

Monthly Climate Summary

National Climate Summary: January 2014

Issued: 3 February 2014

A cool January for most of NZ; dry for North Island except Taranaki to Wellington.

Temperature	Temperatures were well-below average for most of the South Island and much of the Waikato and Manawatu-Wanganui regions (more than 1.2°C below January average). Below average temperatures were experienced for the remainder of the North Island (0.5-1.2°C below January average), except for Hawke's Bay, Gisborne, and eastern Northland and Auckland, where near average temperatures were observed (within 0.5°C of January average).
Rainfall	Well below normal rainfall (less than 50 percent of January normal) for Northland, parts of Waikato, Hawke's Bay, and around Christchurch. Below normal rainfall (50-79 percent of January normal) in the remainder of those regions as well as Bay of Plenty. In contrast, well above normal rainfall (more than 149 percent of January normal rainfall) for Wellington region, parts of Marlborough, Central Otago, and Fiordland. Above normal rainfall (120-149 percent of January normal) in parts of north Canterbury and Taranaki, and near normal rainfall elsewhere (within 20 percent of January normal).
Soil moisture	As at 1 February 2014, soils were much drier than normal across northern and central parts of the North Island, especially about western Northland, western and central Waikato, the Central Plateau, and inland Hawke's Bay. Soils were also drier than normal in parts of south Canterbury. Soils were wetter than normal around East Cape and Southland. Soil moisture levels were near normal for the remainder of the country.
Sunshine	Well above normal sunshine (more than 125 percent of January normal) for isolated areas of West Coast and inland Canterbury. Above normal sunshine (110-124 percent of January normal) for the Far North, parts of Waikato, and Bay of Plenty. Near normal sunshine (within 10 percent of January normal) for the remainder of New Zealand.

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Overview

January 2014 was characterised by much lower pressures than normal over and to the west and south of New Zealand, and close to near normal pressures were situated off the southeast coast of Australia. These regional pressure patterns resulted in a strong southwesterly flow anomaly across the country, which caused significantly lower than normal temperatures for the time of year across much of the country, especially in the south and west.

Temperatures for January were well-below average for the South Island and much of the Waikato and Manawatu-Wanganui regions (more than 1.2°C below January average). Temperatures were below average for the remainder of the North Island (0.5-1.2°C below January average), except for Hawke's Bay, Gisborne, eastern Northland and Auckland, as well as the coastal strip north of Banks Peninsula in the South Island, where near average temperatures were observed (within 0.5°C of January average). The nation-wide average temperature in January 2014 was 16.2°C, (0.9°C below the 1971-2000 January average from NIWA's seven-station temperature series which begins in 1909).

Well below normal rainfall (less than 50 percent of January normal) was experienced in Northland, parts of Waikato, Hawke's Bay, and around Christchurch. Below normal rainfall (50-79 percent of January normal) was recorded in the remainder of those regions as well as Bay of Plenty. In contrast, well above normal rainfall (more than 149 percent of January normal rainfall) was recorded in Wellington region, as well as parts of Marlborough, Central Otago, and Fiordland. Above normal rainfall (120-149 percent of January normal) was recorded in parts of north Canterbury and Taranaki, and near normal rainfall (within 20 percent of January normal) was experienced elsewhere.

As at 1 February 2014, soils were much drier than normal across northern and central parts of the North Island, especially about western Northland, western and central Waikato, the Central Plateau, and inland Hawke's Bay. Soils were also drier than normal in parts of south Canterbury. Soils were wetter than normal around East Cape and Southland. Soil moisture levels were near normal for the remainder of the country.

Well above normal sunshine (more than 125 percent of January normal) was observed in isolated areas of West Coast and inland Canterbury. Above normal sunshine (110-124 percent of January normal) was experienced in the Far North, parts of Waikato, and Bay of Plenty. Near normal sunshine (within 10 percent of January normal) was recorded in the remainder of New Zealand.

Further Highlights:

- The highest temperature was 33.8°C, recorded at Leeston (near Christchurch) on 19 January.
- The lowest temperature was -2.7°C, observed at Waiouru on 27 January.
- The highest 1-day rainfall was 220 mm, recorded at North Egmont on 4 January.
- The highest wind gust was 183 km/hr, observed at Cape Turnagain on 16 January.
- In January 2014, Auckland was the warmest, Dunedin was the coolest and cloudiest, Christchurch was the driest, Wellington was the wettest, and Tauranga was the sunniest of the six main centres.

- Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2014 (January) are: Whakatane (314 hours), Tauranga (301 hours), Gisborne (296 hours), and Lake Tekapo (296 hours).

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Temperature: Well below average temperatures for much of the country.

Temperatures were well-below average for the South Island and much of the Waikato and Manawatu-Wanganui regions (more than 1.2°C below January average). Temperatures were below average for the remainder of the North Island (0.5-1.2°C below January average), except for Hawke's Bay, Gisborne, eastern Northland and Auckland, as well as the coastal strip north of Bank's Peninsula in the South Island, where near average temperatures were observed (within 0.5°C of January average).

It was the coldest January on record for South West Cape. Many locations recorded near-record low mean temperatures for January.

The nation-wide average temperature in January 2014 was 16.2°C, (0.9°C below the 1971-2000 January average from NIWA's seven-station temperature series which begins in 1909)¹.

Record² or near-record mean air temperatures for January were recorded at:

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
Low records or near-records				
Kaitia	18.6	-0.8	1985	4th-lowest
Whatawhata	15.9	-2.4	1952	2nd-lowest
Te Kuiti	16.2	-2.2	1959	3rd-lowest
Taumarunui	15.8	-2.3	1947	2nd-lowest
Turangi	15.4	-1.7	1968	3rd-lowest
Takapau Plains	15.2	-1.7	1962	3rd-lowest
Takaka	15.6	-1.6	1978	Equal 4th-lowest
Haast	13.1	-1.6	1949	4th-lowest
Secretary Island	12.9	-1.9	1985	2nd-lowest
Puysegur Point	12.6	-1.2	1978	4th-lowest

¹ Interim value

² 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.

Cape Campbell	15.7	-1.1	1953	4th-lowest
Arthurs Pass	11.4	-1.9	1973	4th-lowest
Orari Estate	14.7	-1.7	1972	4th-lowest
Manapouri	12.7	-2.0	1963	4th-lowest
Lumsden	12.7	-2.1	1982	2nd-lowest
Cromwell	15.2	-2.5	1949	3rd-lowest
Alexandra	15.5	-2.2	1983	2nd-lowest
Tiwai Point	13.1	-1.4	1970	3rd-lowest
Balclutha	13.2	-1.9	1964	3rd-lowest
South West Cape	11.8	-1.3	1991	Lowest

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

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Leigh	24.8	2.3	1966	3rd-highest
Motu	21.9	1.4	1990	2nd-highest
Low records or near-records				
Whatawhata	21.1	-2.2	1952	4th-lowest
Martinborough	22.4	-1.2	1986	4th-lowest
Greymouth	17.6	-2.2	1947	4th-lowest
Secretary Island	15.7	-2.5	1985	Lowest
Puysegur Point	14.8	-1.7	1978	2nd-lowest
Cape Campbell	18.0	-1.5	1953	2nd-lowest
Arthurs Pass	15.9	-2.4	1973	4th-lowest
Cheviot	22.3	-0.8	1982	4th-lowest
Lumsden	18.4	-2.2	1982	3rd-lowest
Alexandra	21.9	-2.8	1983	3rd-lowest
Balclutha	17.6	-2.7	1964	Lowest
South West Cape	14.3	-1.8	1991	Lowest

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

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
Low records or near-records				
Kaitia	14.0	-0.8	1985	4th-lowest
Warkworth	12.4	-1.3	1966	4th-lowest
Whangaparaoa	14.8	-1.1	1982	4th-lowest
Motu	8.6	-1.8	1990	Lowest
Whatawhata	10.8	-2.4	1952	3rd-lowest
Hamilton (Ruakura)	9.8	-3.1	1906	4th-lowest
Hamilton (Airport)	10.0	-2.4	1946	4th-lowest

Te Kuiti	9.7	-2.8	1959	Lowest
Taumarunui	8.7	-3.3	1947	Lowest
Turangi	8.5	-2.7	1968	Lowest
Takapau Plains	9.2	-1.8	1962	2nd-lowest
Dannevirke	10.3	-1.9	1951	2nd-lowest
Takaka	9.7	-1.7	1978	3rd-lowest
Appleby	9.8	-2.6	1932	3rd-lowest
Hanmer Forest	6.7	-1.9	1906	4th-lowest
Orari Estate	8.6	-1.8	1972	3rd-lowest
Timaru	7.8	-2.5	1885	Lowest
Lumsden	7.0	-1.9	1982	2nd-lowest
Cromwell	8.6	-2.4	1949	3rd-lowest
Tiwai Point	9.3	-1.7	1970	Lowest
South West Cape	9.2	-0.8	1991	3rd-lowest

Rainfall: Dry around Christchurch and for most of North Island. In contrast, wet from Taranaki to Wellington as well as parts of the South Island.

Well below normal rainfall (less than 50 percent of January normal) was experienced in Northland, parts of Waikato, Hawke's Bay, and around Christchurch. Below normal rainfall (50-79 percent of January normal) was recorded in the remainder those regions as well as in the Bay of Plenty. In contrast, well above normal rainfall (more than 149 percent of January normal rainfall) was recorded in the Wellington region, as well as parts of Marlborough, Central Otago, and Fiordland. Above normal rainfall (120-149 percent of January normal) was recorded in parts of north Canterbury and Taranaki, and near normal rainfall (within 20 percent of January normal) was experienced elsewhere.

As at 1 February 2014, soils were much drier than normal across northern and central parts of the North Island, especially about western Northland, western and central Waikato, the Central Plateau, and inland Hawke's Bay. Soils were also drier than normal in parts of south Canterbury. Soils were wetter than normal around East Cape and Southland. Soil moisture levels were near normal for the remainder of the country.

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

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-records				
Mahia	81	141	1990	4th-highest
Low records or near-records				
Toenepi	9	12	1951	4th-lowest

Sunshine: Near normal sunshine for most of the country.

Well above normal sunshine for January (more than 125 percent of January normal) was recorded in isolated areas of West Coast and inland Canterbury. Above normal sunshine (110-124 percent of January normal) was experienced in the Far North, parts of Waikato, and Bay of Plenty. Near normal sunshine (within 10 percent of January normal) was observed for the remainder of New Zealand.

Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2014 (January) are: Whakatane (314 hours), Tauranga (301 hours), Gisborne (296 hours), and Lake Tekapo (296 hours).

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

Location	Sunshine hours	Percentage of normal	Year records began	Comments
High records or near-records				
Waipawa	277	137	1945	4th-highest

January climate in the six main centres

Auckland and Tauranga were the only main centres that recorded near average temperatures for January – the other four centres experienced below or well below average temperatures. Low rainfall was recorded in all of the main centres except Wellington and Dunedin – Christchurch in particular had a very dry January with only 12 mm of rainfall (36% of normal January rainfall). In contrast, Wellington had a very wet month, recording 176% of normal January rainfall.

In January 2014, Auckland was the warmest, Dunedin was the coolest and cloudiest, Christchurch was the driest, Wellington was the wettest, and Tauranga was the sunniest of the six main centres.

January 2014 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Auckland ^a	19.2	-0.4	Near average
Tauranga ^b	19.0	-0.5	Near average
Hamilton ^c	16.7	-1.6	Well below average
Wellington ^d	16.3	-0.6	Below average
Christchurch ^e	16.0	-1.2	Well below average
Dunedin ^f	13.9	-1.4	Well below average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	42	68%	Below normal
Tauranga ^b	50	64%	Below normal
Hamilton ^c	39	47%	Well below normal
Wellington ^d	133	176%	Well above normal
Christchurch ^e	12	36%	Well below normal
Dunedin ^f	59	80%	Near normal
Sunshine			
Location	Sunshine (hours)	% of normal	Comments
Auckland ^a	242	104%	Near normal
Tauranga ^b	301	115%	Above normal
Hamilton ^g	268	115%	Above normal
Wellington ^d	222 ³	90%	Near normal
Christchurch ^e	247	104%	Near normal
Dunedin ^f	184	102%	Near normal

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

³ Missing one day of data from 24 January.

Highlights and extreme events

Temperatures

In early January, frequent westerly to northwesterly airflows over the eastern North Island resulted in an extended warm spell for areas of Gisborne and Hawke's Bay. Over the first 11 days of the month, the average daily maximum temperature for Gisborne, Napier and Hastings was 26.5°C, 26.4°C and 26.6°C respectively. In Wairoa (Hawke's Bay), the average daily maximum temperature over the first 12 days of the month was 27.2°C, with the maximum daily temperature exceeding 28.0°C on seven out of twelve days.

In mid-January, unseasonably cool temperatures were experienced over much of the country associated with frequent west to south-west airflows.

On 19 January, temperatures over 30°C were recorded in Canterbury and Hawke's Bay, due to the foehn effect caused by northwesterly winds.

The highest temperature was 33.8°C, recorded at Leeston (near Christchurch) on 19 January.

The lowest temperature was -2.7°C, observed at Waiouru on 27 January.

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments
Low records or near-records				
Cape Reinga	10.3	10th	1951	4th-lowest
Whangaparaoa	11.0	10th	1982	Equal 2nd-lowest
Motu	0.9	18th	1990	4th-lowest
Martinborough	1.9	28th	1986	2nd-lowest
Mahia	8.2	19th	1990	3rd-lowest
Palmerston North	0.3	28th	1918	2nd-lowest
Secretary Island	6.4	18th	1985	3rd-lowest
Appleby	2.6	18th	1932	2nd-lowest
Hanmer Forest	-1.0	18th	1906	Equal 4th-lowest
Cheviot	2.5	28th	1982	3rd-lowest
Winchmore	1.3	18th	1928	4th-lowest
Le Bons Bay	5.9	27th	1984	4th-lowest
Lake Tekapo	-1.1	18th	1925	4th-lowest
Nugget Point	3.0	30th	1970	Lowest

Rain and slips

The highest 1-day rainfall experienced in January was 220 mm, recorded at North Egmont on 4 January.

On 3 January, a short but heavy burst of rain in Levin caused surface flooding, with some campers at the Levin Holiday Park displaced by water-logged grounds.

On 9 January, heavy showers affected the northern North Island.

On 20 and 21 January, the remnants of ex-Tropical Cyclone June caused wet and windy weather for much of the North Island and northern South Island. On 21 January, morning games of the Taranaki Open Fours bowls tournament were postponed for half a day due to rain.

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

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Mahia	55	26th	1990	Highest

Wind

The highest wind gust recorded in January was 183 km/hr, observed at Cape Turnagain on 16 January.

On 2 January, strong winds struck parts of the lower South Island. A car was blown off the road between Luggate and Cromwell, and a boat ran aground near Bluff after strong winds caused it to break from its moorings. The Milford Road was temporarily closed due to poor weather.

On 3 January, strong winds hit the lower North Island, with flights in and out of Wellington disrupted. 444 homes and businesses in Pukerua Bay lost power, whilst 144 homes in the Hutt Valley hills around Kelson also lost power. Traffic delays on SH1 between Levin and Otaki were caused by debris from trees lying on the road, and motorists driving on SH2 over the Rimutaka Hill were warned to take caution due to the windy conditions. Further south, a caravan was tipped over by strong winds near Kaikoura.

On 12-13 January, gale force north-westerly winds hit exposed areas around Wellington, including the Rimutaka Ranges and Mt Kaukau. Strong winds were also experienced in Hawke's Bay, but no damage was reported.

On 16 January, severe wind warnings were issued for Hawke's Bay and the Wairarapa. A 70-year-old walnut tree in Dannevirke was felled by the strong winds.

On 17 January, strong winds were experienced in many regions. Drivers of motorcycles, caravans, and high-sided vehicles on Auckland's Harbour Bridge, SH 1 at the Desert Road, SH 87 from Kyeburn to Mosgiel, SH 8 from Rae's Junction to Milton, SH 90 from Rae's Junction to McNab, SH 1 from Milton to Gore, and SH 73 from Arthur's Pass to Springfield were advised to take extra care due to

strong winds. In Queenstown, a poplar was blown over, destroying a corner of the Lakeside Motel, crushing one car, and damaging other vehicles.

On 19 January, strong winds whipped through Wellington, picking up a bouncy castle in Hataitai.

On 20 and 21 January, the remnants of ex-Tropical Cyclone June caused wet and windy weather for much of the North Island and northern South Island. On 20 January, rain on long-dry roads in Northland caused a number of car crashes occurred as drivers lost control on the greasy tar seal. About 800 households in Kerikeri lost power for two hours after a branch fell onto power lines. On 21 January, gales hammered exposed parts of Northland, high winds blew debris and a trampoline onto roads in the Manawatu, and trees were blown onto roofs and roads in the Waikato. More than 5500 households in Auckland lost power for a time, and trees and branches fell on roads, cars, power lines, telephone lines, and houses across the region. Drivers were warned to take care on roads due to high winds, especially on Auckland's Harbour Bridge and Mangere Bridge. A boat was assisted to shore in Tauranga Harbour by the Coastguard, as the people onboard could not get back into shore themselves due to strong winds and choppy conditions. In Manawatu and Taranaki, the windy weather caused a number of small faults on the power network, affecting 120 rural properties.

On 23 January, drivers of motorcycles, caravans, and high-sided vehicles were warned to drive with care on SH 1 at Desert Road, SH 7 from Hanmer turnoff to Springs Junction (Lewis Pass), SH 1 from Gore to Dunedin, SH 90 from McNab to Raes Junction, and SH 8 from Raes Junction to Milton, due to strong winds. High winds cut power and caused problems for firefighters battling a blaze in Clyde. Power was also cut in Cromwell when a line went down in the wind.

On 24 January, drivers of motorcycles, caravans, and high-sided vehicles were warned to take care due to strong winds on SH 1 at Desert Road.

On 26 January, a mini-tornado hit the Kapiti coast settlement of Raumati South, lifting two roofs, ripping out fences and trees and throwing patio furniture and trampolines into the air. At least eight domestic flights were cancelled and another 12 were delayed at Auckland airport due to stormy weather. On SH 1 at the Desert Road, drivers of motorcycles, caravans, and high-sided vehicles were warned to take care due to strong winds.

Record or near record January extreme wind gusts were recorded at:

Location	Extreme wind gust (km/hr)	Date of extreme gust	Year records began	Comments
Cape Reinga	133	21st	1974	Equal highest
Kaikohe	70	21st	1986	Equal 3rd-highest
Paeroa	104	21st	1991	Highest
Pukekohe	65	21st	1986	Equal 4th-highest
Wanganui	102	26th	1977	Highest
Westport	124	13th	1973	Highest
Nelson	85	3rd	1972	Equal 4th-highest

Lightning and hail

On January 9, a lightning strike took out the only set of traffic lights in Kawerau, and isolated hail hit parts of Auckland. Thunderstorms were also observed between Taupo and Gisborne, and north to Auckland.

Snow and ice

On January 8, about 10 cm of snow fell at the summit of the mountain above Mt Hutt Ski Area. January snow is not unusual there, but the usually the amount of snow that falls in January is much smaller.

For further information, please contact:

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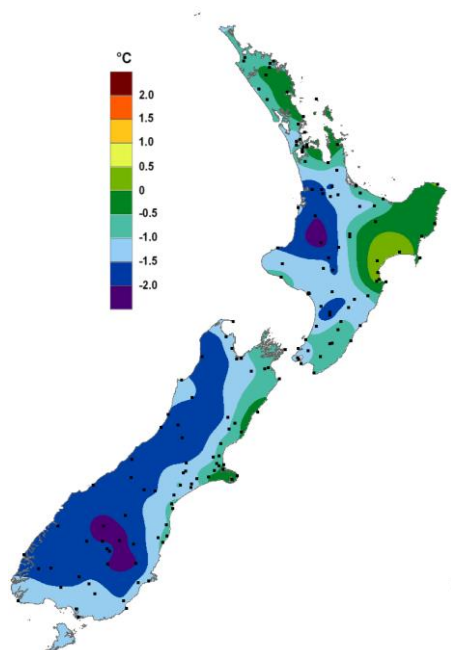
Tel. 04 386 0315

For climate data enquiries, please contact:

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January 2014 mean temperatures, expressed as a difference from average (°C).

Mean temperatures well below average (more than 1.2°C below the January average) across much of the South Island, as well as Waikato and Manawatu-Wanganui (indicated by purple and dark blue shades). Mean temperatures were below average (between 0.5 and 1.2°C below January average) for much of the remainder of New Zealand, indicated by light blue and teal shades.