

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1970—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.	
Moa Flat, West Otago ..	1,345	66.0	45.6	55.8	+1.1	79.3	20	33.6	9	2.76	13	-0.1	0.69	28	..
Mahinerangi Dam ..	1,300	65.5	44.7	55.1	..	79.8	20	32.0	9	2.74	12	-0.9	1.50	28	..
Tapuni ..	740	67.9	47.1	57.5	+0.3	81.9	6	35.8	8	3.27	13	-0.1	0.72	28	..
Rankleburn Forest ..	835	67.1	45.8	56.4	+0.2	83.0	20	35.4	15	2.72	13	0.0	0.63	28	..
Taieri Mouth ..	50	66.0	47.6	56.8	..	83.0	6	38.5	9	1.73	10	..	0.67	28	..
Otautau ..	180	67.8	44.0	55.9	-1.3	82.0	6	32.8	15	3.23	13	-0.3	1.76	20	182
Winton ..	145	68.0	46.6	57.3	..	81.7	6	35.0	14	1.48	12	..	0.90	20	185
Gore ..	235	69.4	46.5	58.0	-0.7	83.5	20	35.5	14	2.74	16	-0.4	0.61	28	177
Hokonui Forest ..	150	68.9	46.6	57.8	-0.3	81.5	20	35.1	9	3.49	15	-0.1	1.07	20	..
Invercargill Airport ..	1	66.3	46.4	56.4	+0.2	79.3	20	36.1	9	3.12	16	-0.7	1.07	20	186
Milton ..	60	70.0	46.1	58.0	..	85.5	20	32.8	14	1.89	13	-0.5	0.45	6	..
Finegand, Balclutha ..	20	67.9	46.6	57.2	..	84.3	6	36.0	16	2.23	13	..	0.65	28	183
Rarotonga, Cook Islands ..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raoul Island ..	126	76.8	67.8	72.3	0.0	80.1	11	64.6	25	5.02	15	-1.1	2.18	6	194
Chatham Islands ..	157	65.4	54.0	59.7	+0.9	70.8	28	43.7	10	1.24	7	-1.2	1.06	2	166
Campbell Island ..	49	53.4	43.7	48.8	..	62.4	18	38.0	8	4.40	23	..	0.66	10	72
Scott Base, Antarctica ..	58	..	..	15.6	+3.1	32.7	4	-8.3	20	..	..	..	..	..	..
Lake Vanda, Antarctica ..	510	29.3	16.2	22.8	..	39.9	2	1.8	28	..	..	..	..	..	..

LATE RETURNS

Kinleith, December 1969 ..	1,257	72.8	54.1	63.4	..	84.9	22	43.0	6	9.62	18	..	3.29	17	..
Kinleith, January 1970 ..	1,257	76.2	55.2	65.7	..	82.0	29	45.4	12	1.56	9	..	0.31	2	..
Whatawhata, December 1969	340	73.3	56.1	64.7	+3.1	82.6	23	44.3	6	6.68	16	+2.7	1.22	17	219
Whatawhata, January 1970	340	76.8	57.1	67.0	+2.6	84.4	25	46.9	9	1.14	6	-2.5	0.31	6,14	282
Taurewa Forest, January 1970	2,545	73.5	45.0	59.2	..	78.5	21,26	36.0	9	3.64	7	..	1.02	19	..
Borland Saddle, January 1970	3,250	67.6	48.1	57.8	..	72	28	30	27	5.01	12	..	1.15	17	..
Erratum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kaikoura, January 1970	..	..	..	..	..	..	..	..	..	..	..	..	..	..	213

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.

*The sunshine recorder is not located at the station but is in the near vicinity.

NOTES ON THE WEATHER FOR FEBRUARY 1970

General—February was a dry month over the greater part of the country. In western districts of the North Island rainfall had been inadequate back to October 1969 and in some of these areas even further back. Farmers reported serious drought conditions in the main dairying areas of the North Island, with some herds of cows drying off and winter silage already being fed to others. Sheep were also short of feed and starting to lose condition. Forest fires were reported in many areas. However, conditions proved suitable for harvesting. The main farming areas not affected by the dry weather were Gisborne and most of Hawke's Bay; and Southland and Otago with parts of Canterbury.

Rainfall—In the North Island rainfall was mainly only a quarter of the normal value, but it was close to zero in parts of Taihape and Manawatu; Kapiti Island received only 0.01 in. However, in Gisborne and parts of Hawke's Bay it was wetter than usual, with totals up to three times the average and exceeding 15 in. in places.

In the South Island rainfall was mainly half the normal value. The deficiency there was greatest in Marlborough, where a station near Seddon received only 0.06 in. Rainfall was above average in Fiordland and western Southland besides parts of inland South Canterbury.

For the first 2 months of the year the total rainfall was unusually low in many North Island districts. At Hamilton, with 1.18 in., it was the lowest since 1946; and at Palmerston North, with 1.43 in., it was the lowest since 1928.

In northern Hawke's Bay and Gisborne totals of as much as 8 in. were recorded for the 2 days 10 and 11 February, causing serious flooding in Wairoa.

Temperatures—Temperatures were mainly close to, or somewhat above, normal. However, in central and southern Hawke's Bay they were 2 degrees cooler than usual.

The month was marked by an unusually high frequency of south-easterly winds, especially up to the 17th, making this the cooler part of the month.

Sunshine—Sunshine was above normal by 30-70 hours in northern and some western districts of the North Island, besides Nelson and Marlborough with the greater part of Canterbury; and in coastal Southland. Motueka received 287 hours.

Sunshine was below normal by 30-60 hours in Gisborne, with eastern Bay of Plenty and most of Hawke's Bay. Napier received only 161 hours.

Weather Sequence—At the beginning of February a belt of high pressure extended from the south Tasman Sea across the South Island to the Chatham Islands, while a depression was centred off East Cape. Easterly to south-easterly winds prevailed, especially over the North Island, with light rain in Gisborne and northern Hawke's Bay, besides some other east coast areas of both Islands. During the 2nd and 3rd the depression moved somewhat closer to Gisborne and a cold front crossed the country. Conditions remained rather similar.

Pressures increased over the North Island with the advance of an anticyclone, but in the south the westerlies freshened with the approach of a trough of low pressure. On the 4th some rain was reported in Bay of Plenty and Coromandel, besides Fiordland. During the next 2 days the trough became almost stationary over the South Island, with rain spreading to Westland, Southland, and Otago. On the 7th and 8th the trough crossed the remainder of the country, producing a change to southerly winds. Rain was fairly general but mainly light.

A depression soon developed to the north-east of Auckland and remained there from the 9th to the 11th. In the easterlies rain developed in Gisborne and Northland and spread to Hawke's Bay, with some heavy falls, causing flooding in Wairoa. On the following day the depression moved away and the rain became lighter. Another trough of low pressure caused freshening southerlies on the 13th, with light rain also spreading to some eastern districts of the South Island. For the next 2 days an anticyclone was centred to the south-east of the South Island, while pressures remained low to the north. Easterlies brought some scattered light rain to the northern half of the North Island. From the 16th to the 18th the weather was fine.

Westerlies freshened in the south during the 19th and 20th, with a trough of low pressure moving on to the South Island as a very deep depression passed close to Macquarie Island. Rain spread over the West Coast, western Southland, and parts of Otago, with some heavy falls in Fiordland. During the following day the trough crossed the country, affecting mainly the South Island, except for Nelson, Marlborough, and North Canterbury. From the 22nd to the 24th a belt of high pressure brought mainly fine weather. However, in the westerlies over the South Island, Fiordland, and South Westland received some rain. Pressures remained high on the 25th and 26th, but light rain was reported in Bay of Plenty and eastern Northland.

During the last 2 days of the month a small depression passed close to Southland and the associated trough of low pressure crossed the country. Rain was fairly general but mainly light; exceptions were western Northland, Nelson, and the West Coast.

J. F. GABITES, Director.