Aotearoa New Zealand Climate Summary: **2024** Issued: 8 January 2025

2024: Warm for most, dry for northern and eastern areas

Temperature	2024 was New Zealand's 10th-warmest year on record, based on NIWA's seven station series which begins in 1909. Annual temperatures were above average (0.51-1.20°C above the annual average) for much of Northland, northern Waikato, Bay of Plenty, coastal Hawke's Bay, southern Taranaki, Whanganui, eastern and southern Wairarapa, Tasman, inland northern Canterbury, Banks Peninsula, and eastern Otago. Annual temperatures were near average (±0.50°C of average) elsewhere.
Rainfall	Rainfall was below normal (50-79% of the annual normal) for much of eastern and northern Canterbury, Tasman, Wairarapa, Bay of Plenty, the Coromandel Peninsula, and Northland. Rainfall was above normal (120-149% of the annual normal) for western parts of Otago, and inland and western parts of Southland. Near normal annual rainfall (80-119% of the annual normal) was typically observed elsewhere.
Soil moisture	From January to May, soil moisture levels were below normal for many parts of the country. In March, the Ministry for Primary Industries classified the drought conditions in Northland, Taranaki, Manawatū-Whanganui, Wairarapa, Wellington, Marlborough, Tasman, and Nelson as a medium-scale adverse event. By the end of winter, soil moisture levels had recovered such that near normal levels were observed for all except isolated parts of Central Otago (above normal soil moisture). By the end of September, lower than normal soil moisture levels emerged in eastern parts of the North Island, particularly Hawke's Bay, and this persisted through most of the remainder of the year. Above normal soil moisture levels emerged for much of Southland and Otago during September, and these persisted to the end of November. At the end of December, below normal soil moisture was widespread for northern, central and western parts of the North Island. In contrast, soil moisture levels were above normal for eastern parts of the North Island, Christchurch, Banks Peninsula, and southern parts of Southland.
Sunshine	Marlborough experienced New Zealand's highest annual sunshine total during 2024 (2769 hours recorded at Blenheim).

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Overview

2024 was Aotearoa New Zealand's 10th-warmest year on record. The 2024 nationwide average temperature calculated from NIWA's seven station series was 13.25˚C, being 0.51˚C above the 1991-2020 annual average. Of New Zealand's 10 warmest years on record, eight have occurred since 2013 (Figure 1). The ongoing warming trend observed both locally and globally is consistent with human-caused climate change. This is largely driven by human greenhouse gas emissions. Atmospheric carbon dioxide (CO_2) levels continue to rise, surpassing 420 ppm at NIWA's Baring Head monitoring station during 2024.

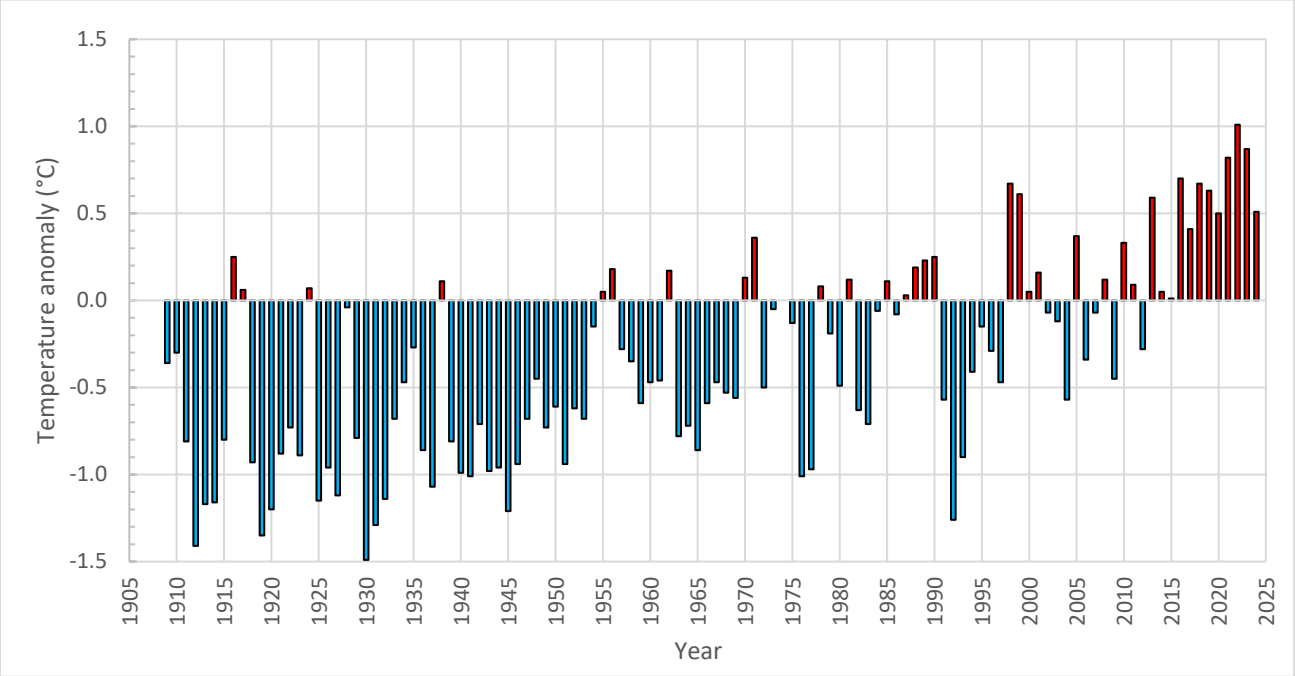

Figure 1. New Zealand 7-station annual temperature, minus the 1991-2020 average.

Data from NIWA's seven station series shows eight months of 2024 had temperatures that were well above average (>1.2°C above the monthly average) or above average (0.5-1.2°C above the monthly average). December and January were the country's warmest months compared to normal, at 1.5°C and 1.3°C above the 1991-2020 monthly average, respectively. Meanwhile, May and March were relatively cool, recording mean temperatures of 1.3°C and 1.0°C below the 1991-2020 monthly average, respectively. March and May were just the second and third months to have below average national temperatures (0.5-1.2°C below the monthly average) since May 2017.

In early 2024, a weakening El Niño event in the equatorial Pacific delivered more westerly (summer 2023-24) and southwesterly (autumn) winds than normal over New Zealand. ENSO-neutral conditions prevailed from June to December. New Zealand had more easterly and northeasterly winds than normal during winter, while spring was characterised by more westerly winds than normal. The prevalence of west-southwest winds contributed to a dry year for many northern and eastern areas of the country, as these areas are relatively sheltered from weather systems arriving from the west-southwest. The dryness was exceptional in some locations, with Dargaville and Whitianga each observing their driest year on record. A further eight locations observed near-record low annual rainfall totals (see Section 6 for details).

Several extreme rainfall events occurred throughout the year, with four local state of emergency declarations (Westland District in January, Wairoa in June, Dunedin and Clutha District in October, and Westland District in November). The southern South Island was exposed to frequent rain-bearing systems during the year, and the Ministry for Primary Industries announced a medium-scale adverse event classification for Southland and the Clutha District in October due to persistently wet conditions. Most notably, Lumsden observed its wettest year since records began in 1982.

Settled weather was a feature of July, with a blocking high pressure system in place for several weeks. The strength of the high pressure peaked on 10 July, when Ranfurly (Otago) registered a mean sea level air pressure (MSLP) of 1046.5 hPa – which is mainland New Zealand's highest MSLP measurement on record.

Local and regional sea surface temperatures (SSTs) have an important influence on weather conditions in New Zealand. In 2024, local SSTs were cooler compared to recent years, dipping below normal for the first time since early 2021 during autumn. This contributed to the cooler than average air temperatures the country observed during March and May. By mid-late winter, local SSTs returned to above normal and remained that way for much of the rest of the year. Local SSTs were most unusually warm during late-January to early-February, peaking at 2.1°C above average off the west of the North Island. Local SSTs were most unusually cool during April, falling as low as 0.9°C below average off the west of the South Island.

Section 1: The year in review

The monthly sequence of New Zealand climate was as follows:

January 2024: Warm and dry for many parts of the country

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. 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.

February 2024: A dry month for many regions

Below normal (50-79% of normal) or well below normal (<50% of normal) rainfall occurred in most regions of the country. However, near normal (80-119% of normal) rainfall was observed in parts of central Waikato, inland Manawatū-Whanganui, West Coast, and inland Southland. The remainder of Southland, Fiordland, and Stewart Island observed above normal (120-149% of normal) or well above normal (>149% of normal) rainfall. Above average temperatures (0.51-1.20°C above average) were observed in parts of Northland, Coromandel Peninsula, Bay of Plenty, Gisborne, northern Hawke's Bay, Wairarapa, southern Marlborough, Canterbury, and north-east Otago. Below average temperatures (0.51-1.20°C below average) covered parts of western Auckland, Waikato, Taranaki, West Coast, and northern Fiordland.

March 2024: New Zealand's coldest March in 12 years

Temperatures were below average (0.51-1.20°C below average) or well below average (>1.20°C below average) for most of the country. Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for northern, eastern and southern regions of the North Island, as well as much of the northern and central South Island. Above normal rainfall (120-149% of normal) was observed in parts of Waikato, Fiordland and Southland.

April 2024: Dry in eastern New Zealand, wetter in the west of both islands

Below normal (50-79% of normal) or well below normal (<50% of normal) rainfall was observed in eastern Northland, parts of Auckland, the Coromandel Peninsula, much of the central, eastern, and lower North Island, Tasman, Canterbury, and northern Otago. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) in parts of Taranaki, eastern Marlborough, the central and lower West Coast, Fiordland, and western Southland. Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) in much of Northland, parts of Auckland, the Coromandel Peninsula, parts of Hawke's Bay, Manawatū-Whanganui, Wellington, Tasman, Canterbury, Otago, and Southland.

May 2024: New Zealand's coldest May in 15 years, dry for much of the country

Temperatures were below average (0.51-1.20°C below average) or well below average (>1.20°C below average) for most of the country. Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for most of the South Island, southern and western parts of the North Island, Bay of Plenty, and parts of Waikato and Northland. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for isolated parts of Auckland, and eastern parts of the North Island including Gisborne, Hawke's Bay, and southern Wairarapa.

June 2024: Warm and dry for many, wet for some northern and eastern parts of both islands

Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) for most of the country. Rainfall was below normal (50-79% of normal) or well below normal (<50%

of normal) for inland, western, and southern parts of the North Island, much of Canterbury, the West Coast, western Otago, eastern Southland, and Fiordland. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for northern parts of Northland, Gisborne, Hawke's Bay, Nelson, northern Tasman, eastern Marlborough, and eastern Otago.

July 2024: Mild and dry for much of the country

Above average (0.51-1.20°C above average) or well above average (>1.20°C above average) temperatures were observed for western and southern parts of Northland, Hawke's Bay, Wairarapa, and northern, western and coastal parts of the South Island. Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for much of the North Island, and parts of Marlborough, Nelson, northern and central Canterbury, West Coast, and Southland. Above normal (120-149% of normal) or well above normal (>149% of normal) rainfall was observed in most of Otago, southern Canterbury, Banks Peninsula, and the Bay of Islands.

August 2024: A warm month, wet for western and central parts

Temperatures were near average (±0.50°C of average) or above average (0.51-1.20°C above average) for most of the country, with isolated pockets of well above average (>1.20°C above average) temperatures observed in parts of Northland, Hawke's Bay, southern Taranaki, and Fiordland. Rainfall was above normal rainfall (120-149% of normal) or well above normal (>149% of normal) for western, inland, and northern parts of the South Island, as well as lower parts of the North Island, and much of Taranaki. Rainfall was below normal (50-79% of normal) for eastern and southern parts of Northland, Auckland, Coromandel, Bay of Plenty, Gisborne, Hawke's Bay, the Central Plateau, coastal Canterbury about and south of Banks Peninsula, and coastal North Otago.

September 2024: Warm and dry for northern and eastern parts of both Islands

Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) in parts of Northland, Auckland, Waikato, Bay of Plenty, Gisborne, Hawke's Bay, Taranaki, Whanganui, Tararua District, Wellington, Marlborough, much of Canterbury, and eastern Otago. Temperatures were below average (0.51-1.20°C below average) for parts of Fiordland and western Southland. Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) in northern, eastern and central parts of the North Island, Tasman, Nelson, western Marlborough, and northern and central parts of Canterbury. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for the lower half of the South Island, the West Coast, parts of Wellington, and Manawatū-Whanganui.

October 2024: A mild month overall, very wet for much of the South Island

Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) for most of the North Island, Marlborough, northern and eastern Canterbury, West Coast, Fiordland, and eastern parts of Otago. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) in much of the South Island, southern Wellington, Bay of Plenty, southern and central parts of Waikato, and northwestern parts of Northland. Below normal (50-79% of normal) or well below normal (<50% of normal) rainfall was observed in Gisborne, Hawke's Bay, southern parts of the Central Plateau, northeastern parts of Wairarapa, and Banks Peninsula.

November 2024: Dry and warm for most of the country

Rainfall was below normal (50-79% of normal) or well below normal (<50% of normal) for much of the country. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) for parts of the West Coast. Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) for most of the country.

December 2024: New Zealand's 5th-warmest December on record

Temperatures were above average (0.51-1.20°C above average) or well above average (>1.20°C above average) throughout the country. Rainfall was above normal (120-149% of normal) or well above normal (>149% of normal) in eastern and southern parts of the North Island, inland Marlborough, northern, eastern and central parts of Canterbury, parts of the West Coast, and central and eastern parts of Southland. Below normal (50-79% of normal) or well below normal (<50% of normal) rainfall was observed in northern, central and western parts of the North Island, Nelson, Tasman, southern Canterbury, and North Otago.

Section 2: Monthly temperature

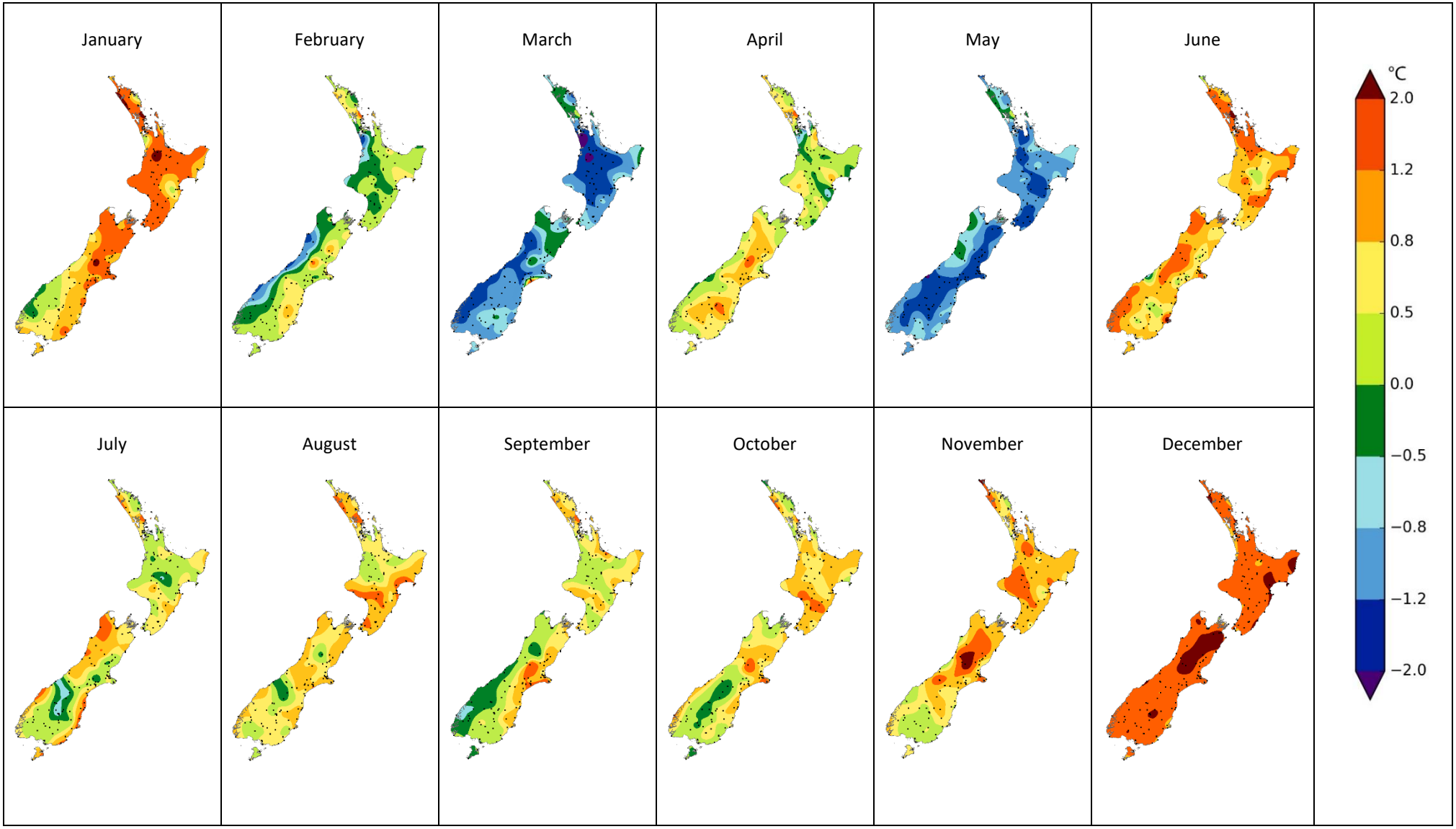

Figure 2: Monthly temperature anomalies (compared to the 1991-2020 monthly averages) for each month of 2024.

Section 3: Monthly rainfall

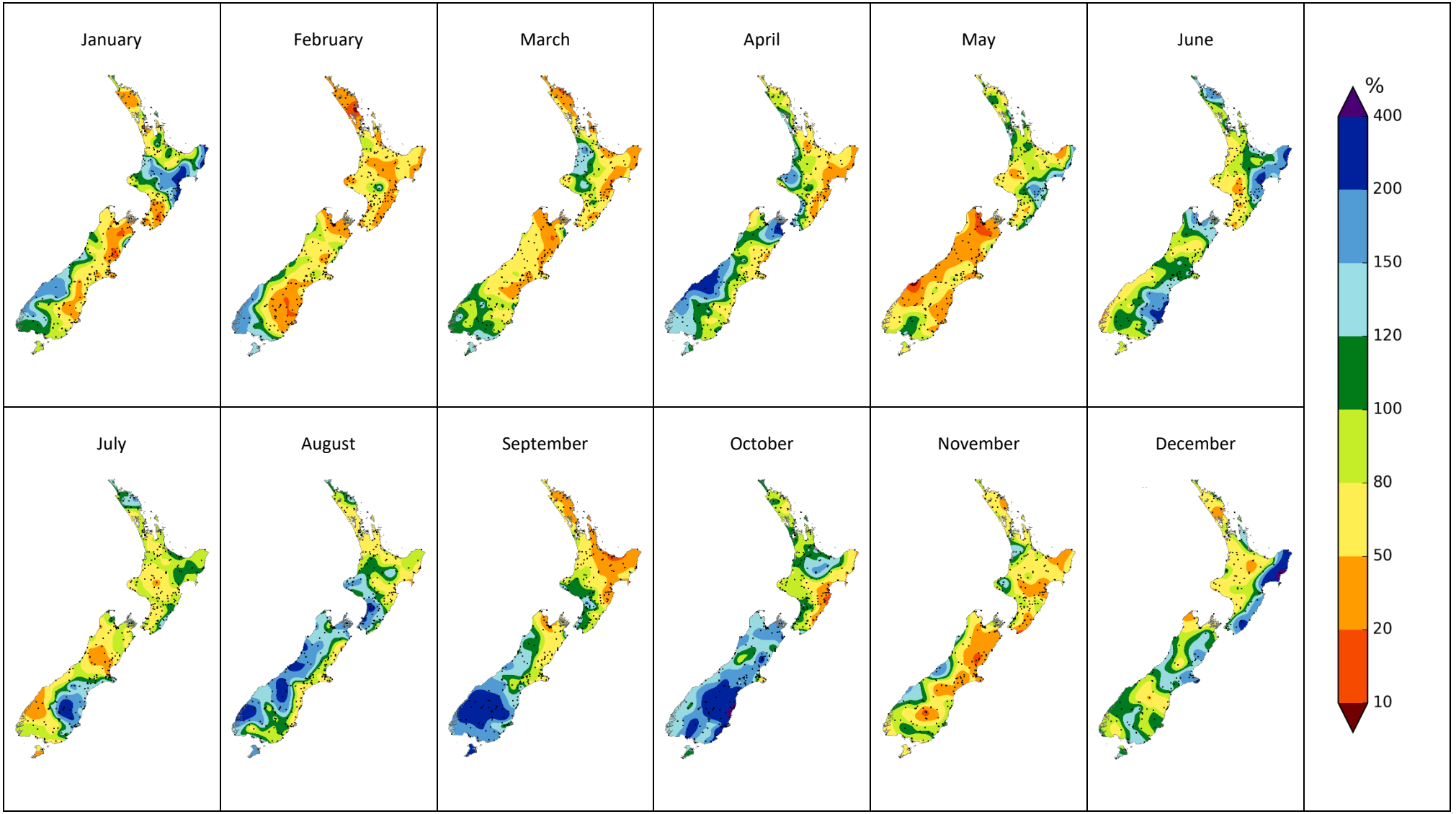

Figure 3: Monthly rainfall (as a percentage of the corresponding 1991-2020 monthly normal) for each month of 2024.

Section 4: Observations and statistics

Based on data available at the time of writing, NIWA analyses of month-by-month records show:

- Using NIWA's seven-station temperature series which begins in 1909, the nationwide average temperature for 2024 was 13.25°C. This was 0.51°C above the 1991–2020 annual average, making 2024 New Zealand's 10th-warmest year on record.
- Leigh recorded the highest annual average temperature across the mainland for 2024 with 17.3°C, followed by Kaitaia at 16.8°C, and Whangaparāoa at 16.5°C.
- The highest air temperature of the year was 37.0°C recorded at Hanmer Forest, followed by 36.9°C at Waipara West, and 36.5°C at Waiau. These temperatures were each recorded on 5 February.
- The lowest air temperature of the year was -11.8°C recorded at Lake Tekapo on 3 August. This was followed by -11.1°C at Mt Cook Airport on 3 and 4 August, and -10.9°C at Lake Tekapo on 4 August.
- The top three daily rainfall totals from regularly reporting gauges in 2024 were 373 mm at Franz Josef on 8 November, 330 mm at Milford Sound on 19 January, and 326 mm at Lower Whataroa on 8 November.
- Of all the regularly reporting gauges, the wettest locations in 2024 were: Cropp River at Waterfall (West Coast, 975 metres above sea level) with 11,503 mm, Tuke River at Tuke Hut (West Coast, 975 metres above sea level) with 11,256 mm, and Cropp River at Cropp Hut (West Coast, 860 metres above sea level) with 10,191 mm.
- The locations with the lowest rainfall totals for 2024 were Alexandra with 354 mm, Bromley (Christchurch) with 354 mm, and Riccarton (Christchurch) with 374 mm.
- Marlborough experienced New Zealand's highest annual sunshine total during 2024 (2769 hours recorded at Blenheim), followed by the wider Nelson region (2760 hours recorded at Richmond), Bay of Plenty (2734 hours recorded at Tauranga), and Tasman (2665 hours recorded at Tākaka).
- The highest confirmed wind gust for 2024 was 198 km/h recorded at Cape Turnagain on 20 September.
- Of the six main centres in 2024, Auckland was the warmest, Tauranga was the sunniest, Christchurch was the driest, Wellington was the wettest, Christchurch and Dunedin were equal-coolest, and Dunedin was the least sunny.

Ranked annual total rainfall, mean temperatures and sunshine hours for the stations available at time of writing are displayed on the following five pages. Some sites have missing days of data. The number of missing days is indicated by a superscript number next to the annual value in the tables below.

Location	Rainfall (mm)
CROPP AT WATERFALL	11503
TUKE AT TUKE HUT	11256
CROPP AT CROPP HUT	10191
DOON AT MIDDLE ARM	9626
HOKITIKA AT COLLIERS CK	8084
MILFORD SOUND EWS	8010[6]
MILFORD SOUND AWS	7814[8]
WAIHO AT DOUGLAS HUT	7777
HOKITIKA AT PRICES FLAT	7752
IVORY GLACIER CWS	6847[1]
HAAST AT ROARING BILLY	6584
WHATAROA AT SHB	6431
RAKAIA AT LAKE RAMSAY	5612
GODLEY AT EADE HUT	5490
FRANZ JOSEF EWS	5109
MT PHILISTINE EWS	5104
MURCHISON AT ROSE RIDGE	4912
TAIPO AT SHB	4699
ARTHURS PASS AWS	4538[11]
MANAPOURI, WEST ARM JETTY EWS	4515
MT COOK EWS	4491
ARTHURS PASS RAINE EWS	4489
MUELLER HUT EWS	4472
ARTHURS PASS EWS	4303
MATHIAS AT NZDSA HUT	4236
HAAST AT MOA CK	4224
BUTCHERS CK AT BUTCHERS GULLY	3929
ŌKĀRITO EWS	3614
HOPKINS AT BOANERGES RIDGE	3495
MURCHISON MTNS EWS	3493[2]
HOPKINS AT ELCHO FLATS	3451
ALBERT BURN	3403
AHURIRI AT ELCHO FLATS	3111
HOKITIKA AERO AWS	3073
HOKITIKA EWS	2944
PUKEITI RAINE	2876
PUYSEGUR POINT AWS	2811[13]
WAIPAOA AT MANGATU DIVIDE	2668
TAKAHE VALLEY CWS	2656[4]
EGLINTON, KNOBS FLAT CWS	2638[1]
UPPER RAKAIA EWS	2593
MT COOK AERO AWS	2537[7]
GREYMOUTH AERO EWS	2385
MAKITUKU AT F TRIG	2339
MAHANGA EWS	2316
WESTPORT AERO AWS	2307
MOTU AT WAITANGIRUA	2196
WESTPORT EWS	2190
NGAHERE AT NGAHERE HUT	1899
ARAPITO EWS	1882
AWAKINO EWS	1874
WHANGANUI AT TE PORERE	1749
REEFTON EWS	1727
COBB AT TRILOBITE	1719
STRATFORD EWS	1680
STEWART ISLAND EWS	1628
TAURANGA-TAUPŌ AT KIKO RD	1625
TĀKAKA EWS	1574
KAIKOHE AWS	1537[5]
PUREORA FOREST CWS	1515
TOLAGA BAY WXT AWS	1449[13]
WHAKATĀNE AT TARAPOUNAMU	1446
TAUTUKU EWS	1445
WAIPAPA AT WAITETI STATION	1431
MANAPOURI AERO AWS	1426[6]
TARAPOUNAMU EWS	1385
TROUNSON CWS	1367
KERIKERI AERODROME AWS	1364
WAIROA AERO AWS	1362[4]
WHATAWHATA 2 EWS	1358
INVERCARGILL AERO AWS	1357[1]
LOWER RETARUKE CWS	1322
WHITIANGA AERO AWS	1320[3]
RUSSELL CWS	1317[8]
MAKOTUKU AT SH49A BR	1301
TŪRANGI 2 EWS	1297
NEW PLYMOUTH AERO AWS	1293[1]
TE PUKE EWS	1289
TAUMARUNUI AWS	1289[2]
INVERCARGILL AERO	1283[6]
BIRCHWOOD WXT AWS	1268[15]
KERIKERI EWS	1262
TE KUITI EWS	1251
LUMSDEN AWS	1249
TAUMARUNUI EWS	1243[6]
MĀHIA AWS	1237[11]
OHAKUNE EWS	1230[2]
INVERCARGILL AERO 2 EWS	1219[3]
WELLINGTON, KELBURN 2	1216
WELLINGTON, KELBURN AWS	1203[3]
TIWAI POINT EWS	1197
RANGITAIKI AT ANIWHENUA	1184
ROTORUA AERO AWS	1180[1]

WHITIANGA EWS	1178
PORT TAHAROA AWS	1175[4]
GISBORNE AERO AWS	1157
MATUKITUKI AT WEST WĀNAKA	1142
WAIROA, NORTH CLYDE EWS	1141
WHANGANUI AT BELOW PIRIAKA	1139
MANUKAU HEADS EWS	1131
PURERUA AWS	1129[1]
WAIMARINO AT KEPA RD	1124
GORE AWS	1117[1]
POKAIWHENUA AT PUKETURUA	1104
WHAKAURU AT MOSSOP RD	1103
HAMILTON AERO AWS	1099[1]
TAURANGA CWS	1095[7]
WHANGAPARĀOA AWS	1091[2]
WAIKATO AT CAMBRIDGE GOLF COURSE	1073
UPPER HUTT, TRENTHAM EWS	1066
AUCKLAND, WHENUAPAI AWS	1066[1]
WARKWORTH EWS	1064
MANGARE STM AT MANGARE RD	1051
PUKEKOHE EWS	1043[4]
CASS EWS	1033
AUCKLAND AERO	1031[2]
PARAPARAUMU AERO AWS	1029[2]
AUCKLAND, NORTH SHORE ALBANY EWS	1027
KAITAIA AIRPORT AWS	1022[16]
WHAKATĀNE AERO AWS	1014
MANGAKINO AT DILLON RD	1014
LEIGH 2 EWS	1013
PAHĪATUA EWS	1011
MATAMATA, HINUERA EWS	1005
TAUPŌ CWS	999[1]

ROTORUA EWS	998[2]
WAIOURU AERO AWS	993[2]
MOTUEKA, RIWAKA EWS	992[1]
LEVIN AWS	978
MAYFIELD AT RUAPUNA	975
WAIKERIA EWS	975[15]
TAHUNAATARA AT OHAKURI RD	970
AUCKLAND, MOTAT EWS	968
QUEENSTOWN EWS	967
HĀWERA AWS	965[5]
TAPANUI EWS	955
PALMERSTON NORTH AERO AWS	953[2]
KAITAIA EWS	943
NUGGET POINT AWS	941[1]
PARAPARAUMU AERO EWS	937
WHIRINAKI AT GALATEA	936
GORE EWS	933
WELLINGTON, GRETA POINT CWS	917[1]
AUCKLAND, MĀNGERE 2 EWS	906[8]
WHAKATĀNE EWS	901[12]
OHAKEA AWS	899[2]
WELLINGTON AERO	898
AKITIO EWS	893
FIRTH OF THAMES EWS	890
WAIRAU VALLEY, MILL ROAD CWS	889
HAMILTON, RUAKURA 2 EWS	887
QUEENSTOWN AERO AWS	874[5]
WHANGĀREI AERO AWS	872[16]
GALATEA AWS	868[1]
WAIOURU EWS	852
WĀNAKA AERO AWS	847
FLAT HILLS WXT AWS	845[5]

DANNEVIRKE EWS	844
PALMERSTON NORTH EWS	842[9]
TAKAPAU PLAINS AWS	833[15]
WAIKATO AT REIDS FARM	833
NGAWI AWS	829
FAIRLIE AWS	829[1]
DUNEDIN, MUSSELBURGH EWS	827
LEVIN EWS	821
NELSON AERO	812[2]
TAUPŌ AERO AWS	811[1]
WHANGANUI AERO AWS	806[2]
CASTLEPOINT AWS	804[10]
AHURIRI AT STH DIADEM	801
WĀNAKA CWS	800
DARGAVILLE 2 EWS	788
BALCLUTHA, TELFORD EWS	784[8]
WHANGĀREI EWS	784
DUNEDIN AERO AWS	769[2]
BLENHEIM AERO AWS	757
HANMER FOREST EWS	752
NELSON AERO AWS	752[2]
CAPE CAMPBELL AWS	736[1]
AKAROA EWS	734
KAIKŌURA AWS	732
WHANGANUI, SPRIGGENS PARK EWS	730
OAMARU AWS	720[2]
RICHMOND EWS	713
NAPIER EWS	700
NAPIER AERO AWS	698[4]
WAIOTAPU AT REPOROA	696
LE BONS BAY AWS	694[4]
MASTERTON, TE ORE ORE CWS	663[5]

OAMARU AIRPORT AWS	655[1]
PUKAKI AERODROME AWS	648
MASTERTON EWS	642
BALCLUTHA, FINEGAND EWS	635[16]
APPLEBY 2 EWS	635[1]
WINCHMORE 2, RAINE EWS	634
WAIPAWA EWS	633
ORARI ESTATE EWS	631
ROXBURGH WXT AWS	619[1]
TARA HILLS AWS	614[2]
WHAKATU EWS	609
LAKE TEKAPO EWS	603
TE PIRITA AT SHARLANDS ROAD	602
ASHBURTON AERO AWS	599[5]
LINCOLN, BROADFIELD RAINE EWS	598
LISMORE, RACEMANS HOUSE CWS	597
WAIPARA NORTH BRANCH EWS	582
MARAEKAKAHO CWS	577
WINCHMORE 2 EWS	559
CHRISTCHURCH AERO	553
OAMARU EWS	538[1]
LINCOLN, BROADFIELD EWS 2	532
WAIMATE CWS	528
CULVERDEN AWS	519[2]
TIMARU AERO AWS	519[2]
WAIAU SCHOOL CWS	516
LINCOLN, BROADFIELD EWS	513
CHEVIOT EWS	513
BLENHEIM RESEARCH EWS	506
DIAMOND HARBOUR EWS	499
RANGIORA EWS	499
TIMARU EWS	480
WINDSOR EWS	476
BARING HEAD	470
MIDDLEMARCH EWS	464
CHRISTCHURCH BOTANIC GARDENS EWS	458
LAUDER EWS	451[2]
CROMWELL EWS	439
ALEXANDRA AWS	425[3]
MEDBURY CWS	417[1]
RANFURLY EWS	408
BALMORAL EAST CWS	407
CLYDE 2 EWS	399
CHRISTCHURCH, KYLE ST EWS	374
BROMLEY EWS	354
ALEXANDRA EWS	354

Location	Mean temp (°C)
LEIGH 2 EWS	17.3
KAITAIA EWS	16.8
WHANGAPARĀOA AWS	16.5
KAITAIA AERO EWS	16.4
DARGAVILLE 2 EWS	16.2
WHANGĀREI AERO AWS	16.1
AUCKLAND AERO	16.1
AUCKLAND, MĀNGERE 2 EWS	15.9
KERIKERI EWS	15.8
WHANGĀREI EWS	15.7
AUCKLAND, MOTAT EWS	15.7
AUCKLAND, NORTH SHORE ALBANY EWS	15.7
KERIKERI AERODROME AWS	15.6
TAURANGA AERO AWS	15.5
TAURANGA CWS	15.5
WHAKATĀNE EWS	15.4
PORT TAHAROA AWS	15.4
WHITIANGA EWS	15.3
GISBORNE EWS	15.3
KAIKOHE AWS	15.3
NGAWI AWS	15.2
NAPIER EWS	15.2
WAIROA, NORTH CLYDE EWS	15.1
AUCKLAND, WHENUAPAI AWS	15.1
WHITIANGA AERO AWS	15.1
TROUNSON CWS	14.9
GISBORNE AERO AWS	14.8
WHANGANUI, SPRIGGENS PARK EWS	14.7
MANUKAU HEADS EWS	14.7
WHAKATĀNE AERO AWS	14.6
WARKWORTH EWS	14.5
NAPIER AERO AWS	14.5
HAMILTON, RUAKURA 2 EWS	14.3
WHATAWHATA 2 EWS	14.3
WELLINGTON AERO	14.3
WHANGANUI AERO AWS	14.3
PUKEKOHE EWS	14.3
MANAIA, MOTUMATE STM	14.1
MATAMATA, HINUERA EWS	14.0
NEW PLYMOUTH AERO AWS	13.9
PALMERSTON NORTH EWS	13.9
WHAKATU EWS	13.8
MARAEKAKAHO CWS	13.8
PARAPARAUMU AERO EWS	13.8
TE KUITI EWS	13.7
WAIKERIA EWS	13.7
HAMILTON AERO AWS	13.7
LEVIN EWS	13.6

NELSON AERO AWS	13.6
OHAKEA AWS	13.6
LEVIN AWS	13.6
AKAROA EWS	13.5
PARAPARAUMU AERO AWS	13.5
PALMERSTON NORTH AERO AWS	13.5
BARING HEAD	13.4
WELLINGTON, KELBURN AWS	13.4
CAPE CAMPBELL AWS	13.4
MASTERTON, TE ORE ORE CWS	13.3
MARTINBOROUGH EWS	13.2
DANNEVIRKE EWS	13.2
KAIKŌURA AWS	13.2
TAUPŌ CWS	13.2
GALATEA AWS	13.2
ARAPITO EWS	13.1
TAUMARUNUI EWS	13.1
HĀWERA AWS	13.1
WAIPARA WEST EWS	13.0
TĀKAKA EWS	13.0
AKITIO EWS	12.9
BLENHEIM AERO AWS	12.9
DIAMOND HARBOUR EWS	12.9
ROTORUA AERO AWS	12.8
RICHMOND EWS	12.8
BROMLEY EWS	12.8
WESTPORT AERO AWS	12.8
UPPER HUTT, TRENTHAM EWS	12.8
WAIRAU VALLEY, MILL ROAD CWS	12.8
CHRISTCHURCH BOTANIC GARDENS EWS	12.8
WESTPORT EWS	12.8
GREYMOUTH AERO EWS	12.7
MASTERTON EWS	12.7
TAUMARUNUI AWS	12.7
MASTERTON AERO AWS	12.6
WAIPAWA EWS	12.6
ROTORUA EWS	12.6
APPLEBY 2 EWS	12.5
WAIAU SCHOOL CWS	12.5
PAHĪATUA EWS	12.4
AWAKINO EWS	12.3
LINCOLN, BROADFIELD EWS	12.1
TAUPŌ AERO AWS	12.1
CHEVIOT EWS	12.1
REEFTON EWS	12.0
HOKITIKA AERO AWS	12.0
LINCOLN, BROADFIELD EWS 2	11.9
STRATFORD EWS	11.9
HOKITIKA EWS	11.9
CULVERDEN AWS	11.9
DUNEDIN, MUSSELBURGH EWS	11.8
TE PIRITA AT SHARLANDS ROAD	11.8
CHRISTCHURCH AERO	11.8
LE BONS BAY AWS	11.8
BALMORAL EAST CWS	11.7
ŌKĀRITO EWS	11.7
WAIMATE CWS	11.7
RANGIORA EWS	11.7
MOTU EWS	11.7
HANMER FOREST EWS	11.6
KAIKŌURA, MIDDLE CREEK	11.5
TIMARU EWS	11.5
HAAST AWS	11.5
OHOKA CWS	11.4
LISMORE, RACEMANS HOUSE CWS	11.4
MEDBURY CWS	11.4
FRANZ JOSEF EWS	11.3
ORARI ESTATE EWS	11.2
TŪRANGI 2 EWS	11.2
ALEXANDRA EWS	11.2
QUEENSTOWN EWS	11.2
OAMARU AWS	11.2
OHAKUNE EWS	11.1
CROMWELL EWS	11.0
TIMARU AERO AWS	11.0
SUGAR LOAF AWS	11.0
TIWAI POINT EWS	10.9
WINDSOR EWS	10.9
WINCHMORE 2 EWS	10.8
OAMARU EWS	10.8
WĀNAKA AERO AWS	10.8
OAMARU AIRPORT AWS	10.8
LAKE MOERAKI EWS	10.8
PUREORA FOREST CWS	10.8
MILFORD SOUND EWS	10.7
BALCLUTHA, FINEGAND EWS	10.7
TAUTUKU EWS	10.7
DUNEDIN AERO AWS	10.7
CLYDE 2 EWS	10.7
FAIRLIE AWS	10.7
MILFORD SOUND AWS	10.7
STEWART ISLAND EWS	10.6
MAYFIELD AT RUAPUNA	10.6
WĀNAKA CWS	10.6
BALCLUTHA, TELFORD EWS	10.6
NUGGET POINT AWS	10.5

TAPANUI EWS	10.4
INVERCARGILL AERO AWS	10.4
GORE AWS	10.4
WAIPARA NORTH BRANCH EWS	10.3
GORE EWS	10.2
LAUDER EWS	10.2
WAIPOUNAMU CWS	10.2
TARAPOUNAMU EWS	10.1
QUEENSTOWN AERO AWS	10.1
FIVE RIVERS CWS	10.0
INVERCARGILL AERO 2 EWS	9.9
CASS EWS	9.8
LUMSDEN AWS	9.8
RANFURLY EWS	9.6
TARA HILLS AWS	9.6
PUKAKI AERODROME AWS	9.5
MANAPOURI, WEST ARM JETTY EWS	9.3
TE ANAU AT PARK HQ CWS	9.3
MANAPOURI AERO AWS	9.3
MT COOK EWS	9.2
LAKE TEKAPO EWS	9.2
WAIOURU AERO AWS	9.2
WAIOURU EWS	9.1
ARTHURS PASS EWS	8.4
MT RUAPEHU, CHATEAU EWS	8.2
ALBERT BURN	5.2
IVORY GLACIER CWS	4.6
MUELLER HUT EWS	3.4
UPPER RAKAIA EWS	3.3
MT PHILISTINE EWS	3.0
MAHANGA EWS	2.5
MT POTTS EWS	1.6

Location	Sunshine (hours)
BLENHEIM RESEARCH EWS	2769
RICHMOND EWS	2760
TAURANGA AERO AWS	2734[1]
WHAKATĀNE SUNSHINE	2668
TĀKAKA EWS	2665
NEW PLYMOUTH AERO AWS	2657
APPLEBY 2 EWS	2651[2]
NAPIER EWS	2607[1]
LAKE TEKAPO EWS	2585
BROMLEY EWS	2484
AUCKLAND, MĀNGERE 2 EWS	2482[15]
AUCKLAND, MOTAT EWS	2478
DIAMOND HARBOUR EWS	2444
CHRISTCHURCH AERO	2403[1]
CHEVIOT EWS	2395[1]
AKITIO EWS	2391
TŪRANGI 2 EWS	2389
WINCHMORE 2 EWS	2364
CROMWELL EWS	2356[1]
PARAPARAUMU AERO AWS	2343[3]
HOKITIKA AERO AWS	2315
LINCOLN, BROADFIELD EWS	2309
RANGIORA EWS	2307
WESTPORT EWS	2305[2]
HAMILTON, RUAKURA 2 EWS	2304[1]
WAIPARA WEST EWS	2289
GISBORNE AERO AWS	2287[2]
QUEENSTOWN AERO AWS	2286[5]
ALEXANDRA EWS	2281
PARAPARAUMU AERO EWS	2256

MANUKAU HEADS EWS	2239
MASTERTON EWS	2234[1]
FIRTH OF THAMES EWS	2223[1]
WAIKERIA EWS	2208
AKAROA EWS	2182
WELLINGTON, KELBURN AWS	2177[4]
OAMARU EWS	2156[1]
WHANGĀREI EWS	2144
UPPER HUTT, TRENTHAM EWS	2143
MIDDLEMARCH EWS	2087[3]
KAITAIA EWS	2077
LEVIN EWS	2055
TE KUITI EWS	2024
TAUMARUNUI AWS	1960[3]
DANNEVIRKE EWS	1955
GREYMOUTH AERO EWS	1948
WAIPAWA EWS	1945[16]
PALMERSTON NORTH EWS	1942[10]
DUNEDIN, MUSSELBURGH EWS	1942[1]
STRATFORD EWS	1942[1]
MARTINBOROUGH EWS	1868
REEFTON EWS	1864
GORE EWS	1848[1]
MT COOK EWS	1833[1]
ARAPITO EWS	1748[2]
FRANZ JOSEF EWS	1705
INVERCARGILL AERO 2 EWS	1688[7]
DARGAVILLE 2 EWS	1598
BALCLUTHA, TELFORD EWS	1515[9]

Section 5: Annual temperature – Warm for most of the country

Across the country, 13 locations observed a record or near-record high annual mean temperature, 24 locations observed a record or near-record high annual mean maximum temperature, and four locations observed a record or near-record high annual mean minimum temperature. For the 9th consecutive year, no location experienced a record or near-record cold year based on annual mean temperature.

Table 1: Record or near-record high or low annual average temperature departures for 2024[1].

Location	Mean air temp. (°C)	Departure from average(°C)	Year records began	Comments
Mean temperature				
Kawerau	15.9	1.2	1954	Highest
Kaitaia	16.9	1.3	1948	2nd-highest
Leigh	17.5	2.8	1966	3rd-highest
Whangaparāoa	16.7	0.8	1982	3rd-highest
Motu	12.2	1.1	1990	3rd-highest
Dargaville	16.2	0.8	1943	4th-highest
Purerua	16.3	0.6	1983	4th-highest
Mt Ruapehu Chateau	8.4	0.7	2000	4th-highest
Hāwera	13.4	0.6	1977	4th-highest
Hanmer Forest	11.3	1.0	1906	4th-highest
Kaikōura	13.4	0.8	1963	4th-highest
Waipara West	13.1	0.7	1973	4th-highest
Le Bons Bay	11.9	0.5	1984	4th-highest
Mean maximum temperature				
Whakatāne	20.8	1.1	1974	Highest
Kawerau	22.5	2.1	1954	Highest
Whakatu	20.8	2.0	1965	Highest
Whangaparāoa	20.3	1.3	1982	2nd-highest
Appleby	19.2	1.2	1932	2nd-highest
Waiau	19.4	1.0	1974	2nd-highest
Cheviot	18.7	1.0	1982	2nd-highest
Waipara West	18.9	1.2	1973	2nd-highest
Purerua	20.0	0.8	1983	3rd-highest
Taupō	18.8	1.9	1949	3rd-highest
Motu	17.4	1.5	1990	3rd-highest
Mt Ruapehu Chateau	13.1	0.8	2000	3rd-highest
Dannevirke	18.2	1.4	1951	3rd-highest
Paraparaumu	18.0	0.9	1953	3rd-highest
Tākaka	19.3	1.0	1978	3rd-highest
Kaikōura	17.0	1.1	1963	3rd-highest
Lake Tekapo	15.9	1.0	1927	3rd-highest

[1] The rankings (1st, 2nd, 3rd etc.) in Tables 1 to 11 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 because of the practical limitations of performing homogeneity checks in real-time.

Windsor	17.2	1.0	2000	3rd-highest
Leigh	21.4	2.5	1966	4th-highest
Ngawi	18.5	0.8	1972	4th-highest
Whanganui	18.9	0.7	1937	4th-highest
Hanmer Forest	18.8	1.2	1906	4th-highest
Le Bons Bay	15.0	0.5	1984	4th-highest
Waipounamu	15.6	0.5	1980	4th-highest
~	~	~	~	~
Te Anau	13.4	-1.4	1963	Lowest
Mean minimum temperature				
Puysegur Point	9.3	0.6	1978	3rd-highest
Kaitaia	13.1	1.3	1948	4th-highest
Hāwera	9.6	0.6	1977	4th-highest
Ohakune	6.4	0.8	1962	4th-highest
~	~	~	~	~
Tūrangi	5.4	-0.6	1968	Lowest
Clyde	3.5	-0.3	1978	3rd-lowest
Whakatu	7.3	-0.3	1965	4th-lowest

The highest temperatures of the year occurred on 5-6 February, when eight locations reached a maximum temperature of at least 34.9°C. Most notably, Hanmer Forest recorded a maximum temperature of 37.0°C, which was the location's 3rd-highest maximum temperature since records began in 1906. A warm and humid northerly airflow saw 15 locations across the North and South Islands observe record or near-record high minimum temperatures on 20 January. Three locations observed near-record low minimum temperatures during clear and calm weather spells in May and August.

Table 2: Record or near-record high or low annual temperature extremes for 2024.

Location	Temperature (°C)	Date of occurrence	Year records began	Comments
Highest extreme maximum temperatures				
Kawerau	34.8	Dec-29th	1954	2nd-highest
Ngawi	32.8	Feb-6th	1972	2nd-highest
Cheviot	36.3	Feb-6th	1982	2nd-highest
Whatawhata	31.3	Jan-21st	1952	3rd-highest
Hanmer Forest	37.0	Feb-5th	1906	3rd-highest
Pukaki Aerodrome	33.5	Jan-12th	1972	3rd-highest
Leigh	30.2	Jan-12th	1966	Equal 3rd-highest
Waiau	36.5	Feb-5th	1974	Equal 3rd-highest
Mt Ruapehu Chateau	26.3	Feb-7th	2000	4th-highest
Waipara West	36.9	Feb-5th	1973	4th-highest
Windsor	31.8	Dec-3rd	2000	4th-highest
Waikeria	31.5	Jan-22nd	1957	Equal 4th-highest
Lowest extreme maximum temperatures				
None observed				

Highest extreme minimum temperatures				
Kaikōura	21.8	Jan-20th	1972	Highest
Cheviot	22.8	Feb-7th	1982	Highest
Lincoln	22.9	Jan-20th	1881	Highest
Wellington (Airport)	21.0	Jan-20th	1972	Equal highest
Auckland (Western Springs)	22.6	Jan-20th	1971	2nd-highest
Mt Ruapehu Chateau	15.5	Jan-20th	2000	2nd-highest
Ngawi	23.6	Feb-7th	1972	2nd-highest
Waiau	22.9	Dec-5th	1974	2nd-highest
Christchurch (Airport)	22.5	Jan-20th	1863	2nd-highest
Akaroa	23.3	Jan-20th	1978	2nd-highest
Middlemarch	21.2	Feb-6th	2000	2nd-highest
Stratford	18.9	Jan-20th	1972	Equal 2nd-highest
Martinborough	21.9	Jan-20th	1986	3rd-highest
Appleby	19.9	Jan-20th	1941	3rd-highest
Rangiora	22.0	Jan-20th	1972	3rd-highest
Hanmer Forest	21.5	Dec-5th	1972	Equal 3rd-highest
Pukaki Aerodrome	17.5	Feb-7th	1972	Equal 3rd-highest
Matamata	20.5	Jan-20th	1999	4th-highest
Waipara West	22.6	Jan-20th	1973	4th-highest
Roxburgh	20.2	Jan-11th	1950	4th-highest
Oban (Stewart Island)	15.5	Feb-24th	1975	4th-highest
Te Kuiti	20.8	Jan-20th	1959	Equal 4th-highest
Greymouth	18.7	Jan-20th	1972	Equal 4th-highest
Lowest extreme minimum temperatures				
Tūrangi	-7.2	Aug-4th	1968	2nd-lowest
Whakatu	-4.6	May-12th	1965	2nd-lowest
Appleby	-6.3	May-10th	1932	2nd-lowest

Section 6: Annual rainfall – Dry for northern and eastern parts

Ten locations observed record or near-record low annual rainfall totals for 2024. It was the driest year on record for Dargaville and Whitianga, with these towns observing just 72% and 66% of normal annual rainfall, respectively. In contrast, rainfall was abundant in Lumsden, with the town observing its wettest year since records began in 1982.

Six locations in the South Island observed near-record high 1-day rainfall totals during 2024. On 3 October, Dunedin recorded 131 mm of rain, which is equivalent to 18% of the city's normal annual rainfall.

Table 3: Record or near-record annual rainfall totals for the year 2024.

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-records				
Lumsden	1249	140	1982	Highest
Low records or near-records				
Dargaville	788	72	1943	Lowest
Whitianga	1178	66	1961	Lowest
Whangārei	784	61	1937	2nd-lowest
Masterton	642	72	1926	2nd-lowest
Auckland (Western Springs)	968	78	1948	3rd-lowest
Kaitaia	943	71	1948	4th-lowest
Te Puke	1289	78	1973	4th-lowest
Arapito	1882	84	1978	4th-lowest
Waiau	516	67	1974	4th-lowest
Cheviot	513	75	1982	4th-lowest

Table 4: Record or near-record high extreme 1-day rainfall totals that occurred in 2024.

Location	1-day extreme rainfall (mm)	Date	Year records began	Comments
Dunedin (Musselburgh)	131	Oct-3rd	1918	2nd-highest
Franz Josef	373	Nov-8th	1926	3rd-highest
Manapouri (West Arm Jetty)	166	Sep-1st	1971	3rd-highest
Tautuku	89	Oct-3rd	1976	3rd-highest
Tiwai Point	69	Feb-6th	1970	4th-highest
Balclutha	73	Oct-3rd	1964	Equal 4th-highest

Section 7: 2024 climate in the six main centres

Rainfall was near normal for all main centres. Auckland received 82% of normal rainfall, a welcome relatively dry year after experiencing its wettest year on record in 2023. Temperatures were near average for all main centres except Dunedin, where the annual temperature was above average. Of the six main centres in 2024, Auckland was the warmest, Tauranga was the sunniest, Christchurch was the driest, Wellington was the wettest, Christchurch and Dunedin were equal-coolest, and Dunedin was the least sunny.

Table 5: 2024 climate in the six main centres.

Rainfall			
Location	**Rainfall (mm)**	**% of normal**	**Comments**
Auckland[a]	906[8]	82	Near normal
Tauranga[b]	1095	91	Near normal
Hamilton[c]	1099[1]	91	Near normal
Wellington[d]	1203[3]	91	Near normal
Christchurch[e]	553	90	Near normal
Dunedin[f]	827	114	Near normal
Temperature			
Location	**Mean temp. (°C)**	**Departure from normal (°C)**	**Comments**
Auckland[a]	16.0	+0.5	Near average
Tauranga[g]	15.6	+0.5	Near average
Hamilton[c]	13.9	+0.1	Near average
Wellington[d]	13.6	+0.5	Near average
Christchurch[e]	11.9	+0.3	Near average
Dunedin[f]	11.9	+0.7	Above average
Sunshine			
Location	**Sunshine (hours)**		
Auckland[a]	2482[15]		
Tauranga[b]	2734[1]		
Hamilton[g]	2304[1]		
Wellington[d]	2177[4]		
Christchurch[e]	2403[1]		
Dunedin[f]	1942[1]		

[a] Māngere [b] Tauranga Cws [c] Hamilton Airport [d] Kelburn [e] Christchurch Airport [f] Musselburgh [g] Tauranga Aero [h] Ruakura

[#] Note: superscript numbers represent number of days of missing data

Section 8: Significant weather and climate events in 2024

This section contains information pertaining to some of the more significant weather and climate events that occurred in 2024. Note that a more detailed list of significant weather events for 2024 can be found in the *Highlights and extreme events* section of NIWA's Monthly Climate Summaries. These summaries are available online at https://niwa.co.nz/climate-and-weather/monthly.

Floods and high rainfall

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.

An atmospheric river brought heavy rain to the country from 9-12 April. On 9 April, SH6 was closed due to a slip between Haast and Fox Glacier, and then extended to Franz Josef on 10 April due to a second slip. Due to several downed power poles, emergency management warned Haast residents that they could face several days without power. On 11 April, flooding washed away part of the Lower Hollyford bridge in Southland. In Spring Creek near Blenheim, residents of 70 homes were advised to evacuate as a precaution due to rising water on the Wairau River.

From 25-26 June, heavy rainfall caused severe impacts for much of Gisborne and Hawke's Bay. In Wairoa, at least 400 properties were affected by flooding, with hundreds of residents evacuated from their homes. A state of local emergency was declared for Wairoa, with power turned off in the town due to floodwaters putting substations at risk. Farther south, a regional state of emergency was declared for the Heretaunga area of Hastings after high swells and high tide combined to cause inundation of low-lying areas.

From 3-4 October, persistent and heavy rain fell over southeastern parts of the South Island. A state of emergency was declared in Dunedin and the Clutha District. In Dunedin, two welfare centres opened for about 70 residents who evacuated their properties due to flooding. Eleven properties were red-stickered (i.e. access was prohibited), with a further 31 properties yellow-stickered (i.e. access was restricted). Approximately 40 Dunedin roads were closed due to flooding.

On 4 October, the Government announced a medium-scale adverse event classification for Southland and the Clutha District, after persistently wet conditions over the previous five weeks caused considerable challenges for farmers.

From 8-9 November, a local state of emergency was declared for the Southern Ward of Westland District as heavy rain caused extensive flooding, evacuations, land slips and road closures in the area. The highway between Fox Glacier and Haast was closed for several days due to slips, flooding, and cracks in the road near Knights Point. Extensive surface flooding occurred in the township of Haast.

Table 6: Record high monthly extreme 1-day rainfall totals were recorded in 2024 at:

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Ranking
January				
None observed				

February				
Invercargill	70	6th	1939	Highest
Tiwai Point	69	6th	1970	Highest (4th-highest)
Round Hill	76	6th	2003	Highest
March				
None observed				
April				
Lake Moeraki	162	9th	1985	Highest
Haast	147	9th	1943	Highest
Linkwater	160	11th	1938	Highest
Pukaki Airport	39	11th	1972	Highest
Pukaki, Guide Hill	58	11th	1963	Highest
May				
Brentwood	119	21st	1966	Highest
June				
Roxburgh	31	15th	1950	Highest
July				
Purerua	69	19th	1983	Highest
August				
Palmerston North	64	17th	1928	Highest
Kokiri, Maori Gully Road	104	25th	1980	Highest
September				
Levin	55	3rd	1949	Highest
Lake Manapouri (West Arm Jetty)	166	1st	1971	Highest (3rd-highest)
Islay Downs	49	12th	1969	Highest
October				
Culverden	54	25th	1921	Highest
Springburn	64	25th	1913	Highest
Waipara West	64	25th	1973	Highest
Dunedin (Musselburgh)	131	3rd	1918	Highest (2nd-highest)
Green Island, Kaikorai	121	3rd	1993	Highest
Glenledi Rd	174	3rd	1984	Highest
Inchclutha, T'Graph Rd	130	3rd	1967	Highest
Alexandra	28	26th	1990	Highest
Whangapoua	97	2nd	1991	Highest
Woodend, Gladstone	55	25th	1981	Equal highest
November				
Ōkārito	165	8th	1981	Highest
Lower Whataroa	326	8th	1949	Highest
Franz Josef	373	8th	1926	Highest
Haast	223	8th	1943	Highest
December				
Māhia	86	26th	1990	Highest
Tiwai Point	48	21st	1970	Highest
Campbell Island	44	4th	1991	Highest

Note that rankings in brackets are all-month (annual) rankings

Drought and low rainfall

Several locations experienced lengthy dry spells (consecutive days with less than 1 mm of rain) during February, including: Gisborne (23 days), Kaitaia (22 days), Blenheim, Nelson, and Cape Reinga (21 days), Motueka (20 days), Whangārei (19 days).

On 14 March, the Ministry for Primary Industries classified the drought conditions in the Marlborough, Tasman, and Nelson areas as a medium-scale adverse event, following months of low rainfall. Two weeks later, this was extended to parts of the North Island, including Northland, Taranaki, Manawatū-Whanganui, Wellington and Wairarapa.

Temperature extremes

Warm and muggy conditions prevailed over much of the country from 19-22 January. Twenty-one locations observed record or equal-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 the airport climate station reached a maximum of 29.6°C, the highest January temperature at that location since records began in 1962.

On 5-6 February, a very hot Australian-sourced air mass lay over New Zealand. The presence of a strong high pressure system over the North Island caused a northwest wind to blow across the South Island, producing the hottest temperatures of 2024. The highest temperature recorded was at Hanmer Forest in North Canterbury on 5 February, when it reached 37˚C, the location's 2nd-highest February temperature on record.

From 8-12 May a period of high atmospheric pressure and clear skies dominated New Zealand after the passage of a cold southerly front. Heavy frosts were observed in many areas, with four locations registering record or equal-record low daily minimum temperatures for May.

On 10 June, a very warm northwesterly airflow covered much of New Zealand. Hastings recorded a maximum temperature of 25.7°C, which is the highest temperature ever recorded in New Zealand for the month of June. In Whakatu, the temperature reached 25.3°C, which is New Zealand's third-highest June temperature on record.

On 29 August, eastern areas of the country recorded relatively high temperatures for the time of year, with northwesterly winds prevailing across the country. Hastings reached 24.9°C, which is New Zealand's equal-fourth highest August temperature. Whakatu recorded 24.7°C, which is New Zealand's equal-fifth highest August temperature.

Table 7: Extremes of high daily maximum temperature in 2024 were recorded at:

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Ranking
January				
Cape Reinga	26.5	21st	1951	Highest
Whangaparāoa	30.6	31st	1982	Highest
Wellington (Airport)	29.6	22nd	1962	Highest
February				
Waiau	36.5	5th	1974	Highest (Equal 3rd-highest)

March				
Purerua	26.8	1st	1983	Highest
April				
Kaikohe	29.1	11th	1973	Highest
Takapau Plains	26.6	10th	1962	Highest
Hāwera	24.2	10th	1977	Equal highest
May				
Manapouri (West Arm Jetty)	16.6	31st	1971	Highest
June				
Kerikeri	21.6	10th	1945	Highest
Purerua	21.2	10th	1983	Highest
Kawerau	22.1	8th	1954	Highest
Mt Ruapehu Chateau	15.8	8th	2000	Highest
Hastings	25.7	10th	1965	Highest
Māhia	21.0	10th	1990	Highest
Waimate	23.4	1st	1908	Highest
Windsor	21.8	1st	2000	Highest
July				
Leigh	20.8	16th	1966	Highest
Westport	18.0	19th	1937	Highest
Lake Tekapo	17.6	26th	1925	Highest
Middlemarch	19.4	26th	2000	Highest
Five Rivers	18.5	26th	1982	Highest
Lumsden	18.3	26th	1982	Highest
Cromwell	18.8	26th	1949	Highest
August				
Purerua	20.5	27th	1983	Highest
Warkworth	21.8	31st	1966	Highest
Whangaparāoa	20.4	31st	1982	Highest
Hastings	24.9	29th	1965	Highest
Hāwera	19.3	29th	1977	Highest
Dannevirke	20.7	29th	1951	Equal highest
Waiouru	16.5	31st	1962	Equal highest
September				
Dannevirke	24.1	3rd	1951	Highest
October				
Whakatu	29.1	24th	1965	Highest
Chatham Island	21.6	25th	1878	Highest
November				
Le Bons Bay	28.0	28th	1984	Highest
Bromley	32.1	28th	1962	Highest
December				
Kawerau	34.8	29th	1954	Highest (2nd-highest)
Mt Ruapehu Chateau	25.1	29th	2000	Highest
Whakatu	33.8	5th	1965	Highest
Tākaka	31.0	4th	1978	Highest
Haast	27.3	26th	1949	Highest

Appleby	30.2	4th	1932	Highest
Windsor	31.8	3rd	2000	Highest (4th-highest)

Note that rankings in brackets are all-month (annual) rankings

Table 8: Extremes of low daily maximum temperature in 2024 were recorded at:

Location	Extreme low maximum (°C)	Date of extreme temperature	Year records began	Ranking
January				
None observed				
February				
None observed				
March				
South West Cape	9.4	28th	1991	Lowest
Campbell Island	6.3	26th	1991	Equal lowest
April				
None observed				
May				
None observed				
June				
None observed				
July				
None observed				
August				
None observed				
September				
Windsor	6.1	13th	2000	Lowest
Clyde	5.1	13th	1978	Lowest
October				
Tara Hills	2.5	26th	1949	Lowest
Clyde	4.1	26th	1978	Lowest
Alexandra	3.4	26th	1930	Lowest
November				
None observed				
December				
None observed				

Table 9: Extremes of low daily minimum temperature in 2024 were recorded at:

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Ranking
January				
South West Cape	4.4	29th	1991	Lowest
Campbell Island	-0.9	10th	1991	Lowest
February				
Campbell Island	-1.0	27th	1991	Equal lowest

March				
Martinborough	0.6	21st	1986	Lowest
Whakatu	1.4	17th	1965	Lowest
Appleby	0.1	16th	1932	Lowest
April				
None observed				
May				
Tūrangi	-6.3	8th	1968	Lowest
Whakatu	-4.6	12th	1965	Lowest (2nd-lowest)
Waiheke Island, Awaroa	-1.7	12th	1985	Lowest
Waipawa	-4.3	12th	1945	Equal lowest
June				
None observed				
July				
Mokohinau Island	2.8	17th	1994	Lowest
Waipounamu	-7.4	15th	1980	Lowest
August				
Tūrangi	-7.2	4th	1968	Lowest (2nd-lowest)
September				
None observed				
October				
Mokohinau Island	1.0	15th	1994	Lowest
November				
Mokohinau Island	5.0	12th	1994	Lowest
Waipawa	-1.9	4th	1945	Lowest
December				
Mokohinau Island	6.0	22nd	1994	Lowest
Waipounamu	-0.2	17th	1980	Lowest

Note that rankings in brackets are all-month (annual) rankings

Table 10: Extremes of high daily minimum temperature in 2024 were recorded at:

Location	Extreme high minimum (°C)	Date of extreme temperature	Year records began	Ranking
January				
Purerua	21.0	20th	1983	Highest
Auckland (Whenuapai)	21.5	20th	1951	Highest
Auckland (Western Springs)	22.6	20th	1971	Highest (2nd-highest)
Port Taharoa	21.8	20th	1974	Highest
Masterton	21.5	20th	1943	Highest
Martinborough	21.9	20th	1986	Highest (3rd-highest)
Napier	23.3	15th	1940	Highest
Palmerston North	20.3	21st	1940	Highest
Wellington (Airport)	21.0	20th	1972	Highest (Equal-highest)
Upper Hutt (Trentham)	20.3	20th	1972	Highest

Kaikōura	21.8	20th	1972	Highest (Highest)
Cheviot	22.2	20th	1982	Highest
Waipara West	22.6	20th	1973	Highest (4th-highest)
Rangiora	22.0	20th	1972	Highest (3rd-highest)
Christchurch (Airport)	22.5	20th	1863	Highest (2nd-highest)
Lincoln	22.9	20th	1881	Highest (Highest)
Akaroa	23.3	20th	1978	Highest (2nd-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
February				
Middlemarch	21.2	6th	2000	Highest
March				
Lake Tekapo	19.0	11th	1928	Highest
April				
Matamata	18.7	12th	1999	Highest
Whakatāne	19.9	12th	1975	Highest
Taumarunui	18.3	12th	1947	Highest
Wairoa	20.1	12th	1972	Highest
Hāwera	17.9	11th	1977	Highest
Ohakune	16.3	12th	1972	Highest
Hanmer Forest	18.6	11th	1972	Highest
Waipara West	20.3	11th	1973	Highest
Akaroa	19.6	10th	1978	Highest
May				
None observed				
June				
Kaitaia	18.2	9th	1948	Highest
Ohakune	12.4	10th	1972	Highest
Whanganui	15.8	10th	1972	Highest
Puysegur Point	13.5	7th	1978	Highest
Cheviot	13.2	1st	1982	Highest
Ranfurly	12.0	1st	1897	Highest
Middlemarch	14.8	1st	2000	Highest
Waipounamu	10.1	1st	1980	Highest
Nugget Point	11.5	1st	1972	Highest
Tautuku	13.5	1st	1976	Highest
July				
Wānaka	11.1	27th	1972	Highest
Manapouri (West Arm Jetty)	8.3	27th	1972	Highest
Roxburgh	10.7	27th	1950	Highest
Nugget Point	10.3	27th	1972	Highest
August				
Cheviot	12.7	25th	1982	Highest
September				
Purerua	15.6	1st	1983	Highest

Cape Reinga	14.8	2nd	1971	Equal highest
Kaitaia	17.5	1st	1948	Equal highest
October				
Kaitaia	18.0	26th	1948	Highest
Paraparaumu	15.9	26th	1972	Highest
Hāwera	15.6	26th	1977	Highest
Motueka	16.3	26th	1972	Highest
Appleby	15.3	26th	1941	Highest
Brothers Island	15.0	26th	1997	Highest
Akaroa	17.5	25th	1978	Highest
Port Taharoa	17.1	26th	1974	Equal highest
Upper Hutt (Trentham)	16.1	26th	1972	Equal highest
November				
Kaitaia	20.3	15th	1948	Highest
Blenheim	18.8	9th	1947	Highest
Mt Cook (Airport)	16.7	28th	1929	Highest
Rangiora	18.9	9th	1972	Highest
Akaroa	20.5	9th	1978	Equal highest
December				
Cape Reinga	18.8	15th	1971	Highest
Blenheim	20.9	5th	1947	Highest
Hanmer Forest	21.5	5th	1972	Highest
Medbury	20.5	5th	1927	Highest
Waiau	22.9	5th	1974	Highest (2nd-highest)

Note that rankings in brackets are all-month (annual) rankings

Strong winds and wildfires

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.

On 4 February around 10:00 p.m., a large 80-hectare forest fire developed in Kirwee, outside Christchurch. By 5 February, the fire had been contained, but a seven-helicopter aerial operation was needed to keep it at bay. The fire formed as a hot, dry air mass from Australia arrived, along with west-to-northwest winds. On 7 February, a major vegetation fire broke out in Tasman's Lee Valley, requiring a significant aerial operation.

On the afternoon on 14 February, a wildfire ignited in the Worsley area in the Port Hills near Christchurch. The fire initially required 130 firefighters on the ground and 11 helicopters, and saw a State of Local Emergency declared for Christchurch City and the Selwyn District. Around 30 properties were evacuated. The fire was initially fanned by hot, dry, northwesterly winds before a southerly change on 15 February made smoke more noticeable around Christchurch City. A number of other wildfires broke out across Canterbury during mid-February, including a fast-moving blaze in Waikari Valley near Waipara on 19 February.

On 29 May, strong winds struck the upper North Island. Power outages caused by fallen trees affected at least 50,000 customers across Auckland and Waikato.

On 1 June, strong northwesterly winds fanned approximately twelve vegetation fires across Canterbury. Residents were evacuated along Racecourse Rd, east of Mt Brown Rd, due to a vegetation fire in Broomfield, Hurunui.

On 5 December, strong northwest winds fanned a large fire near the Craigieburn Range in Canterbury. The fire began near SH73 at Bridge Hill, and burned approximately 980 hectares. Three school groups were evacuated from camps in the area. Ten helicopters, three fixed-wing aircraft, and up to 97 personnel were deployed to battle the blaze. SH73 was closed between Castle Hill and Arthurs Pass.

Table 11. Maximum wind gust extremes in 2024 were recorded at:

Location	Maximum wind gust (km/h)	Date of maximum wind gust	Year records began	Ranking
January				
None observed				
February				
Manapouri	87	19th	1991	Highest
Clyde	72	19th	1983	Highest
Alexandra	82	19th	2001	Highest
Whakatāne	91	3rd	1974	Highest
March				
Mt Cook (Airport)	145	4th	2000	Highest
April				
Reefton	57	11th	1999	Highest
Middlemarch	108	25th	2000	Highest
May				
Auckland (Whenuapai)	113	29th	1972	Highest
Pukekohe	81	29th	1986	Highest
Te Kuiti	63	29th	2003	Highest (4th-highest)
Tūrangi	127	17th	1973	Highest
Alexandra	109	29th	2001	Highest
June				
Wānaka	82	1st	1992	Highest
South West Cape	170	1st	1991	Highest
July				
None observed				
August				
Whitianga	97	19th	1991	Highest
Te Puke	71	19th	1987	Highest
September				
Windsor	106	1st	2001	Highest
October				
None observed				

November				
None observed				
December				
Gisborne	104	19th	1972	Highest
Māhia	107	27th	1991	Highest
Rangiora	95	8th	1999	Highest
Middlemarch	111	8th	2000	Highest

Note that rankings in brackets are all-month (annual) rankings

Snow and ice

From 8-21 July, freezing fog and black ice were regularly reported for inland parts of the South Island, especially about the Mackenzie Basin and Central Otago. The icy conditions were associated with an exceptionally strong high pressure system which prevailed over the South Island for nearly two weeks. On the evening of 10 July, Ranfurly recorded a mean sea level pressure of 1046.5 hPa – a new high national barometric record.

From 29-31 July, a prolonged dry spell at South Island ski areas was ended by a heavy snowfall event. Snowfall totals reported included 20-50 cm at Coronet Peak, 67 cm at The Remarkables, 41 cm at Cardrona, at least 70 cm at Treble Cone, 93 cm at Ōhau, 68 cm at Roundhill, 80 cm at Mt Dobson, and 83 cm at Mt Hutt.

On 13 September, snow fell to low elevations for parts of northern Southland, inland Otago, and the Mackenzie Basin. Seven schools across Queenstown, Arrowtown and Alexandra were closed. Downed trees and heavy snow weighting on power lines were the likely cause of power outages to approximately 3,500 customers in Alexandra, Omakau, Cromwell and Clyde.

By the end of September, staff at The Remarkables ski area (near Queenstown) reported that more than 2 metres of snowfall had occurred during September. The regular and heavy snowfalls contributed to snowpack depth and coverage that was better than it had been at any stage during winter 2024. Across the valley, Coronet Peak ski area extended their season by a week due to the favourable conditions, with the ski area closing on 29 September.

On 26 October, heavy snow fell in the South Island's high elevation terrain, with snow settling to relatively low elevations in parts of inland Otago such as Alexandra, Clyde, and Wānaka. The heaviest snowfalls occurred about inland parts of Canterbury, with NIWA's climate stations measuring 56 cm of snow depth at Mt Cook Village, and 27 cm at Arthur's Pass.

Lightning, hail and tornadoes

On 15 May, at least 600 lightning strikes were recorded in the hour to 9:30 a.m. along and near the Coromandel Peninsula and western Bay of Plenty.

From 29-31 August, thunderstorms were a common feature of New Zealand's weather. Approximately 300,000 lightning strikes were recorded over the country and the Tasman Sea during this period.

Cloud and fog

On 24 June, fog forced the cancellation and delay of more than 60 flights at Auckland Airport. Ferry services on Auckland Harbour were also delayed because of the poor visibility. On 25 June, fog was again present at Auckland Airport, with 24 flights cancelled or delayed.

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