

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for September 1978—continued
LATE RETURNS AND CORRECTIONS—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees Celsius								Rainfall in Millimetres					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	Minimum	Date				Amount	Date	
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Arapito, August 1978 ..	20	..	5.1	..	..	..	..	1.9	29	206	18	..	33	17	..
Karamea, June 1978 ..	5	12.9	5.6	9.3	..	15.5	18	-1.8	29	122	..	..	39	8	..
Karamea, July 1978 ..	5	13.1	6.1	9.6	..	18.0	4	2.2	1	232	..	..	37	4	..
Karamea, August 1978 ..	5	13.7	6.2	10.0	..	16.3	14	3.0	3	164	..	..	..	..	..
Ashley Forest, August 1978	107	13.2	3.2	8.2	+1.0	20.6	10	-0.5	20	80	8	+6	27	25	179
Lincoln, August 1978 ..	11	13.8	2.9	8.4	+1.7	20.9	10	-1.8	20	63	8	+7	25	24	162
Naseby Forest, August 1978	610	10.5	-0.8	4.9	+1.5	16.2	23	-4.7	20	71	10	+41	44	25	..
Moa Creek, August 1978	427	11.1	-2.0	4.6	+1.1	17.5	9	-5.4	20	30	..	+15	..	..	..
Woodlands, August 1978	47	11.6	3.4	7.5	+0.9	17.2	9	-2.0	18	70	26	..	7	24	..
Milton, August 1978 ..	18	11.7	1.5	6.6	+0.7	18.1	9	-2.5	18	108	9	+70	66	25	..
Tautuku, August 1978 ..	61	11.7	3.6	7.7	..	16.8	6	-1.0	21	91	20	..	33	25	..
Rarotonga Airport, August 1978	7	25.7	19.4	22.6	+1.1	27.1	23	14.1	29	334	15	+212	221	9	175
Raoul Island, August 1978	38	19.0	14.0	16.5	+0.5	22.4	23	10.3	31	103	22	-34	31	18	174
Campbell Island, June 1978	15	6.4	2.3	4.4	-0.4	8.6	3	-1.5	11	74	30	-56	12	11	6
Campbell Island, July 1978	15	7.1	4.3	5.7	+1.1	10.3	18	-0.7	4	132	30	+25	21	12	7
Campbell Island, August 1978	15	8.2	3.8	6.0	+1.0	10.1	9	-3.4	25	134	29	+25	20	22	31
Totokoitu, Rarotonga, July 1978	9	24.2	18.6	21.4	..	27.9	29	14.2	5	107	14	..	39	23	..
Totokoitu, Rarotonga, August 1978	9	24.8	19.4	22.1	..	27.3	2	15.2	28	526	18	..	354	9	..

The "normal" refers to the present site of the instruments. Standard period for normals is 1941-1970. No normals are available for stations with only short records.

*Indicates that the sunshine recorder is not located at the station but is in the near vicinity.

A rain day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall have occurred more than once during the month, the date of the first occurrence is given.

WEATHER NOTES FOR SEPTEMBER 1978

General—Pressures were above normal over most of New Zealand during September, and exceptionally high to the east and south of the country. Winds were considerably lighter than usual throughout the month. At Paraparaumu no gusts of over 34 knots were reported, and this has never occurred before in September since records began in 1948. Cloudy conditions prevailed over most of the country with parts of Canterbury and Otago experiencing their fourth consecutive month with rainfall well above normal. Hydro storage levels were nearly 70 percent of the normal capacity in the South Island. Temperatures were slightly cooler than usual east of the main ranges. Most farmers reported that more sunshine and warmer temperatures were needed to improve grass growth. Lambing progressed well in the North Island, but in parts of Canterbury losses were high in some areas because of the wet conditions. Other stock was said to be in good condition.

Rainfall—Rainfall was slightly above normal in parts of Northland, Auckland, Poverty Bay, Hawke's Bay and the Wellington area. In the South Island the only areas with totals below normal were parts of Nelson, Westland, inland Otago and most of Southland. The greatest departures were in Canterbury, where many stations recorded more than 200 percent above their usual September totals. At Methven 242 mm were recorded during the month, and this was more than 370 percent of normal. Most of the heavy rain fell about the middle and last week of the month. At Highbank Power Station 46 mm were recorded in 12 hours on the 16th, and in 48 hours from the afternoon of the 15th nearly 87 mm.

The four months from June to September have been exceptionally wet in parts of inland Canterbury. One of the worst affected areas has been near Hororata where more than 500 mm have been measured in this period. The normal value for these four months being about 240 mm. The only access to many farms on the clay foothills is by foot or horseback, and one farmer was unable to use his four wheel drive vehicle to cross paddocks during September.

Temperatures—Temperatures were below normal in parts of Northland, Bay of Plenty, Poverty Bay, Hawke's Bay, Wairarapa and most of the South Island east of the main ranges. The greatest departures of nearly 1°C below were in Hawke's Bay and inland Canterbury. Areas of Taranaki, Nelson and Westland were above normal by about ½°C to 1°C.

Sunshine—The only areas with sunshine hours above normal were parts of Northland, Taranaki and Southland. In Bay of Plenty, Hawke's Bay, Wairarapa, Nelson, Marlborough and Canterbury the month's totals were below normal by 40 to 50 hours. At Hanmer only 95 hours were measured. This is the lowest recorded at this station in September since the station began in 1930.

WEATHER SEQUENCE SEPTEMBER 1978

The cold front which had been moving northwards over New Zealand at the end of August was lying across Northland at the beginning of the month. A ridge of high pressure extended onto the country from the Tasman Sea and on the 2nd an anticyclone had moved onto New Zealand. This anticyclone persisted until the morning of the 6th, and brought fine weather to most of the country, apart from some isolated showers in eastern districts of the North Island. Temperatures were cooler than usual over most of the country during the first week of the month, but slightly warmer in Southland and Otago from the 4th to the 8th.

During the afternoon of the 7th a weak cold front moved across the South Island, and isolated showers were reported in parts of Fiordland and Westland. Disturbances in a moist northwest flow onto the country brought rain to many areas west of the main ranges on the 8th. Heavy falls were recorded in Westland, more than 60 mm in 24 hours. By the evening of the 8th a warm front associated with a depression in the Tasman Sea had moved onto the South Island. Early on the 9th the cold front ahead of this depression had also moved onto New Zealand. As this system moved slowly across the country from the 9th to the 11th many areas in both Islands had moderate to heavy falls, the greatest being on the West Coast and in the Wellington district. More than 100 mm was recorded in the 24 hours to 9 a.m. on the 9th in Westland, and in excess of 50 mm the following day. Temperatures were warmer than usual on the east coast of the North Island on the 10th and 11th.

By the evening of the 11th a weak ridge of high pressure extended onto the country, and pressures had fallen to the south of Tasmania as a depression developed. This depression moved to the south of New Zealand, and the cold front associated with it moved onto the South Island on the 13th, bringing heavy rain to most of the country as it crossed slowly eastwards. Twenty-four hour falls