

CLIMATOLOGICAL TABLE—Summary of the Records of Temperature, Rainfall, and Sunshine for February 1977—continued
LATE RETURNS AND CORRECTIONS—continued

Station	Height of Station Above M.S.L.	Air Temperatures in Degrees (Celsius)								Rainfall (in millimetres)					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	
	Metres	°C	°C	°C	°C	°C		°C		mm		mm	mm		Hrs
Molesworth, January 1977	893	18.9	5.6	12.3	−1.8	26.7	23	0.6	10	71	9	+18	46	18	..
Craigieburn Forest, January 1977	914	15.9	6.0	11.0	−2.1	23.6	23	1.4	14	208	18	+106	57	18	..
Cromwell, January 1977 ..	213	21.1	9.0	15.1	−2.5	27.8	22	5.3	9	35	11	−8	9	4	..
Tapanui, January 1977 ..	226	17.7	7.0	12.4	−2.2	25.3	23	4.3	10	71	17	−18	19	16	..
Stewart Island, January 1977	3	15.1	8.5	11.8	..	21.5	23	3.6	18	152	26	..	23	30	..
Waitangi, Chatham Island, January 1977	44	17.1	11.0	14.1	−0.3	19.4	31	5.7	11	133	18	+80	30	21	175
Campbell Island, January 1977	15	12.0	6.7	9.4	+0.1	15.3	29	3.9	17	115	28	−9	20	30	80
Nandi Airport, Fiji, January 1977	15	31.7	23.8	27.8	+0.7	33.8	7	21.4	26	598	22	..	130	16	168

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.

NOTES ON THE WEATHER FOR FEBRUARY 1977

General—During February pressures were higher than normal over the whole of New Zealand for the first time in several months. Rainfall was below normal over most of the country, the month being rather sunny in most areas. There were two spells of particularly wintry weather on the 11/12 and 22/23 when the daily maximum temperatures were well below normal over most of the country. Farmers reported in many parts of the North Island that conditions had become very dry with pastures showing little growth. Some considerable falls of rain towards the end of the month did bring relief to farmers in some areas.

Rainfall—Rainfall was below the normal February value with the exception of parts of Taranaki, Manawatu, Wellington, Wairarapa, Hawke's Bay, Nelson, Marlborough, South Canterbury, and Southland. Parts of Hawke's Bay received nearly 4 times the normal value whilst some stations in the Northland region received only 15 percent of the normal value for the month. Fiordland and Westland were dry, having only received about 40 to 50 percent of the normal monthly fall. Areas north of Hamilton and Tauranga nearly all had less than half the normal rain. There were heavy falls of rain in the Hawke's Bay region on the 23rd and 24th when 190 mm was recorded at Wairoa in a 48 hour period up to 9 a.m. on the 24th. One reporting station near Wairoa recorded 230 mm in 24 hours on the 23rd/24th. Major flooding in Wairoa was caused by the Tawhaara Stream breaking its banks, and many slips closed the road from Gisborne to Napier.

Temperatures—Temperatures were slightly above normal over most of the northern half of the North Island. Parts of Hawke's Bay, Wairarapa and Wellington were ½° to 1°C below normal. In the South Island, the West Coast, Otago and parts of Canterbury had temperatures above normal by as much as ½°C, but other areas were below normal by the same amount.

Sunshine—Sunshine was above or near normal over the whole of New Zealand. Some areas in Northland, Auckland, Taranaki, Westland and Otago had nearly 50 hours more sunshine than normal. Some districts of Hawke's Bay had slightly below normal hours of sunshine for the month.

Weather sequence—The ridge of high pressure that had extended onto the North Island at the end of January moved to the east with pressures falling to the south of the country. A cold front was moving towards the South Island and on the 2nd this front moved northwards over the country bringing considerable rain to the West Coast. Temperatures were warm in the Poverty Bay and Hawke's Bay areas.

On the 3rd the front had moved to the north of New Zealand and a ridge of high pressure extended onto the whole of the country from the Tasman Sea though pressures were low to the south of the country. An anticyclone became established over the country and persisted from the 4th to the 6th bringing settled weather to most of the country. Temperatures were warm in areas of coastal Southland and Otago.

By the 7th the anticyclone had started to move away from the country and a trough of low pressure with associated cold front was approaching the South Island. As this front passed northwards most of the South Island, with the exception of parts of Nelson and Marlborough, recorded some rain. The front was weak as it passed over the North Island and only a few isolated areas reported small falls of rain. A ridge of high pressure extended from the Tasman Sea onto the country late on the 7th and an anticyclone persisted over the country until the 10th. Temperatures were warm in coastal Canterbury, Hawke's Bay and Poverty Bay.

A trough of low pressure moved onto the South Island early on the 10th with pressures still high over the northern half of the North Island. As the cold front associated with the trough moved onto the North Island a small depression formed on the front, this moved northeast and brought heavy rain to the Wellington area and parts of Hawke's Bay on the 11th. Temperatures were cold over most of the country especially on the east coasts of both Islands on the 11th and 12th.

The depression moved eastwards and a ridge of high pressure extended onto the country. An anticyclone was established over New Zealand from the 13th to the 18th with only one weak cold front passing over the South Island and lower North Island on the 16th and this brought light showers to Fiordland, parts of Canterbury, Nelson and Wellington. Temperatures were warm over most of the country especially on the east coasts of both Islands.

On the 19th the anticyclone moved eastwards and a small depression formed on a front in the Tasman Sea which moved slowly eastwards onto the country. This depression became complex, forming two low pressure centres as it passed over central New Zealand on the 21st. Heavy rain was reported on the 21st and 22nd in Westland, central Canterbury, Nelson, Wellington and Taranaki, and on the 23rd there were heavy falls in the Hawke's Bay and Poverty Bay areas and there was major flooding in Wairoa. Temperatures were very cold on the east coasts of both the North and South Islands on the 22nd and 23rd.

A ridge of high pressure moved onto the South Island and central New Zealand on the 23rd, the depression over the North Island gradually moving northeastward away from the country. Pressures were low to the north of New Zealand and near Tasmania. An anticyclone brought settled weather over most of the country from the 25th to early on the 27th, light showers were reported in parts of Northland, Hawke's Bay, Poverty Bay and the Wairarapa.

On the 27th a depression had formed on a front in the Tasman Sea. This system moved eastwards and in the morning of the 28th the cold front associated with this depression had moved onto the South Island and was moving northwards. Heavy rain was recorded on the West Coast and this gradually spread northwards over the country.