

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1968—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.	°F.	In.	In.	In.	Hrs.		
Lake Hawea .. .. .	1,147	71.1	52.1	61.6	-0.9	80.4	26	37.8	14	2.08	11	-1.1	0.68	8	
Naseby Forest .. .. .	2,000	71.9	44.8	58.3	+2.1	88.5	21	29.4	14	0.74	6	-2.5	0.30	2	
Herbert Forest .. .. .	200	70.3	45.1	57.7	..	94.1	22	36.0	10	2.77	12	..	1.14	3	
Cherry Farm, Waikouaiti .. .	21	69.8	48.1	59.0	+2.6	90.0	22	35.1	14	3.61	9	+1.2	1.38	12	
Taiieri .. .. .	80	72.2	47.8	60.0	+2.0	88.7	22	36.8	16	2.30	7	-0.2	0.98	3	
Berwick Forest .. .. .	60	71.6	47.5	59.6	+1.5	90.2	22	35.8	10	1.41	8	-1.3	0.39	9	
Dunedin Airport .. .. .	4	71.8	46.8	60.4	+1.2	90.0	27	32.8	16	1.65	9	-0.5	0.47	3	
Oamaru .. .. .	99	71.4	50.9	61.2	..	95.0	22	43.0	15	0.97	3	..	0.61	2	
Musselburgh, Dunedin .. .. .	5	68.7	52.2	60.4	+1.6	89.0	22	43.1	10	1.67	10	-0.8	0.55	12	
West Arm, Lake Manapouri .. .	590	63.8	49.3	56.6	+0.1	73.5	24	34.5	14	18.48	19	+5.5	6.12	27	
Queenstown .. .. .	1,080	71.6	50.3	61.0	+1.0	85.0	21	37.7	14	2.65	11	+0.2	0.75	8	
Mid Dome .. .. .	1,252	70.9	47.7	59.3	..	90.0	21	36.4	14	3.10	11	..	0.58	8	
Cromwell .. .. .	698	76.4	52.5	64.4	+1.5	92.3	21	39.0	13	0.99	8	-0.6	0.32	8	
Ophir .. .. .	1,000	73.8	48.3	61.0	+1.6	91.4	21	30.8	14	0.82	5	-0.9	0.50	3	
Moa Creek .. .. .	1,400	71.3	44.7	58.0	+1.2	88.0	21	28.0	14	1.26	9	-0.4	0.74	9	
Earnsclough .. .. .	500	76.4	46.8	61.6	+1.5	94.8	21	35.0	10	1.49	7	0.0	0.85	3	
Alexandra .. .. .	461	75.0	51.3	63.2	+1.2	92.7	21	37.1	14	0.89	9	-0.6	0.21	9	
Roxburgh Hydro .. .. .	350	74.3	45.0	62.1	+1.6	94.0	21	36.0	14	0.97	10	-1.0	0.22	9	
Moa Flat, West Otago .. .. .	1,345	69.2	46.4	57.8	+3.1	87.6	21	37.5	14	1.47	12	-1.4	0.47	3	
Lake Mahinerangi .. .. .	1,300	67.4	45.8	56.6	..	85.0	21	34.0	10	1.77	9	-1.8	0.66	9	
Tapanui .. .. .	740	71.8	47.7	59.8	+2.6	89.5	22	38.0	14	1.81	11	-1.4	0.57	19	
Rankleburn Forest .. .. .	835	69.5	46.7	58.1	+1.9	87.2	21	38.2	10	2.10	14	..	0.43	19	
Taieri Mouth .. .. .	50	66.0	47.8	57.7	..	87.0	27	37.0	10	2.16	11	..	0.60	3	
Otautau .. .. .	180	67.7	48.4	58.0	+0.8	86.0	21	37.0	16, 24	3.84	11	+0.3	1.80	27	
Gore .. .. .	235	70.7	48.7	59.7	+1.0	89.9	21	39.4	14	3.32	11	+0.2	1.09	27	
Winton .. .. .	145	68.6	48.2	58.4	..	88.3	21	39.1	14	3.48	14	..	1.60	27	
Pebble Hills .. .. .	150	69.4	48.8	59.1	+1.0	90.0	21	37.0	16	3.93	13	+0.3	1.40	27	
Invercargill Airport .. .. .	1	65.9	47.5	56.7	+0.5	85.4	21	37.3	16	3.69	14	-0.1	1.19	27	
Milton .. .. .	60	71.2	47.4	59.3	..	88.5	27	35.2	10	1.56	10	-0.9	0.34	3	
Balclutha .. .. .	20	70.6	48.3	59.4	..	87.8	27	38.2	14	1.43	13	..	0.33	3	
Rarotonga .. .. .	15	83.8	72.8	78.3	-0.1	88.7	2	67.8	23	12.56	19	+4.4	3.73	21	
Raoul Island .. .. .	126	76.1	68.1	72.1	-0.2	80.0	12	63.9	18	4.83	13	-1.3	2.16	21	
Chatham Islands .. .. .	157	62.9	51.4	57.2	-1.5	71.6	27	45.1	25	1.55	13	-0.8	0.52	9	
Campbell Island .. .. .	49	53.1	43.8	48.4	..	58.7	18	33.7	18	5.66	25	..	0.63	21	
Scott Base, Antarctica .. .. .	45	..	..	16.5	..	28.8	..	6.7	..	..	..	..	..	..	

LATE RETURNS

	Ft.	°F.	°F.	°F.	°F.	°F.	°F.	In.	In.	Hrs.				
Retaruke, August 1967 .. .. .	680	57.4	40.1	48.8	..	65.0	24	25.5	6	7.97	17	..	1.72	11
Retaruke, September 1967 .. .	680	57.5	38.5	48.0	..	64.0	21	24.6	7	2.48	20	..	0.71	12
Retaruke, October 1967 .. .. .	680	65.8	44.9	55.4	..	72.2	29	30.2	25	2.80	14	..	0.86	8
Wharite Peak, January 1968 .. .	3,000	57.3	46.2	51.8	..	69.2	14	41.0	19	4.24	17	..	2.16	18
<i>Errata:</i>														
Gisborne, January 1968 .. .. .	13	..	..	..	..	87.2	13	..	..	..	..	..	..	..

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.

\*Sunshine recorder is not located at the station but is in the near vicinity.

NOTES ON THE WEATHER FOR FEBRUARY 1968

**General**—In the North Island this was the driest February since 1946 and one of the driest months on record. The weather was also sunny over both Islands. Northern districts were experiencing their second successive month of very dry weather. In these areas dairy production was dropping and in some places feed was very scarce. Elsewhere in the North Island and also in Nelson the dry weather was beginning to affect pastures and crops; but February was a good month for harvesting. In Canterbury, Otago, and Southland the supply of feed was somewhat better than in the North Island.

**Rainfall**—Rainfall was mainly only one third of the average value over the North Island. In Gisborne and parts of northern Northland it was less than a tenth of the average. Many parts of the North Island received little or no rain after the 9th.

Other dry months over the North Island with about the same rainfall as February 1968 were February 1915, March 1931, January 1955, and January 1957. However, in February 1946 the North Island rainfall was only about half as much as in February 1968.

Over the greater part of the South Island rainfall was close to average. It was only about two-thirds of the average value in most of Nelson, Marlborough, coastal North Canterbury, Otago and eastern Southland; and it was considerably lower—less than half—in the Waimea Plains of Nelson, around Kaikoura, and in parts of inland North Otago. On the other hand, in Westland and Northern Fiordland rainfall was more than 50 percent above average.

**Temperatures**—Temperatures were 1-3 degrees warmer than usual over the South Island, except on the West Coast, where they were cooler than average by 1-2 degrees. In the North Island they were mainly close to average. The second half of the month was warmer than the first half; and from the 20th onward some eastern districts recorded maximum temperatures of 90-98°F at times.

**Sunshine**—Sunshine was above average, except on the West Coast, where it was close to average. The surplus was mainly 30-60 hours and was greatest in Northland and Auckland, in Gisborne, and in Nelson, Marlborough, and Canterbury.

**Weather Sequence**—At the beginning of the month a deep depression lay far to the south and another depression passed to the south-east, with an associated trough of low pressure crossing New Zealand. Rain affected western districts as far north as Taranaki. A change to southerlies on the 2nd brought rain to remaining districts of the South Island; and this persisted on the

3rd and spread to southern districts of the North Island as a small depression from the Tasman crossed the South Island. However, the weather improved in Fiordland and South Westland. With increasing pressures and an anticyclone over the Tasman Sea the 4th and 5th were mainly fine.

During the next two days the anticyclone moved on to the North Island while a deep depression passed to the south and the associated trough of low pressure crossed the South Island. Heavy rain was reported on the West Coast and in the Alps. Scattered falls also extended to Southland and some inland districts of Otago and Canterbury. Rain became fairly general on the 8th and 9th as winds changed to southerly with the passage of another trough. This was the last rain of any consequence in February for many districts, and there was very little of it in parts of Hawke's Bay and Gisborne.

By the 10th a ridge of high pressure extended over New Zealand from an anticyclone over the Tasman Sea. A trough of low pressure crossing the South Island affected the West Coast on this and the following day; and on the 12th the rain also extended to Southland and Otago. From the 13th to 16th the anticyclone was centred just to the west of the country, while a second centre developed east of the South Island. The weather was mainly fine and cool. However, a weak southerly change affected the east coast of the South Island at first; and showers were reported later in northern districts. As the anticyclone moved further northward, from the 17th to 19th, the only rain reported was on the West Coast and in some southern districts of the South Island. During the week 20-26 February an extensive belt of high pressure was stationary over New Zealand and surrounding areas, with highest pressures over the central Tasman Sea and to the east of the North Island. The only rain reported apart from isolated brief showers was in Gisborne and parts of Bay of Plenty on the 23rd and 24th. Temperatures were warmer than previously, especially in Canterbury.

By the 27th a trough of low pressure associated with a depression far to the south-west was moving on to the South Island. Heavy rain set in over Fiordland and South Westland with lighter falls over the remainder of the West Coast and in Southland. The rain in these areas persisted on the following day as the trough moved slowly north-eastward, and showers were also reported in Otago and Canterbury. As pressures rose behind the front on the last day of the month there was a clearance on the West Coast, but light rain affected some western districts of the North Island.

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