

## Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of September, 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.										Rainfall, in Points (000 to 1 Inch).
		Max. Temp. in Shade.	Min. Temp. in Shade.	Mean Temp. in Shade.	Solar Radiation.	Terrestrial Radiation.	Velocity Wind, in Miles. (0 to 10.)	Amount of Cloud.	Direction of Wind.			
1	29-345	Fah. 59·8	Fah. 45·7	Fah. 52·7	114·0	32·3	240	0	N.W.	19		
2	29-602	55·9	35·9	45·9	121·0	33·0	351	1	S.W.			
3	29-528	55·7	42·8	49·2	108·0	36·7	241	9	S.			
4	29-583	51·4	40·3	45·8	112·0	33·8	197	7	N.W.			
5	29-618	54·0	36·7	45·8	114·0	26·6	138	5	ENE	Trace		
6	29-963	59·4	37·3	48·3	117·0	26·6	123	10	S.	Trace		
7	30-159	49·6	43·2	46·4	97·0	37·6	310	9	S.E.			
8	30-213	52·8	35·1	43·9	118·0	23·0	146	2	N.E.			
9	30-189	54·3	31·2	42·7	115·0	23·0	113	0	Calm	Trace		
10	29-893	59·2	41·7	50·4	115·0	30·0	27	10	E.	4		
11	29-711	59·8	47·7	53·7	121·0	44·2	265	10	ENE	1		
12	29-684	55·7	49·7	52·7	98·0	46·0	248	7	S.E.	1		
13	29-772	58·5	48·1	53·3	114·0	45·7	391	10	S.			
14	29-826	56·4	40·5	48·4	105·0	29·0	74	5	Calm			
15	29-822	62·4	46·1	54·2	115·0	33·1	148	9	N.W.	17		
16	29-526	57·9	47·2	52·5	124·0	45·4	427	6	N.W.	34		
17	29-800	57·3	41·6	49·4	118·0	31·9	191	8	S.			
18	29-904	57·5	36·1	46·8	125·0	27·0	65	1	N.W.			
19	29-980	60·4	50·5	55·4	121·0	42·0	249	0	N.W.			
20	29-997	64·8	53·2	59·0	122·0	46·4	276	0	N.W.			
21	29-992	61·2	52·8	57·0	123·0	49·5	555	9	N.W.	14		
22	29-888	58·2	50·3	54·2	106·0	49·0	386	10	S.	10		
23	30-093	51·4	44·6	48·0	105·0	40·0	280	7	SSE			
24	30-054	54·3	36·3	45·3	111·0	24·2	147	9	N.			
25	29-858	58·7	51·4	55·0	129·0	46·5	299	9	N.W.	15		
26	30-012	65·3	40·7	53·0	135·0	29·8	235	9	S.			
27	30-218	58·8	45·2	49·5	120·0	41·5	386	4	S.			
28	30-043	56·2	49·2	52·7	125·0	42·0	245	10	N.	12		
29	29-684	55·8	49·7	52·7	122·0	49·4	396	10	N.W.	68		
30	29-856	56·2	42·2	49·2	77·0	40·5	446	9	S.			
*	29-857	57·1	43·8	50·4	114·9	36·8	253	6·5	..	196		
†	29-925	57·2	45·4	51·3	104·5	38·4	244	..	..	419		

\* Means, &amp;c.

† Means previous years.

## DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
2	1	3	2	9	1	..	10	2

NOTE.—A dry spring month with precipitation 53 per cent. below the mean of previous years. Total bright sunshine 169 hours 27 minutes, and three sunless days, giving an average of 5 hours 39 minutes per diem. Snow reported on hilltops on 2nd, and thunder and lightning on the 25th. Mean earth-temperature at 1 ft. was 51°, and 52·2° at 3 ft. Mean dew-point, 43·4°; mean elastic force of vapour, 0·281 in.; and mean relative humidity, 77 per cent. of saturation.

## SUMMARY FOR THE MONTH OF SEPTEMBER, 1919.

The weather during September was extremely changeable, and the mean temperature was generally below that of previous years. Consequently vegetable growth was rather backward for this season in most parts of the Dominion. Total rainfall was deficient in nearly all districts with a westerly aspect, while Hawke's Bay and the eastern half of the South Island experienced more than the average, chiefly owing to very heavy rains which occurred on the 10th and 11th. The storm at this time was an ex-tropical cyclone, the centre of which passed in the north on the 10th and 11th and off East Cape on the night of the 12th. It was responsible for south-east gales in the East Coast districts, and floods in some of the rivers in the Hawke's Bay, Marlborough, and Kaikoura districts. The rainfall reported at Hapuku, Kaikoura, for the three days was 10·45 inches, of which amount 6·37 inches fell on the 11th. Frequent disturbances of the westerly type were in evidence during the month, accounting for strong north-west to south-west winds, particularly during the first four days and between the 15th and 20th.

B. V. PEMBERTON, Acting-Director.

CLIMATOLOGICAL TABLE.  
MEANS AND TOTALS FROM THE CHIEF STATIONS.  
September, 1919.

Name of Station and Observer.	Altitude above Sea-level.	Mean Temp. Air in Shade.		Extremes.		Total Rainfall (000 Points to the Inch). (4 Point or more)	Days with Rain (4 Point or more)
		Mean Temp.	Max. Temp.	Mean Min. Temp.	Min. Temp.		
NORTH ISLAND.		Deg.	Deg.	Deg.	Deg.	Points.	Dys.
AUCKLAND ..	125	50·0	58·3	41·7	356	18	
F. A. F. Burnett	46	52·2	60·6	43·9	550	17	
G. F. McGirr	925	51·8	65·9	37·8	457	8	
J. R. Cummins	340	51·4	60·4	42·4	539	15	
P. A. Clifford	TAURANGA ..	50·6	60·5	40·7	754	9	
C. J. Butcher	160	52·9	60·4	45·4	510	21	
W. W. Smith	250	49·5	59·4	39·7	296	10	
T. W. Lonsdale	2080	44·9	52·1	37·7	392	18	
A. R. Fanlin	100	49·2	57·1	41·3	272	12	
J. A. Colquhon	119	49·0	56·5	41·6	312	16	
CENTRAL DEVELOPMENT FARM, WERAROA							
J. Beverley	186	48·8	57·6	40·0	396	11	
GREYTOWN ..		..	..	..	..	..	
W. C. Davies	377	48·7	60·5	37·0	367	16	
MASTERTON ..							
Wm. Hood	70	51·3	60·4	42·2	256	5	
GREENMEADOWS, NAPIER							
T. B. McBreen	34	58·8	..	..	209	11	
TRENTHAM MILITARY CAMP							
Lieut.-Col. Leahy							
WELLINGTON ..		50·4	57·1	43·8	196	12	
SOUTH ISLAND.							
BRIGHTWATER ..		49·6	59·8	39·5	158	11	
Ven. Archdeacon Kempthorne							
NELSON ..		..	..	..	..		
J. Williams							
HAMMER SPA ..		44·4	53·9	34·9	686	11	
G. J. O'Brien							
CHRISTCHURCH ..		46·0	54·7	37·4	302	12	
H. F. Skeay							
LINCOLN ..		47·4	57·8	37·0	265	11	
L. J. Wild							
KISSELTON ..		45·7	56·8	34·6	542	10	
A. R. Blackwood							
RAKAI ..		45·9	55·5	36·3	410	11	
Miss A. Hardy							
TIMARU ..		46·9	56·5	37·4	282	11	
Caretaker of Domain							
WAIMATE ..		45·6	58·9	37·4	483	12	
F. Akhurst							
DUNEDIN ..		47·1	54·4	39·9	358	15	
D. Tannock							
GORE ..		44·4	54·7	34·1	299	13	
H. Dolamore							
HOKITIKA ..		47·0	54·9	39·2	772	17	
W. H. Fleming							
INVERCARGILL ..		46·3	56·7	35·9	343	12	
L. Lennie							