

Aotearoa New Zealand Climate Summary: **June 2021** Issued: 5 July 2021

# 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 13th 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

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 sub-tropics, 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).

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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.

**Record[[1]](#footnote-2) or near-record mean air temperatures for June were recorded at:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Mean  air temp. (oC) | Departure from normal (oC) | Year records began | Comments |
| 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 |
| 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. (oC) | Departure from normal (oC) | 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 |
| Auckland (Māngere) | 16.9 | 1.7 | 1959 | 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 |
| 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 | 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 | 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 | | | | |
| None observed |  |  |  |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | Mean minimum  air temp. (oC) | Departure from normal (oC) | 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-records | | | | |
| None observed |  |  |  |  |
| Low records or near-records | | | | |
| 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. (oC) | Departure from normal (oC) | Comments | |
| Aucklanda | 13.4 | +1.6 | Well above average | |
| Taurangab | 13.1 | +2.1 | Highest on record | |
| Hamiltonc | 11.0 | +1.6 | Well above average | |
| Wellingtond | 11.7 | +2.0 | Highest on record | |
| Christchurche | 8.2 | +1.8 | Well above average | |
| Dunedinf | 8.8 | +1.5 | 2nd-highest on record | |
| Rainfall | |
| Location | Rainfall (mm) | % of normal | Comments | |
| Aucklanda | 93 | 79 | Below normal | |
| Taurangab | 136 | 119 | Near normal | |
| Hamiltonc | 127 | 101 | Near normal | |
| Wellingtond | 128 | 93 | Near normal | |
| Christchurche | 54 | 94 | Near normal | |
| Dunedinf | 57 | 98 | Near normal | |
| Sunshine | |
| Location | Sunshine (hours) |
| Aucklanda | 128 |
| Taurangab | 124 |
| Hamiltong | 100 |
| Wellingtond | 85 |
| Christchurche | 87 |
| Dunedinf | 75 |  | |

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. |

<https://www.niwa.co.nz/our-science/climate>

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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. [↑](#footnote-ref-2)