

New Zealand Climate Summary: February 2020

Issued: 4 March 2020

Dry in the North Island; flooding in the lower South Island

Rainfall	February was extremely dry across the North Island with most locations observing well below normal (<50% of normal) rainfall. In fact, some locations in Northland and the central North Island received less than 10% of their normal February rainfall. Well below normal rainfall also occurred across Nelson and Marlborough. Rainfall was generally below normal (50-79% of normal) from Taranaki to Kapiti Coast as well as much of Tasman and northern Canterbury. Conversely, rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) across much of the lower West Coast, Otago, and Southland. Some locations observed rainfall amounts >200% of their February normal.
Temperature	February was a warm month across New Zealand, with above average (0.51-1.20°C above average) to well above average (>1.20°C above average) temperatures observed across nearly all of the North Island as well as much of the upper and central South Island. Meanwhile, near average (-0.5°C to +0.5°C from average) temperatures were observed across western Waikato, coastal Taranaki, much of the West Coast, and Fiordland.
Soil Moisture	As of 1 March, soil moisture levels were below to well below normal across nearly all of the North Island and the top of the South Island. In addition, severe meteorological drought was in place across Northland, Auckland, much of Waikato, western Bay of Plenty, East Cape, and southern Marlborough, while meteorological drought was found from Gisborne to Bay of Plenty and south to Manawatu-Whanganui and eastern Taranaki. Conversely, soils were wetter than normal across the West Coast, Otago, and much of Southland.

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Overview

February 2020 was characterised by above normal pressure over and north of the North Island, with below normal pressure to the southeast of New Zealand. This pressure setup was associated with minimal air flow anomalies, particularly in the North Island where high pressure was dominant during February.

February was extremely dry across nearly all of the North Island and the top of the South Island, with widespread below or well below normal rainfall observed. Several locations experienced record or near-record long dry spells (see *Highlights and extreme events* for further details), while as of 29

February severe meteorological drought was present across Northland, Auckland, much of Waikato, western Bay of Plenty, East Cape, and southern Marlborough according to NIWA's New Zealand Drought Index. This resulted in numerous water restrictions, fire bans, and MPI declaring two medium-scale adverse events from Northland to northern Waikato. Conversely, heavy rainfall in early February resulted in severe flooding across Fiordland, Otago, and Southland, particularly along the Mataura River. Several locations in the lower South Island observed record or near-record February rainfall amounts.

February was a warm month across New Zealand, with a majority of locations observing above or well above average temperatures due to prominent high pressure and prevalent sunshine. Notably, an unusually warm air mass early in the month resulted in all-time maximum temperature records being set in Whitianga, Te Puke, Whakatane, and Whangarei (see *Highlights and extreme events* for further details). The nationwide average temperature in February 2020 was 18.2°C, which is 1.0°C above the 1981-2010 February average from NIWA's seven station temperature series which begins in 1909, and the 11th-warmest February on record.

New Zealand has not had a month with below average temperatures in 37 months, or since January 2017.

Further Highlights:

- The highest temperature was 37.4°C, observed at Napier on 2 February.
- The lowest temperature was -0.3°C, observed at Hanmer Forest on 9 February.
- The highest 1-day rainfall was 509 mm, recorded at Milford Sound on 3 February.
- The highest wind gust was 195 km/h, observed at Cape Turnagain on 2 February.
- Of the six main centres in February 2020, Tauranga was the warmest and driest, Dunedin was the coldest and wettest, Auckland was the sunniest, and Christchurch was the least sunny.
- Of the available, regularly reporting sunshine observation sites, the sunniest four locations in 2020 so far are Bay of Plenty (618 hours), Taranaki (592 hours), Waikato (584 hours) and Auckland (564 hours).

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Rainfall: Very dry in the north; flooding in the south

February was extremely dry across the North Island, with most locations observing well below normal (<50% of normal) rainfall. In fact, some locations in Northland and the central North Island received less than 10% of their normal February rainfall. Well below normal rainfall also occurred across Nelson and Marlborough. Rainfall was generally below normal (50-79% of normal) from Taranaki to Kapiti Coast as well as much of Tasman and northern Canterbury. Conversely, rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) across much of the lower West Coast, Otago, and Southland. Some locations observed rainfall amounts >200% of their February normal.

Several record dry spells lasted into February, including 47 days at multiple locations in Auckland and 64 days in Blenheim, with records dating back to 1943 and 1927, respectively. The dry weather resulted in numerous water restrictions, fire bans, and MPI declaring two medium-scale adverse events from Northland to northern Waikato.

Conversely, heavy rainfall brought severe flooding to the lower South Island during early February, particularly along the Mataura River in Southland, resulting in a State of Emergency being declared. Between 1-4 February, Milford Sound received 1104 mm of rain, which is 243% of its normal February rainfall and 16% of its annual normal rainfall.

As of 1 March, soil moisture levels were below to well below normal across nearly all of the North Island and the top of the South Island. In addition, severe meteorological drought was in place across Northland, Auckland, much of Waikato, western Bay of Plenty, East Cape, and southern Marlborough, while meteorological drought was found from Gisborne to Bay of Plenty and south to Manawatu-Whanganui and eastern Taranaki. Conversely, soils were wetter than normal across the West Coast, Otago, and much of Southland.

Location	Rainfall	Percentage	Year records	Comments		
	total (mm)	of normal	began			
High records or near-records						
Nugget Point	176	273	1930	Highest		
Milford Sound	1376	303	1929	2nd-highest		
Balclutha	179	272	1964	2nd-highest		
Clyde	92	229	1978	3rd-highest		
Waipounamu	186	237	1917	4th-highest		
Cromwell	79	225	1949	4th-highest		
Gore	169	200	1907	4th-highest		
Low records or near-records						
Kaitaia	4	4	1948	Lowest		
Kaikohe	5	5	1956	Lowest		

Record¹ or near-record February rainfall totals were recorded at:

¹ The rankings (1st, 2nd, 3rd.etc) in all Tables in this summary are relative to climate data from a *group* of nearby stations, some of which may no longer be operating. The current climate value is compared against all values from any member of the group, without any regard for homogeneity between one station's record, and another. This approach is used due to the practical limitations of performing homogeneity checks in real-time.

Dargaville	1	1	1943	Lowest
Warkworth	5	5	1966	Lowest
Whitianga	12	10	1961	Lowest
Rotorua	2	3	1963	Lowest
Takapau Plains	10	14	1962	Lowest
Whatawhata	9	11	1952	2nd-lowest
Te Kuiti	3	3	1950	2nd-lowest
Turangi	4	3	1968	2nd-lowest
Dannevirke	7	8	1951	2nd-lowest
Napier	2	4	1870	2nd-lowest
Whangarei	9	9	1937	Equal 2nd-lowest
Kerikeri	9	7	1935	3rd-lowest
Paeroa	8	9	1914	3rd-lowest
Te Puke	18	16	1973	3rd-lowest
Masterton	7	11	1926	3rd-lowest
Appleby	1	2	1932	3rd-lowest
Taumarunui	9	10	1913	4th-lowest
Tutira	8	9	1894	4th-lowest
Mahia	18	21	1990	4th-lowest

Temperature: A warm month across much of New Zealand

February was a warm month across New Zealand due to prominent high pressure and prevalent sunshine, with above average (0.51-1.20°C above average) to well above average (>1.20°C above average) temperatures observed across nearly all of the North Island as well as much of the upper and central South Island. Meanwhile, near average (-0.5°C to +0.5°C from average) temperatures were observed across western Waikato, coastal Taranaki, much of the West Coast, and Fiordland.

Temperatures were particularly warm in early February due to an unusually warm air mass overhead, with multiple locations observing record or near-record maximum temperatures between 1-4 February. In fact, Whitianga, Te Puke, Whakatane, and Whangarei each set all-time maximum temperature records.

The nationwide average temperature in February 2020 was 18.2°C, which is 1.0°C above the 1981-2010 February average from NIWA's seven station temperature series which begins in 1909, and the 11th-warmest February on record.

Location	Mean air temp. (°C)	Departure from average (°C)	Year records began	Comments
High records or near-records				
Motu	18.0	2.2	1990	Highest
Waipawa	20.3	2.4	1945	Highest
Medbury	19.2	2.1	1927	Highest

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

Rotorua	19.9	2.1	1964	2nd-highest
Таиро	19.9	2.8	1949	2nd-highest
Wairoa	22.2	3.3	1964	2nd-highest
Mahia	20.3	2.0	1990	2nd-highest
Farewell Spit	20.2	2.1	1971	2nd-highest
Hanmer Forest	18.9	3.3	1906	2nd-highest
Waiau	19.3	2.2	1974	2nd-highest
Cheviot	18.7	2.3	1982	2nd-highest
Lake Tekapo	17.7	2.9	1927	2nd-highest
Whangarei	22.0	1.8	1967	3rd-highest
Whangaparaoa	21.8	1.6	1982	3rd-highest
Whitianga	20.8	1.5	1962	3rd-highest
Tauranga	21.5	1.7	1913	3rd-highest
Te Puke	20.7	2.0	1973	3rd-highest
Martinborough	19.9	2.2	1986	3rd-highest
Ngawi	20.1	1.6	1972	3rd-highest
Gisborne	21.8	2.8	1905	3rd-highest
Hastings	20.8	3.0	1965	3rd-highest
Upper Hutt (Trentham)	19.1	1.9	1939	3rd-highest
Stratford	18.3	2.0	1960	3rd-highest
Kaikoura	18.5	2.0	1963	3rd-highest
Whakatane	20.9	1.4	1974	4th-highest
Masterton	20.1	2.8	1906	4th-highest
Takapau Plains	19.1	2.3	1962	4th-highest
Hicks Bay	20.8	1.7	1969	4th-highest
Porirua	18.6	0.7	1968	4th-highest
Rangiora	18.1	1.7	1965	4th-highest
Akaroa	19.0	1.9	1978	4th-highest
Low records or near-records				
None observed				

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

Location	Mean maximum air temp. (°C)	Departure from average (°C)	Year records began	Comments
High records or near-records				
Whangarei	28.3	3.8	1967	Highest
Leigh	27.2	4.2	1966	Highest
Whangaparaoa	26.3	2.6	1982	Highest
Whitianga	27.7	3.7	1962	Highest
Paeroa	27.9	2.7	1947	Highest
Matamata	28.1	3.6	1999	Highest
Tauranga	26.5	2.5	1913	Highest
Te Puke	26.4	2.7	1973	Highest
Rotorua	26.2	3.7	1964	Highest
Таиро	27.2	4.5	1949	Highest
Motu	24.8	4.2	1990	Highest

Hamilton (Airport)	27.9	3.2	1946	Highest
Te Kuiti	28.3	3.8	1959	Highest
Turangi	25.7	2.7	1968	Highest
Hicks Bay	24.8	2.6	1969	Highest
Hastings	27.0	3.9	1965	Highest
Waipawa	28.0	4.2	1945	Highest
Wairoa	28.8	4.8	1964	Highest
Stratford	24.2	3.0	1960	Highest
Ohakune	25.1	3.9	1962	Highest
Farewell Spit	25.2	3.1	1971	Highest
Hanmer Forest	28.3	5.4	1906	Highest
Medbury	26.5	2.9	1927	Highest
Kerikeri	27.0	2.4	1945	2nd-highest
Kaikohe	26.5	3.3	1973	2nd-highest
Whakatane	26.3	2.1	1974	2nd-highest
Whatawhata	26.7	2.9	1952	2nd-highest
Takapau Plains	25.8	3.2	1962	2nd-highest
Dannevirke	25.6	3.0	1951	2nd-highest
Gisborne	27.8	3.5	1905	2nd-highest
Mahia	23.9	2.4	1990	2nd-highest
Palmerston North	25.9	2.6	1928	2nd-highest
Kaikoura	22.9	2.9	1963	2nd-highest
Cheviot	25.7	3.4	1982	2nd-highest
Lake Tekapo	25.3	3.6	1927	2nd-highest
Takaka	25.2	2.1	1978	Equal 2nd-highest
Kaitaia	27.0	2.6	1948	3rd-highest
Auckland (Whenuapai)	26.5	2.2	1945	3rd-highest
Taumarunui	27.6	3.3	1947	3rd-highest
Masterton	27.3	3.4	1906	3rd-highest
Napier	26.8	3.3	1870	3rd-highest
Upper Hutt (Trentham)	24.6	2.3	1939	3rd-highest
Waiouru	22.6	2.9	1962	3rd-highest
Blenheim	26.2	2.4	1932	3rd-highest
Le Bons Bay	21.0	2.2	1984	3rd-highest
Ranfurly	24.2	2.7	1897	3rd-highest
Cape Reinga	24.1	1.3	1951	4th-highest
Mokohinau	23.9	1.3	1994	4th-highest
Warkworth	26.3	2.8	1966	4th-highest
Ngawi	24.0	1.6	1972	4th-highest
Whakatu	26.2	3.1	1965	4th-highest
Waiau	26.2	2.5	1974	4th-highest
Rangiora	24.1	2.3	1965	4th-highest
Low records or near-records				
None observed				

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

Location	Mean minimum air temp. (°C)	Departure from average (°C)	Year records began	Comments
High records or near-records				
Waiau	12.3	2.0	1974	2nd-highest
Mahia	16.6	1.5	1990	3rd-highest
Porirua	15.0	1.2	1968	3rd-highest
Martinborough	14.1	2.3	1986	4th-highest
Ngawi	16.1	1.5	1972	4th-highest
Cheviot	11.7	1.2	1982	4th-highest
Low records or near-records				
None observed				

February climate in the six main centres

February was a dry month across the main centres, with the exception of Dunedin which observed well above normal rainfall. Temperatures were above average or well above average in all main centres. Of the six main centres in February 2020, Tauranga was the warmest and driest, Dunedin was the coldest and wettest, Auckland was the sunniest, and Christchurch was the least sunny.

Temperature			
Location	Mean temp.	Departure	Comments
	(°C)	from average	
		(°C)	
Auckland ^a	21.1	+1.1	Above average
Tauranga ^b	21.5	+1.7	Well above average (3 rd -highest on record)
Hamilton ^c	20.0	+1.2	Above average
Wellington ^d	18.0	+0.8	Above average
Christchurch ^e	18.1	+1.3	Well above average
Dunedin ^f	15.7	+0.7	Above average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	12	17	Well below normal
Tauranga ^b	11	13	Well below normal
Hamilton ^c	18	24	Well below normal
Wellington ^d	42	59	Below normal
Christchurch ^e	23	53	Below normal
Dunedin ^f	110	162	Well above normal
Sunshine			
Location	Sunshine		
	(hours)		
Auckland ^a	269		
Tauranga ^b	263		
Hamilton ^g	244		
Wellington ^d	203		
Christchurch ^e	165		
Dunedin ^f	185		
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February 2020 main centre climate statistics:

^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 was 509 mm, recorded at Milford Sound on 3 February.

On 3-4 February, torrential rain and flooding impacted Fiordland, cutting off SH94 between Te Anau and Milford Sound and leaving more than 380 people stranded. Those stranded were directed to an assembly point at Mitre Peak Lodge. SH94 was badly damaged and remained closed to private vehicles for the entire month, with a partial reopening for bus convoys occurring towards the end of the month. A State of Emergency was declared in Milford Sound, and the Department of Conservation said that damage to the Routeburn Track was so severe that it would remain closed for the rest of the season, while the Milford Track would be closed for at least three weeks.

Over 30 hours between 2-3 February, Milford Sound received 492 mm of rain, which is more than its February normal rainfall of 454.7 mm.

Between 1-4 February, Milford Sound received 1104 mm of rain, which is 243% of its normal February rainfall and 16% of its annual normal rainfall.

Due to the heavy rain and flooding, cruise ship visits to Milford Sound were cancelled as floating storm debris was a navigational hazard.

A State of Emergency was declared in Southland and residents in parts of Gore, Mataura, and Wyndham were told to evacuate due to flooding on the Mataura River, which peaked at 2500 cumecs at Gore on 5 February, and nearly 2700 cumecs at Mataura. This State of Emergency was originally put in place until 11 February, but was then extended until at least 18 February. A boil water notice was also issued for residents in Mataura, the Otama Water Supply scheme, and all flood-affected Southland residents who use groundwater.

More than 2400 people were evacuated from their homes in Gore along with more than 1500 people in Mataura. Dairy NZ stated that more than 100 dairy farms were severely impacted by the flooding.

Dozens of roads were closed due to the flooding in Southland and Otago, including SH1 between Dunedin and Invercargill, SH94, SH97, SH6 between Queenstown and Kingston, and portions of SH90.

Between 7-8 February, three bodies were found in the Makarora River, believed to be a group that had been tramping in Mount Aspiring National Park and were caught in floodwaters.

On 16 February, ex-tropical cyclone Uesi delivered heavy rain to much of the West Coast and Fiordland, although there were no reports of damage from the storm.

Drought, water restrictions, and fire bans

Several record or near-record dry spells (defined as consecutive days with less than 1 mm of rain) stretched into February across New Zealand, including:

- Auckland area 47 days (6 Jan-21 Feb), longest on record
- Whangarei 38 days (15 Jan-21 Feb), second-longest on record
- Whitianga 34 days (15 Jan-17 Feb), longest on record
- Takaka 46 days (20 Dec-3 Feb), longest on record

- Blenheim 64 days (20 Dec-21 Feb), longest on record
- Cheviot 49 days (21 Dec-7 Feb), longest on record
- Culverden 45 days (21 Dec-3 Feb), 2nd longest on record
- Rangiora 45 days (21 Dec-3 Feb), 2nd longest on record
- Hanmer Forest 40 days (26 Dec-3 Feb), longest on record

As of 29 February, the New Zealand Drought Index showed that severe meteorological drought was widespread across Northland, Auckland, northern Waikato, and East Cape, along with parts of western Bay of Plenty, Manawatu-Whanganui, northern Canterbury and southern Marlborough. Meteorological drought also emerged from central Waikato to Manawatu-Whanganui, Taranaki, Bay of Plenty, coastal Wairarapa, and Tasman. Much of the rest of the country was unusually dry, except for the western and lower South Island.



On 3 February a total watering ban was declared in Coromandel Town, Whitianga, and Hahei.

By mid-February, total fire bans were in place across all of the North Island, Tasman, Nelson, Marlborough, northern Canterbury, and Central Otago.

On 11 February, MPI declared the meteorological drought conditions in Northland and northern Auckland an adverse event, unlocking \$80,000 in government support.

On 18 February, the Far North District Council placed Level 4 water restrictions on the Paihia and Kawakawa catchments due to the long-term dry spell. By late February, water restrictions were increased to Level 3 in Kerikeri and Waipapa, and Level 2 in Whangarei.

As of 26 February, Auckland Watercare believed that the Hoteo River in Wellsford was running at its lowest level since 1983, when the area experienced its worst drought on record.

On 28 February, MPI declared the meteorological drought conditions in Waikato and South Auckland an adverse event, unlocking \$80,000 in government support.

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Queenstown	81	3rd	1890	Highest
Waipounamu	81	3rd	1917	Highest
Lauder	84	4th	1924	Highest
Milford Sound	509	3rd	1929	2nd-highest
Tara Hills	47	4th	1949	2nd-highest
Cromwell	49	4th	1949	2nd-highest
Clyde	54	4th	1978	2nd-highest
Gore	62	3rd	1907	2nd-highest
Balclutha	76	3rd	1964	2nd-highest
Nugget Point	60	2nd	1930	2nd-highest
Wanaka	52	4th	1927	3rd-highest
Ranfurly	49	4th	1897	3rd-highest
Middlemarch	55	4th	1896	3rd-highest
Dunedin (Airport)	53	4th	1962	4th-highest

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

Temperatures

The highest temperature was 37.4°C, observed at Napier on 2 February.

The lowest temperature was -0.3°C, observed at Hanmer Forest on 9 February.

An unusually warm air mass over the North Island in early February resulted in several locations setting all-time maximum temperature records, including:

- On 1 February, Whitianga reached 33.1°C, the hottest temperature recorded there since records began in 1962. (The previous record was 33.0°C in February 2017). Meanwhile, Te Puke reached at least 33.0°C, beating the old record of 32.5°C set in January 1979.
- On 2 February, Whakatane set a new all-time record as the temperature reached 33.9°C, but this record was smashed the very next day as the maximum temperature on 3 February reached 36.4°C.
- On 3 February, Whangarei set a new all-time record as the temperature reached 32.8°C, but this record was beaten the next day on 4 February as the maximum temperature reached 34.1°C.

On 17 February, expected high temperatures caused level one water restrictions to be introduced in Christchurch due to concern that excessive demand would lead to low water pressure for firefighting purposes.

High temperatures in Auckland resulted in peak water demand records being broken three times during the week of 17 February as Aucklanders used colossal amounts of water. The highest volume was 568 million litres on Wednesday 19 February.

New Zealand has not had a month with below average temperatures in 37 months, or since January 2017.



Figure: Monthly seven station series temperature anomalies since January 2017.

Location	Extreme maximum (°C) 	Date of extreme temperature	Year records began	Comments			
High records or near-records							
Kaitaia	30.7	2nd	1948	Highest			
Kerikeri	33.2	1st	1945	Highest			
Whangarei	34.1	4th	1967	Highest			
Whitianga	33.1	1st	1962	Highest			
Tauranga	33.6	1st	1913	Highest			
Te Puke	33.0	3rd	1973	Highest			
Whakatane	36.4	3rd	1975	Highest			
Motu	32.5	3rd	1990	Highest			
Takapau Plains	33.8	4th	1962	Highest			
Hicks Bay	31.8	2nd	1969	Highest			
Waipawa	36.9	4th	1945	Highest			
Whanganui	31.6	4th	1937	Highest			
Akaroa	35.5	2nd	1978	Highest			
Le Bons Bay	32.2	2nd	1984	Highest			
Wairoa	37.3	2nd	1964	Equal highest			
Mokohinau	27.6	3rd	1994	2nd-highest			
Leigh	30.6	17th	1966	2nd-highest			
Whangaparaoa	30.1	20th	1982	2nd-highest			
Matamata	32.1	3rd	1999	2nd-highest			
Rotorua	32.0	3rd	1964	2nd-highest			
Таиро	32.0	3rd	1949	2nd-highest			
Te Kuiti	31.1	12th	1959	2nd-highest			

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

Mahia	33.5	4th	1990	2nd-highest
Napier	37.4	2nd	1868	2nd-highest
Palmerston North	32.9	4th	1918	2nd-highest
Takaka	32.8	2nd	1978	2nd-highest
Motueka	32.0	2nd	1956	2nd-highest
Appleby	31.3	2nd	1932	2nd-highest
Kaikohe	31.6	3rd	1973	Equal 2nd-highest
Auckland (Airport)	29.8	4th	1959	3rd-highest
Dannevirke	32.6	4th	1951	3rd-highest
Hastings	35.5	4th	1965	3rd-highest
Kaikoura	34.1	4th	1963	3rd-highest
Ranfurly	32.5	3rd	1897	3rd-highest
Whatawhata	30.3	14th	1952	4th-highest
Gisborne	35.2	4th	1905	4th-highest
Stratford	27.6	14th	1960	4th-highest
Ohakune	29.8	1st	1962	4th-highest
Waiouru	28.6	4th	1962	4th-highest
Farewell Spit	28.2	3rd	1971	4th-highest
Arapito	27.6	15th	1978	4th-highest
Richmond	31.5	2nd	1862	4th-highest
Hanmer Forest	35.5	3rd	1906	4th-highest
Cheviot	35.3	4th	1982	4th-highest
Lincoln	35.6	2nd	1881	4th-highest
Auckland (Mangere)	29.3	18th	1959	Equal 4th-highest
Low records or near-records				
Puysegur Point	11.4	4th	1978	Equal 4th-lowest

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments				
High records or near-records								
Masterton	22.2	4th	1943	Highest				
Upper Hutt (Trentham)	21.4	4th	1972	Highest				
Appleby	20.5	2nd	1941	Highest				
Blenheim	22.0	4th	1947	Highest				
Waiau	24.4	3rd	1974	Highest				
Cheviot	24.5	3rd	1982	Highest				
Rangiora	22.1	3rd	1972	Highest				
Akaroa	23.8	3rd	1978	Highest				
Le Bons Bay	21.5	3rd	1984	Highest				
Lake Tekapo	21.5	3rd	1928	Highest				
Milford Sound	18.2	3rd	1935	Equal highest				
Wanaka	20.3	3rd	1972	Equal highest				
Five Rivers	19.5	2nd	1982	2nd-highest				
Martinborough	21.7	4th	1986	3rd-highest				

Porirua	19.1	4th	1972	3rd-highest		
Kaikoura	20.3	3rd	1972	3rd-highest		
Medbury	23.2	3rd	1927	3rd-highest		
Waipara West	24.1	3rd	1973	3rd-highest		
Ngawi	22.7	3rd	1972	Equal 3rd-highest		
Greymouth	18.5	4th	1972	Equal 3rd-highest		
Nelson	20.4	2nd	1862	4th-highest		
Hanmer Forest	21.5	17th	1972	4th-highest		
Culverden	22.3	3rd	1930	4th-highest		
Ashburton	21.5	17th	1928	4th-highest		
Haast	18.0	4th	1949	Equal 4th-highest		
Low records or near-records						
Appleby	2.8	9th	1932	3rd-lowest		

Wind

The highest wind gust was 195 km/h, observed at Cape Turnagain on 2 February.

Record or near-record February extreme wind gusts were recorded at:

Location	Extreme wind gust (km/h)	Date of extreme gust	Year records began	Comments
Secretary Island	165	16th	1994	Highest
Clyde	63	27th	1983	2nd-highest
South West Cape	167	1st	1991	2nd-highest
Te Puke	52	23rd	1987	3rd-highest
Mt Kaukau (Wellington)	141	4th	1969	3rd-highest
Reefton	56	4th	1999	3rd-highest
Gore	111	2nd	1987	3rd-highest
Upper Hutt (Trentham)	83	4th	1999	4th-highest

Lightning and hail

On 23 February, thunderstorms brought small hail to the Tauranga area, including Whakamarama and Mt Maunganui.

Cloud and fog

On 18 February, fog at Nelson Airport caused several cancellations and diversions. One inbound flight from Auckland was cancelled, along with several departing flights to Wellington and Auckland. In addition, some other Nelson-bound flight were instead diverted to Blenheim Airport.

For further information, please contact:

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February 2020 rainfall expressed as a percentage of normal (1981-2010 normal).

February was extremely dry across the North Island due to persistent high pressure, with most locations observing well below normal rainfall. In fact, some locations in Northland and the central North Island received less than 10% of their normal February rainfall. Conversely, rainfall was above normal or well above normal in the lower South Island.

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