

CLIMATOLOGICAL TABLE—continued
Summary of the Records of Temperature, Rainfall, and Sunshine for February, 1951—continued

Station	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.				Bright Sunshine.	
		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.
	Ft.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	In.			In.		Hours.	
Rudstone, Methven ..	1,217	68.8	48.8	58.8	-0.4	85.0	18	40.4	13	5.31	10	+1.66	3.13	9	170.0
Akaroa ..	150	68.7	52.5	60.6	(-1.3)	81.2	24	43.8	13	3.56	8	(-0.17)	2.66	9	159.6
Lincoln ..	36	68.5	49.7	59.1	-0.7	82.2	24	38.2	13	6.15	8	+4.34	4.03	9	183.2
The Hermitage ..	2,510	68.1	44.2	56.2	+0.5	80.0	23	36.0	13	5.93	7	-7.86	3.10	14	..
Winchmore ..	626	67.5	47.8	57.6	..	86.0	24	37.6	13	5.27	9	..	3.75	9	..
Haast ..	15	67.8	51.3	59.6	..	77.2	9	45.2	20	8.97	12	..	2.80	6	154.0
Ashburton ..	323	68.1	49.4	58.8	-1.4	88.4	24	39.0	13	4.54	7	+1.93	3.39	9	161.8
Fairlie ..	1,004	68.6	46.4	57.5	-1.0	87.0	24	35.0	21	3.66	7	+0.62	2.27	9	..
Lake Tekapo ..	2,400	68.6	43.6	56.1	-0.7	81.0	18, 24	35.0	13	2.66	5	+0.66	1.72	9	..
Timaru ..	56	69.6	50.0	59.8	-0.4	80.0	24	42.4	23	1.58	5	-0.65	0.85	9	145.3
Adair ..	200	64.4	50.7	57.6	..	77.1	24	45.8	13	1.25	8	..	0.59	9	..
Tara Hills ..	1,600	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Milford Sound ..	20	63.7	51.0	57.4	(+0.4)	74.2	10	44.6	13, 21	9.20	9	-13.50	3.26	14	..
Waimate ..	200	67.6	49.6	58.6	-1.1	81.5	24	43.0	23	1.15	6	-1.19	0.56	9	122.2
Queenstown ..	1,100	71.8	49.4	60.6	+1.0	84.0	2	39.4	13	1.39	7	-0.89	0.87	4	208.0
Cromwell ..	720	75.9	51.7	63.8	..	86.7	23	42.5	20	0.49	4	..	0.21	6	..
Ophir ..	1,000	73.2	45.2	59.2	-0.5	84.7	23	29.4	21	0.66	3	-1.31	0.41	6	..
Earnsclough ..	500	74.3	47.9	61.1	..	86.6	18	38.3	20, 22	0.39	2	..	0.34	6	..
Waipiata ..	1,550	68.7	45.0	56.8	-0.9	82.0	24	38.0	20	0.71	4	-1.34	0.33	6	197.7
Alexandra ..	520	74.8	50.4	62.6	+1.1	85.1	2	40.8	20	0.32	3	-1.18	0.28	6	192.8
Roxburgh Hydro ..	350	72.9	49.8	61.4	..	83.2	1	41.8	13,	0.56	3	..	0.43	6	..
Mid Dome ..	1,252	65.9	46.0	56.0	..	77.0	21	37.0	13	1.05	9	..	0.34	6	..
Moa Flat, West Otago ..	1,345	65.6	45.4	55.5	..	74.9	2	35.9	21	0.99	9	..	0.63	6	..
Manorburn Dam ..	2,448	65.0	41.7	53.4	-0.3	75.5	23	34.0	20	0.53	2	-1.38	0.42	6	..
Taieri ..	80	66.4	48.1	57.2	(-0.5)	77.3	5	33.8	23	2.23	5	(-0.18)	1.47	9	168.3
Musselburgh, Dunedin ..	5	64.6	51.5	58.0	(-1.1)	76.0	18	41.5	13	3.13	6	-0.20	1.92	9	168.3
East Gore ..	245	69.3	48.1	58.7	+0.9	81.0	3	36.0	13	1.11	11	-1.91	0.35	6	..
Gore ..	240	69.5	47.5	58.5	+0.0	80.0	3	36.5	13	1.00	8	..	0.36	6	149.6
Otautau ..	180	66.1	46.8	56.4	..	74.4	4	34.2	13	2.43	9	..	0.83	5	..
Pebby Hills ..	150	67.9	48.0	58.0	..	80.0	3	32.5	13	1.53	10	..	0.42	6	..
Invercargill ..	32	65.9	48.5	57.2	+0.4	79.0	3	36.0	1	2.17	9	-1.45	0.97	6	140.6
Invercargill South ..	8	65.4	49.3	57.4	+0.1	78.8	3	40.8	8	1.95	9	(-1.76)	0.67	6	..

LATE RETURNS

Oratia, Henderson, Jan., 1951	138	73.2	55.2	64.2	..	80.8	11	44.9	27	3.85	11	..	1.93	1	..
Chateau Tongariro, Jan., 1951	3,670	64.5	45.3	54.9	+2.5	75.5	11	35.0	28	8.28	10	(-0.13)	3.70	24	..
Molesworth, Jan., 1951	2,930	70.7	43.1	56.9	(-0.2)	85.0	13	35.0	27, 29	1.36	5	(-0.72)	0.58	24	..
Fairlie, Jan., 1951	1,004	66.7	48.1	57.4	-2.5	85.0	9	40.0	27	4.93	13	+1.93	1.68	24	..
Cromwell, Jan., 1951	720	74.6	51.2	62.9	..	91.0	7	39.4	2	1.52	6	..	0.65	1	..

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, and the normals are partly interpolated.

NOTES ON THE WEATHER FOR FEBRUARY, 1951

General.—The general westerly flow was much lighter than usual during February, a condition normally favouring the formation of depressions. However, only one depression of any consequence crossed New Zealand although a major storm was approaching on the last day of the month.

Over the greater part of the country rainfall was light, but the absence of strong westerly winds combined with rather high humidity prevented pastures from drying-off unduly. As a result, feed was generally in abundance and dairy production was maintained at a high level. Canterbury and Hawke's Bay, however, experienced a wet month and harvesting operations were considerably delayed in the former province. Excellent crops of stone fruits were obtained this season.

Rainfall.—In Canterbury and the eastern part of Northland rainfall was well above normal. There was a slight excess in Hawke's Bay, Taranaki, Nelson, and near Dunedin. Near Christchurch, and especially in the Kaituna Valley, the 24-hour period ending at 9 a.m. on the 10th was the wettest ever recorded in February. In parts of Canterbury there has not been a wetter summer on record.

Over the remainder of the country rainfall was deficient although most districts had at least half the average amount.

Temperature.—On the east coast temperatures were about 1° F. below normal. Proceeding westwards this deficit gradually vanished and on the west coast temperatures exceeded the normal by about 1° F. In Northland there was a slight negative anomaly.

Day-to-day temperature-changes were generally small, there being no spells of excessively hot or unusually cold weather.

Sunshine.—The provinces of Wellington, Nelson, and Westland all had appreciably more than the average sunshine. Elsewhere totals were generally below average, though in few cases was the deficiency more than 20 hours.

Weather Sequence.—For the first two days rain fell intermittently in Hawke's Bay and in eastern and northern districts of the Auckland Province due to a shallow depression located out to the north-east. The weather was fair and mild elsewhere as an anticyclone moved away eastwards from the South Island. A brief period of fairly general rain was associated with the leisurely movement of a trough across the Dominion during the 3rd and 4th.

Another trough which reached Southland on the 5th developed into a large and complex disturbance which remained over New Zealand until the 11th. For a start rainfall was mostly confined to the south and west, but on the 8th it became general over the North Island and soon afterwards extended to the remainder of the country. During the night of the 8th one low pressure centre moved across Taranaki and Hawke's Bay, then proceeded south-westwards for a time, later causing local flooding about Christchurch and North Canterbury on the 10th.

As the disturbance moved off to the east on the 12th the weather began to improve, but a further brief period of rain fell during the day as a cold front advanced up the South Island. On the 13th an anticyclone from the Tasman Sea moved rapidly across the Dominion. The trough associated with a deep depression far to the south reached Southland on the morning of the 14th. It took almost two days to move across the country, but rain did not penetrate to districts east of the main ranges.

Another anticyclone moved rapidly across the country on the 17th and continued on steadily towards the east. During the 19th cool south-easterlies and dull misty weather advanced slowly over the South Island behind a weak cold front, while rain developed over the northern part of the North Island under the influence of a shallow depression out to the north-west. The weather improved generally on the 20th and a spell of warm, sunny weather followed as an intense anticyclone from the South Tasman gradually enveloped the Dominion. Although this anticyclone moved away to the east on the 25th, pressures remained relatively high while another anticyclone travelled across the South Tasman and to the south of New Zealand. A weak cold front which reached Southland on the morning of the 25th retreated southwards on the following day.

During the 27th freshening easterly winds and intermittent rain in Northland heralded the approach of a vigorous tropical cyclone. Moving rapidly southwards the cyclone centre had reached a position about 100 miles west of North Cape at the end of the month. By then winds had risen to gale force over Northland and rain had spread southwards over most of the North Island.

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