

National Climate Summary – January 2007:

Cloudy with low rainfall overall; east-west temperature contrasts

- **Rainfall: Below normal in many regions, areas of above normal rainfall in Northland, Bay of Plenty, Taupo, near East Cape, Wellington, and Nelson**
- **Soil moisture: Severe deficits in Auckland, Nelson, eastern regions from Gisborne to Marlborough, and Central Otago**
- **Temperature: Above average in the east of the North Island and on the South Island's West Coast; below average in the east of the South Island**
- **Sunshine: Below normal in many regions, sunny in Southland**

January was generally cloudy with low rainfall over much of New Zealand, and east-west temperature contrasts.

Rainfall was below average in many regions, especially in the east where totals were 50 percent (half) or less of normal. Areas with above normal rainfall occurred in Northland, Bay of Plenty, Taupo, near East Cape, Wellington, and Nelson. Offshore, rainfall was more than 200 percent (twice) of normal in the Chatham Islands. Significant soil moisture deficits (of at least 110 mm) occurred during January throughout much of Auckland, Waikato, Bay of Plenty, Nelson, and eastern regions of both islands. However, deficits were severe (at least 130 mm) in Auckland, Nelson, eastern regions from Gisborne to Marlborough, and Central Otago. Below average temperatures persisted (from December) in January in the east of the South Island. However, temperatures were above average for the time of year in Gisborne, Hawke's Bay, on the South Island's West Coast, and in the Southern Lakes district. Temperatures, especially in the south and east, were well below normal during the first week of the month, but more typical of summer in many regions after that. The national average temperature was 16.7 °C (0.4 °C below normal). Sunshine hours were below normal in many regions, but above normal in Southland. More anticyclones ('highs') predominated south of New Zealand, with troughs of low pressure often over central New Zealand. As a result, southeasterlies were more frequent than average over much of the South Island, while more frequent westerlies prevailed north of the country.

Other Highlights:

- The lowest air temperature during January 2007 was -0.6 °C recorded at Waiouru on the 4th.
- The highest temperature during the month was 33.5 °C recorded at Napier Airport on the 22nd, with maximum temperatures between 30.0 °C and 33.0 °C measured on the same day at many other eastern localities from Gisborne to Otago.
- There were several high rainfall events, with at least 50 mm in 24 hours, most of which affected the South Island's West Coast (on the 6th, 13th, 20th, 22nd, 29th, and 31st). However, high rainfall (about 60 mm) occurred in parts of Coromandel and Bay of Plenty on the 9th, and Northland (55-60 mm) on the 12th.
- A wind gust of 167 km/h from the northwest was recorded at Rock and Pillar, Otago, on the 22nd.
- Auckland was the warmest and sunniest, Christchurch the driest, and Wellington the wettest of the five main centres. Temperatures were above normal in Hamilton, and below normal in the other main centres, especially Christchurch. Rainfall was above normal in Wellington, near normal in Hamilton, and below normal in Auckland, Christchurch and Dunedin. Sunshine hours were near normal in Auckland, but below normal in the other main centres.

Rainfall: January rainfall totals were 50 percent (half) or less of normal throughout much of Hawke’s Bay, Canterbury, and Otago. Rainfall was also below average throughout much of Wairarapa, Westland, and Southland. Rainfall was above average, with totals 125 percent (one and a quarter) or more of normal, in parts of Northland, Bay of Plenty, Taupo, near East Cape, Wellington, and Nelson.

Temperature: Mean temperatures were below average in many eastern regions from Wairarapa to Otago. However, they were more than 1.0 °C below average in parts of Wellington, Marlborough, and Canterbury. In contrast, temperatures were above average in Gisborne, Hawke’s Bay, on the South Island West Coast, and in the Southern Lakes district.

Sunshine: Sunshine hours were below normal in many regions, especially in the west of the North Island, from Taranaki to Wellington, and the northern half of the South Island. Sunshine hours were above normal in Southland.

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RAINFALL: BELOW NORMAL IN MANY REGIONS, AREAS WITH ABOVE NORMAL IN NORTHLAND, BAY OF PLENTY, TAUPO, WELLINGTON, AND NELSON

January rainfall totals were 50 percent (half) or less of normal throughout much of Hawke’s Bay, Canterbury, and Otago. Rainfall was also below average, less than 75 percent (three quarters) or less of normal, throughout much of Wairarapa, Westland, and Southland. Rainfall was above average, with totals 125 percent (one and a quarter) or more of normal, in parts of Northland, Bay of Plenty, Taupo, near East Cape, Wellington, and Nelson. January rainfall was near normal elsewhere. Offshore, rainfall was more than 200 percent (twice) of normal in the Chatham Islands.

Near or record low January rainfall was recorded at:

Location	January Rainfall (mm)	Percentage of normal	Year Records began	Comments
Wairoa, North Clyde	12	12	1992	Lowest
Lauder	13	24	1943	2 nd lowest

High January rainfall was recorded at:

Location	January Rainfall (mm)	Percentage of normal	Year Records began	Comments
Chatham Islands	114	214	1951	Well above normal

TEMPERATURE: ABOVE AVERAGE IN THE EAST OF THE NORTH ISLAND AND ON THE SOUTH ISLAND WEST COAST, BELOW AVERAGE IN MANY EASTERN REGIONS

Mean temperatures were 0.5 °C or more below average in many eastern regions from Wairarapa to Otago, and more than 1.0 °C below average in parts of Wellington, Marlborough, and Canterbury. In contrast, temperatures were 0.5 °C or more above average in Gisborne, Hawke’s Bay, on the South Island West Coast,

and in the Southern Lakes district. Temperatures were near average in most other regions. The national average temperature was 16.7 °C (0.4°C below normal).

Low January mean air temperatures were recorded at:

Location	Mean air temperature (°C)	Departure from Normal	Year Records began	Comments
Wellington, Kelburn	15.6	-1.3	1928	Well below normal
Christchurch Airport	15.5	-1.6	1954	Well below normal

SUNSHINE: BELOW AVERAGE IN MANY REGIONS

January sunshine hours and/or solar radiation were less than 90 percent of normal in many regions, especially in the west of the North Island, from Taranaki to Wellington, and the northern half of the South Island (includes Buller, Marlborough, Nelson, and Canterbury), as well as coastal Otago. Sunshine hours were more than 110 percent of normal in Southland, and near normal elsewhere.

Near or record low January sunshine hours were recorded at:

Location	January Sunshine (hrs)	Percentage of normal	Year Records began	Comments
Stratford	171	75	1963	2 nd lowest
Paraparaumu Airport	167	70	1953	3 rd lowest
Takaka	169	70	1986	Lowest
Motueka	200	76	1965	Equal lowest
Nelson Airport	181	68	1949	Lowest

JANUARY'S CLIMATE IN THE FIVE MAIN CENTRES

Auckland was the warmest and sunniest, Christchurch the driest, and Wellington the wettest of the five main centres. Temperatures were above normal in Hamilton, and below normal in the other main centres, especially Christchurch. Rainfall was above normal in Wellington, near normal in Hamilton, and below normal in Auckland, Christchurch, and Dunedin. Sunshine hours were near normal in Auckland, but below normal in the other main centres.

January 2007 main centre climate statistics:

Location	Jan. Mean Temp. (°C)	Dep. from normal (°C)		Jan. rainfall (mm)	% of Normal		Jan. Sunshine (hours)	% of Normal	
Auckland	19.4	-0.3	Below normal	58 ^a	78	Below normal	220	96	Near normal
Hamilton	18.6	+0.3	Above normal	93	113	Near normal	190	82	Below normal
Wellington	15.6	-1.3	Well below normal	102	141	Above normal	196	80	Well below normal
Christchurch	15.5 ^b	-1.6	Well below normal	22 ^b	52	Below normal	177 ^b	77	Well below normal
Dunedin	14.2 ^c	-1.0	Below normal	44	61	Below normal	145	82	Below normal

^a Owairaka ^b Christchurch Airport ^c Dunedin Airport

HIGHLIGHTS AND EXTREME EVENTS

- **Temperature**

The lowest air temperature during January 2007 was -0.6 °C recorded at Waiouru on the 4th. The highest temperature during the month was 33.5 °C recorded at Napier Airport on the 22nd, during hot dry northwesterly conditions, with maximum temperatures between 30.0 ° and 33.0 °C measured at many other eastern localities from Gisborne to Otago.

- **High rainfall**

There were several high rainfall events, with at least 50 mm in 24 hours. These were:

Date	Region	Location	Rainfall (mm)
6 Jan.	Fiordland	Milford Sound	88
9 Jan.	Coromandel	Whitianga Airport	58
	Bay of Plenty	Te Puke	62
12 Jan.	Northland	Kaikohe	57
13 Jan.	South Westland	Lake Moeraki	79
20 Jan.	Southland	Secretary Island	55
22 Jan.	Westland	Lake Moeraki	84
	Fiordland	Milford Sound	119
29 Jan.	Buller	Westport	51
31 Jan.	South Westland	Franz Josef	71
	Fiordland	Milford Sound	98
	Southern Alps	Mount Cook Village	132

- **Hailstorm**

A ten-minute hailstorm affected parts of Te Puke on 2 January. Although it was heavy, no significant horticultural damage was reported.

- **High winds**

A wind gust of 167 km/h from the northwest was recorded at Rock and Pillar, Otago, on the 22nd.

For further information, please contact:

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