.0	7.3	9.1	6.7	12.3	13.6	14.4	13.2	14.7	16.7	14.2	16.1	15.7	21.8	25.3	18.9	15.9	19.0
10	9.7	11.3	10.7	9.2	10.0	11.5	10.4	17.3	18.9	18.1	16.6	17.5	19.1	17.9	13.7	14.1	23.1	25.1	19.1	15.5	18.4
11	10.4	10.4	9.5	6.9	5.5	4.2	7.8	18.0	18.1	17.0	14.3	12.8	11.7	15.3	13.6	13.4	21.5	21.7	20.4	19.1	18.3
12	3.7	5.6	6.7	4.4	5.7	6.6	5.5	11.1	13.1	14.0	11.8	13.1	13.9	12.8	17.6	15.9	24.4	27.0	21.8	20.1	21.1
13	4.7	4.6	4.2	4.6	7.1	9.3	5.8	12.0	12.0	11.7	11.9	14.4	16.8	13.1	19.7	19.1	19.0	19.9	19.3	18.1	19.2
14	10.3	11.5	12.2	10.9	10.3	10.1	10.9	17.9	19.1	19.7	18.3	17.7	17.7	18.4	17.9	17.9	18.7	18.9	17.3	16.3	17.8
15	8.6	9.5	10.9	10.0	11.1	12.0	10.4	16.0	17.0	18.3	17.5	18.6	19.7	17.9	16.5	16.8	19.0	21.6	19.9	18.1	18.7
16	11.4	12.2	11.4	8.8	9.0	9.5	10.4	18.9	19.8	18.9	16.2	16.4	17.0	17.9	17.9	15.9	21.4	25.5	20.3	18.2	19.9
17	8.2	9.0	9.0	7.3	7.4	7.9	8.1	15.7	16.4	16.4	14.6	14.9	15.4	15.6	16.0	15.1	19.1	21.4	19.9	19.1	18.4
18	6.9	6.6	5.0	3.7	3.1	3.8	4.9	14.3	14.0	12.4	11.1	10.6	11.3	12.3	17.8	16.5	17.7	18.6	16.9	16.8	17.4
19	4.4	6.0	7.0	6.1	7.3	10.3	6.9	11.9	13.6	14.3	13.5	14.7	17.9	14.3	16.1	14.7	22.1	24.1	19.8	15.1	18.7
20	12.4	14.4	14.9	12.6	13.6	16.3	14.0	20.0	22.0	22.4	20.0	21.2	24.0	21.6	12.1	10.5	17.5	22.3	16.5	11.5	15.1
21	16.8	17.9	18.0	15.9	15.3	17.2	16.9	24.6	25.6	25.6	23.3	22.9	24.8	24.5	8.9	9.5	16.7	22.8	16.4	12.7	14.5
22	16.3	16.7	16.7	14.1	14.3	14.7	15.5	24.0	24.3	24.2	21.6	21.9	22.3	23.1	10.8	12.4	18.1	22.2	15.7	12.9	15.4
23	13.3	12.7	11.4	9.6	9.7	8.8	10.9	21.0	19.8	18.9	17.0	17.2	16.3	18.4	12.6	13.2	20.8	20.6	17.3	17.5	17.0
24	6.6	5.7	5.1	3.7	4.2	5.1	5.1	14.0	13.3	12.6	11.0	11.7	12.7	12.6	16.8	16.9	20.6	21.7	17.1	16.3	18.2
25	4.8	4.7	4.3	999.5	995.8	989.1	999.7	12.4	12.3	11.8	7.0	3.3	996.4	7.2	16.1	16.3	17.3	18.6	17.7	18.0	17.3
26	977.6	977.2	988.8	993.1	998.0	0.4	989.2	984.7	984.4	996.2	0.4	5.3	7.9	996.5	23.0	21.9	21.4	22.6	19.7	18.8	21.2
27	1.2	4.6	6.1	5.7	8.3	9.9	6.0	8.7	10.9	13.6	13.1	15.8	17.5	13.3	16.6	16.8	20.7	22.0	16.9	13.1	17.7
28	11.0	12.4	13.1	11.3	12.8	13.3	12.3	18.6	20.0	20.6	18.6	20.4	21.0	19.9	11.7	12.0	21.7	23.9	18.0	14.4	17.0
29	11.9	11.9	11.0	9.1	9.9	10.1	10.7	19.5	19.5	18.4	16.4	17.2	17.6	18.1	14.4	14.7	19.7	23.7	20.5	19.6	18.8
30	8.7	9.2	9.3	7.0	7.7	7.4	8.2	16.2	16.7	16.7	14.3	15.1	14.9	15.7	17.3	17.3	20.9	23.1	19.3	17.3	19.2

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND											
	Max.	Min.	Mean	Range	2	6	10	14	18	22	Mean	6 obs.	24 h.			
1	20.6	15.2	17.9	5.4	ENE 0.7	N 1.1	SSE 1.7	SSE 1.5	SSE 0.9	SSW 2.4	1.4	1.2				
2	25.7	17.2	21.5	8.5	S 1.1	E 0.7	S 0.9	S 3.2	S 1.3	S 2.6	1.6	1.7			</td	

SEPTEMBER, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0—10)						FORMS OF CLOUD																															
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L																		
1	16.1	16.6	19.2	19.0	20.3	18.6	18.3	10	10	10	10	10	10	10.0	—	—	sc	—	—	sc	—	—	st,sc	—	—	st,sc	—	—	st															
2	18.5	18.8	19.6	21.1	21.2	19.3	19.8	10	10	6	9	7	9	8.5	—	—	st	—	—	sc	—	—	cu	cs	—	cu	—	—	sc															
3	18.6	19.0	20.8	23.5	16.4	13.1	18.6	10	10	10	10	8	8	9.3	—	as	—	—	—	st	—	—	st	—	—	sc	—	—	sc															
4	13.6	14.0	14.6	15.2	16.1	15.5	14.8	10	10	7	10	10	3	8.3	—	ac	sc	cs	—	sc	ci	—	cu	cs,cl,cc	—	cu	cs	—	—	cs														
5	15.7	15.2	16.5	20.9	21.7	18.5	18.1	7	10	10	10	10	0	7.8	cs	—	—	ci	as	—	—	as	—	ci	ac	cu	es	—	sc	—	—													
6	15.5	15.8	16.5	14.9	15.1	16.3	15.7	0	7	8	8	9	10	7.0	—	—	—	—	—	ac,as	cu	—	ac	cu	—	ac	sc	—	—	sc														
7	14.7	15.4	17.6	18.8	19.1	17.5	17.2	10	10	10	10	10	10	10.0	—	—	sc	—	—	sc	—	as	—	—	as	—	—	as	—	—														
8	18.0	17.6	18.7	16.4	19.2	18.8	18.1	10	10	6	4	5	1	6.0	—	as	—	—	—	st	—	—	ac,sc,st	—	ac	eu	—	ac	sc	—	—	sc												
9	17.6	17.1	19.9	17.6	18.5	16.6	17.9	10	10	3	3	7	4	6.2	—	—	st	—	—	st	—	—	sc	—	—	cu	—	—	sc	—	—													
10	15.0	15.4	18.4	18.5	17.8	16.4	16.9	0	8	2	1	1	0	2.0	—	—	—	—	—	sc,st	—	—	cu	—	—	cu	es	—	—															
11	15.1	15.2	19.7	19.2	20.8	20.5	18.4	6	6	10	10	10	10	8.7	—	—	st	—	—	—	—	sc	—	—	st	—	—	sc	—	—														
12	19.5	18.1	20.4	22.9	22.8	22.3	21.0	0	10	6	7	8	10	6.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—															
13	22.3	21.7	20.8	21.8	21.2	20.0	21.3	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	st	—	—	st	—	—													
14	20.1	19.9	20.8	20.2	19.4	18.2	19.8	10	10	10	10	10	10	10.0	—	—	st	—	—	ns	—	—	st	—	—	ns	—	—	ns	—	—													
15	18.4	18.8	19.8	20.8	21.2	20.0	19.8	10	10	10	10	10	10	10.0	—	—	st	—	—	sc	—	—	ac	sc	—	—	sc	—	—	sc	—	—												
16	19.7	17.7	17.2	14.8	20.5	18.8	18.1	10	10	2	8	10	10	8.3	—	—	sc	—	—	—	ci	—	cu	ci	—	cu	ci	—	sc	—	as	—												
17	16.7	15.1	16.3	20.6	21.4	21.7	18.6	10	10	10	10	10	10	10.0	—	—	st	—	—	as	st	—	as	cu	—	—	st	—	—	ns	—	—												
18	19.4	18.4	19.5	19.8	18.6	18.6	19.1	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	ns	—	—	st	—	—													
19	17.9	16.0	19.7	18.4	18.8	16.1	17.8	10	7	7	8	10	0	7.0	—	—	st	ci	ac	sc	cc,cs	—	cu	cs,cc	—	cu	ci,cc	—	cu	—	—	sc	—	—										
20	11.9	11.8	11.9	12.5	15.9	12.6	12.8	0	10	6	2	2	0	3.3	—	—	—	ei,es	—	—	es	—	—	ee	—	—	sc	—	—	sc	—	—	sc	—	—									
21	10.8	11.9	15.0	15.3	15.6	13.7	13.7	0	10	3	3	1	2	3.2	—	—	—	st	—	—	es	ac	sc	es	—	sc	cs	—	—	sc	—	—	sc	—	—									
22	12.6	14.1	16.0	16.6	15.0	13.9	14.7	3	10	9	10	6	10	8.0	—	—	sc	—	—	—	ci	—	eu	ci,cc	—	eu	ci	—	—	cs	—	—	cs	—	—									
23	13.9	14.7	16.6	17.7	16.9	17.1	16.2	10	10	10	10	10	10	10.0	—	ac	—	—	as,ac	sc	—	ac	sc	—	as	sc	—	—	ns	—	—	ns	—	—	ns	—	—							
24	18.6	19.1	20.9	21.0	18.6	17.4	19.3	10	10	9	10	10	10	9.8	—	—	ns	—	—	st	—	—	sc	—	—	ns	—	—	st	—	—	ns	—	—	ns	—	—							
25	17.7	18.2	19.2	20.8	19.1	19.9	19.2	10	10	10	10	10	10	10.0	—	—	ns	—	—	ns	—	—	ns	—	—	ns	—	—	as	ns	—	—	ns	—	—	ns	—	—						
26	26.7	24.1	19.8	19.0	16.1	16.5	20.4	10	10	10	6	2	6	7.3	—	—	ns	—	—	sc,st	—	—	sc,st	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—				
27	16.3	16.4	16.1	13.1	12.9	13.0	14.6	4	9	8	6	6	1	5.7	—	—	sc	—	—	ac	sc	—	—	sc	—	—	cu,sc	—	—	sc	—	—	ac	sc	—	—	sc	—	—	sc	—	—		
28	12.8	13.2	14.9	15.1	17.2	15.0	14.7	7	7	3	2	0	10	4.8	—	—	sc	—	—	ac	sc	ci,cc	—	sc	ci	—	eu	—	—	eu	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—
29	15.7	15.7	18.5	22.2	22.4	21.8	19																																					



OCTOBER, 1953.

Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	7.0	9.0	9.5	7.5	7.9	8.7	8.3	14.6	16.6	17.0	14.9	15.4	16.3	15.8	16.1	15.0	19.0	20.3	14.5	12.2	16.2
2	6.9	5.2	3.4	0.6	0.3	1.7	3.0	14.4	12.8	11.0	8.0	7.9	9.3	10.6	11.0	11.1	12.9	17.2	15.4	10.1	13.0
3	1.7	3.0	3.1	3.3	6.3	8.0	4.2	9.5	10.6	10.4	10.6	13.7	15.7	11.8	7.9	8.7	20.3	21.1	14.8	10.3	13.9
4	8.6	9.2	9.3	7.0	7.3	8.0	8.2	16.3	17.1	16.8	14.4	14.9	15.8	15.9	5.8	4.9	16.8	21.3	14.7	9.3	12.1
5	7.3	7.7	7.1	4.7	7.0	9.3	7.2	15.0	15.4	14.6	12.0	14.7	17.2	14.8	7.0	8.3	17.4	20.7	12.5	7.8	12.3
6	9.3	10.9	11.1	9.2	11.0	12.0	10.6	17.2	18.7	18.7	16.7	18.7	19.9	18.3	5.3	3.3	16.1	19.1	12.7	7.7	10.7
7	11.8	12.4	11.5	9.2	9.0	9.2	10.5	19.5	20.3	19.1	16.7	16.6	17.1	18.2	5.3	6.0	16.5	20.8	13.2	8.1	11.7
8	9.1	9.0	8.6	5.5	7.3	7.1	7.8	16.8	16.8	16.2	12.8	14.7	14.9	15.4	5.7	3.9	15.2	21.5	15.3	10.7	12.1
9	5.5	5.9	5.1	1.6	1.5	1.9	3.6	13.2	13.6	12.7	9.1	9.0	9.5	11.2	10.2	11.1	14.6	18.4	17.0	15.8	14.5
10	0.6	0.8	1.9	1.0	2.0	3.3	1.6	8.2	8.3	9.2	8.3	9.5	10.9	9.1	13.9	13.1	17.9	20.7	15.9	14.4	16.0
11	3.8	6.3	8.4	8.2	11.3	13.6	8.6	11.4	13.9	16.0	15.7	19.0	21.3	16.2	12.7	12.9	15.9	18.1	13.1	10.5	13.9
12	13.2	14.3	13.2	9.6	8.4	6.6	10.9	21.1	22.1	20.8	17.1	15.9	14.1	18.5	6.6	5.3	14.6	18.2	16.1	15.1	12.7
13	4.4	4.7	5.6	5.1	7.9	9.7	6.2	12.0	12.3	13.1	12.6	15.5	17.5	13.8	13.5	13.0	15.6	16.3	12.8	9.9	13.5
14	10.3	11.5	14.0	14.3	16.7	19.8	14.4	18.0	19.3	21.6	21.9	24.4	27.7	22.2	9.1	7.1	16.2	16.5	10.4	5.9	10.9
15	21.0	22.0	22.1	19.8	20.4	21.6	21.2	29.0	30.0	29.9	27.4	28.3	29.5	29.0	4.0	2.6	11.5	17.1	9.9	5.7	8.5
16	21.5	21.6	22.4	20.4	21.7	23.3	21.8	29.5	29.6	30.1	28.0	29.5	31.1	29.6	3.3	1.4	11.8	18.9	10.9	5.5	8.6
17	22.9	23.7	23.3	19.5	19.9	19.4	21.5	30.9	31.7	31.0	27.0	27.7	27.3	29.3	3.1	3.3	10.8	18.5	12.9	7.6	9.4
18	18.6	18.3	17.3	14.4	13.9	14.4	16.2	26.4	26.1	25.1	21.9	21.5	22.1	23.9	6.9	5.2	14.8	20.5	15.1	9.3	12.0
19	13.6	12.8	12.0	8.0	8.0	7.7	10.4	21.5	20.7	19.7	15.5	15.7	15.4	18.1	7.2	7.4	15.8	22.2	14.8	10.0	12.9
20	6.1	5.3	5.0	3.0	3.8	5.7	4.8	13.9	13.2	12.4	10.4	11.4	13.5	12.5	6.4	3.6	15.9	20.5	13.6	8.2	11.4
21	5.9	6.9	6.6	4.4	5.1	4.8	5.6	13.6	14.4	14.0	11.8	12.6	12.4	13.1	9.1	9.1	14.9	19.1	15.9	14.9	13.8
22	5.7	6.3	7.9	7.9	10.7	12.7	8.5	13.3	13.9	15.5	15.4	18.3	20.4	16.1	12.7	12.2	17.0	16.7	14.0	10.5	13.9
23	13.9	15.4	16.4	15.0	16.2	17.3	15.7	21.6	23.3	24.0	22.4	23.8	25.1	23.4	7.7	4.3	14.3	19.6	12.5	8.0	11.1
24	16.0	15.9	15.8	12.8	12.7	13.1	14.4	23.9	25.1	23.5	20.3	20.3	20.8	22.3	6.9	6.8	10.3	18.1	13.4	8.9	10.7
25	12.4	13.2	14.1	13.2	15.4	16.7	14.2	20.3	21.0	21.7	20.8	23.1	24.6	21.9	8.2	7.1	15.1	17.9	10.2	8.0	11.1
26	16.8	17.2	17.7	16.2	17.5	19.3	17.5	24.7	25.2	25.5	23.8	25.2	27.1	25.3	4.3	0.9	10.5	15.3	7.6	3.8	7.1
27	19.8	21.6	22.0	20.2	20.6	21.7	21.0	27.8	29.7	29.9	27.8	28.4	29.7	28.9	1.5	-1.1	9.5	16.9	10.4	3.7	6.8
28	20.6	20.6	18.1	14.3	12.8	8.7	15.9	28.7	28.4	26.0	21.9	20.4	16.4	23.6	1.2	2.8	7.5	12.1	10.8	10.7	7.5
29	4.8	4.4	5.1	4.2	6.7	8.4	5.6	12.4	12.0	12.7	11.7	14.3	16.3	13.2	11.7	12.3	15.4	17.7	12.9	6.7	12.8
30	9.6	11.3	12.4	11.1	13.9	15.3	12.3	17.5	19.1	20.0	18.6	21.5	23.0	20.0	4.0	2.5	12.0	18.7	13.5	11.9	10.4
31	15.5	15.1	15.1	13.1	11.4	10.3	13.4	23.3	22.9	22.7	20.7	19.1	17.9	21.1	11.0	9.3	14.3	13.1	12.6	13.1	12.2

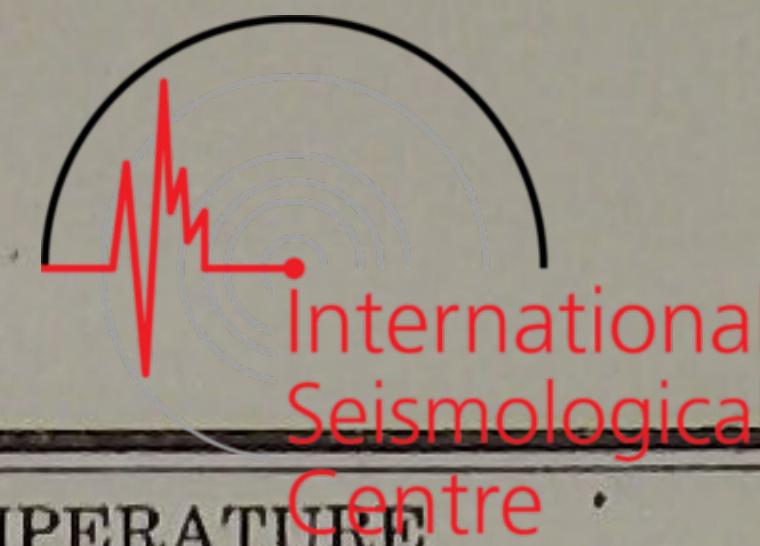
Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND												Mean	
	Max.	Min.	Mean	Range	2		6		10		14		18		22		6 obs.	24 h.
					W	NNW	W	NNW	SSE	NW	N	NNW	ESE	W	W	SW	SSE	NNW
1	21.8	10.7	16.3	11.1	W	2.0	W	0.9	NNW	4.4	NNW	6.5	ESE	0.9	W	1.3	2.7	2.0
2	18.4	8.4	13.4	10.0	NNW	0.7	—	0.2	—	0.0	—	0.4	S	1.7	—	0.4	0.6	0.5
3	23.4	6.8	15.1	16.6	SE	1.1	—	0.2	SSE	1.3	NW	5.2	—	0.2	NE	1.7	1.6	1.6
4	21.7	4.0	12.9	17.7	NW	0.7	—	0.0	N	1.1	NNW	2.0	—	0.0	—	0.0	0.6	0.9
5	21.5	6.4	14.0	15.1	NNW	1.1	—	0.0	ESE	0.7	WNW	6.1	N	0.9	W	0.7	1.6	1.6
6	19.8	3.0	11.4	16.8	N	1.1	—	0.0	NNE	3.0	NNW	3.2	SW	2.4	—	0.0	1.6	1.6
7	21.8	4.8	13.3	17.0	W	1.5	WNW	0.9	E	0.7	SE	2.4	SSE	1.5	NNW	0.9	1.3	1.5
8	22.4	3.7	13.1	18.7	NNW	0.9	ENE	0.9	WNW	1.1	—	0.2	SSE	4.2	—	0.0	1.2	1.1
9	19.0	9.3	14.2	9.7	NW	0.7	—	0.0	—	0.0	SSE	3.6	SSE	6.7	SSE	3.2	2.5	2.6
10	21.4	13.0	17.2	8.4	ENE	1.1	NNE	1.1	NW	0.9	NNE	0.7	SSE	4.8	—	0.2	1.4	1.2
11	18.6	8.3	13.5	10.3	NNW	1.1	N	3.4	NNW	6.3	WNW	4.6	WNW	3.4	E	2.0	3.5	2.5
12	19.2	4.8	12.0	14.4	NW	1.5	—	0.0	SSE	1.3	SSE	9.1	S	0.9	S	3.2	2.7	2.6
13	19.0	9.8	14.4	9.2	E	1.5	NE	1.1	WNW	4.8	WNW	3.6	—	0.2	SSE	1.5	2.1	2.6
14	17.5	5.1	11.3	12.4	SSE	1.7	—	0.4	WNW	6.1	NNW	5.2	WNW	1.7	NW	1.1	2.7	2.5
15	17.9	2.2	10.1	15.7	N	1.1	NW	2.2	—	0.2	W	1.3	SW	0.7	NNW	1.3	1.1	1.4
16	19.2	1.2	10.2	18.0	N	0.7	—	0.2	NNW	1.1	S	2.0	S	2.2	—	0.4	1.1	1.3
17	19.2	1.0	10.1	18.2	NNW	0.7	—	0.0	—	0.4	S	5.5	SE	3.0	SE	1.1	1.8	1.7
18	21.4	5.0	13.2	16.4	—	0.0	NNW	0.9	—	0.4	SSE	6.7	SSE	3.6	—	0.4	2.0	1.9
19	23.4	6.0	14.7	17.4	—	0.2	—	0.0	N	0.9	W	0.9	SSW	2.6	N	0.9	0.9	1.1
20	21.8	3.5	12.7	18.3	—	0.2	NNW	1.1	N	3.8	NW	2.2	WSW	1.3	WSW	0.7	1.6	1.5
21	19.6	8.7	14.2	10.9	WSW	1.7	E	1.1	SE	4.6	SSE	4.6	SSE	4.2	S	4.2	3.4	3.1
22	18.4	10.4	14.4	8.0	SSE	0.9	NW	1.3	N	2.2	N	3.0	NNW	3.8	NE	0.7	2.0	2.9
23	20.0	4.0	12.0	16.0	N	1.7	NW	1.5	NW	0.7	SE	1.3	SSE	3.6	NNW	1.1	1.7	1.8
24	20.6	5.8	13.2	14.8	—	0.0	—	0.4	NNW	0.7	—	0.0	W	2.6	—	0.0	0.6	0.8
25	18.3	6.1	12.2	12.2	—	0.2	NNE	0.7	NNE	1.3	—	0.4	S	2.6	NE	1.5	1.1	1.0
26	15.5	0.7	8.1	14.8	WNW	2.6	NNE	0.9	NNW	1.1	NNW	3.8	W	2.0	N	1.1	1.9	1.9
27	17.5	-1.2	8.2	18.7	NW	1.3	—	0.4	NNW	1.1	WSW	1.3	SSE	5.0	NNE	0.7	1.6	1.5
28	12.6	0.6	6.6	12.0	NW	0.7	—	0.2	—	0.2	N	1.1	—	0.0	NNW	2.0	0.7	0.6
29	19.0	5.6	12.3	13.4	NW	2.4	—	0.0	NNW	4.0	N	4.6	N	2.6	WNW	1.3	2.5	2.8
30	19.8	2.4	11.1	17.4	NE	1.1	NW	0.9	NNW	1.1	ESE	1.3	SSE	5.4	ESE	1.1	1.8	1.7
31	14.9	9.5	12.2	5.4	ESE	0.7	—	0.4	SSW	2.6	E	0.7	E	1.1	SE	2.8	1.4	1.3

OCTOBER, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0-10)						FORMS OF CLOUD																					
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L								
1	17.7	14.0	12.8	11.4	13.3	12.2	13.6	10	9	10	10	10	10	9.8	—	ac	—	cs	—	sc	cs,ci	—	sc	cs,ci	—	—	cs	—	—					
2	12.4	12.6	13.4	15.2	15.2	11.2	13.3	10	10	10	9	10	0	8.2	—	as	—	as	—	st	—	as	sc	es	—	sc	—	—	—					
3	10.1	11.0	15.1	13.0	11.4	10.2	11.8	0	10	6	3	3	3	4.2	—	—	—	—	sc,st	—	sc	—	ac,sc,cu	cs	—	—	cs	—	—					
4	8.8	8.4	11.9	12.3	13.7	11.0	11.0	2	0	2	10	6	0	3.3	es	—	—	—	ci	—	sc	ci	—	sc	ci	—	—	—	—	—				
5	9.6	10.9	15.3	11.3	10.2	9.5	11.1	0	10	6	2	0	0	3.0	—	—	—	—	—,sc	—	sc	—	—,sc,eu	—	—	—	—	—	—					
6	8.7	7.6	10.3	9.4	11.1	9.5	9.4	0	6	0	1	0	0	1.2	—	—	—	—	cu	—	—	cu	—	—	cu	—	—	—	—	—	—			
7	8.7	9.2	11.8	12.1	11.7	9.8	10.6	0	10	3	5	1	0	3.2	—	—	—	ci	—	≡	es,cc	—	sc	cc,es	—	—	sc	—	—	—	—	—	—	
8	8.9	7.8	13.5	10.8	15.1	12.0	11.4	0	10	10	9	0	9	6.3	—	—	—	es	—	—	ce	—	cu	—	—	—	sc	—	—	ns	—	—	ns	
9	12.0	12.6	15.1	17.9	18.1	17.4	15.5	10	10	10	10	10	10	10.0	—	—	st	—	—	st	—	as	sc	—	—	ns	—	—	ns	—	—	—		
10	15.2	14.7	16.4	13.4	16.1	15.9	15.3	10	10	10	10	2	10	8.7	—	—	sc	—	—	≡,sc	es,ci	—	sc	ci	ac	cu	ci	—	sc	—	—	ns		
11	13.9	12.5	11.9	12.4	11.6	11.2	12.3	10	6	7	4	10	2	6.5	—	—	ns	—	—	sc	—	—	sc	—	—	sc	—	—	sc	—	—	sc		
12	9.2	8.8	12.6	14.7	14.7	15.6	12.6	0	10	7	10	10	10	7.8	—	—	sc	—	—	≡	—	sc	cs	—	sc	—	—	sc	cs	—	st	—	—	
13	14.8	14.2	12.6	10.4	12.4	11.2	12.6	10	6	8	7	3	10	7.3	—	as	ns	—	—	sc	—	—	cu,ns	cs	—	sc,cu	—	—	cu	—	—	sc		
14	10.7	9.5	9.2	9.6	9.5	8.8	9.6	10	1	2	6	0	0	3.2	—	—	sc	—	—	cu	—	—	sc,eu	—	—	sc	—	—	sc	—	—	sc		
15	7.8	7.0	8.5	8.2	9.3	8.5	8.2	0	0	0	1	0	0	0.2	—	—	—	—	st	—	—	sc	—	—	cu	—	—	sc	—	—	sc			
16	7.3	6.6	9.7	8.9	10.1	8.1	8.5	0	10	0	0	0	0	1.7	—	—	—	—	≡	—	—	eu	—	—	cu	—	—	ac	—	—	—			
17	7.3	7.6	10.1	11.4	11.7	9.7	9.6	0	10	2	1	0	0	2.2	—	—	—	—	≡	—	—	ac	cu	—	—	cu	—	—	—	—	—	—		
18	9.7	8.6	12.6	13.7	13.7	11.0	11.6	9	10	2	6	0	0	4.5	—	—	sc	—	—	≡	—	—	sc	—	—	es	—	—	eu	—	—	—		
19	9.7	10.0	13.8	11.7	14.3	11.4	11.8	0	10	1	1	1	8	3.5	—	—	—	—	≡	—	—	cu	—	—	cu	—	ci	ac	—	—	—			
20	9.2	7.8	12.4	11.5	12.5	10.2	10.6	3	0	0	0	0	0	0.5	—	—	—	—	≡	—	—	sc	—	—	cu	—	—	—	—	—	—			
21	10.4	11.0	14.2	15.0	15.2	15.6	13.6	10	10	10	7	6	9	8.7	—	—	sc	—	ac	st	—	ac	sc	—	—	sc	—	—	sc	—	—	sc		
22	14.0	13.9	10.8	12.0	10.7	10.3	12.0	10	6	10	10	9	9	9.0	—	—	st	es	—	sc	ci	—	cu	cs,ci	—	cu	cs,ci	—	—	cs,ci	—	—	—	
23	9.7	8.2	7.9	8.9	10.3	10.0	9.2	2	0	0	1	6	10	3.2	ci	—	cu	—	—	—	ac	—	cc	—	cu	cc	—	—	cc	—	—	—		
24	9.4	9.3	10.7	12.9	11.5	10.8	10.8	10	10	7	4	1	9	6.8	—	—	sc	—	ac	sc	—	ac	sc	cc	—	cu	—	—	sc	—	—	sc		
25	10.5	9.8	11.8	11.0	10.2	9.6	10.5	9	10	2	3	0	1	4.2	—	—	sc	—	—	≡	—	eu	—	—	cu	—	—	cu	—	—	cu			
26	7.9	6.3	9.2	8.6	8.3	7.4	8.0	0	4	0	0	0	0	0.7	—	—	—	—	≡	—	—	cu	—	—	cu	—	—	—	—	—	—			
27	6.3	5.4	9.3	8.4	8.8	7.5	7.6	0	10	0	0	0	0	1.7	—	—	—	—	≡	—	—	—	—	—	—	—	—	—	—	—	—	—		
28	6.3	7.2	8.9	11.0	12.3	12.7	9.7	3	8	10	10	10	10	8.5	cs	—	—	sc	—	as	—	—	as	—	—	as	—	—	ns	—	—	ns		
29	13.7	14.0	15.1	13.5	10.5	9.3	12.7	10	10	10	9	0	0	6.5	—	—	ns	—	as	sc	—	ac	sc	—	—	—	—	—	—	—	—	—	—	—
30	7.9	7.1	10.2	10.7	12.7	12.7	10.2	0	0	0	0	6	10	2.7	—	—	sc	—	—	cu	—	—	cu	—	as	—	—	as	—	—	as			
31	12.5																																	

NOVEMBER, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	6.0	2.1	1.0	998.7	997.0	1.3	1.0	13.6	9.7	8.6	6.1	4.4	8.8	8.5	12.6	13.8	13.8	14.8	15.8	12.5	13.9
2	2.7	7.7	10.7	11.7	14.1	15.8	10.5	10.3	15.3	18.4	22.0	22.0	23.8	18.6	9.8	9.1	11.9	11.7	7.1	3.1	8.8
3	16.4	17.1	16.8	13.2	13.1	13.2	15.0	24.4	25.2	24.6	20.8	20.8	21.0	22.8	1.6	-0.9	7.0	14.0	10.1	6.1	6.3
4	11.3	10.9	11.8	9.3	7.9	6.9	9.7	19.1	18.6	19.3	16.8	15.7	14.6	17.4	5.9	8.6	16.2	18.4	11.3	10.5	11.8
5	1.7	998.1	995.3	994.3	995.8	997.6	997.1	9.3	5.7	2.7	1.7	3.4	5.2	4.7	8.8	8.1	12.7	16.1	11.0	9.3	11.0
6	0.7	2.6	3.9	3.1	4.6	6.1	3.5	8.4	10.3	11.7	10.7	12.3	14.0	11.2	6.6	6.0	8.1	8.7	5.6	4.9	6.7
7	6.7	9.3	11.1	9.3	9.7	8.4	9.1	14.6	17.3	19.0	17.1	17.6	16.4	17.0	3.7	2.0	5.9	10.1	3.7	1.6	4.5
8	4.2	2.6	6.3	5.1	7.5	9.3	5.8	12.0	10.3	13.9	12.7	15.3	17.1	13.6	3.1	4.5	10.1	12.4	8.7	9.0	8.0
9	9.2	9.5	9.0	5.5	5.6	6.9	7.6	17.1	17.3	16.7	13.3	13.5	14.7	15.4	7.0	6.7	7.2	6.2	3.9	3.3	5.7
10	5.7	6.6	7.4	5.6	5.9	5.1	6.1	13.6	14.6	15.1	13.3	13.7	13.0	13.9	2.5	1.5	4.6	7.1	4.7	1.4	3.6
11	3.9	4.4	6.9	5.7	8.7	10.9	6.8	11.8	12.4	14.7	13.6	16.7	18.9	14.7	3.3	2.7	4.5	4.8	2.3	0.9	3.1
12	11.5	13.6	15.3	14.7	16.3	15.3	14.5	19.5	21.6	23.3	22.6	24.3	23.3	22.4	1.6	0.2	3.5	5.5	4.1	0.3	2.5
13	13.9	11.4	9.7	7.5	7.0	5.7	9.2	22.0	19.3	17.5	15.3	14.7	13.5	17.1	0.7	2.2	7.7	9.5	7.9	5.9	5.7
14	5.7	5.6	6.4	5.9	8.6	10.1	7.1	13.5	13.5	14.1	13.6	16.4	18.0	14.9	7.8	3.7	8.2	7.1	3.9	3.1	5.6
15	11.8	14.9	18.1	18.0	20.4	19.4	17.1	19.8	22.9	26.1	26.0	28.4	27.4	25.1	2.6	0.6	3.2	2.8	2.4	2.1	2.3
16	21.0	20.8	19.4	15.7	14.7	12.4	17.3	29.0	29.0	27.3	23.5	22.6	20.3	25.3	1.4	0.0	6.7	8.1	5.5	4.7	4.4
17	8.4	8.2	10.3	9.3	13.2	15.0	10.7	16.3	15.9	18.0	17.2	21.1	23.0	18.6	3.3	4.3	6.1	6.1	2.8	1.3	4.0
18	15.5	16.2	16.7	14.1	13.6	13.2	14.9	23.5	24.3	24.6	22.1	21.6	21.3	22.9	-0.1	-1.0	2.8	3.2	0.8	0.4	1.0
19	10.6	9.1	10.0	9.6	11.9	13.1	10.7	18.6	17.1	18.0	17.5	19.9	21.1	18.7	0.1	-0.3	-0.2	3.5	0.5	-0.7	0.5
20	13.5	15.9	18.4	17.3	18.3	19.0	17.1	21.5	24.0	26.4	25.3	26.4	27.1	25.1	-2.1	-2.5	0.0	0.9	-1.1	-1.1	-1.0
21	19.1	19.9	20.2	17.2	18.0	17.6	18.7	27.3	28.0	28.2	25.2	26.0	25.6	26.7	-0.7	-2.3	3.6	4.3	2.8	-0.1	1.3
22	16.4	14.3	10.9	2.3	999.9	0.4	7.4	24.4	22.4	18.7	10.0	7.7	8.2	15.2	-1.6	-2.9	3.7	8.9	7.0	5.9	3.5
23	3.0	5.6	9.5	9.0	11.1	12.4	8.4	10.9	13.5	17.3	16.8	19.0	20.4	16.3	4.8	3.5	4.3	6.2	3.1	0.1	3.7
24	13.3	13.0	14.6	14.1	15.3	14.0	14.1	21.3	20.8	22.6	22.0	23.3	22.0	22.0	0.7	2.5	2.5	4.0	3.2	1.0	2.3
25	13.1	13.9	13.3	12.4	13.7	14.9	13.6	21.1	21.9	21.3	20.3	21.6	22.7	21.5	1.3	1.1	3.7	6.1	4.2	3.5	3.3
26	14.9	14.4	14.0	10.9	9.5	6.6	11.7	22.9	22.6	21.9	18.7	17.3	14.4	19.6	0.2	-1.0	6.3	7.5	1.5	1.3	2.6
27	1.7	997.3	998.3	998.0	1.7	1.0	999.7	9.6	5.2	6.0	5.7	9.6	8.8	7.5	2.7	2.9	5.9	6.4	2.1	-0.4	3.3
28	5.5	9.0	13.0	14.0	15.9	17.1	12.4	13.3	17.0	21.0	22.0	23.9	25.1	20.4	-0.3	-1.1	0.3	1.3	1.3	2.3	0.6
29	16.6	17.2	19.3	19.9	22.3	24.4	20.0	24.6	25.2	27.0	27.7	30.1	32.4	27.8	2.7	3.3	8.3	9.3	6.1	1.1	5.1
30	24.4	24.0	24.4	22.7	22.7	23.1	23.6	32.3	32.3	32.4	30.4	30.4	31.0	31.5	-1.1	-2.3	3.2	11.9	8.9	5.4	4.3
Mean	10.3	10.5	11.4	9.8	10.8	11.2	10.7	18.2	18.4	19.2	17.7	18.7	19.1	18.5	3.0	2.4	6.1	7.9	5.0	3.3	4.6

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND													
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.						
1	16.8	10.7	13.8	6.1	SE	2.2	SSE	6.5	SSE	5.4	E	2.0	SW	5.5	W	7.4	4.8	4.6
2	13.8	2.3	8.1	11.5	WNW	12.2	NNE	2.0	WNW	7.8	WNW	1.7	W	0.9	NNW	2.2	4.	

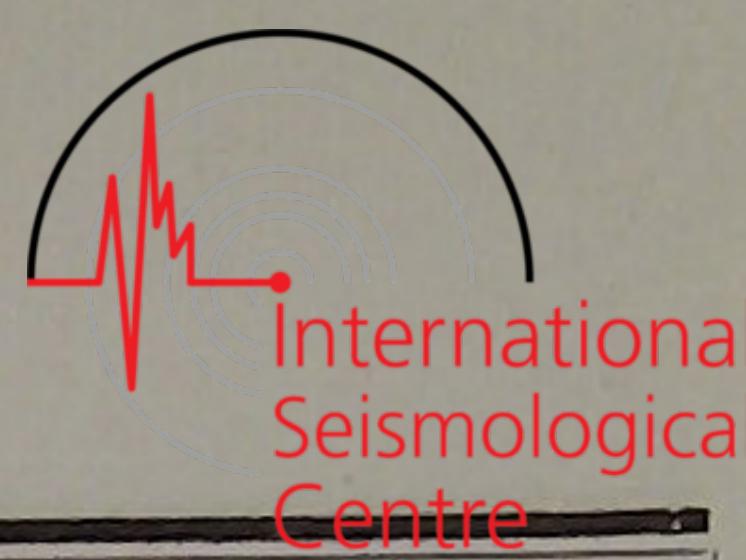
NOVEMBER, 1953.



Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0—10)						FORMS OF CLOUD														
	2 6 10			14 18 22			Mean	2 6 10			14 18 22			Mean	2		6		10		14		18		22		
	2	6	10	14	18	22		2	6	10	14	18	22		H	M	L	H	M	L	H	M	L	H	M	L	
1	14.1	14.3	15.1	16.1	11.7	9.7	13.5	7	10	10	10	10	0	7.8	—	—	st	—	as	sc, st	—	as	st	—	—	sc	
2	8.8	7.8	8.7	8.8	8.7	7.3	8.4	1	7	6	7	1	0	3.7	—	—	sc	—	—	sc	—	—	sc, ns	—	—	sc	
3	6.6	5.5	7.6	9.0	9.7	8.6	7.8	0	2	1	1	0	0	0.7	—	—	—	—	—	sc	—	as	cu	—	—	cu	
4	9.0	8.9	10.4	11.0	11.3	11.1	10.3	1	2	10	10	10	9	7.0	—	—	sc	—	—	cu	cs	—	cu	cs	as	—	
5	10.6	10.4	12.0	11.8	9.2	7.6	10.3	10	10	10	7	3	4	7.3	—	—	st	—	—	sc	—	—	sc, ns	—	—	sc	
6	6.0	5.2	5.6	6.3	6.0	5.8	5.8	5	6	3	3	0	1	3.0	—	—	sc	—	—	cu	—	—	st	—	—	ns	
7	6.8	6.5	7.0	6.0	6.0	5.7	6.3	3	8	10	1	0	0	3.7	—	—	ns	—	—	sc, st	—	—	sc	—	—	—	
8	6.2	7.7	11.6	9.5	8.6	6.9	8.4	10	10	8	5	8	8	8.2	—	—	st	—	—	ns	cs	—	sc, ns	—	—	sc	
9	7.4	6.6	7.6	7.0	7.6	7.5	7.3	10	9	10	10	10	10	9.8	—	—	sc	—	—	as	—	—	ns	—	—	ns	
10	6.8	6.6	7.6	6.3	5.9	5.5	6.5	5	9	5	9	8	4	6.7	—	—	st	cs	—	sc	es	—	sc	—	cs	sc	
11	4.7	5.5	5.3	6.0	5.1	5.5	5.4	10	10	10	9	1	1	6.8	cs	—	sc	—	—	sc, cu	—	—	cu, sc, st	—	—	sc	
12	5.4	5.6	6.8	5.5	5.3	5.6	5.7	1	10	10	10	3	10	7.3	—	—	sc	—	—	ns, sc	—	—	sc, st	—	—	sc	
13	5.9	6.1	7.3	8.8	8.9	8.5	7.6	10	10	9	10	10	9	9.7	—	—	st	—	—	as	sc	—	—	sc	—	—	sc
14	8.8	7.4	8.7	7.7	7.3	6.6	7.8	4	2	10	10	10	10	7.7	—	—	sc	—	—	ns	—	—	ns	—	—	ns	
15	5.3	6.0	7.0	6.2	5.9	5.5	6.0	10	10	10	8	7	7	8.7	—	—	as	ns	—	—	ns	—	—	ns, cu	—	—	sc
16	5.6	5.7	5.9	6.5	6.8	7.2	6.3	3	9	10	10	10	10	8.7	—	—	sc	cs	—	sc	—	—	as, ac	—	—	st	
17	6.8	6.6	6.6	5.7	4.0	4.2	5.7	10	10	10	10	8	9	9.5	—	—	st	—	—	sc	—	—	sc	—	—	sc	
18	4.6	4.7	4.6	5.6	5.5	6.1	5.2	8	7	10	10	8	10	8.8	—	—	sc	—	—	sc, st	cs	—	sc	as	—	—	
19	5.7	5.6	6.0	5.9	5.9	4.7	5.6	10	10	10	6	10	10	9.3	—	—	sc	—	—	ns	—	—	st, sc	—	—	st	
20	5.1	4.8	5.1	5.0	5.3	4.6	5.0	10	10	5	6	8	4	7.2	—	—	ns	—	—	ns, sc	—	—	sc, ns	—	—	sc	
21	4.7	4.5	4.9	4.8	4.7	5.2	4.8	2	5	3	3	6	6	4.2	—	—	sc	—	—	cu, st	—	—	sc	—	—	cu	
22	5.0	4.7	5.8	7.8	9.3	7.2	6.6	0	0	10	9	10	10	6.5	—	ac	—	—	sc	—	—	sc	—	—	st		
23	5.6	5.7	6.0	5.1	5.1	5.5	5.5	6	3	9	4	5	6	5.5	—	—	st	—	—	sc, sc	cs	—	sc	—	cs	sc	
24	5.8	5.7	6.6	6.4	4.5	5.0	5.7	10	9	10	10	0	7	7.7	—	—	ns	—	—	ns	—	—	ns, sc	—	—	sc	
25	5.7	6.3	6.3	5.5	5.3	5.0	5.7	10	10	10	8	9	9	9.3	—	—	st	—	—	sc	—	—	sc	—	—	sc	
26	4.9	4.7	4.5	4.9	5.4	5.9	5.1	3	4	2	4	5	10	4.7	—	—	sc	—	—	sc	—	ac	eu	cs	ac	—	
27	6.0	6.6	7.8	6.3	4.4	5.9	6.2	10	10	8	4	0	0	5.3	—	as	—	—	as	—	—	ac	sc	—	st, sc	—	—
28	5.6	5.5	4.3	4.7	4.0	4.4	4.8	10	10	10	10	1	10	8.5	—	—	ns	—	—	ns	—	—	ns, sc	—	—	sc	
29	5.3	5.9	7.9	8.1	7.7	6.2	6.9	10	8	9	7	0	0	5.7	—	—	sc	—	—	sc	—	—	sc	—	—	—	
30	5.4	4.9	7.2	8.2	9.1	8.1	7.2	2	10	3	9	10	1	5.8	—	—	sc	—	—	≡	ci	ac	sc	cc	—	sc	—

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DECEMBER, 1953.



Day	STATION PRESSURE (1000mb +)						M.S.L. PRESSURE (1000mb +)						AIR TEMPERATURE °C								
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean
1	23.0	23.0	21.7	17.7	17.2	16.2	19.8	31.0	31.0	29.5	25.2	25.0	23.9	27.6	6.5	1.4	9.9	17.3	9.9	10.9	9.3
2	15.1	14.6	14.3	12.4	12.2	12.3	13.5	23.0	22.3	22.0	20.2	19.9	20.2	21.3	8.1	12.4	10.0	8.1	6.9	5.8	8.6
3	12.0	12.7	14.0	14.0	17.0	17.0	14.5	19.8	20.6	22.0	21.9	25.0	25.1	22.4	5.3	4.2	4.5	4.6	1.7	1.2	3.6
4	17.0	16.2	16.2	14.3	16.0	15.4	15.9	25.0	24.3	24.2	22.3	24.2	23.4	23.9	0.1	-2.9	0.9	1.7	-0.5	-1.1	-0.3
5	15.0	15.3	15.7	15.1	15.8	17.7	15.8	23.1	23.3	23.7	23.1	23.9	25.9	23.8	-2.1	-1.5	0.7	0.0	-1.1	-1.7	-1.0
6	18.3	18.4	19.9	18.7	22.0	22.6	20.0	26.4	26.6	27.9	26.7	30.1	30.6	28.1	-1.3	-1.7	1.3	1.7	0.2	-0.1	0.0
7	22.9	23.4	23.9	22.0	22.3	22.6	22.9	31.0	31.5	32.0	30.0	30.4	30.7	30.9	-1.2	-1.8	-0.7	2.5	-0.3	-1.4	-0.5
8	22.4	22.7	23.7	24.3	26.3	28.4	24.6	30.6	30.7	31.7	32.4	34.4	36.7	32.8	-2.4	0.0	2.0	2.9	-0.1	-4.2	-0.3
9	29.6	28.7	29.7	27.9	25.9	22.7	27.4	37.9	37.1	38.0	35.9	34.0	30.9	35.6	-5.4	-5.1	-0.5	1.9	-0.8	-0.5	-1.7
10	18.9	14.4	9.1	1.9	998.7	998.0	6.8	26.9	22.4	17.1	9.7	6.4	5.7	14.7	0.3	0.3	1.1	2.5	3.4	8.2	2.6
11	999.9	0.7	1.3	0.2	2.0	2.4	1.1	7.7	8.6	9.1	7.8	9.7	10.3	8.9	6.8	4.7	9.1	8.4	4.6	3.3	6.2
12	2.3	3.7	4.0	4.0	7.4	10.4	5.3	10.1	11.5	11.8	11.9	15.1	18.3	13.1	2.9	2.5	6.3	5.8	5.2	3.8	4.4
13	12.7	14.0	13.6	11.5	12.2	13.0	12.8	20.7	21.9	21.3	19.3	20.0	21.0	20.7	4.5	3.3	6.6	8.4	5.2	3.1	5.2
14	13.5	14.3	14.0	12.3	12.2	12.4	13.1	21.5	22.3	21.9	20.0	20.0	20.3	21.0	0.3	0.3	6.9	7.7	5.2	3.7	4.0
15	13.7	15.3	18.6	17.5	20.7	21.6	17.9	21.6	23.1	26.4	25.3	28.7	29.7	25.8	4.1	2.5	6.5	5.5	3.9	0.5	3.8
16	21.6	22.3	22.7	19.4	19.5	18.7	20.7	29.7	30.6	30.7	27.3	27.5	26.9	28.8	-2.1	-3.9	4.7	7.9	2.3	-1.1	1.3
17	16.7	15.4	13.6	8.0	4.6	8.8	11.2	24.8	23.5	21.7	15.9	12.4	16.7	19.2	-2.6	-3.0	0.5	4.7	3.8	6.0	1.6
18	13.2	15.5	17.2	17.5	19.1	19.3	17.0	21.1	23.5	25.1	25.3	27.3	27.4	25.0	5.1	4.1	6.8	8.1	1.2	-1.8	3.9
19	18.1	16.3	15.1	11.3	11.1	13.2	14.2	26.3	24.3	23.1	19.0	18.9	21.1	22.1	-1.2	-0.7	2.2	9.5	5.2	6.9	3.7
20	14.4	16.3	17.6	15.0	14.7	13.0	15.2	22.3	24.3	25.6	22.7	22.7	21.1	23.1	4.4	3.1	5.4	7.1	1.2	0.2	3.6
21	10.4	11.0	14.0	13.9	16.2	17.7	13.9	18.4	19.0	21.9	21.9	24.2	25.7	21.9	2.5	1.0	5.0	4.9	1.5	-0.7	2.4
22	17.0	15.7	15.1	11.7	13.1	13.0	14.3	25.0	23.7	23.1	19.5	21.1	21.0	22.2	-0.2	0.1	0.3	1.8	-0.2	-1.3	0.1
23	11.8	11.1	11.8	11.5	13.2	13.9	12.2	19.9	19.3	19.8	19.4	21.2	22.0	20.3	-2.5	-1.9	1.8	2.9	0.4	-2.6	-0.3
24	13.6	14.1	15.8	15.5	16.4	15.9	15.2	21.7	22.3	23.8	23.5	24.4	23.9	23.3	-4.9	-2.7	0.7	1.9	0.5	0.3	-0.7
25	14.7	12.2	11.4	7.0	5.5	2.6	8.9	22.7	20.3	19.4	14.9	13.5	10.6	16.9	-0.1	-0.4	1.0	3.0	0.6	-0.5	0.6
26	997.5	993.2	991.8	988.4	998.1	4.0	995.5	5.3	1.2	999.7	996.0	6.0	12.0	3.4	-2.1	-2.0	0.1	7.2	0.9	-0.1	0.7
27	7.8	10.0	13.1	13.9	16.6	16.2	12.9	15.8	18.1	21.1	21.9	24.6	24.3	21.0	-0.5	-1.3	0.1	0.5	-0.4	-1.5	-0.5
28	14.0	15.1	13.6	10.1	10.0	10.0	12.1	22.1	23.3	21.6	18.1	18.0	18.0	20.2	-1.7	-1.5	-0.7	-0.3	-0.1	-1.1	-0.9
29	10.9	10.0	9.5	5.7	4.2	4.2	7.4	18.9	18.1	17.5	13.6	12.2	13.3	15.6	-1.0	-1.5	-0.5	0.3	0.1	0.7	-0.3
30	4.2	4.4	6.4	4.3	6.1	5.3	5.1	12.0	12.6	14.3	12.2	14.1	13.3	13.1	-0.6	-3.7	-0.6	2.2	-1.1	-2.0	-1.0
31	5.9	7.0	7.7	6.4	10.9	14.9	8.8	14.0	15.0	15.8	14.4	19.0	23.1	16.9	-2.9	-4.2	-1.7	-2.2	-4.0	-8.7	-4.0
Mean	13.8	13.8	14.1	12.0	13.1	13.7	13.4	21.8	21.8	22.0	19.9	21.1	21.7	21.4	0.5	0.0	2.9	4.5	1.8	0.8	1.7

Day	AIR TEMPERATURE °C				DIRECTION AND VELOCITY (m.p.s.) OF THE WIND											
	Max.	Min.	Mean	Range	2	6	10	14	18	22	6 obs.	24 h.				
1	18.0	1.2	9													



DECEMBER, 1953.

Day	VAPOUR PRESSURE (mb)						AMOUNT OF CLOUD (0—10)						FORMS OF CLOUD																			
	2	6	10	14	18	22	Mean	2	6	10	14	18	22	Mean	H	M	L	H	M	L	H	M	L	H	M	L						
1	8.4	6.5	9.7	11.6	10.2	9.5	9.3	3	1	9	1	0	1	2.5	—	—	sc	—	—	sc	—	ac	—	cc	—	cu	—	—	sc			
2	8.9	11.0	10.1	8.6	8.6	7.8	9.2	2	10	10	10	10	10	8.7	—	—	sc	—	—	sc	—	—	sc	—	—	ns	—	—	sc			
3	6.9	5.7	5.9	5.7	4.6	4.2	5.5	10	10	10	10	1	0	6.8	—	—	st	—	—	sc	—	as	sc	—	—	sc	—	—	sc			
4	3.9	4.4	4.7	4.9	4.6	3.9	4.4	0	1	10	10	1	2	4.0	—	—	—	ci	ac	—	—	as	—	—	as	sc	—	—	sc			
5	4.5	4.8	4.9	4.9	4.1	4.3	4.6	1	6	4	7	3	10	5.2	—	—	sc	—	—	st	—	—	sc,ns	—	—	sc	—	—	ns,sc			
6	4.2	4.9	4.2	5.1	5.0	4.8	4.7	10	10	8	10	10	8	9.3	—	—	st	—	—	ns	—	—	sc	—	—	sc	—	—	sc			
7	4.1	4.3	4.0	3.8	4.7	4.8	4.3	5	10	6	2	10	10	7.2	—	—	sc	—	—	sc	—	as	—	—	ac	sc	—	—	sc			
8	4.5	4.8	4.4	4.5	3.8	3.5	4.3	9	10	7	4	0	0	5.0	—	—	sc	—	—	sc,ns	—	—	sc	—	—	sc	—	—	—			
9	3.8	3.7	4.3	4.7	5.1	5.1	4.5	0	4	10	10	10	10	7.3	—	—	—	cs	ac	—	cs	—	—	as	—	—	as	—	—	st		
10	5.4	6.0	6.4	7.1	7.8	8.3	6.8	10	10	10	10	10	5	9.2	—	—	st	—	as	—	—	ns	—	—	ns	—	—	sc				
11	6.4	6.5	7.2	7.1	7.0	6.3	6.8	4	7	5	6	10	10	7.0	—	—	sc	—	—	sc	—	—	sc,ns	—	—	ns	—	—	ns			
12	5.8	5.9	5.5	5.8	4.9	5.7	5.6	10	10	2	2	2	1	4.5	—	—	ns	—	—	ns	—	—	st,sc	—	—	st,sc	—	—	sc			
13	5.9	6.4	6.5	6.3	7.3	7.4	6.6	3	8	8	10	7	2	6.3	—	—	sc	—	—	sc	—	—	sc	—	ac	sc	—	—	sc			
14	6.0	5.9	5.3	6.0	7.2	7.3	6.3	1	1	2	10	8	9	5.2	—	—	sc	—	—	sc	—	—	sc	cs	—	sc	—	—	ns			
15	5.8	6.1	4.4	5.4	5.4	4.8	5.3	8	10	6	8	7	0	6.5	—	—	sc	—	—	sc,eu	—	—	sc,cu	—	—	cu	—	—	sc			
16	4.7	4.4	5.4	5.1	5.5	5.2	5.1	0	0	0	0	8	2	1.3	—	—	—	—	—	cc	—	—	—	—	cs	—	—	cc	—	—	—	
17	4.8	4.7	5.7	6.6	7.2	7.7	6.1	3	7	8	10	10	2	6.7	ci	—	—	—	ac	—	—	ac	sc	—	as	—	—	ns	cs	—	—	
18	7.0	5.5	4.9	5.7	5.2	4.9	5.5	1	2	0	0	7	0	1.7	—	—	sc	—	—	cu	—	—	—	cc	—	cu	ci	—	ci	—	—	—
19	5.1	4.9	5.3	7.0	7.0	7.3	6.1	10	10	1	9	5	10	7.5	—	as	—	—	ac	—	—	sc	—	—	sc	—	—	sc	—	—	sc	
20	5.2	4.4	4.9	4.9	5.6	5.4	5.1	6	3	0	0	0	1	1.7	—	ac	—	cc	ac	—	—	sc	—	—	cu	—	—	—	—	—	sc	
21	5.7	6.2	5.6	4.4	4.0	4.1	5.0	3	4	5	2	0	0	2.3	—	—	sc	—	—	sc	—	—	sc,st	ci	—	cu	—	—	cu			
22	4.1	4.2	4.0	4.6	5.7	5.3	4.7	10	10	10	10	10	10	10.0	cs	—	sc	—	as	sc	—	as	—	—	as	—	—	ns	—	—	st	
23	5.0	5.1	4.9	4.5	4.2	4.2	4.7	7	10	4	5	0	5	5.2	—	—	sc	—	—	st	cs	ac	cu	cs,ci	—	sc	—	—	cs	ac	sc	—
24	4.1	4.5	5.2	5.7	6.1	6.0	5.3	4	10	10	10	10	10	9.0	—	—	sc	—	—	sc	—	—	sc,st	—	—	st,sc	—	—	st	—	as	sc
25	5.8	5.8	6.6	7.2	6.0	5.9	6.2	10	10	10	10	10	10	10.0	—	—	st	cs	—	—	st	—	as	sc	—	—	st	—	—	≡		
26	5.1	5.2	5.8	6.4	6.1	5.0	5.6	8	10	10	10	10	10	9.7	—	—	≡sc	—	—	≡	—	—	ns	—	—	ns,sc	—	—	ns			
27	3.6	3.7	4.0	4.3	4.2	4.3	4.0	3	4	8	10	8	10	7.2	—	—	sc	—	—	sc	—	—	sc,cu	—	—	ns,sc	—	sc	—	as	—	—
28	4.7	4.9	5.3	5.7	6.0	5.4	5.3	10	10	10	10	10	10	10.0	—	as	—	—	ns	—	—	st	—	—	ns	—	—	st	—	—	st	
29	5.1	5.2	5.6	6.0	6.2	6.3	5.7	10	10	10	10	10	10	10.0	—	—	st	—	—	ns	—	—	ns	—	—	ns	—	—	sc			
30	5.3	4.3	5.2	4.3	5.4	4.9	4.9	0	4	7	6	10	2	4.8	—	—	—	sc	ci	—	st,sc	ci	—	st,cu	—	—	ns	—	—	ns		
31	4.5	4.2	3.5	4.8	4.3	2.9	4.0	10	10	0	10	0	0	5.0	—	—	ns	—	—	ns	—	—	sc	—	—	ns	—	—	—			

Centre

Day	Duration of Sunshine (in hours)	Total Solar and Sky Radiation (Cal./cm ²)	Amount of Evaporation mm	RELATIVE HUMIDITY %							PRECIPITATION mm							REMARKS			
				Open Air	in the Shelter	2	6	10	14	18	22	Mean	22-2	2-6	6-10	10-14	14-18	18-22	Total	A. M.	P. M.
1	6.8	194	2.2	1.3	86	97	80	59	83	73	80	—	—	—	—	—	—	—	—	—	0
2	0.2	34	(1.3)	1.2	81	76	82	80	87	85	82	—	—	0.0	0.0	0.0	2.1	2.1	—	9	9, ●
3	—	80	1.5	1.3	77	69	70	67	67	63	69	—	0.1	—	—	—	—	—	0.1	●, 0, ∞	0, ∞, □
4	0.3	98	(2.3)	1.6	63	92	72	70	78	70	74	—	—	—	0.0	—	—	—	0.0	□, □, 0, *	* , □
5	7.7	215	(2.5)	1.7	88	88	75	81	74	81	81	—	—	0.1	0.0	0.0	0.0	0.1	0.1	□, *, ▲	* , ▲, □
6	3.6	146	2.4	1.3	76	92	63	73	80	79	77	0.0	0.3	—	0.0	0.0	—	0.3	□, △, *	* , □	
7	3.3	155	(1.5)	0.9	74	82	69	51	78	88	74	—	—	—	—	—	—	—	—	□, 0	0, □
8	1.3	82	1.5	1.3	90	78	63	59	63	82	73	—	0.0	0.1	—	—	—	—	0.1	□, *, 0	0, □, □
9	3.2	140	(0.8)	0.4	98	93	73	67	89	87	85	—	—	—	—	—	—	—	—	□, □, 0	0, ∞, □
10	—	23	(4.5)	0.8	86	97	97	97	100	76	92	—	1.2	2.6	11.9	27.9	4.3	47.9	□, ●	●, ▲	
11	5.7	175	(1.5)	1.1	65	76	62	65	83	82	72	—	—	—	0.0	0.3	0.7	1.0	—	●, ▲	●
12	8.2	228	2.4	1.5	77	81	58	63	56	71	68	0.6	0.4	0.0	—	—	—	1.0	●, 0, ▲	0, ▲	
13	4.2	158	1.3	0.8	70	83	67	57	83	97	76	—	—	—	—	—	—	—	—	●	●
14	4.4	145	(2.0)	1.1	96	95	54	57	81	92	79	—	—	—	—	0.2	0.3	0.5	□, □, 0	0, ●	
15	5.4	223	1.9	1.2	70	84	45	60	67	75	67	0.1	—	—	—	—	—	0.1	●	0, □, □	
16	7.6	213	1.4	1.0	92	100	63	48	76	92	79	—	—	—	—	—	—	—	—	□, □, 0	0, □, □, □
17	0.8	96	(1.7)	1.3	98	98	89	77	89	82	89	—	—	—	—	0.5	2.1	2.6	—	□, □, ∞	∞, ●
18	8.4	212	1.9	1.5	80	68	50	53	78	92	70	—	—	—	—	—	—	—	—	0, ▲	0, □, □
19	6.8	205	(2.0)	1.3	93	86	74	59	79	74	78	—	—	—	—	—	0.4	0.4	—	●	●
20	8.0	206	(1.7)	1.0	62	57	54	49	85	87	66	—	—	—	—	—	—	—	0	—	0, □
21	7.9	201	2.2	1.7	78	95	65	51	59	71	70	—	—	—	—	—	—	—	—	□, ●, 0, ▲	0, □, □
22	—	64	(1.2)	0.8	68	68	65	66	95	96	76	—	—	—	—	0.2	0.8	1.0	—	□, □, 0	0, *, ▲, □, □
23	6.6	189	1.3	1.3	100	98	70	60	67	86	80	—	—	—	—	—	—	—	—	□, □, 0	0, □, □
24	1.1	100	0.7	0.4	100	92	81	82	97	97	92	—	—	—	0.0	—	—	0.0	—	□, □, △	△, ∞, □
25	—	70	(0.4)	0.4	96	98	100	95	95	100	97	—	—	—	—	—	—	—	—	□, □, =, ≈	≡, □
26	1.2	102	(0.8)	1.6	100	100	95	63	93	82	89	—	—	0.3	2.0	3.3	0.2	5.8	—	●, ▲, *, △, □,	
27	0.9	69	(1.1)	0.9	61	67	65	69	71	79	69	—	—	—	0.0	0.0	—	0.0	—	□, *, △, 0	0, *, △, □
28	—	43	(0.9)	0.7	89	90	93	96	98	96	94	—	—	0.1	0.1	1.5	0.0	1.7	—	—	* , *, □, □
29	—	79	(1.4)	0.7	91	96	96	96	100	98	96	—	0.0	1.0	0.6	2.7	0.3	4.6	—	□, *, ▲, □	* , ●, □, □, □
30	4.9	172	(0.4)	0.7	91	96	89	60	96	94	88	—	—	—	—	0.2	1.3	1.5	—	□, □	* , ●, □, □
31	1.8	190	(0.7)	0.6	94	98	66	94	98	100	92	0.3	1.1	0.1	0.3	0.2	—	2.0	—	□, *, □	* , *, □, □

1953.



Month	AIR PRESSURE (STATION) 1000 mb+										AIR PRESSURE (Mean Sea Level) 1000 mb+											
	2 6 10			14 18 22			Mean	Max.	Date	Min.	2 6 10			14 18 22			Mean	Max.	Date	Min.	Date	
	January	6.9	6.6	6.9	5.4	6.7	7.2	6.6	23.3	4	983.8	12	15.0	14.7	14.9	13.3	14.9	15.3	14.7	31.5	4	991.5
February	12.6	13.0	13.5	11.7	12.5	13.0	12.7	25.6	23	1.9	7	20.8	21.2	21.6	19.7	20.6	21.2	20.8	33.7	23	9.9	7
March	6.2	7.0	7.6	6.2	6.8	7.2	6.8	23.2	18	985.9	11,12	14.1	14.9	15.5	14.0	14.7	15.1	14.7	32.4	18	993.6	11,12
April	8.3	8.8	8.7	7.2	7.7	8.9	8.3	19.6	1, 2	994.1	24	16.3	16.7	16.4	15.2	15.4	16.7	16.1	27.6	1, 2	2.1	24
May	7.1	7.6	7.4	6.1	6.6	7.7	7.1	18.0	3	986.4	30	14.8	15.3	14.9	13.6	14.2	15.4	14.7	26.0	3	993.9	30
June	2.0	2.9	2.7	1.4	1.6	2.6	2.2	11.9	4	989.5	8, 9	9.5	10.4	10.1	8.8	9.0	10.1	9.6	19.5	4, 14	997.0	8, 9
July	2.9	3.6	3.6	2.5	2.6	3.7	3.1	9.3	11,12	991.8	8	10.3	11.0	10.9	9.8	9.9	11.1	10.5	17.0	11,12	999.0	8
August	3.3	3.8	4.0	2.6	3.0	4.2	3.5	18.4	30	993.9	14	10.7	11.2	11.3	9.9	10.4	11.6	10.9	25.9	30	1.1	14
September	6.8	7.4	7.6	6.2	6.7	7.5	7.0	18.1	21	975.0	26	14.3	14.9	15.1	13.5	14.1	15.0	14.5	25.9	21	982.0	26
October	11.1	11.7	11.8	9.8	10.8	11.6	11.1	23.9	17	0.0	2	18.9	19.5	19.4	17.3	18.4	19.3	18.8	31.9	17	7.5	2
November	10.3	10.5	11.4	9.8	10.8	11.2	10.7	24.8	30	993.6	5	18.2	18.4	19.2	17.7	18.7	19.1	18.5	32.8	30	0.4	5
December	13.8	13.8	14.1	12.0	13.1	13.7	13.4	29.7	9	988.4	26	21.8	21.8	22.0	19.9	21.1	21.7	21.4	38.0	9	996.0	26
Annual	7.6	8.0	8.3	6.7	7.4	8.2	7.7	29.7	XII9	975.0	IX26	15.4	15.8	15.9	14.4	15.1	16.0	15.4	38.0	XII9	982.0	IX26
Month	AIR TEMPERATURE °C												VAPOUR PRESSURE mb									
	2 6 10			14 18 22			Mean	Mean			Absolute			2 6 10			14 18 22			Mean		
	-4.7	-5.8	-2.4	-0.1	-3.0	-4.2	-3.4	1.3	-8.9	10.2	5.4	10	-16.0	19	4.0	3.6	4.2	4.9	4.5	4.0	4.2	
February	-5.2	-6.5	-1.8	0.6	-2.1	-4.0	-3.2	1.7	-8.3	10.0	13.0	28	-17.4	3	3.7	3.3	4.1	4.3	4.2	3.9	3.9	
March	1.5	1.3	5.1	6.9	4.3	2.4	3.6	8.0	-0.4	8.4	14.6	24	-5.4	7	5.9	5.8	6.1	6.0	6.4	6.2	6.1	
April	4.2	4.1	10.3	12.4	9.1	5.8	7.7	13.9	2.2	11.7	23.2	28	-2.0	23	7.4	7.3	7.5	7.3	7.5	7.5	7.4	
May	8.9	9.6	16.2	18.7	15.0	11.1	13.2	19.9	7.2	12.7	24.8	26	-2.0	3	10.6	10.9	11.8	12.0	12.1	11.6	11.5	
June	14.7	15.0	19.1	20.9	18.7	15.7	17.4	21.9	13.5	8.4	29.2	17	9.0	10	15.2	15.4	16.7	17.7	17.0	15.9	16.3	
July	19.5	19.7	23.5	25.2	22.7	20.3	21.8	26.2	18.6	7.6	32.9	28	11.8	15	21.9	21.9	22.8	23.6	23.1	22.2	22.6	
August	19.1	19.1	23.1	24.9	22.5	20.2	21.5	26.2	17.8	8.4	31.9	11	11.3	29	21.3	21.3	22.8	23.8	23.5	21.8	22.4	
September	15.5	15.3	20.1	22.4	18.8	16.6	18.1	23.2	14.2	9.1	27.4	12	7.5	21	16.9	16.8	18.2	18.6	18.7	17.6	17.8	
October	7.7	6.9	14.5	18.5	13.2	9.5	11.7	19.5	5.5	14.0	23.4	3	-1.2	27	10.3	9.8	11.9	11.8	12.3	11.1	11.2	
November	3.0	2.4	6.1	7.9	5.0	3.3	4.6	9.1	0.5	8.5	18.8	4	-3.5	22	6.5	6.4	7.3	7.2	6.8	6.4	6.8	
December	0.5	0.0	2.9	4.5	1.8	0.8	1.7	5.8	-2.0	7.8	18.0	1	-10.4	31	5.3	5.3	5.5	5.8	5.8	5.6	5.5	
Annual	7.1	6.8	11.4	13.6	10.5	8.1	9.6	14.7	5.0	9.7	32.9	VII28	-17.4	II3	10.7	10.7	11.6	11.9	11.8	11.2	11.3	
Month	PRECIPITATION mm												RELATIVE HUMIDITY %									
	2 6 10			14 18 22			Sum			Maximum				2 6 10			14 18 22			Mean		
	19.4	20.3	15.8	9.3	17.4	11.5	93.7	15.0	12, 13	6.4	12	94	93	82	80	91	91	89				
February	8.4	2.4	3.7	1.4	1.6	3.8	21.3	2.9	1	2.1	20	91	92	78	68	82	87	83				
March	13.2	1.9	5.4	7.8	21.3	30.1	79.7	22.0	25	16.9	25	85	86	68	61	77	84	77				
April	11.8	22.5	9.0	14.1	13.5	2.9	73.8	36.3	30	11.9	30	88	87	59	50	63	79	71				
May	18.5	26.3	16.3																			

1953.



Month	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
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MONTHLY MAXIMUM DAILY RANGE (WITH DATE) OF AIR TEMPERATURE (°C)

Max. Date	18.8 19	21.5 28	17.3 7	21.7 28	23.2 4	15.9 17	15.0 2	15.1 31	15.7 21	18.7 27	16.0 3	16.8 1	v 23.2 4
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VARIABILITY OF DAILY MEAN AIR TEMPERATURE (°C)

Mean	1.6	1.6	1.5	1.6	1.2	1.7	1.5	1.3	1.4	1.6	2.0	1.5	1.5
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FREQUENCY OF VARIATION

Rise	< 2°	9	8	10	13	14	10	10	12	14	4	7	121
	2° — 4°	4	6	4	4	4	5	5	3	2	5	2	47
	4° — 6°	1	1	1	—	—	2	1	—	1	2	2	12
	6° — 8°	—	—	—	—	—	—	—	—	—	—	—	—
	8° & more	—	—	—	—	—	—	—	—	—	—	—	—
	Sum	14	15	15	18	18	17	16	13	15	17	11	11
Fall	< 2°	14	11	13	9	10	8	13	13	12	6	10	134
	2° — 4°	1	2	2	2	2	5	1	5	3	7	7	41
	4° — 6°	2	—	1	—	—	—	1	—	—	1	2	8
	6° — 8°	—	—	—	1	—	—	—	—	—	—	—	1
	8° & more	—	—	—	—	—	—	—	—	—	—	—	—
	Sum	17	13	16	12	12	13	15	18	15	14	19	20
Stationary	—	—	—	—	1	—	—	—	—	—	—	—	1

MONTHLY MAXIMUM (WITH DATE) MINIMUM (WITH DATE)
AND RANGE OF VAPOUR PRESSURE (mb)

Max. Date	7.3 11	7.2 11	11.2 25	14.7 29	19.6 13	22.5 26	32.2 31	33.0 11	26.7 26	17.7 1	16.1 1	11.6 1	viii 33.0 11
Min. Date	1.6 19	1.4 3	3.5 17	4.0 14	4.8 2	10.5 9	14.0 11	13.4 25	10.8 21	5.4 27	4.0 28	3.5 8	ii 1.4 3
Range	5.7	5.8	7.7	10.7	14.8	12.0	18.2	19.6	15.9	12.3	12.1	8.1	31.6

MONTHLY MINIMUM (WITH DATE) OF RELATIVE HUMIDITY (%)

Min. Date	56 1	41 28	31 22	30 20	26 3	47 17	45 1	50 15	40 20	39 23	41 25, 26	45 15, 20	v 26 3
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VELOCITY (m.p.s.) OF WIND

CLOUD AMOUNT
(0—10)

Hour Month	2 6 10			14 18 22			Maximum		Mean for 24h	No. of Days with Gale.				2 6 10			14 19 22			Mean	
	Vel.	Dir.	Date	m.p.s.	m.p.s.	m.p.s.	10—15	15—29		≥29	Sum	2	6	10	14	19	22				
January	2.2	2.4	2.3	3.7	3.0	2.5	18.2	w	11	2.7	6	2	—	8	7.7	8.0	7.3	8.2	7.8	7.9	7.8
February	2.5	1.9	1.9	3.6	2.0	2.4	14.2	w	11	2.5	6	—	—	6	7.0	8.3	6.9	7.5	6.6	6.8	7.2
March	2.4	2.7	3.4	4.6	3.5	2.4	14.7	WNW	27	3.1	7	—	—	7	8.1	8.6	8.4	8.4	8.5	7.4	8.3
April	1.9	1.8	4.0	6.7	4.8	3.5	17.9	WSW	12	3.8	9	3	—	12	6.9	6.2	6.4	5.5	5.8	5.9	6.1
May	2.0	1.5	3.3	5.3	4.9	2.1	17.9	w	30	3.4	2	1	—	3	6.1	7.0	6.6	6.7	7.5	5.6	6.6
June	2.5	2.5	3.3	4.7	4.4	3.1	15.0	NNW	9	3.3	3	1	—	4	8.7	8.8	8.9	8.2	8.2	7.9	8.4
July	1.2	1.3	2.5	3.5	4.0	2.4	9.6	e	29	2.4	—	—	—	9.1	9.5	9.0	7.9	8.6	7.6	8.6	
August	1.1	0.7	1.7	3.4	2.8	2.1	8.7	SSE	17	1.8	—	—	—	7.6	9.5	9.3	8.5	8.7	7.6	8.5	
September	1.2	0.9	1.7	2.8	2.2	1.5	13.4	SSE	26	1.7	1	—	—	1	7.6	9.5	7.8	7.9	7.7	7.1	7.9
October	1.1	0.7	1.9	3.0	2.4	1.2	9.8	SSE	9	1.7	—	—	—	4.8	7.3	5.0	5.1	3.7	4.5	5.1	
November	3.2	2.4	3.3	5.0	3.4	3.3	15.8	w	23	3.6	12	1	—	13	6.4	7.7	8.0	7.3	5.7	5.8	6.8
December	2.5	2.6	3.3	3.7	3.0	2.5	22.0	w	12	3.1	4	3	—	7	5.5	7.2	6.5	7.2	6.4	5.5	6.3
Annual	2.0	1.8	2.7	4.2	3.4	2.4	22.0	w	XII 12	2.8	50	11	—	61	7.1	8.1	7.5	7.4	7.1	6.6	7.3

METEOROLOGICAL OBSERVATIONS AT MIZUSAWA.

1953.



NUMBER OF OBSERVATIONS OF THE WIND FROM

Dir. Month	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	Calm
January	9	5	4	4	5	4	7	4	5	1	4	8	25	23	22	27	29
February	7	7	10	2	6	3	3	7	7	1	2	5	15	16	17	27	33
March	11	6	1	3	4	4	7	11	7	4	6	8	13	21	19	26	35
April	4	1	3	3	4	7	7	20	6	1	7	13	27	15	20	17	25
May	8	1	7	2	3	5	12	30	18	6	5	5	12	15	12	15	30
June	21	3	3	5	—	3	4	32	44	4	4	2	4	8	8	22	13
July	9	2	2	3	10	7	17	38	30	6	3	4	4	6	5	4	36
August	10	1	1	5	4	4	10	28	22	12	4	2	7	5	14	17	40
September	9	1	2	2	4	2	8	33	18	2	5	4	6	14	6	15	49
October	16	7	5	3	5	5	7	19	8	2	3	3	9	11	15	25	43
November	17	6	7	6	12	2	9	8	12	2	3	2	13	21	16	27	17
December	21	7	10	2	4	5	8	7	6	1	6	4	10	23	23	27	22
Annual	142	47	55	40	61	51	99	237	183	42	52	60	145	178	177	249	372

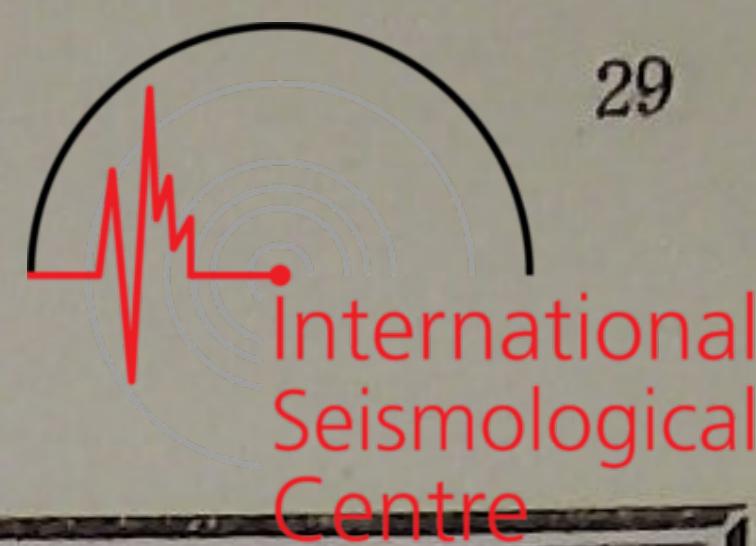
MONTHLY MEAN VELOCITY (m.p.s.) OF THE WIND FROM

Dir. Month	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
January	2.3	2.5	1.4	1.5	0.9	2.9	2.5	4.2	3.1	0.7	3.8	4.0	3.4	4.5	2.8	3.2
February	2.1	2.3	1.8	2.3	1.8	1.1	2.9	2.1	2.3	1.3	2.1	2.3	3.9	4.2	3.1	3.3
March	2.3	2.7	1.1	1.2	1.1	2.9	3.9	4.1	2.8	3.1	4.2	3.6	4.0	5.2	5.5	3.9
April	1.9	3.0	3.0	1.5	1.6	1.8	5.7	4.7	3.3	3.4	3.5	6.7	7.2	3.1	3.3	3.5
May	2.0	0.9	1.9	2.5	1.7	4.5	4.8	5.6	3.8	3.9	2.6	1.2	3.5	4.5	2.2	3.8
June	3.1	4.1	2.4	1.6	—	1.7	3.6	4.6	3.9	2.7	2.2	1.9	1.6	3.2	1.8	5.0
July	2.3	1.8	1.1	2.0	1.7	3.4	3.6	4.0	3.9	2.2	1.0	1.2	1.3	1.5	1.2	3.1
August	1.8	0.7	3.0	1.6	1.0	2.5	2.0	3.1	3.1	2.5	2.6	0.9	2.4	1.5	1.4	3.4
September	1.1	0.9	2.1	0.9	1.0	0.7	2.8	2.7	2.8	2.8	2.2	1.0	1.3	3.1	2.1	2.4
October	1.9	1.2	1.2	0.7	1.4	0.9	2.3	3.8	2.8	2.6	1.4	1.2	1.5	3.3	1.6	2.2
November	2.7	1.5	2.2	3.4	1.6	2.4	2.1	3.8	2.6	2.2	4.6	6.4	6.7	6.3	3.4	4.2
December	2.5	1.9	1.9	0.8	1.3	1.7	1.7	2.2	2.1	2.0	4.2	2.6	8.0	4.6	3.6	3.5
Annual	2.3	2.1	1.9	1.8	1.4	2.3	3.2	3.9	3.3	2.7	3.0	3.5	4.5	4.2	3.0	3.5

DIRECTION AND INTENSITY (m.p.s.) OF THE RESULTANT
WIND COMPUTED WITH THE VELOCITY

Hours Month	2	6	10	14	18	22	General	
January	N 70° W	1.7	N 52° W	1.5	N 45° W	1.3	N 80° W	1.8
February	N 51° W	1.3	N 30° W	0.8	N 30° W	0.9	N 48° W	2.3
March	N 45° W	1.8	N 61° W	1.5	N 69° W	2.0	N 74° W	2.1
April	N 55° W	0.9	S 77° W	0.7	N 81° W	1.5	S 69° W	3.6
May	S 89° W	0.5	N 61° W	1.4	S 0° W	6.5	S 14° W	1.9
June	N 87° W	0.4	S 87° W	0.3	S 9° W	0.6	S 5° E	1.3
July	S 27° E	0.4	S 30° E	0.5	S 15° E	1.4	S 34° E	2.4
August	N 6° W	0.1	S 79° W	0.1	S 21° W	0.2	S 6° E	1.2
September	N 67° W	0.2	S 45° W	0.2	S 57° W	0.4	S 5° E	1.3
October	N 36° W	0.3	N 12° W	0.4	N 26° W	1.0	N 73° W	0.6
November	N 59° W	1.7	N 56° W	0.5	N 59° W	1.3	N 44° W	3.5
December	N 42° W	1.7	N 53° W	1.9	N 43° W	2.1	N 62° W	2.0
Annual	N 56° W	0.8	N 60° W	0.6	N 71° W	0.7	S 77° W	1.1
							S 43° W	0.9
							S 58° W	0.5
							S 88° W	0.6

1953.



NUMBER OF DAYS WITH PRECIPITATION (Separated by Amount)

Month Amount \	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
<0.1mm	3	3	2	3	—	—	—	2	1	1	4	3	22
0.1— 1	10	8	7	8	4	6	2	7	4	4	8	7	75
1— 3	6	10	5	5	3	2	1	3	—	—	5	8	48
3— 5	3	—	2	—	3	2	—	1	—	1	2	1	15
5— 10	3	—	2	2	1	1	5	2	1	3	4	1	25
10— 15	3	—	2	1	—	1	2	1	1	1	1	—	13
15— 20	—	—	—	—	1	—	3	4	1	—	—	—	9
20— 25	—	—	1	—	—	—	1	—	1	—	—	—	3
25— 30	—	—	—	—	—	1	1	—	2	—	—	—	4
30— 35	—	—	—	—	2	—	—	—	1	—	—	—	3
35— 40	—	—	—	1	—	—	—	—	1	—	—	—	2
40— 45	—	—	—	—	—	—	—	—	—	—	—	—	—
45— 50	—	—	—	—	—	—	—	1	—	—	—	1	2
50— 60	—	—	—	—	—	—	—	—	—	—	—	—	—
60— 70	—	—	—	—	—	1	1	—	—	—	—	—	2
70— 80	—	—	—	—	—	—	—	—	—	—	—	—	—
80— 90	—	—	—	—	—	—	—	—	—	—	—	—	—
90—100	—	—	—	—	—	—	—	—	—	—	—	—	—
100≤100	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	28	21	21	20	14	14	16	21	13	10	24	21	223

EARTH TEMPERATURE °C

Month	Surface						Mean	Depth (m)									
	2	6	10	14	18	22		0.05	0.1	0.2	0.3	0.5	1.0	2.0	3.0	5.0	6.0
January	-0.3	-0.3	-0.3	-0.1	-0.1	-0.2	-0.2	-0.3	-0.1	1.3	2.5	3.5	6.3	11.4	13.1	13.5	13.3
February	-1.1	-1.2	-0.7	-0.3	-0.4	-0.7	-0.7	-0.9	-1.0	0.1	1.3	2.7	5.1	9.9	11.9	12.9	13.0
March	2.6	2.5	6.1	9.0	5.1	3.5	4.8	4.1	4.0	3.9	4.2	4.4	5.1	8.7	10.9	12.3	12.7
April	6.5	6.0	13.9	16.7	10.8	7.8	10.3	9.7	9.4	8.9	8.6	8.0	7.6	8.7	10.2	11.6	11.4
May	11.9	12.0	21.6	23.5	16.5	13.6	16.5	15.6	15.3	14.4	13.7	12.6	10.9	9.5	10.2	11.2	12.0
June	16.8	17.0	22.9	25.5	20.6	17.9	20.1	19.3	19.1	18.3	17.5	16.4	14.4	11.1	10.8	11.2	11.9
July	21.6	21.7	27.5	29.4	24.9	22.5	24.6	23.6	23.5	22.5	21.7	20.1	17.5	12.8	11.7	11.4	11.9
August	22.2	22.0	26.6	28.6	25.2	23.0	24.6	24.2	24.2	23.8	23.4	22.6	20.5	14.8	12.8	11.9	11.9
September	18.4	18.1	23.6	25.8	21.1	19.3	21.0	20.9	21.0	20.7	20.6	20.4	19.6	16.1	14.3	12.5	12.2
October	11.7	11.1	18.2	20.2	15.1	12.8	14.9	15.1	15.4	15.8	16.2	16.7	17.4	16.0	14.6	13.1	12.5
November	4.8	4.5	7.9	9.3	6.3	5.1	6.3	6.7	7.2	8.2	9.3	10.6	13.1	15.0	14.6	13.4	12.9
December	1.7	1.4	3.8	5.3	2.7	1.9	2.8	3.1	3.3	4.1	4.9	6.0	8.8	13.0	14.0	13.4	13.1
Annual	9.7	9.6	14.3	16.1	12.3	10.5	12.1	11.8	11.8	11.8	12.0	12.0	12.2	12.3	12.4	12.4	12.4

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual

MONTHLY TOTAL DURATION OF SUNSHINE (in hours)

110.8	148.4	125.5	210.2	218.4	132.0	115.0	97.3	125.6	186.6	111.0	110.3	1691.1
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RATE OF SUNSHINE (%)

36	49	34	53	49	30	25	23	34	54	37	38	38
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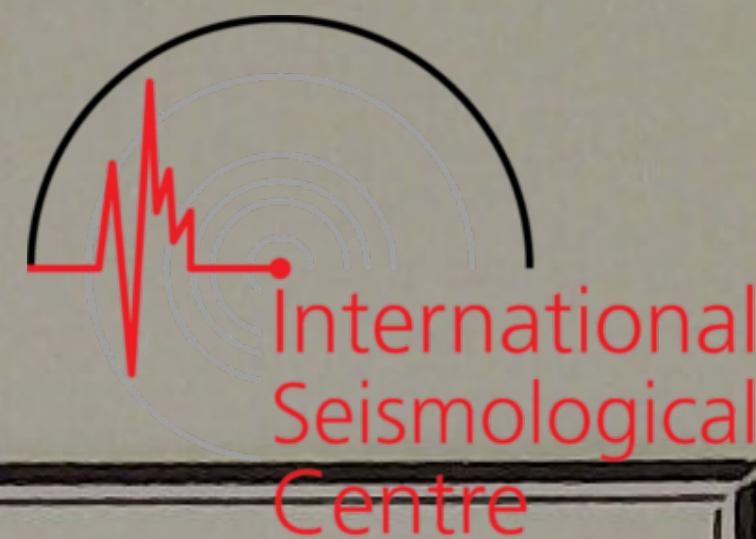
AMOUNT OF EVAPORATION (mm)

OPEN AIR												
1.8	2.2	2.1	3.8	4.5	3.7	4.2	3.2	3.0	2.5	1.9	1.6	2.9

IN THE SHELTER

1.0	1.1	1.0	1.6	1.7	1.4	1.3	1.1	1.0	1.0	1.0	1.1	1.2
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1953.



NUMBER OF OBSERVATIONS OF THE HORIZONTAL VISIBILITY FROM

Dir.	Class	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Sum.
N	0	—	—	—	—	—	—	—	—	—	—	—	—	—
	1	—	1	2	—	1	—	—	—	—	5	—	3	12
	2	—	—	1	—	2	—	2	2	—	7	2	—	16
	3	6	—	2	—	1	—	—	1	5	2	—	1	18
	4	4	3	1	2	1	—	1	3	1	1	1	4	22
	5	12	17	7	10	13	17	17	6	15	5	4	6	129
	6	50	21	13	13	12	20	29	23	18	8	10	13	230
	7	54	38	33	25	36	45	38	30	40	16	27	34	416
	8	44	55	82	74	62	53	65	69	70	95	93	93	855
	9	16	33	45	56	58	45	34	52	31	47	43	32	492
E	0	—	—	—	—	—	—	—	—	—	—	—	—	—
	1	—	1	2	—	1	—	—	—	—	5	—	3	12
	2	—	—	1	—	2	—	2	2	—	7	2	—	16
	3	6	—	2	—	1	—	—	1	5	2	—	1	18
	4	4	3	1	2	1	—	1	3	1	1	1	4	22
	5	12	16	7	8	11	16	17	7	15	4	4	6	123
	6	49	22	12	10	12	20	26	20	17	9	10	10	217
	7	53	37	32	26	38	45	40	32	39	17	24	33	416
	8	46	58	83	77	63	55	66	70	72	95	94	97	876
	9	16	31	46	57	57	44	34	51	31	46	45	32	490
S	0	—	—	—	—	—	—	—	—	—	—	—	—	—
	1	—	1	2	—	1	—	—	—	—	5	—	3	12
	2	—	—	1	—	2	—	2	2	—	7	2	—	16
	3	6	—	2	—	1	—	—	1	5	2	—	1	18
	4	4	3	1	2	1	—	1	3	1	1	1	4	22
	5	12	17	7	10	12	18	17	6	15	4	4	6	128
	6	50	23	14	11	14	24	29	21	19	8	12	10	235
	7	51	34	31	25	37	42	42	32	38	17	25	33	407
	8	47	59	83	74	61	52	62	70	71	95	91	98	863
	9	16	31	45	58	57	44	33	51	31	47	45	31	489
W	0	—	—	—	—	—	—	—	—	—	—	—	—	—
	1	—	1	2	—	1	—	—	—	—	5	—	3	12
	2	—	—	1	—	2	—	2	2	—	6	2	—	15
	3	6	—	2	—	1	—	—	—	5	2	—	1	17
	4	4	3	1	2	1	—	1	3	1	1	1	4	22
	5	12	16	7	10	12	18	17	6	15	4	4	6	127
	6	50	27	17	12	15	25	31	21	22	8	18	12	258
	7	54	39	36	25	39	45	40	37	38	19	31	37	440
	8	46	54	78	76	60	50	62	69	68	95	86	95	839
	9	14	28	42	55	55	42	33	48	31	46	38	28	460

TOTAL SOLAR AND SKY RADIATION ON THE HORIZONTAL SURFACE (gr. cal/cm². hour.)

	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	Sum
January	—	—	—	2.1	11.9	23.8	32.3	37.4	34.4	28.5	19.3	10.6	3.1	0.3	—	—	203.7
February	—	—	0.3	7.2	20.8	33.6	43.5	49.0	45.3	40.7	31.0	18.6	6.4	0.7	—	—	297.1
March	—	0.0	2.1	11.3	22.6	31.8	38.4	41.8	42.7	35.6	25.5	18.5	9.3	2.1	0.0	—	281.7
April	—	1.6	9.6	21.0	32.2	44.3	48.8	50.8	49.2	45.6	36.3	28.9	17.1	6.1	0.5	—	392.0
May	0.5	6.0	16.9	26.6	39.0	49.7	54.5	54.4	53.7	50.0	39.8	30.8	19.7	8.5	1.6	0.0	451.7
June	0.2	4.9	13.4	23.5	32.8	38.1	40.2	42.4	43.6	41.1	34.8	24.8	17.8	10.6	3.0	0.1	371.3
July	0.1	2.9	9.9	18.6	28.6	37.2	42.0	45.4	43.1	38.2	31.9	23.5	16.2	9.6	3.2	0.1	350.5
August	—	1.0	6.6	17.4	24.9	31.4	37.3	41.5	36.2	37.6	31.7	22.4	13.5	6.6	1.2	—	309.3
September	—	0.2	5.5	14.6	26.5	35.4	40.2	43.9	40.6	35.2	26.6	18.6	8.5	2.0	—	—	297.8
October	—	0.0	2.7	13.9	26.6	37.5	43.4	43.1	40.8	35.3	25.6	14.5+	3.5	0.2	—	—	287.1
November	—	—	0.3	6.3	13.7	22.0	26.8	26.9	26.6	21.3	14.9	4.8	0.6	—	—	—	164.2
December	—	—	0.0	2.7	11.6	19.7	24.4	25.3	22.8	17.7	10.9	3.6	0.2	—	—	—	138.9
Annual	0.8	16.6	67.3	165.2	291.2	404.5	471.8	501.9	479.0	426.8	328.3	219.6	115.9	46.7	9.5	0.2	3545.3

1953.



NUMBER OF DAYS WITH

Month	●	*	△	▲	☒	≡	Clear	Cloudy	Sunless	☒	□	Min. Temp. <0°	Mean Temp. <0°	Max. Temp. <0°	Min. Temp. ≥25°	Mean Temp. ≥25°	Max. Temp. ≥25°	Max. Temp. ≥30°
January	25	25	2	—	—	1	—	18	1	8	3	31	30	8	—	—	—	—
February	18	17	1	—	—	1	—	11	1	6	4	28	22	13	—	—	—	—
March	19	8	1	—	—	2	—	20	5	7	5	15	1	—	—	—	—	—
April	17	3	1	—	—	4	2	9	2	12	7	8	—	—	—	—	—	—
May	14	—	—	—	—	1	5	2	12	3	3	3	—	—	—	—	—	—
June	14	—	—	—	—	—	1	22	8	4	—	—	—	—	—	8	—	—
July	16	—	—	—	—	3	2	23	9	—	—	—	—	—	4	18	6	—
August	19	—	—	—	—	4	4	23	5	—	—	—	—	—	3	20	3	—
September	12	—	—	—	—	—	5	1	18	8	1	—	—	—	—	7	—	—
October	8	—	—	—	—	1	14	6	8	2	—	6	1	—	—	—	—	—
November	20	7	3	—	—	1	1	10	1	13	8	14	1	—	—	—	—	—
December	18	9	2	—	—	2	3	9	6	7	15	26	12	—	—	—	—	—
Annual	200	69	10	—	9	41	16	183	50	61	51	126	66	21	—	7	53	—

Note 1: In the 2nd column the number of days on which the amount is 0.1 mm or more are reckoned, but in the 3rd 4th 5th columns, the amount is not considered.

Note 2: In the 7th column, day with \equiv° are not included.

GENERAL REMARKS

	First Day (last year) 1952	Last Day (this year) 1953	First Day (this year) 1953
Min. Air Temp. below 0°:	Oct. 27	May 4	Oct. 27
Mean Air Temp. below 0°:	Dec. 3	Feb. 27	Dec. 4
Max. Air Temp. below 0°:	Dec. 20	Feb. 22	Jan. 12 (1954)
Max. Air Temp. above 25°:		Sept. 19	June 15
Mean Air Temp. above 25°:		Aug. 12	July 27
Max. Air Temp. above 30°:		Aug. 12	July 24
Hoar Frost:	Oct. 26	May 4	Oct. 15
Snow:	Nov. 13	Apr. 14	Nov. 11
Snow on Ground.	Nov. 13	Apr. 14	Nov. 19
Max. Continuance of Days with Min. Temp. below 0° is 72 Days:		from Dec. 19 to Feb. 28	
Max. Continuance of Days with Mean Temp. below 0° is 30 Days:		from Jan. 12 to Feb. 12	
Max. Continuance of Days with Max. Temp. above 30° is 5 Days:		from July 27 to July 31	
Max. Continuance of Days with precipitation is 30 Day:		from Dec. 19(1952) Jan. 17	
Max. Continuance of Days without precipitation is 8 Day:		from June 11 to June 18	

Continuance of more than 5 Days with precipitation are:

30 Days:	from Dec. 19(1952) to Jan. 17	8 Days:	from July 16 to July 23
22 ,,	from Jan. 2 to Feb. 12	10 ,,	from Aug. 16 to Aug. 15
6 ,,	from Feb. 15 to Feb. 20	9 ,,	from Nov. 7 to Nov. 15
9 ,,	from Mar. 8 to Mar. 16	7 ,,	from Nov. 19 to Nov. 25
5 ,,	from Apr. 15 to Apr. 19	7 ,,	from Dec. 26 to Jan. 1(1954)
6 ,,	from June 5 to June 10		

1953.



FIVE-DAY MEANS

Month	Five-day Period	Air Pressure mb	Air Temperature °C	Vapour Pressure mb	Relative Humidity %	Amount of Clouds (0-10)	Velocity of Wind m.p.s.	Precipitation (Total) mm
January	1—5	24.7	-5.5	3.6	92	8.6	2.6	12.6
	6—10	12.2	-1.9	4.7	89	8.6	2.9	22.2
	11—15	5.5	-1.3	4.9	88	8.3	3.3	32.6
	16—20	21.0	-4.3	3.9	90	6.5	1.7	2.9
	21—25	10.8	-3.7	4.2	90	8.3	2.3	12.1
	26—30	13.5	-3.3	4.0	84	6.9	3.1	10.8
February	31—4	18.9	-6.0	3.4	89	7.1	2.2	5.4
	5—9	17.0	-4.8	3.6	88	7.8	2.9	5.0
	10—14	20.5	-0.2	4.7	79	6.3	2.9	2.7
	15—19	19.7	-4.7	3.6	87	8.0	2.9	4.3
	20—24	25.5	-2.8	3.8	78	7.3	2.7	2.7
	25—1	21.9	1.2	5.0	75	6.5	1.8	1.7
March	2—6	16.3	1.2	5.3	79	7.7	3.6	7.1
	7—11	14.7	3.9	5.9	73	7.9	3.6	11.0
	12—16	16.6	2.7	5.4	74	8.2	2.9	6.7
	17—21	20.0	3.1	6.4	82	8.5	2.3	16.0
	22—26	11.3	6.2	7.2	77	8.1	2.8	26.2
	27—31	8.9	3.7	6.1	77	9.4	3.7	12.7
April	1—5	20.0	6.4	7.2	76	7.3	3.4	5.4
	6—10	20.0	9.2	8.1	72	5.8	2.6	0.2
	11—15	13.6	5.8	6.3	67	7.1	5.8	14.7
	16—20	15.4	5.7	5.8	66	5.2	3.3	4.8
	21—25	12.6	6.6	6.4	68	5.0	3.8	10.3
	26—30	15.1	12.3	10.9	77	6.3	3.9	38.4
May	1—5	22.5	8.9	7.2	67	4.2	3.0	0.1
	6—10	12.4	13.5	12.5	83	8.2	2.8	39.4
	11—15	10.1	14.8	13.4	79	8.0	3.2	4.1
	16—20	20.4	12.0	9.1	68	5.6	3.0	2.7
	21—25	15.3	14.9	13.1	78	5.7	4.1	45.9
	26—30	7.6	14.9	13.4	80	7.2	4.3	12.9
June	31—4	10.9	16.3	14.7	80	9.0	3.4	0.6
	5—9	7.6	15.0	15.0	88	9.6	4.3	106.3
	10—14	11.0	15.8	14.9	83	8.6	3.0	2.5
	15—19	13.8	19.7	17.3	77	6.1	2.6	3.1
	20—24	10.2	16.7	15.6	82	9.4	3.8	3.4
	25—29	5.8	19.8	19.0	83	8.6	2.6	3.6
July	30—4	7.5	21.2	19.8	80	7.6	2.6	6.5
	5—9	7.8	20.3	20.9	88	9.8	3.0	43.9
	10—14	14.9	19.0	17.0	78	7.2	3.5	8.4
	15—19	8.0	21.4	22.5	88	9.3	2.5	50.4
	20—24	12.1	22.5	25.3	93	9.4	1.3	100.5
	25—29	10.8	24.7	27.4	88	8.2	1.9	20.6
August	30—3	10.4	24.5	26.6	86	8.3	2.4	14.0
	4—8	12.0	22.8	24.8	89	9.3	1.7	19.9
	9—13	9.1	25.0	28.0	89	9.7	1.6	17.9
	14—18	7.8	22.2	22.8	86	7.9	2.2	65.0
	19—23	9.8	21.4	20.9	82	8.6	1.8	10.8
	24—28	9.8	16.9	17.3	90	8.6	1.6	25.0
September	29—2	20.1	18.2	17.6	85	7.8	1.5	—
	3—7	10.1	17.7	16.9	84	8.5	1.8	0.8
	8—12	14.3	19.2	18.5	84	5.9	1.6	0.2
	13—17	16.6	18.8	19.5	91	9.7	1.0	85.7
	18—22	19.1	16.2	15.6	85	6.3	1.3	25.4
	23—27	9.6	18.3	17.9	88	8.6	3.4	70.2
October	28—2	16.0	16.8	16.2	84	8.6	1.3	0.2
	3—7	15.8	12.1	10.8	79	3.0	1.4	0.1
	8—12	14.1	13.8	13.4	85	7.9	2.0	11.5
	13—17	24.8	10.2	8.7	79	2.9	1.9	0.2
	18—22	16.7	12.8	11.9	82	5.2	2.1	0.0
	23—27	24.3	9.3	9.2	80	3.3	1.4	0.1
November	28—1	17.3	11.4	11.8	87	7.1	2.2	36.1
	2—6	14.9	8.9	8.5	74	4.3	3.9	0.5
	7—11	14.9	5.0	6.8	78	7.0	3.6	13.8
	12—16	20.9	4.1	6.7	81	8.4	3.0	9.6
	17—21	22.4	1.2	5.2	80	7.8	4.5	8.6
	22—26	18.9	3.1	5.7	76	6.7	2.9	8.4
December	27—1	23.0	4.5	7.8	80	5.6	3.2	4.4
	2—6	23.9	2.2	5.7	77	6.8	4.8	2.6
	7—11	24.6	1.3	5.3	79	7.1	2.1	49.0
	12—16	21.9	3.8	5.8	74	4.8	3.5	1.6
	17—21	22.2	3.0	5.6	74	4.0	3.2	3.0
	22—26	17.2	0.1	5.3	87	8.8	2.9	6.8
Mean		15.4	9.6	11.4	81	7.3	2.8	16.8

SEISMOLOGICAL OBSERVATIONS

Remarks:—

1. The seismic intensity is divided into the following eight classes according to the scale of the Central Meteorological Observatory of Japan (1949).

Unfelt	0
	1. Slight
	2. Weak
	3. Rather strong
Felt	4. Strong
	5. Very strong
	6. Disastrous
	7. Very disastrous

2. The time adopted in the seismological observations is Japanese Central Standard Time 9 east from Greenwich.

3. Symbols and Notations.

i : Sudden beginning of motion.

e : Gradual beginning of motion.

? : Doubtful phase.

+ : Out of order of the instrument.

⊕ : Out of the range of the instrument.

[] : Depth of focus in the unit of km.

[S] : Shallow-focused earthquakes.

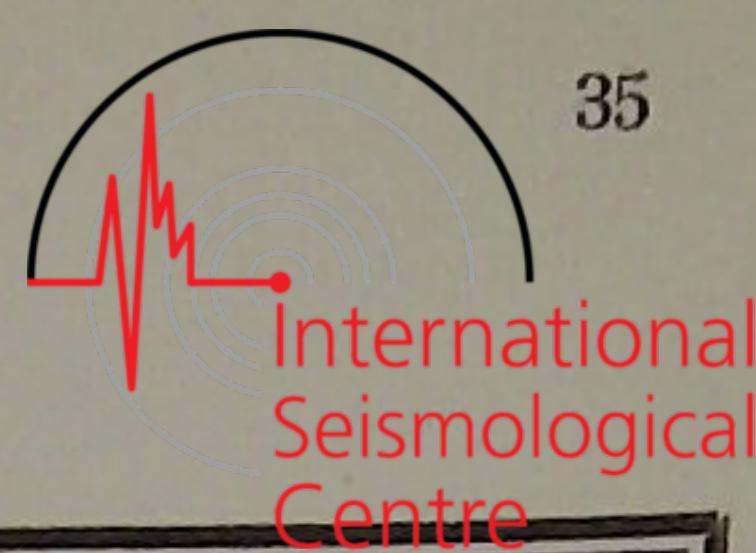
A.S. : After-shock

4. The sign of maximum amplitude: + towards E and N.
— towards W and S.



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks
		E	W	N S	E	W	N S	E	W	N S	E W	N S			
1	Jan. 1	h 11 52	m 09	s e 52	m 52	s 30	e 52	m 37	s —	m —	+ 34	μ 25	m 5	s 47	0 37°N, 139°E [10]
2	2	11 17	14	— —	17	29	— —	— —	— —	— —	— 7	— —	1	56	0
3	3	17 21	06	— —	21	28	— —	— —	— —	— —	— 3	— —	2	17	0
4	4	21 13	51	— —	14	28	— —	— —	— —	— —	— 3	— —	3	11	0 36.0N, 139.0E [110]
5	5	16 53	44	53 46	58	22	58	21	— —	— —	-230	-435	91	42	0 55N, 170E
6	5	19 09	50	09 51	12	26	12	25	— —	— —	+106	+540	46	57	0 49N, 156E
7	7	e 14 53	37	— —	54	16	— —	— —	— —	— —	+ 8	— —	8	40	0
8	7	? 23 16	47	— —	17	10	e 17	13	— —	— —	+ 7	+ 10	5	13	0
9	10	7 04	23	— —	04	37	04	36	— —	— —	- 6	+ 8	3	46	0
10	12	8 02	49	? 02 51	? 10	54	? 10	30	— —	— —	— —	— —	31	02	0 65N, 135W
11	13	2 —	—	? 27 40	— —	—	? 30	17	— —	— —	— —	— —	16	00	0
12	13	— —	—	— —	00	50	— —	— —	— —	— —	— —	— —	—	—	0
13	14	15 35	21	35 21	35	52	35	56	— —	— —	- 17	- 28	5	52	0 36.3N, 142.0E [40]
14	14	18 39	02	39 03	39	56	89	58	— —	— —	- 46	- 55	7	26	0 36.0N, 141.8E [60]
15	16	13 11	52	— —	12	16	— —	— —	— —	— —	- 4	— —	2	15	0
16	17	15 12	38	— —	e 13	18	— —	— —	— —	— —	+ 7	— —	4	55	0 35.5N, 140.2E [65]
17	19	1 —	—	04 43	— —	05	04	— —	— —	— —	+ 15	3 42	0 41.3N, 142.1E [40]		
18	19	13 58	18	58 15	58	53	58	51	— —	— —	+460	+378	19	47	0 41.6N, 143.8E [40]
19	19	15 50	49	e 50 51	51	12	51	14	— —	— —	+ 11	- 18	4	16	0
20	19	16 00	12	00 11	00	39	00	38	— —	— —	+ 36	+ 38	7	15	0 39.4N, 143.9E [40]
21	19	16 16	21	16 21	16	45	16	42	— —	— —	- 51	- 50	4	10	0 39.5N, 144.0E [40]
22	19	16 —	—	— —	22	11	— —	— —	— —	— —	— —	— —	—	—	0
23	20	6 13	56	— —	14	17	— —	— —	— —	— —	+ 6	— —	3	27	0
24	21	2 —	—	34 42	— —	40	39	— —	— —	— —	— —	—	13	58	0
25	21	14 35	19	35 18	35	47	35	45	— —	— —	- 16	- 10	5	44	0
26	21	20 —	—	— —	15	38	— —	— —	— —	— —	- 3	— —	—	—	0
27	22	6 59	48	— —	60	22	60	19	— —	— —	- 7	— —	5	58	0 35.9N, 141.0E [60]
28	22	14 09	55	— —	10	20	— —	— —	— —	— —	+ 3	— —	3	24	0
29	23	e 5 08	00	— —	08	21	— —	— —	— —	— —	—	—	2	15	0
30	23	8 17	17	? 17 33	17	52	e 17	56	— —	— —	+ 9	— —	3	49	0
31	27	10 05	42	— —	— —	— —	— —	— —	— —	— —	—	—	3	51	0
32	27	12 17	22	17 19	20	59	20	53	— —	— —	—	—	13	26	0
33	27	12 33	27	33 25	? 36	47	? 36	25	— —	— —	—	—	12	15	0
34	27	13 10	49	e 10 50	? 13	15	— —	— —	— —	— —	—	—	9	39	0
35	30	11 02	05	— —	02	34	— —	— —	— —	— —	+ 10	— —	4	41	0
36	Feb. 31	0 10	51	— —	11	02	— —	— —	— —	— —	- 6	— —	2	06	0
37	3	10 20	26	20 26	21	05	21	04	— —	— —	+ 10	+ 15	4	23	0 35.5N, 140.3E [50]
38	6	22 13	58	13 56	14	36	14	37	— —	— —	+738	+424	36	57	0 42.0N, 144.2E [80]
39	8	3 26	44	e 26 45	e 29	01	? 29	10	— —	— —	+ 5	— —	15	32	0 48N, 158E
40	9	3 21	39	— —	22	05	e 22	11	— —	— —	- 12	+ 10	4	51	0
41	9	3 58	09	— —	58	35	— —	— —	— —	— —	- 8	— —	4	00	0
42	10	10 14	25	e 14 27	15	11	15	13	— —	— —	+ 21	+ 20	7	24	0 42.7N, 144.9E [40]
43	10	17 02	23	— —	02	37	— —	— —	— —	— —	—	—	2	58	0
44	10	20 27	20	e 27 20	27	45	27	45	— —	— —	- 14	+ 8	5	37	0
45	11	e 21 25	53	— —	27	20	— —	— —	— —	— —	+ 8	— —	4	59	0
46	11	e 21	41 01	— —	41	17	— —	— —	— —	— —	—	—	2	15	0
47	12	17 26	31	26 30	38	33	38	21	— —	— —	—	—	45	04	0
48	13	22 44	32	— —	44	55	e 44	56	— —	— —	+ 10	— —	3	19	0
49	15	6 53	01	53 04	56	50	56	49	— —	— —	- 23	- 78	15	07	0
50	16	2 19	29	19 28	20	11	20	11	— —	— —	- 23	+ 28	8	00	0 42.2N, 144.8E [60]
51	16	9 08	15	e 08 16	08	54	08	54	— —	— —	- 21	- 13	6	03	0 42.3N, 142.9E [100]
52	16	15 44	15	— —	44	26	— —	— —	— —	— —	- 6	— —	1	31	0
53	18	? 3 15	13	— —	15	28	e 15	31	— —	— —	- 6	— —	3	48	0
54	18	23 32	32	e 32 32	33	04	33	03	— —	— —	+ 23	+ 15	5	04	0
55	19	22 17	38	— —	18	06	— —	— —	— —	— —	—	—	3	49	0



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Fpicenter and Remarks		
		E	W	N S	E	W	N S	E	W	N S	WW	NS					
56	Feb. 22	h 10	m 46	s 21	m —	s 47	m 05	e 47	s 03	m —	+ 4	μ	m 4	s 40	0		
57	23	e 12	19	38	—	—	19	56	—	—	—	—	—	2 08	0		
58	23	e 12	46	10	46	09	49	30	49	40	—	—	18	41	0		
59	25	17	26	26	26	26	26	35	26	36	—	±394	±375	7 04	2		
60	25	17	58	40	—	—	59	02	—	—	—	—	—	2 29	0		
61	26	6	24	24	? 24	50	? 28	46	? 28	46	—	—	—	15 20	0		
62	26	9	—	—	—	—	36	22	36	24	—	22	+ 30	—	0		
63	26	20	51	59	e 51	59	59	30	e 59	19	e 64	36	? 64	37	+ 18	0	
64	28	7	04	48	e 04	49	05	38	05	37	—	—	+ 7	- 15	4 38	0	
65	Mar. 2	e 13	15	44	—	—	15	59	—	—	—	—	+ 8	—	2 57	0	
66	3	20	37	44	—	—	38	06	—	—	—	—	+ 6	—	3 21	0	
67	4	e 7	57	20	e 57	20	59	48	59	48	—	—	—	13 01	0		
68	4	14	54	04	—	—	54	26	—	—	—	—	—	2 30	0		
69	6	6	05	30	e 05	26	08	28	? 08	34	—	—	+ 10	—	14 52	0	
70	6	6	25	26	e 25	27	27	41	e 27	44	—	—	+ 6	—	32 43	0	
71	7	6	—	—	—	—	07	00	—	—	—	—	—	—	—	0	
72	7	17	—	—	—	—	04	50	—	—	—	—	—	—	—	0	
73	8	e 21	31	12	—	—	31	44	—	—	—	—	+ 5	—	3 10	0	
74	9	19	12	25	e 12	33	e 13	01	e 13	01	—	—	+ 5	—	5 22	0	
75	11	7	27	17	—	—	27	50	—	—	—	—	+ 4	—	4 52	0	
76	12	e 1	58	17	—	—	58	45	—	—	—	—	+ 11	—	4 45	0	
77	14	14	10	07	—	—	10	23	10	23	—	—	- 8	—	2 42	0	
78	16	20	—	—	—	—	19	51	—	—	—	—	—	—	—	0	
79	16	21	—	—	—	—	49	21	—	—	—	—	—	—	—	0	
80	17	22	08	18	08	15	e 10	48	? 10	42	—	—	+ 9	—	12 30	0	
81	18	7	41	54	41	53	42	05	42	03	—	—	- 29	- 10	2 54	0	
82	19	4	18	34	18	36	28	44	e 28	35	43	08	? 42	38	- 8	70 24	0
83	19	e 17	46	53	—	—	? 49	50	? 49	48	—	—	+ 4	—	16 01	0	
84	19	e 19	19	39	—	—	e 22	47	—	—	—	—	+ 4	—	6 19	0	
85	20	17	34	55	—	—	35	50	35	52	—	—	+ 6	—	5 30	0	
86	21	e 10	25	31	e 25	33	e 26	29	e 26	28	—	—	- 67	- 50	7 01	0	
87	21	e 10	37	02	—	—	37	50	—	—	—	—	- 16	—	6 05	0	
88	24	15	21	48	—	—	21	58	—	—	—	—	- 6	—	2 17	0	
89	27	4	35	19	—	—	35	37	—	—	—	—	+ 11	—	2 51	0	
90	28	4	35	27	e 35	30	35	55	e 35	58	—	—	- 12	—	4 23	0	
91	29	20	46	00	e 45	58	46	22	46	20	—	—	- 85	- 73	8 14	0	
92	30	0	24	52	—	—	25	07	—	—	—	—	- 8	—	2 58	0	
93	30	14	—	—	—	—	38	54	—	—	—	—	+ 5	—	—	0	
94	Apr. 2	3	13	52	—	—	15	36	—	—	—	—	- 6	—	5 47	0	
95	2	13	03	58	—	—	04	43	e 04	45	—	—	+ 7	—	7 02	0	
96	2	20	56	56	e 56	57	57	16	57	16	—	—	- 45	+ 40	8 37	1	
97	3	17	52	30	—	—	52	57	—	—	—	—	- 2	—	2 11	0	
98	4	2	52	39	e 52	39	53	21	e 53	25	—	—	+ 65	- 40	10 01	0	
99	4	14	53	07	53	04	53	55	53	55	—	—	+ 616	+ 990	23 08	0	
100	6	9	44	49	44	47	51	32	e 51	33	—	—	- 19	—	14 40	0	
101	6	12	56	08	—	—	e 60	58	—	—	—	—	—	—	12 32	0	
102	6	14	57	51	—	—	58	27	—	—	—	—	—	—	4 30	0	
103	6	e 18	34	18	—	—	34	52	—	—	—	—	+ 5	—	5 12	0	
104	6	21	19	06	—	—	19	54	—	—	—	—	+ 5	—	7 11	0	
105	9	4	52	05	e 52	07	52	48	e 52	53	—	—	- 6	—	5 33	0	
106	10	11	29	26	—	—	29	56	—	—	—	—	+ 5	—	2 47	0	
107	13	2	49	07	—	—	49	19	e 49	19	—	—	- 21	—	4 09	0	
108	13	3	49	02	e 49	04	49	19	e 49	19	—	—	- 35	—	4 01	0	
109	13	17	39	30	—	—	39	41	—	—	—	—	- 5	—	2 06	0	
110	14	e 10	22	17	—	—	22	48	e 22	44	—	—	- 6	—	5 40	0	
															42.4N, 144.1E [20]		



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks						
		E	W	N S	E	W	N S	E	W	N S	E W	N S									
111	Apr.	h 17	m 24	s 22	m e 24	s 22	m 25	s 01	m e 25	s 02	m —	s —	+ 6	μ	m 5	s 52	0	35.6°N, 141.2°E [60]			
112		18	42	59	e 43	04	43	09	e 43	12	—	—	- 17	—	3	06	0				
113		23	18	14	—	—	19	04	e 19	04	—	—	- 13	+	7	6	19	0			
114		11	05	11	—	—	05	44	—	—	—	—	+ 5	—	3	31	0				
115		13	37	36	—	—	38	06	—	—	—	—	+ 5	—	3	59	0	41.7°N, 142.5°E [50]			
116	May	20	22	23	30	—	—	23	47	—	—	—	—	—	1	53	0				
117		17	—	—	—	—	54	00	—	—	—	—	+ 4	—	—	—	0				
118		1	—	—	32	44	—	—	39	24	—	—	45	06	—	106	35	0	4S, 154°E		
119		e 12	04	58	—	—	e 05	47	—	—	—	—	—	—	—	3	33	0			
120		12	—	—	—	—	36	23	—	—	—	—	—	—	—	—	—	0			
121	May	30	5	22	00	—	—	22	41	—	—	—	—	+ 108	—	12	14	0	42.2°N, 143.2°E [55]		
122		14	46	31	—	—	46	43	—	—	—	—	- 12	—	1	53	0				
123		? 20	34	03	—	—	37	27	—	—	—	—	+ 3	—	7	20	0	54°N, 162°E			
124		1	—	—	—	—	03	02	—	—	—	—	—	—	—	—	0				
125		2	36	46	36	47	? 46	07	? 46	38	—	—	- 7	- 18	49	05	0	36.5°S, 73.0°W [100]			
126	May	7	e 21	54	16	—	—	54	43	—	—	—	—	+ 4	—	2	28	0	40.8°N, 143.5°E [S]		
127		5	—	—	34	04	—	—	34	45	—	—	+ 70	+ 43	6	28	0	41.6°N, 142.2°E [40]			
128		10	12	57	42	—	—	58	19	—	—	—	—	- 8	—	6	32	0	36.3°N, 139.8°E [60]		
129		11	4	50	04	50	05	50	39	e 50	43	—	—	+ 38	- 35	13	08	0	36.2°N, 141.1°E [40]		
130		11	19	27	31	27	30	36	24	e 36	23	—	—	—	—	15	34	0			
131	June	12	10	38	56	—	—	39	48	e 39	50	—	—	+ 11	—	6	29	0			
132		9	35	40	—	—	36	12	—	—	—	—	- 5	—	4	50	0				
133		14	20	11	—	—	20	19	—	—	—	—	—	—	1	29	0				
134		18	7	13	17	13	17	14	19	e 14	16	—	—	- 40	- 30	12	43	0	34.7°N, 139.7°E [110]		
135		7	20	21	—	—	20	50	e 20	55	—	—	+ 9	—	5	27	0	41.4°N, 142.1°E [40]			
136	June	19	12	15	24	15	22	e 18	45	e 18	56	—	—	22	20	—	28	69	25	0	51°N, 159°E
137		e 13	56	19	—	—	57	02	—	—	—	—	—	—	4	47	0	36.2°N, 140.9°E [30-40]			
138		19	51	38	e 07	26	57	48	—	—	—	—	—	—	11	30	0				
139		8	07	30	e 07	26	08	15	e 08	16	—	—	+ 29	- 25	7	46	0	36.2°N, 139.9°E [60]			
140		1	54	04	—	—	54	20	—	—	—	—	+ 4	—	3	18	0				
141	June	25	e 11	36	06	—	—	36	27	—	—	—	—	+ 5	—	2	56	0			
142		10	44	00	44	02	44	35	44	38	—	—	- 380	- 645	19	09	0	41.8°N, 143.1 [40]			
143		5	36	52	—	—	36	59	36	59	—	—	± 5	—	2	59	0				
144		2	—	—	—	—	59	40	—	—	—	—	—	—	—	—	0				
145		31	22	27	20	—	—	27	33	—	—	—	—	- 12	—	3	06	0			
146	June	3	2	52	29	e 52	31	54	34	54	32	—	—	+ 10	—	22	07	0	30.5°N, 142.0°E [60-80]		
147		2	56	09	—	—	56	32	—	—	—	—	+ 2	—	3	08	0				
148		10	—	—	—	—	58	04	—	—	—	—	- 3	—	—	—	0				
149		18	—	—	—	—	45	17	—	—	—	—	—	—	—	—	0				
150		20	44	54	—	—	—	—	—	—	—	—	—	—	3	06	0				
151	July	8	22	25	06	—	—	25	34	—	—	—	—	- 11	—	4	39	0	36.4°N, 141.2°E [40]		
152		14	—	—	—	—	38	32	—	—	—	—	+ 7	—	—	—	0	30.9°N, 139.8°E [400-450]			
153		11	3	32	04	e 32	00	37	43	? 38	02	—	—	—	—	18	01	0	4S, 128°E		
154		10	—	—	—	—	05	48	—	—	—	—	± 14	—	—	—	0				
155		13	0	19	14	—	—	19	41	19	42	—	—	- 4	—	4	45	0			
156	July	14	19	33	48	e —	—	35	50	e —	—	—	—	- 2	—	6	15	0	28.0°N, 140.5°E [500]		
157		2	55	35	e 55	40	e 62	26	e 62	12	—	—	—	—	23	32	0	56.5°N, 154°W			
158		18	55	13	55	14	56	38	e 56	42	—	—	+ 35	+ 20	20	22	0	31.5°N, 142.0°E [40]			
159		17	e 10	03	29	—	—	03	46</												



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks
		E	W	N S	E	W	N S	E	W	N S	E W	N S			
166	June 23	h 3	m 49	s 56	m —	s —	m 50	s 06	m —	s —	—	μ	m 2	s 13	0
167	23	22	57	36	57	33	e 60	50	e 60	43	—	+ 5	+ 13	13 42	0
168	25	6	21	18	—	—	22	48	22	51	—	- 16	—	12 01	0
169	25	19	53	00	e 52	58	? 61	05	e 61	20	—	—	+ 75	46 47	0
170	26	14	51	52	51	53	e 59	00	e 59	00	—	+ 8	+ 40	24 16	0
171	26	e 21	03	26	e —	—	03	58	—	—	—	—	4	17	0
172	28	e 14	39	23	e 39	25	40	34	40	32	—	- 19	+ 5	31 20	0
173	28	23	44	16	44	15	45	07	45	06	—	+ 23	+ 25	6 46	0
174	30	e 13	16	37	—	—	17	03	—	—	—	—	2	39	0
175	July 1	12	03	22	03	23	06	17	06	17	—	+ 15	- 20	20 59	0
176	2	16	07	09	07	08	15	27	15	25	—	- 100	- 145	34 14	0
177	2	17	49	27	e 49	22	50	04	e 50	03	—	- 25	—	7 44	0
178	2	23	33	44	e 33	47	34	22	34	22	—	- 8	—	4 44	0
179	3	e 14	35	58	—	—	39	27	—	—	—	+ 4	—	7 02	0
180	4	13	—	—	—	—	23	44	—	—	—	+ 4	—	—	0
181	5	e 15	23	43	—	—	? 28	48	—	—	—	—	17	08	0
182	5	23	07	03	e 07	00	09	02	09	03	—	- 3	+ 8	9 07	0
183	7	7	—	—	—	—	04	07	—	—	—	+ 4	—	—	0
184	8	2	30	27	e 30	32	31	54	e 31	54	—	+ 13	- 10	11 32	0
185	9	e 8	03	24	—	—	04	10	—	—	—	- 3	—	3 39	0
186	10	4	22	00	—	—	22	52	22	52	—	- 40	+ 25	7 00	0
187	10	e 4	31	27	e 31	25	32	12	e 32	09	—	+ 11	—	9 11	0
188	11	22	03	57	e 03	58	04	29	04	28	—	+ 47	- 115	7 31	0
189	12	e 15	51	06	—	—	? 51	59	—	—	—	—	4	35	0
190	13	7	35	15	—	—	35	54	e 35	57	—	+ 21	+ 10	7 31	0
191	14	21	45	17	e 45	16	45	57	e 45	55	—	+ 17	—	6 58	0
192	16	1	—	—	—	—	56	56	—	—	—	± 4	—	—	0
193	16	23	32	54	e 32	56	33	23	33	24	—	- 55	- 40	9 48	0
194	17	19	18	33	—	—	18	56	—	—	—	- 6	—	3 30	0
195	21	e 9	33	03	—	—	33	21	—	—	—	+ 4	—	4 22	0
196	22	0	12	29	e 12	27	13	15	13	17	—	+ 25	—	5 56	0
197	22	2	26	36	e 26	38	27	18	e 27	17	—	+ 7	—	7 06	0
198	22	14	15	04	15	05	18	03	e 18	02	—	+ 10	+ 23	23 01	0
199	22	21	53	04	53	04	53	39	53	39	—	+ 66	+ 33	16 16	0
200	23	8	17	46	—	—	18	15	—	—	—	+ 4	—	4 27	0
201	25	4	—	—	—	—	19	42	—	—	—	—	—	—	0
202	25	14	—	—	—	—	53	28	—	—	—	—	—	—	0
203	27	1	57	55	57	55	61	23	61	22	—	- 79	- 188	21 21	0
204	27	8	31	22	31	22	31	50	31	48	—	+ 228	- 320	13 29	0
205	27	22	—	—	—	—	38	21	—	—	—	—	—	—	0
206	28	0	08	25	e 08	26	12	11	† 12	12	—	+ 35	- 18	13 16	0
207	28	3	42	38	? 42	39	43	30	e 43	29	—	- 5	—	5 23	0
208	30	0	28	30	—	—	28	51	—	—	—	—	—	2 57	0
209	30	13	21	19	21	19	21	46	e 21	52	—	- 20	—	5 16	0
210	31	8	49	17	49	15	52	54	52	53	—	+ 62	+ 45	13 33	0
211	Aug. 3	6	03	39	—	—	06	39	—	—	—	+ 5	—	5 41	0
212	4	23	03	12	—	—	03	39	—	—	—	+ 3	—	1 32	0
213	6	0	49	50	—	—	50	19	e 50	18	—	+ 46	—	4 50	0
214	8	22	14	40	? 14	45	15	23	15	25	—	+ 32	+ 15	7 02	0
215	11	8	02	51	—	—	03	03	—	—	—	+ 6	—	2 00	0
216	11	12	45	09	—	—	? 55	01	—	—	—	—	—	—	0
217	12	18	36	37	e 36	32	e 46	56	? 46	57	—	—	47	28	0
218	13	14	46	54	e 46	51	47	20	e 47	18	—	—	60	27	0
219	13	18	34	04	34	06	42	50	42	51	—	—	3	34	0
220	14	16	59	18	—	—	59	29	—	—	—	± 3	—	13 24	0
											—	—	1	24	0



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earth- quake	Intensity	Epicenter and Remark		
		E	W	N S	E	W	N S	E	W	N S	E W	N S					
221	Aug. 19	h 17	m 44	s 06	m —	s —	m 44	s 51	m 44	s 54	m —	s —	— 8	μ	m 4	s 50	0
222		e 9	29	45	— —	— —	36	07	— —	— —	— —	— —	— 5	—	10	50	0
223		10	35	33	— —	— —	35	45	— —	— —	— —	— —	— 6	—	1	53	0
224		e 14	36	04	— —	— —	36	32	— —	— —	— —	— —	+ 6	—	3	28	0
225		18	05	42	— —	— —	05	55	— —	— —	— —	— —	—	—	1	08	0
226	24	18	—	—	— —	— —	38	36	— —	— —	— —	— —	—	—	—	—	0
227	24	e 19	00	16	— —	— —	00	33	— —	— —	— —	— —	—	—	1	29	0
228	25	0	01	45	— —	— —	01	59	01	59	— —	— —	± 164	+ 395	7	01	2
229	26	19	10	42	— —	— —	11	06	— —	— —	— —	— —	— 6	—	3	44	0
230	28	i 7	17	44	17	44	i 18	31	18	33	— —	— —	- 166	+ 275	9	19	0
231	Sept. 1	13	15	49	— —	— —	16	13	— —	— —	— —	— —	+ 15	—	3	55	0
232		16	57	20	— —	— —	57	43	— —	— —	— —	— —	+ 4	—	2	22	0
233		17	00	51	— —	— —	01	10	— —	— —	— —	— —	—	—	1	41	0
234		20	19	19	— —	— —	19	36	— —	— —	— —	— —	- 5	—	2	48	0
235		10	03	31	— —	— —	03	45	— —	— —	— —	— —	+ 11	—	3	10	0
236	1	20	55	42	e 55	43	56	14	56	13	— —	— —	+ 40	- 15	7	09	0
237	2	6	32	56	— —	— —	33	45	— —	— —	— —	— —	+ 15	—	5	04	0
238	2	16	15	27	— —	— —	15	47	— —	— —	— —	— —	+ 2	—	2	17	0
239	3	10	02	46	— —	— —	03	20	03	20	— —	— —	- 27	—	6	10	0
240	4	15	—	—	— —	— —	25	54	— —	— —	— —	— —	—	—	—	—	0
241	4	16	26	53	e 26	55	29	50	29	51	— —	— —	+ 26	- 58	61	53	0
242	6	4	02	14	e 02	13	05	16	e 05	22	— —	— —	+ 10	—	10	31	0
243	8	e 3	11	28	— —	— —	11	48	— —	— —	— —	— —	—	—	2	51	0
244	10	13	18	23	18	23	18	55	e 18	56	— —	— —	+ 6	—	7	08	0
245	10	13	—	—	— —	— —	28	30	e 28	30	— —	— —	- 3	—	—	—	0
246	10	15	—	—	— —	— —	45	52	— —	— —	— —	— —	- 3	—	—	—	0
247	12	2	55	13	— —	— —	56	31	— —	— —	— —	— —	+ 13	—	5	03	0
248	13	13	43	18	— —	— —	43	45	— —	— —	— —	— —	+ 3	—	3	04	0
249	13	23	49	27	— —	— —	50	39	50	38	— —	— —	+ 12	- 8	5	28	0
250	14	7	—	—	— —	— —	58	18	— —	— —	— —	— —	—	—	—	—	0
251	14	9	—	—	— —	— —	? 37	24	— —	— —	— —	— —	—	—	—	—	0
252	15	—	—	—	— —	— —	01	27	— —	— —	— —	— —	—	—	—	—	0
253	15	e 16	42	36	— —	— —	43	04	— —	— —	— —	— —	+ 3	—	4	02	0
254	15	18	45	03	— —	— —	45	52	— —	— —	— —	— —	- 7	—	4	37	0
255	15	20	33	26	— —	— —	34	40	— —	— —	— —	— —	+ 10	—	4	27	0
256	17	6	46	13	e 46	14	46	40	e 46	43	— —	— —	+ 8	—	4	22	0
257	18	e 13	54	01	— —	— —	e 54	19	— —	— —	— —	— —	- 2	—	3	00	0
258	18	17	56	12	— —	— —	56	26	— —	— —	— —	— —	± 3	—	1	29	0
259	19	1	—	—	— —	— —	23	38	— —	— —	— —	— —	—	—	—	—	0
260	19	22	54	14	— —	— —	54	25	— —	— —	— —	— —	- 5	—	1	35	0
261	20	1	50	06	— —	— —	50	28	— —	— —	— —	— —	+ 2	—	3	02	0
262	21	1	11	17	— —	— —	11	31	— —	— —	— —	— —	- 1	—	2	50	0
263	23	11	18	15	e 18	18	e 21	14	e 21	20	— —	— —	+ 11	- 38	27	11	0
264	24	12	—	—	— —	— —	e 50	28	— —	— —	— —	— —	—	—	—	—	0
265	25	22	44	07	— —	— —	45	46	— —	— —	— —	— —	- 14	—	7	46	0
266	27	21	59	28	— —	— —	59	40	— —	— —	— —	— —	- 5	—	1	57	0
267	28	22	18	20	— —	— —	18	43	— —	— —	— —	— —	- 4	—	2	53	0
268	29	7	42	44	— —	— —	43	14	— —	— —	— —	— —	—	—	1	36	0
269	29	10	48	42	e 48	39	58	31	58	27	— —	— —	—	—	25	11	0
270	Oct. 5	13	36	25	36	24	40	04	40	05	— —	— —	+ 14	+ 20	21	41	0
271	5	19	01	19	— —	— —	01	54	— —	— —	— —	— —	- 2	—	6	35	0
272	6	1	12	07	— —	— —	13	04	— —	— —	— —	— —	—	—	4	05	0
273	6	2	16	38	— —	— —	16	52	— —	— —	— —	— —	± 3	—	3	44	0
274	6	12	41	46	— —												

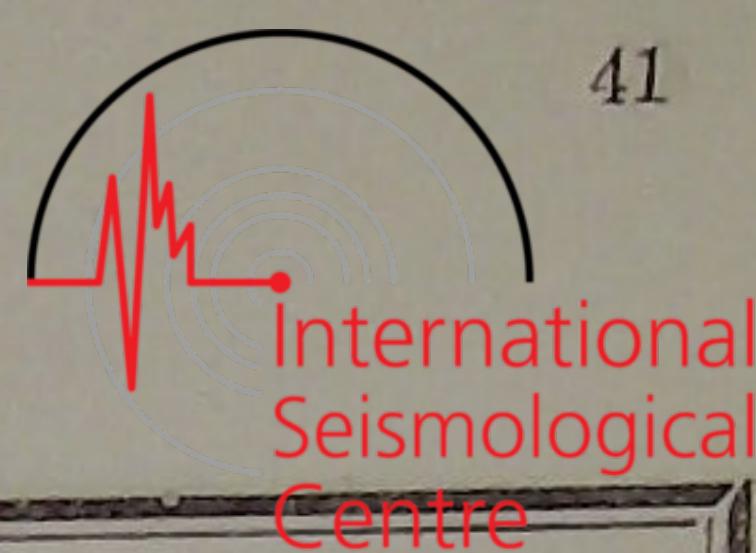
EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks				
		E	W	N S	E	W	N S	E	W	N S	E W	N S							
276	Oct. 6	h 16	m 25	s 24	m —	s —	m 25	s 33	m —	s —	—	μ	m 3	s 14	0	3°, 150° 39.5N, 142.5E [S]			
277		6 46	27	e 46	27	e 52	30	? 52	21	—	—	+ 3	—	48	58	0			
278		13 17	53	—	—	? 21	05	—	—	—	—	- 4	—	10	51	0			
279		15 —	—	—	—	00	35	—	—	—	—	± 45	—	—	—	0			
280		18 49	13	—	—	49	27	—	—	—	—	—	—	3	44	1			
281	9	2 51	25	—	—	51	53	—	—	—	—	—	—	2	41	0			
282	9	13 —	—	—	—	e 31	00	—	—	—	—	—	—	—	—	0			
283	9	19 —	—	—	—	e 00	12	—	—	—	—	—	—	—	—	0			
284	10	12 39	01	—	—	39	20	—	—	—	—	+ 5	—	2	49	0			
285	11	22 12	10	e 12	13	14	37	e 14	56	—	—	+ 25	- 125	6	18	0	50.5N, 155.5E [60]		
286	13	2 37	13	—	—	37	27	e 08	18	—	—	+ 12	—	3	01	0			
287	14	3 07	49	—	—	08	14	e 08	18	—	—	+ 14	—	4	17	0	41.3N, 141.9E [20]		
288	14	23 48	30	48	31	49	19	49	20	—	—	+ 370	- 543	21	50	1	42.8N, 144.6E [90]		
289	15	17 49	45	e 49	44	50	14	50	11	—	—	+ 18	+ 15	3	31	0	38.2N, 144.3E [40]		
290	18	0 07	13	—	—	07	21	—	—	—	—	+ 13	—	2	46	0			
291	18	6 11	40	11	37	15	17	e 15	03	—	—	—	—	12	11	0	52.5N, 161.0E		
292	19	23 42	47	—	—	42	57	—	—	—	—	—	—	0	58	0			
293	20	8 35	06	—	—	35	22	—	—	—	—	—	—	1	52	0			
294	21	9 —	—	—	—	24	11	—	—	—	—	- 7	—	—	—	0			
295	22	e 16	48	52	e 48	54	49	22	49	21	—	—	+ 13	—	4	25	0		
296	24	13 11	03	—	—	11	41	e 25	29	—	—	+ 6	—	5	24	0			
297	24	13 24	44	—	—	25	23	e 25	29	—	—	- 36	—	7	44	0	41.8N, 144.2E [100]		
298	24	13 46	04	—	—	46	43	—	—	—	—	+ 6	—	5	44	0			
299	25	0 36	24	—	—	36	34	—	—	—	—	+ 8	—	2	18	0			
300	27	12 42	03	42	03	42	56	42	56	—	—	+ 59	+ 93	15	09	0	42.7N, 145.6E [60]		
301	27	e 22	39	45	—	—	39	54	—	—	—	+ 5	—	2	16	0			
302	28	5 37	30	—	—	37	40	—	—	—	—	+ 21	—	2	12	0	38.8N, 141.7E [0-10]		
303	28	e 7	57	28	—	—	58	03	—	—	—	- 28	—	7	55	0	42.2N, 143.1E [70]		
304	28	16 57	46	? 57	44	58	06	e 58	06	—	—	+ 6	—	2	57	0			
305	30	7 43	35	—	—	43	55	—	—	—	—	- 8	—	2	41	0			
306	Nov. 2	e 6 00	38	? 00	47	e 01	19	—	—	—	- 15	—	—	5	09	0			
307		0 49	11	—	—	49	53	e 49	54	—	+ 4	—	—	4	46	0			
308		12 58	58	58	59	e 66	47	66	48	e 72	25	e 72	30	+ 13	+ 528	72	22	0	14S, 166E
309		15 07	24	07	24	09	03	09	04	—	—	+ 16	—	6	46	0	39.5N, 129.0E [600-700]		
310		22 06	52	e 06	53	07	15	07	17	—	—	+ 35	+ 25	7	15	0	39.2N, 143.6E [40]		
311	8	2 —	—	—	—	e 32	06	—	—	—	—	—	—	—	—	0			
312	8	3 —	—	—	—	e 45	16	—	—	—	—	—	—	—	—	0			
313	8	19 14	49	—	—	15	00	—	—	—	- 5	—	—	1	29	0			
314	9	22 —	—	—	—	56	30	—	—	—	—	—	—	—	—	0			
315	10	2 29	55	29	55	33	22	e 33	27	—	—	—	—	13	11	0			
316	11	8 44	20	44	19	46	17	46	17	—	—	- 13	—	20	55	0			
317	13	5 —	—	—	—	00	13	—	—	—	—	—	—	—	—	0			
318	14	4 —	—	—	—	? 25	35	—	—	—	—	—	—	—	—	0			
319	15	5 07	55	? 07	49	10	56	? 11	04	—	—	—	—	14	55	0			
320	15	13 58	01	—	—	58	16	—	—	—	+ 9	—	—	3	17	0			
321	17	13 13	00	—	—	13	36	13	37	—	—	- 20	- 13	5	43	0	36.1N, 140.0E [80]		
322	24	19 02	23	—	—	03	43	03	44	—	—	- 15	- 18	5	50	0	46.5N, 143E [200-300]		
323	26	2 50	11	50	11	—	—	—	—	—	—	—	—	—	3				
324	26	4 —	—	—	e 03	47	03	48	—	—	—	—	—	—	—	0	34.3N, 141.8E [40-60]		
325	26	4 04	40	04	38	05	13	05	15	—	—	- 68	+ 48	—	—	0	34.3N, 141.8E		
326	26	4 23	51	—	—	24	33	—	—	—	—	—	—	—	—	0			
327	26	5 23	12	—	—	23	47	—	—	—	—	—	—	—	—	0			
328	26	5 28	56	—	—	29	34	—	—	—	—	—							



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks	
		E	W	N S	E	W	N S	E	W	N S	E	W				
331	Nov. 26	h 7 —	m 32	s 35	m —	s —	m 05	s 48	m —	s —	m —	c —	μ —	μ —	m s —	0
332	26	e 7 32	35	—	—	—	33	04	—	—	—	—	—	—	—	0
333	26	7 36	08	—	—	—	36	30	—	—	—	—	—	5 24	0	
334	26	8 37	24	87 20	38	14	38	15	—	—	—	—	+ 38	12 06	0	A.S. of No. 323
335	26	8 58	43	—	—	59	05	—	—	—	—	—	- 2	—	—	0
336	26	9 01	10	—	—	02	07	—	—	—	—	—	—	—	—	0
337	26	9 04	45	04 46	05	52	05	54	—	—	—	—	—	—	—	0
338	26	9 23	33	—	—	e 24	17	—	—	—	—	—	—	—	—	0
339	26	e 9 41	10	—	—	41	41	—	—	—	—	—	—	—	—	0
340	26	e 9 49	04	—	—	49	43	—	—	—	—	—	—	—	—	0
341	26	e 9 56	50	—	—	57	18	—	—	—	—	—	- 2	—	—	0
342	26	10 21	02	21 01	21	40	21	40	—	—	—	—	- 18	- 28	13 17	0
343	26	10 35	57	—	—	36	28	e 36	28	—	—	—	- 9	—	6 39	0
344	26	10 48	45	48 45	49	47	49	49	—	—	—	—	+ 259	- 350	44 05	0
345	26	e 10 59	10	—	—	e 59	46	—	—	—	—	—	—	—	—	0
346	26	11 19	03	19 05	19	31	19	30	—	—	—	—	+ 24	- 5	—	0
347	26	11 25	36	e 25 34	26	08	e 26	07	—	—	—	—	- 8	+ 1 3	7 16	0
348	26	12 05	06	—	—	05	29	05	27	—	—	—	- 3	—	4 00	0
349	26	12 25	45	—	—	26	28	26	30	—	—	—	+ 12	+ 18	6 02	0
350	26	12 34	33	—	—	35	08	35	06	—	—	—	- 6	- 5	4 31	0
351	26	12 47	13	—	—	47	43	e 47	50	—	—	—	+ 4	- 8	4 19	0
352	26	12 —	—	—	—	53	37	—	—	—	—	—	+ 2	—	—	0
353	26	12 —	—	—	—	57	13	—	—	—	—	—	+ 3	—	—	0
354	26	13 22	53	e 22 57	23	40	23	39	—	—	—	—	+ 36	+ 28	11 22	0
355	26	13 36	21	—	—	e 36	45	—	—	—	—	—	+ 2	—	2 36	0
356	26	13 —	—	—	—	50	45	—	—	—	—	—	—	—	—	0
357	26	14 05	20	05 19	06	04	06	05	—	—	—	—	+ 15	- 20	—	0
358	26	14 09	40	—	—	e 10	21	e 10	23	—	—	—	- 7	- 13	6 52	0
359	26	16 —	—	—	—	23	34	—	—	—	—	—	- 2	—	—	0
360	26	17 15	30	15 30	16	14	16	18	—	—	—	—	—	—	59 44	0
361	26	e 17 28	31	e 28 32	29	08	e 29	08	—	—	—	—	—	—	—	0
362	26	e 17 32	41	—	—	e 33	29	33	28	—	—	—	+ 18	—	—	0
363	26	e 17 40	48	—	—	41	36	—	—	—	—	—	+ 6	—	—	0
364	26	18 —	—	—	—	11	25	—	—	—	—	—	—	—	—	0
365	26	18 16	43	—	—	17	27	e 17	32	—	—	—	- 5	+ 8	4 05	0
366	26	19 25	13	—	—	25	38	—	—	—	—	—	—	—	2 24	0
367	26	19 33	29	—	—	34	09	—	—	—	—	—	+ 3	—	5 08	0
368	26	20 —	—	—	—	16	58	—	—	—	—	—	—	—	—	0
369	26	20 37	41	e 37 44	38	10	e 38	15	—	—	—	—	- 17	- 23	—	0
370	26	e 20 43	45	—	—	e 44	15	44	17	—	—	—	- 9	+ 23	—	0
371	26	20 —	—	—	—	46	29	46	33	—	—	—	- 15	- 2	—	0
372	26	20 55	15	—	—	55	43	—	—	—	—	—	+ 4	—	4 30	0
373	26	21 12	16	—	—	12	51	—	—	—	—	—	- 4	—	4 30	0
374	26	21 27	57	—	—	28	23	—	—	—	—	—	- 2	—	2 19	0
375	26	23 30	43	—	—	31	28	31	28	—	—	—	+ 8	- 8	7 18	0
376	26	23 41	27	—	—	42	01	—	—	—	—	—	- 2	—	3 12	0
377	26	23 45	58	—	—	46	27	—	—	—	—	—	+ 2	—	3 15	0
378	27	9 41	18	—	—	42	04	—	—	—	—	—	- 4	—	2 36	0
379	27	10 06	04	—	—	06	43	—	—	—	—	—	+ 6	—	2 58	0
380	27	10 26	12	26 14	27	03	27	04	—	—	—	—	+ 10	- 15	7 40	0
381	27	10 55	58	e 56 03	56	43	56	44	—	—	—	—	- 11	—	6 09	0
382	27	e 11 39	14	—	—	39	34	—	—	—	—	—	—	—	2 19	0
383	27	12 06	18	—	—	06	51	—	—	—	—	—	- 4	—	2 10	0
384	27	14 07	16	—	—	07	45	—	—	—	—	—	- 6	—	2 38	0
385	27	15 51	43	—	—	52	16	—	—	—	—	—	- 9	—	2 54	0



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks
		E	W	N S	E	W	N S	E	W	N S	E W	N S			
386	Nov. 27	h 16 06	m 10	s —	m —	s —	m 06	s 41	m —	s —	+ 5	μ	m 2	05	0
387	27	20 31	20	s —	—	—	32	10	e 32	04	—	—	184	—	78
388	27	22 32	32	s —	—	—	33	05	33	03	—	—	+ 8	—	8
389	27	22 33	54	s —	—	—	34	29	—	—	—	—	+ 9	—	30
390	27	23 41	04	s —	—	—	41	31	—	—	—	—	—	2	07
391	28	3 33	04	s —	—	—	33	55	e 33	51	—	—	+ 16	—	20
392	28	4 15	45	s —	—	—	16	08	—	—	—	—	- 4	2	04
393	28	11 —	—	12 16	—	—	—	—	13	29	—	—	—	11	07
394	28	12 —	—	01 39	—	—	—	—	02	37	—	—	+ 13	5	31
395	28	13 —	—	27 17	—	—	—	—	28	08	—	—	+ 10	4	37
396	28	14 —	—	12 37	—	—	58	32	e 58	30	—	—	—	6	12
397	28	15 57	36	e 57	34	—	25	40	—	—	—	—	—	6	52
398	28	16 24	48	—	—	—	13	59	—	—	—	—	—	3	31
399	28	17 —	—	—	—	—	—	—	—	—	—	—	—	—	0
400	28	19 14	56	—	—	—	15	49	—	—	—	—	—	3	26
401	28	23 02	05	—	—	—	02	55	02	54	—	—	+ 4	—	5
402	28	23 14	49	—	—	—	15	42	15	44	—	—	- 10	+ 13	7
403	29	4 30	12	e 30	16	—	31	08	31	11	—	—	- 11	- 13	6
404	29	4 55	56	55	56	—	56	46	56	45	—	—	- 15	+ 18	5
405	29	5 08	22	—	—	—	09	11	09	10	—	—	—	3	39
406	29	7 13	44	—	—	—	14	34	14	31	—	—	+ 6	—	3
407	29	e 13 09	13	e 09	11	—	10	20	e 10	18	—	—	+ 50	+ 90	19
408	30	1 —	—	—	—	—	28	31	—	—	—	—	- 2	—	0
409	30	3 22	23	22	22	—	23	35	23	37	—	—	- 76	+ 50	16
410	30	12 41	23	e 41	26	—	42	18	42	18	—	—	- 35	+ 40	11
411	30	14 58	36	—	—	—	59	35	59	34	—	—	+ 5	+ 5	8
412	30	15 03	43	—	—	—	04	31	—	—	—	—	+ 2	—	24
413	30	e 21 54	38	—	—	—	55	26	55	26	—	—	+ 3	+ 5	4
414	30	22 —	—	—	—	—	29	43	—	—	—	—	—	—	0
415	30	22 44	48	e 44	49	—	45	40	45	40	—	—	+ 22	+ 25	11
416	Dec. 1	23 36	22	? 36	25	—	37	05	37	03	—	—	- 25	- 20	9
417		1 19	48	—	—	—	20	39	—	—	—	—	—	2	31
418		2 49	42	49	45	—	50	38	50	38	—	—	+ 11	+ 20	8
419		2 59	45	—	—	—	60	41	e 60	41	—	—	- 5	—	4
420		e 13 56	02	—	—	—	e 56	37	—	—	—	—	—	—	2
421	1	14 12	06	—	—	—	14	46	—	—	—	—	—	—	0
422	1	14 28	24	—	—	—	? 30	51	—	—	—	—	—	8	01
423	2	1 —	—	—	—	—	12	05	12	04	—	—	—	—	0
424	2	1 19	45	e 19	53	—	e 20	30	e 20	38	—	—	- 18	—	7
425	2	11 05	10	—	—	—	05	29	—	—	—	—	+ 2	—	1
426	2	13 15	07	—	—	—	16	29	—	—	—	—	+ 12	—	4
427	2	e 13 32	55	—	—	—	39	09	—	—	—	—	—	—	26
428	2	14 00	15	—	—	—	e 00	46	—	—	—	—	—	1	24
429	2	15 11	28	e 11	31	—	12	18	e 12	22	—	—	- 11	+ 13	4
430	2	16 01	51	—	—	—	02	36	—	—	—	—	—	—	2
431	2	18 48	53	e 48	58	—	49	39	e 49	40	—	—	+ 40	+ 25	—
432	2	18 53	39	e 53	42	—	54	03	e 54	06	—	—	- 10	—	2
433	2	18 58	23	e 58	21	—	58	47	58	49	—	—	+ 26	+ 20	3
434	2	19 32	19	e 32	29	—	33	08	e 33	13	—	—	- 7	+ 8	5
435	3	e 1 50	02	—	—	—	50	51	e 50	50	—	—	- 6	+ 8	10
436	3	10 49	18	—	—	—	49	54	—	—	—	—	—	—	0
437	3	14 23	51	—	—	—	24	12	—	—	—	—	—	1	06
438	3	18 19	23	—	—	—	20	02	—	—	—	—	+ 5	—	2
439	3	e 19 42	44	—	—	—	43	29	—	—	—	—	- 5	—	22
440	4	0 02	26	e 02	31	—	? 09	04	? 09	11	—	—	—	- 25	34



EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude		Duration of Total Earthquake	Intensity	Epicenter and Remarks	
		E	W	N S	E	W	N S	E	W	N S	E W	N S				
441	Dec. 4	h 0 18 57	m —	s 57	m —	s —	m 19 55	m —	s —	m —	s —	— 4	μ	m 4 30	0	A.S. of No. 323 34.2N [50] 141.2E
442	4	6 42 41	—	—	43	39	—	—	—	—	—	+ 3	—	3 13	0	A.S. of No. 323 34.1N [S] 141.0E
443	4	17 25 53	25	54	26 54	26 50	—	—	—	—	—	- 22	+ 23	7 24	0	A.S. of No. 323 34.0N [20- 141.1E 30]
444	4	21 47 10	—	—	47 55	—	—	—	—	—	—	+ 5	—	3 47	0	
445	5	0 59 23	—	—	60 04	—	—	—	—	—	—	—	—	2 36	0	
546	5	? 3 18 35	? 18	34	19 51	e 19 43	—	—	—	—	—	- 6	+ 8	6 05	0	
447	5	18 42 34	42	35	43 33	43 29	—	—	—	—	—	- 66	- 5	20 12	0	A.S. of No. 323 34.3N [40] 141.4E
448	5	18 58 25	—	—	59 19	—	—	—	—	—	—	+ 8	—	4 06	0	
449	5	20 08 21	—	—	08 38	08 37	—	—	—	—	—	- 50	- 28	2 52	0	
450	5	23 56 01	—	—	56 49	e 56 44	—	—	—	—	—	+ 6	—	4 20	0	A.S. of No. 323 34.0N [40] 141.2E
451	6	2 22 23	—	—	? 23 27	—	—	—	—	—	—	+ 6	—	4 01	0	A.S. of No. 323 34.2N [40] 141.3E
452	6	3 40 43	e 40	46	41 39	41 41	—	—	—	—	—	+ 28	+ 28	8 56	0	A.S. of No. 323 34.2N [50] 141.6E
453	7	0 33 12	—	—	e 34 13	e 34 05	—	—	—	—	—	—	—	37 56	0	
454	7	2 31 47	31	46	32 29	e 32 28	—	—	—	—	—	+ 5	—	4 28	0	
455	7	11 25 19	25	22	? 25 49	? 25 54	—	—	—	—	—	- 14	+ 13	7 52	0	
456	7	12 59 20	—	—	59 40	—	—	—	—	—	—	+ 3	—	3 09	0	41.5N, 142.5E [60]
457	7	23 11 53	11	54	—	12 08	—	—	—	—	—	- 2033	—	29 51	3	38.7N, 142.2E [20-40]
458	8	1 46 29	—	—	47 15	e 47 15	—	—	—	—	—	+ 7	—	10 34	0	A.S. of No. 323 34.3N [40] 141.3E
459	8	4 11 01	e 11	04	11 55	e 11 54	—	—	—	—	—	- 11	+ 8	9 16	0	A.S. of No. 323 34.3N [40] 141.5E
460	8	e 11 13 04	? 13	07	14 45	14 51	—	—	—	—	—	- 20	- 23	40 30	0	
461	8	e 13 25 23	—	—	25 53	25 52	—	—	—	—	—	+ 6	—	3 47	0	
462	9	3 37 22	—	—	37 37	—	—	—	—	—	—	+ 3	—	2 59	0	
463	9	20 16 40	—	—	17 27	e 17 28	—	—	—	—	—	+ 2	—	5 40	0	
464	11	16 15 26	e 15	27	16 19	16 19	—	—	—	—	—	+ 13	—	6 06	0	A.S. of No. 323 34.3N [40] 141.3E
465	12	6 36 36	—	—	37 20	37 20	—	—	—	—	—	- 8	—	4 31	0	42.0N, 142.6E [60]
466	12	14 34 38	34	39	37 37	37 39	—	—	—	—	—	- 29	- 18	16 18	0	21.5N, 141.5E [300]
467	12	18 33 19	—	—	33 52	e 33 49	—	—	—	—	—	- 6	—	4 00	0	
468	13	? 3 05 33	? 05	22	? 10 20	? 09 57	—	—	—	—	—	—	—	116 49	0	
469	13	16 00 05	00	05	03 31	e 03 37	—	—	—	—	—	—	—	19 18	0	51N, 159E
470	14	0 42 05	—	—	42 23	—	—	—	—	—	—	- 10	—	4 02	0	37.6N, 141.6E [50]
471	14	1 42 33	—	—	42 49	—	—	—	—	—	—	- 5	—	2 30	0	37.7N, 141.7E [60]
472	14	19 42 40	e 42	39	43 24	e 43 22	—	—	—	—	—	- 5	—	7 59	0	
473	14	22 45 11	? 45	14	45 43	e 45 47	—	—	—	—	—	- 5	—	4 06	0	
474	15	? 10 47 51	—	—	48 33	—	—	—	—	—	—	- 6	—	5 43	0	
475	16	12 — —	—	—	36 32	36 32	—	—	—	—	—	± 6	—	—	0	A.S. of No. 323 34.1N [40] 141.7E
476	16	18 50 58	51	00	51 13	51 14	—	—	—	—	—	± 56	- 45	6 32	0	38.1N, 142.1 [40]
477	18	11 36 41	36	41	36 56	36 57	—	—	—	—	—	+ 15	—	3 21	0	
478	19	11 — —	—	—	38 27	—	—	—	—	—	—	—	—	—	0	
479	20	5 08 39	e 08	42	08 55	08 57	—	—	—	—	—	- 7	—	2 54	0	
480	20	9 22 27	—	—	23 16	23 16	—	—	—	—	—	+ 101	- 105	12 18	0	39.5N, 137.0E [360]
481	20	10 — —	—	—	20 18	—	—	—	—	—	—	—	—	—	0	
482	21	6 21 28	21	27	22 43	22 45	—	—	—	—	—	- 723	- 160	33 24	0	A.S. of No. 323 34.3N [40] 141.0E
483	22	2 37 00	37	01	37 30	37 30	—	—	—	—	—	- 644	+ 475	17 32	1	41.4N, 142.2E [40]
484	22	7 48 11	e 48	12	49 08	e 49 05	—	—	—	—	—	- 5	—	8 10	0	
485	22	20 16 56	16	58	17 56	17 58	—	—	—	—	—	- 41	+ 45	8 43	0	35.5N, 140.7E [20]
486	22	21 54 41	—	—	55 12	55 13	—	—	—	—	—	- 10	—	3 26	0	
487	23	? 3 51 44	? 51	46	? 56 31	? 56 30	—	—	—	—	—	—	—	18 52	0	
488	23	6 — —	—	—	20 16	—	—	—	—	—	—	—	—	—	0	
489	24	11 38 00	38	01	41 35	e 41 36	—	—	—	—	—	- 13	+ 100	20 18	0	
490	24	15 01 28	—	—	02 11	02 11	—	—	—	—	—	- 11	—	7 08	0	

EARTHQUAKES, 1953.

No.	Date 1953	P			S			L			Maximum Amplitude	Duration of Total Earth- quake	Intensity	Epicenter and Remarks
		E	W	N S	E W	N S	E W	N S	E W	N S				
491	Dec. 24	h 15	26 05	m s	m s	26 41	m s	m s	m s	m s	μ	μ	4 33	0
492	25	e 8	25 35	— —	25 34	30 39	? 30 47	— —	— —	— —	+ 6	+ 38	27 21	0
493	25	10	55 50	55 50	59 32	59 34	— —	— —	— —	— —	—	— 755	31 02	0
494	25	20	57 19	e 57	23	57 54	57 56	— —	— —	— —	— 21	+ 18	10 26	0
495	26	1	14 26	14 27	15 31	e 15	33	— —	— —	— —	— 65	— 35	16 53	0
														A.S. of No. 323 34N 141E [S]
496	26	4	04 13	e 04	17	05 20	e 05	32	— —	— —	+ 9	+ 10	15 01	0
497	26	e 11	07 50	— —	— —	08 30	— —	— —	— —	— —	—	—	2 53	0
498	26	12	39 17	39 19	39 29	39 30	— —	— —	— —	— —	+ 61	+ 28	6 10	0
499	26	22	— —	— —	? 17	27	— —	— —	— —	— —	+ 10	—	—	0
500	27	20	19 52	e 19	55	20 11	20 13	— —	— —	— —	+ 40	— 43	8 42	0
														38.9N, 142.1E [40]
501	27	22	16 07	16 08	16 18	16 19	— —	— —	— 12	—	—	—	2 49	0
502	29	23	— —	— —	e 31	37	— —	— —	— —	— —	—	—	—	0
														41.5N, 142.5E [60]

PULSATORY OSCILLATIONS, 1953. (EW Component.)



No.	Beginning			Ending			Maximum				Double Amplitude μ	
	Date			Date			Date		Date			
	Month	Day	Hour	Month	Day	Hour	Day	Hour	Day	Hour		
1	Jan.	1	9	Jan.	9	23	1	11	1	23	12	
2		6	2		9	11	6	5	7	9	16	
3		10	7		12	2	11	2	11	8	13	
4		12	6		18	5	12	15	14	9	12	
5		21	5		26	17	22	20	23	21	7	
6	Feb.	29	4	Feb.	2	13	29	15	30	18	10	
7		7	16		10	9	9	3	9	7	4	
8		11	23		14	8	12	1	12	23	10	
9		17	8		19	9	17	17	17	23	10	
10		22	6		26	1	22	16	23	9	9	
11	Mar.	28	3	Mar.	1	10	28	22	1	9	3	
12		1	16		4	11	2	16	3	9	8	
13		7	22		9	23	8	9	9	1	12	
14		11	20		14	1	12	4	12	18	28	
15		21	2		22	13	21	7	22	2	37	
16	Apr.	25	22	Apr.	28	12	26	1	27	9	14	
17		29	11		31	23	29	18	30	9	8	
18		10	15		15	2	11	8	12	18	8	
19		16	2		16	17	16	8	16	11	9	
20		21	12		22	10	21	15	21	23	8	
21	May.	24	13	May.	25	15	24	17	24	23	5	
22		29	8		2	6	30	12	1	8	27	
23		8	19		10	23	9	4	9	15	10	
24		12	21		15	19	14	5	14	22	9	
25		23	6		25	18	24	15	25	5	8	
26	June	29	15	June	31	9	30	11	30	23	12	
27		1	9		3	6	1	22	2	7	4	
28		5	12		7	9	6	17	6	23	9	
29		8	8		10	11	8	21	9	19	20	
30	July	8	2	July	8	21	8	5	8	8	6	
31	Aug.	30	9	Aug.	31	21	30	19	31	1	3	
32		24	7		27	26	25	21	26	23	30	
33		13	1		14	13	13	15	13	17	7	
34		19	21		21	11	20	6	20	9	6	
35		29	3		29	23	29	5	29	9	9	
36	Nov.	1	7	Nov.	2	23	1	21	2	3	15	
37		5	9		6	16	5	16	5	23	7	
38		8	5		9	10	8	15	9	1	7	
39		17	8		18	7	17	13	17	19	6	
40		22	6		25	12	22	23	23	16	17	
41	Dec.	27	9	Dec.	30	20	27	13	28	18	8	
42		1	18		7	12	3	1	3	12	9	
43		10	5		13	18	10	9	11	10	61	
44		14	6		16	12	14	23	15	18	3	
45		17	6		19	1	17	19	18	12	15	
46		19	9	Jan. (1954)	22	9	20	5	20	9	6	
47		23	8		25	10	23	14	24	0	3	
48		26	7		28	15	26	15	27	14	10	
49		29	9		30	9	29	19	30	6	5	
50		30	12		1	9	30	20	30	23	6	