Government Meteorological Observatory.

M ETEOROLOGICAL Observations at Kelburn, Wellington, for the Month of January, 1934. Observations taken at 9 a.m. Altitude of Observatory, 415 ft.

			s, at	Temperature (° F.) from Observations at 9 a.m.						Wind.			(100	Hours	at		
	D. 4			Pressure in Inches, at Sea-level and Standard Gravity.	In Screen.					on Grass.	: uc	Beaufort Scale.		Anemo- Meter.	Points:	1	(Symbols)
	Date.		At 9 a.m.			Mini- mum.	no m	Solar Radiation Maximum.	on		n 24	-= 1	Sunsh Fenths.				
			Dry.		Wet.	Humid- ity.	Dry.	Dry. Dry.	Minimum	Solar R Maxi	Direction	Force.	Run in . Hours.	Rainfall, Points	Bright Sunshine: and Tenths.	Weather 9 a.m.	
				29.711	58.8	54.1	72	63.4	51.0	46.8	132.9	SE	2	190		4.4	o
;				29.534	60.4	56.0	74	67.0	51.1	43.2	129.9	N	5	110	1	5.6	О
;				29.561	60.2	54.1	65	70.4	53.3	46.2	132-1	SE	2	287		12.8	b
:	• •			29.670	62.6	50.8	38	65.8	46.1	40.2	127.2	NW	2	233	5	9.4	b
,			• •	29.596	58.0	52.7	68	65.2	50.0	48.1	127.0	NW	6	332	1	11.6	b
,			• •	29.581	55.0	52.8	86	65.0	$53 \cdot 2$	50.3	131.4	NW	3	376	17	7.8	or
				$29 \cdot 657$	57.2	53.3	76	58.9	47.0	40.6	123.9	S	3	188	14	5.4	0
				30.034	57.0	51.9	68	62.0	50.0	47.2	130.1	SE	4	233		9.9	О
				30.024	59.8	55.1	73	67.3	53.4	51.8	140.1	NNW	3	128		1.3	О
				30.083	63.2	54.2	52	67.4	$52 \cdot 2$	47.0	134.3	N	4	135		9.9	c
				30.033	62.3	59.0	81	70.6	57.8	56.1	134.0	NNW	4	217		8.6	О
			• •	29.886	68.1	60.4	62	72.0	58.2	55.9	138.0	NNW	6	269		8.1	bq
			• •	29.851	61.8	56.0	67	66.4	56.2	55.2	135.9	NNW	4	400		2.8	0
				29.761	61.2	53.1	55	66.0	53.0	50.0	$132 \cdot 2$	WNW	2	256	53	5.0	c
				29.746	65.0	55·1	49	71.0	48.0	43.0	140.0	NW	3	107	48	7.3	b
				29.950	$59 \cdot 4$	52.2	58	67.4	49.0	46.0	133.1	S	3	162		13.0	be
				29.786	61.0	57.0	77	69.0	54.4	50.8	128.1	NNW	6	219		8.1	oq
				29.826	67.0	59.9	64	71.0	$57 \cdot 2$	54.0	128.2	N	4	212		12.9	bz
				29.870	69.4	61.0	59	76.8	56.1	$51 \cdot 2$	135.0	NW	4	140		13.1	bz
				29.805	67.7	60.2	63	71.4	57.7	$53 \cdot 1$	129.3	NNW	3	209	1	7.0	bz
				29.594	61.3	57.8	80	64.6	58.0	57.4	134.5	NNW	6	315		5.1	oq
				29.593	59.4	51.7	56	60.3	49.2	45.0	$129 \cdot 1$	S	1	356	24	5.8	e
				29.845	54.6	50.0	70	$62 \cdot 6$	$39 \cdot 4$	35.5	128.0	NNW	4	114		9.1	0
				29.715	$62 \cdot 2$	59.0	82	69.0	53.0	$52 \cdot 8$	131.3	NW	6	482	2	6.6	oq
				29.889	60.4	60.3	99	63.7	57.3	55.7	$92 \cdot 1$	NW	7	350		0.0	omo
				29.954	62.9	61.4	92	64.3	59.7	60.0	105.1	NW	6	562		0.1	om
				30.022	64.3	59.8	76	$72 \cdot 1$	57.2	55.0	134.2	N	2	451	2	2.3	О
				30.026	65.0	60.4	75	67.0	55.8	53.5	129-1	SSE	2	111	12	2.4	o
				30.208	$55 \cdot 1$	53.9	92	65.8	$54 \cdot 1$	$53 \cdot 1$	115.1	ESE	3	147	23	0.0	or
				30.354	64.7	56.9	59	68.6	53.4	$52 \cdot 4$	133.0	NE	3	170		12.1	be
				30.308	65.0	57.0	58	73.2	51.1	42.8	132.9	E	1	116		13.6	b
	Means, &	0		29.854	61.6	56.0	69	67.3	53.0	49.7	129.3		3.7	244.4	203	221.1	

Mean earth temperature at 1 ft., 63.6° ; and at 3 ft., 62.2° . Number of rain days, 13.

DIRECTION OF WIND,

Gale (force	Forces									
8 or more).	4 to 7.	Calm.	Ň.	N.E.	Ε.	S.E.	S.	s.w.	w.	N.W.
1	15	۱.,	8	1	11	4	31	1 1	1	121

Note.—A changeable and cool summer month, with temperatures 1.5° below average. Total bright sunshine 221.1 hours, 48 per cent. of the possible; two sunless days. Precipitation was 28 per cent. below the normal. Gales were experienced on two days; lightning was observed on the 5th and 6th, and thunderstorms occurred on the 7th Total bright sunshine Mean dew point at 9 a.m., 51.0°; mean vapour pressure, 0.374 in. and 22nd.

NOTES ON THE WEATHER FOR JANUARY, 1934.

General.—People generally regarded January as a changeable and unpleasant month. It was cold and windy for midsummer. To the meteorologist, also, the weather was rather abnormal. This was due principally to the unusually pronounced development of the summer monsoon in Australia. In the middle of the month a severe heat spell was experienced there. Air was being poured out from the Continent in a westerly direction and had a pronounced influence on conditions in New Zealand. At one stage, also, from the 18th to the 20th, a good deal of bush-fire smoke was being brought over. Heavy rains in the eastern parts of the South Island caused a great improvement in the condition of crops and pastures. Unfortunately, considerable local damage was done to wheat crops by hailstorms, and in some cases the plants were borne down by the rain. Around Nelson and in the interior of Marlborough rain is still very badly needed, a shortage of winter feed being threatened. The precipitation at the latter end of the month improved prospects in Taranaki and the Waikato, where feed is generally abundant. Elsewhere conditions are not quite so good. On the whole, however, stock are in very good condition, there is a prospect of good crops, and the milk-yield has been fairly well maintained.

Rainfall.—In the North Island the heavy rains of the 28th and 29th brought the total month's fall above the average in coastal areas from Kawhia to the South Taranaki Bight, and in parts of the Hawke's Bay and Wairarapa districts. In the west some of the excesses were large. The remainder of the North Island thad less rain than average, very dry conditions being experienced in most of the Auckland Province. In the South Island there were very heavy rains along the east coast and extending over most of the interior of Canterbury and southern Nelson and Marlborough, Double the average fall was recorded in places. In northern Nelson and the interior of Marlborough, South Canterbury,

rains along the east coast and extending over most of the interior of Canterbury and southern Nelson and Marlborough. Double the average fall was recorded in places. In northern Nelson and the interior of Marlborough, South Canterbury, Otago, and Southland the situation was reversed, the totals being much below normal.

Temperatures.—The month was abnormally cool. In practically all parts the mean temperature was much below the January average. Particularly was this the case in the Waikato, Taranaki, and Manawatu districts. On the morning of the 23rd there was a rather widespread frost which, though only light, was sufficient at this time of year to do considerable damage to tender crops such as tomatoes, potatoes, beans, &c. In the Nelson district the tobacco crop suffered severely in some localities.

Sunshine was much below normal in the eastern portions of South Canterbury and Otago. Elsewhere there was little departure from the average, but generally it was slightly below. Taupo reports 285.7 hours, Tauranga 269.0 hours, and Lake Tekapo 265.2 hours.

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Pressure Systems.—The first stormy period began on the 2nd, and conditions remained unsettled in the South Island until the 7th. Rain was fairly general in the latter area and there were some very heavy falls in Canterbury. On the 5th they were accompanied by thunderstorms and heavy hail, which did much damage to wheat crops.