Government Meteorological Observatory.

M ETEOROLOGICAL Observations at Kelburn, Wellington, for the Month of June, 1934. Observations taken at Altitude of Observatory, 415 ft.

	Date.		Pressure, in Inches, at Sea-level and Standard Gravity.	Temperature (° F.) from Observations at 9 a.m.							Wind.			(100	Hours	at
				In Screen.					Grass.	: .			Anemo- meter.	Points Inch).	, ,	(Symbols)
				At 9 a.m.			Maxi- mum.	Mini- mum.	10 10	adiation num.			3. 24 8.	4.1	Sunshi enths.	
				Dry.	Wet.	Humid- ity.	Dry.	Dry.	Minimum	Solar Radiation : Maximum.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright Sunshine: and Tenths.	Weather 9 a.m.
1			30.058	54.4	51.2	79	57.4	50.3	49.0	78.9	NW	2	172	62	0.0	0
2			$29 \cdot 788$	$52 \cdot 1$	52 · 1	100	$52 \cdot 9$	$51 \cdot 1$	50.2	58.8	Calm		63	124	0.0	orf
3			$29 \cdot 817$	48.4	48.1	98	$50 \cdot 9$	47.4	47.4	71.7	S	2	92	1	0.4	omr
4			29.845	50.0	48.2	87	$52 \cdot 0$	47.5	46.7	78.0	SE	2	46	11	0.1	0
5	• • •		29.965	47.0	46.3	95	$50 \cdot 0$	$44 \cdot 6$	44.2	84.1	S	2	92	1	0.2	0
6			30.038	49.8	47.3	82	$55 \cdot 3$	45.0	38.8	97.0	Calm		83		8.3	b
7			29.915	48.0	44.8	76	$52 \cdot 4$	41.0	32.3	96.9	Calm		28	9	7.0	be
8			$29 \cdot 982$	44.5	42.9	87	$49 \cdot 2$	47.7	39.2	$104 \cdot 0$	S	3	128	14	$3 \cdot 3$	0
9			30.009	43.8	42.6	90	$48 \cdot 6$	38.2	31.2	94.7	Calm		39	24	4.8	be
10			$30 \cdot 291$	41.9	39.1	76	$47 \cdot 4$	37.1	35.7	84.4	SSE	3	128	8	$2 \cdot 7$	op
11			30.001	$47 \cdot 2$	42.8	67	$51 \cdot 2$	34.9	28.2	$95 \cdot 6$	N	5	178	6	8.4	b
12			29.884	44.6	43.0	87	$46 \cdot 0$	42.1	32.9	$57 \cdot 3$	SE	5	187	11	0.4	op
13			29.969	45.0	41.9	76	$48 \cdot 0$	$40 \cdot 2$	38.0	$94 \cdot 3$	S	4	299		5.8	ō
14			30.165	43.9	$42 \cdot 0$	85	$53 \cdot 4$	39 · 1	$32 \cdot 2$	99.0	Calm		144	Trace	4.9	е
15			30.213	46.3	44.0	82	$51 \cdot 8$	43.0	$40 \cdot 2$	$102 \cdot 1$	Calm		85	Trace	2.0	0
16			30.384	42.7	$42 \cdot 3$	96	$54 \cdot 0$	37.1	29.4	94.0	Calm		42		7.9	bf
17			30.491	$43 \cdot 2$	42.0	89	$55 \cdot 0$	37.5	28.0	97.3	Calm		36		8.2	b
18			$30 \cdot 288$	49.2	44.4	66	$55 \cdot 2$	42.1	38.0	85.5	N	2	116	36	1.0	0
19			30.074	49.7	49.2	97	$54 \cdot 7$	47.6	$46 \cdot 3$	66.1	NE	1	82	93	0.0	od
20			29.904	51.8	51.1	95	$53 \cdot 5$	49.1	46.1	66.3	Calm		41	14	0.0	0
2ĭ	•••		29.841	48.9	48.8	99	50.0	46.7	47.0	63.9	SE	2	188	10	0.0	omd
22	•••		29.895	47.5	46.8	94	48.8	45.5	41.3	64.0	SSE	4	113	4	0.1	0
23	•••		30.009	42.1	42.0	99	46.5	42.4	$42 \cdot 1$	85.3	SE	3	190	Trace	2.2	op
24			$29 \cdot 986$	42.1	40.8	89	$47 \cdot 7$	35.8	29.4	95.6	Calm		113		7.4	bcw
25	••		30.096	46.8	44.0	79	$54 \cdot 6$	36.7	$27 \cdot 2$	$103 \cdot 8$	N	2	63		6.4	c
26	••		$30 \cdot 322$	$45 \cdot 9$	43.8	83	$54 \cdot 6$	38.4	$29 \cdot 2$	99.4	Calm		56	15	4.9	Ď
27	•••		29.891	49.7	49.0	95	55.6	44.6	41.8	64.2	N	5	285	20	0.0	omd
28			29.380	52.9	50.6	84	54.5	49.0	49.6	91.0	NW	6	476	17	2.1	bq
29			29.334	47.5	45.0	82	51.0	38.0	33.1	93.0	WNW	5	222	i	$\tilde{4}\cdot\tilde{3}$	b
30	• • •		29.374	41.9	37.2	61	48.0	37.3	34.0	91.7	w	i	253	· •	$\hat{6} \cdot 7$	be
	Means, &c.		29.974	47.0	45·1	86	51.7	42.6	38.3	85.3		2	135	481	99.5	•••

Mean earth temperature at 1 ft., 48.3°; and at 3 ft., 51.2°. Number of rain days, 20.

DIRECTION OF WIND.

Gale (force E. N.W. 8 or more). N.E. S.E. S. S.W. 4 to 7. Calm. N. 11 4 1 5 5 $2\frac{1}{2}$ 1 1 11/2 . .

Note.—A cold winter month, with temperature below normal. Total bright sunshine, 99.5 hours, 36 per cent. of the possible; six sunless days. Precipitation was 15 per cent. above the average. Until the last few days there was a remarkable absence of strong winds. Hail was recorded on five occasions; lightning was seen on the evening of the 29th; fog occurred on four mornings; and on six mornings frosts were registered. Mean dew-point at 9 a.m., 43.0°; mean vapour pressure, 0.277 in.

Notes on the Weather for June, 1934.

General.—June was, on the whole, a rather cold month, with less sunshine than usual. Until the last few days there was comparatively little wind, so that the low temperatures did not produce harmful effects. As regards total rainfall, conditions varied considerably in different districts, but generally it was rather humid. Cold and wet combined hindered ploughing and cultivation, and in that respect matters are in a backward condition. In Canterbury farmers have, in many cases, not been able to make their sowings of wheat or oats. It is not yet possible to estimate the effects of the spell of severe weather with widespread snowfalls which commenced at the end of the month and extended into July, but previous

severe weather with widespread snowfalls which commenced at the end of the month and extended into July, but previous to that there had been a certain amount of growth in pastures and stock were in satisfactory condition. Marlborough had good rains and, at the same time, escaped the snow. Both there and in Nelson conditions have improved.

Rainfall.—Owing chiefly to the heavy rains from the 18th to the 20th, practically the whole of the Auckland Province except the Poverty Bay and East Cape areas had considerably above the average rainfall for June. The same was the case in Nelson, Marlborough, and southern Wellington. Over the east coast districts of the North Island, in southern Taranaki, and northern Wellington the totals fell short of the average. In the parts of the South Island not mentioned the distribution was irregular with totals below the average predominating. Generally, the number of rain days was high, so that even where the total rain was low the month was effectively a wet one. The storm of the 18th to 20th mentioned above was responsible for many very heavy rains from Nelson and Marlborough northwards. Russell recorded 5·10 in. on the 18th and 7 in. in the whole period; Waihi had a total of 11·30 in., with 6·73 in. on the 18th; and Motueka 4·29 in. and Bainham (Golden Bay) 7·26 in. on the 18th. In North Auckland very severe flooding occurred and much damage was done. Floods were experienced, also, in the Bay of Plenty and Waikato districts, and in Nelson, on the Waimea Plains, and in the Motueka and Golden Bay areas. and Golden Bay areas.

Temperatures were for the most part slightly below normal, but the departures were important only in eastern districts and parts of the interior. At many places in western districts the normal was just exceeded. Owing to the still weather many hard frosts were recorded. In the cold and boisterous weather at the end of the month there were heavy snowfalls on all the ranges and even on much of the plain country of the South Island and the central plateau of the North. There were snowfalls on the Canterbury Plains also on the 9th.

Sunshine was everywhere considerably below normal. The best totals were recorded at Tauranga, 149.6 hours, and New Plymouth. 136.7 hours.

Pressure and Weather Systems.—During the greater part of the month such storms as occurred were rather complicated in structure but not very vigorous. They consisted of irregular troughs of low pressure running in a north to south direction, there being a tendency for the lowest pressure to occur over the northern extremity of the Dominion. The first of these depressions passed on the 2nd and was responsible for widespread rains with many heavy falls.