



SIGNIFICANT WEATHER – September 2006

SUMMARY

Significant winds were reported in Queensland, New South Wales, Tasmania, South Australia and Western Australia.

Conditions were generally drier and windier than average throughout the Northern Territory which resulted in significant and widespread bushfire activity particularly north of Daly Waters. Bushfires were also reported in Queensland, New South Wales and Victoria.

Victoria experienced severe frosts near the end of the month. Queensland received widespread rainfall at the beginning of the month causing damage to sugar cane crops.

THUNDERSTORMS

Queensland

On the 10th a mid level cold pool caused thunderstorms to develop in the southeast. The Tewantin-Noosa area received heavy rain some trees were brought down.

At least one severe thunderstorm affected southeast Queensland in the afternoon of the 27th with the Toowoomba area reporting hail. About 15,000 homes lost power, mainly near Ipswich and Gatton. An associated wind gust of 91 km/h was recorded at the University of Queensland Gatton observing site. Albany Creek in Brisbane's west was also badly affected with 3,500 homes left without power at the height of the storm. Hail was also reported from some centres on the Sunshine Coast. Heavy rainfall was recorded at Moorina Alert (near Caboolture). Thunderstorms in the early evening

produced marble to golf ball sized hail at Warwick.

New South Wales

On the 3rd at Wee Jasper (Southern Tablelands) thunderstorms with 2cm hail were reported.

At Sydney, Observatory Hill recorded 30mm of rain on the 6th. Localised flooding was reported in the western suburbs of Sydney and the Audley Weir. At Windsor and Quakers Hill, thunderstorms with heavy rain and 2cm hail occurred.

At Moree on the 27th a thunderstorm with 3cm hail was reported in the township.

WIND

Queensland

Wind gusts greater than 90 km/h were recorded on the following days:

12th	Cape Moreton Lighthouse 93 km/h
	Double Is Point Lighthouse 102 km/h
27th	Uni of Queensland Gatton 91 km/h

New South Wales

Fires and severe winds were experienced in eastern New South Wales on the 24th. An extended period of gales and high temperatures brought significant fire and wind related damage to eastern New South Wales. A motorcyclist was killed by a falling tree branch brought down by a wind gust at Kangaroo Valley (Southern Highlands). At least six homes were destroyed by fire in the Picton, Oakville and Hawkesbury river regions near Sydney and hundreds more

evacuated. Fire emergencies were declared in north Baulkham Hills, Hawkesbury River, Redland (south of Newcastle) and Wollondilly. The highest wind gusts recorded were: Thredbo 137 km/h, Cabramurra 120 km/h, Bellambi 115km/h, Wollongong 111 km/h, Montague Island and Ulladulla 108 km/h, Camden 109 km/h, Scone and Badgerys Creek 104 km/h, Penrith 102 km/h and at Richmond and Murrurundi 100 km/h.

In the Sydney area on the same day, strong winds brought down trees and power lines causing widespread power outages in western suburbs. Power was lost to 100,000 homes in the southern highlands and the Illawarra due to strong winds, reaching 115 km/h at Wollongong and 109 km/h at Camden. There was widespread raised dust.

Wind gusts in excess of 100 km/h reported on the following days:

3rd Thredbo 109 km/h,
7th Norah Head 104 km/h,
Newcastle 109 km/h,
19th Thredbo 120 km/h
20th Thredbo 109 km/h
22nd Thredbo 111 km/h
24th Nowra 100 km/h
Bellambi 115 km/h
Thredbo 143 km/h
Ulladulla 107 km/h
Richmond 100 km/h
Badgerys Creek 104 km/h
Murrurundi 104 km/h
Albion Park 111 km/h
Penrith 102 km/h
Camden 109 km/h
Montague Island 107 km/h
Scone 104 km/h
Mount Ginini 105 km/h
Cabramurra 120 km/h

Victoria

On the 1st strong northwesterly winds ahead of a cold front produced the following severe wind gusts: Lookout Hill 91 km/h, and Wilsons Promontory 102 km/h.

On the 3rd strong westerly winds behind a cold front produced the following severe wind gusts: Mount Buller 98 km/h, Wilsons

Promontory 94 km/h, Mt Hotham 113 km/h, Falls Creek 98 km/h, Mt Baw Baw 105 km/h.

On the 9th the combination of a low pressure system and a strong high pressure system produced a strong southerly flow that produced the following severe wind gusts: Grampians 93 km/h, Lookout Hill 96 km/h and Mt Buller 94 km/h.

On the 19th strong and gusty north to north west winds ahead of a strong cold front produced severe wind gusts at the following locations: Dunns Hill 94 km/h, Colac 102 km/h, Lookout Hill 113 km/h, Point Wilson 113 km/h, Avalon 102 km/h, Swan Hill 107 km/h, Kilmore Gap 93 km/h, East Sale 94 km/h, Mt Buller 118 km/h, Falls Creek 124 km/h, Eildon 94 km/h, Omeo 100 km/h, and Mt Hotham 113 km/h. Minor damage to trees and buildings was reported from various locations across the state.

On the 22nd strong and gusty north to northwest winds ahead of a cold front produced the following severe wind gusts: Colac 91 km/h, Lookout hill 102 km/h, Dunns Hill 96 km/h, Grampians 93 km/h, Mt Hotham 113 km/h and Mt Buller 91 km/h.

On the 24th strong to gale force north to northwesterly winds shifted gusty west to southwesterly as a cold front crossed the state. Strongest wind gusts were Mt Hotham 133 km/h, East Sale 113 km/h, Avalon Airport 96 km/h, Melbourne Airport 94 km/h, Ballarat 87 km/h and Aireys Inlet 83 km/h.

Tasmania

A low pressure system developed south of the state causing severe winds throughout much of the state during the early morning of the 21st. Several houses around Tasmania suffered substantial roof damage and there were extensive power disruptions. Peak wind gusts of 174 km/h were recorded at Maatsuyker Island. In Hobart the strongest reported gust was 98 km/h. The winds intensified overnight and into the morning of the 22nd.

Wind gusts in excess of 110 km/h were reported on the following days:

1st Mount Wellington 152 km/h
Maatsuyker Island 139 km/h
Hartz Mountain 133 km/h

Scotts Peak Dam 131 km/h
 Droughty Hill 113 km/h,
 2nd Mount Wellington 126 km/h
 18th Mount Wellington 119 km/h
 20th Hogan Island 130 km/h
 Mount Wellington 119 km/h
 Maatsuyker Island 111 km/h
 21st Maatsuyker Island 174 km/h
 Mount Wellington 150 km/h
 Cape Grim 146 km/h
 Scotts Peak Dam 135 km/h
 Droughty Hill 126 km/h
 Hartz Mountain 119 km/h
 Hogan Island 113 km/h
 Mount Read 111 km/h
 22nd Cape Grim 133 km/h
 Tasman Island 131 km/h
 Maatsuyker Island 128 km/h
 Mount Wellington 126 km/h
 Hogan Island 124 km/h
 King Island Airport 124 km/h
 Droughty Hill 122 km/h
 Mount Read 119 km/h
 Maria Island 117 km/h
 Hartz Mountain 111 km/h
 23rd Cape Grim 111 km/h
 24th Hogan Island 128 km/h
 Tasman Island 119 km/h
 27th Droughty Hill 126 km/h
 Cape Grim 128 km/h
 Maatsuyker Island 126 km/h
 Mount Read 117 km/h
 Hogan Island 115 km/h
 28th Mount Wellington 119 km/h

South Australia

On the 19th a low pressure system passing south of the state produced gale force northwest winds at Lameroo for about 40 minutes.

Vigorous fronts and showers following the fronts resulted in severe wind gusts on the 22nd and 24th. The southeast of the state was worst affected on the 22nd with westerly wind gusts of 106 km/h at Naracoorte, 102 km/h at Cape Jaffa, 98 km/h at Coonawarra and 91 km/h at Robe. Estimated wind gusts of 100 km/h were also reported from Kangaroo Island. Severe west to southwest wind gusts were reported at Minlanton 95 km/h, Edithburgh 93 km/h and Cape Willoughby 91 km/h.

Western Australia

During the passage of a moderate cold front, Cape Leeuwin recorded a wind gust of 100 km/h on the 11th and Cape Naturaliste 93 km/h on the 12th. No damage was reported.

On the 21st during the passage of a moderate cold front, Cape Leeuwin recorded a wind gust of 102 km/h. No damage was reported.

FROST

Victoria

On the 24th a vigorous cold front moved rapidly across Victoria bringing strong winds across most of the State. Wind speeds at Shepparton averaged 30 to 50 km/h during the afternoon with wind gusts in excess of 70 km/h. There were reports of wind damage across southern parts of the state. This was also the day on which extensive wildfires occurred over New South Wales.

During the evening, winds decreased rapidly, allowing temperatures to fall to below zero throughout the Goulburn Valley during the morning of the 25th. Severe frosts resulted in major damage to the fruit crop which is highly vulnerable to freezing conditions at this time of the year. A minimum temperature of -1.2°C was recorded at Shepparton and -2.8°C at Wangaratta. Cold conditions persisted throughout the 25th and temperatures again fell to below zero throughout the valley on the morning of the 26th with minimum temperatures of -1.3°C being recorded at Shepparton and -3.3°C at Wangaratta, resulting in further damage to the fruit crop.

This event was extremely unusual in that conditions settled so rapidly after a day of strong winds across Victoria.

BUSHFIRES

Queensland

A large fire was reported at Kooralbyn (near Boonah) and another near Chinchilla which burnt out 120 hectares on the 24th.

New South Wales

On the 24th many large bushfires in and around Sydney destroyed several houses at Picton and 3 houses at Cattai. Several large bushfires were also reported on the Central Coast.

Victoria

A control burn on the 16th in the Murray-Sunset National Park in the Mallee district burned out of control. Wildfires were also reported in the Otways, near Mirboo North, Healesville, Kyneton, Echuca and Shepparton.

Northern Territory

In the first half of the month grassfires affected Darwin and adjacent rural areas. A large blaze also occurred in the Adelaide River region, affecting Tortilla Flats. From the 16th to the 18th large fires affected the Darwin River region. An area of approximately 39 square kilometres was burned and 13 farms, 9 structures and several vehicles destroyed. The estimated damage bill was one million dollars. Further south, extensive fires affected the region to the north and northeast of the Katherine township as well as Nitmiluk National Park. In central parts, fires affected areas around Wave Hill (Kalkarindji), Tennant Creek and a very large fire near the Queensland border east of Mittiebah. In the Alice Springs district fires to the east and northwest of Yuendumu required suppression efforts in the latter part of the month.

TEMPERATURE

Highest Mean Maximum Temperature for September

<i>Station</i>	<i>Actual °C</i>	<i>Previous Highest °C</i>	<i>Year</i>	<i>Years of Record</i>
<i>New South Wales</i>				
<i>Peak Hill</i>	24.3	23.9	1972	41
<i>Gulgong</i>	23.0	22.6	1972	36
<i>Cowra Research</i>	21.7	21.0	1972	63
<i>Bathurst Ag.</i>	20.4	19.9	1972	97
<i>Katoomba</i>	17.3	17.2	1928	99
<i>Orange Airport</i>	17.7	16.7	1972	38
<i>Orange Agr.</i>	17.3	16.3	2000	30
<i>Wellington</i>	24.0	23.9	1928	99
<i>Cowra A/P</i>	22.6	21.8	1972	40
<i>Yass</i>	19.9	19.6	1914	99
<i>Goulburn</i>	18.4	18.2	1999	35
<i>Charlotte Pass</i>	7.3	7.0	1998	76
<i>Tumbarumba</i>	18.2	17.3	2001	41
<i>Wagga Wagga</i>	21.6	20.6	1944	64
<i>Burrinjuck Dam</i>	20.9	19.3	2001	94
<i>Wyalong</i>	22.8	22.3	1972	56

Highest Mean Minimum Temperature for September

<i>Station</i>	<i>Actual °C</i>	<i>Previous Lowest °C</i>	<i>Year</i>	<i>Years of Record</i>
<i>New South Wales</i>				
<i>Sydney A/P</i>	13.2	12.8	2001	78
<i>Sydney Observatory Hill</i>	13.5	13.4	1998	147

Lowest Mean Maximum Temperature for September

<i>Station</i>	<i>Actual °C</i>	<i>Previous Lowest °C</i>	<i>Year</i>	<i>Years of Record</i>
<i>Northern Territory</i>				
<i>Alyangula Police</i>	29.7	29.9	2004	21

Lowest Mean Minimum Temperature for September

<i>Station</i>	<i>Actual °C</i>	<i>Previous Lowest °C</i>	<i>Year</i>	<i>Years of Record</i>
<i>Northern Territory</i>				
<i>Timber Creek</i>	17.2	17.5	2004	25

Highest Daily Maximum Temperature for September

<i>Station</i>	<i>Actual °C</i>	<i>Date</i>	<i>Previous Highest °C</i>	<i>Year</i>	<i>Years of Record</i>
<i>New South Wales</i>					
<i>Hume Reservoir</i>	28.4	19	27.7	1987	84
<i>Nelson Bay</i>	34.2	24	32.2	2003	38
<i>Western Australia</i>					
<i>Albany Airport</i>	27.9	29	27.8	1981	41
<i>Beverley</i>	33.8	29	32.0	1981	36

Brookton	33.1	29	31.1	1967	37
Corrigin	33.1	29	31.2	1987	49
Cunderdin	34.7	29	33.4	1987	56
Hyden	34.5	29	34.0	1981	33
Katanning Comp.	31.3	29	30.6	1946	49
Kellerberrin	34.5	29	34.4	1967	46
Lake Grace Comp.	32.1	29	31.7	1961	42
Manjimup	28.2	29	28.1	1961	46
Narembeen	34.0	29	33.4	1987	34
Ongerup	31.5	29	30.8	1990	39
Pearce	31.4	29	31.0	1967	48
Pingelly	32.6	29	29.0	1981	34
Port Hedland A/P	42.2	30	41.2	1998	59
Roebourne	42.1	30	41.8	1998	48
Wagin	31.8	29	28.9	1990	31

Highest Daily Minimum Temperature for September

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
Queensland					
Taroom PO	20.1	06	20.0	1980	50
Western Australia					
Bridgetown Comp.	15.5	10	15.1	1981	49
Corrigin	14.7	11	14.6	1977	49
Hyden	14.6	11	14.5	1996	33
Ongerup	14.9	11	14.3	1980	39
Northern Territory					
Curtin Springs	22.4	28	21.5	2005	40

Lowest Daily Maximum Temperature for September

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
New South Wales					
Kempsey	15.0	10	15.6	1975	99
Western Australia					
Badgingarra	12.0	07	12.2	1968	36
Goomalling	11.5	07	12.2	1971	30
Roebourne	23.0	09	25.0	1993	48

Lowest Daily Minimum Temperature for September

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
Victoria					
Echuca Aero	-1.0	26	-1.0	1995	126
Mangalore A/P	-3.6	25	-3.1	2002	47
Northern Territory					
Darwin Airport	14.3	01	14.4	2004	65
Mango Farm	9.1	01	9.4	2003	25
Timber Creek	10.4	01	10.9	1982	25

RAINFALL

Queensland

A combination of an upper trough moving northward from the southern interior and moist onshore winds from a high located in the Tasman Sea produced widespread rain and scattered showers in the first week of the month. This developed first in the south, then extended north to affect all eastern districts. A band stretching from the Cardwell Range/Seymour region (10-15 kilometres north northwest of Ingham) experienced falls of between 350mm and 680mm over a 72 hour period resulting in flash flooding, significant erosion and the closure of the Bruce Highway at the Seymour River. Falls over the remainder of the district were generally in the 100mm-250mm range. The rain impacted significantly on the sugar cane crush and additionally had a serious effect on newly planted crops in the worst effected areas. Parts of the south east coast, Capricornia coast, Herbert and north tropical coast received record totals for the month.

New South Wales

On the 7th Sydney had its wettest September day since 1883 and its third wettest September day since records began in 1859.

Highest Monthly Rainfall on Record for September

Station	Actual mm	Previous Highest mm	Year	Years of Record
Queensland				
Bamaga	72.0	37.0	1973	30
Hillgrove Stn	80.4	72.6	1947	106
Meringa Sugar Exp Stn	130.5	109.0	1998	73
Bemerside	213.4	172.8	1998	77
Cardwell Marine Pde	336.0	309.4	1926	135
Kangaroo Hills Stn	107.4	95.8	1910	97
Upper Stone Exelby	386.8	124.2	1998	67
Paluma Ivy Cottage	366.5	235.5	1997	37
Elphinstone Pocket No1	258.6	245.8	1998	51
Horse Shoe Bend	182.8	135.0	1998	35
Dalrymple Heights	181.7	153.7	1998	69
Karragarra Island	119.2	113.0	1959	51
Fordsdale	93.0	86.2	1976	54
Dunwich	149.8	120.1	1993	35
New South Wales				
Williamtown	160.0	155.1	1970	64
Wollombi	139.0	106.4	1995	53

<i>Cessnock (Nulkaba)</i>	135.9	109.3	1978	40
<i>Paterson</i>	161.4	118.2	1970	39
Western Australia				
<i>Bencubbin</i>	72.2	66.5	1958	92
<i>Bodallin</i>	55.2	52.4	1970	38
<i>Ilgarari</i>	21.3	12.7	1944	40
<i>Mallina</i>	26.2	22.4	1904	77
<i>Manfred</i>	45.0	32.8	1904	92
<i>Marillana</i>	43.8	27.2	1970	59
<i>Port Hedland A/P</i>	27.4	9.2	1984	64
<i>Westonia</i>	60.6	57.3	1996	91

Lowest Monthly Rainfall on Record for September

Station	Actual mm	Previous Lowest mm	Year	Years of Record
New South Wales				
<i>Ogunbil</i>	17.0	19.6	1987	48
<i>Gunning</i>	3.4	9.9	1932	120
<i>Berridale</i>	5.4	6.1	1968	59
<i>Tumut</i>	14.0	15.2	1914	120
<i>Yarrangobilly</i>	7.6	48.8	1994	100
<i>Caves</i>				
<i>Tibooburra</i>	0.0	0.0	Numerous	120
<i>Ournie (Waralla)</i>	22.8	27.3	1994	55
<i>Tooma</i>	15.3	18.2	1972	39
South Australia				
<i>Woomera</i>	0.0	0.4	1991	58
<i>Cleve A/P</i>	8.2	10.4	1981	44
<i>Coulta</i>	9.4	10.5	1916	130
<i>Cummins</i>	4.6	7.8	1936	93
<i>Darke Peak</i>	1.2	2.1	1948	93
<i>Elliston</i>	3.1	6.2	1981	125
<i>Kimba</i>	2.4	3.8	1948	86
<i>Kyancutta</i>	1.1	1.9	1948	77
<i>Lock</i>	3.0	7.6	1918	92
<i>Pt Neill</i>	2.4	4.6	1981	95
<i>Rudall</i>	1.4	7.6	1982	37
<i>Streaky Bay</i>	3.4	3.5	1904	142
<i>Ungarra</i>	4.8	7.3	1939	93
<i>Wharminda</i>	1.4	5.7	1987	93
<i>Booborowie</i>	5.8	8.9	1938	82
<i>Burra</i>	12.0	15.4	1995	46
<i>Bute</i>	5.5	5.9	1948	122
<i>Crystal Brook</i>	4.7	6.6	1944	126
<i>Pt Broughton</i>	0.0	3.8	1918	123
<i>Spalding</i>	7.0	7.1	1918	104
<i>Ardrossan</i>	1.2	2.9	1948	127
<i>Cape Borda</i>	16.8	17.1	1972	142
Western Australia				
<i>Tamar</i>	37.0	41.2	2004	43
<i>Jarraewood</i>	48.9	52.0	1987	31

<i>Bemerside</i>	129.2	03	94.0	1962	77
<i>Cardwell Marine Pde</i>	174.4	02	96.5	1926	135
<i>Kangaroo Hills Stn</i>	56.4	03	50.8	1915	97
<i>Upper Stone Exelby</i>	151.8	04	53.3	1943	67
<i>Paluma Ivy Cottage</i>	124.0	02	120.5	1997	37
<i>Ingham Composite</i>	133.0	03	99.8	1998	39
<i>Elphinstone Pocket No. 1</i>	97.2	02	80.6	1998	51
<i>Horse Shoe Bend</i>	113.6	03	77.4	1998	35
<i>Byfield Childs Rd</i>	78.0	01	49.5	1931	78
<i>Crediton</i>	54.0	02	49.0	1993	51
<i>Darts Creek</i>	51.2	01	49.5	1964	64
<i>Heron Is Res Stn</i>	91.8	01	77.0	1998	47
<i>Mt Tamborine</i>	84.8	01	67.4	1998	106
<i>Forsdale</i>	55.0	28	51.8	1975	54
<i>Mt Mowbullin</i>	61.0	11	57.6	1998	37
<i>Hinze Dam</i>	72.0	01	57.5	1988	32
<i>Naviloween</i>	55.0	28	45.2	1962	48
<i>Mandala Farm</i>	42.4	28	35.2	1995	37
New South Wales					
<i>Wollombi</i>	52.6	10	40.9	1963	53
<i>Cessnock (Nulkaba)</i>	58.6	10	49.6	1996	40
<i>Paterson</i>	61.8	10	52.2	1988	39
Western Australia					
<i>Beacon</i>	46.6	09	20.8	1958	69
<i>Bencubbin</i>	26.2	08	23.4	1968	79
<i>Bodallin</i>	20.2	09	19.0	2001	37
<i>Boolarly</i>	22.2	09	22.0	1984	108
<i>Calingiri</i>	40.0	08	30.0	1973	70
<i>Codg Codgen</i>	27.8	08	26.4	1992	99
<i>Glenvar</i>	22.8	08	16.3	1949	34
<i>Kondut</i>	27.8	08	17.8	1999	72
<i>Koorda</i>	30.3	08	26.2	1958	81
<i>Mallina</i>	22.0	09	17.8	1920	75
<i>Manfred</i>	44.0	09	17.8	1986	86
<i>Marillana</i>	35.0	09	15.0	1970	57
<i>Maysboro</i>	37.4	08	27.9	1973	55
<i>Mulga Downs</i>	34.0	09	16.4	1986	103
<i>Neds Creek</i>	22.0	09	14.2	1970	59
<i>Port Hedland A/P</i>	19.0	09	9.2	1984	64
<i>Trayning</i>	37.0	08	27.8	1986	91

Note: Some statistical records mentioned in this report are based on data that have yet to be fully validated

Highest Daily Rainfall on Record for September

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
Queensland					
<i>Bamaga</i>	69.0	04	10.4	1973	30
<i>Babinda PO</i>	292.0	04	174.2	1953	95
<i>Daintree Tea</i>	105.0	04	95.4	1975	41
<i>Happy Valley</i>	294.0	04	159.0	1975	51