

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for November 1965—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.
Mid Dome	1,252	60.6	43.0	51.8	-1.3	72.2	26	29.0	21	4.45	19	+1.4	0.65	27, 28	..
Riversdale	419	61.7	40.6	51.2	-1.9	75.6	12	30.1	3	2.77	15	..	0.51	27	..
Cromwell	720	64.8	43.9	54.4	-2.6	75.5	24	30.3	21	1.62	9	+0.4	0.65	12	..
Ophir	1,000	63.5	41.1	52.3	-2.0	73.7	24	25.0	21	1.16	8	-0.1	0.47	1	..
Moa Creek	1,400	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Earnsclough	500	66.6	40.8	53.7	-1.3	76.8	24	25.0	21	0.88	11	-0.2	0.17	8	..
Alexandra	461	64.5	45.0	54.8	-2.1	76.8	12	31.3	21	0.85	12	-0.3	0.22	28	182
Roxburgh Hydro ..	350	63.7	43.2	53.4	-2.6	76.0	26	31.8	3	1.50	12	-0.4	0.25	4	..
Moa Flat, West Otago	1,345	56.9	40.9	48.9	-2.0	68.7	16	30.6	20	2.58	17	-0.4	0.57	19	..
Lake Mahinerangi ..	1,300	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapanui	740	59.8	42.5	51.2	-2.2	73.0	26	33.0	20	3.44	19	+0.2	0.60	19	..
Rankleburn Forest ..	835	58.8	40.7	49.8	-2.7	75.0	26	32.0	20, 21	3.21	19	..	0.45	19, 27	..
Otautau	180	59.3	42.3	50.8	-2.0	74.0	26	29.2	21	3.24	17	-0.3	0.75	19	143
Gore	230	61.2	43.5	52.4	-1.8	77.6	26	34.0	21	2.33	17	-0.9	0.54	27	131
East Gore	245	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Winton	150	60.4	43.8	52.1	..	74.8	26	31.3	21	2.64	18	..	0.51	27	149
Pebble Hills	138	61.0	42.6	51.8	-2.2	76.0	26	31.0	21, 22	4.55	19	+1.0	1.87	27	..
Invercargill Airport ..	1	59.4	43.3	51.4	-0.8	74.1	25, 26	32.6	21	2.70	16	-0.9	0.62	13	148
Milton	60	61.0	43.3	52.2	..	75.7	26	33.0	20	2.94	17	+0.6	0.73	19	..
Balclutha	20	60.5	42.9	51.7	..	75.9	26	34.0	20	2.37	19	..	0.38	20	141
Rarotonga	15	79.9	69.0	74.4	..	84.4	15	61.9	12	1.68	11	..	0.70	22	202
Raoul Island	126	60.7	60.7	65.2	-0.7	74.8	29	55.0	5	39.4	13	+1.1	2.11	10	158
Chatham Islands.. ..	157	57.8	48.0	52.9	+0.1	62.5	28	36.2	4	2.74	18	+0.5	0.53	13, 19	166
Campbell Island	49	48.9	39.1	44.0	-1.8	56.7	26	32.7	20	3.19	28	+1.0	0.60	13	103
Scott Base, Antarctica	45	..	..	11.1	..	25.7	26	-9.4	15	..	..	..	..	..	..
LATE RETURNS															
East Gore, Sep 1965 ..	245	56.0	37.7	46.8	-0.8	63.0	17	28.0	6	2.79	12	+0.3	0.61	2	144
Paeroa, Oct 1965	27	63.6	44.6	54.1	-2.9	70.2	25	30.6	19	1.84	13	-2.3	0.35	4	..
Whatawhata, Oct 1965	340	60.6	45.2	52.9	-2.4	68.1	30	31.4	8	3.43	14	-2.4	0.75	27	180
Puketurua, Oct 1965 ..	470	60.8	42.5	51.6	-1.7	67.2	25	27.4	8	1.82	12	-3.2	0.29	16	..
Golden Downs, Oct 1965	900	60.2	37.9	49.0	-1.6	68.5	25	26.2	7	2.36	13	-2.2	0.45	12	..
Moa Creek, Oct 1965 ..	1,400	57.7	32.4	45.0	-3.0	68.9	26	19.5	1	1.76	11	+0.4	0.53	31	..
Errata															
Rangiora, Sep 1965 ..	150	0.94	4
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Te Teko, Oct 1965	100	1.36	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.

NOTES ON THE WEATHER FOR NOVEMBER 1965

General: November was for the most part cooler, wetter, and cloudier than usual. Many farmers found it a reasonably good month. However, in parts of Gisborne, Bay of Plenty, and Northland conditions were too dry; while in a few areas, especially around Taihape, the cold wet weather adversely affected growth and delayed shearing.

Rainfall: Over the greater part of the country rainfall was somewhat above normal. In North Taranaki, Taumarunui, Wellington, and the Marlborough Sounds, western Nelson, and inland Buller it was double the average value. In North Taranaki and Wellington three-quarters of the rain fell in the first week during the passage of two troughs of low pressure and their associated secondary depressions. Serious flooding resulted in Waitara and the Hutt Valley.

Rainfall was somewhat below average near the east coast in the North Island, including Bay of Plenty and the east coast of Northland but omitting the area between Tokomaru Bay and Opotiki. It was also somewhat below average on the Kaikoura coast, in North Otago and parts of Central Otago, in Stewart Island and parts of coastal Southland.

Temperatures: Temperatures were below normal, mainly by 1-2 degrees.

The coolest spells, with snow on the ranges, occurred on the 2nd and on the 18th and 19th.

Sunshine: Sunshine was mainly below average. The deficit exceeded 30 hours on the West Coast, in Nelson and Taranaki, and also in parts of Central Otago. On the other hand, Gisborne and the greater part of Hawke's Bay were favoured with 20-50 hours more sun than normal; and South Canterbury received a little above average.

Weather Sequence: During the first two days of the month a trough of low pressure crossed the country. A depression developed on it and moved south-eastward through Cook Strait. Rain was general, with some considerable falls in the northern half of the South Island and in the Wellington and Taranaki Provinces. Winds turned to cold southerlies, with snow on the ranges.

A weak ridge of high pressure brought temporarily fair weather on the 3rd. However, another trough of low pressure soon moved on to the country from the south-west. A depression developed over the mid-Tasman and moved on to the South Island, while the trough remained almost stationary through Cook Strait from about the 4th to the 7th. Rain was fairly general, but parts of Otago, Canterbury, and Hawke's Bay were not affected. Some considerable falls were reported from the West Coast, Nelson, Taranaki, and about Cook Strait, with flooding in the Hutt Valley and Wairarapa. Snow fell again on the ranges. The trough then

moved just off the country, but another depression developed on it; so that the trough became almost stationary once again to the north-east during the 8th and 9th. The weather cleared in southern districts of the South Island and in western and southern districts of the North Island, but elsewhere there was further rain, heavy in Bay of Plenty.

The weather became generally fair temporarily on the 10th as a ridge of high pressure extended over New Zealand from the north. Pressures soon dropped to the south, and between the 11th and 13th a depression over the South Tasman Sea moved past Southland, while several associated troughs crossed the country. Rain was confined mainly to the West Coast and the Alps but it extended at times also to Southland, Nelson, the area about Cook Strait, Taranaki, and parts of the Auckland Province. On the next day a depression developed to the east, causing a southerly change; and the rain became fairly general, though mainly light. Thunderstorms were reported from Canterbury and hail from Wanganui and Taihape.

Pressures remained low to the south and south-west; and from the 15th to the 17th a trough of low pressure moved slowly north-eastward over the South Island, with a depression forming west of Cook Strait. Considerable rain fell on the West Coast, and by the 17th it extended also to parts of Southland, Otago, and Canterbury, Nelson, and the area about Cook Strait. On the 18th and 19th the depression crossed the northern part of the South Island and moved south-eastward, causing a cold southerly change, with rain becoming fairly general. Snow was reported on the hills in Southland; but in Fiordland and Central Otago the weather cleared.

The period from the 20th to the 24th was the only one of any length with predominantly fair weather over the whole country. At first a ridge of high pressure extended over New Zealand from the west. Later a belt of high pressure covered the whole area. A few showers were reported, especially on the West Coast and about the ranges of both islands.

On the 25th and 26th a depression over the South Tasman Sea moved rapidly south-westward, and the associated trough of low pressure crossed the country. Rain was reported on the West Coast, about Cook Strait, and over the greater part of the Auckland and Taranaki Provinces. Pressures remained low to the south, and another trough of low pressure crossed New Zealand during the 27th and 28th with fairly general rain, missing however eastern districts north of Christchurch, Bay of Plenty, and Northland. A depression developed to the east on the following day and winds turned to the south-west, with a clearance over the greater part of the South Island. On the last day of the month pressures were rising with the advance of an anticyclone over the Tasman Sea, and the weather was mainly fair.

J. F. GABITES, Director.

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