

## CLIMATOLOGICAL TABLE—continued

Summary of the Records of Temperature, Rainfall, and Sunshine for March 1952—continued

Station	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.						Bright Sun- shine.
		Means of		Mean of A and B.	Difference From Normal.	Absolute Maximum and Minimum.			Total Fall.	No. of Rain Days.	Difference From Normal.	Maximum Fall.				
		A Max.	B Min.			Maximum.	Date.	Minimum.				Date.	Amount.	Date.		
Akaroa .. ..	150	67.2	49.6	58.4	-1.2	86.0	13	41.0	18	1.74	9	(-0.91)	0.57	27	158.6	
Lincoln .. ..	36	67.7	45.4	56.6	-0.4	83.5	13	33.9	27	1.07	11	-1.01	0.31	27	163.7	
The Hermitage ..	2,510	63.5	42.9	53.2	-0.9	74.1	13	29.1	29	9.37	9	-6.32	3.00	25	162.0	
Winchmore .. ..	626	61.7	44.4	56.0	(-0.4)	87.0	13	34.0	18, 29	0.96	7	(-1.26)	0.31	27	..	
Haast .. ..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Ashburton .. ..	323	69.7	45.8	57.8	+0.0	89.6	13	35.2	29	0.98	5	-1.22	0.33	17	146.6	
Fairlie .. ..	1,004	68.2	41.9	55.0	-0.3	85.0	13	32.0	6, 18	0.57	6	-1.82	0.25	15	..	
Lake Tekapo ..	2,400	66.3	40.5	53.4	-0.7	78.6	12	22.9	29	0.27	1	-1.29	0.27	25	185.2	
Timaru .. ..	56	66.9	45.3	56.1	-1.3	81.0	25	35.0	19	0.68	4	-1.45	0.45	15	134.2	
Adair .. ..	200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Tara Hills .. ..	1,600	68.0	43.1	55.6	(-0.6)	78.7	13	29.2	29	0.51	7	(-1.31)	0.15	25	175.4	
Milford Sound ..	20	62.1	47.3	54.7	-0.5	70.2	23	37.5	18	40.57	17	+18.49	17.52	24	..	
Waimate .. ..	200	68.1	47.3	57.7	+0.2	82.0	25	37.0	18	0.34	5	-1.90	0.18	16	139.8	
Queenstown .. ..	1,100	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Cromwell .. ..	720	68.1	46.5	57.3	(-0.3)	79.2	31	36.1	18, 29	0.82	5	(-0.61)	0.58	25	..	
Ophir .. ..	1,000	67.8	41.0	54.4	-1.3	77.5	13	27.0	29	0.94	6	-0.52	0.60	25	..	
Earnsclough ..	500	69.0	43.7	56.4	(-0.5)	81.2	31	28.0	29	0.53	4	(-0.68)	0.28	25	..	
Waipiata .. ..	1,550	..	42.3	..	..	..	..	33.0	23	0.92	11	-0.65	0.28	25	153.8	
Alexandra .. ..	520	68.9	45.3	57.1	-0.5	81.0	31	31.9	29	0.64	6	-0.51	0.31	25	156.1	
Roxburgh Hydro ..	350	70.1	45.5	57.8	..	81.2	31	35.0	27	1.12	12	(-0.40)	0.33	16	..	
Mid Dome .. ..	1,252	62.8	42.4	52.6	..	73.0	12, 13	34.0	6	3.85	10	..	0.81	25	..	
Moa Flat, West Otago	1,345	60.4	42.3	51.4	..	71.8	14	35.4	27	2.72	20	(+0.26)	0.62	25	..	
Manorburn Dam ..	2,448	59.5	38.4	49.0	-1.4	70.5	31	32.0	18, 29	1.16	11	-0.53	0.47	25	..	
Taieri .. ..	80	64.8	44.9	54.8	(-0.4)	78.5	13	34.8	23	1.82	14	(-0.25)	0.55	25	114.6	
Musselburgh, Dunedin	5	62.9	48.7	55.8	(-0.6)	74.2	13	40.0	27	2.11	13	-0.45	0.59	25	125.6	
East Gore .. ..	245	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Gore .. ..	240	63.3	44.3	53.8	(-1.6)	78.0	14	32.5	23	3.81	20	(+0.70)	0.55	25	114.8	
Otautau .. ..	180	62.8	41.4	52.1	(-2.6)	78.0	31	28.8	23	5.54	15	(+2.02)	0.78	25	..	
Pebble Hills .. ..	150	62.4	44.0	53.2	..	74.0	14, 15	34.0	23	6.73	20	(+3.11)	1.07	25	..	
Invercargill .. ..	32	61.1	46.5	53.8	-0.9	75.0	14	32.0	23	6.86	23	+2.70	1.20	25	106.4	
Invercargill South ..	8	60.5	46.9	53.7	-1.3	73.9	14	36.4	4	7.50	23	(-3.38)	1.57	25	..	
LATE RETURNS.																
Waihi, Feb., 1952 ..	354	74.1	59.7	66.9	+2.5	79.6	5	53.0	2	5.34	20	-0.15	1.15	19	145.9	
Molesworth, Feb., 1952	2,930	71.1	45.9	58.5	(+2.3)	83.5	8	30.0	16	1.48	6	(-0.69)	0.83	18	..	
Adair, Feb., 1952 ..	200	68.1	50.1	59.1	(+1.1)	89.8	2	42.3	16	1.74	16	(-0.58)	0.60	27	..	

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Molesworth, Feb., 1952 ..	2,930	71.1	45.9	58.5	(+2.3)	83.5	8	30.0	16	1.48	6	(-0.69)	0.83	18	..
Adair, Feb., 1952 ..	200	68.1	50.1	59.1	(+1.1)	89.8	2	42.3	16	1.74	16	(-0.58)	0.60	27	..

NOTE.—At stations where departures from normal are in parentheses, the temperature record has been maintained for less than ten years, the rainfall record for less than twenty years. Rainfall normals have been revised and now refer to the standard period 1921–1950. Where observations are not available for the whole period, or where the site of the rain gauge has been changed, the normals are partly interpolated.

## NOTES ON THE WEATHER FOR MARCH 1952

**General.**—Warm dry weather prevailed for the first half of March, but later it became changeable and much cooler. Dairy production in the North Island was good for a start, but fell rapidly towards the end of the month. Pip and stone fruits yielded good crops, but a late season and a recent lack of sunshine adversely affected tomatoes and grapes. The North Island potato crop was also very disappointing. Conditions were favourable for stock in the North Island, but not so good in the South Island, especially for lambs.

**Rainfall.**—Apart from a moderate surplus in Southland, Fiordland, and Gisborne, rainfall was substantially below normal. Over the greater part of the country totals were less than half the average. The deficiency was greatest in the South Canterbury–Waitaki region where rainfall has been well below normal for the past three months. Exceptionally heavy rain in the ranges of western Otago on the 24th resulted in local damage to roads. For the twenty-four hours ending at 9 a.m. on the 25th the rainfall at Milford Sound amounted to 17.52 in.

**Temperatures.**—Temperatures for the first half of the month were above normal, but it became appreciably cooler afterwards. On the whole mean temperatures for the month were about one degree below normal.

**Sunshine.**—It was a rather cloudy month. In Westland and Southland the duration of bright sunshine was equivalent to an hour a day below the average. Elsewhere the deficiency was somewhat smaller, while there was a slight surplus in Nelson, Marlborough, and in eastern districts of the North Island.

**Weather Sequence.**—At the beginning of the month a large anti-cyclone was moving eastwards off the South Island, while another was centred in the Australian Bight. Easterly winds brought scattered rain to eastern districts of the Auckland Province. A weak trough moving northwards over the South Island produced light rain, except in Canterbury, but gradually filled up on the 3rd near Cook Strait.

Scattered rain occurred over the North Island on the night of the 4th when a cyclone moving rapidly down from the tropics passed well to the east of the Dominion. Meanwhile the western anticyclone had progressed slowly eastwards. After two temporary southerly changes in the South Island, cool southerlies became general on the 8th as the anticyclone gradually enveloped the country. Temperatures soon recovered and mild settled weather

prevailed until the 14th, except in the south where rain fell intermittently after the 11th. This rain was caused by a frontal system which oscillated back and forth over Otago and Southland during the passage of two wave depressions off the south coast.

With the approach of a vigorous depression from the north, easterlies became strong in exposed parts of the Auckland Province on the 14th, and rain spread southwards to Gisborne and northern Hawke's Bay during the day. Moving rapidly southwards the low-pressure centre passed about 300 miles east of Gisborne on the forenoon of the 16th. At that time a cold front which had moved up rapidly from the south had reached Cook Strait accompanied by a broad band of rain. South-westerlies became general during the afternoon. Deepening still further, the storm centre crossed the Chatham Islands the same night. Temperatures became much cooler following the passage of a secondary cold front on the 17th, and changeable south-westerly conditions persisted for a further two days. Showers and strong winds occurred in exposed positions with gales along the Otago coast on the afternoon of the 18th. The weather improved on the 20th as the centre of an anticyclone crossed Northland. Radiation fogs were reported over a wide area on the following morning.

An active depression which moved rapidly across Otago on the night of the 21st brought moderate rainfall to western and southern districts of the South Island. Moving northwards, the associated cold front weakened and became stationary over South Auckland, later to retreat southwards as the warm front of the next depression whose centre passed close to Southland early on the 25th. Exceptionally heavy rainfalls were recorded in Fiordland on the night of the 24th. When the low-pressure trough, which had become very vigorous, crossed the Dominion from the west on the 25th northerly gales and a belt of heavy rain affected the greater part of the country.

Fresh to strong westerlies prevailed on the 26th with frequent showers in the west and south, but unsettled showery weather became more widespread on the 28th following a change to cold southerlies. On the next two nights frosts were reported in sheltered inland districts of both Islands.

After a temporary clearance in Westland on the 29th it became showery there towards the end of the month, when winds veered westerly with the advance of a large anticyclone from the Tasman Sea towards the North Island. Elsewhere, rising barometers signified improved weather and moderating winds.

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(N.Z. M.O. 107)