

# Dry and sunny across much of the North Island, wet in southern and western parts of the South Island

Rainfall	May rainfall was well above normal (more than 150% of normal) throughout Fiordland, western Southland, the Southern Lakes, Central Otago, and parts of the West Coast. In contrast, well below normal rainfall (less than 50% of normal) or below normal rainfall (50–79% of normal) was received throughout much of the North Island. It was especially dry about parts of Northland, the Coromandel, Bay of Plenty, Gisborne, Hawke's Bay and coastal Wairarapa, where rainfall was well below normal. Rainfall was near normal (within 20% of May normal) for parts of Manawatu-Whanganui, Nelson, inland Marlborough, North Canterbury, the Canterbury High Country and Dunedin.
Soil moisture	As of 1 June 2014, soils were wetter than normal throughout the eastern South Island, the Southern Lakes and Central Otago. Soil moisture was near normal for the remainder of the South Island. In the North Island, drier than normal soils persist for parts of Auckland and Northland, whilst soils about northern Gisborne, the Central Plateau and Hawke's Bay were also drier than normal. Soil moisture levels were near normal for most of the remaining areas of the North Island.
Temperature	Temperatures were abnormally high for much of the South Island and lower half of the North Island, where mean temperatures were typically above average (0.5-1.2°C above average). Near normal temperatures (within 0.5°C of May normal) were observed elsewhere. A cold snap struck in the last week of May, bringing hail and snow to low levels over the lower South Island. This was followed by frosts across the country, which were severe in inland areas of the South Island. Parts of Auckland and Northland observed record or near-record low minimum temperatures on 28 May.
Sunshine	Sunshine was well above normal (more than 125% of May normal) or above normal (110-124% of May normal) for most of the North Island. Areas of coastal Manawatu-Whanganui were the exception, where sunshine was near normal (within 10% of May normal). Sunshine was below normal in Fiordland (75-89% of May normal), well above normal in costal North Canterbury, and above normal in Canterbury north of Ashburton and South Otago. Remaining parts of the South Island observed near normal sunshine.

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#### Overview

May 2014 was characterised by lower pressures than normal to the south and west of New Zealand, with slightly higher than normal pressures to the north of the country. This pressure pattern resulted in an anomalous westerly flow over most of the country, bringing considerable rainfall to western and southern parts of the South Island, but relatively dry and sunny conditions for much of the North Island.

There was quite a contrast in rainfall observed across the country. Many southern and western parts of the South Island received well above normal rainfall for the month (more than 150% of normal), whereas much of the North Island observed well below normal or below normal rainfall (less than 50% of normal and 50–79% of normal respectively). It was especially wet about parts of Fiordland which received more than 200% of normal May rainfall. Considerable spillover of rainfall from the Main Divide occurred in western Southland, the Southern Lakes and Central Otago where rainfall was also well above normal. In contrast, Christchurch enjoyed a welcome respite from persistent heavy rainfall after an especially wet March and April, with the city observing below normal rainfall for May. Rainfall was also below normal for many eastern, central and northern parts of the North Island. It was an especially dry month about Kerikeri, Whangarei, Tauranga, Hicks Bay, Napier and Blenheim, with less than 30% of normal May rainfall recorded at these locations.

Despite a relatively dry month in Christchurch, soils there remained wetter than normal. Soils were also wetter than normal throughout the eastern South Island, Central Otago and the Southern Lakes. In the North Island, drier than normal soils persist for parts of Auckland and Northland, with considerable rainfalls required to bring soil moisture levels back to normal in those parts. Soils about northern Gisborne, the Central Plateau and Hawke's Bay are also drier than normal. Soil moisture levels were near normal for most of the remaining areas of the New Zealand.

Mean temperatures were above average (0.5 to 1.2°C) for the month of May across most of the South Island and parts of the southern and central North Island. The exception was the Central Plateau, Nelson, coastal Westland near the glaciers and coastal Southland, where temperatures were near normal (within 0.5°C of May normal). Well above average mean temperatures (more than 1.2°C above May average) were observed in limited inland parts of Westland, Canterbury and Otago, as well as some coastal locations in Canterbury. Air temperature anomalies over the North Island were generally more moderate than the South Island, with no locations observing well above average or well below average (more than 1.2°C below May average) temperatures. Temperature anomalies observed over the North Island were generally higher in southern and central parts compared to remaining areas of the island, with temperatures above normal and near normal for those parts respectively. The average or above average mean temperature observed throughout New Zealand in May occurred despite a cold snap that struck in the last week of the month, which brought snow to sea level over the southern South Island, and was followed by widespread frosts across New Zealand as an anticyclone became established over the country. During this time, a number of North Island locations observed record or near-record low minimum temperatures for the month of May (see Highlights and extreme events - Temperatures section). The nation-wide average temperature in May 2014 was 11.4°C (0.7C° above the 1971-2000 May average from NIWA's seven station temperature series which begins in 1909).

May was a particularly sunny month for most of the North Island, with well above normal (more than 125% of May normal) or above normal (110-124% of May normal) recorded there. Areas of coastal Manawatu-Whanganui and the Kapiti Coast were the exception, where sunshine was near normal (within 10% of May normal). Sunshine was below normal in Fiordland (75-89% of May normal), well above normal in costal North Canterbury, and above normal in Canterbury north of

Ashburton and South Otago. Remaining parts of the South Island observed near normal sunshine. Such sunshine anomalies are in keeping with the anomalous westerly flow occurring over most of the country in May: the effect of orography on this flow giving rise to increased cloud along western parts of the South Island and increased sunshine towards the east coast.

#### **Further Highlights:**

- The highest temperature was 26.0°C, observed at Napier on 6 May.
- The lowest temperature was -7.4°C, observed at Middlemarch on 30 May.
- The highest 1-day rainfall was 256 mm, recorded at Milford Sound on 22 May.
- The highest wind gust was 202 km/hr, observed at Cape Turnagain on 25 May.
- Of the six main centres in May 2014, Tauranga was the driest and sunniest, Auckland was the warmest, Hamilton was the wettest, Christchurch was the coolest and Dunedin was the cloudiest.
- Of the available, regularly reporting sunshine observation sites, the sunniest four centres<sup>1</sup> so far in 2014 (January to May) are: Whakatane (1262 hours), Tauranga (1153 hours), Auckland Albany (1090 hours) and Takaka (1077 hours).

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## Rainfall: Wet in southern and western parts of the South Island, dry throughout much of the North Island

May was a dry month for many parts of the North Island, but a particularly wet month for southern and western parts of the South Island. The contrast in rainfall observed across New Zealand is illustrated in the table below, with both near-record high and record or near-record low rainfall totals observed at locations across the country. It was an especially wet month in Milford Sound which recorded in excess of 1300 mm of rain: equivalent to twice the annual normal rainfall of Christchurch. In contrast, it was a very dry month in parts of both islands, with Kerikeri and Whangarei observing less than 25% of normal rainfall, whilst Wairoa (Hawke's Bay) recorded no rainfall at all.

Despite a relatively dry month in Christchurch, soils remained wetter than normal thanks to a record-breaking wet March and April there. Soils were also wetter than normal throughout the eastern South Island, Central Otago and the Southern Lakes. In the North Island, drier than normal soils persist for parts of Auckland and Northland, with a lack of substantial rainfall in May exacerbating the dryness experienced in those parts. Soils about northern Gisborne, the Central Plateau and Hawke's Bay are also drier than normal, while soil moisture levels were near normal for most of the remaining areas of the New Zealand.

<sup>&</sup>lt;sup>1</sup> New Plymouth sunshine is still omitted from this ranking while recent instrumentation changes are assessed.

#### Record<sup>2</sup> or near-record May rainfall totals were recorded at:

Location	Rainfall total (mm)	Percentage of normal	Year records began	Comments
High records or near-reco	rds			
Milford Sound	1337	224	1929	2nd-highest
Lumsden	127	142	1982	3rd-highest
Alexandra	55	172	1983	3rd-highest
South West Cape	183	152	1991	3rd-highest
Low records or near-recor	ds			
Kaitaia	43	31	1948	3rd-lowest
Kerikeri	31	20	1981	3rd-lowest
Kaikohe	41	30	1956	Equal 3rd-lowest
Whangarei	24	22	1937	Lowest
Masterton	36	44	1992	3rd-lowest
Wairoa	0	0	1964	Lowest
Blenheim	16	29	1941	4th-lowest

### Temperature: Abnormally high temperatures for much of the South Island and lower half of the North Island, near normal temperatures elsewhere

May temperatures overall weren't especially high or low across New Zealand compared to average for the time of year. This is highlighted in the following tables, with relatively few locations observing record or near-record mean, mean maximum and mean minimum temperatures respectively. It is likely that many more locations would have observed near-record high temperatures for the month of May had it not been for the cold snap and subsequent frosts which occurred throughout New Zealand during the last week of the month. Nevertheless, well above average mean temperatures (more than 1.2°C above May average) were observed in Masterton, Reefton, Culverden, Waiau, Cheviot, Lyttelton, Lake Tekapo, Timaru and Ranfurly. The nation-wide average temperature in May 2014 was 11.4°C (0.7C° above the 1971-2000 May average from NIWA's seven station temperature series which begins in 1909)<sup>3</sup>.

<sup>&</sup>lt;sup>2</sup> The rankings (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>.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.

<sup>3</sup> Interim value

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

Location	Mean air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-recor	ds			
Masterton	11.8	1.7	1992	3rd-highest
Ngawi	14.2	1.1	1972	3rd-highest
Reefton	10.1	1.6	1960	3rd-highest
Culverden	9.9	1.5	1928	4th-highest
Waiau	10.3	1.9	1974	2nd-highest
Cheviot	10.6	1.5	1982	Highest
Ranfurly	7.4	1.9	1975	3rd-highest

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

Location	Mean maximum air temp. (°C)	Departure from normal (°C)	Year records began	Comments
High records or near-reco	rds			
Kerikeri	19.5	0.9	1981	4th-highest
Whangaparaoa	18.1	0.9	1982	4th-highest
Ngawi	17.5	1.8	1972	3rd-highest
Waipawa	17.5	1.8	1945	3rd-highest
Stratford	15.7	1.4	1960	3rd-highest
Reefton	14.7	1.5	1960	4th-highest
Kaikoura	16.2	2.0	1963	3rd-highest
Waiau	17.2	2.6	1974	Highest
Cheviot	16.9	1.7	1982	2nd-highest
Waipara West	17.2	1.6	1973	4th-highest
Ranfurly	13.5	2.4	1975	3rd-highest

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

Location	Mean minimum air temp. (°C)	Departure from normal (°C)	Year records began	Comments		
High records or near-record	High records or near-records					
Masterton	5.9	1.8	1992	4th-highest		
Cheviot	4.4	1.3	1982	2nd-highest		
Ranfurly	1.4	1.4	1975	4th-highest		
South West Cape	8.1	0.8	1991	4th-highest		
Campbell Island	5.0	0.9	1991	3rd-highest		

### Sunshine: A very sunny month for much of the North Island and eastern parts of the South Island

May was a very sunny month across much of the North Island, as well as many parts of the South Island east of the Main Divide. Nine locations recorded record or near-record high sunshine hours for the month of May, from as far north as Kaitaia to as far south as Balclutha. Cheviot (North Canterbury) recorded a remarkable 152% of normal sunshine hours. Queenstown recorded 139% of normal sunshine hours in May, yet received 195% of normal rainfall for the month, suggesting the weather there was very changeable over the course of the month.

Of the available, regularly reporting sunshine observation sites, the sunniest four centres so far in 2014 (January - May) are: Whakatane (1262 hours), Tauranga (1153 hours), Auckland - Albany (1090 hours) and Takaka (1077 hours).

#### Record or near-record May sunshine hours were recorded at:

Location	Sunshine hours	Percentage of normal	Year records began	Comments
High records or near-recor	rds			
Kaitaia	177	116	1985	2nd-highest
Dargaville	165	124	1943	2nd-highest
Auckland (Mangere)	182	127	1963	2nd-highest
New Plymouth	180	125	1972	4th-highest
Dannevirke	151	126	1963	4th-highest
Takaka	184	114	1985	4th-highest
Cheviot	183	152	1983	Highest
Queenstown	122	139	1930	4th-highest
Balclutha	129	134	1964	2nd-highest

#### May climate in the six main centres

Temperatures were near average for the three northern-most main centres, but above average in Wellington, Christchurch and Dunedin. All main centres recorded well below normal or below normal rainfall for the month of May, with the exception of Dunedin which recorded near normal rainfall. The lack of rainfall in Auckland and Tauranga was accompanied by well above normal sunshine. Dunedin experienced above normal sunshine hours, whilst sunshine was near normal at the remaining main centres. Of the six main centres in May 2014, Tauranga was the driest and sunniest, Auckland was the warmest, Hamilton was the wettest, Christchurch was the coolest and Dunedin was the cloudiest.

May 2014 main centre climate statistics:				
Temperature				
Location	Mean temp. (°C)	Departure from normal (°C)	Comments	
Auckland <sup>a</sup>	14.4	0.4	Near average	
Tauranga <sup>b</sup>	13.5	0.2	Near average	
Hamilton <sup>c</sup>	11.4	-0.2	Near average	
Wellington <sup>d</sup>	12.4	0.7	Above average	
Christchurch <sup>e</sup>	9.6	0.6	Above average	
Dunedin <sup>f</sup>	9.9	0.6	Above average	
Rainfall				
Location	Rainfall (mm)	% of normal	Comments	
Auckland <sup>a</sup>	54	50%	Below normal	
Tauranga <sup>b</sup>	28	26%	Well below normal	
Hamilton <sup>c</sup>	80	75%	Below normal	
Wellington <sup>d</sup>	73	66%	Below normal	
Christchurch <sup>e</sup>	37 <sup>4</sup>	65%	Below normal	
Dunedin <sup>f</sup>	75	116%	Near normal	
Sunshine				
Location	Sunshine (hours)	% of normal	Comments	
Auckland <sup>a</sup>	182	127%	2nd-highest on record	
Tauranga <sup>b</sup>	207	125%	Well above normal	
Hamilton <sup>g</sup>	159	109%	Near normal	
Wellington <sup>d</sup>	137	102%	Near normal	
Christchurch <sup>e</sup>	152	109%	Near normal	
Dunedin <sup>f</sup>	125	115%	Above normal	

<sup>&</sup>lt;sup>a</sup> Mangere <sup>b</sup> Tauranga Airport <sup>c</sup> Hamilton Airport <sup>d</sup> Kelburn <sup>e</sup> Christchurch Airport <sup>f</sup> Musselburgh <sup>g</sup> Ruakura

<sup>&</sup>lt;sup>4</sup> Missing one day of data from 1 May.

### Highlights and extreme events

#### **Temperatures**

On 24 May, a southerly front struck abruptly in Dunedin with temperatures reportedly dropping  $10^{\circ}$ C (from  $15^{\circ}$ C to  $5^{\circ}$ C) in just five minutes. Very strong wind gusts and hail struck in conjunction with the front's arrival.

The lowest temperature was -7.4°C, observed at Middlemarch on 30 May. The highest temperature was 26.0°C, observed at Napier on 6 May.

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

Location	Extreme maximum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-reco	ords			
Kerikeri	24.1	6th	1981	2nd-highest
Whangaparaoa	21.6	6th	1982	4th-highest
Motu	21.9	4th	1990	Equal highest
Auckland (Mangere)	23.1	6th	1959	3rd-highest
Ngawi	24.3	26th	1972	Highest
Napier	26	6th	1868	3rd-highest
Stratford	20.6	19th	1960	Highest
Waiau	25.3	5th	1974	2nd-highest
Low records or near-reco	rds			
Whangaparaoa	12.4	27th	1982	Equal 4th-lowest
Greymouth	8.1	27th	1972	3rd-lowest
Le Bons Bay	5.1	26th	1984	Lowest
Campbell Island	1.2	24th	1991	3rd-lowest

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

Location	Extreme minimum (°C)	Date of extreme temperature	Year records began	Comments
High records or near-reco	ords			
Masterton	15.0	24th	1992	3rd-highest
Waione	15.3	7th	1993	4th-highest
Hawera	15.5	24th	1977	Equal 3rd-highest
Puysegur Point	14.0	20th	1978	3rd-highest
Culverden	15.0	6th	1930	3rd-highest
Waiau School	16.8	6th	1974	Highest
Cheviot	15.4	6th	1982	Highest

Waipara West	16.6	21st	1973	2nd-highest			
Christchurch (Airport)	14.8	6th	1863	2nd-highest			
Christchurch (Riccarton)	14.1	6th	1863	3rd-highest			
Ranfurly	10.5	29th	1975	Equal 4th-highest			
Low records or near-records							
Kaitaia	2.1	28th	1967	3rd-lowest			
Kerikeri	1.6	28th	1981	Lowest			
Kaikohe	3.7	27th	1973	Equal 3rd-lowest			
Warkworth	-1.4	28th	1966	Lowest			
Whangaparaoa	6.8	27th	1982	Equal 3rd-lowest			
Auckland (Whenuapai)	-2.3	28th	1945	Lowest			
Te Puke	-1.5	28th	1973	2nd-lowest			
Rotorua	-3.6	28th	1964	Lowest			
Auckland (Mangere)	0.4	28th	1959	2nd-lowest			
Port Taharoa	2.4	27th	1973	2nd-lowest			
Turangi	-5.3	28th	1968	Lowest			
New Plymouth	0.1	27th	1944	Equal 3rd-lowest			
Ngawi	0.0	27th	1972	Lowest			
Napier	-2.1	28th	1868	3rd-lowest			
Wairoa	-0.1	28th	1964	4th-lowest			
Le Bons Bay	0.7	27th	1984	4th-lowest			
South West Cape	1.7	25th	1991	4th-lowest			

#### Rain and slips

On 7 May, a motorist travelling on SH 8 over the Lindis Pass had a serious accident after hitting a large rock which had come down onto the road as a result of heavy rain. An unscheduled closure of SH 6 through the Haast Pass was caused by a rockfall at the Diana Falls slip site.

On 23 May heavy rain caused a slip on SH 73 near Arthur's Pass. The large size of the slip meant the road was remained closed until 26 May. SH 6 through the Haast Pass was closed by further rockfall at the Diana Falls slip site, with the road remaining closed until 26 May.

The highest 1-day rainfall was 256 mm, recorded at Milford Sound on 22 May.

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

Location	Extreme 1- day rainfall (mm)	Date of extreme rainfall	Year records began	Comments
Milford Sound	256	22nd	1929	2nd-highest
Waipara West	30	13th	1973	4th-highest
Lumsden	35	20th	1982	4th-highest
Alexandra	18	7th	1983	Equal 4th-highest

Invercargill	38	20th	1939	3rd-highest
Tiwai Point	42	20th	1970	3rd-highest
South West Cape	34	12th	1991	4th-highest
Campbell Island	31	28th	1991	Equal 3rd-highest

#### Wind

On 6 May, strong winds caused two trees to fall near Blenheim. One tree partially blocked Old Renwick Road, whilst the other downed tree on SH 1 in Tuamarina did not block the road.

On 8 May, drivers of motorcycles, campervans and high-sided vehicles were warned to take extra care on SH 1 at the Desert Road due to strong winds.

On 23 May, drivers of motorcycles, campervans and high-sided vehicles were warned to take extra care on SH 1 at the Desert Road, SH 2 on the Rimutaka Hill Road, SH 7 from Culverden to Springs Junction and SH 73 from Springfield to Arthur's Pass due to strong winds.

On 24 May, around 2000 homes were without power in the Wairarapa and Tararua districts. The loss of power was largely as a result of trees brought down by strong winds falling onto power lines. Farther south, the Bluff Oyster and Food Festival was cancelled with people forced to evacuate due to dangerous weather conditions and damaging winds. Traffic delays of up to two hours occurred just north of Bluff due to power lines which had come down over the road and entrapped a vehicle. Strong winds caused power outages in Millers Flat, Lawrence, Milton, Mosgiel, Outram, and parts of Waldronville, and a woman was injured when a tree fell on the car she was occupying near Mosgiel. 1790 Dunedin customers were temporarily without power as strong winds felled power lines there.

On 25 May strong winds struck across New Zealand. In the Wairau Valley, dozens of trees were flattened in Wyeburn Forest on SH 63. SH 6 between Haast and Franz Josef was closed due to strong winds and fallen trees on the road. Caution was advised to motorists travelling on SH 1 from Gore to Dunedin, SH 1 from Kaikoura to Blenheim, SH 7 from Hanmer turnoff to Springs Junction (Lewis Pass), SH 73 from Springfield to Arthur's Pass, SH 2 at the Rimutaka Hill and SH1 at the Desert Road due to strong winds. Strong winds continued through to the early hours of 26 May around Wellington, with the Fire Service attending 60 weather-related callouts in Wellington, Kapiti and Wairarapa overnight from 25 May to 26 May. On 26 May the morning train service from Palmerston North to Wellington ran 70 minutes late due to a tree blown over the line at Longburn.

On 28 May, drivers of motorcycles, campervans and high-sided vehicles were warned to take extra care on SH 73 from Springfield to Arthur's Pass and SH 2 over the Rimutaka Hill due to strong winds. The same warning was issued to motorists on SH 1 at the Desert Road on 29 May.

The highest wind gust was 202 km/hr, observed at Cape Turnagain on 25 May.

#### Record or near record May extreme wind gusts were recorded at:

Location	Extreme wind gust (km/hr)	Date of extreme gust	Year records began	Comments
Motu	83	24th	1991	Equal 2nd-highest
Castlepoint	154	24th	1972	2nd-highest
Paraparaumu	119	25th	1972	Equal 3rd-highest
Levin	89	24th	1971	4th-highest
Mt Kaukau (Wellington)	150	25th	1969	3rd-highest
Hawera	85	5th	1986	Equal 3rd-highest
Milford Sound	122	25th	1974	4th-highest
Nelson	91	5th	1972	Equal 3rd-highest
Lyttelton	93	26th	1980	3rd-highest
Tara Hills	82	25th	1985	Equal 4th-highest
Wanaka	80	28th	1992	Equal 2nd-highest
Manapouri	74	24th	1991	3rd-highest
Queenstown	93	29th	1972	2nd-highest
Gore	102	22nd	1987	2nd-highest
Tiwai Point	130	24th	1971	3rd-highest
South West Cape	159	25th	1991	2nd-highest

#### Snow and ice

On 24 May SH 94 between Te Anau and Milford Sound was closed because of snow.

On 26 May snow fell and settled to low levels in many areas of the South Island, but especially about Southland and Otago. Light snow was reported to sea level in Dunedin and Invercargill, whilst heavier falls occurred inland and at higher elevations including northern and eastern Southland, Queenstown Lakes District and Central Otago. Snow also settled at St Arnaud in the Tasman Distict, and at higher elevations of the Desert Road in the North Island. Several bus services in Dunedin were suspended, including all hill routes and school runs. Many Dunedin and Northern Southland schools were closed for the day. An emergency operation centre was established at Dunedin Hospital as staff and patients had difficulty getting to the hospital. Seven flights in and out of Queenstown Airport were cancelled. Staff attempting to access Cardrona ski area were forced to turn back at the 12 km mark on the access road due to at least 50 cm of snow on the road, whilst 50 cm of new snow was reported by staff at The Remarkables ski area. Numerous roads throughout the south were affected by snow, and several trucks slid off the northern motorway out of Dunedin prior to the road being closed. SH 1 from Dunedin to Waitati, SH 94 from Te Anau to Milford Sound (the Milford Road), the Crown Range road between Cardrona and Eastburn, SH 93 from Mataura to Clinton, SH 87 from Outram to Middlemarch, SH 85 from Palmerston to Kyeburn and SH 6 at the Upper Buller Gorge were all closed due to snow, whilst caution was advised on SH 1 from Dunedin to Gore, SH 6 from Frankton to Kingston, SH 6a from Frankton to Queenstown, SH 6 from Frankton to Cromwell, SH 6 from Wanaka to Luggate, SH 8 at the Lindis Pass, SH 8 from Alexandra to Roxburgh, SH 85 from Kyeburn to Omakau, SH 90 from McNab to Raes Junction, SH 8 from Raes Junction to

Milton and SH 75 from Little River to Barry's Bay (on Banks Peninsula) because of snow. In addition the Queenstown Lakes District Council alerted drivers to watch for black ice throughout the region, and drivers were warned to take caution on SH 6 from Lake Hawea to Makarora due to ice. Black ice was reported around Roaring Meg in the Kawarau Gorge between Queenstown and Cromwell, (SH 6), the Lindis River Bridge and Tarras areas (SH 8) and between Cromwell and Clyde (SH 8).

On 27 May frosts occurred throughout New Zealand, the frosts being especially heavy about inland parts of both the North Island and South Island. A number of vehicle accidents occurred and were attributed to the icy conditions, including a multi-vehicle crash on Dunedin's Northern Motorway which caused delays for other commuters. Other accidents occurred on icy streets within Dunedin city, Gore, and on the Wallacetown-Lorneville Highway in Southland. Schools in Dunedin, Queenstown and Arrowtown had a delayed start, allowing time for pupils and teachers to arrive given the delays to traffic caused by icy roads.

#### Lightning and hail

On 10 May a brief shower of hail occurred in Whangarei, with hailstones reported to be about 1 cm in diameter.

Thunderstorms struck Hawke's Bay on 14 May, where at least six car accidents were attributed to drivers not adjusting their driving to the poor weather conditions. A severe hailstorm was reported between Maraekakaho and Tikokino, in Central Hawke's Bay.

On 23 May a lightning strike caused a major fire at a remote historic homestead at Paradise near Glenorchy.

On 24 May a lightning strike caused damage to telephone services at Southland Hospital in Invercargill.

#### Cloud and fog

On 7 May, fog caused the delay, diversion or cancellation of numerous flights due to depart or arrive at Auckland Airport.

On 19 May, flights at Hamilton Airport were delayed, diverted or cancelled due to heavy fog.

On 20 May, flights at Auckland Airport and Hamilton Airport were delayed, diverted or cancelled due to fog.

#### For further information, please contact:

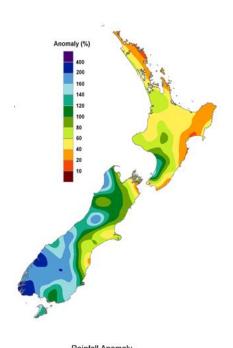
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May 2014 total rainfall expressed as a % of normal, illustrating the considerable contrast in rainfall anomalies observed across New Zealand.

Well above normal rainfall for western and southern parts of the South Island (150% or more of May normal rainfall – darker blue shades), but well below normal rainfall for eastern and northern parts of the North Island (less than 50% of May normal rainfall – orange and red shades.

Rainfall Anomaly, 9am 01/05/2014 to 9am 01/06/2014

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