

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of July, 1927. Observations taken 9 a.m.

Altitude of Observatory, 10 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.				
1	29.874	52.8	46.0	49.4	73.8	42.2	128	10	E.	1
2	29.738	54.8	48.6	51.7	60.3	47.2	199	9	S.E.	..
3	29.842	49.3	34.8	42.0	79.0	25.2	284	4	Calm	..
4	29.974	53.8	35.4	41.6	98.0	26.5	102	5	N.	10
5	29.807	57.1	49.8	53.4	103.2	48.0	393	9	N.W.	4
6	30.009	55.6	39.8	47.7	79.0	30.1	203	0	N.	Trace
7	30.075	59.0	48.0	53.5	103.0	40.3	155	3	N.N.W.	..
8	30.024	59.9	41.8	50.8	101.1	33.7	142	2	N.W.	1
9	29.972	57.0	51.8	54.4	102.2	49.0	216	10	N.	27
10	29.501	56.1	48.0	52.0	86.0	42.6	120	9	N.N.W.	38
11	29.238	57.0	46.8	51.9	104.0	40.0	131	10	S.	37
12	29.251	52.9	42.2	47.5	70.4	32.1	163	9	N.	..
13	29.169	57.1	38.2	47.6	102.0	28.9	159	10	S.	12
14	29.578	50.2	40.2	45.2	81.0	38.2	336	4	S.W.	Trace
15	29.960	48.0	39.9	43.9	96.3	30.0	297	2	S.W.	..
16	29.995	56.5	32.1	44.3	99.1	24.0	91	4	N.	21
17	29.439	54.3	46.9	50.6	99.0	44.7	334	10	N.	6
18	29.697	56.8	47.8	52.3	102.0	43.2	296	0	N.W.	Trace
19	29.643	55.3	50.2	52.7	100.0	48.9	305	10	N.W.	36
20	30.033	54.0	35.6	44.8	68.0	27.6	112	0	Calm	..
21	30.166	55.0	32.1	43.5	100.0	24.0	29	9	N.W.	..
22	30.038	53.4	40.2	46.8	101.7	31.0	93	6	S.W.	4
23	30.109	54.0	43.1	48.5	105.9	38.0	164	6	S.E.	9
24	30.327	51.1	43.1	47.1	101.0	39.4	240	4	S.	..
25	30.239	51.0	36.2	43.6	100.0	28.5	79	9	Calm	50
26	29.813	52.2	42.1	47.1	67.9	43.0	95	10	Calm	8
27	29.720	53.8	43.9	48.8	67.0	34.8	22	10	N.	19
28	29.856	51.6	47.5	49.5	67.0	47.5	180	10	S.	1
29	29.865	51.8	48.9	50.3	61.0	44.8	179	10	S.E.	40
30	29.787	52.6	44.2	48.4	71.0	44.0	498	10	S.	14
31	29.817	48.1	44.7	46.4	62.0	43.6	426	10	S.	8
*	29.824	53.9	42.9	48.4	87.5	37.5	199.1	6.9	..	246
†	29.918	53.1	42.3	47.7	87.5	35.7	203	5.6	..	555

* Means, &c. † Means previous years.

DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
9	..	1	3	6	3	..	5	4

NOTE.—A cloudy and unsettled month, with moderate northerly winds prevailing. Total bright sunshine 102 hours 52 minutes, 35 per cent. of the possible, and eight sunless days. Hail fell on the 13th; fog occurred on the 25th, and frost was recorded on the grass on ten mornings. Mean earth temperature at 1 ft. was 46.2°, and 49.2° at 3 ft. Mean dew-point, 41.7°; mean elastic force of vapour, 0.264 in.; and mean relative humidity, 78 per cent. of saturation.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM CHIEF STATIONS.

July, 1927.

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 (½ Point or more).
			Mean Max. Temp.	Mean Min. Temp.		
NORTH ISLAND.						
152	AUCKLAND ..	Deg 52.3	Deg. 57.0	Deg. 47.6	Points. 847	29
131	RUAKURA FARM, HAMILTON EAST A. Y. Montgomery	49.1	57.7	40.6	660	23
211	MATAMATA .. W. Halligan	48.3	56.2	40.4	710	21
46	TE AROHA .. C. E. Christensen	50.3	59.1	41.6	1044	21
340	WAIHI .. Wm. C. Morris	49.4	56.5	42.3	1822	22
100	TAURANGA .. C. J. Butcher	50.2	57.4	43.0	1110	23
925	ROTORUA .. W. E. Penno	46.7	53.5	39.9	1028	21
60	NEW PLYMOUTH .. G. H. Dolby	49.9	55.1	44.6	748	25
2080	TAIHAPE .. A. R. Fannin	42.6	47.6	37.5	319	18
100	PALMERSTON NORTH .. J. A. Colquhoun	..	54.4	..†	224	18
8	TANGIMOANA .. T. E. Stringer	48.5	56.2	40.7	219	14
119	CENTRAL DEVELOPMENT FARM, WERAROA J. E. Sharp	47.9	55.1	40.7	412	19
5	NAPIER .. Chas. L. Thomas	48.6	56.2	41.0	514	15
377	MASTERTON .. R. Brown	45.3	53.4	37.3	467	21
186	GREYTOWN .. W. Allan	45.8	53.8	37.8	575	22
10	WELLINGTON ..	48.4	53.9	42.9	346	20
SOUTH ISLAND.						
11	TAKAKA, NELSON .. J. H. Scott	47.3	56.0	38.6	1167	10
34	NELSON .. H. D. McKellar	46.6	54.6	38.6	539	12
1220	HANMER SPRINGS .. W. Montgomery	39.5	47.0	32.0	420	14
25	CHRISTCHURCH .. H. F. Skey	41.9	49.4	34.5	246	15
42	LINCOLN .. D. J. Sidey	41.6	50.2	33.0	222	13
1220	KISSELTON .. E. T. Cockburn	..	..	..	342	10
349	RAKAIA .. Miss A. Hardy	42.1	51.3	33.0	241	10
323	ASHBURTON .. H. P. Clayton	41.0	49.9	32.1	236	16
1000	FAIRLIE .. R. J. Rainey	38.1	48.5	27.8	199	10
2350	LAKE TEKAPO .. R. R. Beauchamp	33.7	41.6	25.9	190	6
130	TIMARU .. Carstaker of Domain	41.3	48.8	33.8	272	11
200	WAIMATE .. F. Akhurst	41.4	50.0	32.7	486	8
1550	SANATORIUM, WAIPIATA Dr. A. Kidd	36.8	45.0	28.7	69	12
1000	OPHIR .. Rev. A. Don	34.3	43.5	25.1	20	7
300	DUNEDIN .. D. Tannock	43.5	49.8	37.3	751	15
245	GORE .. A. T. Newman	..	..	..	..	..
12	HOKITIKA .. J. A. Chesney	45.6	54.8	36.5	854	17
12	INVERCARGILL .. L. Lennie	41.9	48.9	35.0	286	20

† Thermometer out of order.

SUMMARY FOR THE MONTH OF JULY, 1927.

The total precipitation of the month was above normal over the North Island, with the exception of small areas about Cook Strait and at Kawhia and Gisborne. In the South Island there were considerable local variations in the amounts measured, but Nelson and Marlborough had an excess, and also isolated places on the east coast and in western Otago. Westland, North Canterbury, and most parts of Otago recorded less than the mean. In some districts, notably in the Bay of Plenty and Hawke's Bay, the excess was considerable.

There were three outstanding storms during the month, which may be briefly described as follows: A cyclone from the north-westward was centred over the Auckland Peninsula on the 1st, and passed off East Cape on the night of the 2nd. On these two days some phenomenal rainfalls occurred in the Gisborne and Hawke's Bay Districts, resulting in serious floods in the low-lying country. Between the 9th and 14th an intense and extensive westerly low-pressure area dominated, with strong northerly winds, changing to southerlies, about the 13th. Much rain fell during this period and, on the 13th, there were heavy snowfalls in the high country in the South Island and also in the central portion of the North Island. Waiouru recorded a fall of 17 in., and at Taumarunui it was regarded as the heaviest fall since 1918. From the 25th to the close of the month wide and extensive cyclonic disturbances operated between New Zealand and Australia, and conditions were again extremely unsettled, with strong north-east to south-east winds. Although precipitation came mostly in the form of drizzle, some heavy rains were occasionally experienced, particularly in the northern and east coast districts on the 25th and 26th.

In many parts of the North Island the continuous rain accounted for serious floods and landslips which interfered with railway and other traffic.

Fair weather ruled between the 3rd and 8th, and other shorter fair periods were experienced, but usually the duration of sunshine was below the average. Temperatures, however, were about normal and above the mean of the previous month, and generally there was a good growth in vegetation for the time of year.

EDWARD KIDSON, Director.