

Extremely wet for northern South Island but dry for Otago; a very warm April for North Island.

Rainfall	More than double normal April rainfall recorded in upper South Island and Tauranga. Well above normal rainfall (more than 150 percent of April normal) observed in parts of Waikato, Bay of Plenty, and Manawatu. Above normal rainfall (120-150 percent of April normal) recorded in Northland, Auckland, Kapiti coast, coastal Canterbury, and Southland. In contrast, well below normal rainfall recorded in central Otago.
Soil moisture	As at 1 May, significant soil moisture deficits (more than 110 mm of deficit) were evident in parts of Canterbury and central Otago. The rainfall during April recharged soils throughout most of New Zealand.
Temperature	Mean temperatures were well above average (more than 1.2°C above the April average) across most of the North Island. April temperatures were above average (0.5°C to 1.2°C above April average) across most of the South Island except for inland Canterbury and Otago (near average April temperatures there).
Sunshine	A cloudy April for the lower North Island and northern and eastern South Island (75-90 percent of normal April sunshine hours). In contrast, a very sunny month for the west coast of the South Island south of Franz Josef (more than 125 percent of normal April sunshine). Near normal sunshine hours elsewhere.

Click on the link to jump to the information you require:

[Overview](#)

[Rain](#)

[Temperature](#)

[Sunshine](#)

[April climate in the six main centres](#)

[Highlights and extreme events](#)

Overview

April 2013 was characterised by lower pressures than usual over New Zealand and to the south and west of the country, with higher pressures than normal to the east of the Chatham Islands. This meant more northwesterly winds than normal affected the country, resulting in a very warm month for many regions. Northwesterly fronts resulted in extremely heavy rainfall in the western Bay of Plenty on 20 April and in the Nelson and Tasman regions on 21 April.

More than double the normal April rainfall total was recorded in the north of the South Island. Motueka received 267 percent (over two-and-a-half-times) normal April rainfall, with almost half of this occurring in one day, on the 21st (116 mm). Also, Tauranga received almost two-and-a-half-times its normal rainfall for April (284 mm, 236 percent of normal). Rainfall was also well above normal (above 150 percent of April normal) in parts of Waikato, Bay of Plenty, and Manawatu. Rainfall was above normal (120-150 percent of April normal) in parts of: Northland, Auckland, Kapiti Coast, Canterbury, and coastal Southland. In contrast, April rainfall was below normal (50 to 80 percent of normal April rainfall) in central Otago, with some locations recording well below normal rainfall (less than 50 percent of normal April rainfall). As at 1 May, significant soil moisture deficits (more than 110 mm of deficit) were evident in parts of Canterbury and central Otago. The rainfall during April recharged soils throughout most of New Zealand.

Mean temperatures for April were well above average (more than 1.2°C above the April average) across most of the North Island. Mean temperatures were above average (between 0.5°C and 1.2°C above the April average) for most of the South Island except for parts of inland Canterbury and Otago (near average temperatures for April there). It was the warmest April on record for Leigh, Masterton, Wairoa, and Ohakune. The nation-wide average temperature in April 2013 was 14.0°C (0.7°C above the 1971-2010 April average, using NIWA's seven-station temperature series which begins in 1909).

The dominance of low pressures during April resulted in a cloudy month for the lower North Island and northern and eastern South Island, with below normal sunshine hours for those areas (75 to 90 percent of normal April sunshine hours). In contrast, it was a very sunny month for the West Coast of the South Island, south of Franz Josef (more than 125 percent of normal April sunshine). Sunshine was near normal (within 10 percent of normal April sunshine hours) elsewhere. Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to April) are: New Plymouth (1118 hours), Whakatane (1097 hours), Paraparaumu (1006 hours), and Lake Tekapo (1003 hours).

Further Highlights:

- The highest temperature was 28.6 °C, recorded at Hastings on 3 April.
- The lowest temperature was -5.9°C, observed at Ranfurly on 10 April.
- The highest 1-day rainfall was 155 mm, recorded at Milford Sound on 26 April.
- The highest wind gust was 161 km/hr, at Cape Turnagain, on 29 April.
- In April 2013, Tauranga was the wettest, warmest, and sunniest, Dunedin was the coolest, and Christchurch was driest and cloudiest of the six main centres.
- Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to April) are: New Plymouth (1118 hours), Whakatane (1097 hours), Paraparaumu (1006 hours), and Lake Tekapo (1003 hours).

For further information, please contact:

Dr Andrew Tait

Principal Scientist, Climate - NIWA National Climate Centre, Wellington
Tel 04 386 0562, Mobile 027 327 7948

Rainfall: Very wet for northern South Island, as well as Bay of Plenty, Waikato, and Manawatu. Below normal rainfall for central Otago.

More than double the normal April rainfall total was recorded in the north of the South Island. Motueka received 267 percent (over two-and-a-half-times) normal April rainfall, with almost half of this occurring in one day, on the 21st (116 mm). Also, Tauranga received almost two-and-a-half-times its normal rainfall for April (284 mm, 236 percent of normal). Rainfall was also well above normal (above 150 percent of April normal) in parts of Waikato, Bay of Plenty, and Manawatu. Rainfall was above normal (120-150 percent of April normal) in parts of: Northland, Auckland, Kapiti Coast, Canterbury, and coastal Southland. In contrast, April rainfall was below normal (50 to 80 percent of normal April rainfall) in central Otago, with some locations recording well below normal rainfall (less than 50 percent of normal April rainfall).

As at 1 May, significant soil moisture deficits (more than 110 mm of deficit) were evident in parts of Canterbury and central Otago. The rainfall during April recharged soils throughout most of New Zealand.

Record¹ or near-record April rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
Low records or near-records				
Waipara	95	170	1973	4th-highest
South West Cape	159	153	1991	3rd-highest
Tara Hills	9	25	1949	4th-lowest
Campbell Island	60	49	1992	2nd-lowest

Temperature: Well above average across North Island, and above average for most of the South Island except for inland Canterbury and Otago.

Mean temperatures for April were well above average (more than 1.2°C above the April average) across most of the North Island. Mean temperatures were above average (between 0.5°C and 1.2°C above the April average) for most of the South Island except for parts of inland Canterbury and Otago (near average mean April temperatures there). It was the warmest April on record for Leigh, Masterton, Wairoa, and Ohakune.

¹ The rankings (1st, 2nd, 3rd.etc) in all Tables in this summary are relative to climate data from a *group* of nearby stations, some of which may no longer be operating. The current climate value is compared against all values from any member of the group, without any regard for homogeneity between one station's record, and another. This approach is used due to the practical limitations of performing homogeneity checks in real-time.

The nation-wide average temperature² in April 2013 was 14.0°C (0.7°C above the 1971-2010 April average, using NIWA's seven-station temperature series which begins in 1909).

Many locations recorded record- or near-record-breaking high mean temperatures for April.

Record or near-record mean air temperatures for April were recorded at:

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Cape Reinga	18.1	0.9	1951	4th-highest
Dargaville	18.5	2.5	1943	3rd-highest
Whangarei	18.0	1.4	1967	3rd-highest
Leigh	19.3	1.9	1966	Highest
Whangaparaoa	18.2	1.2	1982	2nd-highest
Auckland (Whenuapai)	16.5	1.0	1945	Equal 4th-highest
Whitianga	16.7	1.4	1962	4th-highest
Rotorua	14.8	1.5	1964	3rd-highest
Motu	13.0	1.9	1990	4th-highest
Auckland (Airport)	17.7	1.4	1959	3rd-highest
Masterton	14.8	2.1	1992	Highest
Dannevirke	14.7	1.9	1951	3rd-highest
Ngawi	16.4	1.4	1972	4th-highest
Hicks Bay	17.4	1.4	1969	3rd-highest
Hastings	15.8	2.2	1965	3rd-highest
Waipawa	14.7	1.8	1945	3rd-highest
Wairoa	16.9	2.2	1964	Highest
Mahia	16.4	1.5	1990	2nd-highest
Paraparaumu	15.7	2.2	1953	2nd-highest
Wellington (Airport)	15.8	1.4	1962	2nd-highest
Stratford	14.2	1.8	1960	2nd-highest
Hawera	15.0	1.7	1977	3rd-highest
Ohakune	13.3	2.5	1962	Highest
Farewell Spit	16.2	1.6	1971	2nd-highest
Secretary Island	13.7	1.1	1985	4th-highest
Motueka	14.1	1.4	1956	4th-highest
Nelson	14.8	1.2	1943	4th-highest
Cheviot	12.9	1.1	1982	3rd-highest

² Interim monthly value

Record or near-record mean maximum air temperatures for April were recorded at:

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Kaitaia	21.8	0.8	1985	4th-highest
Kerikeri	22.1	1.1	1981	3rd-highest
Kaikohe	20.9	1.6	1973	4th-highest
Dargaville	22.5	2.7	1943	3rd-highest
Whangarei	22.4	1.9	1967	2nd-highest
Leigh	23.5	3.4	1966	Highest
Whangaparaoa	21.4	1.6	1982	2nd-highest
Auckland (Whenuapai)	21.3	1.2	1945	4th-highest
Tauranga	21.5	1.5	1913	4th-highest
Whakatane	21.7	1.7	1974	3rd-highest
Motu	18.6	2.5	1990	Highest
Auckland (Airport)	21.2	1.2	1959	4th-highest
Hamilton (Ruakura)	22.9	3.0	1906	3rd-highest
Hamilton (Airport)	21.4	1.5	1946	2nd-highest
Hicks Bay	21.0	1.8	1969	2nd-highest
Wairoa	22.2	2.6	1964	Highest
Mahia	19.9	2.2	1990	Highest
Stratford	18.2	1.3	1960	2nd-highest
Hawera	19.0	1.6	1977	2nd-highest
Ohakune	18.1	2.3	1962	2nd-highest

Record or near-record mean minimum air temperatures for April were recorded at:

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Dargaville	14.6	2.5	1943	2nd-highest
Whitianga	12.5	2.2	1962	3rd-highest
Auckland (Airport)	14.1	1.4	1959	4th-highest
Masterton	9.4	3.0	1992	2nd-highest
Dannevirke	10.4	2.4	1951	4th-highest
Waione	10.8	2.6	1991	2nd-highest
Martinborough	9.3	1.9	1986	3rd-highest
Ngawi	13.8	1.8	1972	2nd-highest
Paraparaumu	12.4	3.2	1953	2nd-highest
Wellington (Airport)	13.5	2.0	1962	Highest
Stratford	10.2	2.2	1960	3rd-highest
Ohakune	8.6	2.8	1962	2nd-highest
Farewell Spit	13.2	2.4	1971	Highest

Secretary Island	10.8	1.2	1985	3rd-highest
Cape Campbell	12.7	1.1	1953	4th-highest
Waiau	7.5	2.3	1974	2nd-highest
Cheviot	7.6	2.3	1982	Highest
Le Bons Bay	10.0	1.0	1984	4th-highest
Orari Estate	6.9	1.6	1972	3rd-highest

Sunshine: A cloudy April for lower North Island and upper South Island, but very sunny for western South Island south of Franz Josef. Near normal elsewhere.

The dominance of low pressures during April resulted in a cloudy month for the lower North Island and upper and eastern South Island, with below normal sunshine hours for those areas (75 to 90 percent of normal April sunshine hours). In contrast, it was a very sunny month for the West Coast of the South Island, south of Franz Josef (more than 125 percent of normal April sunshine). Sunshine was near normal (within 10 percent of normal April sunshine hours) elsewhere.

Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2013 (January to April) are: New Plymouth (1118 hours), Whakatane (1097 hours), Paraparaumu (1006 hours), and Lake Tekapo (1003 hours).

Record or near-record April sunshine hours were recorded at:

Location	Sunshine hours	Percentage of normal	Year records began	Comments
Low records or near-records				
Martinborough	127	78	1986	4th-lowest
Takaka	144	78	1985	2nd-lowest
Blenheim	153	80	1947	2nd-lowest
Cheviot	141	85	1983	3rd-lowest

April climate in the six main centres

April rainfall was almost two-and-a-half-times normal in Tauranga, with 220 mm falling over the three days from the 19th to the 21st. Rainfall was also well above normal for April in Hamilton, and above normal in Christchurch and Dunedin. All of the main centres except for Dunedin had well above average or above average mean temperatures in April. Sunshine was well below normal in Christchurch, below normal in Hamilton and Wellington, and near normal elsewhere.

In April 2013, Tauranga was the wettest, warmest, and sunniest, Dunedin was the coolest, and Christchurch was driest and cloudiest of the six main centres.

April 2013 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Auckland ^a	16.7	0.5	Above average
Tauranga ^b	17.3	1.7	Well above average
Hamilton ^c	15.9	1.7	Well above average
Wellington ^d	14.9	1.2	Well above average
Christchurch ^e	12.7	0.8	Above average
Dunedin ^f	11.9	0.2	Near average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	98	116%	Near normal
Tauranga ^b	284	236%	Well above normal
Hamilton ^c	140	160%	Well above normal
Wellington ^d	87	103%	Near normal
Christchurch ^e	59	134%	Above normal
Dunedin ^f	69	135%	Above normal
Sunshine			
Location	Sunshine (hours)	% of normal	Comments
Auckland ^a	170	105%	Near normal
Tauranga ^b	172	94%	Near normal
Hamilton ^e	139	85%	Below normal
Wellington ^d	127	79%	Below normal
Christchurch ^e	116	71%	Well below normal
Dunedin ^f	120	96%	Near normal

^a Mangere ^b Tauranga Airport ^c Hamilton Airport ^d Kelburn ^e Christchurch Airport ^f Musselburgh ^g Ruakura

Highlights and extreme events

Rain and slips

The highest 1-day rainfall was 155 mm, recorded at Milford Sound on 26 April.

On 9 April, thunderstorms brought flash floods to Hawke's Bay.

On 16 April, the occupants of a home in Grey Lynn, Auckland were evacuated after heavy rain caused subsidence, and the collapse of a balcony. Surface flooding was reported across Auckland.

On 17 April, a large slip closed Graham Valley Road, one of the access routes into Kahurangi National Park from the Motueka Valley Highway.

On 20 April, SH2 was closed by flooding near Waihi, and also affected by surface flooding in Tauranga. Waihi Beach Road was impassable and visitors had to be evacuated from two camping grounds. People were rescued from cars caught by floods and slips. Properties were also flooded in Katikati, Omokoroa, Mount Maunganui, and Te Puke, and local roads throughout the western Bay of Plenty were affected by flooding. Power was lost to homes in Otumoetai after a slip damaged a transformer. In Hamilton flash flooding closed streets, including SH1 at Lorne Street, and trapped cars in several suburbs. Many properties were inundated by flood waters.

On 21 April, torrential rain caused flooding in the Nelson and Tasman regions, particularly in Richmond and Stoke. This rainstorm was one of the most intense ever measured in New Zealand, and it was the most intense ever recorded in the Nelson and Tasman regions. The maximum 1-hour rainfall total during the storm was 101 mm/hr in the Roding catchment near Richmond, a rainfall total which has a 500-year return period in this area. The most extreme 1-hour rainfall ever measured in New Zealand is 134 mm/hour in the Cropp River catchment on the west coast of the South Island, a catchment which holds many of New Zealand's extreme rainfall records. The highest 24-hour rainfall total recorded during the 21 April storm was 216 mm, recorded at the Tasman District Council office in Richmond. Slips closed SH60 over Takaka Hill, and many local roads were also closed by slips. Many properties were flooded, and cars abandoned after the occupants were rescued. All sports grounds were closed, and there was significant damage to the aquatic centre and Saxton Stadium. Rainfall data here were sourced from Tasman District Council.

On 30 April, heavy rain, accompanied by hail and thunderstorms, caused flooding in Canterbury, including Christchurch city where a central city mall was closed, after water flooded the centre and power was cut.

Record or near record April extreme 1-day rainfall totals were recorded at:

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Kerikeri	70	15th	1981	3rd-highest
Kaikohe	88	15th	1956	4th-highest
Hamilton	69	21st	1935	4th-highest
Motueka	116	21st	1956	2nd-highest
Nelson	122	21st	1941	Highest
South West Cape	33	15th	1991	2nd-highest

Wind

The highest wind gust was 161 km/hr, at Cape Turnagain, on 29 April.

On 4 April, the Hawke's Bay rescue helicopter was damaged by a wind gust while preparing to take off from the helipad at Wellington Hospital.

On 15 April, power was cut to customers in the Maungatapere area after wind brought down a tree on to power lines, and at nearby Poroti power was lost when the wind broke the cross-arm of a power pole. The strong winds uprooted trees throughout Northland and the upper North Island, and ripped two boats from their moorings at Paihia.

On 16 April, in high winds and rough seas a boat in Tauranga Harbour was ripped from its moorings and washed on to rocks beside The Strand.

On 20 April, a tornado brought down a tree and damaged property in Raglan.

Record or near record April extreme wind gusts were recorded at:

Location	Extreme wind gust (km/hr)	Date of extreme gust	Year records began	Comments
Cape Reinga	130	15th	1974	Equal 3rd-highest
Manapouri	69	28th	1991	4th-highest
Gore	104	27th	1987	Equal 2nd-highest
South West Cape	152	28th	1991	Equal 3rd-highest

Temperatures

The highest temperature was 28.6 °C, recorded at Hastings on 3 April. The first few days of April were particularly warm, resulting in a number of maximum temperature records for April being broken at sites in the North Island.

The lowest temperature was -5.9°C, observed at Ranfurly on 10 April. This is the equal 3rd-lowest April temperature recorded in a group of surrounding stations, in records which began in 1975. The morning of 10 April was particularly cold at a number of locations in Otago and Southland.

Record or near-record daily maximum air temperatures for April were recorded at:

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-records				
Leigh	27.7	1st	1966	Highest
Whangaparaoa	24.8	1st	1982	3rd-highest
Te Puke	25.1	1st	1973	Equal 4th-highest
Motu	22.8	2nd	1990	Highest
Whatawhata	25.6	2nd	1952	4th-highest
Hamilton (Ruakura)	27.4	2nd	1906	Equal 3rd-highest
Hamilton (Airport)	25.9	3rd	1946	2nd-highest
Takapau Plains	25.2	3rd	1962	3rd-highest
Dannevirke	26.4	3rd	1951	3rd-highest
Waione	28.0	3rd	1991	Highest
Castlepoint	25.2	3rd	1972	4th-highest
Hicks Bay	23.6	18th	1969	Equal 4th-highest
Hastings	28.6	3rd	1965	Highest
Waipawa	27.9	3rd	1945	Equal highest
Wairoa	27.9	1st	1964	2nd-highest
Mahia	25.0	1st	1990	2nd-highest
Hawera	22.8	3rd	1977	4th-highest
Ohakune	25.0	16th	1962	2nd-highest
Wanganui	27.4	16th	1937	Equal 2nd-highest
Takaka	24.3	1st	1978	Equal 3rd-highest

Record or near-record daily minimum air temperatures for April were recorded at:

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments
Low records or near-records				
Taumarunui	-2.4	11th	1947	3rd-lowest
Mahia	5.4	11th	1990	3rd-lowest
Ranfurly	-5.9	10th	1975	Equal 3rd-lowest
Dunedin (Airport)	-4.5	10th	1962	Equal 4th-lowest
Lumsden	-3.9	10th	1982	3rd-lowest
Invercargill	-4.6	10th	1905	2nd-lowest
Balclutha	-4.1	10th	1964	Lowest
High records or near-records				
Taumarunui	17.4	17th	1947	3rd-highest
Masterton	17.0	17th	1992	2nd-highest

Martinborough	17.6	30th	1986	Equal 2nd-highest
Mahia	17.7	4th	1990	Equal highest
Paraparaumu	17.6	17th	1972	3rd-highest
Levin	18.0	17th	1950	4th-highest
Wellington (Airport)	17.7	30th	1972	Equal 4th-highest
Stratford	16.4	17th	1972	4th-highest
Kaikoura	16.3	1st	1972	4th-highest
Cheviot	17.2	29th	1982	Equal highest
Waipara	18.3	29th	1973	Equal 3rd-highest
Lumsden	12.2	28th	1982	Equal 3rd-highest

Lightning and hail

On 9 April, thunderstorms moved over Manawatu, Wanganui, Taranaki, Hawke's Bay and Bay of Plenty.

On 21 April, thunderstorms crossed the North Island, injuring two people in separate incidents in the Waikato. Both men were wearing gumboots and survived the lightning strikes. A passenger plane en route from Wellington to Auckland was struck by lightning as it approached Auckland Airport, but landed safely.

On 24 April, there was a spectacular lightning storm over Auckland.

Cloud and fog

On 15 April, low cloud caused the cancellation of flights into and out of both Blenheim and Invercargill Airports.

For further information, please contact:

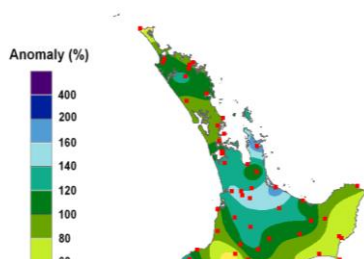
Dr Andrew Tait

Principal Scientist, Climate - NIWA National Climate Centre, Wellington
Tel 04 386 0562, Mobile 027 327 7948

For climate data enquiries, please contact:

Ms Petra Chappell

Climate Analyst – NIWA National Climate Centre, Auckland
Tel 09 375 2052



April 2013 rainfall totals, expressed as a difference from normal (%).

Dark blue colours indicate more than 200 % of April normal rainfall in the upper South Island. Well above normal rainfall (more than 150 % of normal April rainfall) was recorded in parts of Bay of Plenty, Waikato, and Manawatu (lighter blue shades). Teal shades indicate above normal rainfall (120-150 % of normal April rainfall) for those areas as well as Auckland and Canterbury. Yellow and orange shades indicate below normal and well below normal rainfall totals for April in central Otago.

www.niwa.co.nz/ncc © Copyright NIWA 2013.

All rights reserved.