

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of July, 1918. Observations taken 9 a.m.

Altitude of Observatory, 8 ft.

Date.	Barometer reduced and corrected in inches to Lat. 45°.	From Self-registering Instruments, for Twenty-four Hours previously.							Amount of Cloud, 0 to 10.	Direction of Wind.	Rainfall, in Points (100 to 1 Inch).
		Max. Temp. in Shade.	Min. Temp. in Shade.	Mean Temp. in Shade.	Solar Radiation.	Terrestrial Radiation.	Veloc. Wind, in Miles.	Direction of Wind.			
1	29.564	54.3	43.3	48.8	104.0	34.0	57	10	Calm	40	
2	29.656	52.4	41.2	46.8	86.0	29.2	46	10	S.	69	
3	30.102	48.2	42.6	45.4	55.0	41.2	542	9	S.	66	
4	30.221	47.7	43.7	45.7	87.0	41.0	544	7	S.	Trace	
5	30.099	49.2	32.1	40.6	82.0	19.0	184	3	NNE	2	
6	29.740	53.4	46.3	49.8	115.0	41.0	384	10	N.W.	33	
7	29.569	54.8	41.8	48.3	75.0	30.0	271	4	Calm	110	
8	29.311	59.0	47.7	53.3	107.0	42.8	241	6	N.W.	..	
9	29.421	57.7	39.0	48.3	110.0	29.0	75	8	N.W.	9	
10	29.416	55.0	47.5	51.2	105.0	44.0	312	2	N.W.	34	
11	29.076	57.6	50.1	53.8	109.0	47.3	369	8	N.W.	3	
12	29.685	52.8	42.6	47.7	87.0	30.8	89	0	S.W.	..	
13	29.917	58.0	31.2	44.6	101.0	24.0	450	0	Calm	Trace	
14	29.562	56.1	47.9	52.0	103.0	47.1	369	5	NNW	29	
15	28.980	56.2	50.5	53.3	92.0	46.0	360	8	N.W.	2	
16	29.091	54.0	36.9	45.4	103.0	26.5	152	1	WNW	23	
17	29.320	50.2	32.3	41.2	89.0	20.9	155	5	Calm	Trace	
18	29.650	52.5	34.1	43.3	104.0	22.5	100	4	S.	13	
19	29.764	51.4	38.3	44.8	77.0	36.3	348	2	SSW	..	
20	29.705	46.6	32.8	39.7	102.0	22.4	294	0	Calm	2	
21	29.546	51.0	38.8	44.9	103.0	32.0	338	9	S.W.	17	
22	29.526	44.2	34.1	39.1	99.0	32.0	419	10	S.W.	9	
23	29.754	45.8	34.6	40.2	102.0	32.5	463	7	S.W.	3	
24	29.991	47.6	41.0	44.3	95.0	37.8	465	7	S.W.	..	
25	30.051	49.0	42.2	45.6	105.0	38.3	384	3	S.	..	
26	30.118	48.0	42.2	45.1	102.0	39.9	419	9	S.	2	
27	30.171	47.4	30.1	38.7	90.0	17.7	154	0	Calm	..	
28	30.105	50.5	35.0	42.7	102.0	25.0	51	5	Calm	3	
29	29.866	51.0	31.3	41.1	104.0	21.0	179	9	S.	30	
30	29.941	46.6	39.0	42.8	89.0	35.4	407	8	SSW	..	
31	29.864	51.2	32.4	41.8	101.0	24.7	129	0	N.W.	Trace	
*	29.703	51.6	39.4	45.5	96.3	32.6	282	5.4	..	499	
†	29.906	52.9	42.1	47.5	86.5	34.9	198	596	

* Means, &c. † Means previous years.

DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm
2	9	5	1	7	7

NOTE.—A cold and showery month, with strong south and south-west winds prevailing. Barometric pressure and temperatures were below the mean of previous years. The minimum reading of the barometer at 9 a.m. was 28.980 in. on the 15th. Total bright sunshine, 127 hours 24 minutes, and one sunless day. Frost was recorded on the grass on sixteen mornings, the lowest reading being 17.7° on the 27th. Thunderstorm on the 16th, snow fell on the 21st and 22nd, and hail on the 16th, 21st, and 29th. Mean earth-temperature at 1 ft. was 45.7°, and 48.5° at 3 ft. Mean dew-point, 38.6°; mean elastic force of vapour, 0.234 in.; and mean relative humidity, 77 per cent. of saturation.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM THE CHIEF STATIONS.

July, 1918.

Altitude above Sea-level.	Name of Station and Observer.	Absolute Mean Temp. Air in Shade.	Extremes.		Total Rainfall (100 Points to the Inch).	Days with Rain (4 Point or more)
			Mean Max. Temp.	Mean Min. Temp.		
Ft. 125	NORTH ISLAND. AUCKLAND .. F. A. F. Burnett	Deg. 49.4	Deg. 55.6	Deg. 43.2	Points. 594	Dys. 23
46	TE AROHA .. G. F. McGirr	.. 44.5	.. 57.4	.. 31.6	349	20
925	ROTORUA .. W. Penno	.. 42.3	.. 50.6	.. 34.0	329	10
340	WAIHI .. P. A. Clifford	.. 45.5	.. 54.5	.. 36.5	475	21
..	TAURANGA .. C. J. Butcher	.. 44.2	.. 54.3	.. 34.1	193	16
160	NEW PLYMOUTH .. W. W. Smith	.. 48.3	.. 54.8	.. 41.8	728	24
250	MOUMAHAKI .. T. W. Lonsdale	.. 44.0	.. 51.7	.. 36.4	474	22
2080	TAIHAPE .. A. R. Fannin	.. 37.9	.. 43.1	.. 32.7	474	26
100	PALMERSTON NORTH .. J. E. Vernon	.. 43.0	.. 50.7	.. 35.3	437	16
186	GREYTOWN .. W. C. Davies	.. 42.9	.. 50.3	.. 35.5	750	26
377	MASTERTON .. Wm. Hood	.. 42.4	.. 50.4	.. 34.5	622	25
70	GREENMEADOWS, NA-PIER T. B. McBreen	.. 46.7	.. 54.4	.. 39.0	332	7
..	TRENTHAM MILITARY CAMP Lieut.-Col. Leahy	.. 43.7	.. 50.2	.. 36.3	738	26
10	WELLINGTON .. Ven. Archdeacon Kempthorne	.. 45.5	.. 51.6	.. 39.4	499	20
..	SOUTH ISLAND. BRIGHTWATER .. Ven. Archdeacon Kempthorne	.. 42.7	.. 52.4	.. 33.0	235	12
34	NELSON .. J. R. Dart	.. 44.2	.. 51.1	.. 37.3	199	10
1220	HANMER SPA .. Miss M. Stewart	.. 35.6	.. 43.9	.. 27.4	653	6
25	CHRISTCHURCH .. H. F. Skey	.. 39.6	.. 46.9	.. 32.4	686	20
42	LINCOLN .. L. J. Wild	.. 40.1	.. 47.9	.. 32.4	616	18
1220	KISSELTON .. A. R. Blackwood	.. 35.2	.. 44.6	.. 25.8	204	9
..	RAKAIA .. Miss A. Hardy	.. 39.3	.. 47.0	.. 31.7	378	8
130	TIMARU .. Caretaker of Domain	.. 40.1	.. 48.2	.. 32.0	60	8
200	WAIMATE .. F. Akhurst	.. 40.2	.. 47.8	.. 32.7	65	7
300	DUNEDIN .. D. Tannock	.. 40.3	.. 45.7	.. 35.0	307	15
245	GORE .. H. Dolamore	.. 36.4	.. 42.8	.. 30.0	453	22
12	HOKITIKA .. W. H. Fleming	.. 41.4	.. 49.9	.. 33.0	799	18
12	INVERCARGILL .. L. Lennie	.. 38.3	.. 44.5	.. 32.1	485	22

SUMMARY FOR THE MONTH OF JULY, 1918.

The month of July proved one of the coldest and stormiest winter months experienced for many years. Rainfall, however, was not excessive, totals above the average only being recorded north of Auckland, and in the Wanganui, North Canterbury, and Otago districts.

Atmospheric disturbances were so numerous that hardly a day passed without one either enveloping or being within effective distance of the Dominion.

On the 1st of the month the shallow depression, mentioned in the June summary, was still in evidence, and further heavy snowfall occurred in North Canterbury.

The most severe storm was one which ruled between the 15th and 24th, and which caused a widespread snowfall between the 19th and 22nd. Very stormy weather, with south-west gales, was experienced generally about this time, and snow was recorded at many places in the North Island where it had not occurred since August, 1904.

A comparison of these two storms brings out some interesting facts. The one on the 1st was a shallow cyclone accounting for a heavy local snowstorm in North Canterbury, with south-east winds. The latter was an intense westerly area of low pressure which apparently remained stationary for several days, with its central area in the vicinity of Chatham Islands. The winds were distinctly south-west, and the snowfall was more general.

The stormiest weather is experienced with an intense and extensive depression, but, as in this instance, a small, shallow disturbance invariably proves the more dangerous when its effects are confined to a comparatively small area.

D. C. BATES, Director.