

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for November 1967—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Fahrenheit)								Rainfall in Inches					Bright Sun- shine
		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	Mini- mum	Date				Amount	Date	
	Ft.	°F.	°F.	°F.		°F.		°F.		In.			In.		Hrs.
Otematata ..	920	..	..	..	..	73.7	27	34.0	11	4.41	11	..	1.25	16	..
Oamaru Aerodrome ..	99	61.3	42.3	51.8	..	73.7	27	34.0	11	4.41	11	..	1.25	16	..
Tara Hills, Omarama ..	1,600	58.4	38.0	48.2	-5.4	68.9	3	29.1	5	5.17	14	+3.5	1.36	26	201
Lake Hawea ..	1,147	58.1	43.4	50.8	-5.3	69.2	3	34.5	1	4.65	16	+2.2	0.62	5	..
Naseby Forest ..	2,000	57.6	35.8	46.7	-4.1	71.2	27	25.0	20	2.51	14	+0.4	0.50	16	..
Herbert Forest ..	200	64.3	37.0	50.6	..	76.2	8	32.0	20	4.47	12	..	1.43	17	..
Cherry Farm, Waikouaiti ..	21	61.3	40.6	51.0	-1.6	75.2	27	31.1	13	3.15	16	+1.2	1.12	17	..
Taieri ..	80	61.4	41.2	51.3	-2.6	76.1	27	31.5	15, 21	2.26	13	0.0	0.52	23	..
Berwick Forest ..	60	61.3	40.3	50.8	-3.1	75.7	27	29.9	15	3.35	14	+0.9	0.60	23	..
Dunedin Airport ..	4	61.4	40.1	50.8	-2.6	75.0	27	28.5	15	2.98	17	+1.1	0.62	23	185
Oamaru ..	99	62.2	43.2	52.7	..	73.3	27	33.5	13	3.52	9	..	1.11	16	..
Musselburgh, Dunedin ..	5	59.7	44.0	51.8	-2.8	76.4	27	36.5	13	2.81	17	0.0	0.40	23	168
West Arm, Lake Manapouri ..	590	53.5	40.2	46.8	-4.9	72.4	30	32.8	1	21.71	24	+9.0	2.62	13	..
Queenstown ..	1,080	60.1	40.7	50.4	-3.9	73.2	30	32.8	6	6.56	17	+4.1	1.37	23	156
Mid Dome ..	1,252	59.0	40.2	49.6	..	69.1	30	32.8	1	2.88	13	..	0.64	5	..
Cromwell ..	698	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophir ..	1,000	60.8	39.9	50.3	-4.0	74.0	29	28.6	20	2.58	9	+1.3	1.00	17	..
Moa Creek ..	1,400	59.1	37.3	48.2	-3.8	71.3	29	25.6	20	2.49	14	+1.3	0.87	17	..
Earnsclough ..	500	64.3	38.9	51.6	-3.4	76.5	29	30.5	5, 15	2.40	12	+1.3	0.88	17	..
Alexandra ..	461	63.1	43.2	53.2	-3.7	75.8	29	35.9	19	2.01	11	+0.9	0.82	17	218
Roxburgh Hydro ..	350	62.8	41.3	52.0	-4.0	74.2	30	31.0	15	1.95	12	+0.1	0.44	5, 18	..
Moa Flat, West Otago ..	1,345	57.1	38.9	48.0	-2.8	71.1	29	31.8	20	2.20	18	-0.8	0.42	2	..
Lake Mahinerangi ..	1,300	56.1	37.4	46.8	..	72.0	29	27.4	21	2.96	18	-0.2	0.61	18	..
Tapau ..	740	59.4	40.4	49.9	-3.5	77.0	29	32.2	20	3.43	17	+0.2	0.62	18	..
Rankleburn Forest ..	835	58.7	39.4	49.0	-3.5	72.6	27	31.0	20	4.55	19	..	0.83	11	..
Taieri Mouth ..	50	58.2	39.4	48.8	..	74.0	27	29.1	15	4.02	17	..	1.05	23	..
Otautau ..	180	58.4	40.1	49.2	-3.6	73.0	29	30.0	20	3.84	18	+0.3	0.97	11	178
Gore ..	225	60.7	42.4	51.4	-2.8	77.2	29	32.1	13	4.13	16	+0.9	1.21	7	..
Winton ..	145	59.0	40.6	49.8	..	74.5	29	30.1	20	2.68	18	..	0.46	2	187
Pebble Hills ..	150	59.5	41.1	50.3	-3.7	76.0	29	30.0	20	3.73	20	+0.2	0.78	11	..
Invercargill Airport ..	1	57.6	40.8	49.2	-3.0	73.6	29	34.3	20	4.46	19	+0.9	0.69	11	186
Milton ..	60	61.0	42.0	51.5	..	73.5	27	29.5	1	2.86	16	+0.6	0.53	23	..
Balclutha ..	20	59.9	42.7	51.3	..	71.4	27	33.5	21	3.23	17	..	0.58	2	186
Rarotonga ..	15	79.8	70.0	74.9	-0.2	82.9	25	60.6	18	9.10	22	+2.8	2.17	15	157
Raoul Island ..	126	71.7	62.5	67.1	+1.2	76.9	19	55.1	4	1.10	10	-1.7	0.27	1	205
Chatham Islands ..	157	58.3	46.6	52.4	-0.4	66.0	30	36.4	10	2.55	13	+0.4	0.65	6	176
Campbell Island ..	49	48.5	37.2	42.8	..	52.9	26	28.2	11	4.49	24	..	1.01	11	111
Scott Base, Antarctica ..	45	..	..	9.0	..	28.4	..	-12.5	..	..	..	..	..	..	..

LATE RETURNS

Riverhead, Oct. 1967 ..	105	67.5	49.2	58.3	+3.5	71.0	20, 28	36.8	14	0.59	10	-4.0	0.23	5	..
Te Aroha, Oct. 1967 ..	..	68.4	51.0	59.7	+2.2	73.0	19	40.0	25	0.90	12	-3.7	0.28	30	..
Kinleith, Oct. 1967 ..	1,257	63.6	46.9	55.2	..	72.6	25	36.8	25	2.48	17	..	0.41	23	..
Kaweka Forest, Oct. 1967 ..	1,358	65.1	46.9	56.0	..	73.9	18	38.2	25	2.08	9	..	0.63	23	..
Otematata, Sept. 1967 ..	920	56.5	35.4	46.0	-1.6	69.0	27	21.0	12	0.32	7	-1.0	0.13	14	..
Otematata, Oct. 1967 ..	920	62.9	39.5	51.2	-1.1	75.1	29	32.2	4	1.86	..	+0.5	0.78	2	..

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 NOVEMBER 1967

General—November was very wet. It was also unusually cloudy and windy; but November 1967 will probably be remembered mainly for the exceptionally heavy snowfall on the 16th and 17th in the Mackenzie country and surrounding areas of inland South Canterbury and North Otago. This snow caused considerable losses of sheep, besides flattening crops and disrupting transport and communications.

In many districts the rain was welcomed after the previous dry weather, and growth was generally good. However, shearing and haymaking were adversely affected; and in parts of the North Island lambs were not doing as well as usual.

No less than four tornadoes were reliably reported during the month: near New Plymouth on the 19th; in the Feilding-Woodville area of Manawatu on the 23rd; at Greymouth on the 24th; and in the Remuera-Meadowbank area of Auckland city on the 25th. All four did some damage; and the last one wrecked a hospital at Remuera.

Rainfall—Rainfall was more than double the average value over most of the South Island and Stewart Island; also over most northern districts of the North Island. The Canterbury high country about and to the south-west of Lake Coleridge received more than four times the average value. A number of stations in various parts of the country reported their highest November total; and Half Moon Bay, Stewart Island received 13.33 in., the highest in any month in 53 years of record. Otira received no less than 52.81 in. for the month.

The only area with rainfall appreciably below average was part of inland western Southland.

Temperatures—South of a line from Greymouth to Christchurch temperatures were mainly 3-6 degrees below average. Elsewhere they were close to average.

The snowfall in the Mackenzie country was reliably reported to be 2-3 feet deep in places and several times as deep in drifts. In some areas it was the worst in living memory in any month of the year. Temperatures were greatly depressed by snow lying for several days, and the mean temperature of 43°F at the Hermitage was lower than any previously recorded there in November or even October.

Sunshine—Sunshine was below average by up to 70 hours except in eastern districts and most of Southland, where it was close to average. In Buller and most of Westland it was the cloudiest November on record. Hokitika's total was only 106 hours, and Westport received 119 hours.

Weather Sequence—The month opened with an anticyclone over the North Tasman Sea and pressures low to the east and south-east. Rain was reported on the coast from South Westland to Southland; and there were also isolated showers in the North Island. With the approach of a trough of low pressure on the following day the rain extended further over the western and southern districts of the South Island. As the trough crossed the country on the 3rd and 4th light rain affected many districts.

From the 5th to the 7th a deep depression crossed the South Tasman Sea and moved past Campbell Island, while two associated troughs crossed the country. Winds were mainly between north-west and south-west, reaching well beyond gale force in some areas, especially about Cook Strait. Excessive rain was reported in the Alps and on parts of the West Coast and lighter falls elsewhere, except in eastern districts from Gisborne to Otago. A brief temporary improvement occurred in most areas on the 8th, with a small ridge of high pressure over the North Island. However, some light rain was still reported on the West Coast and the Southland coast.