

CLIMATOLOGICAL TABLE—continued
Summary of the Records of Temperature, Rainfall, and Sunshine for December, 1948—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.		Hours.
Alexandra ..	520	73.6	49.3	61.4	+1.0	92.2	29	36.5	3	0.53	6	-0.85	0.20	12	232.1
Manorburn Dam ..	2,448	63.2	37.3	50.2	-1.4	83.0	29	28.0	6	1.02	8	-1.15	0.31	1	..
Musselburgh, Dunedin ..	5	66.1	49.3	57.7	(+0.3)	80.7	13	40.0	2,9	2.94	16	-0.21	0.80	13	183.0
Taieri ..	80	67.5	45.4	56.4	(+0.4)	78.6	28	36.0	1	2.49	19	-0.25	0.47	1	..
East Gore ..	245	66.9	45.8	56.4	+0.1	80.0	19	34.0	23	3.37	17	+0.14	0.60	3, 21	..
Gore ..	240	67.0	46.5	56.8	-0.1	80.5	19	36.0	23	3.56	18	..	0.66	21	187.2
Invercargill ..	32	64.5	46.2	55.4	+0.3	74.0	11, 26	35.0	10	4.66	19	+1.01	1.11	14	186.0
Invercargill South ..	8	63.8	47.5	55.6	+0.0	78.2	19	38.5	10	4.71	18	+0.97	1.14	14	..

LATE RETURNS

Te Pahi, Te Hapua, Nov., 1948	200	67.5	53.2	60.4	+0.4	72.6	10	42.4	26	2.06	13	(-1.23)	0.72	19	236.6
Te Aroha, Nov., 1948 ..	46	69.4	51.8	60.6	+0.0	74.5	1, 28	43.0	18	7.80	24	+3.91	3.31	19	..
Golden Downs, Nov., 1948	900	64.2	41.7	53.0	-1.3	68.5	3	29.6	18	5.23	13	(+1.49)	0.74	21	..
Molesworth, Nov., 1948	2,930	58.2	38.3	48.2	(-3.4)	69.0	28	29.5	17	3.50	12	(+1.25)	0.75	18	..
Balmoral, Nov., 1948 ..	743	63.3	44.1	53.7	-1.8	76.3	29	31.8	13	3.98	11	(+1.68)	1.50	13	..
Lincoln, Nov., 1948 ..	36	64.3	44.9	54.6	+0.0	81.2	9	30.7	15	2.79	12	+0.82	0.63	16	202.3

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

NOTES ON THE WEATHER FOR DECEMBER, 1948

General.—The beginning of December was changeable and rather cool, but a hot dry spell prevailed over the Christmas period. On the whole, the month was sunnier and drier than usual. Shearing and haymaking have suffered little interruption, except in Southland. Crops have done reasonably well in spite of very dry weather in eastern districts. Stock has remained in good condition.

Rainfall.—Over the greater part of the country rainfall was well below the average. Lowest totals were east of the ranges from Canterbury to Hawke's Bay, and in the Nelson and Wanganui districts. Rainfall was in excess in Southland, Fiordland, and about the Alps, mainly as a result of heavy rains from the 12th to the 14th, Milford Sound having 11.47 in. on the 12th. There was a slight surplus in the far north and along the coast from New Plymouth to Manukau Harbour.

Temperatures.—Mean temperatures were mostly one or two degrees above normal, but in Taranaki, North Auckland, and the West Coast they were slightly below normal. Two cold spells at the beginning and in the middle of the month were more than offset by the warm spell over the Christmas period. The maximum temperature of 84.3° in Wellington on the 28th was the highest of any December since records commenced in 1862.

Sunshine.—The duration of sunshine was very high in Canterbury, Marlborough, and eastern districts of the North Island. Blenheim and Gisborne had a surplus equivalent of over two hours a day. New Plymouth and Auckland, on the other hand, had substantial deficiencies. Elsewhere, departures from normal were not large, and were mainly positive.

Weather Sequence.—With an anticyclone over the Tasman Sea and a deep depression near Chatham Islands, strong south-westerlies and cold showery weather, which had set in at the end of November, continued for the first two days of December. Hail and thunderstorms were widespread, and the South Island ranges received a heavy coating of snow. It improved in the North Island on the 3rd, but rain fell intermittently in Otago and Southland, where a cold front was retarded for a time before proceeding slowly north-eastwards, to pass off the country on the morning of the 5th.

It rained on the West Coast during the night of the 6th, when a very deep depression passed in the far south. The associated cold front remained almost stationary near Cook Strait during the 7th. When passing over the North Island later it was much weakened, and produced only scattered rain in western districts. On the 8th brief rain with a secondary cold front was confined to Westland and Southland. An anticyclone which moved in from the west brought a general improvement in the weather. Temperatures dropped sharply, but soon recovered.

In the period from the 11th to the 14th two wave depressions which developed off New South Wales moved rapidly across the Tasman and southern New Zealand, giving widespread rain in Southland, Otago, and the West Coast. Unusually heavy falls in the far south-west resulted in some flooding in Southland and the Southern Lakes district. Light rains fell in Taranaki and western districts of the Wellington Province.

Cold south-westerlies became general on the 15th. Showers were frequent in the south and in other exposed places, being accompanied at times by hail and thunder. Light frosts occurred in sheltered districts of the South Island on the 15th and 16th.

North-westerlies prevailed when an anticyclone crossed to the north-east of New Zealand on the 17th. Barometers remained very low to the south-west. East coast districts north of Otago had a spell of warm dry weather; elsewhere it was mainly overcast with intermittent rain, heaviest falls being in Westland.

Winds backed westerly on the 20th. Next day there was a change to strong south-westerlies following the passage of a deep depression in the far south. Showers persisted for a time in exposed places, but with the approach of a large anticyclone from the west winds decreased and fine weather prevailed by the 23rd. The anticyclone became almost stationary, and warm sunny weather continued for a week over the whole Dominion. Local showers in the Bay of Plenty on Christmas Day and in Southland on the 27th were minor exceptions. Fog was widespread on the mornings of the 29th and 30th.

A depression which crossed Norfolk Island on the night of the 29th moved southwards into the Tasman Sea. Skies became overcast on the 30th, and rain later extended slowly southwards. Light rains also developed in the South Island as a cold air mass advanced northwards. At the end of the month the cold front had become stationary over South Auckland, the depression lay west of Taranaki, and an anticyclone was building up east of Canterbury.

M. A. F. BARNETT, Director.

Notice to Mariners No. 2 of 1949

Marine Department,
Wellington, N.Z., 17th January, 1949.

NEW ZEALAND.—SOUTH ISLAND.—OAMARU

Holmes Wharf—Less Depth Reported

Position: Lat., 45° 06' 4 S.; long., 170° 58' 5 E. (approx.).
Details: Recent soundings taken by the Harbourmaster show a least depth of 21½ ft. M.L.W.S. in the normal berthing position at Holmes Wharf.

Chart affected: No. 2532 (inset).
Publications: New Zealand Pilot, 1946, page 299; New Zealand Nautical Almanac and Tide-tables, 1949, page 275, and plan.

Authority: Oamaru Harbour Board.

W. C. SMITH, Secretary.

(M. 3/13/194.)

Notice to Mariners No. 3 of 1949

Marine Department,
Wellington, N.Z., 19th January, 1949.

NEW ZEALAND.—NORTH ISLAND.—WHANGAREI—PASSAGE ISLET
Light Established

Position: Southern extreme, Passage Islet. Lat., 35° 49' 8 S. long., 174° 29' 8 E. (approx.).

Abridged Description: Fl. R. 3 secs. 21 ft. 3 M. (U).
Details: A red light flashing every three seconds, flash 0.5 seconds, is exhibited from an unpainted concrete tower in the above position. Elevation, 21 ft.; height of tower, 5 ft.; arc of visibility, from 278° through north to 133°.

Chart affected: No. 1090.
Publications: New Zealand Pilot, 1946, page 151; New Zealand Nautical Almanac and Tide-tables, 1949, page 188, and plan.

Authority: Harbour Board, Whangarei.

W. C. SMITH, Secretary.

(M. 3/3/287.)