

CLIMATOLOGICAL TABLE—continued

Summary of the Records of Temperature, Rainfall, and Sunshine for November, 1950—continued

Station.	Height of Station above M.S.L.	Air Temperatures in Degrees (Fahrenheit).								Rainfall in Inches.					Bright Sunshine. Hours
		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.			
Fairlie	1,004	67.8	41.0	54.4	+0.7	80.0	25	28.5	3	1.00	7	-1.43	0.32	26	..
Lake Tekapo .. .	2,400	66.5	39.6	53.0	..	75.5	30	27.8	3	0.11	2	..	0.09	26	..
Timaru	56	67.6	43.9	55.8	+0.2	78.8	26	35.2	3, 4	2.55	8	+0.61	0.83	26	257.6
Adair	200	64.2	45.1	54.6	..	79.1	25	35.6	1, 3	2.16	9	..	0.93	26	..
Tara Hills .. .	1,600	69.7	40.3	55.0	..	77.6	24	29.5	18	0.42	3	..	0.24	30	..
Milford Sound ..	20	60.9	43.3	52.1	(+0.0)	66.4	19	35.8	3	18.62	15	(-7.51)	3.85	29	..
Waimate	200	66.8	45.1	56.0	+0.9	77.5	16, 24	34.0	1	1.75	7	-0.43	0.83	30	236.5
Queenstown .. .	1,100	68.0	44.2	56.1	+2.3	76.8	11	35.2	6	1.84	6	-0.33	0.58	30	259.4
Cromwell .. .	720	71.7	45.1	58.4	..	81.7	15	33.2	3	0.67	4	..	0.46	30	..
Ophir	1,000	70.0	41.6	55.8	+1.7	78.5	13, 25	21.8	18	1.18	2	-0.20	1.13	30	..
Earnsclough .. .	500	70.2	42.6	56.4	..	82.2	15	29.4	18	0.75	2	..	0.58	30	..
Waipiata .. .	1,550	66.4	42.5	54.4	+2.2	78.5	15	30.0	3	1.88	4	+0.27	1.31	30	275.4
Alexandra .. .	520	71.1	44.5	57.0	+1.4	82.6	15	32.2	18	0.76	3	-0.40	0.62	30	242.5
Roxburgh Hydro ..	350	69.5	45.0	57.2	..	84.5	15	36.0	1	1.35	6	..	0.69	30	..
Mid Dome .. .	1,252	65.5	41.8	53.6	..	78.0	15	29.0	3	2.91	10	..	1.10	30	..
Moa Flat, West Otago..	1,345	61.9	41.2	51.6	..	76.9	15	33.6	7	3.37	13	..	1.32	30	..
Manorburn Dam ..	2,448	63.5	36.5	50.0	+1.7	83.0	25	28.0	3	1.21	5	-0.77	0.71	30	..
Taieri	80	64.7	42.7	53.7	(+0.3)	80.1	16	31.9	7	2.74	13	(+0.39)	1.08	30	222.0
Musselburgh, Dunedin	5	62.7	46.8	54.8	(+0.0)	75.6	16	38.0	3	2.98	11	+0.35	1.18	30	229.2
East Gore .. .	245	65.1	42.8	54.0	+0.9	81.0	15	33.0	3, 7	3.25	15	-0.18	0.69	25	..
Gore	240	65.5	42.4	54.0	+0.6	80.0	15	34.0	7	3.19	17	..	0.65	25	210.7
Otautau .. .	180	63.4	40.9	52.2	..	77.8	11	31.5	19	2.55	13	..	0.67	25	..
Invercargill .. .	32	63.4	43.6	53.5	+1.2	80.0	11	34.0	1, 7	3.49	14	-0.52	0.82	25	186.6
Invercargill South ..	8	62.2	43.9	53.0	+0.2	79.0	11	34.2	7	3.54	15	(-0.57)	10.76	25	..

LATE RETURNS

Te Aroha, Oct., 1950 ..	46	69.0	49.1	59.0	+1.7	80.5	21	37.5	11, 12	4.11	16	-0.30	0.79	16	..
Golden Downs, Oct., 1950	900	63.6	40.7	52.2	+1.6	73.0	12, 13	32.0	5, 10	2.23	9	(-1.89)	1.14	15	..
Queenstown, Oct., 1950	1,100	63.7	43.7	53.7	+3.4	74.4	27	32.4	10	1.38	8	-1.88	0.62	29	190.9

NOTE.—At stations where departures from normal are in parentheses, the temperature record has been maintained for less than ten years, the rainfall record for less than twenty years, and the normals are partly interpolated.

NOTES ON THE WEATHER FOR NOVEMBER, 1950

General.—Very mild conditions prevailed for the third month in succession. As in October, easterly winds were predominant and it was not until near the end of the month that there was any sign of the onset of the westerly conditions typical of a normal spring season.

In the North Island there was excellent growth of crops and pastures, and dairy production was maintained at a very high level. On the East Coast, however, excessive rainfall has delayed shearing operations.

In Marlborough, Nelson, and Otago crops and stock have suffered through lack of rain, though in Otago timely rains during the last week afforded some relief.

Rainfall.—Apart from a slight deficiency in parts of the Waikato and Bay of Plenty districts, the rainfall over the Auckland and Hawke's Bay Provinces was well above normal. From Hawke's Bay to East Cape, and also over the Coromandel Peninsula, totals were two or three times the normal. Gisborne experienced its wettest November as well as its wettest spring since records commenced in 1878. Several other East Coast stations set new records for November rainfall.

The provinces of Taranaki and Wellington, as well as the South Island, received less than normal rainfall with the exception of part of South Otago. Near Nelson and Blenheim there has not been a drier November in over 50 years.

Heavy rains caused some flood damage in the Coromandel district on the 19th. The fall of 7.34 in. at Waihi on that day was the highest ever recorded there in November.

Temperatures.—As in the previous two months, mean temperatures were everywhere above normal. In the east and south the departure was above 1 F. increasing to 3 F. over much of the Auckland Province.

Sunshine.—The duration of sunshine was appreciably above normal in the South Island. Between Dunedin and Christchurch, and also on the West Coast, the excess was equivalent to 2 hours or more a day, setting new November records in several places.

At the other extreme, Napier had its lowest November sunshine since records commenced in 1907. The remainder of the North Island also had a substantial deficiency, except between Wellington and Palmerston North where there was a surplus of 20-30 hours.

Weather Sequence.—A period of rain accompanied a cold front which moved across the South Island on the 1st, and next day some scattered hail and thunder occurred on the east coast with the passage of a secondary front. Over the South Island settled weather then prevailed until the middle of the month due to the influence of an extensive ridge of high pressure. Occasional showers

were reported in Southland when depressions were passing in the Sub-Antarctic. In the North Island, however, the weather for the first week was very unsettled, especially in the eastern and northern portions. The cold front which arrived from the south on the 2nd became stationary for a time due to the formation of a depression north-west of Auckland. The latter travelled slowly south-eastwards to pass across the Bay of Plenty early on the 4th. Substantial rainfalls were recorded in the east and north, where further heavy rain fell on the 6th when a depression moved north-eastwards from the Central Tasman Sea to fill up slowly north of New Zealand.

On the 8th the high pressure system over the South Island embraced the whole Dominion, bringing improved weather to most of the North Island. In the interior, however, convective showers, accompanied at times by thunder and lightning, affected many districts in the afternoons.

With the passage of a weak disturbance in the sub-tropics on the 14th, easterlies freshened temporarily and rain fell intermittently throughout the day over the Auckland Province.

The high pressure system moved off to the east with the approach of an extensive cold front which began to travel slowly up the South Island on the 16th, later to become stationary across the centre of the North Island. Except in South Canterbury its passage was accompanied by moderate rain.

With the approach of a deep cyclonic depression from the northwest, rain spread rapidly over the whole of the North Island on the 18th. Easterlies rose to gale force in exposed positions and heavy rainfalls were recorded over most of the Auckland and Hawke's Bay provinces as the cyclone travelled slowly south-eastwards, finally moving out of range on the 22nd.

After moving up rapidly from the south, an active cold front passed off towards the northeast on the 23rd. An anticyclone then moved on to the North Island, the centre passing North Cape on the 25th. Another cold front accompanied by brief but heavy rain and a change to southwest winds reached Southland on the morning of the 26th. It took about forty hours to cross the remainder of the country, and was followed by an anticyclone the centre of which was over the North Island on the 28th.

North-westerlies rose to gale force about Cook Strait on the 29th when another cold front began to advance up the South Island. It made very slow progress and by the end of the month was lying across North Canterbury. The accompanying belt of rain brought welcome relief to the parched interior of the Otago Province.

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