

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for March 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
Tara Hills, Omarama ..	1,600	70.3	49.4	59.8	+4.9	83.7	2	37.9	1	4.72	9	+3.0	1.11	8	162
Lake Hawea ..	1,147	70.4	52.3	61.4	+3.4	77.3	1	46.2	18	5.84	11	+2.8	2.56	5	..
Naseby Forest ..	2,000	67.9	46.1	57.0	+5.3	83.0	2	36.0	25	4.24	11	+2.1	1.27	5	..
Herbert Forest ..	200	67.3	49.6	58.4	..	88.2	19	42.0	28, 29	10.69	15	..	7.24	8	..
Cherry Farm, Waikouaiti ..	21	66.3	51.6	59.0	+5.0	87.0	19	44.0	25	10.06	16	+8.0	..	..	..
Taieri ..	80	68.0	51.3	59.6	+4.1	84.7	19	39.5	25	7.70	12	+5.2	2.87	8	..
Berwick Forest ..	60	67.9	50.4	59.2	+3.6	89.5	2	42.1	25	6.98	12	+4.4	3.32	8	..
Oamaru ..	99	66.6	53.6	60.1	..	89.6	19	48.3	18, 19	7.67	16	..	5.05	8	110
Dunedin Airport ..	4	68.5	49.0	58.8	+4.1	88.7	2	35.4	25	7.81	12	+5.6	3.39	8	126
Musselburgh, Dunedin ..	5	65.0	54.0	59.5	+3.1	85.2	19	45.2	25	8.53	15	+6.0	3.58	8	121
West Arm, Lake Manapouri	590	63.4	51.8	57.6	+3.8	75.0	2	43.6	18	14.88	18	+1.6	2.83	5	..
Queenstown ..	1,080	69.0	51.6	60.3	+3.7	79.7	19	42.3	21	5.78	11	+2.7	2.66	5	144
Mid Dome ..	1,252	66.7	49.2	58.0	..	83.4	2	38.0	25	6.60	17	..	1.47	5	..
Cromwell ..	698	72.1	51.7	61.9	+3.5	86.0	2	41.0	25	4.17	8	+3.7	1.59	5	..
Ophir ..	1,000	70.5	48.9	59.7	+4.4	83.7	2	35.0	25	4.84	10	+3.3	1.34	5	..
Moa Creek ..	1,400	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Earnscleugh ..	500	72.7	49.2	61.0	+4.6	87.0	2	36.0	25	4.10	9	+2.7	1.32	5	..
Alexandra ..	461	71.4	52.6	62.0	+4.1	85.9	2	41.8	25	4.04	11	+2.8	1.33	5	146
Roxburgh Hydro ..	350	70.6	52.2	61.4	+3.7	88.0	2	40.0	25	4.24	11	+2.4	0.80	8	..
Moa Flat, West Otago ..	1,345	65.4	48.9	57.2	+5.0	82.4	2	39.9	25	4.50	14	+1.8	0.97	8, 10	..
Lake Mahinerangi ..	1,300	65.1	48.4	56.8	..	83.4	2	39.5	25	5.12	10	+1.7	1.74	9	..
Tapanui ..	740	67.8	51.0	59.4	+4.6	86.0	2	45.3	25	4.46	13	+1.2	0.96	10	..
Rankleburn Forest ..	835	64.8	48.9	56.8	+3.0	83.4	2	41.0	13	6.12	15	..	2.21	8	..
Taieri Mouth ..	50	63.7	50.8	57.2	..	82.1	3	41.5	25	6.00	13	..	2.13	8	..
Otautau ..	180	64.8	49.4	57.1	+2.6	81.0	31	39.5	30	6.33	16	+2.3	2.05	8	94
Gore ..	235	67.3	51.2	59.8	+4.1	83.4	31	39.0	25	5.01	17	+1.8	0.99	5	99
Winton ..	145	65.5	50.5	58.0	..	83.9	31	42.7	24	4.52	14	..	1.15	8	98
Pebble Hills ..	150	66.6	49.8	58.2	+3.3	83.0	31	41.0	15	4.67	16	+0.8	1.10	5	..
Invercargill Airport ..	1	64.1	50.4	57.2	+3.4	81.1	31	39.6	1	4.72	17	+0.4	1.20	5	92
Milton ..	60	66.9	50.4	58.6	..	89.0	2	41.6	30	4.72	12	+2.2	1.84	8	..
Balclutha ..	20	65.0	50.3	57.6	..	80.0	19	41.7	18	4.87	11	..	1.95	8	112
Rarotonga ..	15	82.8	70.5	76.6	-1.6	85.7	7	65.0	18	15.93	20	+6.0	4.12	26	179
Raoul Island ..	126	76.6	69.7	73.2	+2.0	79.6	13	64.0	13	7.84	15	+2.6	4.62	22	155
Chatham Islands ..	157	64.3	53.5	58.9	+2.0	72.2	7	43.3	27	1.16	13	-1.4	0.22	9	122
Campbell Island ..	49	51.6	43.8	47.7	..	63.2	31	35.2	6	3.38	24	..	0.81	22	54
Scott Base, Antarctica ..	45	..	..	2.7	..	23.0	..	-24.7	..	..	..	..	..	..	..

LATE RETURNS

Whatawhata, Jan 1968 ..	Ft. 340	°F. 71.7	°F. 49.3	°F. 60.7	-3.3	°F. 81.1	11	°F. 36.4	20	In. 3.02	12	-1.4	In. 0.82	18	Hrs. 239
Whatawhata, Feb 1968 ..	340	72.6	..	..	..	81.3	22	..	..	2.92	10	-1.4	1.30	9	195
Havelock North, Feb 1968 ..	30	76.0	49.8	62.9	-0.6	89.4	2	38.4	5	0.36	4	-2.1	0.19	9	..
Flockhouse, Bulls, Feb 1968	30	70.5	52.6	61.4	-1.1	77.6	28	42.7	15	1.56	4	-1.2	1.00	3	..
Palmerston North, D.S.I.R., Feb 1968 ..	110	71.3	53.6	62.5	-0.9	81.9	21	42.9	5	2.02	6	-1.0	1.03	3	207

Errata

Owairaka, Feb 1968 ..	133	72.8
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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 MARCH 1968

General—March was exceptionally warm and also very humid. For most of the North Island it was the third successive month with rainfall well below average, and conditions were much too dry, seriously affecting dairy production. In northern districts there was also an outbreak of facial eczema affecting especially cattle. In the South Island rainfall was mainly adequate and conditions were better.

Rainfall—Rainfall was above average over most of the South Island, in Northland and Coromandel, and around Rotorua. It was more than double the average value in Otago and in parts of South Canterbury, Nelson, and Northland. On the Otago coast some stations had nearly four times the average value.

By contrast, in eastern and southern districts of the North Island and in parts of Taihape, Taupo, and Waikato rainfall was less than half the average value. The greatest deficiency was recorded in northern and central Hawke's Bay, Wairarapa, and western Waikato.

Widespread and serious flooding was reported in Dunedin and coastal North Otago and South Canterbury following heavy rainfall on the night of 8-9 March associated with the passage across the South Island of a depression of tropical origin. Flooding was also reported on parts of the Southland plain and around Queenstown.

Temperatures—Temperatures were above average, mainly by about 5 degrees. Highest departures of 6-8 degrees were recorded from Waikato through central districts of the North Island to Southern Hawke's Bay and Northern Wairarapa; and also in inland Marlborough and North Canterbury. In these districts it was by far the warmest March for at least 60 years.

Sunshine—The greater part of the North Island was favoured with 20-50 hours more sunshine than usual, highest departures being recorded from Taumarunui to Manawatu. By contrast, parts of the South Island together with northern and eastern

Northland were unusually cloudy. Te Pahi, Northland received 115 hours, and Invercargill only 92 hours; these were both the lowest in over 30 years of record. Another unusually low total was recorded at Timaru—only 100 hours.

Weather Sequence—On the 1st the weather was generally settled, under the influence of an anticyclone. During the next four days the anticyclone moved away to the east, but fair weather persisted over most of the North Island and in the northern half of the South Island. However, during this time a trough of low pressure moved on to Southland and Otago and became stationary there, with rain spreading progressively eastward over these areas and South Westland from the far south-west. There were some very heavy falls in Fiordland and the Lakes district.

A tropical storm which had originated east of New Caledonia moved southward and started to effect some northern districts on the 6th. The weather cleared temporarily in Southland and later in Otago and Fiordland but rain spread northward over remaining districts of the South Island. The tropical storm became less vigorous as it moved southward to the west of the North Island and crossed the South Island on the 8th, which was a day of fairly general rain. Some heavy rain occurred on this and the following day in coastal Otago, with flooding there and in parts of South Canterbury and Southland and around Queenstown. Meanwhile the weather had improved temporarily over most of the North Island.

A centre of low pressure still persisted off the Fiordland coast, and a trough associated with this centre crossed the country from west to east on the 10th and 11th, with further rain over the South Island and some also in many North Island districts, especially in the west. Low pressures continued to dominate the area for another three days, with the trough almost stationary at first east of Northland and Gisborne. The weather cleared over most of Otago and Southland, but rain was still reported in many other districts.