

CLIMATOLOGICAL TABLE—continued  
Summary of the Records of Temperature, Rainfall, and Sunshine for January 1953—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.	°F.	In.			In.		Hrs.	
Lincoln ..	36	66.6	49.6	58.1	-2.3	82.1	20	30.7	15	5.36	15	+3.26	1.98	22	209.5
The Hermitage ..	2,510	67.5	45.1	56.3	+0.5	79.0	29	33.1	5	5.13	8	-13.66	1.50	25	227.2
Winchmore ..	626	65.5	47.7	56.6	(-3.0)	82.5	21	37.9	28	5.68	17	(+3.24)	1.60	24	..
Haast ..	15	69.4	49.7	59.6	(+1.5)	77.8	26	41.0	29	2.79	7	(-12.26)	1.46	21	308.3
Ashburton ..	323	66.7	49.4	58.0	-3.0	83.8	21	39.8	16	4.59	15	+1.96	1.14	24	168.9
Fairlie ..	1,004	67.0	44.8	55.9	-3.3	84.0	20	33.0	5	3.23	10	+0.21	1.43	24	..
Lake Tekapo ..	2,250	70.9	46.8	58.8	..	86.0	31	36.2	5	2.30	7	+0.45	1.52	24	277.2
Timaru ..	56	66.3	49.8	58.0	-2.6	79.8	20	40.8	5	2.52	15	+0.15	0.68	22	178.7
Adair ..	200	64.2	49.7	57.0	(-2.9)	77.0	20	40.8	5	2.17	12	(-0.37)	0.86	24	..
Tara Hills ..	1,600	73.5	45.2	59.4	(-2.6)	85.2	29	33.6	6	1.46	8	(-0.76)	0.87	11	255.4
Milford Sound ..	20	67.5	50.2	58.8	+1.6	72.3	15	43.6	6	3.49	3	-22.89	2.55	21	..
Waimate ..	200	67.7	49.8	58.8	-1.4	80.0	20	43.5	16, 28	1.86	12	-0.75	0.47	23	178.1
Queenstown ..	1,100	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cromwell ..	720	76.4	49.8	63.1	(+1.0)	85.8	29	37.6	5	2.00	6	(+0.22)	1.02	11	..
Ophir ..	1,000	73.4	45.3	59.4	-0.8	84.6	20	31.0	5	2.75	7	+0.91	1.41	11	..
Earnsclough ..	500	72.8	48.1	60.4	(-0.6)	84.1	20	32.5	5	1.40	5	(-0.22)	0.50	11	..
Waipiata ..	1,550	66.3	44.7	55.5	-2.5	80.5	8	33.0	5	2.71	9	+0.60	1.00	11	252.5
Alexandra ..	520	73.8	49.9	61.8	+0.1	86.1	7	35.0	5	1.60	6	-0.24	0.77	11	258.3
Roxburgh Hydro ..	350	73.2	47.6	60.4	..	87.0	7, 8	37.8	5	1.76	10	(-0.02)	0.76	11	..
Mid Dome ..	1,252	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moa Flat, West Otago ..	1,345	64.7	44.6	54.6	..	77.9	7	35.8	5	3.90	13	(+1.18)	0.89	11	..
Manorburn Dam ..	2,448	64.6	41.0	52.7	-0.4	74.0	7	30.0	5	2.65	7	+0.47	1.33	11	..
Taieri ..	80	66.1	46.9	56.5	(-1.3)	85.0	21	36.8	28	3.78	16	(+1.40)	1.56	11	185.2
Musselburgh, Dunedin ..	5	64.6	50.7	57.6	(-0.6)	79.3	21	43.0	28	2.90	15	+0.17	1.21	11	207.6
East Gore ..	245	68.2	46.0	57.1	-0.9	83.0	7	34.0	5	2.98	11	-0.10	0.61	21	..
Gore ..	240	68.7	46.7	57.7	(-0.7)	84.0	7	35.0	5	2.74	11	(-0.34)	0.63	21	197.3
Otautau ..	180	65.7	45.1	55.4	(-1.7)	79.1	7	35.2	14	2.72	10	(-0.39)	0.69	21	..
Pebble Hills ..	150	68.4	46.1	57.2	..	81.5	7	33.0	14	3.14	15	-0.44	0.74	21	..
Invercargill South ..	8	65.9	48.8	57.4	+0.2	82.2	7	36.2	14	2.38	12	(-1.43)	0.80	23	..
Invercargill Airfield ..	0	64.0	46.0	55.0	-1.2	79.3	7	31.2	14	2.45	13	-1.28	0.82	21	200.8
LATE RETURNS.															
Otara, Dec., 1952 ..	40	69.0	54.3	61.6	..	73.7	26	45.0	12	2.78	12	..	1.02	4	..
Wairakei, Dec., 1952 ..	1,275	69.1	48.9	59.0	..	83.1	28	41.2	9	8.70	17	..	1.70	4	..
Adair, Dec., 1952 ..	200	66.2	52.5	59.4	(+2.2)	77.9	14	44.6	18	2.89	9	(+0.06)	1.36	1	..
Roxburgh Hydro, Dec., 1952 ..	350	73.1	50.3	61.7	..	90.5	27	40.0	9	2.15	13	(+0.34)	1.20	3	..
Gore, Dec., 1952 ..	240	70.9	49.7	60.3	(+3.6)	84.0	27	39.5	16	2.67	14	(-0.41)	0.82	8	183.3

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. Rainfall normals have been revised and now refer to the standard period 1921-1950. Where observations are not available for the whole period, or where the site of the rain gauge has been changed, the normals are partly interpolated.

NOTES ON THE WEATHER FOR JANUARY 1953

**General.**—January's weather displayed much variety, ranging from persistently cool and wet conditions in eastern districts of the North Island to warm sunny weather in Westland. Other districts experienced less extreme conditions but generally there was a lack of settled weather. This weather pattern has been similar in its essential characteristics to that of the previous two months.

Quite apart from the serious flood damage which occurred during the last quarter in the Manawatu district and in North Canterbury, the persistent rain and lack of sunshine have adversely affected crops and delayed farming operations. Dairy production remained high, but it has been a poor season for sheep.

**Rainfall.**—Rainfall was at least double the average over North Canterbury, Marlborough, Wellington, and Hawke's Bay. Some parts of this area received over four times the average rainfall, and many totals were higher than in any January for more than fifty years. The greater part of this rainfall occurred during the passage of a storm which moved northwards from North Canterbury to Manawatu between the 24th and 27th. Major floods occurred in the Ashley, Clarence, Porangahau, and Manawatu Rivers, resulting in widespread damage to farm lands and serious disruption to road and rail communications. Exceptionally high rainfalls were recorded for the twenty-four-hour period up to 9 a.m. on the 28th at Nikau Hill (10.31 in.) and Motutararaia (9.19 in.).

Rainfall was moderately below average in Northland, Bay of Plenty, Nelson, and Southland, but in South Westland totals were less than one-quarter of the average.

Thunderstorms were unusually frequent in the Auckland and Hawke's Bay Provinces, being reported in some districts on at least eight days.

**Temperature.**—In Canterbury mean temperatures were 2°-3° F. below normal, but farther north along the east coast the departure from normal was, in places, even greater. Conditions became relatively warmed towards the west and south, temperatures in Southland being close to normal, and in Westland 1° F. above normal.

**Sunshine.**—The distribution of sunshine was very similar to that of the previous two months. In Westland the total duration was equivalent to 2½ to 3 hours a day above average, and there was a modest surplus in Otago and Southland. Elsewhere totals were below average with a large deficit east of the North Island ranges, especially in Hawke's Bay and Gisborne, where the deficit was equivalent to three hours a day.

**Weather Sequence.**—Though pressures were relatively high over New Zealand at the beginning of the month, a shallow trough lying across the middle of the country caused light rain over a wide area during the first two days. Southerly winds and cool showery weather developed in the south on the 3rd and advanced steadily northwards, while a depression from the Tasman Sea moved across Northland on the 4th.

The arrival of a large anticyclone over the South Island on the 5th brought a spell of fine warm weather, except in eastern districts of the Auckland Province where light rain continued to fall intermittently under the influence of a disturbance centred far to the north-east. Temperatures became temporarily cooler on the east coast of the South Island on the 8th and a few showers occurred in the South.

A ridge of high pressure persisted over the Dominion until the 10th, although by then the anticyclone was centred far beyond the Chatham Islands. There was a change to southerly winds in the south on the 11th as a trough began to move slowly eastwards across the country. The weather deteriorated rapidly in the North Island and in eastern districts of the South Island. A low-pressure centre within the trough moved slowly across Northland on the 12th and next day another centre developed off East Cape. On the 14th an anticyclone cell was centred just south-east of Southland and south-easterly winds had become general. This cell slowly collapsed while another, centred over the Tasman, intensified and later passed across the North Island on the 18th. Conditions improved in the North Island on the 17th, but showers persisted about and east of the main ranges. Isolated showers were also reported from Canterbury and Marlborough up to the 18th.

By the 20th the main high-pressure centre had intensified still further and was located well to the east of New Zealand. The passage of an active trough caused rain to spread eastwards across the country on the 21st—the first appreciable rainfall in South Westland since the beginning of the month. On the 22nd southerlies prevailed over the South Island and south-westerlies in the North Island causing a sharp drop in the temperature. The weather soon cleared again in South Westland but remained unsettled elsewhere.

Heavy rain developed in North Canterbury and Marlborough on the 24th due to the formation of a very active depression east of Banks Peninsula. South-easterly winds became fresh to strong south of this depression, the centre of which followed an unusual northward course and caused serious flooding progressively in Marlborough, Wairarapa, southern Hawke's Bay, and Manawatu. Some exceptionally