

National Climate Summary – June 2005

- **Rainfall:** Extremely dry in the east of the South Island, above normal in Hawke's Bay and Southland
- **Sunshine:** Well above average in the northern North Island, and the south and west of the South Island
- **Temperature:** Below average in the south and east of the South Island, near normal in much of the North Island

June for many was drier and sunnier than normal. Rainfall was well below normal in Marlborough, Canterbury, and parts of Otago, where many locations recorded totals ranging from 5 to 15 mm, some sites experiencing their driest June since the mid 1980s. Timaru Airport recorded a total of only 4 mm (11 percent of normal). In contrast, above average rainfall occurred in Hawke's Bay and Southland. It was very sunny for June in northern regions of the North Island, and also the south and west of the South Island, Dunedin having its sunniest June in more than 50 years of measurement. The national average temperature for June was 8.3 °C. This was 0.2 °C below normal, and the lowest for June in a decade (7.8 °C in 1996). It was also the first June since 1998 which was not warmer than normal. Mean temperatures were near average throughout much of the North Island and the north of the South Island. They were below average in Canterbury, Southland, and Otago. During June, anticyclones ('highs') were often centred west of the South Island. These resulted in above average pressures over New Zealand, with more frequent cool southerlies than average, especially over the North Island.

Other Highlights:

- The highest temperature during June 2005 was 20.6°C recorded at Henderson (Auckland) on the 20th. The lowest temperature for the month was -8.6°C, recorded at Middlemarch on the 16th. Air temperatures fell to -6.1C at Christchurch Airport on the 25th June, the lowest June temperature there in 30 years.
- Damaging winds, attributed to a tornado, toppled trees near Lake Rotoiti, Rotorua on 1 June.
- A couple (one injured) were rescued from their yacht after being caught in a severe storm over 11-12 June north of New Zealand.
- Several damaging tornados affected parts of Auckland on 25 June.
- Several Otago and Southland roads, as well as the North Islands Desert Road, were closed by snow on 2-3 June, with some motorists trapped in the snow.
- Of the four main centres Christchurch was the driest, and Auckland the warmest. Rainfall was below average in all four centres. Temperatures were above average in Auckland, near average in Dunedin, and below average in Wellington and Christchurch. Sunshine hours were well above average in Auckland and Dunedin, near average in Wellington, and below average in Christchurch.

Rainfall: Rainfall was 25 percent (quarter) of normal or less in Marlborough, Canterbury, and parts of Otago, and less than 50 percent (half) of normal in Kapiti, Horowhenua, and Wellington. Totals were also below normal in Bay of Plenty, Waikato, King Country, Taranaki, Wairarapa, and parts of Nelson. Rainfall was above normal in Hawke's Bay and Southland.

Sunshine: Sunshine hours were well above average in much of Northland, Auckland, Waikato, Taranaki, Buller, Westland, inland South Canterbury, and Otago, and also above average in Bay of Plenty. Sunshine hours were well below average in West Otago.

Temperature: Temperatures were near average throughout much of the North Island and the north of the South Island. They were below average in Canterbury, Southland, and Otago.

For further information, please contact:

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WELL BELOW AVERAGE RAINFALL IN THE EAST OF THE SOUTH ISLAND

Rainfall was 25 percent (quarter) of normal or less in Marlborough, Canterbury, and parts of Otago. It was also relatively dry, with less than 50 percent (half) of normal rainfall, in Kapiti, Horowhenua, and Wellington. Totals were 75 percent of normal in Bay of Plenty, Waikato, King Country, Taranaki, Wairarapa, and parts of Nelson. In contrast, rainfall was 175-200 percent of normal in Hawke's Bay and Southland. Rainfall was near normal elsewhere.

Near or record low June rainfall was recorded at:

Location	June rainfall (mm)	Percentage of normal	Year Records began	Comments
Blenheim Research	15	23	1986	Lowest
Blenheim Airport	14	22	1941	Well below average
Winchmore	11	17	1947	Lowest since 1984 (7 mm)
Darfield	17	24	1920	Lowest since 1984 (9 mm)
Christchurch Airport	12	20	1944	Well below average
Lake Tekapo	16	27	1925	Well below average
Timaru Airport	4	11	1957	3 rd lowest
Oamaru Airport	9	24	1941	Well below average
Tara Hills, Omarama	11	25	1950	Well below average
Ranfurly	7	27	1975	2 nd lowest
Clyde	11	30	1983	2 nd lowest

VERY SUNNY IN THE NORTHERN NORTH ISLAND AND THE SOUTH AND WEST OF THE SOUTH ISLAND

Sunshine hours were at least 120 percent of average in much of Northland, Auckland, Waikato, Taranaki, Buller, Westland, inland South Canterbury, and Otago, and at least 110 percent of average in parts of Bay of Plenty. However, they were less than 80 percent of average in West Otago. Hours of bright sunshine were near average elsewhere.

Near or record high June sunshine hours were recorded at:

Location	June sunshine (hours)	Percentage of normal	Year Records began	Comments
Dargaville	125	137	1943	Well above average
Auckland, Mangere	141	126	1963	3 rd highest
Takaka	183	134	1986	Highest
Hokitika Airport	138	136	1964	Well above average
Dunedin, Musselburgh	141	162	1948	Highest
Queenstown	58	77	1930	Well below average

BELOW AVERAGE TEMPERATURES IN THE SOUTH AND EAST OF THE SOUTH ISLAND

Temperatures were near average throughout much of the North Island and the north of the South Island. They were about 0.5°C below average in Canterbury, and Southland, and about 0.5 to 1.0°C below average in Otago.

JUNE'S CLIMATE IN THE FOUR MAIN CENTRES

Of the four main centres Christchurch was the driest, and Auckland the warmest. Rainfall was below average in all four centres. Temperatures were above average in Auckland, near average in Dunedin, and below average in Wellington and Christchurch. Sunshine hours were well above average in Auckland and Dunedin, near average in Wellington, and below average in Christchurch.

Location	June Mean Temp. (°C)	Dep. from normal (°C)		June rainfall (mm)	% of normal		June Sunshine (hours)	% of normal	
Auckland	12.0 ^a	+0.3	Above average	115 ^b	83	Below average	141 ^a	126	Well above average
Wellington	9.1	-0.4	Below average	49	34	Well below average	97	99	Near average
Christchurch	5.6 ^c	-0.5	Below average	12 ^c	20	Well below average	109	91	Below average
Dunedin	6.9	-0.1	Near average	49	67	Below average	141	162	Record high

a Mangere b Mt Albert c Christchurch Airport

HIGHLIGHTS AND EXTREME EVENTS

- **Temperature**

The highest temperature during June 2005 was 20.6°C recorded at Henderson (Auckland) on the 20th. The lowest temperature for the month was -8.6°C, recorded at Middlemarch on the 16th.

Near or record low June minimum air temperatures were recorded at:

Location	Min. temperature °C	Date of occurrence	Records Began	Comments
Whakatu, Hastings	-4.9	28 June	1983	Lowest for June
Appleby, Nelson	-5.5	27 June	1932	Lowest for June
Culverden	-8.2	25 June	1983	Lowest for June
Christchurch Airport	-6.1	25 June	1954	2 nd lowest (-7.2°C in 1975)

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- **High rainfall**

17 June

Rainfall totalling 50 to 90 mm occurred in the Bay of Islands, western Nelson, and South Westland.

24 June

Rainfall totalling about 70 mm occurred in Whitianga.

28 June

Rainfall totalling 65-90 mm occurred in South Westland and Fiordland, and western Southland.

- **High winds, rough seas, and tornadoes**

1 June

Damaging winds, attributed to a tornado, toppled trees – cutting electricity to over 1000 homes near Lake

Rotoiti, Rotorua.

11-12 June

A couple (one person was injured) and their yacht were caught in a severe storm in high winds and 7 to 8 metre swells about 750 km north of New Zealand. They were safely rescued and brought back to New Zealand.

25 June

At least three tornados hit southeastern parts of Auckland, resulting in fallen trees (trapping several people), and surface flooding.

- **Snowfall**

2-3 June

Several Otago and Southland roads were closed by snow on 2-3 June, with sleet and hail elsewhere in the region. As much as 15 cm of snowfall lay in parts of eastern Southland, with lesser amounts in the Catlins and along the South Otago coast, including the motorway north of Dunedin. Several central North Island roads were also closed due to snowfall, about 20 cars and two trucks being trapped in the snow. The Desert Road was closed by ice on 5 June.

25-26 June

Snow fall on the North Island Desert Road, and on the Orongorongo Ranges east of Wellington

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