THE WEATHER IN NEW ZEALAND IN MARCH 1986

General-March was a sunny month, especially over the North Island.

Southerlies prevailed over the north of the North Island, with less strong winds than usual. The frequency of south-easterlies was the second highest since records began in 1956. West to northwesterlies prevailed over the south of the South Island, and strong winds were also not as frequent as usual.

Mean sea level pressures were 1hPa above average in the north of the North Island, and up to 3hPa above average in the South Island.

Pasture growth and stock condition were generally very good. Some farmers in South Canterbury and parts of North Otago found harvesting of crops difficult due to paddocks being too wet.

On the 12th and 13th, an almost stationary depression had developed in the Tasman Sea, and a convergent easterly air stream existed over the Canterbury region. Rainfall was heaviest in parts of South Canterbury where serious flooding resulted. A total of 114 mm was recorded at Timaru Airport in the 24 hours to 9 a.m. on the 13th.

Many roads were scoured and the main trunk railway line was undermined in many places. Approximately 50 bridges were partly washed away by flooded rivers or seriously damaged. Drainage systems failed to cope with the 100 to 150 mm of rainfall over the 24 hours in some places. The worst affected township was Pleasant Point. 1200 people were evacuated, and a state of emergency declared, as the Tengawai River burst its banks and water up to 1.5 m deep flooded the town. 150 people were also evacuated from the township of Seadown; all lifted out by helicopter. There were major stock losses. The total cost of the damage due to the floods has been estimated to be \$39 million.

A thunderstorm on the evening of the 12th affected the whole of the Dannevirke Electric Power Board region from Norsewood to Woodville. During the afternoon and evening of the 13th, thunderstorms accompanied by heavy rain resulted in surface flooding in shops and streets in Masterton. 122 mm was recorded in the 24 hours to 9 a.m. on the 14th at Waingawa, which is the highest on record for March.

Fog occurred at Hamilton, Rotorua, Napier, Taupo, Wanganui, Wellington and Christchurch Airports on the 15th, causing their closure during the morning.

Rainfall—Rainfall was below average throughout the North Island, apart from the Wairarapa and Wellington. Only 16 mm (12 percent of normal) was recorded at Whangarei, and 12 mm (18 percent of normal) at Taupo Airport. 188 mm (247 percent of normal) was recorded at Waingawa. In the South Island it was drier than average in Nelson and on the West Coast, north of Hokitika, with rainfall between 50 to 70 percent of average. On the East Coast, from Cape Campbell to Dunedin, monthly totals were much higher than average. The total of 187 mm (328 percent of normal) for Timaru Airport was the highest on record. Records began there in 1956.

The whole of the Canterbury region received over 200 percent of average, due mainly to the heavy rainfall on the 12th and 13th.

Temperatures—The only region to record well above average temperatures in the North Island was in the Wairarapa. The mean daily temperature at Waingawa was 2.0°C above normal. The mean daily maximum was 1°C below normal, while the mean daily minimum was almost 4.5°C above normal. This was the highest since records began in 1906 and was due to many cloudy nights.

Over the remainder of the North Island mean temperatures were between 0.5° C below to near normal for March.

Over the South Island temperatures were about 1°C below average in Marlborough and 1°C above average in Central Otago. Elsewhere mean daily temperatures were near normal.

Sunshine—March was a particularly sunny month over most of New Zealand. Record high monthly hours of sunshine were recorded in many western North Island regions from Taranaki to Auckland, where sunshine hours ranged between 120 to 140 percent of average.

Sunshine hours were slightly below average in Otago and Southland.

Some of the greatest departures from normal this month were:

Station	Start of Record	Amount of Sunshine	Departur from Normal Hrs	e Rank
Auckland City	1962	246	+ 66	Highest on record
Auckland Airport	1969	259	+77	Highest on record
New Plymouth Airport	1972	262	+68	Highest on record
Stratford	1963	241	+68	Highest on record
Levin	1956	218	+ 52	3rd highest on record
Paraparaumu Airport	1953	245	+61	2nd equal highest on record
Nelson	1935	248	+ 48	