

## Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of January, 1917. Observations taken 9 a.m.

## Altitude of Observatory, 8 ft.

Date.	Barometer reduced and corrected in Inches to Lat. 45°.	From Self-registering Instruments used previously:								Altitude above Sea-level.	Name of Station and Observer.	Extremes.				Days with Rain (3 Point or more).
		Max. Temp. in Shade.	Min. Temp. in Shade.	Mean Temp. in Shade.	Solar Radiation.	Terrestrial Radiation	Veloc. Wind in Miles. 0 to 10.	Amount of Cloud,	Direction of Wind.			Absolute Mean Temp. Air in Shade.	Mean Max. Temp.	Mean Min. Temp.	Total Rainfall (100 Points to the Inch).	
1	30-041	73·5	59·0	66·2	140·0	56·0	301	10 S.S.E.	..	125	NORTH ISLAND. AUCKLAND ..	Deg. 67·4	Deg. 73·4	Deg. 61·5	Points. 348	Dys. 13
2	29-895	73·9	59·4	66·6	142·0	55·1	239	8 ENE	..	46	F. A. F. Burnett TE AROHA ..	Deg. 66·5	Deg. 76·8	Deg. 56·3	Points. 708	Dys. 17
3	29-686	77·2	63·1	70·2	150·0	60·5	197	7 ENE	6	925	G. F. McGirr ROTORUA ..	Deg. 64·5	Deg. 73·1	Deg. 55·9	Points. 339	Dys. 13
4	29-429	78·0	60·2	69·1	151·0	59·0	267	10 S.	..	340	S. R. Edwards WAIHI ..	Deg. 66·7	Deg. 76·0	Deg. 57·5	Points. 651	Dys. 20
5	29-548	70·3	54·1	62·2	142·0	44·2	171	6 NNW	..	..	P. A. Clifford TAURANGA ..	Deg. 65·3	Deg. 74·7	Deg. 55·9	Points. 519	Dys. 14
6	29-655	76·4	63·2	69·8	140·0	54·9	250	6 S.	..	160	C. J. Butcher NEW PLYMOUTH ..	Deg. 67·2	Deg. 76·7	Deg. 57·7	Points. 80	Dys. 11
7	29-897	70·8	54·0	62·4	140·5	42·0	224	0 S.	..	250	W. W. Smith MOUHAMAKI ..	Deg. 64·0	Deg. 75·6	Deg. 52·4	Points. 88	Dys. 4
8	29-667	72·4	58·1	62·7	135·0	40·3	146	1 N.N.W.	103	2080	T. W. Lonsdale TAHUAPE ..	Deg. 60·5	Deg. 69·3	Deg. 51·8	Points. 158	Dys. 8
9	29-526	71·7	51·7	61·7	150·0	49·5	484	10 S.	40	100	J. E. Vernon PALMERSTON NORTH ..	Deg. 64·9	Deg. 76·0	Deg. 53·8	Points. 115	Dys. 5
10	29-711	62·1	55·2	58·6	129·0	53·2	467	9 S.S.E.	..	186	W. C. Davies GREYTOWN ..	Deg. 66·8	Deg. 79·9	Deg. 53·8	Points. 226	Dys. 7
11	29-842	66·6	50·7	58·6	135·0	43·2	147	1 S.E.	..	377	Wm. Hood MASTERTON ..	Deg. 65·9	Deg. 79·3	Deg. 52·5	Points. 180	Dys. 8
12	29-963	69·5	50·0	59·8	131·0	40·4	164	0 Calm	..	70	PIER W. B. Buckley	Deg. 68·0	Deg. 76·5	Deg. 59·5	Points. 524	Dys. 7
13	29-947	74·0	55·9	64·9	133·0	46·1	130	10 N.	..	10	WELLINGTON ..	Deg. 65·2	Deg. 72·6	Deg. 57·9	Points. 176	Dys. 7
14	29-766	69·0	63·0	66·0	140·0	61·0	538	10 N.W.	5	..	..	..	..	..	..	
15	29-586	67·9	61·9	64·9	127·0	59·3	575	4 N.W.	7	34	S. R. Edwards NELSON ..	Deg. 67·9	Deg. 79·0	Deg. 56·9	Points. 9	Dys. 1
16	29-871	71·9	50·1	61·0	137·0	46·1	274	1 N.W.	..	1220	J. R. Dart HANMER SPA ..	Deg. 63·6	Deg. 75·7	Deg. 51·6	Points. ..	..
17	29-727	67·3	59·9	63·6	132·0	59·1	403	1 N.W.	..	25	J. W. McKinna CHRISTCHURCH ..	Deg. 63·9	Deg. 72·1	Deg. 55·7	Points. 194	Dys. 6
18	30-101	73·8	54·7	64·2	143·0	50·2	271	1 S.E.	..	42	H. F. Skey L. J. Wild	Deg. 65·2	Deg. 72·6	Deg. 57·9	Points. 176	Dys. 7
19	30-197	68·2	49·7	58·9	129·0	38·7	140	1 N.W.	..	..	RAKAI ..	Deg. 66·2	Deg. 77·6	Deg. 54·8	Points. 206	Dys. 3
20	30-163	69·1	60·0	64·5	133·0	56·7	344	7 N.W.	..	200	WIMATE ..	Deg. 62·8	Deg. 72·2	Deg. 53·5	Points. 256	Dys. 5
21	30-087	67·0	60·5	68·7	143·0	57·5	537	4 N.W.	..	300	F. Akhurst DUNEDIN ..	Deg. 62·5	Deg. 71·1	Deg. 53·9	Points. 312	Dys. 10
22	30-072	68·9	58·3	63·6	139·0	52·3	268	4 N.E.	..	245	GORE ..	Deg. 63·4	Deg. 76·1	Deg. 50·8	Points. 189	Dys. 13
23	30-015	74·9	61·7	68·3	141·0	57·9	206	0 N.	1	12	H. Dolamore HOKITIKA ..	Deg. 61·8	Deg. 69·5	Deg. 54·2	Points. 222	Dys. 11
24	29-940	73·9	65·0	69·4	139·0	63·2	347	9 N.W.	14	12	F. T. Sandford INVERCARGILL ..	Deg. 60·9	Deg. 70·8	Deg. 51·1	Points. 303	Dys. 18
*	29-911	72·6	57·9	65·2	139·3	52·2	265	5·3	..	..	L. Lennie	..	..	..	..	..
†	29-899	69·4	55·5	62·4	126·1	48·6	256	..	..	..	..	..	..	..	..	..

\* Means, &amp;c.

† Means previous years.

## DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
6	2	2	2	8	..	..	9	2

NOTE.—A fine sunny month, with temperatures well above the average, and rainfall 48 per cent. below the mean of previous years. Total bright sunshine, 267 hours 9 minutes, giving an average of 8 hours 37 minutes per diem, and no sunless days. Heavy thunderstorm on the night of the 8th, and distant thunder and lightning on the 9th. The mean earth-temperature at 1 ft. was 70·5° and 68·3° at 3 ft. Mean dew-point, 54·5°; mean elastic force of vapour, 0·425 in.; and mean relative humidity, 68 per cent. of saturation.

## CLIMATOLOGICAL TABLE.

## MEANS AND TOTALS FROM THE CHIEF STATIONS.

January, 1917.

Ft.	Name of Station and Observer.	Altitude above Sea-level.	Absolute Mean Temp. Air in Shade.			Extremes.	Days with Rain (3 Point or more).
			Mean	Max. Temp.	Min. Temp.		
125	NORTH ISLAND. AUCKLAND ..	..	Deg. 67·4	Deg. 73·4	Deg. 61·5	Points. 348	Dys. 13
46	F. A. F. Burnett TE AROHA ..	..	Deg. 66·5	Deg. 76·8	Deg. 56·3	Points. 708	Dys. 17
925	G. F. McGirr ROTORUA ..	..	Deg. 64·5	Deg. 73·1	Deg. 55·9	Points. 339	Dys. 13
340	S. R. Edwards WAIHI ..	..	Deg. 66·7	Deg. 76·0	Deg. 57·5	Points. 651	Dys. 20
..	P. A. Clifford TAURANGA ..	..	Deg. 65·3	Deg. 74·7	Deg. 55·9	Points. 519	Dys. 14
160	C. J. Butcher NEW PLYMOUTH ..	..	Deg. 67·2	Deg. 76·7	Deg. 57·7	Points. 80	Dys. 11
250	W. W. Smith MOUHAMAKI ..	..	Deg. 64·0	Deg. 75·6	Deg. 52·4	Points. 88	Dys. 4
2080	T. W. Lonsdale TAHUAPE ..	..	Deg. 60·5	Deg. 69·3	Deg. 51·8	Points. 158	Dys. 8
100	A. R. Fannin PALMERSTON NORTH ..	..	Deg. 64·9	Deg. 76·0	Deg. 53·8	Points. 115	Dys. 5
186	J. E. Vernon GREYTOWN ..	..	Deg. 66·8	Deg. 79·9	Deg. 53·8	Points. 226	Dys. 7
377	W. C. Davies MASTERTON ..	..	Deg. 65·9	Deg. 79·3	Deg. 52·5	Points. 180	Dys. 8
70	P. M. Hood GREENMEADOWS, N.A.	..	Deg. 68·0	Deg. 76·5	Deg. 59·5	Points. 524	Dys. 7
10	WELLINGTON ..	..	Deg. 65·2	Deg. 72·6	Deg. 57·9	Points. 176	Dys. 7
34	J. R. Dart NELSON ..	..	Deg. 67·9	Deg. 79·0	Deg. 56·9	Points. 9	Dys. 1
1220	J. W. McKinna HANMER SPA ..	..	Deg. 63·6	Deg. 75·7	Deg. 51·6	Points. ..	..
25	H. F. Skey CHRISTCHURCH ..	..	Deg. 63·9	Deg. 72·1	Deg. 55·7	Points. 194	Dys. 6
42	L. J. Wild LINCOLN ..	..	..	..	..	Incomplete.	..
..	RAKAI ..	..	Deg. 66·2	Deg. 77·6	Deg. 54·8	Points. 206	Dys. 3
130	Timaru ..	..	Deg. 64·6	Deg. 74·6	Deg. 54·7	Points. 208	Dys. 4
200	F. Akhurst WAIMATE ..	..	Deg. 62·8	Deg. 72·2	Deg. 53·5	Points. 256	Dys. 5
300	D. Tannock DUNEDIN ..	..	Deg. 62·5	Deg. 71·1	Deg. 53·9	Points. 312	Dys. 10
245	GORE ..	..	Deg. 63·4	Deg. 76·1	Deg. 50·8	Points. 189	Dys. 13
12	H. Dolamore HOKITIKA ..	..	Deg. 61·8	Deg. 69·5	Deg. 54·2	Points. 222	Dys. 11
12	F. T. Sandford INVERCARGILL ..	..	Deg. 60·9	Deg. 70·8	Deg. 51·1	Points. 303	Dys. 18

## SUMMARY FOR THE MONTH OF JANUARY.

The North Auckland district and the east coast of the North Island experienced a rainfall in excess of the average for the month; but in almost every other part of the Dominion the total was below.

The chief cause of the abundant falls in the North were two subtropical depressions, one which passed off East Cape about the 3rd and 4th, and a prolonged one which ruled in the North from the 27th to the close of the month.

A small "low" off the east coast of the North Island caused severe thunderstorms in the vicinity of Cook Strait on the night of the 8th.

On the 21st some local thunderstorms, accompanied with heavy downpours in the Tokomaru Bay district, caused serious floods in many of the rivers and creeks. The rainfall in many cases was phenomenal, and hitherto unprecedented in New Zealand.

The only other disturbance of note was a moderate westerly low-pressure area ruling between the 13th and 17th, which brought some rain, more especially in the western districts.

The weather on the whole was fine and seasonable, with occasionally very high temperatures ruling, particularly during the last week, when a persistent high-pressure system was centred in the region of the Chatham Islands.

D. C. BATES, Director.