CLIMATOLOGICAL TABLE-continued

Summary of the Records of Temperature, Rainfall, and Sunshine for March, 1951-continued

	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.					
		Means of		Mean		Absolute Maximum and Minimum.							Maximum Fall.		Brigh
Station		A Max.	B Min.	of A and B.	Difference From Normal.	Maximum.	Date.	Minimum.	Date.	Total Fall.	No. of Rain Days.	Difference From Normal.	Amount.	Date.	Sun- shine
	Ft.	°F.	°F.	°F.		°F.		°F.		In.			In.		Hot
Rudstone, Methven	1.217	66.6	48.1	57.4	+0.7	83.9	7	36.7	25	5.98	14	+2.76	$2\cdot 27$	31	198
1 '	150	66.8	51.9	59.4	(-0.2)	80.0	7	42.0	15	4.09	10	(+0.27)	1.23	1	18
. ,	36	66.4	48.1	57.2	$\begin{vmatrix} -0.2 \\ +0.2 \end{vmatrix}$	80.8	10	33.1	15	4.21	11	+2.03	$1.23 \\ 1.36$	i	19
11 TT 11	2,510	65.0	44.6	54.8	+0.8	83.0	6	34.0	26	6.01	8	-9.13	$\frac{1.30}{2.00}$	10	15
rr. 1	626	$65 \cdot 2$	45.8	55.5		85.0	7	32.1	15	5.67	14		1.68	10	1
r ,	15	67.1	52.5	59.8		$78 \cdot 2$	í	43.2	21	8.58	21	••	$\frac{1.08}{2.04}$	22	15
11 ,	323	65.9	47 4	56.6	-0.7	86.0	7.	33.2	26	6.00	12	+3.81	1.53	1,31	17
	1,004	66.9	43.6	55.2	$\begin{bmatrix} -0.7 \\ -0.2 \end{bmatrix}$	88.0	7	30.0	26	5.12	13	$+3.81 \\ +2.66$	1.65	31	111
1 m11	2,400	66.6	42.0	$54 \cdot 3$	$\begin{array}{c c} -0.2 \\ +0.3 \end{array}$	80.5	6	29.5	$\frac{26}{25}$	4.77	9	+3.14	$2 \cdot 41$	31	18
<sub>1</sub> ,	56	66.4	48.7	57.6	$+0.3 \\ +0.2$	81.8	10	36.2	26	3.00	9	+0.81	0.76	1	15
1	200	63.3	48.9	56.1		78.0	6	38.4	25	2.62	14		0.76	1	
TT-11	1,600						-		1			• •		_	١.
r:10 1 0 1	20	65.0	50.7	57.8	(+3.1)	79.8	2	42.8	25	13, 10	12	/ 0.90	4.77	10	•
7-2	200	66.3	48.3	57.3	$\begin{vmatrix} (+3.1) \\ +0.2 \end{vmatrix}$	81.5	6	35.5	$\frac{25}{25}$	$\begin{bmatrix} 13, 10 \\ 2.92 \end{bmatrix}$	10	$(-9 \cdot 28) \\ +0 \cdot 64$	1.36	10	15
	1.100	70.4	47.8	59.1	$  \begin{array}{c} +0.2 \\ +3.0 \end{array}  $	$84 \cdot 2$	6	36.4	25	1.19	8	-1.52	0.72	10	17
	720	70.4	41.0	99.1	+9.0	04.7	•		-	1.19	_	-1.92	0.72		1
	1,000	69.9	43.7	56.8	+1.3	87.9	6	31.0	25	2.25		+0.77	1.47	10	
Č., 1	500	72.0	44.7	58.4		89.9	7	$\frac{31.0}{29.7}$	25	0.63	4	+0.11	0.20	22	
• • •	1,550	66.5	44.6	55.6	+1.1	86.0	7	33.0	$\frac{25}{25}$	1.29	8	-0.35	0.46	22	18
, * ,	520	72.0	46.9	59.4	$\begin{vmatrix} +1 \cdot 1 \\ +2 \cdot 1 \end{vmatrix}$	89.0	7	31.9	25 25	0.72	8	$-0.35 \\ -0.43$	0.40	10	18
	350	70.8	46.9	58.8		90.5	7	$\frac{31.9}{27.8}$	27	1.91	6		1.21	10	
	1,252	67.6	44.3	56.0		85.0	7	30.0	12	$\frac{1.91}{2.89}$	8	•••		10	
	1,345	64.8	44.6	54.7		85.9	7	32.5	25	$\frac{2.69}{3.12}$	13		$1.58 \\ 1.49$	10	
	$\frac{1,343}{2,448}$	63.0	36.3	49.6	+0.6	79.0	7	$\frac{32.5}{29.0}$	12	$\frac{3 \cdot 12}{1 \cdot 21}$	6	-0.66	0.61	10	
	80	$67 \cdot 1$	44.9	56.0	(+0.8)	93.5	7	$\frac{29.0}{31.1}$	25	$\frac{1.21}{3.40}$	14	(+1.14)	2.32	10	17
usselburgh, Dunedin	5	62.8	50.2	56.5	(-0.1)	81.6	6	$37 \cdot 2$	$\frac{25}{25}$	2.66	13	-0.14	1.62	10	17
, ~	245	69.1	44.8	57.0	+1.9	90.0	6, 7		24, 25	$\frac{2.00}{2.74}$	12	$-0.14 \\ -0.53$	$1.02 \\ 1.29$	10	17
	240	69.1	44.5	56.8	+0.9	89.0	7	30.5	24, 23	$2.74 \\ 2.52$	12		1.129 $1.12$	10	17
	180	66.9	44.1	55.5	1 ' 1	83.7	7	31.0	12	$\frac{2.32}{3.33}$	11		1.12	10	
1 1 1 TT:11	150	68.4	$44.1 \\ 44.5$	56.4	• • •	86.0	6	30.0	25	$\frac{3.33}{3.59}$	8	•••	1.47	10	
****	32	67.0	$45.8 \pm 45.8$	56.4	$+2\cdot2$	85.5	7	34.0	$\frac{23}{14}$	$3 \cdot 34$	14	+1.03	$1.01 \\ 1.17$	10	15
· · · · · · · · · · · · · · · · · · ·	8	66.6	46.3	56.4	$\begin{vmatrix} +2.2 \\ -1.7 \end{vmatrix}$	86.8	7	36.1	21	2.82	14	(-1.66)		10	
vercargill South		00.0	40.3	90.4	-1.7	90.9	'	90.1	21	2.82	14	(-1.00)	0.75	10	•
					$\mathbf{L}_{I}$	ATE R	ETUR	NS							
potiki, Feb., 1951	27	73.5	55.7	$64 \cdot 6$	1	79·0 ±	28	47.0	2	5.75	10	1	$3 \cdot 25 +$	3	22
olden Downs, Feb., 1951	900	69.8	47.9	58.8	-0.3	79.0	26	40.5	$2\overline{4}$	3.22	9	(-0.92)	0.94	3	
	2,930	69.4	42.3	55.8	(+0.0)	81.5	18	27.0	3	1.56	5	(-1.10)	0.67	9	

Note.—At station where departures from normal are in parentheses, the tempeature record has been maintained for less than ten years, the rainfall record for less than twenty years, and the normals are partly interpolated.

## NOTES ON THE WEATHER FOR MARCH, 1951

General.—Temperatures during March were mild to warm, but other weather elements displayed great variety from place to place. Taken as a whole, conditions for farming were not very favourable. Lambs did not fatten well despite good pasture growth while footrot was troublesome in several districts. Excessive rain in Canterbury over the past few months has seriously delayed harvesting. Although there was little rain over the greater part of the Auckland Province during March, this region continued to derive benefit from the heavy rains at the end of February, with the result that dairy production was maintained at a high level—at least until near the end of the month.

end of the month, Rainfall.—Rainfall was above average from Otago to East Cape except for Southern Hawke's Bay and much of the Wairarapa district. Most of Marlborough, Nelson, and Canterbury had more than double the normal rainfall. In Canterbury each month since last December has been characterized by a surplus of rain. On the other hand the Auckland and Westland Provinces had less than half the usual March rainfall, as did West Otago. The Waikato district had a year dry month

district had a very dry month.

Temperatures.—Temperatures were about normal in Canterbury and Marlborough, but above normal elsewhere. In Westland and in the interior of the North Island the excess amounted to 2 or 3 degrees Fahrenheit.

High temperatures were recorded east of the Southern Alps on the 6th and 7th, including a maximum of 93.5° F. at Taieri on the 7th. In Otago the 7th was one of the hottest March days in the

last 25 years.

Sunshine.—Over most of the Auckland Province the duration of bright sunshine was better than normal by the equivalent of about an hour a day. The surplus was only slightly less in Marlborough and in the south. A few districts were some 20 hours short of their normal sunshine, including Hawke's Bay, Taranaki, Nelson, Central Otago, and most of the Wellington Province.

Weather Sequence.—A vigorous storm of tropical origin which produced copious rainfall over the North Island and the northern half of the South Island, sped through Cook Strait on the 1st and continued on towards the south. Conditions improved rapidly as a ridge of high pressure gradually intensified over the Dominion and a spell of warm, settled weather followed. However, a weak cold front, in crossing the South Island on the 3rd and the North cold front, in crossing the South Island on the 3rd and the North Island on the 4th, was responsible for some brief rain in most districts. Morning fogs were widespread and recurrent during this

A weak frontal system moved on to southern New Zealand on the 7th and light rain fell intermittently in Otago and Southland during the next few days. On the 10th strong southerly winds invaded the South Island behind an active cold front which advanced invaded the South Island behind an active cold front which advanced steadily northwards accompanied by a belt of heavy rain. Skies cleared in the South Island on the 12th with the arrival of an anticyclone from the Tasman Sea. Meanwhile a complex disturbance had developed out of the north-east. South-easterly winds prevailed north of Marlborough, becoming strong in exposed places as a low-pressure centre moved down past East Cape on the night of the 13th. Skies remained cloudy between Cook Strait and East Cape, rain falling intermittently in the Gisborne district until the 16th.

On the 17th and 18th anticyclones centred east and west of the North Island provided fine, warm weather except on the Southland coast where some rain fell on the 17th during the passage of a depression far to the south.

depression far to the south.

Cloudy skies and scattered light rain accompanied a weak trough which crossed the Dominion from the south-west during the 19th and 20th. The arrival of an anticyclone from the south Tasman brought a cold change but temperatures soon became milder again. When the anticyclone moved off to the east on the 22nd a depression was approaching from the central Tasman Sea. Rain soon became general as the low-pressure centre proceeded eastwards across the Cook Strait region. A southerly change again brought cold temperatures. With rapidly rising pressures the weather cleared in the South Island on the 24th and some light frosts were experienced inland. frosts were experienced inland.

For the next few days a ridge of high pressure lay across the Dominion, joining anticyclones centred in mid-Tasman and near the Chatham Islands respectively. The weather cleared in the North Island by the 26th except about Gisborne and northern Hawke's Bay where conditions remained dull and wet under the influence of a secondary depression which had developed in the north-east.

Some brief rain in the south-west on the 28th was associated with the passage of a depression far to the south. A trough reached Southland on the 30th and began to advance slowly north-eastwards. Next day the weather cleared at last in the Gisborne district, but rain became widespread in the South Island due to the development of a depression over Westland.

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(N.Z.M.O. 107.)