

Government Meteorological Observatory.

METEOROLOGICAL Observations, Wellington, for the month of April, 1923. 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.					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.							Fah.
1	29.586	63.5	57.5	60.5	110.0	52.2	523	3	N.N.W	..	..
2	29.867	63.7	53.4	58.5	125.0	44.0	320	1	N.N.W	..	3	
3	30.165	65.0	44.3	54.6	125.0	31.7	170	3	S.S.W.	..	3	
4	30.429	60.5	47.0	53.7	120.0	35.7	201	3	N.E.	Trace	..	
5	30.165	62.3	55.7	59.0	120.0	52.2	327	3	N.N.W	..	..
6	30.115	62.0	50.9	56.4	122.0	39.2	301	2	S.	..	..
7	29.919	66.2	45.8	56.0	118.0	34.2	197	6	N.N.E.	..	58	
8	29.663	63.0	43.8	53.4	124.0	42.0	442	10	WNW	..	82	
9	29.996	63.0	38.0	50.5	97.0	32.3	372	10	S.S.W.	..	15	
10	30.289	61.5	39.7	50.6	109.0	39.2	119	3	S.	..	..
11	30.378	58.3	40.0	49.1	117.0	29.0	227	7	N.E.	..	..
12	30.585	62.5	51.4	56.9	128.0	42.8	174	10	S.S.E.	..	..
13	30.543	65.0	41.6	53.3	120.0	30.0	87	10	N.E.	..	..
14	30.383	62.0	52.2	57.1	110.0	48.5	187	5	N.W.	..	..
15	30.527	63.1	49.5	56.3	115.0	33.2	184	10	S.	..	..
16	30.569	65.6	38.8	52.2	108.0	29.3	109	0	Calm	..	..
17	30.575	61.7	37.3	49.5	117.0	26.0	92	1	Calm	..	..
18	30.499	63.3	48.0	55.6	115.0	30.2	37	3	Calm	..	..
19	30.312	64.1	40.2	52.1	113.0	29.6	31	2	Calm	..	..
20	30.140	66.6	48.8	57.7	118.0	34.0	23	9	Calm	..	17	
21	29.843	70.7	54.3	62.5	122.0	53.5	73	9	E.	..	88	
22	29.705	70.0	50.4	60.2	100.0	49.6	243	10	S.	..	4	
23	29.888	59.7	52.0	55.8	100.0	47.0	195	3	N.	..	..
24	29.981	64.1	45.5	54.8	114.0	35.9	84	9	S.	..	3	
25	30.090	61.0	52.0	56.5	86.0	49.2	237	10	S.	..	10	
26	29.977	59.4	49.8	54.6	99.0	48.3	505	10	S.	..	15	
27	30.100	56.0	49.6	52.8	81.0	46.2	526	8	S.S.E.	..	10	
28	30.299	60.4	47.1	53.7	108.0	44.2	439	7	S.	Trace	..	
29	30.443	61.3	35.7	48.5	111.0	25.0	161	0	E.	..	..
30	30.434	58.0	38.0	48.0	108.0	27.2	58	1	N.	..	..
31	..	..	..	..	..	..	..	..	..	..	..
*	30.182	62.8	46.6	54.7	112.0	38.7	221.5	5.6	..	..	308
†	30.043	62.7	51.2	56.9	107.1	44.2	234	5.5	..	..	392

* Means, &c. † Means previous years.

DIRECTION OF WIND.

N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
6	3	2	..	12	..	1	1	5

NOTE.—The weather during the month was fair to cloudy, with moderate to strong southerly winds prevailing. Precipitation occurred on 12 days, and was 21 per cent. below the mean of previous years. Total bright sunshine 176 hours 25 minutes, 53 per cent. of the possible, and two sunless days. Thunder was heard on the 9th, and severe hail fell on the same day, while nine frosts were recorded on the grass during the month. Mean earth-temperature at 1 ft. was 55°, and 58.3° at 3 ft. Mean dew-point, 45.4°; mean elastic force of vapour, 0.304 in.; and mean relative humidity, 71 per cent. of saturation.

CLIMATOLOGICAL TABLE.
MEANS AND TOTALS FROM THE CHIEF STATIONS.
April, 1923.

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 (9 Points or more).
			Mean Max. Temp.	Mean Min. Temp.		
Ft. 125	NORTH ISLAND. AUCKLAND ..	Deg. 58.0	Deg. 64.3	Deg. 51.7	Points. 573	Dys. 10
131	RUAKURA FARM, HAMILTON EAST W. B. Monro	53.0	66.1	39.8	710	8
46	TE AROHA .. W. O'Connell	57.0	68.2	45.9	1400	11
340	WAIHI .. C. F. Sims.	55.1	65.8	44.5	1938	12
100	TAURANGA .. C. J. Butcher	55.5	64.9	46.2	1254	10
925	ROTORUA .. W. E. Penno	53.5	64.8	42.3	715	11
60	NEW PLYMOUTH G. H. Dolby	54.5	61.9	47.1	328	9
250	MOUMAHARI .. J. G. McFarlane	50.6	60.2	41.1	355	9
2080	TAIHAPE .. A. R. Fannin	48.9	56.8	41.0	249	14
100	PALMERSTON NORTH .. J. A. Colquhoun	53.2	62.7	43.6	179	9
5	OROUA DOWNS .. H. D. Stride	51.8	62.3	41.3	145	8
119	CENTRAL DEVELOPMENT FARM, WERAROA J. E. Sharp	52.2	60.8	43.5	146	8
377	MASTERTON .. R. Brown	51.3	62.3	40.3	267	13
186	GRETOWN .. W. Allan	51.0	61.4	40.6	238	10
10	WELLINGTON ..	54.7	62.8	46.6	308	12
	SOUTH ISLAND.					
87	BRIGHTWATER .. Ven. Archdeacon Kempthorne	52.6	63.0	42.2	296	7
34	NELSON .. Wm. C. Davies	53.9	63.1	44.8	117	4
1220	HANMER SPRINGS .. W. G. Morrison	49.5	63.5	35.6	201	6
25	CHRISTCHURCH .. H. F. Skey	50.1	58.3	41.8	294	13
42	LINCOLN .. M. J. Scott	49.7	61.5	38.0	310	13
1220	KISSELTON .. F. Freeman	49.6	62.0	37.2	123	2
349	RAKAIA .. Miss A. Hardy	49.9	59.4	40.4	240	8
130	TIMARU .. Caretaker of Domain	50.3	58.7	42.0	223	12
200	WAIMATE .. F. Akhurst	49.4	58.3	40.5	228	14
300	DUNEDIN .. D. Tannock	49.4	56.5	42.3	1060	12
245	GORE .. A. T. Newman	..	..	..	..	..
12	HOKITIKA .. J. A. Chesney	50.6	60.2	41.0	219	9
12	INVERCARGILL .. L. Lennie	48.1	55.2	41.1	363	18

LATE RETURNS.

245	GORE (Nov., 1922) ..	52.5	62.2	42.9	488	25
	,, (Dec., 1922) ..	55.6	66.3	44.9	433	18
12	INVERCARGILL (Mar., 1922)	52.2	61.6	42.8	744	18

ERRATUM.

125	AUCKLAND (Mar., 1923)	62.2	68.5	56.0
-----	-----------------------	------	------	------	----	----

SUMMARY FOR THE MONTH OF APRIL, 1923.

During April there were two periods of unsettled weather—viz., between the 7th and 10th and from the 18th to the 28th. In the former period a disturbance which passed in the South on the night of the 7th developed considerable intensity to the eastward on the following day, and accounted for a heavy south-west gale. Cold and stormy conditions prevailed, especially along the east coast on the 8th and 9th, and electrical disturbances and heavy hail showers were experienced, with snow on the higher levels.

The heaviest rains, however, fell in the period 18th to 28th, when extropical disturbance dominated. Very heavy rain and floods with easterly gales occurred between the 19th and 21st in the northern half of the North Island. The centre of the storm passed in the North on the 22nd. It was followed by a "secondary," which apparently developed in the South, and caused one of the most serious floods experienced in Dunedin. In that city the total rainfall for the three days (20th, 21st, and 22nd) was 8.45 inches, of which 6.81 inches fell on the 21st.

A remarkable feature about both these disturbances was that the heavy downpours were confined to comparatively small areas. This is shown in the totals for the month, which were much above the average northward of Kawhia and Gisborne in the North Island, and on the east coast between Kaikoura and Nugget Point in the South Island. All other parts of the Dominion show an aggregate rainfall considerably below the mean.

Anticyclonic conditions and fair weather were general between the 10th and 17th and on the last two days of the month.

D. C. BATES, Director.