

National Climate Summary – September 2007

- **Rainfall: Below normal in many areas, near or above normal in the parts of Northland, east of the North Island, parts of Otago and Fiordland.**
- **Temperature: Above average in the north of the North Island, and parts of the South Island.**
- **Sunshine: Above average in the south west of the North Island, western and inland areas of the South Island, below average in Northland and the Waikato**
- **Wind: Less wind than normal**

September 2007 was a relatively benign month with more anticyclones and less wind than normal, and less extremes. This resulted in less rainfall than normal in many areas, especially the west of the North Island. Temperatures were above average in many North Island areas.

Rainfall was less than 50 percent (half) of normal in Taranaki, Wanganui and Manawatu, Westland, Marlborough, Banks Peninsula and the Catlins. Soils were drier than normal in eastern Marlborough and north Canterbury. Temperatures were above average in the north of the North Island and the west of the South Island. The national average temperature of 10.5 °C was 0.1°C above average. The month was sunny in the Manawatu, Kapiti, Westland, inland areas of the South Island and Dunedin, but cloudy in Northland. September's climate patterns were produced by more anticyclones ('highs') over New Zealand and to the south and east, resulting in lighter winds than normal, but with more easterlies over the north.

Further Highlights:

- The lowest air temperature during the month was -6.0°C recorded at Fairlie on the 6th and Hanmer on the 7th, following cold southerlies early in the month. A grass minimum of -10.9 °C was recorded at Mt Cook Village on the 7th and 11th.
- The highest temperature during September 2007 was 24.0 °C recorded at Wanganui Airport on the 20th, the highest temperature recorded at that site.
- High rainfall at Kaitaia totalled 102 mm over 24 hours to 9am on the 19th.
- Snowfall occurred to low levels in the east of the South Island on 4 September, settling in low lying parts of Canterbury (6-8cm) in and around Ashburton, Methven, and Geraldine.
- Of the five main centres, Auckland was the warmest and wettest, Christchurch the driest and coldest and Wellington the sunniest.

Rainfall: Rainfall was about 50 percent (half) of normal in the west of the North Islands from Taranaki to Manawatu, as well as Marlborough, Banks Peninsula and the Catlins. Rainfall totals were less than 75 percent (three quarters) normal in many other areas. Normal or above normal rainfall was confined to northern Northland, Gisborne, the Strath Taieri in Otago and Fiordland.

Temperature: Mean temperatures were about 0.5 to 1.0 °C above average in the north of the North Island the west coast and inland parts of the South Island. The national average temperature was 10.5 °C (+0.1°C above average).

Sunshine: September sunshine hours were at least 120 percent of normal in Manawatu, Kapiti, Westland, inland South Canterbury and Dunedin. Sunshine hours were below normal in Northland and Waikato and slightly above normal elsewhere.

For further information, please contact:

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RAINFALL: BELOW NORMAL IN THE NORTH AND EAST OF THE SOUTH ISLAND, NEAR OR ABOVE NORMAL IN REGIONS EXPOSED TO THE WEST

Rainfall was about 50 percent (half) of normal in the west of the North Islands from Taranaki to Manawatu, as well as in Marlborough, Banks Peninsula and the Catlins. Totals were less than 75 percent (three quarters) in remainder of the North Island, except the east, Southland, Nelson, and north Canterbury. In other areas rainfall was near normal, and above normal in northern Northland, Gisborne, the Strath Taieri area of eastern Otago. Totals were 150% of normal or more in Tekapo, Queenstown and Ranfurly.

Low September rainfall was recorded at:

Location	September Rainfall (mm)	Percentage of normal	Year records began	Comments
New Plymouth Airport	36	31	1982	2 nd lowest
Le Bons Bay	18	29	1987	2 nd equal lowest
Nugget Point	17	22	1991	Lowest

TEMPERATURE: ABOVE AVERAGE OVER MUCH OF THE NORTH ISLAND, NEAR AVERAGE ELSEWHERE

Mean temperatures were about 0.5 to 1.0 °C above average over the north of the North Island, the west coast and inland areas of the South Island. Elsewhere temperatures were closer to normal. The national average temperature was 10.4°C (exactly normal).

SUNSHINE: WELL AVERAGE IN WELLINGTON, NELSON, AND INLAND SOUTH CANTERBURY

September sunshine hours were at least 120 percent of normal in Manawatu, Kapiti, Westland, inland South Canterbury the south of the South Island. Sunshine hours were below normal in Northland and Waikato, but generally normal to slightly above normal over the remainder of the country

High September sunshine was recorded at:

Location	September Sunshine (hours)	Percentage of normal	Year records began	Comments
Hokitika Airport	177	125	1964	193, 189, 188

SEPTEMBER'S CLIMATE IN THE FIVE MAIN CENTRES

August 2007 main centre climate statistics:

Location	Sep. mean temp. (°C)	Dep. from normal (°C)		Sep. rainfall (mm)	% of normal		Sep. Sunshine (hours)	% of normal	
Auckland	13.4	+0.5	Above normal	67 ^a	58	Below normal	155	104	Near normal
Hamilton	11.9	+0.5	Above normal	59	59	Below normal	134	92	Below normal
Wellington	10.4	-0.2	Near normal	59	59	Below normal	179	114	Above normal
Christchurch ^b	8.9	-0.4	Near normal	37	81	Below normal	163	99	Near normal
Dunedin	9.5	+0.2	Near normal	47	88	Near normal	158	123	Above normal

^a Owairaka ^b Christchurch Airport

Auckland was the warmest and wettest, Christchurch the coldest and driest, and Wellington the sunniest of the main centres. Rainfall was below normal everywhere except Dunedin. Temperatures were above normal in Auckland and Hamilton, and near normal elsewhere. Sunshine hours were above normal in Dunedin, below normal in Hamilton and near normal elsewhere.

HIGHLIGHTS AND EXTREME EVENTS

- **Temperature**

The lowest air temperature during the month was -6.0 °C recorded at both Fairlie on the 6th, and Hanmer Forest on the 7th, following cold southerlies. A grass minimum of -10.9 °C was recorded at Mt Cook Village on the 7th and 11th.

The highest temperature during September 2007 was 24.0 °C recorded at Wanganui Airport on the 20th, their highest on record for September.

- **High rainfall**

Rainfall at Kaitaia totalled 102mm over 24 hours to 9am on the 19th.

The heaviest fall of the month was 126mm over 24 hours to 9am on 29th at Milford Sound.

- **Snowfall**

Snowfall occurred to low levels in the east of the South Island on 4 September, settling in low lying parts of Canterbury (6-8cm) in and around Ashburton, Methven, and Geraldine (with several schools closed). Snow flurries occurred in Christchurch. Further inland, chains were required for motorists going over the Lindis and Crown Range Passes, with moderate to heavy snowfall (15-45cm) occurring on the Otago and Canterbury ski fields. Minor stock losses (affecting new lambs) occurred. Light snowfall also occurred in Twizel, Tekapo, Darfield, Springfield, and Windwhistle.

- **High winds**

The highest wind gust for the month was 135 km/h recorded at Castlepoint on the 4th during strong north westerlies.

- **Thunderstorms**

A trough passing over the north produced several thunderstorms in Auckland, Waikato and Waitomo with hail, 20mm in diameter and wind gusts reaching 110km/h, and many strikes of lightning. Apart from some strikes to power lines, and the odd roof little damage was reported.

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