

National Climate Summary – Autumn 2011: Warm and wet for many regions

- **Temperatures:** Above average autumn temperatures for much of the North Island, as well as the north of the South Island. Near average temperatures over the southern half of the South Island. Several heat waves during the autumn.
- **Rainfall:** Above normal autumn rainfall across most of the North Island, as well as the north of the South Island, Otago and south Canterbury.
- **Sunshine:** A cloudy autumn for Otago, Nelson, Taranaki to Wellington. Near normal autumn sunshine in most other regions.

New Zealand was affected by more northerly winds than usual during autumn, squeezed between low pressures over the Tasman Sea and anticyclones ('highs') lying east of the country. These northerly winds contributed to the very warm and wet autumn experienced over most of the North Island, and the north of the South Island.

Autumn temperatures were well above average (more than 1.2°C above the autumn average) in parts of Northland, Auckland, the Firth of Thames and Bay of Plenty, southern Hawkes Bay, and around Nelson. Elsewhere in the North Island, and in the north of the South Island, autumn temperatures were generally above average (between 0.5°C and 1.2°C above the autumn average). Near average autumn temperatures (within 0.5°C of average) were experienced over the southern half of the South Island. Using NIWA's seven-station temperature series, the average temperature for autumn 2011 was 13.9°C (0.6°C above the 1971–2000 autumn average).

Rainfall totals for autumn were well above normal (exceeding 150 percent of autumn normal) in parts of Northland, Auckland, Coromandel, Waikato, Bay of Plenty, Gisborne, Central Plateau, Hawkes Bay, from Taranaki to Kapiti Coast, Nelson, Tasman District, south Canterbury and Otago. Elsewhere in the North Island, autumn rainfalls were generally above normal (between 120 and 149 percent of autumn normal). Across the remainder of the South Island, autumn rainfall totals were close to normal (ranging between 80 and 119 percent of seasonal normal).

It was a rather cloudy autumn for Otago and the Lakes District, around Nelson, and from Taranaki to Wellington (with sunshine totals less than 90 percent of autumn normal). Elsewhere, autumn sunshine was closer to seasonal normal (between 90 and 115 percent of autumn normal).

Autumn climate was rather extreme: A State of Emergency was declared for Hawkes Bay on 28 April, due to flooding and slips in the region following extremely heavy rainfall on 26–28 April, and several coastal Hawkes Bay settlements were evacuated after being completely cut off. May started with a heat wave on the West Coast of the South Island. A tornado swept through Albany (Auckland) on 3 May. Flooding rains affected Otago on May 7/8, and Nelson and Takaka on May 25/26.

Further Highlights:

- The highest temperature recorded was 31.4°C recorded at Christchurch on 4 March.
- The lowest temperature recorded was -5.9°C recorded at Ranfurly on 28 April.
- The highest 1-day rainfall of 289 mm was recorded at North Egmont on 25 May.
- The highest gust was 184 km/hr recorded at Southwest Cape on 12 May.
- Of the six main centres, Tauranga was the wettest but also the sunniest, Auckland was the warmest, Christchurch the driest, and Dunedin the coolest and cloudiest.

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TEMPERATURES: ABOVE AVERAGE AUTUMN TEMPERATURES FOR MUCH OF THE NORTH ISLAND AS WELL AS THE NORTH OF THE SOUTH ISLAND. NEAR AVERAGE TEMPERATURES ELSEWHERE. SEVERAL HEAT WAVES DURING THE AUTUMN.

The average temperature in autumn, based on NIWA’s long-term temperature series from seven stations spread across New Zealand, was 13.9°C (0.6°C above the 1971–2000 autumn average)¹.

Autumn temperatures were well above average (more than 1.2°C above the autumn average) in parts of Northland, Auckland, the Firth of Thames and Bay of Plenty, southern Hawkes Bay, and around Nelson. Elsewhere in the North Island, and in the north of the South Island, autumn temperatures were generally above average (between 0.5°C and 1.2°C above the autumn average). Near average autumn temperatures (within 0.5°C of average) were experienced over the southern half of the South Island.

Autumn average afternoon maximum temperatures were record high in Kaikohe, and autumn average morning minimum temperatures were record high for Kaikohe and Nelson (see Tables below).

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

Location	Mean maximum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Kaikohe	21.3	2.1	1973	Highest
Leigh	22.0	2.0	1966	2nd-highest
Westport	18.1	1.0	1937	3rd-highest
Lake Rotoiti	16.3	1.4	1965	4th-highest
Reefton	18.2	1.3	1960	2nd-highest
Motueka	20.1	1.5	1956	2nd-highest
Nelson Aws	19.4	1.3	1943	4th-highest

Record or near-record Autumn mean minimum daily air temperatures were recorded at:

Location	Mean minimum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Kerikeri	12.7	1.1	1981	4th-highest
Kaikohe	13.9	1.6	1973	Highest
Dargaville	13.4	1.9	1943	2nd-highest
Stratford	9.5	1.3	1960	3rd-highest
Hawera	10.4	1.3	1977	3rd-highest
Ohakune	7.3	1.4	1962	2nd-highest
Farewell Spit	12.6	2.2	1971	2nd-highest
Lake Rotoiti	5.5	1.3	1965	3rd-highest
Reefton	7.7	1.2	1960	4th-highest
Nelson	9.9	1.7	1943	Highest
Alexandra (Pioneer)	5.7	1.7	1983	3rd-highest

¹ Interim seasonal value.

RAINFALL: ABOVE NORMAL RAINFALL ACROSS MOST OF THE NORTH ISLAND AND NORTH OF SOUTH ISLAND, AS WELL AS IN OTAGO AND SOUTH CANTERBURY.

Rainfall totals for autumn were well above normal (exceeding 150 percent of autumn normal) in parts of Northland, Auckland, Coromandel, Waikato, Bay of Plenty, Gisborne, Central Plateau, Hawkes Bay, from Taranaki to Kapiti Coast, Nelson, Tasman District, south Canterbury and Otago. Elsewhere in the North Island, autumn rainfalls were generally above normal (between 120 and 149 percent of autumn normal). Across the remainder of the South Island, autumn rainfall totals were close to normal (ranging between 80 and 119 percent of seasonal normal). It was the wettest autumn on record for Pukekohe, Takaka, and Alexandra.

Record or near-record Autumn rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
Cape Reinga	468	184	1919	4th-highest
Kerikeri	690	184	1981	4th-highest
Te Puke	729	177	1973	2nd-highest
Whakatane	627	226	1952	4th-highest
Taupo	402	166	1949	4th-highest
Pukekohe	561	175	1944	Highest
Whatawhata	575	155	1952	4th-highest
Stratford	683	136	1960	4th-highest
Wanganui	294	133	1987	2nd-highest
Takaka	798	166	1976	Highest
Reefton	684	143	1960	4th-highest
Timaru	221	147	1990	2nd-highest
Alexandra (Pioneer)	168	179	1983	Highest
Manapouri	182	65	1961	3rd-lowest

SUNSHINE: A CLOUDY AUTUMN FOR OTAGO, NELSON AND FROM TARANAKI TO WELLINGTON. NEAR NORMAL SUNSHINE ELSEWHERE.

It was a rather cloudy autumn for Otago and the Lakes District, around Nelson, and from Taranaki to Wellington (with sunshine totals around 90 percent of autumn normal). Elsewhere, autumn sunshine was generally closer to seasonal normal (between 90 and 115 percent of autumn normal). In contrast, Balclutha had a rather sunny autumn, overall.

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

Location	Sunshine (hours)	Percentage Of normal	Year records began	Comments
Balclutha	426	121	1964	4th-highest
Takaka	523	92	1985	4th-lowest
Cromwell	436	91	1979	4th-lowest

AUTUMN CLIMATE IN THE SIX MAIN CENTRES

It was a warmer than normal autumn for all six of the main centres. Autumn was extremely wet for the North Island locations listed below, but seasonal rainfall was close to normal for Christchurch and Dunedin. Autumn sunshine hours were near normal for all of the six main centres.

Of the six main centres, Tauranga was the wettest but also the sunniest, Auckland was the warmest, Christchurch the driest, and Dunedin the coolest and cloudiest.

Autumn 2011 main centre climate statistics:

Location	Mean temp. (°C)	Departure from normal (°C)		Rainfall (mm)	% of normal		Sunshine (hours)	% of normal	
Auckland ^a	17.0	+0.7	Above average	519	181%	Well above normal	512	107%	Near normal
Tauranga ^b	16.6	+1.3	Well above average	555	171%	Well above normal	549	102%	Near normal
Hamilton ^c	14.9	+0.7	Above average	444	161%	Well above normal	473 ^g	98%	Near normal
Wellington ^d	14.2	+0.5	Above average	417	135%	Above normal	486	103%	Near normal
Christchurch ^e	12.5	+0.5	Above average	158	99%	Near normal	459	95%	Near normal
Dunedin ^f	12.3	+0.7	Above average	210	104%	Near normal	388	107%	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 of autumn was 289 mm, recorded at North Egmont on 25 May.

On 21-22 March, heavy rain in the Coromandel caused flooding and slips, closing many roads, including Hot Water Beach Road and Hikuai Settlement Road, south of Tairua. SH25 was closed between Thames and Coromandel, and also at Opoutere where forestry logs were washed on to the road. In Eastland, SH35 was closed by flooding about 1 km north of Te Puia Springs, and East Cape Road was closed at Te Araroa by flooding, a slip and fallen trees. In Gisborne, arcing power lines led to a fire on a wooden pole, and other power lines were brought down. In rural areas, the persistent rain put a stop to harvesting, with maize, sweetcorn, tomatoes and grapes affected.

On 27 March, a sudden downpour from Wellington to Kapiti flooded properties, ripped up roads, and caused cars to float down streets. People had to be helped from their cars after they became trapped in the flooding. In Tauranga, a deluge popped stormwater manhole covers and flooded streets. The area between Wanganui, Feilding and Mangaweka was lashed with localised heavy rain and thunderstorms.

On 4 April, heavy rain caused a serious land-slip depositing tonnes of debris on the railtracks at Awatuna, north of Hokitika. In New Plymouth, heavy rain delayed the setting of the newly laid cement road surface in Devon Street, causing a sludgy mess for businesses, people and vehicles in the area.

On 25 and 26 April, heavy rain and winds caused flooding and slips and brought down trees across central North Island regions. SH5 between Rotorua and Taupo was blocked by downed trees and powerlines. SH25 was affected by surface flooding near Whitianga, and slips near Waihi. Slips also closed SH35 at Maraenui Hill, and SH2 south of Matata. Residents were evacuated from Te Awanga, east of Hastings, after the heavy rain. Many roads in Waikato, Taranaki, Manawatu, Bay of Plenty, the Taupo area, Hawkes Bay and Gisborne were closed by slips and flooding.

On 27 April, more people were evacuated from coastal Hawkes Bay settlements, and more roads were closed by slips, following persistent heavy rain. Problems created by the heavy rain meant all water for drinking and cooking had to be boiled and residents were asked to conserve water and not take showers or baths, do the

laundry or flush the toilet. Large slips isolated SH35 between Motu Bluffs and Maraenui Hill around East Cape. SH2 was closed from Bayview to Nuhaka. At Morere Hot Springs heavy rain caused severe damage, with a major slip bursting a main pipe and closing the reserve, possibly for more than a week. In Mt Maunganui, slips closed more of the tracks on Mauao, with some tracks still closed after the January storms.

On 28 April, a large slip in Napier, between Bluff Hill and the port, blocked the railway line as well as the road in both directions, and 18 homes above the slip were evacuated. Mahia was completely cut off by a slip. A group of eight trampers was evacuated by helicopter from Whirinaki Forest Park where they had been trapped for three days by the bad weather. On 29 April, Aramoana (Hawkes Bay) was still completely cut off, and food parcels were dropped by air. The historic building, Aramoana Woolshed, was reported to have been damaged by a very large slip, which lifted it from its foundations. In Northland, the small two-lane bridge on SH1, 2 km north of Te Kao, was impassable after being damaged by flooding, and the Mangonui waterfront was also flooded.

On 2 May, heavy rain caused flooding in Kaeo, and reduced SH10 to one lane north of Kaeo after a section of the road slumped by 60 cm. In Houhora Harbour the storm sank a launch at its mooring. Whangarei Harbour was closed for shellfish gathering after the heavy rain caused overflows from the city's sewerage system. In the Western Bay of Plenty, the heavy rain caused surface flooding in many areas, and slips on SH33 near Paengaroa, and on No3 Rd, Te Puke.

Heavy rain caused flooding in Sumner on 7 May, and many homes with roofs damaged by the earthquake suffered more water damage. Heavy rainfalls were also observed on the 7th in Otago. On 8 May, heavy rain over a 12 hour period caused slips and surface flooding, and blocked drains in Alexandra and Dunedin. On the Otago Peninsula, multiple small slips closed Portobello Road between Dunedin and Macandrew Bay, as well as Highcliff Road. More slips and fallen trees blocked roads across the harbour at Carey's Bay, and at least one house suffered significant damage. Parts of SH1 near Waimate were covered in surface water, with flooding at the intersection of SH1 and SH82, and many buildings in the town were flooded. Local roads were disrupted by slips and flooding, and at least five areas through the Waimate Gorge were washed out.

On 11 May, a "boil-water" notice was issued for Patearoa, Ranfurly, Omakau, Naseby and Lake Roxburgh residents after the heavy rain on 8 May discoloured water supply sources. At Omokoroa, near Tauranga, a huge slip came down leaving a house near the edge of a cliff.

Heavy rain in Eastland on 13 May caused slips and flooding, closing SH2 at Waimana, and causing several slips on SH35, the coast road north of Opotiki. The wet weather was also blamed for the sudden appearance of large potholes along SH3 in Waiwhakaiho Valley just out of New Plymouth.

On 15 May, heavy rain caused flooding in Wellington, with SH2 closed by a slip in Hutt Valley, and a slip near Johnsonville blocking train tracks and stopping services for several hours.

Flooding closed some rural roads in Southland on 19 May. Heavy rain also flooded farmland north of Invercargill, and closed several roads, on May 20.

On 25 May, heavy rain caused flooding in Ferntown, Golden Bay and around Sharlands Creek in Nelson. On the 26th, further heavy rain flooded SH6 at Brightwater and between Havelock and Rai Valley, and SH60 at Takaka, with flood warnings issued for SH63 between Renwick and St Arnaud. Houses were evacuated at Hope and Brightwater. A house was evacuated in Nelson after a massive slip undermined its foundations. Slips closed the Takaka Hill Road, Matai Valley Road, and SH6 at Havelock. Further north, there was severe surface flooding in the northbound lanes of the Waikato Expressway at Rangiriri. Surface flooding up to 600 mm deep was reported in Tokoroa. In the Far North, SH1 was closed at the Rangiahua Bridge which was under water. SH1 was also closed by flooding between Pakaraka and Kaitaia. Surface flooding also covered SH10 at Kaeo.

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

Location	Extreme 1-day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Whitianga	159	Mar-21st	1961	2nd-highest
Timaru	44	Apr-04th	1990	4th-highest
Alexandra (Pioneer)	67	May-07th	1983	Highest

- **Temperature**

Heat wave conditions were experienced on 2 March and 4-5 March across the country, and on 1 May on the West Coast and in Nelson, with multiple locations recording in excess of 25°Celsius during these events. Leigh experienced its highest autumn temperature on record on the 4th of March (26.9°C).

The highest temperature recorded in autumn was 31.4°C recorded at Christchurch on 4 March. The lowest autumn temperature observed was -5.9°C, at Ranfurly on 28 April.

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

Location	Extreme maximum temperature (°C)	Date of extreme temperature	Year Records Began	Comments
Kaikohe	26.8	Mar-17th	1973	2nd-highest
Leigh	26.9	Mar-04th	1966	Highest
Hokitika	26.7	May-01st	1963	Equal 2nd-highest
Le Bons Bay	27.4	Mar-04th	1984	2nd-highest

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

Location	Extreme minimum temperature (°C)	Date of extreme temperature	Year records began	Comments
Kaitaia	20.2	Mar-05th	1985	Equal 4th-highest
Kerikeri	20.7	Mar-05th	1981	Equal 2nd-highest
Kaikohe	20.5	Mar-05th	1973	Highest
Whangaparaoa	19.9	Mar-27th	1982	Highest
Martinborough	19.2	Mar-02nd	1986	2nd-highest
Hicks Bay	20.1	Mar-03rd	1972	4th-highest
Hawera	18.4	Mar-02nd	1977	2nd-highest
Ohakune	16.5	Mar-27th	1972	4th-highest
Wanganui	18.7	Mar-02nd	1987	Highest
Puysegur Point	16.5	Mar-14th	1978	3rd-highest
Waipara West	20.6	Mar-02nd	1973	Equal 3rd-highest

Wind

The highest gust observed during Autumn 2011 was 184 km/hr recorded at Southwest Cape on 12 May.

High winds on 2 March were observed in Nelson, Southland, Central Otago and Wellington. In the capital, strong winds knocked over street signs and blew out office block windows in central Wellington, closing Brandon Street; and near the Basin Reserve, a shop sign was blown into the path of oncoming traffic.

On 22 March, strong winds brought down a tree near Mangawhai, blocking the road. In the Auckland suburb of Parnell, firefighters had to cut through an oak tree, blown on to a house and car, to provide access to the occupants and in Otara a fallen tree brought down phone lines.

On 5 April, a mini tornado in South Auckland blew the roof off a storage unit, trapping a man in a nearby vehicle.

On 26 April, strong winds in Te Awamutu brought down power lines and trees, including an avenue of about 20 trees up to 6 m high, cut power to Cambridge and Te Awamutu, and damaged buildings. One business had a 6 m square window blown out and lost part of its roof. SH1 near Cambridge, and SH30 from Whakamaru to Atiamuri, were blocked by several downed trees. SH33 near Okere Falls, Te Puke was blocked by a fallen tree. SH3 was blocked between New Plymouth and Waitara after a roof was blown onto the road. Downed trees and power lines completely blocked SH5 north of Taupo, and the Naper-Taupo section of SH5 was also blocked by fallen trees. The whole of Taupo and some surrounding areas lost power mid-afternoon after power lines were brought down. In Taranaki, the drill ship, Noble Discoverer, which had been drilling on the Maui gas field, was disconnected from its well-head as a precautionary measure before forecast heavy winds hit the area. Only two flights were able to leave New Plymouth Airport because of the conditions. High winds around Shannon caused a vehicle towing a boat to jack-knife, with the wind lifting the boat clear of the trailer, throwing it into a nearby paddock. At Paraparaumu, a rail barrier was blown into the live overhead train wires and lodged there. In Wellington, the Bluebridge ferry collided with a fishing boat while trying to berth the ship in strong winds. The ferry was damaged and out of service for repairs. At Waikawa near Picton, a twister tore the roof off at least one house and left iron lying metres up a nearby hillside. Further south, high winds made driving difficult on SH6 between Harihari and Haast.

On 27 April, a Jetstar plane was damaged at Wellington Airport when a wind gust blew a container into the tail of the plane. In Tauranga, McLaren Falls Park was closed for a few hours because of high winds and tree damage. All flights in and out of New Plymouth Airport were cancelled because of the high winds. At Rotorua Airport an incoming trans-Tasman flight was diverted to Auckland. One of Pukekura Park's Fernery and Display Houses was closed after wind smashed 18 small glass panes, leaving shards among the plants. In Okato storm-force winds severed the town's power supply, and a huge kowhai tree was blown over on to a house. The lack of power meant the water treatment plant was out of action, and residents were asked to conserve water. Day one of the Subaru Proworld surfing tour event off the coast of Taranaki was abandoned. In Napier, a large gum tree was completely uprooted in the slushy ground and crashed, roots and all, on to a neighbouring property. The corner of the house was compressed, sections of the roof were badly damaged, and a decking area smashed. Telecommunication was lost to coastal Hawke's Bay areas like Waimarama. At the Pelorus Bridge campground, high winds blew a big black birch tree on to a caravan where an elderly couple were trying to sleep. Power to the area was also cut. Wind warnings were issued, particularly for high sided vehicles, for SH6 between Westport and Greymouth, and Hokitika and Haast.

On 3 May, a tornado crossed the Auckland region, killing a man in Albany and injuring many others. Significant damage was done to property and vehicles, and many trees were blown over. One tree, with a 1 m thick trunk, was picked up and thrown into a nearby house, crushing the roof. Road were closed, causing serious traffic problems.

On 11 May, storm damage resulted in a power outage lasting about an hour in western Auckland. At least two large trees were blown over, including one in the courtyard of St Matthew-in-the-City church in downtown Auckland, which toppled onto Wellesley Street, striking a man and causing minor injuries. Three ferry trips between Auckland and Waiheke Island were cancelled because of the high winds. In the Bay of Islands, yachts broke free of their moorings.

On 12 May, wind warnings were issued early morning for SH1 between Kaikoura and Waipara, SH80

between Pukaki and Mt Cook, SH8 at both Burke's Pass and Lindis Pass, and SH87 between Kyburn and Outram. During the day, serious damage was observed, with several people injured, 12,000 consumers losing power, roofs blown off buildings, cars damaged, and many roads closed between Mosgiel and Waikouaiti. One man was seriously injured when his car was badly damaged by a falling tree on SH1 near the Karitane turnoff. In Dunedin, people were blown over, and large trees were uprooted blocking Portobello Road, SH1 and SH88. Trucks were backed up on the northern motorway until fallen trees had been cleared. At Dunedin International Airport, six inbound and outbound flights were delayed, with one inbound flight cancelled, and two flights diverted, one to Invercargill and one to Queenstown. There was significant damage at Woodhaugh Gardens and in the Dunedin Botanic Gardens. The historic Matanaka Farm buildings at Waikouaiti were closed to clear fallen trees in the car park and along the tracks. In Hampden downed power lines arced, sparking together and setting the power pole's crossbeams alight. Fallen trees and power lines also closed SH97 in northern Southland.

On 15 May, a mini-tornado in Atawhai, Nelson battered homes and swept away two trampolines, one of which flew 60 m over a house and caught on the top of a power pole. Power was cut for about an hour and a half. Mini-tornadoes also struck Wellington and the Kapiti Coast, felling 30 m-tall trees.

On 16 May, wind warnings were issued for SH1 between Waiholo and Gore, SH90 between Raes Junction and Gore, SH8 between Raes Junction and Milton, and SH87 between Outram and Kyburn.

On 17 May, high winds again caused damage, pulling off half the roof of an operations building at Napier Port, and a section of roof from a Hastings farm house, and in the harbour, a yacht broke from its mooring. In Wairarapa, gales cut power, brought down branches, and blew a four-tonne truck off SH2 near Mt Bruce. In the Nelson region, gales brought down trees and closed roads, including the Motueka Valley Highway where several hundred pine trees snapped off, and about 40 of the trees fell across the road trapping two trucks between them. Other local roads, including SH60 over Takaka Hill, were closed for short periods. At Ngatimoti, also in the Motueka Valley, five large macrocarpa trees were blown over, crushing two caravans and a truck. In Invercargill, trampolines were lifted and trees blown over, and in Waimate, a hay bale was blown off a truck.

On 26 May, high winds in Wellington brought down a tree on to overhead lines on the Johnsonville railway line between Ngaio and Wadestown, halting trains. At Cooks Beach on the Coromandel Peninsula, two people were injured when a tree fell on their car in strong winds. In Waimate, the track to the White Horse monument was closed after high winds left more than four hectares of pine trees blown down along the mountain bike track and footpath.

Near-record high extreme wind gusts for Autumn were recorded at:

Location	Extreme wind gust speed (km/hr)	Date of extreme gust	Year records began	Comments
Cape Reinga	148	May-01st	1974	Equal 4th-highest
Kaikohe	85	Apr-18th	1986	Highest
Taupo	89	Apr-26th	1982	4th-highest
Paraparaumu	152	Mar-31st	1972	Highest
Levin	91	May-17th	1971	Equal 3rd-highest
Dunedin	115	May-12th	1972	3rd-highest

- **Lightning and hail**

On 4 April, a huge lightning storm lit up northeastern and coastal Wairarapa with massive flashes every two or three minutes for about half an hour. An even bigger thunder storm affected White Island, accompanied by a massive downpour.

On 28 April, the 110kV Transpower line, feeding power to the Far North, was hit by lightning between Maungatapere and Kaikohe, cutting power to more than 30,000 customers for a short time.

On 11 May, a Qantas passenger plane was struck by lightning soon after take-off from Auckland Airport. It re-landed safely.

On 15 May, MetService reported nearly 6000 lightning strikes throughout New Zealand, with a garage set on fire in Paraparaumu, and radio transmitters hit, interrupting broadcasts in Wellington. Power was also cut to properties in the Riwaka Valley after lightning struck transformers on the Takaka Hill.

- **Snow and ice**

On 16 May, SH94 between Te Anau and Milford Sound was closed overnight by snow.

On 18 May, road warnings for ice were issued for SH94, Lower Hollyford Valley to Milford Sound.

On 20 May, snow was well below Stratford Mountain House on Mt Taranaki, with at least 8 cm in the upper car park.

- **Fog**

On 3 May, thick fog obscured vision in the shipping lanes of Wellington Harbour. The fog also caused the cancellation of a flight from Blenheim.

On 5 May, heavy fog delayed 15 domestic flights in and out of Auckland but did not affect international flights.

On 24 May, fog caused cancellations and delays of both incoming and outgoing domestic flights from Auckland International Airport. Heavy fog in Christchurch also caused the diversion and cancellation of flights, including two international flights which were diverted to Wellington.

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