

# Dry and mild for most, wet for Gisborne and Hawke's Bay

Rainfall	Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for much of the South Island, the southwestern North Island, western and northern parts of Waikato, and southern parts of Northland. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for in western and inland parts of Bay of Plenty, southeastern Waikato, Gisborne, Hawke's Bay, eastern Wairarapa, and parts of mid Canterbury.
Temperature	Temperatures were above average (0.51°C to 1.20°C above average) for western and inland parts of the South Island, and much of Auckland, Waikato, Bay of Plenty, East Cape, inland Whanganui, parts of Manawatū, Kāpiti Coast, and inland Wairarapa. Near average temperatures (±0.50°C of average) prevailed for most remaining areas of the country.
Soil Moisture	At the end of November, soil moisture levels were well above normal for eastern and inland parts of the North Island from western Bay of Plenty to Wairarapa, as well as the Far North. Below normal soil moisture levels were observed in western Waikato, Kāpiti Coast, Wellington, southern Canterbury, South Otago, and southern Southland. Elsewhere, near normal soil moisture levels were observed.

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# Overview

November 2023 was characterised by a large belt of higher-than-normal mean sea level pressure (MSLP) that straddled Aotearoa New Zealand and the ocean to the south. This pressure setup resulted in more easterly airflows than normal, with relatively settled and dry weather for many areas (with some exceptions as described below). Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for much of the South Island, the southwestern North Island, western and northern parts of Waikato, and southern parts of Northland. The more frequent easterly airflows brought enhanced rainfall for western and inland parts of Bay of Plenty, southeastern Waikato, Gisborne, Hawke's Bay, eastern Wairarapa, where rainfall was above normal (120-149% of normal) or well above normal (>149% of normal). Above normal rainfall was also recorded in parts of mid Canterbury about Lincoln, Ashburton, and Methven.

Temperatures were mild across the country during November. Above average temperatures (0.51°C to 1.20°C above average) were observed in western and inland parts of the South Island, and much of Auckland, Waikato, Bay of Plenty, East Cape, inland Whanganui, parts of Manawatū, Kāpiti Coast, and

inland Wairarapa. The nationwide average temperature in November 2023 was 14.1°C. This was 0.4°C above the 1991-2020 November average, making it New Zealand's 34th-warmest November since NIWA's seven station temperature series began in 1909.

#### Further Highlights:

- The highest November temperature was 30.0°C, observed at Blenheim on 23 November.
- The lowest November temperature was -2.9°C, observed at Waipara on 26 November.
- The highest 1-day rainfall was 185 mm, recorded at Milford Sound on 12 November.
- The highest wind gust was 209 km/h, observed at South West Cape on 15 November.
- Of the available, regularly reporting sunshine observation sites, the sunniest four regions in 2023 so far are wider Nelson (2397 hours), Mackenzie Basin (2330 hours), Tasman (2323 hours), and Taranaki (2292 hours).
- Of the six main centres in November 2023, Auckland and Tauranga were the equal-warmest,
  Dunedin was the coolest, Tauranga was the wettest, Christchurch was the driest and sunniest,
  and Wellington was the least sunny.

# For further information, please contact:

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

### Rainfall: Dry for most, but wet again in Gisborne and Hawke's Bay

It was a dry November overall for many parts of New Zealand, due to the prevalence of high air pressure over the country. Mt Ruapehu Chateau received just 27% of its normal November rainfall.

In contrast, it was yet another wet month for Gisborne and Hawke's Bay. Wairoa recorded 302 mm of rainfall (375% of its November normal), making it the town's wettest November since records began in 1964.

#### Record<sup>1</sup> or near-record November rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments		
High records or near-reco	rds					
Wairoa	302	375	1964	Highest		
Māhia	223	307	1990	2nd-highest		
Gisborne	222	349	1905	3rd-highest		
Low records or near-records						
Mt Ruapehu Chateau	67	27	2000	2nd-lowest		
Lake Moeraki	186	47	1985	4th-lowest		
Pukaki Airport	20	31	1972	4th-lowest		

<sup>&</sup>lt;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.

# Temperature: Mild throughout the country

November temperatures were relatively mild for the time of year. Two locations observed near-record high mean temperatures, while no locations observed record or near-record low mean temperatures. The warmest location relative to average was Waikeria, where the mean temperature of 16.9°C was 2.0°C above average.

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

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Whakatāne	17.1	1.4	1974	3rd-highest
Waikeria	16.9	2.0	1957	4th-highest
Low records or near-records				
None observed				

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

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Whangaparāoa	21.3	1.7	1982	3rd-highest
Low records or near-records				
None observed				

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

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Waikeria	11.8	2.3	1957	Highest
Motu	9.3	2.1	1990	3rd-highest
Whakatāne	12.4	1.7	1974	4th-highest
Low records or near-records				
None observed				

# November climate in the six main centres

November temperatures were above average for the three northernmost main centres, and near average for the remainder. It was a relatively dry November in Hamilton and Wellington, where rainfall was below normal, respectively. Of the six main centres in November 2023, Auckland and Tauranga were the equal-warmest, Dunedin was the coolest, Tauranga was the wettest, Christchurch was the driest and sunniest, and Wellington was the least sunny.

#### November 2023 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Aucklanda	16.7	+0.6	Above average
Tauranga <sup>b</sup>	16.7	+0.6	Above average
Hamilton <sup>c</sup>	15.4	+0.7	Above average
Wellingtond	13.8	+0.3	Near average
Christchurch <sup>e</sup>	13.0	-0.2	Near average
Dunedin <sup>f</sup>	12.3	0.0	Near average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland <sup>a</sup>	66	115	Near normal
Tauranga <sup>b</sup>	134	212	Well above normal
Hamilton <sup>c</sup>	64 <sup>2</sup>	72	Below normal
Wellingtond	62	72	Below normal
Christchurch <sup>e</sup>	47	105	Near normal
Dunedin <sup>f</sup>	72	115	Near normal
Sunshine			
Location	Sunshine (hours)		
Auckland <sup>h</sup>	228		
Tauranga <sup>b</sup>	231		
Hamilton <sup>g</sup>	211		
Wellington <sup>d</sup>	189		
Christchurch <sup>e</sup>	233		
Dunedin <sup>f</sup>	200		

<sup>&</sup>lt;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

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<sup>&</sup>lt;sup>2</sup> Missing one day of data.

# Highlights and extreme events

#### Rain and slips

The highest 1-day rainfall was 185 mm, recorded at Milford Sound on 12 November.

From 7-8 November, heavy rainfall in northern Hawke's Bay caused surface flooding for parts of Wairoa and Nūhaka. Three people were rescued from their cars after becoming stuck in floodwaters south of Nūhaka, and three homes were evacuated. Flooding forced the closure of Nuhaka School, as well as SH2 from Whirinaki to Wairoa, SH2 from Wairoa to Gisborne, and SH38 from Wairoa to Waikaremoana. A slip caused damage to Māhia East Coast Road near Browns Rise.

From 25-26 November, heavy rainfall in northern Hawke's Bay and Gisborne resulted in elevated river levels, with areas of surface flooding, and power outages for approximately 300 customers. One person died after crashing their vehicle into a slip on SH2 south of Wairoa, while SH35 from Gisborne to Tolaga Bay was closed by surface flooding.

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

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Wairoa	120	7th	1967	2nd-highest
Māhia	94	7th	1990	2nd-highest
New Plymouth	71	19th	1944	3rd-highest

#### **Temperatures**

The highest November temperature was 30.0°C, observed at Blenheim on 23 November. This was the first and only 30°C temperature of November (and spring) 2023. The lowest November temperature was -2.9°C, observed at Waipara on 26 November.

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

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments		
High records or near-records						
Whangaparāoa	26.4	21st	1982	Highest		
Waikeria	29.7	22nd	1957	Highest		
Whatawhata	26.7	21st	1952	4th-highest		
Low records or near-records						
Kawerau	13.7	7th	1954	Equal 2nd-lowest		

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments		
High records or near-records						
Campbell Island	9.4	12th	1991	2nd-highest		
Oamaru	15.9	13th	1972	Equal 3rd-highest		
Whakatāne	17.6	18th	1975	4th-highest		
Low records or near-records						
Martinborough	-0.6	11th	1986	3rd-lowest		

Balclutha	-0.9	10th	1964	3rd-lowest
Waipounamu	0.0	10th	1980	Equal 3rd-lowest

#### Wind

The highest wind gust was 209 km/h, observed at South West Cape on 15 November.

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

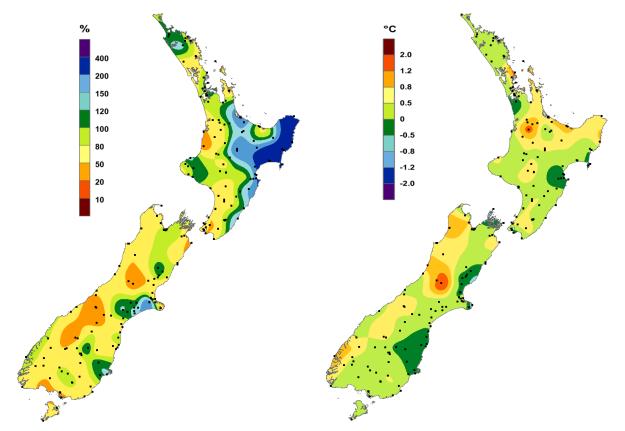
Location	Extreme wind gust (km/h)	Date of extreme gust	Year records began	Comments
Farewell Spit	111	15th	1973	Highest
Mt Cook (Airport)	172	15th	2000	Highest
South West Cape	209	15th	1991	Highest
Mt Ruapehu Chateau	113	25th	2000	2nd-highest
Puysegur Point	150	12th	1986	3rd-highest
Windsor	87	12th	2001	3rd-highest
Bromley	85	28th	1972	4th-highest
Hicks Bay	122	25th	1975	Equal 4th-highest

# **Cloud and fog**

On 19 and 21 November, low cloud about Wellington Airport caused major travel disruption, with numerous flights diverted or cancelled.

# For further information, please contact:

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



**November rainfall** 

Expressed as a percentage of the 1991-2020 normal.

# **November temperature**

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

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

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