

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for January 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.			Maxi- mum	Date	Mini- mum	Date					Amount	Date	
Ft.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	In.		In.		Hrs.				
Moa Creek ..	1,400	73.0	45.7	59.4	-0.9	87.5	30	33.7	..	2.43	7	+0.7	1.22	..	1	..
Earnsclough ..	500	72.1	50.6	61.4	-1.0	85.7	30	40.2	7	3.80	8	+2.0	1.18	1	216	..
Alexandra ..	461	70.7	48.2	59.4	-1.3	86.0	30	34.7	7	3.70	10	+1.5	1.67	1	..	..
Roxburgh Hydro ..	350	64.0	45.2	54.6	-0.2	79.0	30	36.0	7	5.30	16	+2.3	2.02	1	..	..
Moa Flat, West Otago ..	1,345	63.2	45.1	54.2	..	78.0	30	36.0	7	5.70	16	..	2.18	1	..	..
Lake Mahinerangi ..	1,300	66.8	47.7	57.2	-0.3	81.3	30	38.0	6	3.92	17	+0.5	1.11	1	..	..
Tapanui ..	740	64.0	45.9	55.0	-1.7	76.4	27	37.6	6	4.38	19	..	1.26	1	..	..
Rankleburn Forest ..	835	64.3	46.8	55.6	-1.4	80.0	30	33.0	3,7	2.56	16	-1.0	0.41	1	152	..
Otautau ..	180	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gore ..	230	64.6	46.9	55.8	..	79.4	30	33.1	7	2.47	17	..	0.33	1	163	..
Winton ..	150	66.7	47.3	57.0	-1.1	80.0	29, 30	34.5	3	3.44	17	+0.1	0.46	1	..	..
Pebbley Hills ..	138	62.7	46.7	54.7	-1.4	78.1	30	34.1	6	3.19	17	-0.4	0.43	11	142	..
Invercargill Airport ..	1	65.6	47.5	56.6	..	77.9	27	36.1	15	3.76	16	+1.3	1.23	1	..	..
Milton ..	60	64.6	48.0	56.3	..	76.8	27	38.0	3	2.79	20	..	0.93	1	162	..
Balclutha ..	20	82.8	74.4	78.6	+0.4	86.4	14	72.1	21	7.28	19	-3.1	4.00	31	131	..
Rarotonga ..	15	76.3	68.4	72.4	+1.6	80.0	1	60.9	14	6.22	15	+2.5	1.63	9	184	..
Raoul Island ..	126	63.3	52.4	57.8	+0.2	69.9	31	44.1	9	1.55	12	-1.2	0.74	6	166	..
Chatham Islands ..	157	51.3	42.2	46.7	..	55.9	31	37.0	25, 26	5.28	28	..	0.63	15	94	..
Campbell Island ..	49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scott Base, Antarctica ..	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

LATE RETURNS

Owairaka, Dec 1965 ..	133	69.6	55.8	62.7	0.0	75.9	13	48.8	3, 31	4.27	11	+0.6	1.75	17	..	..
Oratia, Dec 1965 ..	135	70.9	51.0	60.9	-0.6	76.1	22	42.3	21	5.17	12	+0.9	2.16	17	..	..
Te Aroha, Dec 1965 ..	40	72.5	52.7	62.6	-2.0	81.0	24	44.0	31	4.34	12	+0.8	1.75	17	..	..
Waerenga-o-Kuri ..	1,030	69.3	50.8	60.0	+0.3	78.8	6, 31	39.0	31	1.30	8	-1.5	0.34	7	..	..
Marton, Dec 1965 ..	462	66.3	50.7	58.5	-0.3	76.3	16	37.6	28	3.89	14	+0.3	1.10	20	..	..
Flockhouse, Bulls, Dec 1965 ..	30	67.2	53.9	60.5	-0.4	79.0	16	42.0	19	3.40	14	+0.6	1.01	20	..	..
Levin, Dec 1965 ..	100	66.1	53.2	59.6	+0.2	75.9	13	45.0	2	3.20	16	+0.4	0.63	6	184	..
Greymouth, Nov 1965 ..	13	60.3	49.4	54.8	-1.0	66.5	26	41.0	20	12.71	23	+4.3	1.54	4	129	..
Gore, Dec 1965 ..	230	..	..	..	..	..	..	..	..	..	..	..	..	..	168	..
Roxburgh Hydro, Dec 1965 ..	350	69.5	46.2	57.8	-1.4	86.8	24	33.5	30	1.03	9	-0.9	0.41	18	..	..
Greymouth, Dec 1965 ..	13	64.2	51.2	57.7	-0.8	71.6	6	37.3	28	10.24	19	+1.3	2.45	6	156	..
Franz Josef, Oct 1965 ..	420	55.7	41.0	48.4	-2.2	64.5	28	31.2	7	15.69	18	-4.9	3.94	31	..	..
Franz Josef, Nov 1965 ..	420	59.2	44.4	51.8	-1.6	68.9	12	35.3	20	24.37	26	+6.6	3.98	16	..	..
Temuka, Nov 1965 ..	80	64.4	43.0	53.7	-0.2	82.5	26	32.8	20	3.52	7	..	1.05	1	..	..
Temuka, Dec 1965 ..	80	68.3	47.8	58.2	+1.4	88.5	15	35.8	28	1.29	9	..	0.43	6, 25	..	..
Errata																
Rai Valley, Dec 1965 ..	250	..	..	..	..	..	..	..	..	4.63	..	..	..	..	..	..

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 JANUARY 1966

**General:** January was very cloudy, and it resembled the two previous months in being wetter than usual. Pasture growth was reported as exceptional - in fact, in some areas there was too much, especially for lambs. The weather was also still too unsettled for haymaking and harvesting.

**Rainfall:** Rainfall was above average in Otago and South Canterbury, about Cook Strait, and over the greater part of the Auckland Province. In parts of Central and South Otago, Taupo, and southern Northland it was more than double the normal value. Some falls of 6-9 inches were reported around Rotorua on the 22nd.

It was drier than usual by more than 25 per cent in western Southland, North Canterbury, and Buller, Gisborne, and parts of Hawke's Bay and Taihape.

**Temperatures:** In the North Island temperatures were mainly above average, the highest departures of 3-4 degrees being in the Gisborne district. In Westland, Otago, and Southland it was 1-2 degrees cooler than usual, but elsewhere in the South Island temperatures were close to average.

**Sunshine:** Sunshine was below average over the whole country. The largest deficits of 50-80 hours were recorded in northern and western districts where it was the cloudiest January for about 40 years. Greymouth's 116 hours was one of the lowest ever recorded in New Zealand in January. Other low totals were Te Pahi (Northland), 150 hours; Auckland, 168 hours; Westport, 151 hours; Hokitika, 129 hours; and Invercargill, 142 hours.

**Weather Sequence:** During the first two days a trough of low pressure crossed the country bringing considerable rain to the southern half of the South Island and some rain also to most of the North Island. On the 3rd an anticyclone covered New Zealand with better weather. However, on the next day a complex depression over the eastern Tasman Sea commenced to affect the South Island with some heavy rain in south Westland and the Alps. From the 5th to the 7th the northernmost centre crossed the Auckland isthmus while the associated trough of low pressure

moved over the North Island. Considerable rain fell in the North Island with general rain also over the northern half of the South Island. The weather had cleared in most districts by the 8th with a weak ridge of high pressure over New Zealand.

On the 9th another weak trough of low pressure brought light or moderate rain to many districts but on the following day the weather was again fair under the influence of a ridge of high pressure. Fair weather persisted for two more days in eastern and northern districts. However, on the 11th a trough of low pressure brought considerable rain to the West Coast with some also on the Southland coast. Another trough of low pressure brought some rain to coastal districts in the southern half of the South Island on the 13th. During the next two days it travelled rather slowly north-eastward, with scattered rain, mainly light. Fair weather prevailed once again on the 16th with an anticyclone over the North Island.

Some heavy rain was reported in the Alps and in Fiordland and south Westland during the 17th and 18th. A trough of low pressure was stationary over Southland and pressures were low over the Tasman Sea. A moist northerly flow covered most of New Zealand with some rain also in Southland and Otago. There was a temporary improvement in most districts on the 19th. However, on the following day the weather deteriorated in the west and north as a trough of low pressure associated with a complex depression over the north Tasman Sea moved on to the Auckland Province. This depression crossed the country during 21-23 January with widespread heavy rain. Some particularly high daily falls of 6-9 inches were reported around Rotorua on the 22nd.

The 24th was a day of south-westerlies as the depression moved away to the south-east. The weather improved but some light rain was still reported in many districts. The 25th to the 29th was the longest spell of generally fair weather during January with an anticyclone moving slowly across New Zealand. During the last two days of the month the weather deteriorated once more in Northland, western districts, and Southland as a weak trough crossed the South Island.

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