

National Climate Summary – May 2009: Early start to winter. Lowest May temperatures ever in many locations and double normal rainfall for most of South Island

- Temperature: Well below average over most of the country; many areas experiencing lowest recorded May temperatures.
- Rainfall: Well above normal rainfall in Northland, Wairarapa, Canterbury, Otago and Southland. Above normal everywhere else with the exception of western Bay of Plenty and Tasman Districts.
- Sunshine: Below normal along Taranaki and east coast of the North Island and Central Otago; above normal in Northland, Manawatu, the south-west of the North Island, and the West Coast.

Extremely low temperatures (between 2.0 and 2.5 °C lower than normal) were recorded over most of the South Island, lower parts of the North Island, King Country, Waikato, Auckland and parts of Northland. Most other locations experienced well below average temperatures (between 1.2 and 2.0 °C lower than normal). The national average temperature of 9.0°C was 1.6°C below the long-term average for May.

Double the normal rainfall for May (about 200 percent of normal) occurred in the Wairarapa, Canterbury and Otago. Much of Northland, Auckland, Wellington and Southland received at least 150 percent of normal May rainfall. Only western Bay of Plenty (about 60 percent of normal) and Tasman District (between 20 and 60 percent of normal) received below normal rainfall for the month.

Well above normal sunshine totals for May (greater than 125 percent of normal) were recorded in Northland, Manawatu, the south-west of the North Island, and the West Coast. Below normal sunshine (between 75 and 90 percent of normal) was received along the Taranaki and eastern coasts of the North Island, and in Central Otago.

There were several extreme events during the month. Many locations received record low maximum and minimum temperatures, particularly between the 9th and the 11th and on the 21st and 22nd of May. Heavy rainfall resulted in flooding in south Canterbury on the 17th, and in Otago on the 18th. High winds buffeted Wellington on the 15th, 17th, 23rd, 24th, 30th and 31st. Snow fell to low levels periodically during the month and tornadoes damaged property in Warkworth on the 11th, and in Taranaki on the 17th.

The average pressure pattern for May 2009 was dominated by the persistence of anticyclones (“highs”) over southern Australia and more depressions (“lows”) than normal passing over and to the east of New Zealand. The average May surface pressure over New Zealand was as much as 8 hPa lower than normal. The persistent anticyclones resulted in more southerly air flows than normal over New Zealand, which led to the low temperatures experienced during the month.

Further Highlights:

- The highest temperature during May 2009 was 23.0 °C recorded at Christchurch on the 16th. The lowest temperature during May was recorded at Hanmer Forest on the 12th, where the minimum temperature was -7.0 °C.
- The highest 1-day rainfall total for May was 321 mm recorded at Mt Cook on the 16th (the highest May 1-day total for this location, since records began in 1928).
- The wind gust of 167 km/hr recorded at Brothers Island (Marlborough Sounds) on the 17th was the highest gust for May for New Zealand.
- Of the six main centres, Tauranga was the warmest, driest and sunniest, and Wellington was the wettest.

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TEMPERATURE: LOWEST EVER FOR MAY FOR MANY AREAS, COLDER THAN NORMAL FOR ALL

The national average temperature of 9.0 °C for May 2009 was 1.6 °C below average for this time of the year. Temperatures were below average (by between 2.0 and 2.5 °C) over most of the South Island, lower parts of the North Island, King Country, Waikato, Auckland and parts of Northland. Most other locations experienced well below average temperatures (between 1.2 and 2.0 °C lower than normal). Record low May maximum or minimum temperatures were recorded in multiple locations throughout the country.

Extreme (high and low) May mean maximum daily air temperatures were recorded at:

Location	Mean maximum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Kaitaia	15.8	-2.5	1967	Lowest
Kerikeri	17.6	-0.9	1981	2nd-lowest
Dargaville	15.5	-2.8	1943	2nd-lowest
Whangarei	16.8	-1.2	1967	2nd-lowest
Warkworth	15.8	-1.8	1966	2nd-lowest
Whangaparaoa	15.9	-0.9	1982	2nd-lowest
Tiri Tiri Lighthouse	15.4	-1.4	1982	Lowest
Kumeu (Waitakere)	15.9	-1.7	1978	Lowest
Whenuapai	16.0	-1.6	1945	4th-lowest
Whitianga	16.5	-0.9	1962	3rd-lowest
Paeroa	15.8	-1.5	1947	4th-lowest
Whakatane	15.6	-1.5	1974	Lowest
Rotorua	13.2	-1.9	1964	Lowest
Taupo	12.4	-1.9	1949	4th-lowest
Auckland	15.8	-1.4	1959	4th-lowest
Pukekohe	15.2	-1.6	1969	2nd-lowest
Whatawhata	15.0	-1.4	1952	4th-lowest
Hamilton	14.8	-1.9	1946	4th-lowest
Port Taharoa	15.6	-1.5	1973	3rd-lowest
Te Kuiti	14.5	-1.9	1959	2nd-lowest
Taumarunui	13.6	-2.0	1947	3rd-lowest
Takapau Plains	11.9	-2.1	1962	3rd-lowest
Dannevirke	11.0	-3.5	1951	Lowest
Castlepoint	12.3	-3.2	1972	Lowest
Martinborough	12.6	-3.2	1986	Lowest
Ngawi	12.8	-2.8	1972	Lowest
Hicks Bay	15.2	-1.5	1969	2nd-lowest
Hastings	15.4	-1.4	1965	3rd-lowest
Paraparaumu	13.3	-1.8	1953	3rd-lowest
Wellington	12.9	-2.1	1962	2nd-lowest
Stratford	12.1	-2.0	1960	2nd-lowest
Hawera	13.2	-1.6	1977	2nd-lowest
Waiouru	8.2	-2.9	1962	2nd-lowest
Wanganui	13.9	-2.0	1987	2nd-lowest
Takaka	15.3	-0.6	1978	4th-lowest
Farewell Spit	14.6	-1.5	1971	2nd-lowest
Lake Rotoiti	10.2	-1.3	1965	3rd-lowest
Greymouth	13.0	-1.4	1947	4th-lowest
Puysegur Point	11.5	-0.6	1978	4th-lowest
Motueka	14.5	-1.3	1956	4th-lowest
Pelorus Sd, Crail Bay	13.9	-1.5	1982	2nd-lowest
Blenheim	13.9	-1.9	1932	3rd-lowest
Cape Campbell	12.3	-2.9	1953	2nd-lowest
Kaikoura	11.6	-2.6	1963	3rd-lowest
Arthurs Pass	6.7	-3.9	1973	Lowest

Cheviot	11.4	-3.6	1982	Lowest
Mt Cook	7.4	-3.5	1929	2nd-lowest
Winchmore	11.1	-2.6	1928	2nd-lowest
Waipara West	12.0	-2.8	1973	Lowest
Darfield	11.0	-3.3	1939	3rd-lowest
Christchurch	11.2	-3.1	1863	3rd-lowest
Lincoln	11.6	-2.7	1881	2nd-lowest
Le Bons Bay	10.1	-2.9	1984	2nd-lowest
Lake Tekapo	7.6	-3.2	1927	2nd-lowest
Orari	10.9	-2.7	1972	Lowest
Timaru	10.9	-2.8	1885	3rd-lowest
Oamaru	10.6	-3.5	1908	Lowest
Tara Hills	8.4	-3.2	1949	2nd-lowest
Wanaka	8.9	-3.2	1955	2nd-lowest
Dunedin	10.5	-2.3	1947	3rd-lowest
Manapouri	8.7	-3.0	1963	Lowest
Queenstown	8.7	-2.6	1871	4th-lowest
Lumsden	9.8	-2.3	1982	2nd-lowest
Gore	9.2	-2.2	1971	2nd-lowest
Tiwai Point	10.4	-1.7	1970	3rd-lowest
Balclutha	9.9	-2.6	1964	Lowest

Extreme (high and low) May mean minimum daily air temperatures were recorded at:

Location	Mean minimum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Kaitaia	8.1	-2.9	1967	2nd-lowest
Kerikeri	7.7	-1.8	1981	Lowest
Warkworth	7.2	-3.5	1966	Lowest
Whangaparaoa	9.8	-2.0	1982	2nd-lowest
Tiri Tiri Lighthouse	11.0	-0.8	1982	4th-lowest
Kumeu (Waitakere)	6.2	-2.0	1978	2nd-lowest
Pukekohe	6.7	-2.5	1969	3rd-lowest
Port Taharoa	8.1	-2.4	1973	Lowest
Te Kuiti	4.2	-2.1	1959	4th-lowest
Taumarunui	2.5	-2.4	1947	3rd-lowest
Turangi	2.7	-1.6	1968	4th-lowest
Castlepoint	8.1	-1.9	1972	2nd-lowest
Martinborough	4.5	-0.9	1986	4th-lowest
Ngawi	8.6	-1.5	1972	Lowest
Hicks Bay	9.2	-1.5	1969	3rd-lowest
Stratford	4.8	-1.5	1960	4th-lowest
Hawera	5.8	-1.4	1977	4th-lowest
Wanganui	7.2	-1.5	1987	3rd-lowest
Takaka	2.9	-2.8	1978	3rd-lowest
Westport	4.9	-2.6	1937	2nd-lowest
Hokitika	3.8	-2.1	1963	2nd-lowest
Greymouth	4.7	-2.4	1947	2nd-lowest
Motueka	1.5	-2.7	1956	Lowest
Pelorus Sd, Crail Bay	7.5	-1.1	1982	2nd-lowest
Appleby	1.7	-3.9	1943	Lowest
Blenheim	1.6	-2.8	1932	Lowest
Kaikoura	6.3	-1.5	1963	4th-lowest
Arthurs Pass	-1.0	-3.4	1973	2nd-lowest
Cheviot	1.7	-1.2	1982	4th-lowest
Le Bons Bay	5.4	-2.0	1984	2nd-lowest
Dunedin	1.5	-0.7	1947	2nd-lowest
Lumsden	0.9	-1.6	1982	4th-lowest
Tiwai Point	3.8	-2.0	1970	2nd-lowest
Balclutha	1.9	-1.9	1964	2nd-lowest

RAINFALL: VERY WET FOR MOST OF COUNTRY EXCEPT TASMAN AND WESTERN BAY OF PLENTY

Double the normal rainfall for May (about 200 percent of normal) occurred in the Wairarapa, Canterbury and Otago. Much of Northland, Auckland, Wellington and Southland received at least 150 percent of normal May rainfall. The following locations received record high May rainfall: Kumeu (Waitakere), Lake Tekapo, Timaru, and Tara Hills. The western Bay of Plenty (about 60 percent of normal) and Tasman District (between 20 and 60 percent of normal) received below normal rainfall for the month.

Extreme (high and low) May rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
Dargaville	219	209	1943	4th-highest
Warkworth	205	177	1966	3rd-highest
Kumeu (Waitakere)	179	174	1978	Highest
Martinborough	177	241	1924	3rd-highest
Hawera	162	175	1977	4th-highest
Mt Cook	809	220	1928	3rd-highest
Lake Tekapo	186	373	1925	Highest
Tara Hills	116	243	1949	Highest
Ranfurly	65	203	1943	4th-highest
Dunedin	168	241	1918	4th-highest
Manapouri	186	177	1961	3rd-highest
Lumsden	100	108	1982	3rd-highest
Balclutha	113	195	1964	3rd-highest
Takaka	65	39	1976	4th-lowest
Nelson	21	28	1941	4th-lowest
Appleby	24	31	1941	4th-lowest

SUNSHINE: ABOVE NORMAL FOR NORTHLAND, MANAWATU, HOROWHENUA-KAPITI, WELLINGTON AND WEST COAST; BELOW NORMAL FOR WEST AND EAST COAST OF NORTH ISLAND AND CENTRAL OTAGO

Well above normal sunshine totals for May (greater than 125 percent of normal) were recorded in Northland (with Kaitaia receiving record high sunshine), Manawatu, Kapiti, and the West Coast. Below normal sunshine (between 75 and 90 percent of normal) was received along the Taranaki and eastern coasts of the North Island, and in Central Otago. Record low sunshine for May was recorded in Martinborough and Stratford.

Extreme (high and low) May sunshine hours were recorded at:

Location	Sunshine (hours)	Percentage of normal	Year records began	Comments
Kaitaia	190	132	1985	Highest
Greymouth	165	166	1947	Highest
Cheviot	144	118	1983	3rd-highest
Turangi 2 Ews	123	84	1976	4th-lowest
New Plymouth Aero	119	83	1972	4th-lowest
Martinborough Ews	92	69	1986	Lowest
Stratford Ews	98	79	1963	Lowest

MAY CLIMATE IN THE SIX MAIN CENTRES

Temperatures for May were below average for Tauranga (the warmest of the main centres) and well below average for the other main centres (with Hamilton, Christchurch and Dunedin recording near-record low temperatures). Rainfall was well above normal in Wellington (the wettest of the main centres), Christchurch and Dunedin, above normal in Auckland, and near normal in Hamilton and Tauranga (the driest of the main centres). Sunshine totals were near normal everywhere except in Auckland and Hamilton, which had above normal sunshine. Tauranga received the most sunshine hours for the month.

May 2009 main centre climate statistics:

Location	Mean temp. (°C)	Departure from normal (°C)		Rainfall (mm)	% of normal		Sunshine (hours)	% of normal	
Auckland ^a	11.8	-2.0	Well below average	142	139	Above normal	153	110	Above normal
Tauranga ^b	12.0	-0.8	Below average	72	81	Near normal	169	105	Near normal
Hamilton	9.9	-1.4	3 rd lowest since 1946	91	86	Near normal	144 ^d	110	Above normal
Wellington	9.7	-1.8	Well below average	185	159	Well above normal	130	101	Near normal
Christchurch ^c	6.9	-2.0	3 rd lowest since 1863	145	277	Well above normal	134	95	Near normal
Dunedin	7.4	-1.9	4 th lowest since 1947	168	241	4 th highest since 1918	100	101	Near normal

^a Mangere ^b Tauranga Airport ^c Christchurch Airport ^d Ruakura

HIGHLIGHTS AND EXTREME EVENTS

• Temperature

The highest temperature during May 2009 was 23.0 °C recorded at Christchurch on the 16th (not a May maximum temperature record for this location). There were only two locations in New Zealand that recorded near-record high minimum temperatures during the entire month, Kaikoura and Fairlie on the 17th, and no locations at all that had near-record high maximum temperatures.

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

Location	Extreme minimum temperature (°C)	Date of extreme temperature	Year Records began	Comments
Kaikoura	14.8	17th	1972	4th-highest
Fairlie	8.0	17th	1972	Equal 4th-highest

The lowest temperature during May was recorded at Hanmer Forest on the 12th, where the minimum temperature was -7.0 °C (not a record for this location). There were several locations that recorded record-low minimum and maximum temperatures for May (see tables below).

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

Location	Extreme minimum temperature (°C)	Date of extreme temperature	Year Records began	Comments
Kaitaia Observatory	4.7	24th	1985	Equal 3rd-lowest
Kerikeri Ews	3.0	22nd	1981	Equal 3rd-lowest
Warkworth Ews	0.1	22nd	1966	Lowest
Whangaparaoa Aws	5.4	21st	1982	Lowest
Te Puke Ews	-1.0	22nd	1973	Equal 2nd-lowest
Whakatane Aero Aws	-1.6	22nd	1975	2nd-lowest

Rotorua Aero Aws	-2.9	22nd	1964	Lowest
Taupo Aws	-4.1	22nd	1949	3rd-lowest
Pukekohe Ews	-0.5	22nd	1969	3rd-lowest
Port Taharoa Aws	2.0	21st	1973	Lowest
Te Kuiti Ews	-2.5	22nd	1959	3rd-lowest
Taumarunui Aws	-4.0	22nd	1947	3rd-lowest
New Plymouth Aws	-0.8	22nd	1944	Lowest
Ngawi Aws	4.6	28th	1972	4th-lowest
Hicks Bay Aws	1.7	22nd	1969	3rd-lowest
Hastings Aws	-2.4	22nd	1965	2nd-lowest
Waipawa Ews	-4.2	22nd	1945	2nd-lowest
Wairoa, North Clyde Ews	-0.2	22nd	1964	4th-lowest
Stratford Ews	-1.8	22nd	1960	Equal 2nd-lowest
Waouru Aws	-6.1	22nd	1962	4th-lowest
Wanganui Aws	1.3	28th	1987	Equal 4th-lowest
Hokitika Aero	-1.8	12th	1963	2nd-lowest
Pelorus Sd, Crail Bay	2.0	21st	1982	3rd-lowest
Blenheim Aero Aws	-4.7	21st	1932	Lowest
Le Bons Bay Aws	0.8	21st	1984	3rd-lowest
Dunedin Aero Aws	-4.9	3rd	1947	3rd-lowest
Balclutha, Telford Ews	-4.5	2nd	1964	Equal 3rd-lowest

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

Location	Extreme maximum temperature (°C)	Date of extreme temperature	Year Records began	Comments
Kaitaia	12.7	11th	1972	Equal lowest
Kerikeri	12.0	11th	1981	Lowest
Kaikohe	11.8	11th	1973	4th-lowest
Dargaville	11.4	2nd	1951	Lowest
Whangarei	11.8	2nd	1967	Lowest
Warkworth	11.5	21st	1966	2nd-lowest
Whangaparaoa	11.9	21st	1982	Lowest
Kumeu (Waitakere)	11.2	2nd	1978	Lowest
Whenuapai	12.0	2nd	1951	Equal 3rd-lowest
Whitianga	12.2	21st	1972	4th-lowest
Paeroa	11.0	22nd	1972	3rd-lowest
Rotorua	9.5	22nd	1972	4th-lowest
Pukekohe	11.2	11th	1972	4th-lowest
Whatawhata	8.8	22nd	1952	Equal 2nd-lowest
Ruakura	8.0	22nd	1940	Lowest
Hamilton	7.0	22nd	1946	Lowest
Port Taharoa	11.3	11th	1974	3rd-lowest
Te Kuiti	8.4	22nd	1959	Lowest
Taumarunui	8.3	22nd	1947	4th-lowest
Takapau Plains	5.1	31st	1972	2nd-lowest
Dannevirke	5.0	31st	1951	Lowest
Castlepoint	7.7	31st	1972	Lowest
Martinborough	7.4	21st	1986	Lowest
Ngawi	9.3	20th	1972	Lowest
Hicks Bay	11.0	31st	1972	2nd-lowest
Napier	8.7	31st	1940	Equal 3rd-lowest
Waipawa	7.5	31st	1945	2nd-lowest
Wairoa	10.0	31st	1972	Equal 3rd-lowest
Paraparaumu	8.3	31st	1972	3rd-lowest
Levin	8.9	31st	1950	4th-lowest
Wellington	9.7	31st	1972	4th-lowest
Wallaceville	7.3	31st	1972	2nd-lowest
Stratford	5.4	31st	1972	Equal lowest
Hawera	8.5	20th	1977	3rd-lowest
Waouru	1.5	31st	1972	Equal lowest
Wanganui	8.5	31st	1972	Lowest

Takaka	11.0	10th	1978	4th-lowest
Farewell Spit	11.3	10th	1972	3rd-lowest
Haast	6.3	9th	1949	Lowest
Blenheim	8.5	31st	1972	Equal 3rd-lowest
Hanmer Forest	1.8	31st	1972	2nd-lowest
Kaikoura	6.3	10th	1972	3rd-lowest
Arthurs Pass	0.2	31st	1973	2nd-lowest
Cheviot	4.9	10th	1982	Lowest
Winchmore	4.8	10th	1928	2nd-lowest
Waipara West	5.5	10th	1973	2nd-lowest
Darfield	4.2	10th	1954	2nd-lowest
Christchurch	5.4	20th	1863	Equal 3rd-lowest
Lincoln	6.0	20th	1881	4th-lowest
Le Bons Bay	5.6	10th	1984	2nd-lowest
Woodbury	5.0	28th	1973	2nd-lowest
Orari	4.4	28th	1972	Lowest

- **Heavy rain and flooding**

The highest 1-day rainfall total for May was 321 mm recorded at Mt Cook on the 16th (the highest May 1-day total for this location, since records began in 1928). Record high 1-day rainfalls for May were also recorded at Lake Tekapo, Woodbury, Timaru, and Tara Hills.

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
Kerikeri	102	26th	1981	2nd-highest
Arthurs Pass	214	16th	1906	2nd-highest
Mt Cook	321	16th	1928	Highest
Lake Tekapo	88	16th	1925	Highest
Woodbury	150	5th	1973	Highest
Tara Hills	70	16th	1949	Highest
Manapouri	37	14th	1963	3rd-highest

On 14 May, rain in Southland closed SH99 between Riverton and Invercargill, and SH6 was reduced to one lane at Makarewa Bridge. Several other minor roads were also closed. Access to Toko Mouth in Southland was restored on 14 May after flooding closed the road for three days.

On 17 May, SH1 south of Ashburton, was closed for several hours after the Rangitata River burst its banks. The main railway line between Rangitata River and Temuka was also closed by flooding, delaying three freight trains. Inland, Omarama had water up to 1 m deep in places, after a stopbank designed to cope with a 100-year flood was overtopped. About 30 people were evacuated from the camping ground, along with three residents living near the river. A major slip closed SH8, on the Omarama side of the Lindis Pass.

On 18 May, farmers used boats to rescue 150 sheep, stranded by the flooded Clutha River at Barnego, near Balclutha. The Skippers Road in Queenstown was closed until further notice, after slips and washouts at various locations. The previous three days of rain had also damaged many roads in the Queenstown Lakes area, with access requiring four-wheel drive vehicles.

On the morning of 20 May, a 12 m stretch of Whitewash Head Road above Scarborough in Christchurch gave way following heavy rainfall. Vehicle access was affected to 23 homes.

On 24 May, residents were evacuated from two houses after a slip in Sumner, Christchurch. In Otago, a slip on Portobello Rd disrupted traffic for about an hour and a-half. And further north, a slip on the Rimutaka Hill Road partly blocked both lanes, but was eventually cleared.

- **High winds and tornadoes**

The wind gust of 167 km/hr recorded at Brothers Island (Marlborough Sounds) on the 17th was the highest gust for May for New Zealand.

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

Location	Extreme wind gust speed (km/hr)	Date of extreme gust	Year Records began	Comments
Cape Reinga	150	8th	1974	3rd-highest
Kaikohe	83	8th	1986	Equal highest
Hawera	82	24th	1986	4th-highest
Milford Sound	120	10th	1974	4th-highest
Blenheim	93	17th	1972	2nd-highest

Strong winds buffeted Wellington on 15 May, damaging power lines and cutting power for a few hours to 2500 homes in Karori and Makara. Four domestic flights into the capital were cancelled and another four were diverted to other airports. Two flights out of the city were cancelled. Trees and fences were blown down, and a parked van was lifted up on to the footpath on Evans Bay Parade. A large glass roof panel on Miramar Library, and a glass veranda panel from an apartment above Taranaki St were damaged.

On 17 May, high winds blew a tree down across SH2 at White Pines Bush, about 15 km north of Napier. In Wellington, flying debris from gales knocked out power for 2-3 hours to about 3000 homes Upper Hutt, Lower Hutt, and Johnsonville. SH77 was closed to campervans and other high-sided vehicles because of the high winds.

On 20 May, wind gusts brought down a tree, blocking SH75 near Akaroa. Further north, the gales caused the delay or cancellation of Cook Strait ferries.

Southerly gales hammered Wellington over the weekend of 23-24 May, closing roads, tearing boats from their moorings, and damaging trees, roofs and power lines. Cook Strait ferries were cancelled, and flights were delayed, cancelled or diverted. Trees brought down power poles near Upper Hutt cutting power to about 1200 houses on 23 May. Power was restored to most homes after several hours, but a few customers were without power until the evening of the 24th. A fallen tree blocked SH2 at Tutira, 45 km from Napier, closing the road for at least two hours.

Eastern South Island, Wellington and eastern North Island were buffeted by high winds over the weekend of 30-31 May. Two teenage girls were rescued in atrocious weather and strong southerly winds kayaking off New Plymouth's East End Beach on 31 May.

- **Snow**

Snow fell on Milford Rd in Fiordland on 5 May, causing minor traffic disruptions.

Snow fell in Central Otago and the Southern Lakes area on 8 May, with 10 cm at Coronet Peak and 15 cm at the Remarkables ski field.

A cold front brought 10-20 cm of snow to inland Otago on 10 May. More than 80 people were trapped for several hours in three tour buses on the Lindis Pass, when it was closed overnight by snow and ice. SH87 from Outram to Middlemarch was also closed.. Both roads were re-opened on 11 May. Mt Hutt staff reported a base of 110 cm. after about 170 cm of snow was recorded in 10 days. In the North Island, Mount Taranaki had a snow base of up to 50 cm by 12 May, enough to consider opening the lower and learner's slopes and t-bar.

By 18 May, The Remarkables, Treble Cone, Cardrona, and Snow Park ski fields had received between 50 cm and 1 m of snow over the preceding three days.

Snow closed the Desert Road in the early hours of 20 May, and in Dunedin, Three Mile Hill Road was closed indefinitely and the Northern Motorway open to light vehicles only. SH87 between Outram and Middlemarch, SH85 between Palmerston and Kyeburn, and the Lindis Pass were also closed by snow.

On 21 May, SH4 between National Park and Raetihi, and the Desert Road were closed by snow and ice for a few hours. Some schools on the Central Plateau were closed for the day. Between 30 cm and 40 cm of snow fell on the upper slopes of Whakapapa ski field. In Taranaki, snow was reported in Stratford, and black ice caused many motor vehicle accidents. Manganui Ski Field was open with 12 cm of new snow.

Snow, slips and a fallen tree closed the highway between Opotiki and Gisborne on 31 May as wintry conditions brought snow and ice to the country's roads. SH2, the Waioeka Gorge Road, was closed and SH7, Lewis Pass, was closed to towing vehicles. Snow fell to sea level along Wellington's south coast and from Southland to Kaikoura, and blanketed high-country passes, including the Rimutaka Hill Road summit and Desert Road. Snow fell at Mt Hutt skifield adding another 15 cm to the more than 2 m of snow that had fallen in May, and snow settled to about 200 m inland and elsewhere around Canterbury, with about 8 cm on the ground near Springfield and in parts of Otago.

- **Hail**

On 11 May, thunderstorms and hail struck Tauranga, Whakatane and Opotiki with hail stones the size of a 20 cent coin, up to 10 cm deep in places, blocking drains and flooding several streets and houses. The hail cut a ragged swathe across kiwifruit orchards, devastating some orchards and bypassing others completely. At Papamoa School a ceiling collapsed and classrooms were flooded.

- **Lightning**

Wellington was hit by thunder, lightning and hail in the early morning of 6 May. Minor flooding affected the southern suburbs, and hail up to 5 cm deep was reported in the eastern suburbs.

Thunderstorms and hail affected Hamilton mid afternoon on 10 May.

Taranaki was affected by lightning strikes on 17 May, damaging transformers and downing powerlines, cutting power to 230 properties.

- **Waterspouts**

On 20 May, several large waterspouts were reported offshore from Papamoa between Motiti Island and Town Point, accompanied by very strong winds.

- **Tornado**

A tornado damaged homes in Warkworth on 11 May.

Taranaki was hit by a mini tornado on 17 May, with a trampoline flung 40 m, windows smashed, and about 20 trees flattened on a property in Opunake. Nearby 15 30-year old trees were knocked over, and three sides of a hay barn were flung 100 m across a paddock, leaving the hay stacked nicely.

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