

**NATIONAL CLIMATE CENTRE
WEDNESDAY 1 DECEMBER 2004**

National Climate Summary – November 2004

- **Temperature: Above average overall: Mild in parts of the Manawatu, Wairarapa, Canterbury, Dunedin and Southland, slightly below average in the north;**
- **Rainfall: Below average over much of the North Island, and northern half of the South Island; above average in the southern half of the South Island;**
- **Soil moisture: Deficits persisted in coastal Marlborough, and are showing up in Hawke's Bay, Canterbury and areas of north and Central Otago;**
- **Sunshine: Above average in Northland, Auckland, Gisborne, Hawke's Bay and Wairarapa, Nelson and Marlborough; below average in Westland, Fiordland and coastal Southland.**

November was a mild month, with mean temperatures about 1.0°C above average in Southland. The national average of 14.3°C was 0.6°C above average. Rainfall was well below average in Northland, Auckland and Hawke's Bay, and along the Kaikoura Coast and North Canterbury, all with totals of 50 percent (half) of average or less. As a result, significant soil moisture deficits persisted in coastal Marlborough, and have now developed in Hawke's Bay, Canterbury, and in the Upper Waitaki valley. Rainfall was above average in Fiordland, Southland, parts of Otago and coastal south Canterbury. Sunshine hours were much above average in the north and east of the North Island and north of the South Island, yet below average in the southwest of the South Island. Most depressions ('lows') tracked well south of New Zealand, while anticyclones ('highs') were more frequent to the east of Chatham Islands with ridges of high pressure over the north of the North Island. These produced more frequent westerlies and north westerlies over the South Island, with very windy conditions at times.

Highlights:

- The highest November 2004 temperature was 30.0°C, recorded in Culverden on the 7th. This was their highest November temperature since measurements commenced in 1983. Nelson Park also recorded 28.5°C, this month, on the 14th. The lowest temperature for the month was -2.0°C, recorded in Ranfurly on the 25th.
- Thunderstorms, high winds, and heavy rainfall buffeted many parts of the upper North Island on the 15th, especially Gisborne where 8000 houses were temporarily without electricity, and Auckland with some roofs damaged and trees fallen. More gales occurred from the 28th to the 30th.
- Cold southerlies brought snowfall to parts of the Otago high country on the 23rd and 25th.
- Of the four main centres Auckland was the sunniest and Christchurch the driest. Rainfall was below average in all centres except Dunedin. Temperatures were above average in Wellington, Christchurch and Dunedin. Sunshine hours were above average in all centres, with totals in Auckland the highest on record.

Temperature: Mean temperatures were about 1.0°C above average in Buller and Southland, and at least 0.5°C above average in the Manawatu, Wellington, central Wairarapa and many areas of the South Island. Below average temperatures occurred in the northern half of the North Island.

Rainfall: Rainfall was well below average in Northland, Auckland, Hawke's Bay, in North Canterbury, and on the Kaikoura Coast. Rainfall was also below average in other areas of the North Island, and the north of the South Island. November rainfall totals were above average in parts of Fiordland, Otago and coastal south Canterbury.

Sunshine: Sunshine hours were above average in Northland, Auckland, Gisborne, Hawke's Bay, Wairarapa, Nelson and Marlborough; and below average in Westland, Fiordland and coastal Southland. .

For further information, please contact:

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ABOVE AVERAGE TEMPERATURES IN MANY REGIONS, BELOW AVERAGE IN THE NORTH

Mean temperatures were about 1.0°C above in Buller and Southland, and 0.5°C or more in the Manawatu, Wellington, central Wairarapa, and in other South Island areas. In the north of the North Island these were up to 0.5°C or more below average. The national average of 14.3°C was 0.6°C above average.

Near or record high November mean air temperatures were recorded at:

Location	Mean temperature	Departure from average (°C)	Records Began	Comments
Farewell Spit	15.6	+1.4	1972	2 nd equal highest
Dunedin Airport	13.6	+1.5	1963	Highest
Lauder	13.2	+1.5	1981	3 rd equal highest
Gore	12.8	+1.1	1972	Equal highest
Invercargill Airport	12.8	+1.5	1948	2 nd highest
Tiwai Point	12.8	+1.0	1970	2 nd equal highest

BELOW AVERAGE RAINFALL IN OVER MUCH OF THE NORTH ISLAND, THE KAIKOURA COAST AND NORTH CANTERBURY ABOVE AVERAGE RAINFALL IN PARTS OF FIORDLAND, OTAGO AND SOUTH CANTERBURY

Rainfall was well below average in parts of Northland, Auckland and Hawke's Bay, along the Kaikoura Coast and in north Canterbury, all with totals of 50 percent (half) of average or less. Rainfall was also below average in Waikato, Taranaki, Taupo/Ruapehu, Wanganui, Wellington and Buller where totals were less than 75 percent (three quarters) of average. In contrast, November rainfall totals were at least 125 percent (one and a quarter) of average, in parts of Fiordland, and in the Alexandra, Maniototo and Oamaru districts of Otago, as well as Southland and coastal south Canterbury. It was particularly wet in the Oamaru district, where totals were two and a half times the normal. Rainfall was near average in other districts.

Near or record November rainfall was recorded at:

Location	November rainfall (mm)	Percentage of normal	Year Records began	Comments
Auckland, Henderson	53	52	1985	2 nd Lowest
Pukekohe	44	46	1987	Lowest
Oamaru	91	252		Well above average

SUNNY IN THE NORTHLAND, AUCKLAND, EAST OF NORTH ISLAND, NELSON AND MARLBOROUGH; CLOUDY IN THE SOUTHWEST

Sunshine hours were at least 110 percent of average in Northland, Auckland, Bay of Plenty, Gisborne, Hawke's Bay, Wairarapa, Wellington, Nelson and Marlborough. These were 90 percent of average or less in King Country, Westland, Fiordland and coastal Southland. Sunshine hours were near average in most other regions. It was particularly sunny in Auckland, Gisborne and Blenheim, with record or near record sunshine totals.

Near or record November sunshine hours were recorded at:

Location	November Sunshine (hours)	Percentage of normal	Year Records began	Comments
Auckland, Mangere	238	124	1963	Highest
Gisborne Airport	257	120	1905	Well above average
Blenheim Research	262	113	1985	2 nd highest

NOVEMBER'S CLIMATE IN THE FOUR MAIN CENTRES

Of the four main centres Auckland was the sunniest and Christchurch the driest. Rainfall was below average in all of the main centres except Dunedin. Temperatures were above average in Wellington, Christchurch and Dunedin, and near average in Auckland. Sunshine hours were above average in all the main centres. Auckland recorded its highest November sunshine totals on record.

Location	November Mean Temp. (°C)	Dep. from normal (°C)		November rainfall (mm)	% of normal		November Sunshine (hours)	% of normal	
Auckland	16.0 ^a	-0.2	Near average	40 ^a	45	Well below average	238	124	Highest
Wellington	14.3	+0.8	Above average	64	64	Below average	236	113	Above average
Christchurch	14.2 ^b	+0.6	Above average	19 ^b	42	Well below average	229	106	Above average
Dunedin	13.0	+0.6	Above average	76	122	Above average	176	109	Above average

a-Mangere

b-Christchurch Airport

HIGHLIGHTS AND EXTREME EVENTS

- **Temperature**

The highest November 2004 temperature was 30.0°C, recorded in Culverden on the 7th. This was their highest November temperature since measurements commenced in 1983. Nelson Park also recorded 28.5°C, this month, on the 14th. The lowest temperature for the month was -2.0°C, recorded in Ranfurly on the 25th.

- **High winds**

Rough weather, including thunderstorms, high winds, and heavy rainfall buffeted many parts of the upper North Island on the 15th, especially Gisborne where 8000 houses were temporarily without electricity, and Auckland with some roofs damaged and trees fallen.

- High winds, with speeds gusting to over 130 km/hr in Hawke's Bay uprooted a tree near Hastings which hit a vehicle and killed two people on the 28th.

- **High rainfall**

Heavy rainfall totalling 252 mm was recorded at Milford Sound for the 24 hours to 9am on the 20th.

- **Snow**

Cold southerlies brought snowfall to parts of the Otago high country on the 23rd and 25th.

For further information, please contact:

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