New Zealand's warmest June on record

Temperature	It was New Zealand's warmest June on record, with the nationwide average temperature 2.0°C above average. This is just the 13 th occasion since 1909 that a month achieved an anomaly of >1.9°C relative to the 1981-2010 average. Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) throughout the country. Twenty-four locations observed their warmest June on record.
Rainfall	Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for eastern parts of Northland, inland Bay of Plenty, eastern Waikato, Wairarapa, northern Canterbury, southeastern Otago and western Southland. Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for parts of Central Otago, South and Mid Canterbury, Nelson, Tasman, inland Whanganui, Gisborne and eastern Bay of Plenty.
Soil Moisture	At the end of the month, soil moisture levels were lower than normal for inland parts of Otago. Soil moisture levels were higher than normal for eastern parts of Canterbury and Marlborough. Near normal soil moisture levels were typical for the remainder of the country.

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Overview
Temperature
Rainfall
June 2021 climate in the six main centres
Highlights and extreme events

Overview

June 2021 mean sea level air pressure was above normal to the east of Aotearoa New Zealand. This was associated with more northeasterly air flows than usual over the country. The prevalence of these air flows, occasional low pressure systems that transported warm, humid air down from the subtropics, and ongoing background warming from climate change meant it was a very warm start to winter throughout the country. Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) throughout New Zealand. Overall, the nationwide average temperature in June 2021 was 10.6°C. This was 2.0°C above the 1981-2010 June average, making it New Zealand's warmest June since NIWA's seven station temperature series began in 1909.

There were considerable spatial differences in monthly rainfall totals observed over the country in June. In the North Island, rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for eastern parts of Northland, inland Bay of Plenty, eastern Waikato, and the

Wairarapa. In contrast, rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for parts of inland Whanganui, Gisborne and eastern Bay of Plenty. For the South Island, rainfall was above normal or well above normal for northern Canterbury, southeastern Otago and western Southland. Rainfall was below normal or well below normal for parts of Central Otago, South and Mid Canterbury, Nelson, and Tasman. Rainfall was typically near normal (80-119% of normal) for remaining areas of New Zealand. By the end of June, soils were drier than normal for inland parts of Otago, and wetter than normal for eastern parts of Canterbury and Marlborough. Soil moisture levels were typically near normal for remaining parts of the country.

Further Highlights:

- The highest temperature was 22.0°C, observed at Hastings on 26 June, and Leigh on 19 June.
- The lowest temperature was -7.4°C, observed at Middlemarch on 19 June.
- The highest 1-day rainfall was 162 mm, recorded at Arthurs Pass on 25 June.
- The highest wind gust was 191 km/h, observed at Cape Turnagain on 28 June.
- Of the six main centres in June 2021, Auckland was the warmest and sunniest, Tauranga was the wettest, Christchurch was the coldest and driest, and Dunedin was the least sunny.
- Of the available, regularly reporting sunshine observation sites, the sunniest four locations in 2021 so far are Taranaki (1331 hours), Bay of Plenty (1299 hours), Marlborough (1291 hours) and Hawke's Bay (1277 hours).

For further information, please contact:

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Temperature: An exceptionally warm month for the country

Winter got off to a very warm start in New Zealand – it was the country's warmest June on record. The warmth was widespread, with every long-term monitoring station observing either above or well above average mean temperatures. It was particularly warm in Motueka, where the mean temperature of 10.8°C was 3.2°C higher than the town's 1981-2010 average.

Record¹ or near-record mean air temperatures for June were recorded at:

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments			
High records or near-records	High records or near-records						
Kaitaia	14.8	2.0	1948	Highest			
Whangaparāoa	14.1	1.5	1982	Highest			
Auckland (Whenuapai)	12.7	1.5	1945	Highest			

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.

Tauranga	13.1	2.1	1913	Highest
Whakatāne	12.4	2.5	1974	Highest
Taupō	10.2	2.8	1949	Highest
Motu	9.1	2.6	1990	Highest
Martinborough	11.0	2.4	1986	Highest
Gisborne	12.5	2.3	1905	Highest
Whakatu	11.2	2.4	1965	Highest
Waipawa	10.1	1.9	1945	Highest
Mahia	13.2	2.4	1990	Highest
Levin	11.7	2.4	1895	Highest
Porirua	12.0	2.2	1968	Highest
Wellington (Kelburn)	11.7	2.0	1927	Highest
Wellington (Airport)	12.6	2.1	1962	Highest
Westport	11.4	2.1	1937	Highest
Hokitika	10.5	2.3	1866	Highest
Greymouth	10.8	2.0	1947	Highest
Haast	10.8	2.7	1949	Highest
Puysegur Point	10.3	1.7	1978	Highest
Motueka	10.8	3.2	1956	Highest
Culverden	8.1	2.3	1928	Highest
Medbury	8.7	2.8	1927	Highest
Kerikeri	13.8	1.7	1945	2nd-highest
Leigh	15.4	2.0	1966	2nd-highest
Whitianga	13.0	1.9	1962	2nd-highest
Rotorua	10.5	1.9	1964	2nd-highest
Taumarunui	10.5	2.4	1947	2nd-highest
Mt Ruapehu Chateau	5.5	1.9	2000	2nd-highest
Ngawi	13.1	1.8	1972	2nd-highest
Hicks Bay	13.9	2.0	1969	2nd-highest
Hastings	11.1	2.3	1965	2nd-highest
Paraparaumu	11.9	2.2	1953	2nd-highest
Palmerston North	11.6	2.3	1928	2nd-highest
Upper Hutt (Trentham)	11.2	2.5	1939	2nd-highest
Ohakune	8.6	2.3	1962	2nd-highest
Tākaka	10.6	2.2	1978	2nd-highest
Arapito	11.1	2.0	1978	2nd-highest
Franz Josef	9.7	2.3	1953	2nd-highest
Brothers Island	12.6	1.5	1997	2nd-highest
Waiau	8.0	2.3	1974	2nd-highest
Windsor	7.2	1.7	2000	2nd-highest
Dunedin (Musselburgh)	8.8	1.5	1947	2nd-highest
Cape Reinga	14.7	1.2	1951	3rd-highest
Whangārei	14.1	1.7	1967	3rd-highest
Auckland (Western Springs)	13.5	1.8	1948	3rd-highest
Tūrangi	9.3	1.9	1968	3rd-highest
Masterton	10.2	2.3	1906	3rd-highest
Dannevirke	10.4	1.9	1951	3rd-highest
Reefton	8.2	2.3	1960	3rd-highest

Milford Sound	7.9	2.2	1934	3rd-highest
Nelson	10.5	2.4	1862	3rd-highest
Cape Campbell	11.6	1.4	1953	3rd-highest
Rangiora	8.3	1.8	1965	3rd-highest
Akaroa	9.9	1.8	1978	3rd-highest
Waimate	8.0	1.7	1908	3rd-highest
Oamaru	7.8	0.7	1967	3rd-highest
Gore	7.0	1.7	1907	3rd-highest
South West Cape	9.2	1.4	1991	3rd-highest
Kaikohe	13.3	1.5	1973	4th-highest
Lower Retaruke	9.8	1.7	1966	4th-highest
Wairoa	12.1	2.1	1964	4th-highest
Whanganui	12.1	1.7	1937	4th-highest
Blenheim	10.3	1.8	1932	4th-highest
Ranfurly	4.7	1.9	1897	4th-highest
Manapouri (West Arm Jetty)	5.7	1.8	1971	4th-highest
Clyde	5.6	1.8	1978	4th-highest
Alexandra	5.9	2.2	1929	4th-highest
Roxburgh	7.3	2.1	1950	4th-highest
Nugget Point	8.0	1.2	1970	4th-highest
Low records or near-records				
None observed				

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

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Whangārei	18.3	2.0	1967	Highest
Whakatāne	16.9	1.7	1974	Highest
Tūrangi	14.1	2.1	1968	Highest
Mahia	15.5	2.2	1990	Highest
Palmerston North	15.4	2.1	1928	Highest
Levin	15.6	2.3	1895	Highest
Ohakune	13.3	3.3	1962	Highest
Hokitika	14.6	2.3	1866	Highest
Haast	14.0	2.4	1949	Highest
Motueka	15.9	2.6	1956	Highest
Medbury	13.6	2.0	1927	Highest
Kerikeri	17.9	1.3	1945	2nd-highest
Leigh	18.2	2.2	1966	2nd-highest
Whitianga	17.4	1.8	1962	2nd-highest
Matamata	16.3	2.4	1999	2nd-highest
Tauranga	16.8	1.7	1913	2nd-highest
Rotorua	14.4	2.0	1964	2nd-highest
Taupō	14.4	2.7	1949	2nd-highest
Motu	13.0	2.0	1990	2nd-highest

Taumarunui 15.4 2.6 1947 2nd-highest New Plymouth 15.5 1.4 1944 2nd-highest Martinborough 15.4 2.1 1986 2nd-highest Whakatu 17.0 2.6 1965 2nd-highest Whakatu 17.0 2.6 1965 2nd-highest Porirua 15.3 2.0 1953 2nd-highest Porirua 15.0 1.8 1968 2nd-highest Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Gore 11.3 2.5 1907 2nd-highest Mt Ruapelu Chateau 9.0 1.7	Auckland (Mängere)	16.9	1.7	1959	2nd-highest
Martinborough 15.4 2.1 1986 2nd-highest Whakatu 17.0 2.6 1965 2nd-highest Paraparaumu 15.3 2.0 1953 2nd-highest Porirua 15.0 1.8 1968 2nd-highest Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 1	Taumarunui	15.4	2.6	1947	2nd-highest
Whakatu 17.0 2.6 1965 2nd-highest Paraparaumu 15.3 2.0 1953 2nd-highest Porirua 15.0 1.8 1968 2nd-highest Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.7 <td>New Plymouth</td> <td>15.5</td> <td>1.4</td> <td>1944</td> <td>2nd-highest</td>	New Plymouth	15.5	1.4	1944	2nd-highest
Paraparaumu 15.3 2.0 1953 2nd-highest Porirua 15.0 1.8 1968 2nd-highest Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 2000 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.8 1.8 1939 3rd-highest Wellington (Airport)	Martinborough	15.4	2.1	1986	2nd-highest
Porirua 15.0 1.8 1968 2nd-highest Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Milch Ruapehu Chateau 9.0 1.7 2000 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Waligawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.8 1.8 1939 3rd-highest Reefton <	Whakatu	17.0	2.6	1965	2nd-highest
Stratford 14.2 2.1 1960 2nd-highest Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Milcks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Milford Sound	Paraparaumu	15.3	2.0	1953	2nd-highest
Westport 14.9 1.8 1937 2nd-highest Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Kaikohe 16.0	Porirua	15.0	1.8	1968	2nd-highest
Arapito 15.2 1.7 1978 2nd-highest Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Walpawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.8 1.8 1939 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Milford Sound 14.1 1.2 1997 3rd-highest Kaikohe	Stratford	14.2	2.1	1960	2nd-highest
Franz Josef 14.2 2.1 1953 2nd-highest Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.8 1.8 1939 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Milford Sound 14.1 1.2 1997 3rd-highest Kaikohe <td>Westport</td> <td>14.9</td> <td>1.8</td> <td>1937</td> <td>2nd-highest</td>	Westport	14.9	1.8	1937	2nd-highest
Puysegur Point 12.6 1.7 1978 2nd-highest Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Moleration 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa <td>Arapito</td> <td>15.2</td> <td>1.7</td> <td>1978</td> <td>2nd-highest</td>	Arapito	15.2	1.7	1978	2nd-highest
Gore 11.3 2.5 1907 2nd-highest South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Wellington (Airport) 14.8 1.8 1939 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa	Franz Josef	14.2	2.1	1953	2nd-highest
South West Cape 11.2 1.4 1991 2nd-highest Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Milford Sound 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Lower Retaruke	Puysegur Point	12.6	1.7	1978	2nd-highest
Mt Ruapehu Chateau 9.0 1.7 2000 3rd-highest Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Whanganui 15.6 1.5 1937 4th-highest Windsor <t< td=""><td>Gore</td><td>11.3</td><td>2.5</td><td>1907</td><td>2nd-highest</td></t<>	Gore	11.3	2.5	1907	2nd-highest
Hicks Bay 16.7 1.7 1969 3rd-highest Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Whangaparāoa 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	South West Cape	11.2	1.4	1991	2nd-highest
Waipawa 15.3 2.2 1945 3rd-highest Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Whangaparāoa 16.0 1.2 1973 4th-highest Port Taharoa 16.2 1.1 1982 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Low records or near-records 12.9 1.7 2000 4th-highest	Mt Ruapehu Chateau	9.0	1.7	2000	3rd-highest
Wellington (Airport) 14.7 1.6 1962 3rd-highest Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1997 3rd-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Low records or near-records 12.9 1.7 2000 4th-highest	Hicks Bay	16.7	1.7	1969	3rd-highest
Upper Hutt (Trentham) 14.8 1.8 1939 3rd-highest Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest	Waipawa	15.3	2.2	1945	3rd-highest
Reefton 12.6 2.5 1960 3rd-highest Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest	Wellington (Airport)	14.7	1.6	1962	3rd-highest
Greymouth 14.3 1.8 1947 3rd-highest Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Vindsor 12.9 1.7 2000 4th-highest Low records or near-records	Upper Hutt (Trentham)	14.8	1.8	1939	3rd-highest
Milford Sound 11.4 2.0 1934 3rd-highest Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Reefton	12.6	2.5	1960	3rd-highest
Brothers Island 14.1 1.2 1997 3rd-highest Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Greymouth	14.3	1.8	1947	3rd-highest
Kaikohe 16.0 1.2 1973 4th-highest Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Milford Sound	11.4	2.0	1934	3rd-highest
Whangaparāoa 16.2 1.1 1982 4th-highest Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Brothers Island	14.1	1.2	1997	
Port Taharoa 16.2 1.1 1973 4th-highest Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Kaikohe	16.0	1.2	1973	4th-highest
Lower Retaruke 14.2 1.5 1966 4th-highest Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Whangaparāoa	16.2	1.1	1982	4th-highest
Hāwera 14.6 1.7 1977 4th-highest Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Port Taharoa	16.2	1.1	1973	4th-highest
Whanganui 15.6 1.5 1937 4th-highest Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Lower Retaruke		1.5	1966	4th-highest
Tākaka 15.6 1.5 1978 4th-highest Windsor 12.9 1.7 2000 4th-highest Low records or near-records	Hāwera	14.6	1.7	1977	4th-highest
Windsor 12.9 1.7 2000 4th-highest Low records or near-records					
Low records or near-records					
		12.9	1.7	2000	4th-highest
None observed					
	None observed				

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

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Kerikeri	10.1	2.4	1945	Highest
Motu	5.1	3.1	1990	Highest
Martinborough	6.7	2.7	1986	Highest
Gisborne	8.0	2.8	1905	Highest
Mahia	10.9	2.6	1990	Highest
Porirua	9.1	2.8	1968	Highest
Wellington (Kelburn)	9.7	2.5	1927	Highest
Wellington (Airport)	10.5	2.6	1962	Highest
Upper Hutt (Trentham)	7.7	3.3	1939	Highest

Westport	7.9	2.3	1937	Highest
Haast	7.6	3.1	1949	Highest
Puysegur Point	8.0	1.7	1978	Highest
Motueka	5.7	3.9	1956	Highest
Cape Campbell	9.7	1.8	1953	Highest
Culverden	3.5	3.6	1928	Highest
Medbury	3.8	3.7	1927	Highest
Rangiora	3.8	2.7	1965	Highest
Lincoln	4.6	2.8	1881	Highest
Waimate	3.5	2.4	1908	Highest
Dunedin (Musselburgh)	5.6	1.6	1947	Highest
Queenstown	3.1	3.0	1871	Highest
Cromwell	2.2	2.8	1949	Highest
Alexandra	1.9	3.3	1929	Highest
Roxburgh	3.9	3.3	1950	Highest
Kaitaia	11.9	2.7	1948	2nd-highest
Leigh	12.6	1.7	1966	2nd-highest
Whitianga	8.9	2.2	1962	2nd-highest
Tauranga	9.4	2.5	1913	2nd-highest
Whakatāne	7.9	3.3	1974	2nd-highest
Castlepoint	10.0	1.8	1972	2nd-highest
Ngawi	10.8	2.0	1972	2nd-highest
Waipawa	5.0	1.8	1945	2nd-highest
Paraparaumu	8.6	2.5	1953	2nd-highest
Palmerston North	7.8	2.5	1928	2nd-highest
Levin	7.9	2.7	1895	2nd-highest
Hokitika	6.5	2.5	1866	2nd-highest
Greymouth	7.4	2.3	1947	2nd-highest
Secretary Island	8.6	1.7	1985	2nd-highest
Nelson	6.5	3.1	1862	2nd-highest
Brothers Island	11.1	1.7	1997	2nd-highest
Waiau	2.9	3.0	1974	2nd-highest
Waipara West	4.7	1.6	1973	2nd-highest
Wānaka	2.4	2.5	1955	2nd-highest
Windsor	1.6	1.7	2000	2nd-highest
Ranfurly	-0.3	1.9	1897	2nd-highest
Manapouri (West Arm Jetty)	3.4	1.8	1971	2nd-highest
Nugget Point	5.4	1.2	1970	2nd-highest
Cape Reinga	12.7	1.5	1951	3rd-highest
Whangaparāoa	12.0	1.9	1982	3rd-highest
Taupō	6.0	2.9	1949	3rd-highest
Masterton	5.5	3.0	1906	3rd-highest
Hicks Bay	11.0	2.2	1969	3rd-highest
Hastings	5.9	2.8	1965	3rd-highest
Waiouru	3.7	2.4	1962	3rd-highest
Arapito	7.1	2.3	1978	3rd-highest
Franz Josef	5.3	2.6	1953	3rd-highest
Lake Tekapo	0.4	2.5	1927	3rd-highest

Timaru	4.0	2.1	1885	3rd-highest
Tara Hills	0.0	2.0	1949	3rd-highest
Oamaru	3.7	1.1	1967	3rd-highest
Te Anau	3.4	2.4	1963	3rd-highest
Clyde	1.4	2.4	1978	3rd-highest
South West Cape	7.2	1.3	1991	3rd-highest
Whangārei	10.6	1.9	1967	4th-highest
Auckland (Western Springs)	9.9	1.9	1948	4th-highest
Pukekohe	9.3	1.9	1969	4th-highest
Mt Ruapehu Chateau	1.9	1.9	2000	4th-highest
Dannevirke	6.6	2.0	1951	4th-highest
Wairoa	7.3	2.2	1964	4th-highest
Whanganui	8.7	1.8	1937	4th-highest
Milford Sound	4.6	2.7	1934	4th-highest
Blenheim	5.6	2.3	1932	4th-highest
Kaikōura	7.5	1.3	1963	4th-highest
Arthurs Pass	2.3	3.1	1973	4th-highest
Mt Cook Village	0.8	1.9	1929	4th-highest
Middlemarch	0.3	1.2	2000	4th-highest
Lauder	0.4	2.3	1924	4th-highest
Low records or near-records				
None observed				

Rainfall: A dry month for South Canterbury and wet in eastern Northland

It was a particularly dry month for parts of South Canterbury, where Timaru recorded just 12 mm of rainfall (31% of normal). It was similarly dry in Ranfurly, where 10 mm of rainfall was recorded (34% of normal). New Zealand's wettest location relative to normal was Kaikohe. The town recorded 298 mm of rainfall, which is 196% of normal for June. No locations observed record or near-record high or low rainfall totals for June.

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

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-reco	rds			
None observed				
Low records or near-recor	ds			
None observed				

June climate in the six main centres

Both Tauranga and Wellington observed their warmest June on record, with Dunedin observing its second-warmest June on record. Rainfall was typically near normal for New Zealand's main centres. The exception was Auckland where rainfall was below normal. Of the six main centres in June 2021, Auckland was the warmest and sunniest, Tauranga was the wettest, Christchurch was the coldest and driest, and Dunedin was the least sunny.

June 2021 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Aucklanda	13.4	+1.6	Well above average
Tauranga ^b	13.1	+2.1	Highest on record
Hamilton ^c	11.0	+1.6	Well above average
Wellingtond	11.7	+2.0	Highest on record
Christchurch ^e	8.2	+1.8	Well above average
Dunedin ^f	8.8	+1.5	2nd-highest on record
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	93	79	Below normal
Tauranga ^b	136	119	Near normal
Hamilton ^c	127	101	Near normal
Wellingtond	128	93	Near normal
Christchurch ^e	54	94	Near normal
Dunedin ^f	57	98	Near normal
Sunshine			
Location	Sunshine		
	(hours)		
Auckland ^a	128		
Tauranga ^b	124		
Hamilton ^g	100		
Wellington ^d	85		
Christchurch ^e	87		
Dunedin ^f	75		
h —			

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

Highlights and extreme events

Temperatures

Relatively warm and humid northerly airflows prevailed over much of New Zealand during the first half of June, delivering periods of high temperatures for the time of year. Twenty-two locations observed record or near-record high daily maximum temperatures between 5-14 June.

The highest temperature was 22.0°C, observed at Hastings on 26 June, and Leigh on 19 June.

The lowest temperature was -7.4°C, observed at Middlemarch on 19 June.

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

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-records	-			
Taumarunui	20.6	9th	1947	Highest
Porirua	19.5	9th	1968	Highest
Ohakune	19.1	14th	1962	Highest
Puysegur Point	18.1	5th	1978	Highest
Five Rivers	19.5	5th	1982	Highest
Hokitika	18.6	21st	1866	Equal highest
Matamata	20.0	10th	1999	2nd-highest
Whakatāne	20.1	9th	1975	2nd-highest
Tūrangi	19.2	9th	1968	2nd-highest
Westport	18.6	8th	1937	2nd-highest
Arapito	19.6	8th	1978	2nd-highest
Manapouri (Airport)	18.1	5th	1963	2nd-highest
Stratford	18.3	9th	1960	Equal 2nd-highest
New Plymouth	19.1	9th	1944	3rd-highest
Haast	17.3	8th	1949	3rd-highest
Ranfurly	18.1	5th	1897	3rd-highest
Lumsden	18.6	5th	1982	3rd-highest
South West Cape	16.4	5th	1991	Equal 3rd-highest
Leigh	22.0	19th	1966	4th-highest
Taupō	18.2	9th	1949	4th-highest
Levin	20.0	6th	1895	4th-highest
Te Anau	16.9	5th	1963	4th-highest
Clyde	19.2	5th	1978	4th-highest
Rotorua	17.8	9th	1964	Equal 4th-highest
Mt Ruapehu Chateau	14.1	14th	2000	Equal 4th-highest
Low records or near-records				
Secretary Island	7.0	28th	1989	2nd-lowest
Port Taharoa	10.7	29th	1974	3rd-lowest
Five Rivers	0.4	19th	1982	3rd-lowest
Lumsden	0.5	19th	1982	4th-lowest

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments				
High records or near-records								
Porirua	14.3	14th	1972	Highest				
Wellington (Kelburn)	14.1	27th	1931	Highest				
Secretary Island	13.9	13th	1988	Highest				
Motueka	13.2	7th	1972	Highest				
Windsor	9.7	14th	2000	Highest				
Dannevirke	14.2	27th	1951	Equal highest				
Mahia	14.2	27th	1990	Equal highest				
Martinborough	14.7	27th	1986	2nd-highest				
Wellington (Airport)	14.9	27th	1972	2nd-highest				
Upper Hutt (Trentham)	14.7	27th	1972	2nd-highest				
Stratford	12.8	27th	1972	2nd-highest				
Hāwera	14.5	27th	1977	2nd-highest				
Tākaka	13.0	27th	1978	2nd-highest				
Culverden	13.7	26th	1930	2nd-highest				
Palmerston North	13.9	27th	1940	Equal 2nd-highest				
Whanganui	14.2	27th	1972	Equal 2nd-highest				
Brothers Island	14.2	27th	1997	Equal 2nd-highest				
New Plymouth	15.6	27th	1944	3rd-highest				
Napier	16.0	27th	1940	3rd-highest				
Haast	12.8	14th	1949	3rd-highest				
Arapito	13.1	27th	1978	Equal 3rd-highest				
Blenheim	13.8	26th	1947	Equal 3rd-highest				
Whangaparāoa	15.1	14th	1982	4th-highest				
Takapau Plains	12.7	27th	1972	4th-highest				
Ngawi	15.9	14th	1972	4th-highest				
Motu	10.9	15th	1990	Equal 4th-highest				
Hokitika	13.0	26th	1866	Equal 4th-highest				
Low records or near-records								
None observed								

Rain and slips

On 20 June, heavy rainfall caused flooding in Tokomaru Bay, with four homes and the local school seriously damaged by the floodwaters. Extensive damage was reported on many district roads in Gisborne, while SH35 around the East Cape was closed due to a slip. Farther south, several roads in the Wairarapa were closed due to flooding, including the main route into Martinborough over the Waihenga Bridge. Heavy rain also caused flooding and road closures in parts of Marlborough near Blenheim. Road closures included Queen Charlotte Drive at Wedge Point, Old Renwick Rd, Jacksons Rd and Taylor Pass Rd. Blenheim sports fields were also closed for several days due to surface water.

The highest 1-day rainfall was 162 mm, recorded at Arthurs Pass on 25 June.

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

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Hanmer Forest	111	20th	1905	Highest
Secretary Island	121	24th	1985	3rd-highest
South West Cape	36	13th	1991	3rd-highest
Martinborough	51	20th	1924	4th-highest
Waipara West	47	20th	1973	Equal 4th-highest

Wind

On 29 June, the *East by West* ferry across Wellington Harbour was cancelled because of wind, and large swells entering the harbour. *Interislander* and *Bluebridge* ferry sailings between the North and South Islands were also cancelled.

The highest wind gust was 191 km/h, observed at Cape Turnagain on 28 June.

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

Location	Extreme wind gust (km/h)	Date of extreme gust	Year records began	Comments
Secretary Island	161	5th	1994	Highest
Lincoln	96	29th	1999	Highest
Dargaville	102	29th	1997	2nd-highest
Westport	119	28th	1973	2nd-highest
Rangiora	93	29th	1999	2nd-highest
Port Taharoa	107	29th	1978	Equal 2nd-highest
Queenstown	89	5th	1972	Equal 2nd-highest
Bromley	91	29th	1972	3rd-highest
Farewell Spit	100	28th	1973	Equal 3rd-highest
Oamaru	83	29th	1984	Equal 3rd-highest
Kaikohe	83	6th	1986	4th-highest
Palmerston North	85	28th	1991	4th-highest

Snow and ice

From 28-29 June, a heavy snowfall occurred in parts of Southland and Otago. On 28 June, Northern Southland College was closed because of snow on the roads near Lumsden, making it too dangerous for the school bus to operate. On 29 June, all schools in Queenstown were closed, with flights at the airport cancelled. Approximately 10-15 cm of snow was reported in many parts of the Wakatipu Basin. Snow also settled in parts of Central Otago, Banks Peninsula, and in Stratford and Midhirst in Taranaki. Many State Highways throughout the country were closed temporarily as a result of the snowfall.

Lightning, hail, and tornadoes

On 19 June, a likely tornado caused extensive damage in Papatoetoe, Auckland. Approximately 240 homes were impacted, with roofs torn off, windows smashed, and power lines downed. Containers

were toppled over at Ports of Auckland's South Auckland Freight Hub, killing one worker and injuring at least two others.

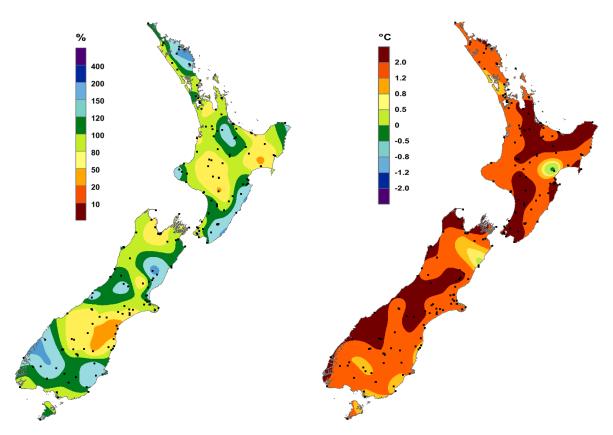
Cloud and fog

On 15 June, fog caused flight delays and cancellations at Christchurch and Dunedin Airports. The fog and low cloud remained about Dunedin for most of the day, meaning there were only two flight arrivals and departures there for the day, respectively.

For further information, please contact:

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June rainfall

Expressed as a percentage of the 1981-2010 normal.

June temperature

Expressed as a departure from the 1981-2010 average in degrees Celsius. Note, missing data from a climate station at Tutira (Hawke's Bay) was identified. This has resulted in an inaccurate illustration of June temperature for this area of New Zealand. An updated map was not available for this summary's publication.

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