

National Climate Summary – Autumn 2010: Warm & wet South Island, sunny North Island.

- **Temperature:** Above average for much of the South Island, and eastern coastal fringe of the North Island. Generally near average autumn temperatures elsewhere.
- **Rainfall:** Extremely wet in the southwest South Island; dry in Waikato and Manawatu-Wanganui. In the eastern South Island, a dry start to autumn but heavy rains last half of May.
- **Sunshine:** Very sunny in the eastern North Island. Cloudy for the West Coast and Fiordland.
- **Soil moisture:** Significant soil moisture deficits persisted through most of autumn in many areas of the North Island, Marlborough and Canterbury. Heavy rainfall at the end of May brought soil moisture to capacity in all regions, except Waikato and Manawatu-Wanganui.

During autumn, the El Niño event dissipated. March was extremely dry in the north and east of the North Island, and South Canterbury and Otago. April saw continued dryness over the North Island, but extremely large rainfalls for the southwest of the South Island, linked to enhanced northwesterly winds there. Significant soil moisture deficits continued during March and April for much of the North Island, Marlborough and Canterbury. However, in May, there was a change to stormy conditions, with more frequent northeasterly winds over the country. This produced extremely high rainfalls and several flood events in eastern regions of both Islands. By the end of May, soil moisture levels were at capacity in all regions except Waikato and Manawatu-Wanganui, which remained drier than normal.

Autumn mean temperatures were above average (between 0.5°C and 1.2°C above average) over much of the South Island, as well as along a coastal fringe in eastern areas of the North Island. In parts of Canterbury and Central Otago, seasonal temperatures were well above average (more than 1.2°C above average). Temperatures were generally near average elsewhere. The New Zealand national average temperature for autumn was 13.8°C (+0.5°C above the 1971-2000 autumn average).

Overall, it was a dry autumn in the Waikato and Manawatu-Wanganui regions (with rainfall between 50 and 80 percent of seasonal normal), but extremely wet in the southwest of the South Island (with totals more than 125 percent of autumn normal). In the east of the South Island, where autumn rainfalls were well above average in many areas (more than 150 percent of normal), most of the autumn rain fell in the last half of May. Elsewhere, autumn rainfalls were generally close to normal.

It was an extremely sunny autumn for the eastern and central North Island, with above normal sunshine totals (between 110 and 125 percent of autumn normal). In comparison, it was a cloudy autumn for Nelson, the West Coast, Fiordland, and parts of Otago, with sunshine totals less than 90 percent of seasonal normal. Elsewhere, sunshine totals were close to autumn normal.

Further Highlights:

- The highest temperature was 32.7°C, recorded at Cromwell on March 9th (a new autumn record) and the lowest temperature was -5.2 °C, recorded at Windsor on May 6th (not an autumn record).
- The highest 1-day rainfall was 314 mm, measured at Milford Sound on April 25th (not an autumn record).
- The highest wind gust was 216.8 km/hr, recorded at Baring Head, Wellington, on March 12th (a new autumn and all-time record at this site).
- Of the six main centres this autumn, Tauranga was the warmest and sunniest, Dunedin the coolest, Wellington and Tauranga equally the wettest, and Hamilton the driest.

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TEMPERATURES: ABOVE AVERAGE FOR MUCH OF THE SOUTH ISLAND, AND EASTERN COASTAL FRINGE OF THE NORTH ISLAND. GENERALLY NEAR AVERAGE ELSEWHERE.

Autumn mean temperatures were above average (between 0.5°C and 1.2°C above average) over much of the South Island, as well as along a coastal fringe in eastern areas of the North Island. In parts of Canterbury and Central Otago, seasonal temperatures were well above average (more than 1.2°C above average).

Temperatures were generally near average elsewhere. The New Zealand national average temperature for autumn was 13.8°C (+0.5°C above the 1971-2000 autumn average).

It was the warmest autumn on record at Whangaparaoa, Motueka and Appleby, since records in the vicinity began in 1982, 1956 and 1943, respectively.

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

Location	Mean maximum air temperature (°C)	Departure from normal (°C)	Year records began	Comments
Kaikohe	20.6	1.4	1973	2nd-highest
Whangaparaoa	21.1	1.9	1982	Highest
Tauranga	21.1	1.3	1913	4th-highest
Whakatane	21.1	1.0	1974	3rd-highest
Ngawi	19.0	1.2	1972	2nd-highest
Wallaceville	19.2	1.5	1939	3rd-highest
Takaka	19.7	1.2	1978	3rd-highest
Lake Rotoiti	16.4	1.4	1965	4th-highest
Motueka	20.6	2.0	1956	Highest
Nelson	19.1	1.1	1943	2nd-highest
Appleby	19.7	1.5	1943	Highest
Blenheim	20.2	1.4	1932	3rd-highest
Hanmer Forest	18.8	1.6	1906	4th-highest
Mt Cook	16.0	1.5	1929	3rd-highest
Winchmore	18.7	1.9	1928	2nd-highest
Waipara West	19.5	1.3	1973	3rd-highest
Christchurch	18.8	1.5	1863	2nd-highest
Lake Tekapo	16.7	1.8	1927	3rd-highest
Tara Hills	17.8	2.0	1949	2nd-highest
Cromwell	19.1	2.2	1949	2nd-highest
Alexandra	18.5	1.4	1983	2nd-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
Kaikohe	13.0	0.7	1973	4th-highest
Ngawi	12.7	0.9	1972	3rd-highest
Farewell Spit	12.1	1.8	1971	4th-highest
Reefton	7.6	1.1	1960	3rd-highest
Haast	9.3	1.1	1949	4th-highest
Darfield	8.1	1.5	1939	3rd-highest
Le Bons Bay	9.9	0.6	1984	3rd-highest
Cromwell	6.6	1.9	1949	2nd-highest
Alexandra	5.8	1.8	1983	Highest
Invercargill	6.7	1.0	1948	4th-highest
Turangi	5.5	-1.5	1968	3rd-lowest
Appleby	6.5	-2.1	1943	4th-lowest

RAINFALL: EXTREMELY WET IN THE SOUTHWEST OF SOUTH ISLAND, DRY IN THE WAIKATO AND MANAWATU-WANGANUI. IN THE EASTERN SOUTH ISLAND, A DRY START TO AUTUMN BUT HEAVY RAINS LAST HALF OF MAY.

Overall, it was a dry autumn in the Waikato and Manawatu-Wanganui regions (with rainfall between 50 and 80 percent of seasonal normal), but extremely wet in the southwest of the South Island (with totals more than 125 percent of autumn normal). In the east of the South Island, where autumn rainfalls were well above average in many areas (more than 150 percent of normal), most of the autumn rain fell in the last half of May. Elsewhere, autumn rainfalls were generally close to normal.

It was the driest autumn on record for Te Puke, Te Kuiti, Turangi and Ohakune (with around half of autumn normal rainfall), since records in the vicinity began in 1973, 1950, 1968, and 1961, respectively.

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

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
Manapouri	455	163	1961	3rd-highest
Te Puke	233	57	1973	Lowest
Taupo	138	57	1949	3rd-lowest
Hamilton (Ruakura)	145	51	1905	3rd-lowest
Hamilton (Airport)	167	57	1935	3rd-lowest
Te Kuiti	206	56	1950	Lowest
Taumarunui	169	49	1913	4th-lowest
Turangi	189	48	1968	Lowest
Ohakune	163	50	1961	Lowest

SUNSHINE: VERY SUNNY IN THE EASTERN NORTH ISLAND. CLOUDY FOR THE WEST COAST AND FIORDLAND.

It was an extremely sunny autumn for the eastern and central North Island, with above normal sunshine totals (between 110 and 125 percent of autumn normal). At Waipawa, Hawkes Bay, it was the sunniest autumn on record. In comparison, it was a cloudy autumn for Nelson, the West Coast, Fiordland, and parts of Otago, with sunshine totals less than 90 percent of seasonal normal. Elsewhere, sunshine totals were close to autumn normal.

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

Location	Sunshine (hours)	Percentage Of normal	Year records began	Comments
Turangi	553	114	1976	2nd-highest
Dannevirke	514	123	1963	3rd-highest
Martinborough	537	114	1986	2nd-highest
Waipawa	581	129	1945	Highest

AUTUMN CLIMATE IN THE SIX MAIN CENTRES

Of the six main centres this autumn, Tauranga was the warmest and sunniest, Dunedin the coolest, Wellington and Tauranga equally the wettest, and Hamilton the driest.

Autumn temperatures were above average for all of the main centres except Auckland and Hamilton (near average temperatures recorded), and sunshine totals were in the near normal range everywhere except

Tauranga (above normal sunshine hours experienced). Seasonal rainfalls were near normal for all of the main centres, except Hamilton (below autumn normal) and Christchurch (above autumn normal).

Autumn 2010 main centre climate statistics:

Location	Mean temp. (°C)	Departure from normal (°C)		Rainfall (mm)	% of normal		Sunshine (hours)	% of normal	
Auckland ^a	16.1	-0.1	Near average	246	86%	Near normal	501	104%	Near normal
Tauranga ^b	16.4	+1.1	Above average	298	92%	Near normal	622	116%	Above normal
Hamilton ^c	14.5	+0.3	Near average	177	64%	Below normal	494* ^g	103%	Near normal
Wellington ^d	14.2	+0.5	Above average	298	97%	Near normal	499	105%	Near normal
Christchurch ^e	12.6	+0.6	Above average	210	132%	Above normal	472	97%	Near normal
Dunedin ^f	12.5	+0.9	Above average	233	116%	Near normal	388	107%	Near normal

^a Mangere ^b Tauranga Airport ^c Hamilton Airport ^d Kelburn ^e Christchurch Airport ^f Musselburgh ^g Ruakura
 *3 hours of sunshine data missing; estimated seasonal total

HIGHLIGHTS AND EXTREME EVENTS

- **Heavy rain and flooding**

The highest autumn 1-day rainfall was 314 mm, recorded at Milford Sound on April 25th (not an autumn record there).

Heavy rain on 22 March caused slips in Fiordland, closing the Milford Sound Road. About 200 trampers were stranded in huts on the Kepler, Milford, and Routeburn tracks after landslides blocked the tracks.

Surface flooding and thunderstorms were reported on the Kapiti Coast, north of Wellington, on 24 March.

Heavy rain on 25 April caused flooding on the road to Milford Sound, stranding visitors.

On 26 April, flooding closed SH94 from Milford Sound to Te Anau, and from Te Anau east to Mossburn. SH97 was closed between Five Rivers and Mossburn, and SH6 between Kingston and Athol was affected by surface water. About 120 trampers were evacuated by helicopter from the Milford Track. Te Anau residents were without telephone links after flooding cut the main fibre optic cable at Whitestone Bridge at about 1.30 pm. An alternative radio link was set up about 7.30 pm. Mobile phone sites were also affected. A property in Lowther Rd, about 12 km north of Lumsden, was evacuated when floodwater flowed through the house. Fences on the property were also underwater. The Dart River breached its banks, flooding Kinloch Road, which was closed by the Queenstown Lakes District Council.

On 27 April, SH99 was closed between Underwood and Wallacetown. Thousands of hectares of farmland were under water after rivers overflowed, with many stock isolated on patches of higher ground. In Tuatapere, the Waiau River burst its banks flooding the Domain, and sending 950 mm of water through the rugby clubrooms. The domestic water supply and all electronic communication ceased at 1.33 am. Water supplies were re-instated about 8.45 am, but residents were asked to conserve water, and boil drinking water. On the Milford and Routeburn Tracks, several bridges were washed away, and there were many slips and washouts, causing DoC to close the tracks. Access roads into Mt Aspiring National Park were also damaged.

On 29 April, the high levels of Lake Wakatipu caused some roads and reserves on the Queenstown foreshore to be flooded, mainly due to wind-blown waves. At 8am on 30 April, Lake Wakatipu had risen to its "threshold" level where water overflowed on to foreshore streets and parks, but major flooding such as seen in 1999 was largely avoided because of flood protection measures.

On 10 May, the Awatuna and Waimea Creeks burst their banks, isolating Stafford Township, north of Hokitika, and flooding property.

On 13 May, heavy rain caused flooding in Rotorua.

On 16 May, Tapawera, south of Motueka, was flooded, with 22 families evacuated, some by helicopter. The Motueka River, and its tributaries, the Wangapeka and Baton Rivers, flooded over farmland, and closed roads, including Motueka Valley Highway, closed by a landslip.

On 21 May, heavy rain caused sewage to spill into Whangarei Harbour.

Heavy rain on 24 May caused severe flooding on Main North Road on the outskirts of Christchurch, and forced the closure of Willowbank Wildlife Reserve. Six kiwi were moved from the flooded nocturnal house. Flooding also occurred in the Bay of Plenty, with the evacuation of one family in Whakatane, and the main road between Whakatane and Ohope blocked by a large slip.

Flooding occurred in Tawa and Titahi Bay (near Wellington) after heavy rain on 25 May, with one person rescued from a submerged car. Further south, several properties and businesses in Richmond, north of Oamaru, were evacuated, a property in York Street Oamaru was evacuated, as was the Oamaru Camping Ground. Schools in Oamaru were closed, as was the freezing works. The Kakanui Bridge, 14 km south of Oamaru, was closed at 7 pm. SH1 north of Oamaru was closed at Waitaki Bridge, and at the SH83 junction, with no detours available. Its intersection with SH82 was closed, and SH82 and SH83 were also closed. South of Oamaru, SH1 was closed at Maheno, open at Hampden, but closed at Palmerston and Cherry Farm. The detour through Kurow was closed about 7 pm because of flooding at Georgetown and Duntroon. Many local roads were also flooded. Rural school bus services in North Otago and Waimate were cancelled, and rural schools in North Otago were all closed. In Dunedin City, sports grounds and some roads were closed by minor flooding, and a large slip closed Highcliff Road on Otago Peninsula. The heavy rain also caused problems with sewage back-up, resulting in the occupants of one house being evacuated, several other properties cleared, and pupils from Northeast Valley Normal School, and students and staff at the Otago Polytechnic Manaaki Student Centre, being sent home. The Temuka River flooded in parts, with low lying areas and some roads on its southern side under water. At Ardmore Airport, Auckland, the heavy rain caused a drain to collapse, exposing an old ammunition dump, fortunately only old shells and casings. In Napier, central city businesses were flooded, damaging stock in some cases.

On 26 May, the Avon River burst its banks causing minor flooding in Christchurch. Heavy rain resulted in a rock fall that blocked the entrance to Ngai Tahu Maori Rock Art site, near SH83 south of Duntroon, but fortunately did not damage the art. Construction work on a section of the Manuka Gorge, SH8 between Milton and Lawrence, was halted temporarily when the Manuka Stream flooded.

On 27 May, the inland road between Waiau and SH1, south of Kaikoura, was closed after heavy rain washed out the road at Lulu's Creek. Telephone links were lost in the Mt Terako and Whalesback area, near Mt Lyford.

On 28 May, residents in Aln Street, Oamaru were evacuated for one night after a landslip caused by saturated soil. Flooding also occurred in Henley on the Taieri Plains. The Danseys Pass Coach Inn manager and his young sons spent two days trapped in the Inn after heavy rain washed out part of the access road, and snow blocked the alpine route. A rough track past the washed-out section was cleared on 30 May.

On 29 May, heavy rain in Napier caused a large slip on Faraday Street, forcing the evacuation of seven residents, who were allowed home on the 30th after the road was re-opened. In other parts of Napier, surface flooding was up to a metre deep. Water schemes supplying several parts of Waitaki district were closed after contamination at their intakes. Affected areas included Palmerston, Awamoko, Dunback, Hampden/Moeraki, Herbert/Waianakarua, Lower Waitaki, Goodwood, and Kauru Hill. In north Otago, a landslip and other slumps also occurred in Moeraki, but affected properties were unoccupied. In Dunedin, land movement resulting from the heavy rain burst a water main, cutting supplies to MacAndrew Bay and Company Bay for several hours.

On 30 May, a major slip north of Macandrew Bay blocked Portobello Road on the Otago Peninsula between

Castlewood Road and Broad Bay.

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
Whangaparaoa	81	May-20th	1946	4th-highest
Kumeu	66	May-20th	1978	3rd-highest
Whakatane	153	May-24th	1952	2nd-highest
Rotorua	113	May-24th	1964	3rd-highest
Castlepoint	95	May-24th	1907	4th-highest
Waipawa	75	May-24th	1945	4th-highest
Routeburn	156	Apr-25th	1971	Highest
Arthurs Point	65	Apr-25th	1966	4th-highest
Te Anau	108	Apr-25th	1965	Highest
Manapouri	79	Apr-25th	1963	Highest
Plains Station	89	Apr-25th	1950	2nd-highest
Queenstown	68	Apr-25th	1890	Equal 4th-highest
Lumsden	52	Apr-25th	1982	2nd-highest

- **Temperature**

The highest autumn temperature was 32.7°C, recorded at Cromwell on March 9th (a new autumn record there). The lowest autumn temperature of was -5.2 °C, recorded at Windsor on May 6th (not an autumn record). The storm on 12 March caused plunging temperatures in Wellington and Kaikoura. MetService reported Wellington Kelburn temperatures plummeted from 18.5 °C to 8.5 °C within ten minutes, with a similar drop recorded at Wellington Airport.

Extreme daily minimum air temperatures were recorded at:

Location	Extreme minimum temperature (°C)	Date of extreme temperature	Year Records began	Comments
Martinborough	18.2	Mar-22nd	1986	Equal 3rd-highest
Puysegur Point	16.2	Mar-31st	1978	Equal 3rd-highest
Cheviot	18.4	Mar-22nd	1982	Highest
Le Bons Bay	17.0	Mar-27th	1984	Equal 4th-highest
Tara Hills	16.6	Mar-27th	1949	Equal 2nd-highest
Palmerston	15.2	Mar-14th	1972	Equal 3rd-highest
Cromwell	19.3	Mar-31st	1949	2nd-highest
Alexandra	16.3	Mar-31st	1983	4th-highest

Extreme daily maximum air temperatures were recorded at:

Location	Extreme maximum temperature (°C)	Date of extreme temperature	Year Records Began	Comments
Kaikohe	26.5	Mar-28th	1973	Equal 3rd-highest
Leigh	26.6	Mar-20th	1966	Highest
Whangaparaoa	27.0	Mar-05th	1982	Highest
Henderson	28.0	Mar-06th	1948	3rd-highest
Whakatane	28.3	Mar-11th	1975	2nd-highest
Opotiki	28.2	Mar-05th	1947	2nd-highest
Auckland	27.4	Mar-01st	1959	3rd-highest
Waikeria	29.5	Mar-05th	1977	2nd-highest
Mana Island	24.5	Mar-05th	1987	Equal 4th-highest
Takaka	27.7	Mar-19th	1978	4th-highest
Motueka	28.2	Mar-26th	1956	4th-highest

Pelorus Sound	26.8	Mar-27th	1982	2nd-highest
Appleby	27.8	Mar-15th	1943	3rd-highest
Arthurs Pass	25.1	Mar-08th	1978	2nd-highest
Mt Cook	28.4	Mar-15th	1929	Equal 4th-highest
Le Bons Bay	27.1	Mar-14th	1984	2nd-highest
Wanaka	30.0	Mar-08th	1955	2nd-highest
Queenstown	29.8	Mar-08th	1871	2nd-highest
Cromwell	32.7	Mar-09th	1949	Highest
Alexandra	32.0	Mar-09th	1983	4th-highest
Kumeu	13.2	May-20th	1978	Equal 3rd-lowest
Pukekohe	11.2	May-20th	1972	3rd-lowest
Takaka	8.8	May-27th	1978	Lowest
Farewell Spit	10.5	May-28th	1972	Equal lowest
Puysegur Point	8.0	May-28th	1978	3rd-lowest
Blenheim	7.8	May-28th	1947	3rd-lowest
Hanmer Forest	2.1	May-28th	1972	Equal 3rd-lowest
Arthurs Pass	1.0	May-27th	1978	4th-lowest
Cheviot	6.6	May-27th	1982	Equal 4th-lowest
Winchmore	5.1	May-27th	1928	Equal 2nd-lowest
Waipara West	5.7	May-27th	1973	3rd-lowest
Darfield	5.2	May-27th	1954	3rd-lowest
Le Bons Bay	6.7	May-27th	1984	3rd-lowest
Lumsden	4.4	May-27th	1982	4th-lowest

- **High winds and tornadoes**

The highest autumn wind gust was 216.8 km/hr, recorded at Baring Head, Wellington, on March 12th (a new all-time record at this site).

On 12 March a southerly storm moved up the east coast, with gale force winds in Wellington and Kaikoura. Trees fell across rail lines, blocking the Hutt Valley line north of Waterloo station, and damaging the overhead power and signalling. Fallen trees also blocked Paekakariki Hill Road. Trains and flights in and out of Wellington were disrupted, and a tug was used to manoeuvre the Cook Strait ferries in Wellington harbour. Power lines were blown down from Island Bay to Upper Hutt, and across to Paekakariki. Falling trees injured people in Carterton, and Rarangi near Blenheim. The course was shortened in an annual fundraising sailing race by the Royal Port Nicholson Yacht Club. Of the 13 keel boats taking part, three needed to be towed to shore, and three had to wait out the storm. One person fell overboard but was quickly rescued. Roofs were blown off buildings at St Bernard's College in Lower Hutt, and Samuel Marsden College in Wellington, and Time Cinema in Lyall Bay. Further south, Stewart Island Flights had to put on three extra flights, because all ferry sailings from Bluff to Oban were cancelled.

On 22 March, severe gales disrupted flights in and out of Wellington Airport, and brought down trees and phone lines. Two Cook Strait ferry sailings were cancelled, and the Eastbourne ferry service between Queens Wharf and Days Bay was also cancelled. At the Basin Reserve, during the cricket test match against Australia, the wind was strong enough to blow a pitch roller along the ground, along with several workers, when they attempted to remove a pitch cover.

On 24 March, gale force winds and heavy rain battered Wellington, delaying flights and damaging windows, roofs and power lines. A tornado was reported at Rutherglen, near Greymouth, felling trees and damaging property.

Gales on 13 May damaged property, downed trees and caused power outages in Westport, Greymouth, Hokitika and Kumara. In Blaketown, a shed was dumped on a house roof, and in Cobden, a trampoline was blown over two houses and on to power lines. In South Westland, the quarterly Whataroa court sitting was cancelled, and Whataroa, Ross, and Kokatahi-Kowhitirangi schools were closed because of the power cuts. The Hokitika Aero Club lost its roof, a plane parked on the tarmac was spun around in the wind, and nearby property was damaged.

On 14 May, small tornadoes were reported between Oakura and New Plymouth. Power was cut to the

Oakura area, some properties suffered structural damage, and shelter belts were flattened.

On 18 May, a tornado was reported above Rotorua airport.

Extreme high wind gusts for autumn were recorded at:

Location	Extreme wind gust speed (km/hr)	Date of extreme gust	Year Records Began	Comments
Baring Head	217	Mar-12th	1991	Highest
Westport	113	May-13th	1973	Equal 2nd-highest
Hokitika	117	May-13th	1972	4th-highest
Milford Sound	141	Mar-22nd	1974	2nd-highest
Puysegur Point	146	May-07th	1986	Equal 4th-highest
Grassmere Salt Works	115	Mar-12th	1963	Equal 4th-highest

• **Fog**

On 14 May, widespread fog across the lower South Island led to the cancellation of flights in and out of Invercargill Airport at both ends of the day.

• **Lightning and Hail**

On 12 March, hail was reported in Culverden, North Canterbury, and Ward in Marlborough.

A thunderstorm struck Fiordland and Otago on 22 March. In the Queenstown Lakes region it blew up lightning protection arrestors, cutting electricity supply for about five hours in some areas.

On 14 May, thunder and lightning struck Taranaki, with surface flooding from the associated heavy rain.

On 15 May, lightning in the Bay of Plenty split a tree into four sections in Te Puke, and activated alarms in Tauranga. In Auckland a violent thunderstorm caused surface flooding, blew down trees, uplifted roofing tiles, and also generated a tornado.

On 17 May, MetService reported 118 lightning strikes between 4.14 pm and 7.50 pm in the Whangarei area.

• **Snow and ice**

On 27 May, snow closed SH87 between Middlemarch and Outram, SH85 between Palmerston and Kyeburn, and Porters Pass in Canterbury. Lee Stream School, near Outram, was also closed.

The Lindis Pass was closed by snow on 28 May, and the Lewis Pass closed to towing vehicles.

On 29 May the Crown range road was closed by snow. SH8 between Fairlie and Twizel was also covered in snow and closed to towing vehicles.

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