# Taihoro Nukurangi 

## 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<br>Soil moisture: Significant deficits eliminated in many areas<br>Temperature: Warm, highest nationally since 1981, and $\mathbf{8}^{\text {th }}$ 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 HaurakiCoromandel 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 $8^{\text {th }}$ highest since reliable records in the 1860s. The national average temperature of $14.6^{\circ} \mathrm{C}$ (higher than March) was $1.2^{\circ} \mathrm{C}$ 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 $29.0^{\circ} \mathrm{C}$ recorded in Napier on the $3^{\text {rd }}$. The lowest temperature for the month was $-2.0^{\circ} \mathrm{C}$ at Middlemarch, Otago on the $14^{\text {th }}$.
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 $128 \mathrm{~km} / \mathrm{h}$ from the northwest at South West Cape on the $23^{\text {rd }}$.
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 $1.5^{\circ} \mathrm{C}$ above average throughout much of the North Island,
and $2{ }^{\circ} \mathrm{C}$ or more above average in parts of Auckland and Coromandel. Temperatures were 1 to $2{ }^{\circ} \mathrm{C}$ above average throughout much of the South Island, and more than $2{ }^{\circ} \mathrm{C}$ 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.

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

${ }^{a}$ to 9 am 30 April.

## Low April rainfall was recorded at:

| Location | April <br> Rainfall $(\mathrm{mm})$ | Percentage <br> of normal | Year <br> records began | Comments |
| :--- | :---: | :---: | :---: | :---: |
| Ngawi | 28 | 34 | 1992 | $3^{\text {rd }}$ lowest |

[^0]Mean temperatures were about $1.5^{\circ} \mathrm{C}$ above average throughout much of the North Island, and $2{ }^{\circ} \mathrm{C}$ or more above average in parts of Auckland and Coromandel. Temperatures were 1 to $2^{\circ} \mathrm{C}$ above average throughout much of the South Island, and more than $2^{\circ} \mathrm{C}$ above average in parts of Canterbury and Otago.

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

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


| Auckland | 17.4 | +1.1 | Above <br> average | $226^{\mathrm{a}}$ | 215 | Well <br> above <br> average | 159 | 101 | Near <br> average |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hamilton | 16.0 | +1.4 | Above <br> average | 182 | 192 | Well <br> above | 149 | 91 | Below <br> average |
| Wellington | 15.1 | +1.4 | Above <br> average | 88 | 88 | Near <br> average | 157 | 101 | Near <br> average |
| Christchurch | $13.7^{\mathrm{b}}$ | +1.6 | Well <br> above | $61^{\mathrm{b}}$ | 120 | Above <br> average | $181^{\mathrm{b}}$ | 113 | Above <br> average |
| Dunedin | 13.0 | +1.1 | average <br> Above <br> average | 112 | 187 | Above <br> average | 124 | 102 | Near <br> average |

${ }^{a}$ Owairaka ${ }^{b}$ Christchurch Airport

## HIGHLIGHTS AND EXTREME EVENTS

## Temperature

The highest temperature recorded during April 2006 was $29.0^{\circ} \mathrm{C}$ recorded in Napier on the $3^{\text {rd }}$. The lowest temperature for the month was $-2.0^{\circ} \mathrm{C}$ at Middlemarch, Otago on the $14^{\text {th }}$.

## 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 $128 \mathrm{~km} / \mathrm{h}$ from the northwest at South West Cape on the $23^{\text {rd }}$.

## 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 9 am on the $26^{\text {th }}$.

High 1-day rainfall was recorded at:

| Location | Rainfall (mm) <br> 24 hours to 9am <br> 26 April 2006 | Year <br> records <br> began | Comments |
| :--- | :---: | :---: | :--- |
| Oamaru Airport <br> Oamaru AWS | 109 | 1950 | Highest for any month <br> Dunedin Airport |

27/28 April: Thunderstorms with high intensity rainfall and flooding occurred in the 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 9 am on the $28^{\text {th }}$.

## 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.

[^1]
[^0]:    ABOVE AVERAGE TEMPERATURES, ESPECIALLY IN AUCKLAND, COROMANDEL, CANTERBURY AND OTAGO

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