THE NEW ZEALAND GAZETTE.

Government Meteorological Observatory.

M ETEOROLOGICAL Observations at Kelburn, Wellington, for the Month of August, 1931. Observations taken at 9 a.m. 9 a.m. Altitude of Observatory, 415 ft.

		Pressure, in Inches, at Sea-level and Standard Gravity.		Temperature (° F.) from Observations at 9 a.m.						m.	Wind.			(100	Hours	at
				In Screen.				Grass.	::	Beaufort Scale		Anemo- meter.	Points Inch),	Ine: E	(Symbols)	
	Date.		e, in svel an ity.	At 9 a.m.			Maxi- mum.	Mini- mum.	ц Ю	adlatio mum.			 8. 8.	9 <mark>1</mark>	t Sunshine : Tenths.	
			Pressure Sca-le Gravi	Dry.	Wet.	Humid- ity.	Dry,	Dry.	Minimum	Solar Radiation Maximum.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright and T	Weather 9 a.m.
1	•.		29.213	<u>48</u> .0	46-7	90	52.7	43.1	 39·8	99.4	NW	5	404		4.1	oq
2	••	••	29.202	44 ·1	40.2	69	48.4	40.5	34.3	101.9	NNW	4	278	1	3.0	o
3	••		$29 \cdot 535$	47.5	$42 \cdot 1$	60	$54 \cdot 2$	36.1	27.5	100.0	NW	5	115		8.5	be
4	••	••	$29 \cdot 638$	44.1	$41 \cdot 9$	82	44.1	44.1	$34 \cdot 2$	83.1	SSE	4	432	21	0.9	oph
5	••	••	30.217	43.9	38.0	53	46.7	36.2	34.8	97.1	SSE	2	257	Trace	9.0	b
6	••	••	30.551	43 3	41.2	82	46.8	40-4	37.0	$103 \cdot 0$	SSE	2	233	••	6.4	be
7 8	••	••	30.497	$41 \cdot 1 \\ 42 \cdot 6$	$37.7 \\ 40.4$	70 81	47 · 8 48 · 8	32.1	$24 \cdot 8$ 25 \cdot 8	98.0	NE	1	71		9.3	b
8 9	••	••	$30 \cdot 277$ $30 \cdot 179$	$42.6 \\ 46.3$	40·4 46·0	- 81 - 98	$\frac{48}{50}$	$ \begin{array}{r} 34 \cdot 7 \\ 41 \cdot 0 \end{array} $	$\frac{25 \cdot 8}{40 \cdot 7}$	$104.5 \\ 74.7$	NNW N	35	$\frac{91}{246}$	8	$2.8 \\ 0.0$	0
))	••	••	30.119 30.301	46.3	45-6	98 91	50-2	43.1	36.1	103.0	SE	2	240 290		66	omr
ĺ	••	••	30.301 30.307	48.9	$45 \cdot 4$	75	50.8 52.6	39.4	31.1	103.0	NNW	5	290 114	19	5.4	o bc
2	••	••	29.761	51.3	51.0	98	53.4	46.0	44.1	63.0	NW	8	447	25	0.0	
8	••	•••	29.954	43.0	$42 \cdot 4$	94	48.9	41.1	34.7	$99 \cdot 1$	SE	1 i	451	3	4.1	orq op
1	••		30.271	44.6	42.0	79	53.1	35.1	26.3	108.0	NE		74		9.2	bf
5	••		29.967	43.1	$41 \cdot 1$	83	52.3	35.9	27.0	105.5	NNE	2	85	···2	7.3	c
ő.			29.761	$\tilde{52} \cdot \hat{1}$	51.9	99	52.7	43.1	36.5	89.0	NNW	6	191	11	0.0	omd
7			29.517	47.6	42.3	61	52.8	44.6	41.2	108.8	ŴNW	6	406		4.5	b
3	•••		29-869	$52 \cdot 8$	49.4	77	57.3	44.2	36-2	109-1	NW	3	317		9.1	Ď
)	••		30.042	$51 \cdot 2$	46.3	66 ;	$52 \cdot 8$	46.6	44.0	88.0	NNW	3	231	1	1.2	ō
)	••	••	29.976	49-4	48 •1	91	51.3	45.1	38.3	80.0	Calm		121		0.4	of
l	••		29-920	$45 \cdot 3$	44.5	94	48.7	42.0	38.4	88-0	SSE	2	134	4	0.6	omr
2	••		29.970	44.7	41.3	73	47.5	41.2	35.7	96.5	SE	3	162	Trace	3.0	. 0
3	••	••	29.999	$45 \cdot 9$	$43 \cdot 6$	82	54.0	35 4	$27 \cdot 6$	104.0	W	1	71	19	3.5	0
1	••		29.742	$52 \cdot 2$	50.4	87	$55 \cdot 3$	43.3	$42 \cdot 4$	94.7	NNW	4	190	16	2.5	0
5	••	••	$29 \cdot 576$	$52 \cdot 1$	50.0	85	55-4	48.6	46.8	$109 \cdot 2$	NW	5	509	29	7.1	bcq
6	••	••	29.947	46-3	$43 \cdot 6$	79	$49 \cdot 0$	44.0		$104 \cdot 2$	SSE	4	322	· · · _	8.0	0
7	••	••	29.979	46.7	43.0	72	48.1	$43 \cdot 1$	41.2	$98 \cdot 2$	S	3	200		4.9	с
8	••	••	29.984	44.7	43.9	94	48.9	42.0		100.0	SE	2	187	8	2.5	op
9	••	••	29.783	48.1	45.9	84	53.7	39-1	33.0	107.1	NNE	1	72	15	$5 \cdot 2$	C
0	••	••	29.274	49.1	46.2	79	54.0	46.5	45.4	112-5	NW	6	276	8	5.6	сp
1	••	••	29.398	47.1	$47 \cdot 0$	99	$47 \cdot 9$	45.6	42.7	65.7	Calm		330	19	0.0	orf
•	Means, &c.	••	29.891	46.9	44.5	82	51.0	41.4	36-4	96-9	<u> </u>	3.2	236	223	134.7	•••

Mean earth temperature at 1 ft., 45.7°; and at 3 ft., 47.3°. Number of rain days, 18.

DIRECTION OF WIND.

Gale (force	Fores									
8 or more).		Calm.	N.	N.E.	Е.	S.E.	s.	8.W.	w.	N.W.
1	12	2	5	3	1 1	61	31		$1\frac{1}{2}$	91
			- 3					· .		

Nore.—The weather during the month was seasonable, but the average mean temperature was below normal. Precipi-tation was 42 per cent. below the average, and it was the driest August since 1915. Total bright sunshine, 134.7 hours, 41 per cent. of the possible, and four sunless days. Frost was recorded on the grass on six mornings. A few flakes of snow were seen on the 4th. Hail fell on the 4th and 12th, lightning was seen on the 9th, and fog was in evidence on four days. Mean dew-point at 9 hrs., 41.5°; and mean vapour pressure, 0.261 in.

SUMMARY FOR THE MONTH OF AUGUST, 1931.

General.—There were several brief periods of stormy weather during August, but, on the whole, there was a considerable improvement in conditions over those of the two preceding winter months. Temperatures were again below normal over the greater part of the Dominion. Cold frosty nights were frequent but, on the other hand, many mild spring-like days were experienced and, as a result, there was a moderate growth of pasture. Stock have kept in fair condition, although a considerable amount of supplementary feeding had to be resorted to in parts of the East Coast districts, where the growth of grass had been retarded through a deficiency of rain combined with below-normal winter temperatures.

Rainfall.—The total ded sindogin a denterative of rain below the average over the greater portion of the North Island, a slight excess only being recorded in parts of the Taranaki district. In the South Island, Marlborough and North Canterbury cases being considerable. The storms recorded during the month were in very few cases responsible for any particularly heavy rains exceept at a few isolated places, chiefy in western districts, the falls generally being more of a showery nature.

Pressure Systems.—During the first four days a very intense and extensive westerly depression was situated over and to the east of New Zealand, and stormy west to south-west winds prevailed, which in some districts developed almost hurricane force at times. They were accompanied by occasional heavy showers and, in places, hail. Snow also fell during this period on much of the high country, and on the 4th there was quite a heavy fall of snow in Central Hawke's Bay. Much damage resulted from this storm in various parts of the country. At Ohai, in Southland, the roofs of several houses were lifted, some chimneys were blown down, and trees uprooted.

From the 5th to the 11th, except for some scattered showers, the weather was mainly fine under the influence of an anti-cyclone which moved gradually across the Dominion. On the 11th, however, barometers commenced to fall with the approach of a steep westerly depression, and on the 12th a widespread north-west gale blew and heavy rain fell in the western districts. The nor'-wester was an extremely fierce one in Canterbury, causing damage to telegraph wires through falling trees. In Christchurch many sheds were unroofed and fences blown down.

The next important disturbance was again one of the westerly type, but it developed a centre in its southern portion, the latter crossing the southern districts during the night of the 16th. Beneficial rain set in with the southerly change on