

## Warm and dry for many parts of the country

<b>Temperature</b>	Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) across most of the country. Temperatures were near average ( $\pm 0.50^\circ\text{C}$ of average) in western parts of Southland and Otago, and parts of Central Otago.
<b>Rainfall</b>	Below normal (50-79% of normal) or well below normal (<50% of normal) rainfall was observed across northern, western, and southern parts of the North Island, and northern, eastern, and inland parts of the South Island. Above normal (120-149% of normal) or well above normal (>149% of normal) rainfall was observed across central and eastern parts of the North Island, and western parts of the South Island.
<b>Soil Moisture</b>	At the end of January, soil moisture levels were lower than normal in parts of Northland, southern Taranaki, Wairarapa, Wellington, Nelson, Marlborough, and north Canterbury. Areas of meteorological drought were present in parts of Marlborough and far northern Canterbury according to the New Zealand Drought Index. Soil moisture levels were higher than normal across central parts of the North Island from Waitomo to Hawke's Bay, and northwestern parts of the South Island.

Click on the link to jump to the information you require:

[Overview](#)

[Temperature](#)

[Rainfall](#)

[January 2024 climate in the six main centres](#)

[Highlights and extreme events](#)

### Overview

January 2024 was characterised by higher than normal mean sea level pressure (MSLP) to the east of Aotearoa New Zealand, with more northerly airflows than normal. Meanwhile, a marine heatwave intensified in New Zealand coastal waters during the month. This contributed to temperatures that were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) across nearly all of the country in January. The exception was western parts of Southland and Otago, and parts of Central Otago, where temperatures were near average ( $\pm 0.50^\circ\text{C}$  of average) for the month. The nationwide average temperature in January 2024 was 18.5°C. This was 1.3°C above the 1991-2020 January average from NIWA's seven station temperature series which begins in 1909, and New Zealand's 8th-warmest January on record.

It was a dry month for many parts of the country, with below normal (50-79% of normal) or well below normal (<50% of normal) rainfall in Northland, Auckland, northern Waikato, eastern Bay of Plenty, much of the western and southern North Island from Taranaki to Wellington, Tasman, Nelson, Marlborough, Canterbury, and Otago. Rainfall totals for the month were above normal (120-149% of normal) or well above normal (>149% of normal) for parts of Gisborne, Hawke's Bay, the Central

Plateau, Waitomo, central and southern parts of the West Coast, parts of western Southland, and northwestern Otago.

Sunshine was abundant for northern and eastern parts of the South Island. Christchurch recorded 297 hours of sunshine, making it the city's sunniest January since records began in 1930. Farther north, Blenheim observed 317 hours of sunshine, which was the town's fourth-highest January sunshine total since records began in 1930.

#### Further Highlights:

- The highest temperature was 35.1°C, observed at Hanmer Forest on 13 January.
- The lowest temperature was -0.7°C, observed at Cass (inland Canterbury) on 25 January.
- The highest 1-day rainfall was 330 mm, recorded at Milford Sound on 19 January.
- The highest wind gust was 152 km/h, observed at South West Cape on 13 January.
- Of the six main centres in January 2024, Auckland was the warmest and driest, Christchurch was the sunniest, Dunedin was the coolest and least sunny, and Tauranga was the wettest.
- Of the available, regularly reporting sunshine observation sites, the sunniest four locations so far in 2024 are wider Nelson (319 hours), Marlborough (317 hours), Tasman (315 hours) and Taranaki (313 hours).

#### For further information, please contact:

Gregor Macara  
Climate Scientist, NIWA Wellington  
Tel. 04 386 0509

---

## Temperature: Warm for the majority of New Zealand

It was the hottest January on record for Whangaparāoa, Whakatāne, and Waikeria, with a further 29 locations observing near-record high mean temperatures for January. Regular spells of northwesterly winds meant daily maximum temperatures of at least 30°C were a common occurrence for eastern and inland parts of the country; Hanmer Forest observed nine such days, with six days in Masterton and Wairoa, and five days in Napier and Christchurch. Auckland (Western Springs) observed 22 days when the maximum temperature exceeded 25°C, compared to seven days in January 2023.

#### Record<sup>1</sup> or near-record mean air temperatures for January were recorded at:

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Whangaparāoa	22.0	2.2	1982	Highest
Whakatāne	21.6	2.1	1974	Highest
Waikeria	21.8	3.0	1957	Highest
Kaitaia	21.5	2.3	1948	2nd-highest

---

<sup>1</sup> The rankings (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>.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.

Leigh	22.4	3.8	1966	2nd-highest
Auckland (Whenuapai)	20.7	1.4	1945	2nd-highest
Chatham Island	17.6	1.9	1878	2nd-highest
Dargaville	21.3	2.0	1943	3rd-highest
Matamata	20.3	2.1	1999	3rd-highest
Kawerau	22.2	2.4	1954	3rd-highest
Taupō	19.8	2.5	1949	3rd-highest
Motu	18.2	2.3	1990	3rd-highest
Auckland (Airport)	21.6	1.6	1959	3rd-highest
Hamilton (Ruakura)	20.6	1.9	1906	3rd-highest
Mt Ruapehu Chateau	14.4	1.9	2000	3rd-highest
Ngawi	20.4	1.7	1972	3rd-highest
Wairoa	21.3	1.9	1964	3rd-highest
Hāwera	18.3	1.6	1977	3rd-highest
Motueka	19.5	1.6	1956	3rd-highest
Kaikōura	18.3	1.7	1963	3rd-highest
Purerua	20.5	1.4	1983	4th-highest
Mokohinau Island	21.1	1.1	1994	4th-highest
Auckland (Western Springs)	21.5	1.9	1948	4th-highest
Tauranga	21.3	1.5	1913	4th-highest
Te Puke	20.6	1.8	1973	4th-highest
Whatawhata	20.6	2.2	1952	4th-highest
Masterton	20.0	1.3	1906	4th-highest
Palmerston North	19.9	2.0	1928	4th-highest
Wellington (Airport)	19.7	1.9	1962	4th-highest
Ohakune	17.2	1.5	1962	4th-highest
Whanganui	20.3	2.0	1937	4th-highest
Cheviot	18.3	1.3	1982	4th-highest
<b>Low records or near-records</b>				
None observed				

**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
<b>High records or near-records</b>				
Whangaparāoa	26.3	2.7	1982	Highest
Leigh	27.1	3.8	1966	2nd-highest
Whakatāne	26.0	1.6	1974	2nd-highest
Whatawhata	26.7	3.1	1952	3rd-highest
Wellington (Airport)	23.4	2.4	1962	3rd-highest
Motueka	25.7	2.0	1956	3rd-highest
Appleby	25.0	2.2	1932	3rd-highest
Hanmer Forest	27.2	3.4	1906	3rd-highest
Cheviot	25.2	1.9	1982	3rd-highest
Windsor	22.4	1.6	2000	3rd-highest
Whangārei	26.2	1.2	1967	4th-highest
Kawerau	28.2	2.4	1954	4th-highest
Motu	23.0	1.8	1990	4th-highest

Auckland (Māngere)	25.7	2.0	1959	4th-highest
Waikeria	27.3	2.3	1957	4th-highest
Paraparaumu	23.4	2.2	1953	4th-highest
Whanganui	24.7	2.1	1937	4th-highest
Kaikōura	22.5	2.2	1963	4th-highest
Waiau	26.5	1.9	1974	4th-highest
Waipara West	25.6	2.4	1973	4th-highest
Oamaru	21.4	1.7	1967	4th-highest
Balclutha	22.3	2.5	1964	4th-highest
Chatham Island	20.8	1.6	1878	4th-highest
Mokohinau Island	23.3	0.9	1994	Equal 4th-highest
<b>Low records or near-records</b>				
None observed				

**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
<b>High records or near-records</b>				
Kaitiāia	17.6	2.8	1948	2nd-highest
Te Puke	16.2	2.6	1973	2nd-highest
Whakatāne	17.1	2.5	1974	2nd-highest
Motu	13.4	2.8	1990	2nd-highest
Waikeria	16.2	3.7	1957	2nd-highest
Mt Ruapehu Chateau	9.1	2.4	2000	2nd-highest
Chatham Island	14.5	2.4	1878	2nd-highest
Dargaville	16.7	1.5	1943	3rd-highest
Mokohinau Island	18.8	1.3	1994	3rd-highest
Auckland (Whenuapai)	16.2	1.6	1945	3rd-highest
Auckland (Western Springs)	17.3	1.9	1948	3rd-highest
Kawerau	16.1	2.3	1954	3rd-highest
Taupō	14.2	2.6	1949	3rd-highest
Ngawi	16.5	1.7	1972	3rd-highest
Wairoa	15.8	2.0	1964	3rd-highest
Māhia	16.2	1.3	1990	3rd-highest
Hāwera	14.1	1.4	1977	3rd-highest
Matamata	14.6	2.7	1999	4th-highest
Auckland (Airport)	17.5	1.4	1959	4th-highest
Napier	16.6	2.3	1870	4th-highest
Ohakune	11.4	1.8	1962	4th-highest
Brothers Island	15.1	0.9	1997	4th-highest
<b>Low records or near-records</b>				
None observed				

---

## Rainfall: Dry for many, wet for central parts of the North Island

January was an especially dry month for Masterton, Wellington Airport, Blenheim, Waiau, Cheviot, and Culverden, with rainfall totals just 20% or less of the monthly normal, respectively. Masterton recorded just 4 mm of rain, making it the town's driest January since records began there in 1926.

In contrast, monthly rainfall totals were high for central parts of the North Island. It was an especially wet month in Whakatu, where the monthly rainfall total of 122 mm was 266% of normal. Notably, more than half of that rainfall (75 mm) was recorded over the final four days of the month.

The lack of rainfall in January has extended a lengthy dry period currently being experienced by parts of the lower North Island and upper South Island. According to the New Zealand Drought Index (NZDI), extremely dry conditions developed during January in the Wellington and southern Manawatū areas, as well as parts of Canterbury and Marlborough, while small pockets of meteorological drought emerged in southern Marlborough and far northern Canterbury.

### 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				
Māhia	116	216	1990	3rd-highest
Campbell Island	200	160	1992	4th-highest
Low records or near-records				
Masterton	4	7	1926	Lowest
Cheviot	7	19	1982	4th-lowest

---

## January climate in the six main centres

It was a relatively warm, dry, and sunny January for all main centres. Temperatures were well above average for all centres except Dunedin, where temperatures were above average. It was a particularly dry month in Auckland and Wellington, with just 38% and 39% of normal January rainfall, respectively. Sunshine hours were higher than normal for all main centres. Notably, Christchurch had its sunniest January since records began in 1930. Of the six main centres in January 2024, Auckland was the warmest and driest, Christchurch was the sunniest, Dunedin was the coolest and least sunny, and Tauranga was the wettest.

### January 2024 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Auckland <sup>a</sup>	21.4	+1.6	Well above average
Tauranga <sup>b</sup>	21.3	+1.5	Well above average
Hamilton <sup>c</sup>	20.1	+1.6	Well above average
Wellington <sup>d</sup>	18.5	+1.5	Well above average
Christchurch <sup>e</sup>	18.4	+1.3	Well above average
Dunedin <sup>f</sup>	16.1	+0.9	Above average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland <sup>a</sup>	21	38	Well below normal
Tauranga <sup>b</sup>	68	90	Near normal
Hamilton <sup>c</sup>	67	89	Near normal
Wellington <sup>d</sup>	31	39	Well below normal
Christchurch <sup>e</sup>	31	73	Below normal
Dunedin <sup>f</sup>	37	53	Below normal
Sunshine			
Location	Sunshine (hours)		
Auckland <sup>a</sup>	277		
Tauranga <sup>b</sup>	274		
Hamilton <sup>g</sup>	243 <sup>2</sup>		
Wellington <sup>d</sup>	265		
Christchurch <sup>e</sup>	297		
Dunedin <sup>f</sup>	230		

<sup>a</sup> Māngere <sup>b</sup> Tauranga Airport <sup>c</sup> Hamilton Airport <sup>d</sup> Kelburn <sup>e</sup> Christchurch Airport <sup>f</sup> Musselburgh <sup>g</sup> Ruakura

<sup>2</sup> Missing one day of data.

---

## Highlights and extreme events

### Rain and slips

The highest 1-day rainfall was 330 mm, recorded at Milford Sound on 19 January.

On 19 January, a local state of emergency was declared for the Westland District from Hokitika to Haast, with prolonged heavy rain causing high river levels and dangerous driving conditions. Farther south, Milford Sound recorded 330 mm of rain, making it the fourth-wettest January day there since records began in 1929.

On 31 January, persistent rain led to areas of surface flooding on SH35 at Rotatahi.

### 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
Lower Retaruke	61	28th	1967	3rd-highest
Tūrangi	96	28th	1968	4th-highest
Milford Sound	330	19th	1929	4th-highest
Windsor	28	22nd	2000	4th-highest

### Drought and dryness

A relatively dry spring and a dry summer so far led to water restrictions in Wellington. On 18 January, Wellington Water increased the water restrictions to level two in Wellington, Porirua, Hutt City, Upper Hutt City and South Wairarapa. These restrictions banned the use of all sprinklers and irrigation systems.

### Temperatures

The highest temperature was 35.1°C, observed at Hanmer Forest on 13 January. The lowest temperature was -0.7°C, observed at Cass (inland Canterbury) on 25 January.

Warm and muggy conditions prevailed over much of the country from 19-22 January. Dozens of locations observed record or near-record high daily minimum temperatures for January during this time. Wellington observed relatively high temperatures during its anniversary weekend. On 22 January, the air temperature at airport climate station reached a maximum of 29.6°C, the highest January temperature at that location since records began in 1962.

On 23 January, a cold front passed over the South Island bringing cooler than usual temperatures for the time of year. Three locations observed near-record low daily maximum temperatures. Clear skies and light winds the following morning resulted in chilly temperatures for some locations. Cromwell and Clyde dipped to 1.3°C and 1.1°C respectively, which was the third-lowest temperature for January on record at both locations.

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

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-records				
Cape Reinga	26.5	21st	1951	Highest

Whangaparāoa	30.6	31st	1982	Highest
Wellington (Airport)	29.6	22nd	1962	Highest
Auckland (Māngere)	29.7	21st	1959	2nd-highest
Hāwera	28.7	19th	1977	2nd-highest
Whanganui	31.1	19th	1937	Equal 2nd-highest
Leigh	30.2	12th	1966	3rd-highest
Auckland (Whenuapai)	29.3	31st	1945	3rd-highest
Whatawhata	31.3	21st	1952	3rd-highest
Dannevirke	30.8	19th	1951	3rd-highest
Akaroa	33.5	20th	1978	3rd-highest
Arapito	27.2	22nd	1978	4th-highest
Motueka	31.6	20th	1956	4th-highest
Motu	28.5	21st	1990	Equal 4th-highest
Waikeria	31.5	22nd	1957	Equal 4th-highest
Palmerston North	31.0	19th	1918	Equal 4th-highest
Oamaru	32.6	11th	1967	Equal 4th-highest
<b>Low records or near-records</b>				
Waipounamu	12.2	23rd	1980	3rd-lowest
Campbell Island	6.6	23rd	1991	3rd-lowest
Tautuku	11.3	23rd	1976	4th-lowest

**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
<b>High records or near-records</b>				
Purerua	21.0	20th	1983	Highest
Auckland (Whenuapai)	21.5	20th	1951	Highest
Auckland (Western Springs)	22.6	20th	1971	Highest
Port Taharoa	21.8	20th	1974	Highest
Masterton	21.5	20th	1943	Highest
Martinborough	21.9	20th	1986	Highest
Napier	23.3	15th	1940	Highest
Palmerston North	20.3	21st	1940	Highest
Wellington (Airport)	21.0	20th	1972	Highest
Upper Hutt (Trentham)	20.3	20th	1972	Highest
Kaikōura	21.8	20th	1972	Highest
Cheviot	22.2	20th	1982	Highest
Waipara West	22.6	20th	1973	Highest
Rangiora	22.0	20th	1972	Highest
Christchurch	22.5	20th	1863	Highest
Lincoln	22.9	20th	1881	Highest
Akaroa	23.3	20th	1978	Highest
Le Bons Bay	20.5	20th	1984	Highest
Tauranga	21.6	20th	1941	Equal highest
Te Puke	20.4	20th	1973	Equal highest
Paraparaumu	20.7	20th	1972	Equal highest
Kaitaia	21.3	20th	1948	2nd-highest



Mokohinau Island	21.1	20th	1994	2nd-highest
Leigh	21.1	15th	1966	2nd-highest
Whangaparāoa	20.8	20th	1982	2nd-highest
Auckland (Māngere)	21.9	20th	1961	2nd-highest
Waikeria	21.3	8th	1972	2nd-highest
Lower Retaruke	19.7	20th	1972	2nd-highest
Mt Ruapehu Chateau	15.5	20th	2000	2nd-highest
Castlepoint	21.9	21st	1972	2nd-highest
Wellington (Kelburn)	19.6	20th	1931	2nd-highest
Stratford	18.9	20th	1972	2nd-highest
Hāwera	20.3	20th	1977	2nd-highest
Ohakune	18.8	20th	1972	2nd-highest
Brothers Island	18.0	20th	1997	2nd-highest
Chatham Island	18.7	22nd	1878	2nd-highest
Matamata	20.5	20th	1999	3rd-highest
Whakatāne	21.2	15th	1975	3rd-highest
Motu	17.9	23rd	1990	3rd-highest
Whatawhata	20.6	20th	1952	3rd-highest
Hamilton (Ruakura)	20.5	20th	1940	3rd-highest
Hamilton (Airport)	20.8	20th	1946	3rd-highest
Taumarunui	20.2	20th	1947	3rd-highest
New Plymouth	20.4	20th	1944	3rd-highest
Takapau Plains	18.7	21st	1972	3rd-highest
Ngawi	22.9	21st	1972	3rd-highest
Levin	20.4	21st	1950	3rd-highest
Whanganui	21.4	21st	1972	3rd-highest
Appleby	19.9	20th	1941	3rd-highest
Kerikeri	21.0	20th	1952	Equal 3rd-highest
Kawerau	20.5	20th	1954	Equal 3rd-highest
Te Kuiti	20.8	20th	1959	Equal 3rd-highest
Greymouth	18.7	20th	1972	4th-highest
Motueka	19.5	22nd	1972	4th-highest
Wānaka	19.0	11th	1972	4th-highest
Roxburgh	20.2	11th	1950	4th-highest
Kaikohe	20.2	20th	1973	Equal 4th-highest
Reefton	17.7	19th	1972	Equal 4th-highest
Culverden	21.8	20th	1930	Equal 4th-highest
<b>Low records or near-records</b>				
South West Cape	4.4	29th	1991	Lowest
Campbell Island	-0.9	10th	1991	Lowest
Cheviot	2.3	24th	1982	2nd-lowest
Cromwell	1.3	24th	1949	3rd-lowest
Clyde	1.1	24th	1978	3rd-lowest
Nugget Point	4.4	24th	1970	Equal 3rd-lowest
Secretary Island	6.5	24th	1985	Equal 4th-lowest

## Wind

The highest wind gust was 152 km/h, observed at South West Cape on 13 January.

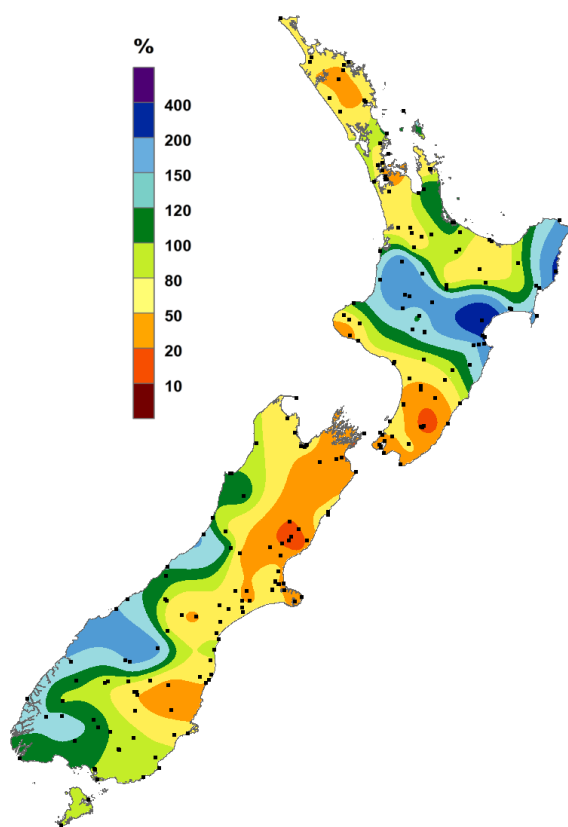
On 19 January, strong northwest winds fanned two separate fires which forced evacuations of approximately 50 homes in Amberley and Loburn. Two homes and a privately-owned church building were destroyed by fires in Loburn, with several other buildings and vehicles including farm machinery destroyed. On 20 January, a third fire spread among vegetation in Swannanoa.

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

Location	Extreme wind gust (km/h)	Date of extreme gust	Year records began	Comments
Reefton	56	27th	1999	Equal 2nd-highest
Secretary Island	130	26th	1994	4th-highest
Bromley	80	27th	1972	Equal 4th-highest
Ranfurly	83	20th	2000	Equal 4th-highest
Clyde	76	20th	1983	Equal 4th-highest

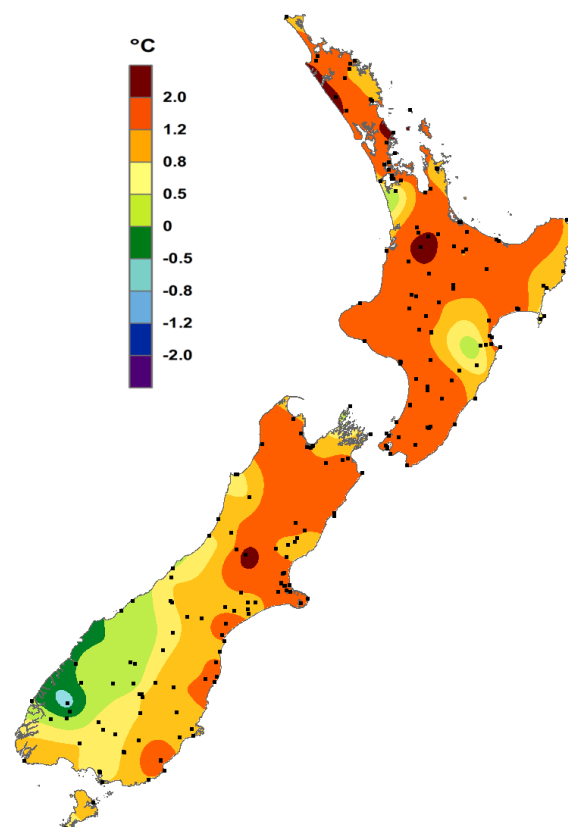
**For further information, please contact:**

**Gregor Macara** | Climate Scientist, NIWA Wellington | Tel. 04 386 0509



**January rainfall**

Expressed as a percentage of the 1991-2020 normal.



**January temperature**

Expressed as a departure from the 1991-2020 average in degrees Celsius.

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

© Copyright NIWA 2024

All rights reserved. Information presented in this summary is based on data available at the time of publication, which is subject to ongoing quality assurance procedures.