

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 1970—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit)								Rainfall in Inches					Bright Sunshine Hrs.
		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.			
Moa Creek	1,400	67.9	40.8	54.4	+1.8	80.0	8	31.0	23	1.58	9	+0.3	0.55	9	..
Earnsclough	500	71.1	44.3	57.7	+1.3	83.7	8	33.0	23	1.29	6	-0.1	0.79	9	..
Alexandra	461	70.5	48.9	59.7	+1.8	82.0	8	38.1	23	1.39	7	+0.2	0.79	9	189
Roxburgh (Power Stn.) ..	360	68.3	47.0	57.6	-0.1	80.5	30	40.0	3	2.21	8	+0.4	0.61	6	..
Moa Flat, West Otago ..	1,345	63.7	45.1	54.4	+1.9	75.0	30	36.3	15	3.15	18	+0.5	0.99	13	..
Mahinerangi Dam	1,300	62.0	45.9	54.0	..	75.6	12	37.3	15	2.94	13	-0.5	0.32	13	..
Tapanui	740	65.3	47.6	56.4	+1.6	78.5	12	38.3	18	3.41	17	+0.1	1.16	13	..
Rankleburn Forest	835	63.3	45.6	54.4	+0.6	77.6	12	35.6	18	2.56	16	-0.3	0.67	13	..
Taieri Mouth	50	62.8	48.3	55.6	..	81.2	30	41.2	21	2.44	13	..	0.80	6	..
Otautau	180	65.0	46.1	55.6	+1.1	77.0	9	34.9	21	3.37	12	-0.6	1.08	13	127
Winton	145	65.1	47.9	56.5	..	78.8	12	36.2	21	1.57	11	..	0.57	13	137
Gore	235	66.3	47.0	56.6	+0.9	80.0	12	31.5	3	2.34	13	-0.9	0.90	13	134
Hokonui Forest	150	66.4	47.0	56.7	+1.8	81.0	12	36.0	21	2.94	14	-1.0	1.05	13	..
Invercargill Airport ..	1	63.9	47.3	55.6	+1.8	78.2	12	35.4	21	2.63	11	-1.7	1.13	13	148
Milton	60	66.5	47.5	57.0	..	80.2	30	38.9	18	2.17	13	-0.3	0.55	6	..
Finegand, Balclutha ..	20	64.7	48.3	56.5	..	79.8	30	40.0	24	1.52	12	..	0.56	13	129
Rarotonga, Cook Islands ..	15	83.4	72.7	78.0	-0.2	86.0	16	68.0	31	11.22	24	+1.3	2.98	30	128
Raoul Island	126	77.0	67.9	72.5	+1.3	79.2	2	63.2	24	3.88	14	-1.3	1.70	27	226
Chatham Islands	157	65.0	55.2	60.1	+3.2	71.4	14	45.9	10	6.58	19	+4.0	2.52	22	99
Campbell Island	49	51.5	43.6	47.6	..	62.1	12	39.1	..	3.03	23	..	1.13	29	51
Scott Base, Antarctica ..	58	..	..	6.1	..	28.4	6	-17.1	30	..	..	..	..	..	..
Lake Vanda, Antarctica ..	510	7.5	-9.2	-0.8	..	31.8	6	-37.1	30	..	..	..	..	..	..
LATE RETURNS															
Rotoehu Forest, February 1970	235	75.3	54.3	64.8	+0.7	82.3	12	42.8	17	1.27	9	-3.9	0.76	28	..
Greymouth, January 1970	14	71.1	57.9	64.5	+4.1	79.6	27	44.1	9	8.56	14	+0.1	1.58	13	208
Greymouth, February 1970	14	70.3	53.5	61.9	+1.1	78.4	13,21	47.2	10	3.21	7	-4.3	1.17	27	199
Errata															
Rukuhia, February 1970	215	..	..	..	..	..	..	..	..	0.74	6	-2.7	..	..	..
Flockhouse, February 1970	30	..	..	..	..	..	..	..	..	0.62	3	-2.2	..	..	..
Rai Valley, February 1970	260	..	..	..	..	..	..	..	..	1.59	6	-3.8	1.19	27	..
Naseby Forest, February 1970	2,000	..	..	..	..	..	..	..	..	1.72	8	-0.8	..	..	..

Corrections to the rainfall departures from normal for February 1970 should be made as follows: Westport,—2.6. Cobb Dam,—4.0. Hokitika Aerodrome,—3.8. Totara Flat,—3.5. Franz Josef,—4.9. Haast,—3.2. Milford Sound,—2.0. 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 MARCH 1970

General—March was wet and warm. The very dry conditions which had been affecting most of the North Island and a considerable part of the South Island were relieved in nearly all districts by good rains, commencing mainly from the middle of the month. Pastures were reported to be making a rapid recovery, with the countryside changing from brown to green, but stock were recovering condition more slowly. The lack of rain still gave cause for concern in a few areas, notably southern Manawatu. Army worm was reported in Northland and facial eczema in Waikato.

Rainfall—Rainfall was more than double the normal value in Taihape, Hawke's Bay, and Wairarapa, besides most of Marlborough and parts of Canterbury, Coromandel, and Bay of Plenty. Greatest excesses were reported in southern Hawke's Bay, where some stations received four to eight times the normal value, with totals up to 14 in., the highest recorded there in any month of the year.

Elsewhere rainfall was mainly above normal or close to it.

In Hawke's Bay most of the rain fell from the 17th to the 19th, in south-easterlies, with a depression centred off the east coast of Northland. Oruawharo, near Takapau, received 8.74 in. for the 17th and 18th.

Temperatures—Mean temperatures were mainly 3 degrees above normal in the North Island, and 1–2 degrees above normal in the South Island.

The first 13 days were exceptionally warm and the last 8 days were also rather warm. The period 15–21 March, when southerly to easterly winds predominated, was several degrees cooler than normal.

Sunshine—Sunshine was 40–80 hours below normal over most of the South Island besides Wellington and southern Wairarapa. It was particularly low in the Christchurch-Ashburton area. The total of 82 hours at Ashburton was the lowest ever recorded in March in any part of New Zealand.

Weather Sequence—For the first 13 days of March temperatures were unusually warm.

On the 1st an anticyclone was centred over Tasmania and a series of weak troughs of low pressure crossed the country bringing only scattered light showers. For the next 4 days the anticyclone moved eastward across the country to the Chatham Islands and the weather was fine and warm.

During the 6th and 7th a trough of low pressure associated with a depression to the south-east of Victoria became stationary over the South Island, and another trough moved eastward over the North Island. Rain covered the whole of the South Island and northern districts of the North Island. For the next 3 days the anticyclone was still centred to the east, and the weather improved at first. However, a small depression with an associated trough soon crossed the South Island with rain there once again, except in Marlborough and North Canterbury. Western and northern districts of the North Island were also affected. Conditions were particularly humid, with patches of fog and very low cloud in many places. As the trough moved away to the north-east on the 11th it brought further rain to northern districts of the North Island. During the 12th and 13th a depression over the north Tasman Sea moved south-eastward, and the associated extensive trough of low pressure moved on to the South Island. Rain commenced in Fiordland and soon spread over the whole country, with some considerable falls in Southland, Waikato, and Bay of Plenty.

The 14th brought a marked change from very warm weather, mainly with northerlies, to much colder weather with southerlies and easterlies, lasting until the 23rd.

As another centre formed in the depression and the main centre moved across Cook Strait to the east on the 14th, a vigorous trough of low pressure crossed the country, with a change to southerly winds. Rain continued over most of the country but the weather cleared in Fiordland and south Westland, and temporarily in Wairarapa and Hawke's Bay. From the 15th to the 19th one centre of the depression moved eastward towards the Chatham