

Wettest autumn on record for parts of the North Island

Rainfall	Well above normal rainfall (>150% of autumn normal) was experienced across the majority of the North Island. Autumn rainfall was well above normal for parts of the northern and eastern South Island, including Nelson, Marlborough, and coastal Canterbury. A number of locations recorded their wettest or near-wettest autumn on record. The west and south of the South Island (south of Hokitika) experienced less rainfall than usual for autumn, with some locations recording well below rainfall (<50% of autumn normal).
Temperatures	Autumn 2017 temperatures were above average (+0.50°C to +1.20°C) for almost the entire North Island. There were pockets of well above average temperatures (> +1.20°C) in the Bay of Plenty and Auckland. The eastern side of the South Island mostly experienced near (-0.50°C to +0.50°C) or below average (-1.20°C to -0.51°C) temperatures. The western South Island observed above average temperatures.
Soil moisture	At the end of autumn 2017 soil moisture was well above normal along the east coast of the North Island south of Gisborne, around Whanganui, and in Marlborough, eastern Canterbury and Otago. Soils were drier than normal in mid-Canterbury, central Otago and southeast Southland. Soil moisture levels were near normal elsewhere.
Sunshine	Autumn sunshine was near normal (90-109% of autumn normal) for Northland to Waikato, the West Coast, inland Canterbury and parts of central Otago. Below normal sunshine (75-89% of autumn normal) was observed in central New Zealand (southern North Island and northern South Island).

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

[Overview](#)

[Rainfall](#)

[Temperature](#)

[Sunshine](#)

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

[Highlights and extreme events](#)

Overview

For the autumn season as a whole, mean sea level pressures were above normal over and to the southwest of New Zealand, which resulted in more northeasterly winds than usual over the North Island and more easterly winds than usual over the South Island. The anomalous northerly flow over the North Island caused numerous moist, tropical airmasses to travel down to New Zealand, including two ex-tropical cyclones, which delivered significant amounts of rain to the top of the country during March and April. These rainfall events caused severe flooding and slips for parts of

the North Island, particularly Auckland, Coromandel, and Bay of Plenty, as well as the top of the South Island. More details about these extreme events can be found in the *Highlights and Extreme Events* section below. Temperatures were generally warmer than usual for autumn across the North Island due to the northerly flows.

In contrast, the predominant easterly flow over the South Island caused wetter than normal conditions for the exposed regions of eastern Canterbury and Otago, but sheltering of western and southern parts encouraged drier than normal conditions to persist for the season in Southland, Central Otago and the West Coast. Temperatures were near average for most of the South Island, and slightly below average for parts of coastal Canterbury. In contrast, the sheltered West Coast experienced above average temperatures for autumn.

Further Highlights:

- The highest temperature was 33.0°C, observed at Leeston on 17 March.
- The lowest temperature was -6.9°C, observed at Middlemarch on 22 May.
- The highest 1-day rainfall was 231.8 mm, recorded at North Egmont on 11 March.
- The highest wind gust was 167 km/hr, observed at Akitio on 19 May.
- Of the six main centres in autumn 2017, Auckland was the warmest and sunniest, Tauranga was the wettest, Dunedin was the driest and Wellington was the least sunny, and Dunedin and Christchurch were both the coolest.

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Rainfall: Very wet in the North Island and north and east of the South Island

Well above normal rainfall (>150% of autumn normal) was experienced across most of the North Island except for localised areas of western Northland, Taranaki and the Central Plateau that recorded near normal (80-119% of normal) or above normal (120-149% of normal) rainfall. Rainfall was also well above normal for parts of the northern and eastern South Island, including Nelson, Marlborough, and coastal Canterbury.

Thirty-five locations recorded their wettest or near-wettest autumn on record. Significantly, Whangaparaoa (north of Auckland) recorded a massive 294% (791 mm) of its normal autumn rainfall total.

In contrast, the west and south of the South Island (south of Hokitika) experienced less rainfall than usual for autumn. Well below normal rainfall (<50% of autumn normal) was observed at Milford Sound, Mt Cook, Tiwai Point, and Invercargill. In fact, Milford Sound and Tiwai Point recorded their lowest autumn rainfall totals on record, with 37% and 48% of their normal autumn rainfalls, respectively.

As a reflection of the stark differences in rainfall during autumn, Lake Taupo experienced its highest autumn inflow on record since 1926 (206% of normal inflow) and the Clutha dam lakes as well as Lake Te Anau experienced their lowest inflows on record for autumn since 1926, with 46% and 43% of normal autumn inflows, respectively.

At the end of autumn 2017, soil moisture was well above normal along the east coast of the North Island south of Gisborne, around Whanganui, and in Marlborough, eastern Canterbury and Otago. Soils were drier than normal in mid-Canterbury, central Otago and southeastern Southland. Soil moisture levels were near normal elsewhere. The first two months of autumn exhibited very wet soils throughout the North Island, but near normal rainfall in May for many areas, as well as the increasing climatological average for soil moisture towards the winter season, resulted in soil moisture levels declining to near normal levels for the time of year.

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

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-records				
Warkworth	747	214	1966	Highest
Whangaparaoa	791	294	1946	Highest
Auckland (Albany)	655	226	1966	Highest
Whitianga	958	208	1961	Highest
Te Puke	1075	256	1973	Highest
Auckland (Mangere)	642	231	1959	Highest
Pukekohe	640	225	1944	Highest
Lower Retaruke	541	167	1966	Highest
Hawera	472	179	1977	Highest
Ohakune	477	169	1961	Highest
Waiouru	460	194	1950	Highest
Takaka	866	189	1976	Highest
Rotorua	822	205	1963	2nd-highest
Taupo	512	247	1949	2nd-highest
Auckland (Airport)	547	203	1959	2nd-highest
Turangi	592	167	1968	2nd-highest
Waione	356	175	1991	2nd-highest
Wairoa	623	171	1964	2nd-highest
Palmerston North	396	184	1928	2nd-highest
Akaroa	465	205	1977	2nd-highest
Kaitia	575	185	1948	3rd-highest
Kaikohe	701	181	1956	3rd-highest
Paeroa	675	232	1914	3rd-highest
Taumarunui	574	177	1913	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.

Hastings	332	158	1965	3rd-highest
Stratford	700	153	1960	3rd-highest
Tauranga	722	220	1898	4th-highest
Whakatane	648	192	1952	4th-highest
Takapau Plains	450	197	1962	4th-highest
Martinborough	313	174	1924	4th-highest
Paraparaumu	423	195	1945	4th-highest
Whanganui	350	165	1890	4th-highest
Farewell Spit	542	188	1874	4th-highest
Appleby	458	178	1932	4th-highest
Waipara West	269	195	1973	4th-highest
Low records or near-records				
Milford Sound	639	37	1929	Lowest
Tiwai Point	146	48	1970	Lowest
Mt Cook	422	39	1928	2nd-lowest
Lake Manapouri	172	63	1961	2nd-lowest
Invercargill	146	47	1900	2nd-lowest

Temperature: Warmer than usual in the North, near average in the South

Autumn 2017 mean temperatures were above average (+0.50°C to +1.20°C) for almost the entire North Island, in part due to the persistent northerly flow pattern for much of the season. There were pockets of well above average temperatures (> +1.20°C) observed in the Bay of Plenty and Auckland regions. Te Puke experienced its warmest autumn on record. Some localised areas of the western Waikato and Wellington region experienced near average temperatures for autumn (-0.50°C to +0.50°C).

Due to the persistent easterly flows across the South Island, the exposed eastern side of the island experienced near average or below average (-1.20°C to -0.51°C) temperatures, and a few locations recorded well below average temperatures (< -1.20°C). In contrast, the western South Island observed above average temperatures due to sheltering by the Southern Alps and the [foehn effect](#) of the easterly winds warming as they descended the western slopes of the Southern Alps.

The nation-wide average temperature for autumn 2017 was 13.2°C (0.2°C above the 1981-2010 autumn average, using NIWA's seven-station temperature series which begins in 1909). This is in sharp contrast to autumn 2016, which was New Zealand's 2nd warmest autumn on record and had a nationwide average temperature of 14.7°C.

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

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Te Puke	16.2	1.6	1973	Highest

Motu	12.8	1.5	1990	2nd-highest
Arapito	14.4	1.0	1978	2nd-highest
Taupo	14.1	1.9	1949	3rd-highest
Whatawhata	16.3	1.6	1952	3rd-highest
Whangarei	17.7	1.1	1967	4th-highest
Mokohinau	18.4	0.9	1994	4th-highest
Whitianga	16.5	1.1	1962	4th-highest
Hicks Bay	17.1	1.1	1969	4th-highest
Low records or near-records				
Oamaru	10.0	-1.3	1967	2nd-lowest
Kaikoura	11.8	-1.3	1963	3rd-lowest

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

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Hanmer Forest	19.8	2.2	1906	2nd-highest
Whitianga	21.7	1.5	1962	2nd-highest
Te Puke	20.9	1.1	1973	2nd-highest
Taupo	18.9	1.6	1949	2nd-highest
Milford Sound	16.5	1.2	1934	2nd-highest
Secretary Island	16.4	1.1	1985	3rd-highest
Low records or near-records				
Timaru	14.5	-1.6	1885	Lowest
Oamaru	14.2	-1.7	1967	Lowest
Takaka	17.3	-1.5	1978	3rd-lowest
Le Bons Bay	14.2	-1.1	1984	3rd-lowest

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

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-records				
Te Puke	11.5	2.0	1973	Highest
Taupo	9.3	2.2	1949	2nd-highest
Cape Reinga	15.4	1.1	1951	3rd-highest
Mokohinau	16.6	1.0	1994	3rd-highest
Wairoa	11.1	1.4	1964	3rd-highest
Waiouru	6.5	1.7	1962	3rd-highest
Lower Retaruke	8.8	1.6	1966	4th-highest
Low records or near-records				
Kaikoura	7.4	-2.6	1963	2nd-lowest

Sunshine: Near normal sunshine for many

Autumn sunshine was near normal (90-109% of autumn normal) for Northland to Waikato, the West Coast, inland Canterbury and parts of central Otago. Queenstown recorded its sunniest autumn on record since 1930 with 127% of normal sunshine, consistent with below normal rainfall and clear skies there. Below normal sunshine (75-89% of autumn normal) was observed in central New Zealand (southern North Island and northern South Island).

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

Location	Sunshine hours	Percentage of normal	Year records began	Comments
High records or near-records				
Queenstown	532	127	1930	Highest
Dunedin (Musselburgh)	452	119	1980	3rd-highest
Franz Josef	469	108	1983	4th-highest
Low records or near-records				
Paraparaumu	362	72	1953	2nd-lowest
Martinborough	408	81	1986	3rd-lowest
Takaka	496	88	1985	4th-lowest

Autumn climate in the six main centres

Temperatures were above average for Auckland, Tauranga and Hamilton for autumn 2017, and near average at the remaining main centres. Well above normal rainfall was observed at all main centres except for Dunedin, which recorded above normal rainfall. Auckland observed its wettest autumn on record in 2017. Sunshine was near normal for Auckland, Hamilton and Tauranga, below normal for Wellington and Christchurch, and above normal in Dunedin. Of the six main centres in autumn 2017, Auckland was the warmest and sunniest, Tauranga was the wettest, Dunedin was the driest, Wellington was the least sunny, and Dunedin and Christchurch were both the coolest.

Autumn 2017 main centre climate statistics:

Temperature			
Location	Mean temp. (°C)	Departure from normal (°C)	Comments
Auckland ^a	16.9	+0.7	Above average
Tauranga ^b	16.5	+0.8	Above average
Hamilton ^c	14.9	+0.7	Above average
Wellington ^d	13.8	+0.1	Near average
Christchurch ^e	11.7	-0.2	Near average
Dunedin ^f	11.7	+0.1	Near average
Rainfall			
Location	Rainfall (mm)	% of normal	Comments
Auckland ^a	642	231%	Well above normal (highest)
Tauranga ^b	722	220%	Well above normal (4 th highest)
Hamilton ^c	544	195%	Well above normal
Wellington ^d	458	163%	Well above normal
Christchurch ^e	278	188%	Well above normal
Dunedin ^f	223	124%	Above normal
Sunshine			
Location	Sunshine (hours)	% of normal	Comments
Auckland ^a	499	101%	Near normal
Tauranga ^b	564	96%	Near normal
Hamilton ^g	496 ²	95%	Near normal
Wellington ^d	386	77%	Below normal
Christchurch ^e	389 ³	79%	Below normal
Dunedin ^f	452	119%	Above normal (3 rd highest)

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

² Missing two days of data

Highlights and extreme events

This section contains information pertaining to some of the more significant highlights and extreme events that occurred during autumn 2017. Note that a more detailed list of significant weather events for autumn 2017 can be found in the *Highlights and extreme events* section of NIWA's monthly Climate Summaries. These monthly summaries are available online, and may be viewed at the following website: <http://www.niwa.co.nz/climate/summaries/monthly>

Rain and slips

On 7-8 March, heavy downpours and significant flooding affected the upper North Island, particularly southeast Auckland and the Coromandel Peninsula. Early on 8 March, nearly 200 school children were evacuated from waist-deep floodwaters at a school camp (Camp Adair) in the Hunua Ranges, southeast of Auckland. Major flooding in Clevedon caused significant stock losses from farms in the area, as well as road closures and evacuations. Houses and roads were also affected by flooding in Beachlands and Maraetai. 150 children at another school camp (Hunua Falls Camp) were evacuated when a fallen tree blocked access to the camp. Around 1000 homes were without power in Auckland's southeast. Waiheke Island also experienced flooding and slips, and a wooden footbridge washed up on Onetangi Beach after being washed down a stream.

The Coromandel Peninsula was cut off due to SH 25 being closed at both Kopu and south of Tairua, due to flooding and slips. The towns of Pauanui, Whangamata, Tairua, Onemana, Hikuai, and Kaiaua were affected by severe flooding and slips, with some evacuations taking place. Whiritoa was cut off by slips on SH 25, and some houses were evacuated there. Seventeen schools and 11 early childcare centres were closed for the day across Auckland and Coromandel, although mostly in Coromandel. More than 8000 homes on the Coromandel Peninsula were without power for a time. Other roads throughout the Coromandel Peninsula and northeast Waikato were closed due to flooding and slips, leading to lengthy detours for motorists. Many of these roads remained closed for a number of days.

On 10-11 March, the second extreme rainfall event occurred. Heavy rain fell in eastern Northland, Auckland, and Coromandel. Many houses were flooded and thousands of people were without power. Waiheke Island was affected by flooding and slips in some areas, with a house being left perched above a slip on a cliff in Oneroa. The Clevedon River flooded again for the second time in three days, and Kawakawa Bay was cut off by slips.

On 12 March, the third significant rainfall event occurred. Localised downpours hit Auckland, with many areas being affected by flooding. The area around New Lynn was the worst affected. Over 320 properties in Auckland were flooded (over 220 in west Auckland), some in waist-deep water. Roads were closed in New Lynn due to major flooding, and people were trapped in their cars and in retail stores by floodwaters at the intersection of Great North Road and Clark Street. In Kelston, residents were evacuated from a block of units due to flooding, and concerns were held for a commercial building in New Lynn which appeared to have a burst water main running through it. A damaged culvert ripped away some of the road and footpath on a New Lynn street. Thousands of people were without power, less than 24 hours after Vector repaired major faults on its network caused by the 10-11 March rain event. At one point during the day, the Fire Service was receiving one emergency call every 24 seconds. In Rotorua, Utuhina Stream burst its banks and threatened about six houses,

and Paradise Valley Road was closed after slips and fallen trees blocked the road and a nearby bridge was washed out.

From 4-5 April, the remnants of ex-Tropical Cyclone Debbie impacted primarily the North Island, causing widespread flooding and damage. A 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. More than 170 schools and early childcare centres were closed across the North Island, mostly in the Manawatu-Whanganui Region, and 200 flood-prone homes in Whanganui were evacuated. 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.

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. Flow on the Rangitaiki River was measured as high as 700 cubic metres per second. 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. Several towns in the Whakatane District were cut off by flooding and slips, including Ruatahuna, Minginui, Waimana, and Ruatoki. 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.

April’s second major weather event occurred from the 12th to the 14th, as ex-Tropical Cyclone 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 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. 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.

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

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Whangaparaoa	172	Apr-04th	1946	Highest
Waiheke Island	210	Mar-07th	1980	Highest
Thames	112	Mar-07th	1957	Highest

Te Aroha	114	Apr-04th	1992	Highest
Omeheu	199	Apr-04th	1987	Highest
Mangatawhiri	142	Mar-07th	1969	Highest
Whatawhata	120	Apr-04th	1952	Highest
Horsham Downs	96	Apr-04th	1973	Highest
Ngahinapouri	140	Apr-04th	1935	Highest
Glenochy	155	Apr-04th	1956	Highest
Mahoenui	151	Apr-04th	1970	Highest
Otorohanga	118	Apr-04th	1957	Highest
Te Kuiti	109	Apr-04th	1957	Highest
Mangakowhai	130	Apr-04th	1995	Highest
Lower Retaruke	97	Apr-04th	1974	Highest
Bainesse	93	Mar-29th	1974	Highest
Secretary Island	166	May-02nd	1985	Highest
Rawene	110	Mar-10th	1977	2nd-highest
Whitianga	161	Apr-04th	1961	2nd-highest
Coroglen	135	Mar-07th	1988	2nd-highest
Te Puke	186	Apr-04th	1973	2nd-highest
Edgecumbe	153	Apr-04th	1990	2nd-highest
Ngakuru	107	Apr-04th	1948	2nd-highest
Kopuriki	128	Apr-04th	1962	2nd-highest
Taupo	97	Apr-04th	1949	2nd-highest
Rainbow Point	90	Apr-04th	1978	2nd-highest
Auckland (Mangere)	101	Mar-10th	1959	2nd-highest
Miranda	114	Mar-07th	1978	2nd-highest
Kawhia	93	Apr-04th	1905	2nd-highest
Ngapuke	92	Apr-04th	1989	2nd-highest
Turangi	88	Apr-04th	1968	2nd-highest
Te Rehunga	117	Apr-04th	1954	2nd-highest
Takapau Plains	84	Apr-04th	1962	2nd-highest
Otane	71	Apr-05th	1995	2nd-highest
Sanson	81	Mar-29th	1973	2nd-highest
Reikorangi	83	Mar-11th	1969	2nd-highest
Glenledi Rd	68	Apr-12th	1984	2nd-highest
Stewart Island	88	Mar-04th	1975	2nd-highest
Waikanae W	93	Mar-11th	1969	Equal 2nd-highest
Tiri Tiri Lighthouse	129	Mar-08th	1946	3rd-highest
Auckland (Albany)	111	Apr-12th	1966	3rd-highest
Auckland (Henderson)	106	Mar-10th	1948	3rd-highest
Rings Beach	132	Apr-04th	1986	3rd-highest
Kerepehi	117	Apr-04th	1925	3rd-highest
Elstow	120	Apr-04th	1917	3rd-highest
Morrinsville	87	Apr-04th	1978	3rd-highest
Thornton East	134	Apr-04th	1948	3rd-highest
Awakeri	131	Apr-04th	1962	3rd-highest
Rotorua	137	Apr-04th	1964	3rd-highest
Owhiro	95	Apr-04th	1975	3rd-highest
Pukehinau	74	Apr-04th	1979	3rd-highest

Waihau	116	Apr-04th	1985	3rd-highest
Ohakune	62	May-11th	1961	3rd-highest
Waiouru	64	Apr-04th	1950	3rd-highest
Tapawera	69	Apr-12th	1992	3rd-highest
Akaroa	122	Apr-05th	1977	3rd-highest
Motunau	68	Apr-13th	1992	3rd-highest
Auckland (Western Springs)	93	Mar-10th	1948	4th-highest
Kennedy Bay	158	Apr-04th	1988	4th-highest
Chiltern	165	Mar-07th	1950	4th-highest
Whakatane	137	Apr-04th	1952	4th-highest
Opouriao	125	Apr-04th	1962	4th-highest
Waiuku	95	Mar-10th	1905	4th-highest
Waione	49	Apr-04th	1991	4th-highest
Pongaroa	78	Apr-04th	1973	4th-highest
Rose Hill	90	Apr-04th	1954	4th-highest
Paraparaumu	74	Mar-11th	1951	4th-highest
Moawhango	50	Apr-04th	1970	4th-highest
Waipara West	65	Apr-05th	1973	4th-highest

Temperatures

On the morning of 22 May, the temperature at Auckland (Western Springs) dipped to 0.4°C, the coldest temperature since 3 July 2016 (323 days). Many locations in New Zealand dipped below freezing. The low temperatures were recorded after southerly winds hit the country, followed by settled anticyclonic conditions.

Overnight on 22-23 May, another cold night was experienced around the country, particularly for the North Island where several sites recorded below freezing temperatures. A northwesterly change caused comparatively warmer temperatures in the lower South Island.

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

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-records				
Hawera	26.2	Mar-10th	1977	Highest
Motu	25.7	Mar-22nd	1990	2nd-highest
Motueka	30.1	Mar-05th	1956	2nd-highest
Pelorus Sound	27.6	Mar-05th	1982	2nd-highest
Secretary Island	25.1	Mar-14th	1985	3rd-highest
Kaikohe	26.9	Mar-08th	1973	Equal 3rd-highest
Farewell Spit	25.7	Mar-01st	1971	Equal 3rd-highest
Whanganui	30.3	Mar-10th	1937	4th-highest
Lake Manapouri	26.5	Mar-16th	1963	4th-highest
Low records or near-records				
Takaka	7.9	May-20th	1978	Lowest
Le Bons Bay	5.2	May-20th	1984	Lowest

Akaroa	7.4	May-20th	1978	2nd-lowest
Oamaru	5.5	May-20th	1972	2nd-lowest
Five Rivers	2.9	May-20th	1982	Equal 2nd-lowest
Dannevirke	6.4	May-20th	1951	3rd-lowest
Waione	8.3	May-20th	1993	3rd-lowest
Te Kuiti	8.9	May-23rd	1959	Equal 3rd-lowest
Takapau Plains	5.1	May-20th	1972	Equal 3rd-lowest
Castlepoint	8.1	May-20th	1972	Equal 3rd-lowest
Lower Retaruke	9.0	May-21st	1972	4th-lowest
Ohakune	5.7	May-21st	1972	4th-lowest
Waiouru	2.9	May-21st	1972	4th-lowest
Reefton	5.6	May-22nd	1972	4th-lowest
Te Anau	4.1	May-20th	1973	4th-lowest

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-records				
Port Taharoa	20.6	Mar-12th	1974	Highest
Lower Retaruke	19.1	Mar-12th	1972	Highest
Hicks Bay	20.5	Mar-12th	1972	Equal highest
Mokohinau	20.7	Apr-04th	1994	2nd-highest
Waiouru	15.5	Mar-12th	1972	2nd-highest
Cape Reinga	19.9	Mar-09th	1971	Equal 2nd-highest
Whangaparaoa	19.9	Apr-04th	1982	Equal 2nd-highest
Te Puke	19.8	Mar-12th	1973	3rd-highest
Taupo	18.5	Mar-12th	1950	3rd-highest
Rotorua	18.8	Mar-12th	1972	Equal 3rd-highest
Kerikeri	21.0	Apr-05th	1952	Equal 4th-highest
Auckland (North Shore)	20.8	Apr-04th	1994	Equal 4th-highest
Thames	20.6	Mar-12th	1957	Equal 4th-highest
Low records or near-records				
Te Kuiti	-3.2	May-22nd	1959	Lowest
Kaikoura	-1.4	May-26th	1963	Lowest
Auckland (North Shore)	3.6	May-23rd	1994	Equal 3rd-lowest
Turangi	-4.9	May-22nd	1968	Equal 3rd-lowest
Whangarei	1.5	May-22nd	1967	4th-lowest
Rotorua	-2.7	May-22nd	1964	4th-lowest
Taumarunui	-4.1	May-22nd	1947	4th-lowest
Hicks Bay	2.5	May-21st	1969	4th-lowest
Stratford	-1.7	May-22nd	1960	4th-lowest
New Plymouth	0.1	May-22nd	1944	Equal 4th-lowest

Wind

High winds associated with ex-Tropical Cyclone 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 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. Forty-four homes lost power in Hawera.

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

Location	Extreme wind gust (km/h)	Date of extreme gust	Year records began	Comments
Kaitaia	196	May-07th	1972	Highest
Kaikohe	89	May-20th	1986	Highest
Whakatane	117	Apr-13th	1974	Highest
Motu	111	Apr-13th	1991	Highest
Lauder	122	Apr-28th	1981	Equal highest
Whitianga	85	May-18th	1991	2nd-highest
Mokohinau	119	Mar-08th	1994	Equal 2nd-highest
Paeroa	98	Mar-08th	1991	Equal 2nd-highest
Hawera	100	Apr-30th	1986	Equal 2nd-highest
Levin	98	Apr-06th	1971	3rd-highest
Napier	100	Apr-13th	1973	Equal 3rd-highest
Secretary Island	128	May-19th	1994	4th-highest
Tauranga	93	May-19th	1973	Equal 4th-highest

Cloud and fog

On 29 March, sea fog caused major disruptions at Wellington Airport, cancelling all flights for about 24 hours. About 100 flights were affected. The fog caused numerous road accidents, leading to delays for commuters.

On 25 May, fog caused chaos at Auckland Airport, where about 120 domestic flights were delayed or cancelled, and one international flight was diverted. The fog lingered for much of the morning. Motorists were unable to see more than a few metres ahead of them in some parts of the city.

On 27 May, fog affected Auckland for much of the morning. In total, 42 domestic flights were cancelled and 42 more were delayed due to poor visibility. One international flight was diverted to Wellington.

Snow and ice

On 20 May, a southerly outbreak delivered the first significant snowfall to low elevations for the year. Snow settled to approximately 200 metres above sea level in southern parts of the South Island, with snow flurries falling to near sea level. Around 13 cm of snow was recorded in Kingston, and numerous flights were cancelled or delayed in Queenstown due to adverse weather and snow on the runway. Several southern roads were closed due to snow, including SH1 between Dunedin and Waitati and SH87 from Outram to Sutton. Snow drifts of 70-90 cm were observed at *The Remarkables* ski area near Queenstown, although some exposed slopes were stripped bare of snow due to strong winds that accompanied the snowfall. Farther north, Mt Ruapehu received up to 25 cm of snow. The Desert Road (SH1) was closed for a time due to snow and ice, and some vehicles required towing after becoming stuck.

For further information, please contact:

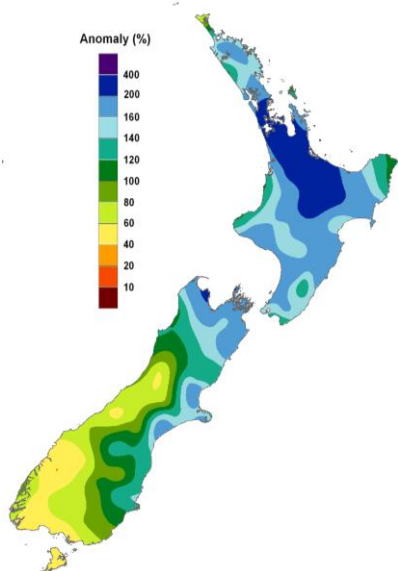
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Autumn 2017 average rainfall, expressed as an anomaly of the 1981-2010 average (%).

The majority of the North Island and the north of the South Island recorded well above normal rainfall for autumn 2017 (>150%), whereas much of the southwest of the South Island recorded below normal rainfall (<79%).

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