Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of June, 1938. Observations taken at 9 a.m. Altitude of Observatory, 415 ft.

			2. 3.1 2. 2.1 2. 2.1 2. 2.1 4. 2.2	Pressure, in Inches, at Sea-level and Standard Gravity.	Temperature (° F.) from Observations at 9 a.m.						Wind.			(100	Hours	ag tr
					In Screen.					grass.	Beaufort Scale.		Anemo- meter.	Points Inch.)		(Symbols)
	:	Date.			At 9 a.m.			Maxi- mum.	Mini- mum,	m on	ď		n 24	ä."	t Sunshine: Tenths.	
					Dry.	Wet.	Humid- ity.	Dry.	Dry.	Minimum on Grass.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright and T	Weather 9 a.m.
1				29.965	55.0	53.2	88	61.2	51.1	44.6	NNW	3	105		5.6	c
2				$30 \cdot 148$	50.0	49.0	93	$55 \cdot 1$	46.1	37.2	Calm		52	Trace	3.3	of
3				30.098	$52 \cdot 1$	50 · 1	86	57 · 1	46.0	34.8	NNE	2	32	30	1.1	0
4				$29 \cdot 944$	$52 \cdot 8$	$52 \cdot 4$	97	56.0	50.0	48.1	N	3	149	1	2.6	o
5				29.994	47.4	44.0	74	49.8	44.7	43.5	S	4	248	ĩ	5.6	og
6				30.000	47.5	$42 \cdot 1$	60	50.4	43.5	40.6	S	3	202		5.0	o
7				29.932	50.0	47.4	81	55.7	39 · 1	29.2	N	4	94	24	2.3	be
3				29.655	54.1	53.8	98	57 · 4	49.0	47.8	NNW	4	306	6	0.2	oir
)				29.575	52.0	47.8	71	$61 \cdot 6$	48.0	38.0	Calm	1	210		7.7	b
)				29 · 823	48.2	46.2	85	58 · 1	42.8	33.0	Calm		52	40	5.0	b
l				29.410	50.8	50.2	95	53.5	47.7	41.2	N	2	122	139	0.3	ор
2				$29 \cdot 374$	47.9	46.3	88	51.0	46.5	41.2	Calm		54	14	0.3	oz
3				29 · 492	42.9	42.9	100	49.8	42.1	43.0	SSW	8	209	83	0.7	oir
1			• • •	30.068	49.8	46.7	77	51.9	40.2	39.6	SSE	5	484	38	1.2	opq
5	• •			30.366	46.5	43.0	74	49.9	42.0	38.0	SE	4	291		4.5	cp
3	• •			30.089	46.7	43.1	73	50.6	$37 \cdot 2$	27.1	Calm	l	90		4.0	bz
7				30.009	42.5	40.0	79	$53 \cdot 2$	35.0	25.8	Calm	::	67	17	6.5	bz
3				29.799	51.7	48.0	75	55.6	40.5	42.4	NW	6	231	34	5.0	b
)		••	• • • • • • • • • • • • • • • • • • • •	29.607	53.9	51.3	83	57.8	49.5	46.9	NW	6	441		5.4	oq
ó				29.652	55.1	50.3	69	$59 \cdot 1$	51.1	46.0	NW	5	336	33	$2\cdot\hat{5}$	e
ĺ		•••	• • •	29.554	48.2	48.0	98	50.4	47.8	47.2	ÑNW	2	$\frac{330}{225}$	10	0.0	or
2	• • •	•		29.510	46.4	45.8	97	46.4	39.9	31.6	s	3	75	124	0.0	or
3	• • •	• • •		30.065	43.0	41.0	83	45.8	41.1	40.2	$\cdot \tilde{\mathbf{s}}$	5	353	3	5.1	ojp
Ĺ	• • •	•••		30.307	$44 \cdot 2$	$42 \cdot 3$	85	53.5	39.3	32.8	Calm		248	"	$7 \cdot 1$	bz
5	• • •	• • •		30.428	46.3	42.8	73	51.0	41.0	31.8	SSW	2	59		1.9	0
3	• • •	•••	• • •	30.452	41.5	41.1	95	48.8	37.6	$29 \cdot 1$	Calm		37		$\frac{1}{3}$	bz
7		. • •		30.272	45.1	$41 \cdot 2$	69	54.6	36.1	$25 \cdot 2$	Calm		7		$6 \cdot \overline{1}$	b
3	• • •	• • •	• • •	29.770	54.0	48.0	61	$54 \cdot 1$	43.4	$\frac{25 \cdot 2}{35 \cdot 3}$	NNW	2	114	131	0.0	0
9		. • •		29.693	50.3	46.1	71	53.0	46.5	45.0	SSW	4	246		4.4	0
٥. ا	• • •	• • •	••	29.472	49.8	45.8	72	51.8	45.2	40.0	Calm	_	57	22	0.0	oz
٠,	• •	••	••	29.412	±0.0	±0.0	12	91.9	40.2	40.0	Caim		91	- 44	0.0	UZ
	Means	, &c.		29.884	48.9	46.3	80	53·5	43.7	38.2		$2 \cdot 6$	173	750	96.6	• •

Mean earth temperature at 1 ft., 49.9°; and at 3 ft., 53.3°. Number of rain days, 18. Total rainfall, 74 per cent. above normal, being the wettest June since 1925. Sunshine, 35 per cent. of the possible. Mean dew-point at 9 a.m., 43.2°; mean vapour pressure, 0.279 in.

Note.—There was a heavy southerly gale on the 13th, and north-west gales on the 18th to 19th. Light hail fell during the morning of the 14th. The Tararuas have had a coating of snow since the 13th, and the Orongorongos and Rimutakas also had snow on them on the 23rd-24th.

DIRECTION OF WIND. Gale (force Forces 8 or more). 10 $5\frac{1}{2}$ $\frac{1}{2}$ 1 $1\frac{1}{2}$ 6 $1\frac{1}{2}$ 5

Notes on the Weather for June, 1938.

General.—Except for the very heavy rains experienced on the eastern side of the South Island, June was a fairly average month. Temperatures were, on the whole, somewhat above and sunshine was slightly below normal. About the usual number of frosts were recorded, but there was no very severely cold weather. The sharp drop in temperature from the preceding month caused the growth of vegetation to be checked, but, generally, there is abundance of feed for stock. The latter, except for young sheep which are reported in a number of districts not to be doing very well, are in good condition. The ground is soft, making work on farms rather difficult.

Rainfall—In Taranaki the rainfall was generally above average but elsewhere over the North Island conditions varied and excesses and deficits appear to be about equally divided. In the South Island, Westland and the Southern Alps had less than the average. In Nelson, most of Marlborough and Southland, the totals were about normal. In southern Marlborough, Canterbury, and most of Otago, the month was extremely wet. Most places had double the average and many more than three times. At Timaru and Oamaru, which each had nearly four times the average, it was the wettest June on record. **Temperatures** were below normal in South Auckland and slightly below also in the coastal areas of Canterbury and Otago. At Auckland and Wellington they were about normal. Over the remainder of the country and for the Dominion as a whole the mean temperature was again above the average. Frosts were fairly numerous. From the 7th onward snow fell on the mountains on several occasions and at the end of the month they carried a moderate amount.

Sunshine* —At most places the sunshine was mostly slightly below the previous average but the reverse was the case at Tauranga (which had 160 4 hours), Rotorua, Christchurch, Dunedin, and Alexandra.

Pressure Systems* —The month began with the same type of weather prevailing as had been experienced during April and May. On the 4th a shallow cy General.—Except for the very heavy rains experienced on the eastern side of the South Island, June was a fairly average

more easterly than on the earlier ones. The centre passed south of the Kermadees on the 6th and New Zealand was com-

paratively little affected.

From the Sth onward the weather adopted a different habit. From this time until the end of the month, each depression as it approached from the west tended to develop a low-pressure centre off the central portion of the west coast. This led to strong northerly winds from Westland northwards as the depression neared the west coast; strong westerlies over the northern half of the North Island and moderate southerlies over the South while the centre was crossing the Dominion; finishing up with contral realizations.

with southerly gales as the system finally moved away.

The first of the series of storms of this kind passed on the 8th to 9th. The next was much more violent and controlled the weather from the 10th to the 14th. Southerly gales on the 13th brought the first really cold spell of the winter. Snow fell on the high levels in both Islands and was heavy on the ranges. The gale was a severe one; some damage was done by it; air services were interrupted; and shipping was interfered with. There was widespread heavy rain with very heavy falls, and some flooding in Taranaki and South Canterbury and North Otago. Some severe thunder and hail storms, also, were reported.