

A very warm March for New Zealand; widespread dryness for North Island and parts of South Island

| | |
|----------------------|--|
| Rainfall | Around 20 percent of normal March rainfall recorded in parts of Northland, Bay of Plenty, and Hawkes Bay, and under 60 percent of March normal rainfall recorded for most of the North Island, West Coast South Island and Southland. Well above normal March rainfall for Kapiti and Kaikoura coasts. |
| Soil moisture | As at 1 April, extreme soil moisture deficits (more than 130 mm of deficit) evident in parts of: Northland, Auckland, Waikato, Bay of Plenty, Gisborne, and Hawkes Bay, Marlborough and Canterbury. Significant soil moisture deficit (more than 110 mm of deficit) was observed elsewhere across the North Island north of Palmerston North, as well as across Otago and Southland. An adverse event due to drought was declared for the entire North Island on 15 March and for Buller and Grey districts on 22 March. |
| Temperature | Mean temperatures were well above average (more than 1.2°C above the March average) across northern and central North Island, and southern and western South Island. March temperatures were above average (0.5°C to 1.2°C above March average) for most other regions, except Gisborne and Marlborough (near average temperatures there). |
| Sunshine | An extremely sunny March for most of the North Island south of Auckland, as well as west of the Southern Alps. Above normal sunshine hours for Auckland, Marlborough, Otago, and Southland. Near normal sunshine hours for March elsewhere. |

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Overview

March 2013 was dominated by anticyclones ('highs') which were slow moving over and to the east of New Zealand. These highs generally kept rain-bearing weather systems such as lows and fronts away, resulting in a dry, sunny, and warm March for many regions. The remains of ex-tropical cyclone Sandra and an active cold front interrupted this pattern, causing very heavy rainfall on the 18th in the lower North Island.

March rainfall was around 20 percent of normal in parts of Northland, Bay of Plenty, and Hawkes Bay. Rainfall was less than 60 percent of March normal for much of the remainder of the North Island north of Stratford, the West Coast of the South Island, parts of Canterbury, Otago, and Southland. It was the driest March on record for Whakatane, Motu, Ohakune, Tiwai Point, and Balclutha. In contrast, the lower North Island and the upper South Island were much wetter than normal for March, with the Kapiti Coast receiving 170 percent of normal March rainfall (over one-and-a-half times normal rainfall), and Kaikoura recording 200 percent of normal rainfall for March (double March normal rainfall).

As at 1 April, extreme soil moisture deficits (more than 130 mm of deficit) evident in parts of: Northland, Auckland, Waikato, Bay of Plenty, Gisborne, and Hawkes Bay, Marlborough and Canterbury. Significant soil moisture deficit (more than 110 mm of deficit) was observed elsewhere across the North Island north of Palmerston North, as well as across Otago and Southland. Following the declaration of an adverse event due to drought in Northland on 27 February, South Auckland, Waikato, Bay of Plenty, and Hawkes Bay regions were declared in drought on 6 March. A declaration of drought across the entire North Island followed on 15 March, and on 22 March drought was declared in Buller and Grey districts.

Mean temperatures for March were well above average (more than 1.2°C above the March average) across northern and central areas of the North Island, and southern and western parts of the South Island. It was the warmest March on record for Leigh, Milford Sound, Manapouri, Wanaka, and Cromwell. Mean temperatures were generally above average (between 0.5°C and 1.2°C above the March average) for all other regions. The nation-wide average temperature in March 2013 was 16.7°C (0.9°C above the 1971-2010 March average, using NIWA's seven-station temperature series which begins in 1909).

The dominance of high pressures during March resulted in an extremely sunny month across the North Island and the west of the South Island. Sunshine totals were well above normal (exceeding 125 percent of March normal) across most of the North Island south of Auckland, as well as west of the Southern Alps. Sunshine totals were above normal (between 110 and 125 percent of March normal) for Auckland, Marlborough, Otago, and Southland. Elsewhere, sunshine was close to normal for March. It was the sunniest March on record for Te Kuiti, Taumarunui, Turangi, New Plymouth, Martinborough, and Stratford. Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to March) are New Plymouth (928 hours), Whakatane (885 hours), Paraparaumu (855 hours), and Lake Tekapo (830 hours).

Further Highlights:

- The highest temperature was 32.9 °C, recorded at Napier on 18 March.
- The lowest temperature was -0.5°C, observed at Mt Cook on both 19 and 20 March.
- The highest 1-day rainfall was 208 mm, recorded at Milford Sound on 24 March.
- The highest wind gust was 135 km/hr, at Cape Turnagain, on 4 March.
- Of the six main centres in March 2013, Tauranga was the equal-driest and sunniest, Christchurch was equal-driest and equal-cloudiest, Auckland was the warmest, Dunedin was coolest and equal-cloudiest, and Wellington was wettest.

- Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to March) are New Plymouth (928 hours), Whakatane (885 hours), Paraparaumu (855 hours), and Lake Tekapo (830 hours).

For further information, please contact:

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Rainfall: Very dry across the most of the North Island, West Coast South Island and Southland. Very wet for Kapiti and Kaikoura coasts.

March rainfall was around 20 percent of normal in parts of Northland, Bay of Plenty, and Hawkes Bay. Rainfall was less than 60 percent of March normal for much of the remainder of the North Island north of Stratford, the West Coast of the South Island, parts of Canterbury, Otago, and Southland. It was the driest March on record for Whakatane, Motu, Ohakune, Tiwai Point, and Balclutha. In contrast, the lower North Island and the upper South Island were much wetter than normal for March, with the Kapiti Coast receiving 170 percent of normal March rainfall (over one-and-a-half times normal rainfall), and Kaikoura recording 200 percent of normal rainfall for March (double March normal rainfall).

As at 1 April, extreme soil moisture deficits (more than 130 mm of deficit) evident in parts of: Northland, Auckland, Waikato, Bay of Plenty, Gisborne, and Hawkes Bay, Marlborough and Canterbury. Significant soil moisture deficit (more than 110 mm of deficit) was observed elsewhere across the North Island north of Palmerston North, as well as across Otago and Southland. Following the declaration of an adverse event due to drought in Northland on 27 February, South Auckland, Waikato, Bay of Plenty, and Hawkes Bay regions were declared in drought on 6 March. A declaration of drought across the entire North Island followed on 15 March, and on 22 March drought was declared in the Buller and Grey districts.

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

| Location | Rainfall total (mm) | Percentage of normal | Year records began | Comments |
|------------------------------------|---------------------|----------------------|--------------------|------------|
| Low records or near-records | | | | |
| Kerikeri | 31 | 24 | 1981 | 3rd-lowest |
| Dargaville | 14 | 18 | 1943 | 2nd-lowest |
| Whakatane | 7 | 8 | 1952 | Lowest |
| Taupo | 14 | 21 | 1949 | 4th-lowest |
| Motu | 42 | 33 | 1990 | Lowest |

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.

| | | | | |
|-----------------|----|----|------|------------------|
| Te Kuiti | 25 | 28 | 1950 | Equal 4th-lowest |
| Turangi | 26 | 24 | 1968 | 4th-lowest |
| Hawera | 20 | 24 | 1977 | 2nd-lowest |
| Ohakune | 19 | 28 | 1961 | Lowest |
| Greymouth | 80 | 45 | 1947 | 3rd-lowest |
| Invercargill | 28 | 29 | 1939 | 3rd-lowest |
| Tiwai Point | 31 | 31 | 1970 | Lowest |
| Balclutha | 12 | 21 | 1964 | Lowest |
| Nugget Point | 26 | 35 | 1930 | 4th-lowest |
| South West Cape | 76 | 66 | 1991 | 4th-lowest |

Temperature: Well above average across northern and central North Island, and southern and western South Island. Above average temperatures elsewhere.

Mean temperatures for March were well above average (more than 1.2°C above the March average) across northern and central areas of the North Island, as well as southern and western parts of the South Island. It was the warmest March on record for Leigh, Milford Sound, Manapouri, Wanaka, and Cromwell. Mean temperatures were generally above average (between 0.5°C and 1.2°C above the March average) for all other regions.

The nation-wide average temperature² in March 2013 was 16.7°C (0.9°C above the 1971-2010 March average, using NIWA's seven-station temperature series which begins in 1909). Many locations recorded record- or near-record-breaking high mean maximum temperatures for March.

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

| Location | Mean air temp. (°C) | Departure from normal (°C) | Year records began | Comments |
|------------------------------|---------------------|----------------------------|--------------------|-------------|
| High records or near-records | | | | |
| Leigh | 21.3 | 2.2 | 1966 | Highest |
| Whangaparaoa | 20.0 | 1.0 | 1982 | 2nd-highest |
| Hamilton | 19.1 | 2.0 | 1906 | 4th-highest |
| Masterton | 17.5 | 2.0 | 1992 | 3rd-highest |
| Stratford | 16.1 | 1.4 | 1960 | 4th-highest |
| Ohakune | 15.4 | 1.9 | 1962 | 4th-highest |
| Farewell Spit | 18.2 | 1.4 | 1971 | 3rd-highest |
| Milford Sound | 15.7 | 2.2 | 1934 | Highest |
| Secretary Island | 15.4 | 1.5 | 1985 | 3rd-highest |
| Puysegur Point | 14.4 | 1.3 | 1978 | 3rd-highest |
| Nelson | 17.9 | 1.4 | 1943 | 3rd-highest |
| Waiau | 16.4 | 1.4 | 1974 | 4th-highest |

² Interim monthly value

| | | | | |
|-----------------|------|-----|------|-------------|
| Cheviot | 15.4 | 0.9 | 1982 | 4th-highest |
| Mt Cook | 14.2 | 1.9 | 1929 | 3rd-highest |
| Le Bons Bay | 15.5 | 1.3 | 1984 | 2nd-highest |
| Tara Hills | 14.9 | 1.6 | 1949 | 3rd-highest |
| Wanaka | 16.6 | 2.4 | 1955 | Highest |
| Ranfury | 14.0 | 1.5 | 1975 | 2nd-highest |
| Manapouri | 14.7 | 2.5 | 1963 | Highest |
| Lumsden | 14.5 | 2.0 | 1982 | 2nd-highest |
| Cromwell | 16.8 | 2.2 | 1949 | Highest |
| Gore | 14.3 | 1.8 | 1971 | 3rd-highest |
| Tiwai Point | 14.4 | 1.3 | 1970 | 3rd-highest |
| Nugget Point | 14.1 | 1.5 | 1970 | 2nd-highest |
| South West Cape | 13.3 | 1.2 | 1991 | 2nd-highest |

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

| Location | Mean maximum air temp. (°C) | Departure from normal (°C) | Year records began | Comments |
|-------------------------------------|-----------------------------|----------------------------|--------------------|-------------------|
| High records or near-records | | | | |
| Kaitiaki | 24.5 | 1.3 | 1985 | 2nd-highest |
| Kerikeri | 24.9 | 1.6 | 1981 | Highest |
| Leigh | 26.1 | 4.1 | 1966 | Highest |
| Whangaparaoa | 23.5 | 1.4 | 1982 | 3rd-highest |
| Auckland (Whenuapai) | 24.1 | 1.2 | 1945 | 4th-highest |
| Te Puke | 24.0 | 1.7 | 1973 | 2nd-highest |
| Whakatane | 24.6 | 1.9 | 1974 | Equal 2nd-highest |
| Rotorua | 23.3 | 2.4 | 1964 | 2nd-highest |
| Motu | 20.3 | 1.7 | 1990 | 2nd-highest |
| Auckland (Airport) | 24.4 | 1.8 | 1959 | 3rd-highest |
| Whatawhata | 25.1 | 2.7 | 1952 | Highest |
| Hamilton (Ruakura) | 27.1 | 4.4 | 1906 | Highest |
| Hamilton (Airport) | 25.8 | 2.9 | 1946 | Highest |
| Port Taharoa | 23.9 | 1.5 | 1973 | 4th-highest |
| Te Kuiti | 25.4 | 2.6 | 1959 | 2nd-highest |
| Taumarunui | 25.6 | 3.4 | 1947 | 2nd-highest |
| Turangi | 23.4 | 2.7 | 1968 | 2nd-highest |
| New Plymouth | 22.6 | 1.8 | 1944 | 4th-highest |
| Masterton | 24.9 | 3.0 | 1992 | 3rd-highest |
| Takapau Plains | 22.7 | 2.1 | 1962 | 4th-highest |
| Dannevirke | 24.1 | 3.5 | 1951 | 2nd-highest |
| Waione | 24.9 | 2.6 | 1991 | Highest |
| Mahia | 21.2 | 1.1 | 1990 | 3rd-highest |
| Palmerston North | 24.3 | 2.8 | 1928 | 3rd-highest |
| Stratford | 21.6 | 2.2 | 1960 | 2nd-highest |
| Ohakune | 22.7 | 3.8 | 1962 | 2nd-highest |
| Wanganui | 23.3 | 2.2 | 1937 | 4th-highest |

| | | | | |
|------------------------------------|------|------|------|------------------|
| Farewell Spit | 21.7 | 1.0 | 1971 | 4th-highest |
| Westport | 21.0 | 1.9 | 1937 | Highest |
| Reefton | 22.7 | 2.0 | 1960 | 3rd-highest |
| Milford Sound | 19.8 | 1.5 | 1934 | 2nd-highest |
| Motueka | 23.8 | 2.2 | 1956 | Highest |
| Appleby | 22.7 | 1.5 | 1932 | 3rd-highest |
| Nelson | 22.9 | 1.9 | 1943 | Highest |
| Arthurs Pass | 19.0 | 3.4 | 1973 | 4th-highest |
| Waiau | 23.4 | 1.7 | 1974 | 4th-highest |
| Cheviot | 21.8 | 1.1 | 1982 | 3rd-highest |
| Mt Cook | 21.2 | 3.3 | 1929 | 2nd-highest |
| Le Bons Bay | 19.1 | 1.6 | 1984 | 2nd-highest |
| Tara Hills | 22.8 | 2.6 | 1949 | Highest |
| Wanaka | 23.0 | 2.5 | 1955 | 3rd-highest |
| Ranfury | 21.5 | 2.1 | 1975 | 4th-highest |
| Dunedin (Airport) | 20.9 | 1.8 | 1962 | 4th-highest |
| Manapouri | 20.8 | 2.7 | 1963 | 2nd-highest |
| Lumsden | 20.8 | 2.6 | 1982 | Highest |
| Cromwell | 24.0 | 2.7 | 1949 | Highest |
| Lauder | 23.7 | 3.6 | 1924 | Highest |
| Invercargill | 19.0 | 1.9 | 1948 | 2nd-highest |
| Tiwai Point | 18.7 | 2.2 | 1970 | 2nd-highest |
| Nugget Poin | 17.7 | 1.6 | 1970 | 3rd-highest |
| South West Cape | 15.7 | 1.2 | 1991 | 4th-highest |
| Low records or near-records | | | | |
| Cape Campbell | 17.5 | -0.7 | 1953 | Equal 3rd-lowest |

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

| Location | Mean minimum air temp. (°C) | Departure from normal (°C) | Year records began | Comments |
|-------------------------------------|-----------------------------|----------------------------|--------------------|-------------|
| High records or near-records | | | | |
| Farewell Spit | 14.6 | 1.6 | 1971 | 4th-highest |
| Milford Sound | 11.6 | 2.9 | 1934 | Highest |
| Secretary Island | 12.7 | 1.7 | 1985 | Highest |
| Puysegur Point | 12.2 | 1.6 | 1978 | 2nd-highest |
| Cheviot | 9.0 | 0.6 | 1982 | 2nd-highest |
| Gore | 9.3 | 1.5 | 1971 | 3rd-highest |
| Nugget Point | 10.5 | 1.3 | 1970 | 4th-highest |
| South West Cape | 10.9 | 1.2 | 1991 | 2nd-highest |

Sunshine: An extremely sunny March for the North Island and western South Island.

The dominance of high pressures during March resulted in an extremely sunny month across much of the North Island and the west of the South Island. Sunshine totals were well above normal (exceeding 125 percent of March normal) across most of the North Island south of Auckland, as well as west of the Southern Alps. Sunshine totals were above normal (between 110 and 125 percent of March normal) for Auckland, Marlborough, Otago, and Southland. Elsewhere, sunshine was close to normal for March. It was the sunniest March on record for Te Kuiti, Taumarunui, Turangi, New Plymouth, Martinborough, and Stratford.

Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to March) are New Plymouth (928 hours), Whakatane (885 hours), Paraparaumu (855 hours), and Lake Tekapo (830 hours).

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

| Location | Sunshine hours | Percentage of normal | Year records began | Comments |
|------------------------------|----------------|----------------------|--------------------|-------------|
| High records or near-records | | | | |
| Te Kuiti | 248 | 146 | 1962 | Highest |
| Taumarunui | 253 | 152 | 1947 | Highest |
| Turangi | 245 | 132 | 1976 | Highest |
| New Plymouth | 294 | 138 | 1972 | Highest |
| Dannevirke | 238 | 136 | 1963 | 2nd-highest |
| Martinborough | 245 | 113 | 1986 | Highest |
| Waipawa | 241 | 141 | 1945 | 2nd-highest |
| Paraparaumu | 274 | 137 | 1953 | 2nd-highest |
| Palmerston North | 242 | 137 | 1930 | 2nd-highest |
| Wallaceville | 232 | 129 | 1939 | 3rd-highest |
| Stratford | 256 | 138 | 1963 | Highest |
| Greymouth | 219 | 136 | 1947 | 4th-highest |
| Queenstown | 230 | 123 | 1930 | 2nd-highest |
| Cromwell | 244 | 114 | 1979 | 4th-highest |

March climate in the six main centres

March rainfall was around half of normal, or less, at all of the main centres except for Wellington. Wellington experienced near normal March rainfall, but almost all of this (83 mm) was recorded overnight on the 18th-19th. Mean monthly temperatures were well above average in all the main centres except for Auckland and Wellington (above average temperatures recorded there). It was a sunny March for all of the six main centres except for Christchurch (which experienced below normal sunshine for March).

In March 2013, Tauranga was the equal-driest and sunniest of the six main centres, Christchurch was equal-driest and equal-cloudiest, Auckland was the warmest, Dunedin was coolest and equal-cloudiest, and Wellington was wettest.

March 2013 main centre climate statistics:

| Temperature | | | |
|---------------------------|------------------|----------------------------|--------------------|
| Location | Mean temp. (°C) | Departure from normal (°C) | Comments |
| Auckland ^a | 19.5 | 1.0 | Above average |
| Tauranga ^b | 19.4 | 1.2 | Well above average |
| Hamilton ^c | 18.5 | 1.6 | Well above average |
| Wellington ^d | 16.8 | 1.0 | Above average |
| Christchurch ^e | 16.2 | 1.3 | Well above average |
| Dunedin ^f | 14.9 | 1.2 | Well above average |
| Rainfall | | | |
| Location | Rainfall (mm) | % of normal | Comments |
| Auckland ^a | 48 | 56% | Below normal |
| Tauranga ^b | 20 | 21% | Well below normal |
| Hamilton ^c | 36 | 42% | Well below normal |
| Wellington ^d | 90 | 106% | Near normal |
| Christchurch ^e | 20 | 43% | Well below normal |
| Dunedin ^f | 30 | 47% | Well below normal |
| Sunshine | | | |
| Location | Sunshine (hours) | % of normal | Comments |
| Auckland ^a | 224 | 117% | Above normal |
| Tauranga ^b | 253 | 118% | Above normal |
| Hamilton ^g | 231 | 125% | Well above normal |
| Wellington ^d | 223 | 109% | Near normal |
| Christchurch ^e | 160 | 84% | Below normal |
| Dunedin ^f | 160 | 111% | Above normal |

^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 208 mm, recorded at Milford Sound on 24 March.

On 18 March, heavy rain in the Nelson region caused flooding around Dovedale and Wakefield.

On 19 March, heavy overnight rain caused minor slips in the Manawatu Gorge, and the bad weather delayed early morning flights out of Palmerston North Airport. Heavy rain caused surface flooding on SH1 in the Kapiti area, and flooded subways associated with commuter railway stations in the Hutt Valley.

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

| Location | Extreme 1-day rainfall (mm) | Date of extreme rainfall | Year records began | Comments |
|----------------------|-----------------------------|--------------------------|--------------------|-------------------|
| Masterton | 68 | 18th | 1926 | 3rd-highest |
| Waione | 53 | 18th | 1991 | 2nd-highest |
| Martinborough | 70 | 18th | 1924 | 2nd-highest |
| Paraparaumu | 65 | 18th | 1951 | 2nd-highest |
| Wellington (Airport) | 48 | 18th | 1958 | 4th-highest |
| Wanganui | 64 | 18th | 1937 | 3rd-highest |
| Tara Hills | 29 | 17th | 1949 | Equal 4th-highest |
| Alexandra | 28 | 17th | 1983 | 4th-highest |

Wind

The highest wind gust was 135 km/hr, at Cape Turnagain, on 4 March.

On 18 March, a tornado damaged property in Carrington Street, New Plymouth. In the Nelson region, strong winds associated with a violent thunderstorm brought down trees, blocking secondary roads.

On 31 March, a tornado swept through Hokitika's central business district, lifting the roofs of the Railway Hotel and Westland District Council buildings.

There were no wind records broken in March.

Temperatures

The highest temperature measured during March was 32.9 °C, recorded at Napier on 18 March. This is the highest autumn temperature recorded in a group of surrounding stations, in records beginning in 1868. Record- or near-record maximum temperatures were observed at a large number of stations across the country, particularly on 11 March (see Table overleaf).

The lowest temperature recorded during March was -0.5°C, observed at Mt Cook on both 19 and 20 March.

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

| Location | Extreme maximum (°C) | Date of extreme temperature | Year records began | Comments |
|-------------------------------------|----------------------|-----------------------------|--------------------|-------------------|
| High records or near-records | | | | |
| Kaitia | 27.2 | 8th | 1985 | 4th-highest |
| Kerikeri | 27.9 | 11th | 1981 | 3rd-highest |
| Whangarei | 29.1 | 18th | 1967 | 2nd-highest |
| Leigh | 29.0 | 8th | 1966 | 2nd-highest |
| Whitianga | 27.4 | 2nd | 1962 | 3rd-highest |
| Paeroa | 29.2 | 11th | 1947 | Highest |
| Tauranga | 30.0 | 1st | 1913 | Equal 2nd-highest |
| Te Puke | 30.1 | 1st | 1973 | Highest |
| Whakatane | 28.6 | 10th | 1975 | 3rd-highest |
| Rotorua | 28.3 | 1st | 1964 | Highest |
| Taupo | 28.8 | 11th | 1949 | Equal 2nd-highest |
| Pukekohe | 28.4 | 11th | 1969 | Equal 2nd-highest |
| Hamilton (Ruakura) | 32.6 | 11th | 1906 | Highest |
| Hamilton (Airport) | 30.7 | 11th | 1946 | 2nd-highest |
| Te Kuiti | 31.3 | 11th | 1959 | 2nd-highest |
| Taumarunui | 32.4 | 11th | 1947 | Highest |
| Turangi | 29.3 | 1st | 1968 | Highest |
| New Plymouth | 29.0 | 11th | 1944 | 2nd-highest |
| Masterton | 29.9 | 1st | 1992 | 3rd-highest |
| Dannevirke | 29.2 | 11th | 1951 | 3rd-highest |
| Napier | 32.9 | 18th | 1868 | Highest |
| Hastings | 32.6 | 18th | 1965 | 3rd-highest |
| Wairoa | 31.8 | 18th | 1964 | 2nd-highest |
| Mahia | 30.9 | 18th | 1990 | Highest |
| Palmerston North | 29.6 | 11th | 1918 | 2nd-highest |
| Hawera | 25.7 | 18th | 1977 | 3rd-highest |
| Ohakune | 27.5 | 11th | 1962 | 3rd-highest |
| Reefton | 30.1 | 11th | 1960 | Highest |
| Motueka | 29.0 | 11th | 1956 | 2nd-highest |
| Arthurs Pass | 26.4 | 1st | 1973 | 4th-highest |
| Waiau | 32.0 | 14th | 1974 | 3rd-highest |
| Tara Hills | 30.3 | 15th | 1949 | 3rd-highest |
| Nugget Point | 28.6 | 14th | 1970 | Highest |
| Low records or near-records | | | | |
| Waiau | 10.5 | 19th | 1974 | 2nd-lowest |
| Cheviot | 11.5 | 19th | 1982 | 3rd-lowest |

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

| Location | Extreme minimum (°C) | Date of extreme temperature | Year records began | Comments |
|------------------------------|----------------------|-----------------------------|--------------------|-------------------|
| Low records or near-records | | | | |
| Mahia | 7.8 | 6th | 1990 | 2nd-lowest |
| High records or near-records | | | | |
| Motu | 15.9 | 18th | 1990 | Equal 4th-highest |
| Masterton | 18.1 | 18th | 1992 | 3rd-highest |
| Mahia | 18.4 | 18th | 1990 | Equal 4th-highest |
| Wallaceville | 18.6 | 18th | 1972 | 4th-highest |
| Ohakune | 18.2 | 18th | 1972 | Highest |
| Puysegur Point | 17.6 | 29th | 1978 | 2nd-highest |
| Cheviot | 17.6 | 25th | 1982 | 3rd-highest |
| Lumsden | 16.1 | 15th | 1982 | Highest |
| Nugget Point | 14.8 | 25th | 1972 | 4th-highest |
| South West Cape | 15.6 | 30th | 1991 | 2nd-highest |

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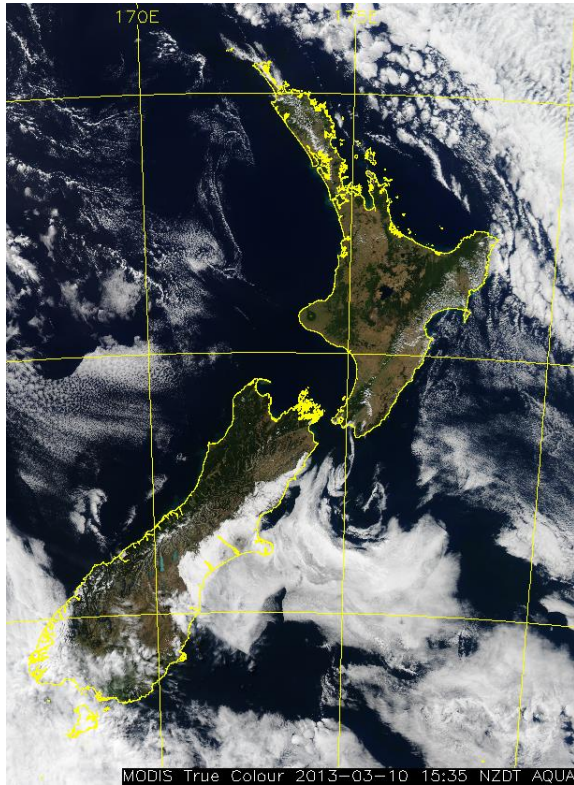
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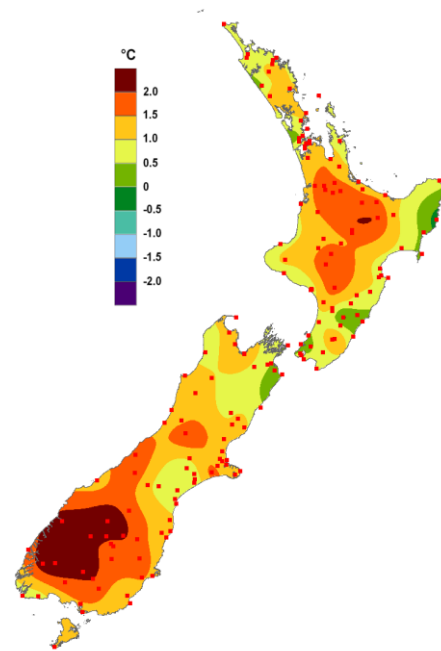
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MODIS true colour satellite image of New Zealand on 10 March 2013, showing dry (brown) areas throughout the North Island. Source: NASA and NIWA.



Mean Temperature Anomaly,
9am 01/03/2013 to 9am 01/04/2013

March 2013 mean temperature, expressed as a difference from average (degrees Celsius).

Dark orange colours indicate well above average temperatures (more than 1.2°C above March average) in the central North Island and lower South Island. Lighter orange and yellow shades indicate above average temperatures (0.5-1.2°C above March average) for the remainder of the country except the eastern and lower North Island and upper South Island.

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