

National Climate Summary – February 2012: Extremely cloudy. Cool in eastern areas.

- **Sunshine: Extremely cloudy over much of New Zealand.**
- **Temperatures: Cooler than usual in eastern areas, as well as the Central North Island. Above average temperatures for the West Coast of the South Island and Fiordland.**
- **Rainfall: Extremely dry for Fiordland. Dry for north Canterbury, Kaikoura coast, and Wairarapa. Patchy wet regions, especially Otago, South Canterbury, Takaka, Auckland, Taranaki, Gisborne, inland Hawkes Bay and inland Bay of Plenty.**
- **Soil Moisture: Above normal for the time of year for Auckland, Bay of Plenty, Taranaki, Tasman, Otago and south Canterbury. Below normal for coastal Southland, Fiordland, Wairarapa and southern Hawkes Bay.**

February was characterised by highs to the southeast of New Zealand, and more lows than normal over the north Tasman Sea. This produced more easterly winds than usual over the country. It was an extremely cloudy month for much of the country, due to both the moist easterly wind flows, and cooler than usual seas around New Zealand. Well below average temperatures were observed in eastern regions of both Islands, because of the onshore easterly winds, but it was a warmer than usual month for the West Coast. Rainfall for the month was rather patchy – with some very dry regions bordering extremely wet ones – in part because frequent thunderstorm activity during the month resulted in rather local rainfalls.

It was an extremely cloudy February across much of New Zealand. Well below normal sunshine totals (below 75 percent of February normal) were observed between Hamilton and Dunedin. It was the cloudiest February on record for Dannevirke, Waipawa, Stratford, and Blenheim.

Well below average temperatures (more than 1.2°C below average) were experienced in Canterbury, as well as along the east coast of the North Island, the Central Plateau, Taupo and Bay of Plenty. Below average temperatures (between 0.5°C and 1.2°C below average) were observed in coastal Otago, the Kaikoura Coast and Blenheim, as well as Wellington, the Kapiti Coast, Manawatu-Wanganui, and the Waitomo District. In contrast, above average February temperatures (between 0.5°C and 1.2°C above average) were recorded in Fiordland and along the West Coast. Elsewhere, mean temperatures for February were close to average. The nation-wide average temperature in February was 16.4°C (0.8°C below the 1971–2000 February average), using NIWA's seven-station temperature series which begins in 1909.

It was an extremely dry February for Fiordland, with less than half of February normal rainfall recorded there. Below normal rainfall (between 50 and 79 percent of February normal) was experienced in north Canterbury and the Kaikoura coast, Wairarapa, as well as parts of Waikato and northwards of the Bay of Islands. In contrast, it was very wet for inland Southland, Otago, the Lakes District, and Takaka (mainly due to the event on 22/23 February), south Canterbury, Taranaki, Gisborne, inland Hawkes Bay and inland Bay of Plenty, much of Auckland, and the Coromandel (with more than 120 percent of February normal recorded in these regions). Soil moisture levels at the end of February were above normal in Auckland, Bay of Plenty, Taranaki, Tasman, Otago and south Canterbury. In contrast, soils were drier than usual in coastal Southland, Fiordland, Wairarapa and southern Hawkes Bay.

Further Highlights:

- The highest temperature was 30.4°C, observed at Hastings on 23 February.
- The lowest temperature was -0.2°C, recorded at Chateau, Ruapehu, on 28 February.
- The highest 1-day rainfall experienced was 275 mm, recorded at North Egmont on 22 February.
- The highest gust recorded was 158 km/hr at Cape Turnagain, on 1 February.
- Of the six main centres, Auckland was the warmest, Tauranga the sunniest, Christchurch the driest, and Dunedin the wettest and cloudiest.

For further information, please contact:

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SUNSHINE: EXTREMELY CLOUDY OVER MUCH OF NEW ZEALAND

It was an extremely cloudy February across much of New Zealand. Well below normal sunshine totals (below 75 percent of February normal) were observed between Hamilton and Dunedin. It was the cloudiest February on record for Dannevirke, Waipawa, Stratford, and Blenheim.

Record or near-record February sunshine hours were recorded at:

Location	Sunshine (hours)	Percentage Of normal	Year records began	Comments
Turangi	134	69	1976	2nd-lowest
Dannevirke	124	67	1963	Lowest
Martinborough	125	63	1986	2nd-lowest
Waipawa	124	71	1945	Lowest
Wellington	148	71	1928	3rd-lowest
Wallaceville	129	65	1939	3rd-lowest
Stratford	119	57	1963	Lowest
Takaka	139	64	1985	2nd-lowest
Blenheim	138	60	1947	Lowest
Cheviot	146	75	1983	2nd-lowest
Dunedin	108	71	1947	3rd-lowest

TEMPERATURE: COOLER THAN USUAL IN EASTERN AREAS, AS WELL AS THE CENTRAL NORTH ISLAND. ABOVE AVERAGE TEMPERATURES FOR THE WEST COAST OF THE SOUTH ISLAND AND FIORDLAND. NEAR AVERAGE ELSEWHERE.

Well below average mean temperatures (more than 1.2°C below average) were experienced in Canterbury, as well as along the east coast of the North Island, the Central Plateau, Taupo and Bay of Plenty. Below average temperatures (between 0.5°C and 1.2°C below average) were observed in coastal Otago, the Kaikoura Coast and Blenheim, as well as Wellington, the Kapiti Coast, Manawatu-Wanganui, and the Waitomo District. In contrast, above average February temperatures (between 0.5°C and 1.2°C above average) were recorded in Fiordland and along the West Coast. Elsewhere, mean temperatures for February were close to average (within 0.5°C of the January average). The nation-wide average temperature in February was 16.4°C (0.8°C below the 1971–2000 February average), using NIWA's seven-station temperature series which begins in 1909¹.

In particular, afternoon (maximum) temperatures were affected by the cloudy conditions during the month. Extremely low maximum temperatures were recorded in February for eastern areas of both Islands, as well as the North Island Central Plateau (see Table below).

Record or near-record monthly-average maximum air temperatures for February were recorded at:

Location	Mean maximum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Taupo	20.9	-2.5	1949	4th-lowest
Turangi	21.3	-1.7	1968	3rd-lowest
Takapau Plains	19.2	-2.8	1962	2nd-lowest
Dannevirke	19.6	-3.1	1951	2nd-lowest
Castlepoint	19.0	-2.8	1972	2nd-lowest
Martinborough	21.2	-3.2	1986	2nd-lowest
Ngawi	20.3	-1.5	1972	3rd-lowest
Gisborne	21.7	-2.6	1905	3rd-lowest
Waipawa	21.0	-2.9	1945	4th-lowest

¹ Interim monthly value.

Wairoa	21.6	-2.5	1964	3rd-lowest
Mahia	20.1	-1.4	1990	3rd-lowest
Wanganui	20.3	-2.4	1937	4th-lowest
Farewell Spit	21.0	-1.2	1971	4th-lowest
Cape Campbell	18.2	-3.4	1953	4th-lowest
Culverden	19.7	-4.0	1928	2nd-lowest
Waipara West	21.0	-2.6	1973	4th-lowest
Le Bons Bay	17.1	-2.1	1984	2nd-lowest
Orari	18.3	-3.5	1972	2nd-lowest
Timaru	17.5	-3.2	1885	2nd-lowest
Oamaru	17.5	-3.1	1908	4th-lowest
Dunedin	16.5	-2.4	1947	2nd-lowest
Balclutha	17.6	-2.4	1964	2nd-lowest
Nugget Point	15.6	-2.1	1970	4th-lowest

Record or near-record monthly-average minimum air temperatures for February were recorded at:

Location	Mean minimum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Martinborough	10.4	-1.7	1986	2nd-lowest
Wanganui	11.9	-2.0	1937	4th-lowest

RAINFALL: EXTREMELY DRY FOR FIORDLAND. DRY FOR NORTH CANTERBURY, KAIKOURA COAST, AND WAIRARAPA. PATCHY WET REGIONS, ESPECIALLY OTAGO, SOUTH CANTERBURY, TAKAKA, AUCKLAND, TARANAKI, GISBORNE, INLAND HAWKES BAY AND INLAND BAY OF PLENTY.

Rainfall for February was rather patchy – with some very dry regions bordering extremely wet ones – in part because frequent thunderstorm activity during the month resulted in rather local rainfalls.

It was an extremely dry February for Fiordland, with less than half of February normal rainfall recorded there. Below normal rainfall (between 50 and 79 percent of February normal) was experienced in north Canterbury and the Kaikoura coast, Wairarapa, as well as parts of Waikato and northwards of the Bay of Islands. In contrast, it was very wet for inland Southland, Otago, the Lakes District, and Takaka (mainly due to the event on 22/23 February), south Canterbury, Taranaki, Gisborne, inland Hawkes Bay and inland Bay of Plenty, much of Auckland, and the Coromandel (with more than 120 percent of February normal recorded in these regions).

Soil moisture levels at the end of February were above normal in Auckland, Bay of Plenty, Taranaki, Tasman, Otago and south Canterbury. In contrast, soils were drier than usual in coastal Southland, Fiordland, Wairarapa and southern Hawkes Bay.

Record or near-record February rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
Lumsden	135	175	1982	2nd-highest
Cromwell	88	275	1949	Highest
Alexandra	76	252	1983	4th-highest
Balclutha	101	167	1964	4th-highest

FEBRUARY CLIMATE IN THE SIX MAIN CENTRES

It was an extremely cloudy month for all six of the main centres, and rather a wet February too (with the exception of Tauranga, where near normal February rainfall was observed). Sunshine totals were the 3rd lowest for February, for both Wellington and Dunedin. February temperatures were near average for Auckland, Tauranga and Hamilton, but below average for Wellington and Christchurch, and well below average for Dunedin. Of the six main centres, Auckland was the warmest, Tauranga the sunniest, Christchurch the driest, and Dunedin the wettest and cloudiest.

February 2012 main centre climate statistics:

Location	Mean temp. (°C)	Departure from normal (°C)		Rainfall (mm)	% of normal		Sunshine (hours)	% of normal	
Auckland ^a	19.4	-0.5	Near average	102	136%	Above normal	169	85%	Below normal
Tauranga ^b	19.3	-0.2	Near average	78	107%	Near normal	154	78%	Below normal
Hamilton ^c	18.2	-0.4	Near average	117	188%	Well above normal	179 ^g	85%	Below normal
Wellington ^d	16.0	-1.1	Below average	77	124%	Above normal	148	71%	3rd lowest since 1928
Christchurch ^e	16.0	-0.8	Below average	55	134%	Above normal	150	77%	Below normal
Dunedin ^f	14.0	-1.2	Well below average	123	199%	Well above normal	108	71%	3rd lowest since 1947

^a Mangere ^b Tauranga Airport ^c Hamilton Airport ^d Kelburn ^e Christchurch Airport ^f Musselburgh ^g Ruakura

HIGHLIGHTS AND EXTREME EVENTS

- **Rain and slips**

The highest 1-day rainfall experienced was 275 mm, recorded at North Egmont on 22 February.

On 17 February, very heavy rain in Auckland caused flooding and damaged homes in Glen Eden and Titirangi. The storm caused the cancellation of a flight from Auckland to Wellington, and delays to some international flights as well as flights to Christchurch, Tauranga, and Blenheim. Flash floods also hit Taupo.

On 22 and 23 February, heavy rain in Otago flooded properties in Alexandra, and caused Shotover Jet in Queenstown to cancel boat trips because of high river levels. Dunedin Airport was closed for several hours, and rural roads in South Otago, and SH97 at Lowther in northern Southland, were closed by surface flooding. About 25 tourists were trapped at a camping ground at Trotter's Gorge near Hampden, and some groups in the Otago Goldfield's Heritage Trust Cavalcade Trail became stuck in the Nevis area. In the Nelson area, slips came down on Cable Bay Road. Hospitals in both Rotorua and Taupo were flooded, with some patients having to be moved. One flight from Hamilton Airport was cancelled because of the conditions, and others delayed. A large slip blocked one lane of SH2 inland from Opotiki. On 24 February, many Otago roads remained closed after the very heavy rain, including SH90 at Pomohaka Bridge between Raes Junction and Gore.

Record or near record February extreme 1-day rainfall totals were recorded at:

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Takaka	139	22nd	1976	Highest
Appleby	65	22nd	1941	4th-highest
Lumsden	45	23rd	1982	2nd-highest
Cromwell	42	22nd	1949	4th-highest
Alexandra	38	22nd	1983	3rd-highest
Balclutha	50	23rd	1964	3rd-highest
Nugget Point	50	23rd	1930	2nd-highest

- **Temperatures**

The highest temperature was 30.4°C, observed at Hastings on 23 February. The lowest temperature was recorded at Chateau, Ruapehu, being -0.2°C on 28 February.

Record or near-record daily maximum air temperatures for February were recorded at:

Location	Extreme maximum temperature (°C)	Date of extreme temperature	Year Records Began	Ranking
Whitianga	18.2	12th	1971	2nd-lowest
Whakatane	18.9	28th	1975	2nd-lowest
Taumarunui	13.8	28th	1947	2nd-lowest
Turangi	15.0	28th	1968	Equal 4th-lowest
New Plymouth	16.7	28th	1944	Equal 4th-lowest
Puysegur Point	11.4	18th	1978	Equal 3rd-lowest
Tiwai Point	11.5	18th	1972	Equal 3rd-lowest

Record or near-record daily minimum air temperatures for February were recorded at:

Location	Extreme minimum temperature (°C)	Date of extreme temperature	Year records Began	Ranking
Kaitaia	21.3	23rd	1985	2nd-highest
Kerikeri	21.5	23rd	1981	Highest
Kaikohe	22.2	23rd	1973	Highest
Whangarei	21.9	23rd	1967	3rd-highest
Dannevirke	2.3	29th	1951	Equal 4th-lowest
Martinborough	2.3	28th	1986	2nd-lowest
Hicks Bay	9.7	26th	1969	Equal 3rd-lowest

- **Wind**

The highest gust recorded was 158 km/hr at Cape Turnagain, on 1 February.

On 17 February, a tornado blew roofs off houses in the Taupo suburb of Paetiki.

On 23 February, gale force winds toppled trees in the Nelson region, closing roads for short periods. Two large yachts ended up on the beach at Anchorage in the Abel Tasman National Park after dragging their anchors, making it necessary to cut tangled anchor lines. In Motueka, power was cut to the central area.

Near-record high extreme wind gusts for February were recorded at:

Location	Extreme wind gust speed (km/hr)	Date of extreme gust	Year records began	Comments
Castlepoint	152	1st	1972	Equal 3rd-highest
Westport	83	23rd	1973	3rd-highest

- **Lightning and hail**

On 15 February, a swarm of twisting waterspouts was reported over the Waitemata Harbour, Auckland, including one large waterspout that moved along the harbour edge past the central business district.

On 17 February, a severe thunderstorm moved over Auckland accompanied by heavy rain. Hail in Kaitaia and Wellsford was so heavy, drivers were forced to stop at the side of the road.

On 20 February, a severe thunderstorm affected the Central North Island.

On 24 February, thunderstorms affected the West Coast of the South Island.

- **Cloud and fog**

On 15 February, heavy fog covered Hastings and Clive.

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