

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of December, 1919. 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.					Solar Radiation.	Terrestrial Radiation.	Veloc. Wind, in Miles.	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.	Fah.	Fah.						
1	29.794	59.3	43.8	51.5	126.0	32.8	164	2	N.		1	
2	29.703	61.8	52.0	56.9	132.0	44.9	365	9	SSW		56	
3	30.098	57.3	39.3	48.3	129.0	32.9	446	6	S.			
4	30.254	56.0	38.4	47.2	133.0	25.5	323	3	NNE			
5	30.109	60.0	54.3	57.1	126.0	46.9	355	7	N.			
6	29.898	64.5	55.5	60.0	144.0	52.0	637	8	N.W.			
7	29.794	65.5	54.1	59.8	139.0	48.5	393	1	N.			
8	29.742	62.5	54.8	58.6	134.0	50.1	489	8	WNW		7	
9	30.006	60.6	41.4	51.0	133.0	41.5	358	6	SSE			
10	29.903	59.8	43.1	51.4	134.0	29.5	224	2	NNW			
11	29.846	66.1	55.0	60.5	133.0	51.0	394	10	NNW		7	
12	29.994	64.9	51.2	58.0	135.0	50.1	226	10	N.		6	
13	29.525	61.0	54.9	57.9	145.0	51.5	501	10	NNE		48	
14	29.854	64.8	49.9	57.3	139.0	50.0	377	10	S.			
15	29.784	63.2	45.5	54.3	121.0	34.5	158	8	N.W.			
16	29.990	66.8	53.8	60.3	137.0	45.2	192	1	N.W.			
17	30.059	68.4	56.4	62.4	129.0	51.2	227	10	N.E.			
18	30.012	60.9	57.9	59.4	101.0	55.6	277	7	N.W.		14	
19	29.776	65.9	58.9	62.4	139.0	55.4	363	10	NNW		1	
20	29.535	70.8	58.6	64.7	131.0	53.7	318	6	N.W.			
21	29.493	71.8	52.9	62.3	136.0	43.8	329	2	N.W.		8	
22	29.757	68.2	45.8	57.0	137.0	33.5	187	0	S.E.		12	
23	29.698	68.3	51.6	59.9	131.0	42.3	213	7	N.W.		17	
24	30.097	66.3	44.8	55.5	143.0	32.8	224	2	N.W.			
25	30.097	67.6	55.2	61.4	130.0	47.2	160	9	N.W.		5	
26	29.770	64.2	57.0	60.6	141.0	54.4	570	10	NNW		58	
27	30.225	59.7	47.0	53.3	84.0	45.0	486	9	S.			
28	30.302	61.0	41.8	51.4	127.0	28.2	192	0	NNE			
29	30.204	72.0	53.8	62.9	130.0	39.5	98	0	N.		1	
30	30.341	79.0	56.5	67.7	136.0	45.8	129	9	SSE			
31	30.299	73.2	58.0	65.6	142.0	46.5	131	9	S.E.		Trace	
*	29.934	64.9	51.1	58.0	131.5	43.9	307	6	2		241	
†	29.863	66.9	53.8	60.3	124.6	46.9	277				328	

* Means, &c. † Means previous years

DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
12	1	..	2	6	..	1	9	..

NOTE.—A changeable month. Total bright sunshine 240 hours 42 minutes, and one sunless day. Three frosts were recorded on the grass. Hail fell on 2nd and 21st, and thunder and lightning was noted on the 23rd. Mean earth-temperature at 1 ft. was 62°, and 59.8° at 3 ft. Mean dew-point, 48.7°; mean elastic force of vapour, 0.344 in.; and mean relative humidity, 71 per cent. of saturation.

CLIMATOLOGICAL TABLE.

MEANS AND TOTALS FROM THE CHIEF STATIONS. December, 1919.

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 (3 Points or more).
			Mean Max. Temp.	Mean Min. Temp.		
Ft. 125	NORTH ISLAND. AUCKLAND* F. A. F. Burnett	Deg. 61.3	Deg. 68.2	Deg. 54.5	Points. 135	Dys. 8
46	TE AROHA .. G. F. McGirr	62.2	71.3	53.1	137	7
925	ROTORUA .. L. Bayfield	60.8	74.4	47.3	130	4
340	WAIHI .. P. A. Clifford	60.9	70.9	50.9	222	13
..	TAURANGA .. C. J. Butcher	60.1	71.4	48.8	86	8
160	NEW PLYMOUTH .. W. W. Smith	59.8	67.7	52.0	161	11
250	MOUMAHAKI .. T. W. Lonsdale	56.6	68.6	44.7	132	9
2080	TAIHAPE .. A. R. Fannin	53.3	63.0	43.7	180	11
100	PALMERSTON NORTH .. J. A. Colquhoun
119	CENTRAL DEVELOPMENT FARM, WERAROA J. Beverley	55.1	63.8	46.4	159	14
186	GREYTOWN† W. C. Davies	58.8	71.3	46.4	236	10
377	MASTERTON .. Wm. Hood	59.3	72.7	45.9	232	8
70	GREENMEADOWS, NAPIER T. B. McBreen	61.5	72.5	50.5	64	4
..	TRENTHAM MILITARY CAMP Lieut.-Col. Leahy	57.4	66.8	48.1	237	9
10	WELLINGTON ..	58.0	64.9	51.1	241	14
..	SOUTH ISLAND. BRIGHTWATER .. Ven. Archdeacon Kempthorne	60.3	69.6	51.1	93	10
34	NELSON .. J. Williams	60.5	70.3	50.7	104	8
1220	HANMER SPA .. G. J. O'Brien	57.8	70.3	45.3	307	10
25	CHRISTCHURCH .. H. F. Skey	57.8	67.6	48.1	124	7
42	LINCOLN .. L. J. Wild	57.0	70.2	43.9	141	10
1220	KISSELTON .. A. R. Blackwood	56.6	67.7	45.5	161	5
..	RAKAIKA .. Miss A. Hardy	57.8	70.0	45.6	145	7
130	TIMARU .. Caretaker of Domain	56.8	67.9	45.7	204	9
200	WAIMATE .. F. Akhurst	55.4	65.4	45.4	248	9
300	DUNEDIN .. D. Tannock	55.3	64.2	46.4	307	13
245	GORE .. H. Dolamore	53.8	64.3	43.4	393	14
12	HOKITIKA .. W. H. Fleming	53.7	60.5	46.9	627	16
12	INVERCARGILL .. L. Lennie	54.3	63.0	45.6	383	18

SUMMARY FOR THE MONTH OF DECEMBER, 1919.

With the exception of South Canterbury, the rainfall was everywhere below the average, the greatest deficiency being recorded in the East Coast and Northern districts of the North Island. Following is a list giving the percentage below average at some representative stations:—

Name of Station.	Percentage below Average.
Auckland ..	53
Napier ..	79
New Plymouth ..	61
Wellington ..	26
Nelson ..	64
Lincoln ..	29
Hokitika ..	43
Invercargill ..	14

The month was characterized by very changeable weather, frequent westerly disturbances accounting for a prevalence of strong winds between north-west and south-west. The change to the latter direction was at times very sudden, notably about the 21st. Electrical disturbances were experienced at this time in various districts, accompanied by a heavy fall of hail and sleet. Some snow fell on the 2nd and 8th in parts of the East Coast districts of the South Island, and a rather wide-spread and damaging frost occurred on the morning of the 4th, both rare events at this time of the year.

B. V. PEMBERTON, Acting-Director.