

NATIONAL CLIMATE CENTRE

FRIDAY 9 JUNE 2006

National Climate Summary – Autumn 2006

Rainfall: Extremely high in Northland, Auckland, and Bay of Plenty;

extremely low in Central Otago

Temperature: Near average throughout much of New Zealand

Sunshine: Sunny in Southland

Autumn rainfall was extremely high in Northland, Auckland, and Waikato, and parts of Bay of Plenty, and extremely low in parts of Central Otago. Seasonal mean temperatures were above average in Auckland, Coromandel, western Bay of Plenty, Nelson, Golden Bay, and parts of Waikato, and below average in parts of South Canterbury, and North Otago. The national average autumn temperature of 13.3 °C was 0.1 °C below normal. However, March was unusually cool, and April was rather mild. Sunshine hours for autumn were near above normal in Southland, and below normal in Golden Bay, and north Canterbury. The overall autumn climate pattern was dominated by frequent troughs or depressions ('lows') over New Zealand, with more frequent northeasterlies over the lower half of the South Island.

Major Highlights:

- The highest temperature recorded during the autumn was 30.2 °C recorded at Ashburton Airport on 14 March. The lowest temperature for the autumn was -5.9 °C at Lake Tekapo on 15 May.
- There were eleven high rainfall events, at least six of which resulted in flooding the most severe was that of 24-25 April, during which time much of the Taieri Plains including Mosgiel were flooded, as well as the towns of Oamaru and Waitati.
 - The highest wind gust for the autumn was 150 km/h from the northwest at Castlepoint on 1 March. Storm force southerlies occurred in Cook Strait on 3 March. Four tornadoes were reported, the most destructive occurring near Waimate on 8 March, destroying a large historic homestead.
 - Wintry conditions occurred with a cold southerly outbreak during 14-15 May, with snow closing several high country South Island roads, and the North Island's Desert Road.

Of the five main centres, Auckland was easily the wettest, but also the sunniest. Rainfall was above average in Auckland, Hamilton, and Christchurch, and near average in Wellington and Dunedin. Temperatures were above average in Auckland, and Hamilton, near average in Wellington and Dunedin, and below average in Christchurch. Autumn sunshine hours were below average in Christchurch, and near average in the four other main centres.

Rainfall: Autumn rainfall was at least 150 percent (one and a half) of normal in Northland, Auckland, and Waikato, and parts of Bay of Plenty. Rainfall was also above normal in Thames, Coromandel, Taupo, Gisborne, North Westland, Nelson, and mid-Canterbury. In contrast, rainfall was less than 50 percent (half) of normal in parts of Central Otago. Totals were also below normal in parts of Marlborough, South Westland, Fiordland, and Southern Lakes.

Temperature: Seasonal mean temperatures were near average throughout much of New Zealand. However, they were above average in Auckland, Coromandel, western Bay of Plenty, Nelson, Golden Bay, and parts of Waikato. Temperatures were below average in parts of South Canterbury, and North Otago.

Sunshine: Sunshine hours were near normal in most regions. However, they were at least 110 percent of normal in Southland, and 90 percent of normal in Golden Bay, and north Canterbury.

For further information, please contact:

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EXTREMELY HIGH AUTUMN RAINFALL IN NORTHLAND, AUCKLAND, AND BAY OF PLENTY; EXTRMELEY LOW RAINFALL IN CENTRAL OTAGO

Rainfall was at least 150 percent of normal in Northland, Auckland, and Waikato, and parts of Bay of Plenty, and at least 125 percent (one and a quarter) of normal in Thames, Coromandel, Taupo, Gisborne, North Westland, Nelson, and mid-Canterbury. In contrast, rainfall was less than 50 percent of normal in parts of Central Otago. Totals were less than 75 percent (three quarters) of normal in parts of Marlborough, South Westland, Fiordland, and Southern Lakes.

Near or record autumn rainfall was recorded at:

Location	Autumn 2006 rainfall	Percentage of normal	Year Records	Comments
	(mm)	or normal	began	
Kaitaia Observatory	494	162	1985	Highest
Whangaparaoa AWS	441	184	1987	Highest
Auckland, Henderson	482	154	1986	Highest
Te Puke	647	147	1973	2 nd highest
Rotorua Airport	531	161	1964	2 nd highest
Auckland Airport	414	154	1962	3 rd highest
Clyde EWS	45	43	1983	2 nd lowest

ABOVE AVERAGE TEMPERATURES IN AUCKLAND, COROMANDEL, WESTERN BAY OF PLENTY, WAIKATO, NELSON, AND GOLDEN BAY; BELOW AVERAGE IN SOUTH CANTERBURY AND NORTH OTAGO

Seasonal mean temperatures were near average throughout much of New Zealand. However, they were more than $0.5~^{\circ}$ C above average in Auckland, Coromandel, western Bay of Plenty, Nelson, Golden Bay, and parts of Waikato. Temperatures were more as much as $1.0~^{\circ}$ C below average in parts of South Canterbury, and North Otago.

SUNNY IN SOUTHLAND

Sunshine hours were near normal in most regions. However, they were at least 110 percent of normal in Southland, and 90 percent of normal in Golden Bay, and north Canterbury.

AUTUMN CLIMATE IN THE FIVE MAIN CENTRES

Of the five main centres, Auckland was easily the wettest, but also the sunniest. Rainfall was above average in Auckland, Hamilton, and Christchurch, and near average in Wellington and Dunedin. Temperatures were above average in Auckland, and Hamilton, near average in Wellington and Dunedin, and below average in Christchurch. Autumn sunshine hours were below average in Christchurch, and near average in the four other main centres.



Location	Autumn Mean Temp. (°C)	Dep. from normal (°C)		Autumn rainfall (mm)	% of normal		Autumn Sunshine (hours)	% of normal	
Auckland	16.6	+0.5	Above average	474 ^a	157	Well above average	502	105	Near average
Hamilton	15.1	+0.7	Above average	363	130	Above average	479	100	Near average
Wellington	13.6	-0.1	Near average	315	102	Near average	451	95	Near average
Christchurch ^b	11.6	-0.4	Below average	221	138	Above average	425	88	Below average
Dunedin	11.4	-0.2	Near average	209	104	Near average	380	105	Near average

a Owairaka, b Christchurch Airport

HIGHLIGHTS AND EXTREME EVENTS

Temperature

The highest temperature recorded during the autumn was 30.2 °C recorded at Ashburton Airport on 14 March.

The lowest temperature for the autumn was -5.9 °C at Lake Tekapo on 15 May.

High rainfall

March: High rainfall, totalling 50-90 mm was recorded in Northland in the 24 hours to 9 am on 8 March. Rainfall totalling at least 90 mm was recorded in Gisborne in the 48 hours to 9 am on the 24 March. Another high rainfall event, associated with ex-tropical cyclone 'Wati', affected Northland in the 48 hours to 9 am on 27 March, with 2-day totals of 147 mm at Kaikohe and 143 mm at Kerikeri.

April: High rainfall in Papakura, Auckland, on 18 April, with people having evacuating their homes due to flooding. Severe flooding in North and East Otago over 24-25 April. Much of the Taieri Plains including Mosgiel were flooded, as well as the towns of Oamaru and Waitati. Motorists were stranded overnight in their cars. The same weather system brought heavy snowfall to the Remarkable's in West Otago, as well as Coronet Peak and Cardrona. Flooding in the Hauraki/Coromandel and Auckland regions during 27-28 April. Floodwaters resulted in the closure of the Karangahake Gorge Road between Paeroa and Waihi, and SH26 between Pareoa and Te Aroha. Flooding also occurred in Whangamata, Pauanui, and Auckland's North Shore.

May: High rainfall events were also frequent in May, occurring in various districts on 2, 6, 12-13, 20-22, and 25-26 May. Substantial surface flooding occurred in Silverdale, north of Auckland on 6 May, in parts of Christchurch on 12 May, and in Tasman on 22 May.

High winds and tornadoes

The highest wind gust for the autumn was 150 km/h from the northwest at Castlepoint on 1 March.

Storm force southerlies occurred in Cook Strait on 3 March. A tornado occurred at a Hinemoana Downs farm near Waimate at about 2 pm on 8 March, destroying a large 23 room historic homestead. Two sheds were also damaged. North easterly gales affected exposed parts of Northland on 26 March, with a gust of 141 km/h at Cape Reinga. Tornado-like winds damaged property on the Kapiti coast during the morning of 8 April, and at Leamington (Waikato) on 20 April. On 11 May, a small tornado lifted half a roof off a Ruawai (Kaipara) house.



Hail, snow, and thunderstorms

Hail occurred during thunderstorms in Wellington on 9 March, resulting in the closure of the airport for a short period of time.

On 8 May, lightning struck a tree in Auckland, shattering at least 16 nearby windows, burning out electrical appliances, and resulting in a localised power outage.

Wintry conditions occurred with a cold southerly outbreak during 14-15 May. In Canterbury, snowfall closed Burkes Pass with several vehicles stranded. Snowfall also occurred between Te Anau and Milford, as well as the Cashmere Hills. In the North Island, snowfall closed the Desert Road. The same event produced gale force southerlies with high seas in Cook Strait, and hail in parts of Auckland.

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