## April 27.]

# THE NEW ZEALAND GAZETTE.

### Government Meteorological Observatory.

M ETEOROLOGICAL Observations at Kelburn, Wellington, for the Month of February, 1933. Observations taken at 9 a.m. Altitude of Observatory, 415 ft.

			s, at idard	Temperature (° F.) from Observations at 9 a.m.								Wind	i.	(100	Hours	at
			Inches d Star	In Screen.					Grass.	л:	Beaufort Scale.		Anemo- meter.	Points Inch).		(Symbols)
	Date.		e, in ∍vel an ity.	At 9 a.m.			Maxi- mum.	Mini- mum,	m on	adiatio mum.	ų.		1 24	'E	Sunshi Fenths.	
			Pressure, in Inches, at Sea-level and Standard Gravity.	Dry.	Wet.	Humid- ity.	Dry.	Dry.	Minimum on	Solar Radiation: Maximum.	Direction.	Force.	Run in Hours.	Rainfall, Points	Bright Sunshine and Tenths.	Weather 9 a.m.
1			$29 \cdot 935$	$64 \cdot 0$	$63 \cdot 2$	95	$69 \cdot 1$	$62 \cdot 4$	$62 \cdot 1$	107.8	NW	6	410	46	0.0	orq
<b>2</b>			$29 \cdot 933$	$62 \cdot 0$	$59 \cdot 8$	87	$65 \cdot 1$	57.5	56.3	$117 \cdot 0$	NW	5	449	••	0.5	0
3		• •	30.045	$64 \cdot 2$	61.7	86	$67 \cdot 8$	60.3	$59 \cdot 1$	$122 \cdot 0$	NE	1	260	66	$0 \cdot 3$	0
4	••		29.784	$57 \cdot 1$	$57 \cdot 0$	99	$57 \cdot 7$	$55 \cdot 7$	$55 \cdot 5$	$85 \cdot 0$	SE	5	166	126	0.0	or
<b>5</b>		••	$29 \cdot 956$	$56 \cdot 0$	$53 \cdot 8$	86	$57 \cdot 4$	$52 \cdot 8$	52.5	$107 \cdot 0$	SSE	6	359	7	0.0	0
6	••		$29 \cdot 914$	55 · 1	$52 \cdot 0$	79	$61 \cdot 2$	51.7	50.8	$112 \cdot 2$	SE	5	290	1	0.0	0
7	••		29.777	$61 \cdot 2$	$55 \cdot 3$	67	$68 \cdot 4$	$50 \cdot 0$	$45 \cdot 1$	$135 \cdot 0$	NE	1	145	1	$12 \cdot 4$	b
8		••	$29 \cdot 823$	$58 \cdot 2$	$57 \cdot 2$	94	$67 \cdot 0$	$56 \cdot 0$	54.7	$132 \cdot 0$	SSE	3	124	••	5.7	0
9		• •	$29 \cdot 720$	$67 \cdot 0$	$62 \cdot 0$	74	$71 \cdot 0$	$54 \cdot 3$	49.3	$133 \cdot 2$	NNW	<b>2</b>	133	••	$8 \cdot 9$	С
10	••	••	$29 \cdot 393$	$62 \cdot 6$	$60 \cdot 0$	85	$67 \cdot 3$	$59 \cdot 0$	$57 \cdot 1$	$140 \cdot 9$	NW	6	408	••	$2 \cdot 6$	oq
11	• •	• •	$29 \cdot 301$	60.0	$51 \cdot 3$	51	$64 \cdot 6$	$54 \cdot 3$	50.7	$127 \cdot 1$	NW	6	515	••	$13 \cdot 0$	b
12	••		$29 \cdot 332$	60.8	$52 \cdot 4$	53	$66 \cdot 8$	$53 \cdot 0$	49.5		NW	3	345	••	12.5	0
13	••	• • *	$29 \cdot 469$	$61 \cdot 0$	$53 \cdot 4$	57	$67 \cdot 7$	$57 \cdot 1$	$55 \cdot 0$		NW	2	409		$6 \cdot 6$	с
14	• •		$29 \cdot 702$	$63 \cdot 4$	$57 \cdot 4$	67	$65 \cdot 6$	$52 \cdot 0$	46.0		NW	6	271	77	$6 \cdot 4$	cq
15			$29 \cdot 483$	64.7	$64 \cdot 2$	97	$67 \cdot 4$	$61 \cdot 9$	60.5		NW	6	575		$6 \cdot 4$	oq
16			$29 \cdot 763$	$61 \cdot 0$	$55 \cdot 3$	68	$66 \cdot 0$	$57 \cdot 1$	$54 \cdot 1$		NW	5	394		$5 \cdot 6$	ō
17	••		$29 \cdot 926$	$61 \cdot 9$	$58 \cdot 0$	78	$64 \cdot 7$	$55 \cdot 1$	$49 \cdot 1$		NW	5	273	17	1.1	0
18			29.791	64.7	$62 \cdot 0$	86	$67 \cdot 7$	$56 \cdot 4$	$56 \cdot 0$	••	NW	5	421		$8 \cdot 9$	beq
19			29.761	$64 \cdot 1$	59.7	77	$68 \cdot 0$	57.3	$54 \cdot 0$		NNW	5	405		11.0	bz
20	••		$29 \cdot 922$	$63 \cdot 0$	$58 \cdot 0$	72	$75 \cdot 0$	$55 \cdot 1$	$53 \cdot 2$		Е	1	257	••	5.8	0
21			$29 \cdot 894$	$71 \cdot 6$	$65 \cdot 8$	72	$77 \cdot 6$	$62 \cdot 0$	$58 \cdot 8$		N	2	91		10.5	be
<b>22</b>			$29 \cdot 591$	$74 \cdot 3$	$65 \cdot 8$	61	$77 \cdot 0$	$65 \cdot 0$	$61 \cdot 0$		N	4	191	22	3.6	ov
23	••		29.586	$64 \cdot 3$	60.8	81	$69 \cdot 3$	$58 \cdot 8$	$55 \cdot 5$	$152 \cdot 8$	NNW	5	334	12	7.4	o
<b>24</b>			$29 \cdot 474$	$65 \cdot 9$	$59 \cdot 2$	65	$68 \cdot 3$	58.7	$54 \cdot 9$	$127 \cdot 0$	NW	4	453		11.1	b
25			$29 \cdot 624$	$66 \cdot 2$	$64 \cdot 3$	90	$66 \cdot 6$	$60.6^{\circ}$	$57 \cdot 9$	$114 \cdot 2$	NNW	7	527	••	1.1	oz
<b>26</b>	••		29.725	$65 \cdot 3$	$58 \cdot 9$	66	$67 \cdot 8$	56.7	$49 \cdot 8$	$135 \cdot 5$	NW	3	383		10.0	e
<b>27</b>			$29 \cdot 817$	$65 \cdot 4$	$59 \cdot 0$	66	69.0	$55 \cdot 5$	50.6	128.7	E	1	313	••	11.4	$\mathbf{bez}$
28		••	$29 \cdot 978$	$61 \cdot 7$	$58 \cdot 9$	84	$63 \cdot 3$	$56 \cdot 0$	$54 \cdot 4$	$117 \cdot 9$	s	4	261	Trace	1.9	0
	Means, &c.		29.730	$63 \cdot 1$	$58 \cdot 8$	77	$67 \cdot 3$	$56 \cdot 9$	$54 \cdot 1$			4 · 1	327	375	164.7	

#### Mean earth temperature at 1 ft., 64.8; and at 3 ft., 63.6°. Number of rain days, 10.

#### DIRECTION OF WIND.

Gale (force	rorces	~ .			-	-		~ ~	~		~ ***			
8 or more).	4 to 7.	Calm.	N.	N.	Е.	Е.		S.E.	s	•	S.W.	w.	N.W.	
	18		4	2		<b>2</b>		3	2				15	
Note	A cloudy	month, wi	th strong	north-wes	sterly	winds,	which	not te	oo freque	ently	reached g	ale force.	The windies	st

February since 1915. Rainfall was 40 per cent. above the normal. Total bright sunshine, 164.7 hours, 42 per cent. of the possible, and four sunless days. Lightning was seen on four days, and a heavy thunderstorm occurred in the early hours of the morning of the 15th. Mean dew-point at 9 a.m., 55.5°; and mean vapour pressure, 0.439 in.

#### NOTES ON THE WEATHER OF FEBRUARY, 1933.

General.—The weather in February was more appropriate to a spring than a late summer month in the prevalence of strong westerly winds. It was generally warm, with an absence of extreme temperatures. Except in low-lying eastern districts, the rainfall was very heavy. Many places recorded double the average fall for February. In consequence, there has been an excellent growth of grass in most districts. Stock are in very good condition, milk yields are being main-tained, and crops are generally turning out well. Haymaking and harvesting have been interfered with to some extent by the continued wet weather. The north-westerly winds, also, interfered with harvesting on the eastern side of the ranges, and caused some loss of fruit.

Rainfall.—On the whole, the month was a very wet one, many places, as has been remarked, having had double the normal February total. On the low levels in Hawke's Bay, Mariborough, Canterbury, and eastern Otago, however, the falls were below average. This was especially the case on the Canterbury Plains.

Temperature and Sunshine.—On the average the temperature was about one degree above normal, but the departures varied considerably. February is usually our sunniest month, but this year such was far from being the case.

Pressure Systems.—The month began with a fairly vigorous depression approaching from the west. Strong northerly winds blew on the 1st in and north of Cook Strait. Heavy rain fell on the west coast of the South Island. On the 3rd a 

mangapai, and were very severe about Auckiand and in the Thames and Waikato districts on the 7th. At some places they were reported again on the 8th. On the same day Central Otago experienced thunderstorms and heavy downpours. On the 9th a change took place in the type of weather, the first of two severe westerly spells which were experienced during the month setting in on this day. Deep depressions passed on the 10th and 14th. Much heavy rain fell on the west coast of the South Island, especially on the nights of the 10th and 14th. There was thunder in the Greymouth district on the night of the 10th and a south-westerly gale blew on the coast. On the night of the 14th and the morning of the 15th a series of particularly severe thunderstorms occurred in Westland, western and northern Canterbury, Nelson, Marlborough, D