

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1966—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.		In.			In.		Hrs.
Oamaru	48	70.0	53.8	61.9	..	87.2	5	42.4	4	0.80	6	..	0.33	19	115
West Arm, Lake Manapouri	590	66.9	54.2	60.5	+4.0	76.6	18	43.5	3	10.42	17	..	2.54	2	..
Queenstown	1,080	72.4	52.3	62.4	+2.4	81.5	18	42.0	1	1.48	11	-1.0	0.35	10	158
Mid Dome	1,252	71.7	51.4	61.5	+4.0	81.9	15	41.4	27	1.85	12	-1.7	0.40	13	..
Riversdale	419	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cromwell	720	76.7	55.3	66.0	+3.1	82.9	5	44.3	27	1.67	8	+0.1	0.67	13	..
Ophir	1,000	76.2	50.6	63.4	+4.0	84.9	13	36.1	27	0.97	6	-0.7	0.35	19	..
Moa Creek	1,400	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Earnsclough	500	77.8	50.1	63.9	+3.8	88.0	13	35.0	27	1.02	7	-0.5	0.34	22	..
Alexandra	461	77.0	54.8	65.9	+3.9	85.2	13, 15	43.1	27	0.95	8	-0.5	0.28	22	192
Roxburgh Hydro	350	76.3	51.7	64.0	+3.5	86.2	13	41.2	27	1.24	11	-0.8	0.34	2	..
Moa Flat, West Otago	1,345	69.9	48.4	59.1	+4.4	78.7	15	39.8	27	1.52	12	-1.4	0.40	24	..
Lake Mahinerangi	1,300	68.6	47.4	58.0	..	78.0	5, 15	36.0	10	1.24	8	..	0.26	11	..
Tapanui	740	73.3	50.8	62.0	+4.8	86.3	15	38.5	27	1.20	12	-2.0	0.37	2	..
Rankleburn Forest	835	70.2	48.7	59.4	+3.2	80.8	16	36.4	27	1.24	9	..	0.59	2	..
Otautau	180	68.5	48.8	58.6	+1.4	82.0	15	34.0	27	2.65	14	-0.9	0.99	14	164
Gore	230	72.6	50.0	61.3	+2.6	84.5	15	40.0	26	1.17	9	-1.9	0.51	2	159
Winton	150	70.6	48.9	59.8	..	85.0	15	31.9	27	1.44	11	..	0.58	2	171
Pebbly Hills	138	71.8	49.2	60.5	+2.4	85.0	15	31.0	24	1.25	9	-2.4	0.62	2	..
Invercargill Airport	1	67.7	48.3	58.0	+1.8	82.2	15	33.7	24	1.26	12	-2.5	0.48	2	165
Milton	60	70.4	49.6	60.0	..	84.1	10	37.2	4	1.31	11	-1.2	0.48	22	..
Balclutha	20	68.5	50.4	59.4	..	81.7	10	39.1	24	0.76	10	..	0.22	2	183
Rarotonga	15	82.6	72.9	77.8	-0.8	84.5	28	67.9	6	3.02	17	-5.2	0.72	1	161
Raoul Island	126	77.4	67.9	72.6	+0.3	80.1	..	64.4	..	11.55	18	+5.5	6.14	27	197
Chatham Islands	157	65.0	54.9	60.0	+1.3	72.2	19	41.7	4	0.94	9	-1.5	0.79	2	128
Campbell Island	49	53.3	43.3	48.3	..	63.3	15	33.4	14	2.45	18	..	0.56	16	75
Scott Base, Antarctica	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..
LATE RETURNS															
Waihi, Jan 1966	300	73.2	57.3	65.2	+0.5	80.7	4	42.4	4	7.37	14	+1.5	4.26	22	137
Te Aroha, Jan 1966	40	76.1	59.0	67.6	+0.7	82.0	7	46.0	14	3.26	13	-0.8	1.41	22	..
Tokoroa, Jan 1966	1,098	71.2	52.8	77.0	+0.2	77.0	7	36.7	11	8.82	14	+4.5	3.34	22	..
Whatawhata, Dec 1965	340	69.4	50.6	60.0	-1.6	78.2	15	41.2	31	5.87	14	+1.9	1.86	17	231
Whatawhata, Jan 1966	340	72.2	56.5	64.4	+0.4	78.8	4	47.5	14	6.11	14	+1.7	1.88	22	186
Waerenga-o-Kuri, Jan 1966	1,030	73.7	55.0	64.4	+2.6	85.3	1	41.0	9	1.83	9	-1.8	1.02	6	..
Flockhouse, Bulls, Jan 1966	30	69.2	55.2	62.2	+0.2	78.0	6, 22	45.0	9, 10, 16	2.92	12	+0.4	1.22	6	..
Foxton, Jan 1966	..	..	..	..	..	..	..	..	..	..	..	..	..	..	197
Reefton, Jan 1966	650	70.2	50.6	60.4	-0.6	81.0	22	41.2	11	5.46	14	..	1.12	6	..
Ohakune, Jan 1966	..	..	..	..	..	..	..	..	..	..	..	..	..	..	211
Moa Creek, Jan 1966	1,400	69.1	44.2	56.6	-0.8	81.1	30	31.8	25	3.53	12	+1.8	1.80	1	..
Gore, Jan 1966	230	65.7	47.9	56.8	-1.9	81.6	30	37.0	6	3.84	16	+0.6	0.79	1	163
Scott Base, Antarctica, Jan 1966	..	..	..	20.7	..	35.2	..	0.5	..	..	..	..	..	..	..

The "normal" refers to the present site of the instruments. The standard periods for normals are: for temperature 1931-60, for rainfall 1921-50, and for sunshine 1935-60. No normals are available for stations with only short records.

NOTES ON THE WEATHER FOR FEBRUARY 1966

General: February was marked by an unusually high frequency of northeasterly winds. It was cloudy and warm, with excessive rain in northern districts of the North Island. In many areas growth was reported to be exceptional and stock benefited, except for lambs.

Rainfall: In Auckland, Waikato, western Bay of Plenty, and most of Northland rainfall was 2-5 times the average value. Greatest excesses were recorded near and to the north of Whangarei and near the coast between Auckland and Thames.

Elsewhere rainfall was mainly close to or somewhat above average. However, in Southland and Otago, Wairarapa, and Gisborne it was comparatively dry—in some places totals were only a quarter of average.

Most of the very heavy rain occurred on two days. The first was the 16th when in thunderstorms daily rainfalls of up to 13 inches were recorded in Northland and parts of Auckland, with flooding and disruption of transport. The second was from 9 a.m. on the 28th to 9 a.m. on 1 March, once again with thunderstorms, and falls of up to 12 inches in Auckland and Waikato. Serious flooding followed in the Hauraki Plains.

At Whenuapai Aerodrome, Auckland, in the evening of the 16th, 4.2 in. of rain were recorded in an hour. This is the highest hourly rainfall ever recorded in New Zealand. The previous highest was 3.75 in. recorded twice at Tauranga Aerodrome.

Temperatures: Temperatures were above average, mainly by 3-6 degrees. Highest departures were recorded in the Taranaki-Taumarunui-Waitomo area. In some areas it was the warmest February since 1938.

Sunshine: Sunshine was below average over most of the country. Over Buller, Westland, and most of Canterbury the deficiency exceeded 50 hours. The total of 70 hours received at Haast was the lowest ever recorded for February in any part of New Zealand.

Two areas were favoured with sunshine about average or slightly above. One was Gisborne and Hawke's Bay with parts of Wairarapa; the other was Southland with parts of Central Otago.

Weather Sequence: On the 1st pressures were high to the north and low to the south and a trough of low pressure crossed the country. Rain was general north of Christchurch and also over the whole of the West Coast.

The fortnight from the 2nd to the 15th was one of settled dry weather over the greater part of the country and it was also very warm. The one area where the weather was almost continuously unsettled was the West Coast. For the first four days of this fort-

night pressures were high to the north and low to the south, with westerlies and rain at times in western and far southern districts of the South Island. An anticyclone moved on to the South Island during the 6th and 7th with little change in weather apart from some light rain just south of Christchurch. As this anticyclone moved to the east on the following day the weather was temporarily fair, even on the West Coast. However, during the 9th and 10th with the approach of depressions over the North and South Tasman Sea rain set in once again on the West Coast and in the Alps, with some considerable falls. At this stage temperatures also became somewhat warmer than previously. For the next five days the anticyclone remained to the east of the Chatham Islands, while pressures were low over the Tasman Sea. In the northeasterly flow over the North Island rain was reported at times in Northland, Auckland, and Bay of Plenty; while conditions remained unsettled on the West Coast.

On the 16th a trough of low pressure commenced to advance over the South Island. However, it was the northernmost part of the country where the change in weather occurred. In Northland and Auckland very heavy rain was reported in the warm moist north-easterlies with some flooding and slips, especially near Whangarei. Considerable rain was also recorded in Waikato and Bay of Plenty. As the trough advanced northward during the 17th and 18th the weather cleared on the West Coast but there was further rain in northern districts of the North Island, spreading to Taranaki, Taumarunui, and Taupo.

By the 19th an anticyclone was still centred to the north-east of the Chatham Islands, and another trough of low pressure commenced to advance over the South Island. An anticyclone developed to the south and later the trough became stationary through Cook Strait. The whole period from the 19th to the 24th was generally unsettled, with considerable rain in Canterbury, Westland, and Buller.

Better weather prevailed on the 25th and 26th under the influence of a ridge of high pressure. However, some light showers were still reported. By the 27th depressions were centred over the eastern Tasman Sea and to the northeast of the North Island. Both centres of this complex system advanced towards Northland, linked by a frontal trough. Rain soon set in there and in Westland; and on the last day of the month it spread all over the North Island with some very heavy falls in Auckland, Waikato, Coromandel, and Bay of Plenty. Slips were reported on the Main Trunk railway and on March 1st serious flooding occurred on the Hauraki Plains.

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