

NATIONAL CLIMATE CENTRE

MONDAY 1 MAY 2006

National Climate Summary – April 2006

Rainfall: Above average over much of New Zealand; Severe flooding in Otago and

Coromandel

Soil moisture: Significant deficits eliminated in many areas

Temperature: Warm, highest nationally since 1981, and 8th highest in reliable records

Sunshine: Very sunny in Gisborne, rather cloudy in North Westland

Flood-producing rainfall events occurred in north and east Otago over 25/26 April, and in the Hauraki-Coromandel region over 27/28 April. As a result the month's rainfall was very high in these regions. Rainfall in north and east Otago totalled 300-400 percent (three to four times) of normal, and totals in the Hauraki-Coromandel region were at least 200 percent (two times) of normal. Rainfall was also well above normal in Northland, Auckland, Waikato, Bay of Plenty, Taupo, north Westland, Nelson, the Southern Alps, inland South Canterbury, and inland areas of Southland. Hokitika recorded its highest April rainfall since 1920. Severe soil moisture deficits were eliminated in many areas. April was much warmer than usual, with mean temperatures being the highest since 1981, and 8th highest since reliable records in the 1860s. The national average temperature of 14.6 °C (higher than March) was 1.2 °C above the 1971-2000 normal. April was much sunnier than normal in Gisborne. However, sunshine was below normal in north Westland and Nelson. During April, depressions (or 'lows') were much more frequent than average in the Tasman Sea. This pattern resulted in frequent warm northwesterlies over the North Island, and more northeasterlies than normal over the South Island.

Other Highlights:

The highest temperature recorded during April 2006 was 29.0 °C recorded in Napier on the 3rd. The lowest temperature for the month was -2.0 °C at Middlemarch, Otago on the 14th.

Tornado-like winds damaged property on the Kapiti coast during the morning of 8 April, and at Leamington (Waikato) on 20 April.

The highest wind gust recorded was 128 km/h from the northwest at South West Cape on the 23rd.

High rainfall in Papakura, Auckland on 18 April, with flooding forcing people to evacuate their homes.

Severe flooding over 25/26 April in north and east Otago. Much of the Taieri Plains, including Mosgiel, was 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 Remarkables in west Otago, as well as Coronet Peak and Cardrona.

More flooding in the Hauraki/Coromandel and Auckland regions over 27/28 April. Floodwaters resulted in the closure of the Karangahake Gorge Road between Paeroa and Waihi, and SH26 between Paeroa and Te Aroha. Flooding also occurred in Whangamata, Pauanui, and Auckland's North Shore.

Temperatures were above average in all five main centres. Christchurch was the driest and sunniest, and Auckland easily the wettest of the main centres. Rainfall was above average in Auckland, Hamilton, Christchurch, and Dunedin, near average in Wellington. Sunshine hours were above average in Christchurch, below average in Hamilton, and near average in the three other main centres.

Rainfall: Rainfall was 300-400 percent of normal in parts of north and east Otago, and about 200-250 percent of normal in parts of Northland, Auckland, Hauraki-Coromandel, Waikato, Bay of Plenty, Taupo, North Westland, Nelson, the Southern Alps, inland South Canterbury, and inland areas of Southland. Rainfall was also above average in many other northern and western regions, as well as Hawke's Bay and central Marlborough. In contrast, April rainfall totals were 50 percent (half) or less of normal in southern parts of Wairarapa and the Kaikoura coast, and also below normal in coastal Southland.

Temperature: Mean temperatures were about 1.5 °C above average throughout much of the North Island,

and 2 $^{\circ}$ C or more above average in parts of Auckland and Coromandel. Temperatures were 1 to 2 $^{\circ}$ C above average throughout much of the South Island, and more than 2 $^{\circ}$ C above average in parts of Canterbury and Otago.

Sunshine: Sunshine hours and/or solar radiation were more than 120 percent of normal in Gisborne, and also above normal in parts of Northland, Canterbury and Southland. In contrast, they were well below normal in North Westland and Nelson.

For further information, please contact:

Dr Jim Salinger – Principal Scientist – Climate, NIWA National Climate Centre, Auckland, Tel. (09) 375 2053 (work) or (027) 521 9468 (mobile)

Stuart Burgess - Climatologist - NIWA National Climate Centre, Wellington, Tel. (04) 386 0569

ABOVE AVERAGE RAINFALL OVER MUCH OF NEW ZEALND

Rainfall was 300-400 percent of normal in parts of north and east Otago, and about 200-250 percent of normal in parts of Northland, Auckland, Hauraki-Coromandel, Waikato, Bay of Plenty, Taupo, north Westland, Nelson, the Southern Alps, inland South Canterbury, and inland areas of Southland. Rainfall was also above average (at least 125 percent of normal) in King Country, the Central Plateau, Wanganui, Manawatu, Hawke's Bay, Buller, and central Marlborough.

In contrast, April rainfall totals were 50 percent (half) or less of normal in southern parts of Wairarapa and the Kaikoura coast, and 75 percent (three quarters) or less of normal in coastal Southland.

Near or record high April rainfall was recorded at:

Location	April	Percentage	Year	Comments
	Rainfall (mm)	of normal	records began	
Warkworth	227	200	1972	Highest
Whangaparaoa	191	243	1987	Highest
Auckland, Henderson	217 ^a	212	1986	Highest
Paeroa	284	275	1914	3 rd highest
Matamata, Hinuera	209	204	1999	Highest
Rotorua Airport	231	207	1964	3 rd highest
Taupo Airport	151	229	1976	Highest
Whakatu	146	219	1983	3 rd highest
Takaka	324	195	2003	Highest
Hokitika	540	217	1866	2 nd highest
Reefton	373	231	1904	3 rd highest
Oamaru Airport	134	299	1941	2 nd highest
Dunedin Airport	164	384	1963	2 nd highest

^a to 9 am 30 April.

Low April rainfall was recorded at:

Location	April	Percentage	Year	Comments
	Rainfall (mm)	of normal	records began	
Ngawi	28	34	1992	3 rd lowest

Mean temperatures were about 1.5 °C above average throughout much of the North Island, and 2 °C or more above average in parts of Auckland and Coromandel. Temperatures were 1 to 2 °C above average throughout much of the South Island, and more than 2 °C above average in parts of Canterbury and Otago.

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

Location	Mean temperature	Departure from	Records Began	Comments
		average (°C)		
Henderson, Auckland	17.6	+1.6	1986	2 nd highest
Te Puke	16.2	+1.4	1973	3 rd highest
Motu	13.5	+2.5	1991	Equal 2 nd highest
Mangere, Auckland	17.4	+1.1	1959	Equal 3 rd highest
Hamilton Airport	15.6	+1.65	1971	3 rd highest
Wellington Airport	16.0	+1.5	1962	Highest
Wallaceville	14.7	+1.8	1940	Equal 2 nd highest
Farewell Spit	15.9	+1.4	1971	Equal 2 nd highest
Nelson Airport	14.7	+1.6	1943	3 rd highest
Blenheim Research	15.1	+1.4	1986	Highest
Kaikoura	14.6	+1.4	1964	3 rd highest
Winchmore	13.6	+1.9	1950	2 nd highest
Rangiora	13.6	+1.6	1965	Equal 3 rd highest
Christchurch Airport	13.7	+1.6	1954	Equal 3 rd highest
Christchurch Gardens	14.5	+1.7	1864	3 rd highest
Dunedin Airport	12.4	+1.6	1963	2 nd highest
Lauder	11.6	+2.4	1987	Highest
Clyde	12.3	+1.8	1983	2 nd highest
Ettrick	12.3	+1.8	1985	Highest
Invercargill Airport	12.2	+1.9	1949	3 rd highest
Tiwai Point	12.7	+1.5	1971	2 nd highest
Campbell Island	8.7	+1.2	1943	Highest
Chatham Island	13.8	+1.3	1957	3 rd highest

VERY SUNNY IN GISBORNE, RATHER CLOUDY IN NORTH WESTLAND

Sunshine hours and/or solar radiation were more than 120 percent of normal in Gisborne, and at least 110 percent of normal in parts of Northland, Canterbury, and Southland. In contrast, they were below normal in north Westland and Nelson.

APRIL'S CLIMATE IN THE FIVE MAIN CENTRES

Temperatures were above average in all five main centres. Christchurch was the driest and sunniest, and Auckland easily the wettest of the main centres. Rainfall was above average in Auckland, Hamilton, Christchurch, and Dunedin, and near average in Wellington. Sunshine hours were above average in Christchurch, below average in Hamilton, and near average in the three other main centres.

Location	Apr.	Dep.	Apr.	% of	Apr.	% of
	Mean	from	rainfall	normal	Sunshine	Normal
	Temp.	normal (°C)	(mm)		(hours)	

Auckland	17.4	+1.1	Above average	226ª	215	Well above	159	101	Near average
Hamilton	16.0	+1.4	Above average	182	192	average Well above	149	91	Below average
Wellington	15.1	+1.4	Above Average	88	88	average Near average	157	101	Near average
Christchurch	13.7 ^b	+1.6	Well above	61 ^b	120	Above average	181 ^b	113	Above average
Dunedin	13.0	+1.1	average Above average	112	187	Above average	124	102	Near average

^a Owairaka ^b Christchurch Airport

HIGHLIGHTS AND EXTREME EVENTS

Temperature

The highest temperature recorded during April 2006 was 29.0 °C recorded in Napier on the 3rd. The lowest temperature for the month was -2.0 °C at Middlemarch, Otago on the 14th.

Tornadoes and high winds

8 April: Tornado-like winds damaged property on the Kapiti coast during the morning, with a roof lifted off a house.

20-April: Tornado-like winds damaged property at Leamington (Waikato).

The highest wind gust recorded during April 2006 was 128 km/h from the northwest at South West Cape on the 23rd.

High rainfall and floods

18 April: Thunderstorms produced high rainfall in Papakura, Auckland at about noon, with about 30 people having to evacuate their homes because of flooding.

24 April: High rainfall, totalling 50 to 100 mm was recorded in Northland, Auckland, and Coromandel.

25/26 April: Severe flooding occurred during high rainfall in north and east Otago. Rivers ran extremely high throughout the region. Much of the Taieri Plains, including Mosgiel, was flooded, with some evacuations. The towns of Oamaru and Waitati were also flooded. Many motorists were stranded overnight in their cars. High rainfall, totalling 123 mm and 128 mm respectively, was recorded at Dunedin Airport, and in Oamaru, in the 24 hours to 9am on the 26th.

Location		Year	Comments
	Rainfall (mm)	records	
	24 hours to 9am	began	
	26 April 2006		
Oamaru Airport	109	1950	Highest for any month
Oamaru AWS	128	2006	Highest in the Oamaru district
			since 157 mm on 19 March 1929
Dunedin Airport	123	1963	Highest for any month

Thunderstorms with high intensity rainfall and flooding occurred in the 27/28 April: Hauraki/Coromandel and Auckland regions. Floodwaters resulted in the closure of the Karangahake Gorge Road between Paeroa and Waihi, and SH26 between Paeroa and Te Aroha. Several motorists were stranded in their cars. Water was as much as 1 m deep in Whangamata, and Pauanui was cut off. Several schools were closed. Parts of North Shore, Auckland were also affected by flooding. Rainfall, totalling 116 mm was recorded at Paeroa in the 24 hours to 9am on the 28th.

Snowfall

25/26 April: Heavy snowfall (40 cm) occurred on the Remarkables in West Otago, with 20 cm on Coronet Peak and Cardrona. Lindis Pass was closed by snow.

For further information, please contact:

Dr Jim Salinger - Principal Scientist - Climate, NIWA National Climate Centre, Auckland, Tel. (09) 375 2053 (work) or (027) 521 9468 (mobile)

Stuart Burgess - Climatologist - NIWA National Climate Centre, Wellington, Tel. (04) 386 0569, or Geoff Baird, NIWA Communications Manager Tel. (04) 385-0543 or (027) 229 6314. www.niwa.co.nz/ncc Copyright NIWA 2006. All rights reserved.