

Tropical moisture brings prolific rainfall to the North Island and eastern South Island

Rainfall	Prolific rainfall totals were observed across nearly the entire North Island, with more than twice the normal April rainfall (>200%) recorded in the large majority of locations. Amounts exceeding three times the April normal (>300%) were also observed in several places. In the North Island, only northern and western Northland received near normal rainfall (80-119% of normal). The northern and eastern South Island also received widespread rainfall in excess of 200% of the April normal, with a couple of locations picking up more than 300% of normal April rainfall. Conversely, much of the West Coast saw near normal (80-119% of normal) to above normal (120-149% of normal) rainfall. Meanwhile, much of Southland and Queenstown-Lakes received below normal rainfall (50-79% of April normal).
Temperature	The majority of the North Island experienced well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) temperatures in April. Isolated locations in the central and southern North Island, as well as the northern and eastern South Island, recorded near average (-0.50 to 0.50°C of average) temperatures. Temperatures were primarily well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) in the western and southern South Island.
Soil Moisture	As of 1 May 2017, soils across most of the North Island were much wetter than normal for the time of year. In the South Island, soils were much wetter than normal in most of the north and east. However, much drier than normal soils were located across Queenstown-Lakes District and much of Southland.
Sunshine	Near normal (90-109% of normal) to below normal (75-89% of normal) sunshine hours were recorded for most locations around New Zealand, while isolated areas of well below normal (<75% of normal) sunshine were observed in the lower North Island and in Central Otago. Isolated above normal (110-125% of normal) sunshine was recorded in the western North Island.

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Overview

April 2017 was characterised by higher than normal atmospheric pressure to the south and southeast of the South Island, along with lower than normal atmospheric pressure over and to the north of the North Island. This pressure pattern resulted in more northeasterly wind flow than normal, bringing with it moist tropical air masses and record-high rainfall for parts of the North Island. These tropical air masses also delivered very warm temperatures to much of the North Island. This pattern also led to a very wet month for the northern and eastern South Island, but at the same time sheltering the West Coast and far south with drier conditions and warm temperatures for the time of year.

Widespread heavy rainfall was the flavour of the month for the majority of the North Island along with the north and east of the South Island. Most locations received the bulk of their April rainfall during two distinct events; the passage of the remnants of Cyclone Debbie during 4-5 April and the arrival of ex-Cyclone Cook during 12-13 April. These storms both brought heavy rain and flooding to much of the North Island and parts of the South Island. Cook also brought high winds to the eastern North Island, resulting in downed trees and power outages. The impacts of these significant rainfall events are covered in more detail in the *Highlights and Extreme Events* section.

Nearly the entire North Island along with the northern and eastern South Island received significant amounts of rain in April. In these regions, more than double the normal rainfall for April (>200% of April normal) was widespread, with some locations receiving more than three times (>300%) their normal rainfall for the month. Notably, Whangaparaoa (north of Auckland) received an incredible 452% of normal April rainfall (319 mm). A multitude of locations around the country either broke or nearly broke rainfall records for April (see Rainfall section on Page 4). In the North Island, only northern and western Northland did not receive well above normal rainfall. There, amounts were near normal (80-119% of normal). In the South Island, the West Coast saw near normal (80-119% of normal) to above normal (120-149% of normal) rainfall. The heavy rainfall in the north and east of the South Island was due to the predominant northeasterly airflow during the month, along with the heavy rainfall from Cook tracking right along the east coast. Conversely, high pressure and the blocking of moist air by mountain ranges led to below normal rainfall (50-79% of April normal) for Queenstown-Lakes District and much of Southland.

With north-northeasterly winds and tropical air masses moving across the North Island, temperatures were well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) across most of the Island in April. In fact, at 2.3 °C above average, Te Puke had its warmest April since records began there in 1973. Across the whole North Island, only a few locations in Waikato and Wellington had near average (-0.50 to 0.50°C of average) temperatures. Locations in the northern and eastern South Island generally recorded near average (-0.50 to 0.50°C of average) temperatures in April, while temperatures were primarily well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) along the West Coast and in Otago and Southland. This temperature division across the South Island was primarily due to northeasterly airflows warming as they travelled down the western (lee) side of the mountain ranges, in a phenomenon known as the foehn effect. The nationwide average temperature in April 2017 was 14.0°C (0.7°C above the 1981-2010 April average from NIWA's seven station temperature series which begins in 1909).

Soil moisture levels across New Zealand at the end of April generally reflected the rainfall pattern seen during the month. Soils across most of the North Island were much wetter than normal for the time of

year, with slightly wetter than normal soils in parts of the central and northeastern North Island. In the South Island, soils were much wetter than normal in most of the north and east. However, much drier than normal soils were located across Queenstown-Lakes and much of Southland, while soil moisture was generally near normal along much of the West Coast.

Sunshine was generally near normal (90-109% of normal) to below normal (75-89% of normal) for most locations around New Zealand, consistent with moist air masses that brought cloudy and rainy conditions to much of the country. However, onshore northeasterly airflows also produced isolated areas of well below normal (<75% of normal) sunshine in the Wellington region and also Central Otago. Isolated above normal (110-125% of normal) sunshine was recorded in the western North Island.

Further Highlights:

- The highest temperature was 30.3°C, observed at Fernhill (Hawke's Bay) on 2 April.
- The lowest temperature was -2.9°C, observed at Manapouri on 7 April.
- The highest 1-day rainfall was 186.0 mm, recorded at Te Puke on 4 April.
- The highest wind gust was 156 km/hr, observed at Brothers Island (Cook Strait) on 30 April.
- Of the six main centres in April 2017, Tauranga was the wettest and sunniest, Christchurch was the coolest and least sunny, Auckland was the warmest, and Dunedin was the driest.
- Of the available, regularly reporting sunshine observation sites, the sunniest four locations in 2017 (1 January – 30 April) were Whakatane (953.3 hours), Lake Tekapo (916.1 hours), Blenheim (898.2 hours) and Richmond (886.9 hours).

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Rainfall: Record rainfall in the North Island, dry in the far south.

The arrival of the remnants of Debbie (4-5 April) and Cyclone Cook (12-13 April) were the driving forces behind very heavy rainfall across nearly the entire North Island as well as the northern and eastern South Island during April. This led to record-high or near-record-high rainfall totals in numerous locations around New Zealand. Whangaparaoa (north of Auckland) received an incredible 452% of normal April rainfall (319 mm). This was the wettest April on record for Whangaparaoa, after also experiencing its wettest March on record the previous month. It was also the wettest April for Te Puke in Bay of Plenty with 477 mm of rain (332% of April normal) and Martinborough in Wairarapa, which recorded 174 mm (346% of April normal). These rainfall events caused significant flooding and slips, which are covered in the *Highlights and Extreme Events* section below.

Conversely, April was a dry month for much of the lower South Island due to persistent high pressure and more northeasterly airflow than normal. Milford Sound had its fourth-driest April on record with 220 mm of rain (41% of April normal), while Invercargill received only 49 mm of rain (51% of April normal).

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

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-records				
Warkworth	322	302	1966	Highest
Whangaparaoa	319	452	1946	Highest
Te Puke	477	332	1973	Highest
Taupo	249	368	1949	Highest
Lower Retaruke	284	267	1966	Highest
Martinborough	174	346	1924	Highest
Hawera	234	281	1977	Highest
Ohakune	230	212	1961	Highest
Waiouru	207	268	1950	Highest
Whitianga	396	260	1961	2nd-highest
Matamata	306	380	1951	2nd-highest
Taupo	211	312	1949	2nd-highest
Hamilton (Ruakura)	254	304	1905	2nd-highest
Dannevirke	224	299	1951	2nd-highest
Waione	164	296	1991	2nd-highest
Palmerston North	192	320	1928	2nd-highest
Levin	193	240	1895	2nd-highest
Stratford	334	229	1960	2nd-highest
Waipara West	163	290	1973	2nd-highest
Akaroa	296	441	1977	2nd-highest
Kaikohe	319	228	1956	3rd-highest
Leigh	236	286	1966	3rd-highest

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.

Whakatane	309	252	1952	3rd-highest
Rotorua	356	317	1963	3rd-highest
Motu	338	233	1920	3rd-highest
Auckland (Mangere)	202	238	1959	3rd-highest
Te Kuiti	257	247	1950	3rd-highest
Taumarunui	270	253	1913	3rd-highest
Masterton	193	340	1926	3rd-highest
Takapau Plains	234	320	1962	3rd-highest
Hastings	153	225	1965	3rd-highest
Palmerston North	187	271	1928	3rd-highest
Upper Hutt	222	275	1924	3rd-highest
Whanganui (Spriggens Park)	208	301	1890	3rd-highest
Oamaru	154	414	1941	3rd-highest
Auckland (Western Springs)	215	230	1948	4th-highest
Whitianga	369	243	1961	4th-highest
Turangi	241	211	1968	4th-highest
Gisborne	231	238	1905	4th-highest
Wairoa	294	230	1964	4th-highest
Wellington (Kelburn)	230	271	1928	4th-highest
Wellington (Airport)	187	273	1958	4th-highest
Whanganui (Airport)	205	286	1890	4th-highest
Takaka	346	222	1976	4th-highest
Kaikoura	263	428	1898	4th-highest
Dunedin (Musselburgh)	136	268	1918	4th-highest
Low records or near-records				
Manapouri	123	38	1971	3rd-lowest
Milford Sound	220	41	1929	4th-lowest

Temperature: Warm in much of the North Island, parts of the South Island.

Much of the North Island experienced a warmer than usual April, primarily due to north-northeasterly winds and tropical air masses moving across the island. Many locations recorded well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) mean air temperatures. In fact, at 2.3 °C above average, Te Puke had its warmest April since records began there in 1973. Several other locations recorded near-records for high mean temperature, high mean maximum temperature, and high mean minimum temperature, indicative of northerly winds bringing warm air from the tropics, along with cloudy nights that prevented heat from escaping into the atmosphere. Across the whole North Island, only a few locations in Waikato and Wellington had near average (-0.50 to 0.50°C of average) mean temperatures in April. Locations in the northern and eastern South Island generally recorded near average (-0.50 to 0.50°C of average) temperatures in April, while temperatures were primarily well above average (>1.20°C above average) or above average (0.51 to 1.20°C above average) along the West Coast and in Otago and Southland. This temperature division across the South Island was primarily due to northeasterly airflows warming as they travelled down the western (lee) side of the mountain ranges, in a phenomenon known as the foehn effect.

The nationwide average temperature in April 2017 was 14.0°C (0.7°C above the 1981-2010 April average from NIWA's seven station temperature series which begins in 1909).

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				
Te Puke	16.9	2.3	1973	Highest
Whangarei	18.3	1.7	1967	2nd-highest
Whatawhata	16.9	2.2	1952	2nd-highest
Hanmer Forest	13.6	3.0	1906	2nd-highest
Kerikeri	18.0	1.6	1945	3rd-highest
Mokohinau Island	19.0	1.3	1994	3rd-highest
Motu	13.8	2.7	1990	3rd-highest
Hastings	16.1	1.8	1965	3rd-highest
Arapito	14.9	1.5	1978	3rd-highest
Kaitaia	18.6	1.7	1948	4th-highest
Whitianga	17.0	1.7	1962	4th-highest
Pukekohe	16.8	1.3	1969	4th-highest
Hicks Bay	17.6	1.6	1969	4th-highest
Waiouru	11.6	2.2	1962	4th-highest
Secretary Island	13.9	1.3	1985	4th-highest
Motueka	14.2	1.5	1956	4th-highest
Low records or near-records				
None observed				

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				
Te Puke	21.6	1.7	1973	Highest
Hanmer Forest	21.4	3.7	1906	Highest
Whitianga	21.9	1.7	1962	2nd-highest
Rotorua	19.5	1.8	1964	2nd-highest
Motu	18.9	2.8	1990	2nd-highest
Waiouru	16.6	2.3	1962	2nd-highest
Secretary Island	16.8	1.3	1985	2nd-highest
Whatawhata	21.6	2.0	1952	3rd-highest
Franz Josef	18.5	2.3	1953	3rd-highest
Tiwai Point	16.2	1.7	1970	4th-highest
Low records or near-records				
Takaka	17.2	-1.5	1978	3rd-lowest

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				
Kaikohe	13.9	1.7	1973	2nd-highest
Whangarei	14.7	2.0	1967	2nd-highest
Mokohinau Island	17.3	1.5	1994	2nd-highest
Cape Reinga	15.9	1.5	1951	3rd-highest
Kaitaia	15.1	2.1	1948	3rd-highest
Kerikeri	13.9	2.2	1945	3rd-highest
Dargaville	14.0	1.9	1943	3rd-highest
Leigh	15.9	1.3	1966	3rd-highest
Auckland (Whenuapai)	13.0	2.0	1945	3rd-highest
Auckland (Airport)	14.2	1.5	1959	3rd-highest
Whatawhata	12.1	2.4	1952	3rd-highest
Roxburgh	7.9	3.5	1950	3rd-highest
Auckland (Henderson)	13.7	2.8	1948	4th-highest
Whitianga	12.5	2.2	1962	4th-highest
Te Puke	12.2	2.8	1973	4th-highest
Hastings	11.2	2.3	1965	4th-highest
Farewell Spit	12.9	2.1	1971	4th-highest
Secretary Island	11.0	1.4	1985	4th-highest
Akaroa	10.1	2.1	1978	4th-highest
Oamaru	8.4	1.3	1967	4th-highest
Lumsden	5.8	1.3	1982	4th-highest
Nugget Point	8.9	1.3	1970	4th-highest
South West Cape	9.6	1.1	1991	4th-highest
Low records or near-records				
Kaikoura	7.8	-2.1	1963	3rd-lowest

Sunshine: Near or below normal sunshine for many.

Sunshine was generally near normal (90-109% of normal) to below normal (75-89% of normal) for most locations around New Zealand, consistent with moist air masses that brought cloudy and rainy conditions to much of the country. However, onshore northeasterly airflows also produced isolated areas of well below normal (<75% of normal) sunshine in the Wellington region and also Central Otago. In Tasman, Takaka recorded its 3rd-lowest April sunshine total on record. Isolated above normal (110-125% of normal) sunshine was recorded in the western North Island, however.

Of the available, regularly reporting sunshine observation sites, the sunniest four locations in 2017 (1 January – 30 April) were Whakatane (953.3 hours), Lake Tekapo (916.1 hours), Blenheim (898.2 hours) and Richmond (886.9 hours).

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

Location	Sunshine hours	Percentage of normal	Year records began	Comments
High records or near-records				
None observed				
Low records or near-records				
Takaka	139	75	1985	3rd-lowest

April climate in the six main centres

April 2017 temperatures were well above average for Tauranga and Hamilton, above average for Auckland and Dunedin, and near average for Wellington and Christchurch. All centres recorded well above normal rainfall, with Auckland experiencing its 3rd-highest April rainfall on record, while Wellington and Dunedin both had their 4th-highest April rainfalls. In addition, the Hamilton suburb of Ruakura had its 2nd-highest April rainfall on record with 254 mm. Wellington and Christchurch experienced well below normal sunshine, while the other main centres recorded near normal sunshine. Of the six main centres in April 2017, Tauranga was the wettest and sunniest, Christchurch was the coolest and least sunny (although it was missing one day of sunshine data), Auckland was the warmest, and Dunedin was the driest.

April 2017 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Auckland ^a	17.4	1.2	Above average
Tauranga ^b	16.9	1.3	Well above average
Hamilton ^c	15.5	1.3	Well above average
Wellington ^d	14.2	0.5	Near average
Christchurch ^e	12.4	0.5	Near average
Dunedin ^f	12.6	0.9	Above average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	202	238	Well above normal (3 rd -highest)
Tauranga ^b	293	243	Well above normal
Hamilton ^c	205	234	Well above normal
Wellington ^d	230	271	Well above normal (4 th -highest)
Christchurch ^e	157	354	Well above normal
Dunedin ^f	136	268	Well above normal (4 th -highest)
Sunshine			
Location	Sunshine (hours)	% of normal	Comments
Auckland ^a	167	103	Near normal
Tauranga ^b	192	104	Near normal
Hamilton ^g	176	107	Near normal
Wellington ^d	114	70	Well below normal
Christchurch ^e	112 ²	69	Well below normal
Dunedin ^f	123	98	Near normal

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

² 1 day missing

Highlights and extreme events

Rain and slips

From 4-5 April, the remnants of Debbie impacted primarily the North Island, causing widespread flooding and damage.

On 4 April, a mud slip slammed into an apartment building in the Kohimarama suburb of Auckland. Initially two people were feared to be missing, but they were quickly accounted for. In Whanganui and Rangitikei a state of emergency was declared due to heavy rain and the threat of flooding on the Whanganui River. Schools were also closed on 5 April due to the state of emergency.

On 5 April, significant impacts were felt around the Auckland region due to the heavy rainfall. A slip in Titirangi blocked a shared driveway which trapped five families inside their homes, while power was knocked out to around 2000 homes, mainly in St. Heliers, Orakei, and Grey Lynn. In New Lynn, the Great North Road-Clark Street intersection was closed by floodwaters, as an underground culvert had been damaged by heavy rainfall in March. Trains were suspended between Pukekohe and Papakura due to a slip, with service replaced by buses. All Gulf Harbour ferries were also replaced by buses. A cliff in Auckland's Torbay partially collapsed from underneath homes, and trees, fences and gardens fell into the sea. The Maraetai and Clevedon areas of Auckland that were hit by floods in early March were again cut off by the flooded Wairoa River. In addition, a Maori cemetery was submerged underwater at Okahu Bay in the Auckland suburb of Orakei.

Elsewhere on 5 April, more than 170 schools and early childcare centres were closed across the North Island, mostly in the Manawatu-Whanganui Region, while 150 students were stranded at a school camp near Port Waikato. Evacuation of about 200 flood-prone homes in Whanganui was underway, while riverfront areas of Whanganui city closed to the public in preparation for possible flood peak on the night of 5 April. Eleven people who evacuated their homes in the Bay of Plenty town of Taneatua were trapped in their cars by floodwaters. Flooding occurred in Papamoa, Bay of Plenty, while ten to fifteen properties were evacuated in Owhiro (near Wellington) as a nearby stream burst its banks. In addition, water restrictions were put in place for all of Ruapehu District due to flooding and poor water quality in rivers where water is taken for the supply of townships. On the evening of 5 April, Wellington Airport suspended all flights as its air traffic instruments were affected by the poor weather. Several incoming flights were diverted to Auckland and Christchurch. Airport operations resumed on the morning of 6 April.

On the morning of 6 April, the entire township of Edgecumbe in Bay of Plenty (about 1600 people) was evacuated due to rising water on the Rangitaiki River. After a stopbank failure, floodwaters reached as high as 1.5 metres in the town, and boats were used to help evacuate residents. About 170 residents were able to return home on 14 April. However, some homes in the township may not be habitable until Christmas.

On 6 April, flow on the Rangitaiki River was measured as high as 700 cubic metres per second. Several towns in the Whakatane District were cut off by flooding and slips, including Ruatahuna, Minginui, Waimana, and Ruatoki. SH 2 through the Waioeka Gorge was closed due to a slip and a road washout. In Taranaki, about 1600 properties in the towns of Urenui, Opunake, and Manaia lost power. Kaikoura

was completely cut off as all roads into the town were closed by slips. The Hakarimata Summit hiking track in Waikato was closed due to rain damage.

During the event, the following major roads were closed due to flooding and/or slips: SH 15 from Karaka Road to Opouteke Road, SH 56 at Opiki, SH 3 from Awakino Tunnel to Tongaparutu, SH 1 near Motutere, Taupo, SH 25 near Kuaotunu, SH 1 south of Kaikoura, SH 4 between Raetihi and Fields Track, and SH 25 between Thames and Coromandel, where more than 100 slips occurred. Caution was advised for many other roads that experienced minor flooding or slips.

Some statistics about the 4-5 April rain event follow:

In the 14 hours between 4 pm on 4 April and 6 am on 5 April, Auckland (Mangere) recorded 84.6 mm of rain. The normal rainfall for the entire month of April is 84.6 mm.

Whangaparaoa, north of Auckland, observed 172 mm of rain between 9.00 am 4 April and 9.00 am 5 April, or 2.4 times (240%) the normal April rainfall in just 24 hours.

The storm brought 164 mm of rain to Tauranga, or 135% of the April normal.

Whakatane had its wettest April day on record (since 1952) on the 4th with 137 mm of rain.

Te Puke in the Western Bay of Plenty recorded 290 mm of rain from the event. This is two times (200%) the normal April rainfall in just four days.

Whitianga on the Coromandel Peninsula observed 150 mm of rain on the 4th, good for the wettest April day on record (since 1961).

Wellington (Airport) recorded 72 mm in one day between 9.00 am on the 5th and 9.00 am on the 6th, making it the wettest day at the airport in about 9 years, or since April 30-May 1, 2008.

Kaikoura observed 155 mm of rain from the storm, or 2.8 times (280%) the normal rainfall for the entire month of April.

Akaroa on Banks Peninsula recorded 200 mm from the storm, or nearly 3 times (300%) the normal rainfall for all of April.

April's second major weather event occurred from the 12th to the 14th, as Cook struck New Zealand after moving through New Caledonia. A "predecessor rain event" arrived on 12 April ahead of Cook, spreading heavy rain across much of the upper North Island.

A state of emergency was declared in Bay of Plenty on 11 April ahead of the approaching storm, with a state of emergency also declared in Thames-Coromandel on 12 April. All schools in Whakatane, Kawerau, and Opotiki districts were closed on 12 April. In the Auckland region, all train service between Papakura and Pukekohe was suspended due to flooding. On the evening of 12 April, Kerikeri had 75.8 mm of rain in only two hours, or just over half the amount normally received during all of April.

On 13 April, Cook approached the upper North Island and made landfall near Whakatane. Thames-Coromandel Civil Defence evacuated everyone from low-lying areas in advance of the storm, and requested that no one visit the Coromandel Peninsula during and shortly after the event. During the

storm, several slips and downed trees closed SH 25 between Tararu and Preece Point, while diversions were put in place on SH 29 due to slips in the Kaimai Range. Additional road closures occurred on SH 2 between Napier and Wairoa, on SH 1 south of Kaikoura, and the Motueka Valley Highway 20 km north of Tapawera.

On 13 April, schools in the eastern Bay of Plenty were closed, and schools in the western Bay of Plenty were asked to close by 1 pm. In addition, coastal areas of Whakatane were evacuated due to the threat of storm surge and coastal inundation, and about 120 people stayed at the Whakatane evacuation centre. The New Zealand Defence Force also placed at least 500 personnel, along with aircraft and trucks on standby to assist with storm response. Several flights from Auckland to regional airports in the North Island and upper South Island were also cancelled.

Heavy rain associated with Cook on the night of 13-14 April caused flooding along the Heathcote and Avon Rivers in Christchurch.

On 30 April, heavy rain caused several slips along SH 3 in Taranaki.

The highest 1-day rainfall was 186.0 mm, recorded at Te Puke on 4 April. However, numerous stations experienced their wettest or near-wettest April day on record during the month.

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
Warkworth	137	4th	1967	Highest
Whangaparaoa	172	4th	1946	Highest
Auckland (North Shore)	111	12th	1966	Highest
Whitianga	161	4th	1961	Highest
Te Puke	186	4th	1973	Highest
Whakatane	137	4th	1952	Highest
Rotorua	137	4th	1964	Highest
Auckland (Mangere)	86	4th	1959	Highest
Pukekohe	84	4th	1944	Highest
Whatawhata	120	4th	1952	Highest
Te Kuiti	109	4th	1957	Highest
Turangi	88	4th	1968	Highest
Takapau Plains	84	4th	1962	Highest
Waiouru	64	4th	1950	Highest
Waipara West	65	5th	1973	Highest
Kerikeri	134	12th	1945	2nd-highest
Auckland (Western Springs)	82	4th	1948	2nd-highest
Whitianga	150	4th	1961	2nd-highest
Taupo	97	4th	1949	2nd-highest
Hamilton (Ruakura)	81	4th	1907	2nd-highest
Hamilton	74	4th	1935	2nd-highest
Lower Retaruke	71	4th	1967	2nd-highest
Waione	49	4th	1991	2nd-highest
Matamata	88	12th	1951	Equal 2nd-highest

Kaikohe	110	4th	1956	3rd-highest
Taupo	81	4th	1949	3rd-highest
Auckland (Airport)	78	4th	1959	3rd-highest
Hastings	73	4th	1967	3rd-highest
Waiouru	59	4th	1950	3rd-highest
Akaroa	122	5th	1977	3rd-highest
Whangarei	91	12th	1943	4th-highest
Leigh	85	4th	1967	4th-highest
Taumarunui	96	4th	1913	4th-highest
Masterton	60	4th	1926	4th-highest
Hawera	45	5th	1977	4th-highest
Dunedin (Musselburgh)	56	12th	1918	4th-highest

Temperatures

The highest temperature was 30.3°C, observed at Fernhill (Hawke's Bay) on 2 April. The lowest temperature was -2.9°C, observed at Manapouri on 7 April. Many of the month's warmest maximum temperatures occurred on the 2nd or 3rd, due to northwesterly foehn winds ahead of the remnants of Debbie. Similarly, many of the warmest minimum temperatures occurred on the night of the 4th, with a tropical air mass located over New Zealand.

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				
Mokohinau Island	24.5	3rd	1994	Highest
Rotorua	25.1	3rd	1964	Highest
Motu	25.7	2nd	1990	Highest
Gisborne	29.7	2nd	1905	Highest
Hastings	30.1	2nd	1965	Highest
Wairoa	28.8	2nd	1964	Highest
Mahia	26.5	2nd	1990	Highest
Secretary Island	23.8	13th	1985	Highest
Whitianga	26.8	3rd	1962	2nd-highest
Ngawi	25.0	2nd	1972	2nd-highest
Gisborne	28.5	2nd	1905	2nd-highest
Cheviot	29.2	2nd	1982	2nd-highest
Le Bons Bay	24.7	2nd	1984	2nd-highest
Kaitaia	26.8	2nd	1948	3rd-highest
Paeroa	26.6	3rd	1947	3rd-highest
Te Puke	26.0	3rd	1973	3rd-highest
Rotorua	24.0	3rd	1964	3rd-highest
Auckland (Mangere)	26.1	3rd	1959	3rd-highest
Waiiau School	28.7	2nd	1974	3rd-highest
Wanaka	24.4	1st	1955	3rd-highest
Auckland (Whenuapai)	26.2	3rd	1945	Equal 3rd-highest
Whitianga	26.1	3rd	1962	Equal 3rd-highest

Taupo	24.4	3rd	1949	Equal 3rd-highest
Kaitaia	26.1	2nd	1948	4th-highest
Five Rivers	23.8	1st	1982	4th-highest
Queenstown	24.5	1st	1871	Equal 4th-highest
Lauder	26.0	1st	1924	Equal 4th-highest
Low records or near-records				
Oamaru	8.3	30th	1972	3rd-lowest
Winchmore	7.4	6th	1928	4th-lowest

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
High records or near-records				
Cape Reinga	19.9	3rd	1971	Highest
Kerikeri	21.0	5th	1952	Highest
Kaikohe	19.6	4th	1973	Highest
Whangarei	20.9	4th	1967	Highest
Mokohinau Island	20.7	4th	1994	Highest
Whangaparaoa	19.9	4th	1982	Highest
Auckland (Whenuapai)	20.0	4th	1951	Highest
Port Taharoa	19.5	3rd	1974	Highest
Mahia	17.9	3rd	1990	Highest
Secretary Island	15.9	1st	1988	Highest
Auckland (Airport)	20.6	4th	1961	Equal highest
Kaitaia	20.4	4th	1948	2nd-highest
Whangarei	20.5	4th	1967	2nd-highest
Leigh	20.5	4th	1966	2nd-highest
Hastings	18.2	13th	1972	2nd-highest
Hawera	17.2	13th	1977	2nd-highest
Ohakune	15.8	3rd	1972	2nd-highest
Hicks Bay	19.0	3rd	1972	Equal 2nd-highest
Auckland (North Shore)	20.8	4th	1994	3rd-highest
Auckland (Henderson)	20.2	4th	1971	3rd-highest
Auckland (Western Springs)	20.2	12th	1971	3rd-highest
Whitianga (Airport)	19.3	4th	1971	3rd-highest
Whitianga	19.3	3rd	1971	3rd-highest
Auckland (Mangere)	20.1	12th	1961	3rd-highest
Paeroa	19.4	4th	1971	Equal 3rd-highest
Palmerston North	17.5	13th	1940	Equal 3rd-highest
Te Puke	18.6	12th	1973	4th-highest
Taupo	16.6	3rd	1950	4th-highest
Waiouru	13.9	12th	1972	4th-highest
Puysegur Point	15.5	27th	1978	4th-highest
Te Anau	13.7	2nd	1973	4th-highest
Motueka	16.2	13th	1972	Equal 4th-highest

Queenstown	14.8	2nd	1871	Equal 4th-highest
Low records or near-records				
None observed				

Wind

On 13 April, Air New Zealand suspended operations at Tauranga Airport due to the arrival of Cook, while inbound flights into New Plymouth were cancelled which then affected departure flights.

In the Bay of Plenty, SH 34 between Edgecumbe and Te Teko was closed due to fallen power lines, as was SH 30 between Thornton Road and Awakeri. On the evening of 13 April, most if not all of Whakatane, Te Puke, Opotiki, and Waimana lost power as Cook arrived.

High winds associated with Cook hit Gisborne and Hawke's Bay on the night of 13-14 April, bringing down many trees. About 13,000 homes in Hawke's Bay were without power as high winds brought down trees and power lines, and lines company Unison said the damage to its power network was "severe". Twelve Spark cell towers were down and another 16 on battery backup across Bay of Plenty, Gisborne and Hawke's Bay.

On the morning of 14 April, several flights into and out of Wellington Airport were delayed and a couple of flights were also cancelled.

On 30 April, a storm hit the lower North Island which brought damage to Wellington. Trains on the Hutt Valley Line between Petone and Wellington were replaced by buses after balustrades along the waterfront were damaged. Marine Drive was closed temporarily as large waves dumped logs and debris on the road. Power was cut to more than 1300 homes in Lower Hutt. In Brooklyn, a power line came down, damaging three vehicles. Strong winds also forced a Jetstar flight from Auckland to Wellington to return to Auckland. In Taranaki, 44 homes lost power in Hawera.

The highest wind gust was 156 km/hr, observed at Brothers Island (Cook Strait) on 30 April.

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
Te Puke	67	13th	1987	Highest
Whakatane	117	13th	1974	Highest
Motu	111	13th	1991	Highest
Hawera	100	30th	1986	Highest
Oamaru	96	17th	1984	Highest
Lauder	122	28th	1981	Highest
Napier	100	13th	1973	2nd-highest
Levin	98	6th	1971	2nd-highest
Mt Kaukau	152	30th	1969	2nd-highest
Paeroa	96	4th	1991	Equal 2nd-highest
Wanaka	80	28th	1992	Equal 2nd-highest
Baring Head	141	30th	1991	3rd-highest
Cape Campbell	109	6th	1963	3rd-highest
Tauranga	87	13th	1973	4th-highest

Gisborne	89	13th	1972	Equal 4th-highest
Whanganui	87	30th	1977	Equal 4th-highest

Lightning and hail

On 17 April, a thunderstorm brought walnut-sized hail to Gisborne.

Cloud and fog

On 3 April, thick fog shrouded Auckland city. However, there were clear skies over Auckland Airport so there were no flight disruptions.

On 13 April, cloud and fog cancelled or delayed some flights out of Wellington Airport.

On 14 April, a flight out of Queenstown was cancelled due to low cloud.

Snow and Ice

A cold southerly brought light snowfall to locations above about 700 metres in the South Island on 30 April, including ski areas such as Cardrona, Coronet Peak, The Remarkables, and Mt Hutt. Accumulations were generally around 5 cm.

For further information, please contact:

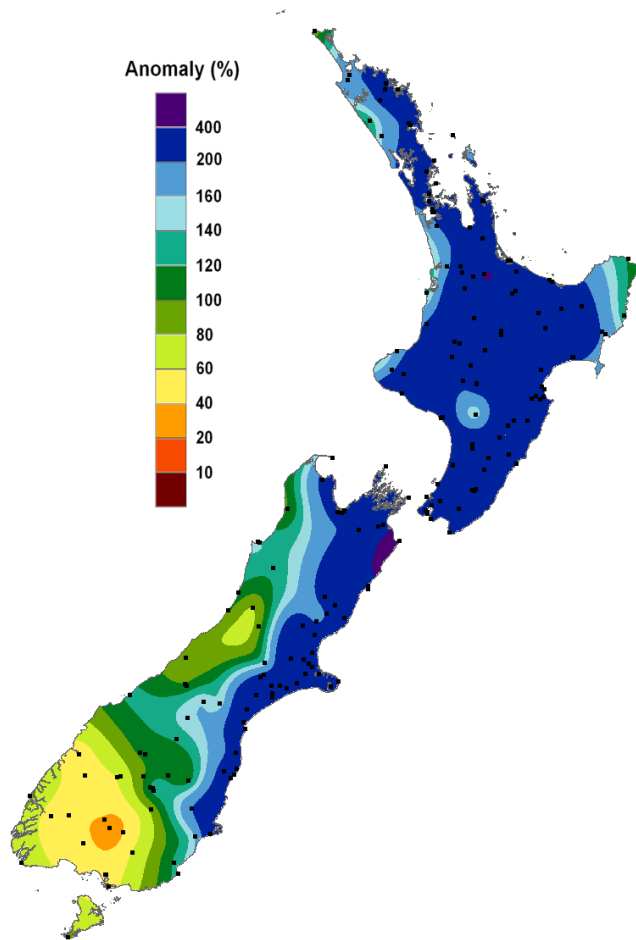
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April 2017 mean rainfall, expressed as percentage of the 1981-2010 normal.

April 2017 was characterised by very heavy rainfall events in the North Island and eastern South Island which caused significant flooding and slips. Some areas received over three times (>300%) the normal April rainfall. The southwest of the South Island generally experienced below normal rainfall (50-79% of April normal).

Note: Due to missing data at Hicks Bay, the percentage of normal rainfall around East Cape is incorrect on this map and should be disregarded.

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