



SIGNIFICANT WEATHER – October 2007

SUMMARY

Severe thunderstorms with large hail and strong winds were the feature of the month with most states reporting thunderstorm activity. In South Australia a person was killed by a falling tree due to the strong winds, and across the nation several people were injured. Damage was estimated to be in the millions of dollars to property and crops with Queensland and New South Wales being the worst affected. In New South Wales the Lismore district was declared a natural disaster area for the second time in a month.

Major bushfires occurred in New South Wales and several on-going fires continued to burn in the Northern Territory.

THUNDERSTORMS/TORNADOES

Queensland

On the 6th trees were brought down by an afternoon severe thunderstorm at Monto.

On the 7th severe thunderstorms produced strong and gusty winds about the western suburbs of Brisbane. Pea sized hail was reported in the Illinbah area.

On the 8th a thunderstorm at Oakey produced a 93 km/h wind gust, while another thunderstorm produced a 91 km/h wind gust at Roma. Hail to golf ball size was reported at Coolangatta.

A severe thunderstorm on the 9th from Samford to Redcliffe produced hail 4cm in diameter at Joyner, 1.5cm hail at Mango Hill, 1cm hail at Caboolture and up to 5cm hail at Redcliffe. The thunderstorm passed through the southern suburbs of Brisbane and the northern end of the Gold Coast. Hail reports include: 2.4 cm at Forest Lake, 3-3.5 cm at Algester, 2.5cm at Salisbury, 1.5cm at Sunnybank Hills and up to golf ball sized at Nerang. Another thunderstorm produced hail 5cm in diameter at Canungra and golf ball sized hail at Beaudesert. The damage bill at Beaudesert is estimated to have caused up to \$7 million worth of damage to three car yards.

Other hail reports were from Deception Bay with golf ball sized hail, Caboolture, Kallangur, Mt Tamborine, Amberley (Ipswich) and also Maleny. Nerang reported hail the size of 10 cent pieces, with occasional golf ball size.

At Jandowae on the Darling Downs, three homes lost their roofs and another 12 homes were damaged by strong winds. There was large hail and heavy rainfall in another severe thunderstorm. Baseball sized hail with jagged edges was reported halfway between Goomeri and Nanango. A severe thunderstorm produced marble-sized hail near Tara on the western Darling Downs.

On the 11th a man suffered serious spinal injuries when the demountable building he was in was blown over by a severe thunderstorm at Blackwater.

On the 12th severe thunderstorms occurred in the south east quarter, particularly on the coastal plain. The most significant activity occurred on the Gold Coast, where golf ball sized hail was reported from Coolangatta. Many trees were blown down in the Gold Coast region. Hail 2cm in diameter was reported at Eagleby and a funnel cloud was reported at Southport. Hail was also reported at Illinbah and Tully Heads.

On the 26th thunderstorms including some supercells, developed over southeastern Queensland. A supercell moved through the northern suburbs of Brisbane, reports included 3cm in diameter hail at Albany Creek and marble sized hail at Aspley.

Very severe thunderstorms occurred over northern New South Wales and during the evening, these storms extended into border parts of south east Queensland, producing very intense rainfall totals in the Logan-Albert catchment area.

Severe thunderstorms on the 28th occurred in southeast Queensland. One moved through Munruben, 28 kilometres west of Beenleigh. Trees were brought down onto every house (about 30) in one street. Sheds were torn from their foundations. A suspected tornado may have been responsible. Flash flooding was also reported. Storms with large hail caused widespread damage to vegetable crops in the Gatton and Lockyer areas on the 28th/29th.

On the 29th two severe thunderstorms occurred. The first affected Emerald, producing wind gusts of 144 km/h at the Airport. There was widespread damage and devastation, especially on the northern side of town, with trees torn down and houses damaged. A shipping container was blown onto a car. There was also substantial damage caused by flying debris. Golf ball sized hail and very heavy rain were also reported. The area was declared a natural disaster zone. At Gayndah a supercell produced a 180 km/h wind gust. There was a lot of damage on the south

side and also at the airport where planes broke their moorings and were flipped. There is some evidence of a tornado having occurred on the southern side of town. Crops were destroyed in Dysart.

New South Wales

On the 8th at Glen Innes (Northern Tablelands) a thunderstorm with strong winds and golf ball size hail was reported. At Grafton (Northern Rivers) a thunderstorm with golf ball size hail was reported between Grafton and Wooli. At Coraki (Northern Rivers) a thunderstorm with 2.5 cm size hail and 20 mm of rain was recorded in 5 minutes. At Casino (Northern Rivers) 2 cm hail was reported and 6 cm hail was reported south of Casino.

At Lismore (Northern Rivers) a severe thunderstorm with 6 cm hail was reported with gale force winds and widespread damage to central Lismore. Many cars and houses were damaged, windows broken and trees blown over. A wind gust of 81 km/h was recorded at the airport. Damage was estimated at about \$60 million. Lismore was declared a natural disaster area.

At Goonellabah (Northern Rivers) hail 3cm in diameter covered the ground and stripped gardens. Some windows were broken and 22mm of rain was recorded in 20 minutes.

On the 9th at Grafton (Northern Rivers) a thunderstorm with 3cm hail was recorded, then golf ball size hail a few hours later. Only minor damage was reported. At South Lismore (Northern Rivers) a thunderstorm with 6cm hail and strong winds estimated at 100 km/h caused widespread damage. About 20mm of rain was recorded in 10 minutes and windows were broken. People were injured and cars were damaged, many trees were uprooted. There was also flash flooding and power outages. At McLeans Ridges (Northern Rivers) hail 3cm in diameter was reported at Goonellabah (Northern Rivers). Hail 3-4cm in diameter was recorded at Richmond Hill (Northern Rivers), golf-ball size hail occurred for 15 minutes and 25mm of rain was recorded during that period. At Byron Bay (Northern Rivers) very heavy rain, 20mm was recorded in 16 minutes. At Corndale (Northern Rivers) very heavy rain, 32mm in 12 minutes was recorded.

On the 12th at Camden (Illawarra) a thunderstorm with golf ball size hail at Camden airport was reported and 1cm hail at Campbelltown. At Heathcote (Metropolitan) 2cm hail occurred. At Tweed Heads (Northern Rivers) golf ball size hail was reported.

On the 25th there was hail between Tamworth and Manila (North West Slopes). At Tamworth there was very heavy rain with 28mm recorded in 30 minutes.

On the 26th at Merrylands West (Metropolitan) a thunderstorm with very heavy rain, 36.5mm in 14 minutes caused local flash flooding. At Ryde (Metropolitan) a thunderstorm with heavy rain,

caused local flooding and power outages. At Grafton, Byron Bay and Mullumbimby (Northern Rivers) large hail and strong winds caused damage exceeding \$1 million.

A tornadic super-cell thunderstorm hit Dunoon, near Lismore on the 26th causing major damage in the small town. More than 20 houses lost their roofs with some partly demolished, including the local church when the tornado swept through the centre of town. Trees were snapped off or uprooted, power lines brought down and gardens flattened. Large hail was also reported. The local sub-station exploded after being hit by flying debris, causing power outages. The Lismore district was declared a natural disaster area for the second time this month with the damage bill at Dunoon totalling about \$5 million.

On the 28th at Wyalong (South West Slopes) a thunderstorm with 3.5cm hail was reported.

On the 29th at Lismore (Northern Rivers) a thunderstorm with 2 cm hail and heavy rain, about 25 mm in 10 minutes was recorded.

On the 31st at Elsmore (Danthonia Alert) (Northern Tablelands) there was heavy rain, 45mm in 1 hour.

Victoria

On the 28th a severe thunderstorm produced golf ball sized hail 2-3 cm in diameter in the northeast of Victoria at Beechworth, Myrtleford and Bright.

South Australia

On the 23rd thunderstorms over the Agricultural districts resulted in flash flooding at the townships of Crystal Brook (50mm in 30 minutes), Kadina (Kadina P.O., 45mm in 90 minutes), Moonta (34mm) and Quorn (15mm). Creek flooding caused road closures at Booleroo Centre, Wirrabara, Tarcowie, and the Hawker to Wilpena road. Daily rainfall totals included Georgetown (75mm), Braemar (96mm), Paratoo (59mm) and Laura (64 mm).

Northern Territory

On the 31st a severe thunderstorm in the Alice Springs District generated golf ball sized hail (4.5 cm in diameter) at Watarrka, 54mm of rainfall was recorded, with wind gusts estimated to be around 140 km/h. Trees were stripped of foliage, and a helicopter was blown over, several tents and a demountable building were also damaged.

WIND

Queensland

Winds greater than 90 km/h were reported on:

08th Oakey 93 km/h, Roma 91 km/h
10th Winton 113 km/h
12th Rundle Island 100 km/h
Cape Moreton 93 km/h
Hervey Bay 100 km/h
29th Emerald 144 km/h, Gayndah 180 km/h

New South Wales

Winds greater than 100 km/h were reported on:

01st Mount Boyce AWS 107 km/h
Thredbo AWS 104 km/h
03rd Montague Island Lighthouse 102 km/h
Bombala AWS 109 km/h
Thredbo AWS 105 km/h
04rd Thredbo AWS 107 km/h
05th Thredbo AWS 107 km/h
06th Thredbo AWS 100 km/h
12th Montague Island Lighthouse 104 km/h
16th Green Cape AWS 104 km/h
19th Thredbo AWS 105 km/h
28th Thredbo AWS 115 km/h

Victoria

Winds greater than 100 km/h were reported on:

01st Wilsons Promontory 117 km/h
02nd Ferny Creek 107 km/h
03rd Mount Hotham 115 km/h,
Mount Buller 104 km/h
Cape Nelson 109 km/h
Wilsons Promontory 117 km/h
Colac 100 km/h, Aireys Inlet 100 km/h
04th Wilsons Promontory Gust 102 km/h
12th Wilsons Promontory 118 km/h
15th Wilsons Promontory 111 km/h
16th Wilsons Promontory 133 km/h
East Sale 102 km/h, Green Cape 104 km/h
Gabo Island 113 km/h
28th Mount William 118 km/h
Coldstream 104 km/h, Ferny Creek 113 km/h
Mount Buller 120 km/h
Mount Hotham 130 km/h
Falls Creek 122 km/h

Widespread damage from strong winds was reported on the 28th.

Tasmania

Strong and gusty winds on the 3rd and 4th were the cause of several incidents across the state, although no major damage or injury was reported. Some of the reports of very strong gusts were from sites that do not often report them, including Launceston City.

Winds greater than 110 km/h were reported on:

01st Mount Wellington 139 km/h
Maatsuyker Island 135 km/h
Droughty Hill 128 km/h
Cape Grim 120 km/h
Hogan Island 117 km/h
Scotts Peak Dam 115 km/h
Mount Read 115 km/h
02nd Mount Read 113 km/h
03rd Cape Grim 126 km/h
Hogan Island 126 km/h
Maatsuyker Island 124 km/h
Mount Wellington 124 km/h
Mount Read 119 km/h
04th Mount Wellington 148 km/h
Maatsuyker Island 143 km/h
Scotts Peak Dam 126 km/h
Droughty Hill 124 km/h
Mount Read 122 km/h, Cape Grim 115 km/h
Hogan Island 113 km/h
Eddystone Point 111 km/h
05th Maatsuyker Island 126 km/h
Mount Wellington 124 km/h
14th Mount Wellington 137 km/h
15th Mount Wellington 128 km/h
Maatsuyker Island 122 km/h
Droughty Hill 117 km/h
16th Hogan Island 131 km/h
Cape Grim 130 km/h
18th Mount Wellington 122 km/h
Maatsuyker Island 122 km/h
Scotts Peak Dam 117 km/h
Hartz Mountain 115 km/h
19th Mount Wellington 130 km/h
Droughty Hill 128 km/h
Maatsuyker Island 128 km/h
Mount Read 117 km/h
Scotts Peak Dam 113 km/h
Hartz Mountain 111 km/h
22nd Mount Wellington 113 km/h
28th Mount Read 126 km/h
30th Maatsuyker Island 117 km/h

South Australia

A deep and slow moving low-pressure system south of the Bight on the 27th and 28th produced damaging wind gusts and gale force winds over a large part of South Australia. A girl was killed by a falling tree in Whyalla on the 28th. Wind gust observations from both days included 109 km/h at Marree and Wudinna, 107 km/h at Woomera and Yunta, 106 km/h at Tarcoola and 96 km/h at Oodnadatta. There were numerous observations of 91-93 km/h wind gusts.

Storm Surge

On the 29th as a consequence of the strong to gale force winds over the previous two days, the sea level at Osborne (near Inner Harbour) reached 3.5 metres.

Western Australia

On the 17th the passage of a cold front produced a wind gust of 93 km/h at Cape Leeuwin and 91 km/h at Esperance Airport, no damage was reported.

On the 26th/27th the passage of a series of cold fronts produced severe wind gusts across the SWLD and Eucla. The highest wind gust was at Rottneest Island which recorded 100 km/h on the 27th. Other significant wind gusts included: Cape Leeuwin 96 km/h on the 26th, Esperance Airport 96 km/h and Forrest 96 km/h on the 27th. Scattered minor damage was reported from around the Perth Metropolitan area.

FLOODING

Tasmania

Abnormal tides

The combination of low atmospheric pressure, strong westerly winds and high (spring) astronomical tides led to the inundation of several low-lying coastal areas in the north, west and southeast of the state on the 3rd and 4th, although no significant damage was reported.

BUSHFIRES

New South Wales

Major Bushfires occurred in New South Wales during October from the 2nd to the 6th at Oyster Bay, Medowie, and Tilligerry Peninsula in the Port Stephens area. In the Lower Hunter 2,300 hectares were burnt and one house was destroyed by bushfires.

Fires occurred from the 3rd to the 12th at Bundjalung National Park and Evans Head on the North Coast, where 6,000 hectares were burnt by bushfires.

Northern Territory

Several on-going fires burnt through the Gulf Country, with the loss of fodder around Mt McMinn, Amungee Mungee, Tanumbirn, Hodgson's River and Broadmere. A fire in the Douglas-Daly District near Fish River burnt for two weeks in the middle of the month resulting in the loss of fodder. Some smaller fires also affected parts of the Darwin Rural area and central Arnhem Land.

A number of fires continued burning over southern parts of the Northern Territory, including the large on-going fire in the Tanami Desert, and others near Mount Doreen, Mallapunyah, and Nicholson Block near the Northern Territory/Queensland border. Another fire was ignited by lightning strikes near Brunette Downs on the 9th.

TEMPERATURE

Highest Mean Maximum Temperature for October

Station	Actual °C	Previous Highest °C	Year	Years of Record
New South Wales				
Barraba	29.3	28.5	2002	41
Gunnedah SCS	29.6	29.0	2002	59
Inverell SCS	26.8	26.7	2002	58
Murwillumbah	28.6	28.3	2005	34
Riverview Observatory	25.8	25.4	1949	98
Prospect Dam	27.2	27.1	1988	42
Montague Island	20.1	19.9	2005	38
Victoria				
Laverton RAAF	21.8	21.8	1961	65

Highest Mean Minimum Temperature for October

Station	Actual °C	Previous Highest °C	Year	Years of Record
Queensland				
Charleville Aero	17.4	17.2	1967	66
New South Wales				
Grenfell	11.5	11.3	1914	100
Wyalong PO	11.7	11.4	1999	57
Griffith Airport	11.1	10.9	1977	37
South Australia				
Marree Comp	17.0	15.9	1977	68

Highest Daily Maximum Temperature for October

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
Queensland					
Mornington Island	38.7	27	38.0	2005	35
Victoria					
Mangalore Airport	36.3	21	35.9	2006	49
Kerang	38.5	21	37.8	2004	45
Rutherglen Research	35.1	21	35.1	2006	43
Tatura Inst	35.6	21	35.2	2006	43
Kyabram DPI	36.4	21	36.3	1965	41
Western Australia					
Bidyadanga	43.8	14	43.2	1991	48

Lowest Daily Maximum Temperature for October

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
Queensland					
Low Isles LH	24.4	02	24.5	1978	41
Western Australia					
Esperance	10.8	27	12.7	2005	39

Highest Daily Minimum for October

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
Queensland					
Baralaba PO	24.4	29	23.7	2004	39
Monto Township	23.2	29	22.1	1980	34
Gladstone Radar	23.7	28	23.6	1983	50
Gympie	23.5	29	22.5	1972	42
Maryborough	23.4	28	23.1	2005	49
Nambour Dpi	22.6	29	22.4	2005	43
Brian Pastures	22.5	29	22.3	2005	40
Oakey Aero	20.7	29	19.9	2004	35
New South Wales					
Smoky Cape	21.6	02	21.0	1998	50

Victoria					
Essendon Airport	21.3	28	19.2	2006	38
South Australia					
Nonning	21.4	21	21.2	1977	38

Lowest Daily Minimum for October

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
Victoria					
Horsham Polkemmet Rd	-2.5	09	-1.5	2004	48

RAINFALL

Highest Monthly Rainfall on Record for October

Station	Actual mm	Previous Highest mm	Year	Years of Record
Queensland				
Oakington	140.8	140.8	1999	30
Plevna Downs	48.0	44.0	1992	36
South Australia				
Braemar	103.8	97.2	1995	44
Western Australia				
Esperance Aero	94.4	84.1	1972	37
Lorinna	83.2	83.0	1990	35

Lowest Monthly Rainfall on Record for October

Station	Actual mm	Previous Lowest mm	Year	Years of Record
New South Wales				
Moulamein PO	0.0	0.0	1896, 1914, 2006	119
Victoria				
Kerang	0.0	0.0	1914	113
Melbourne Airport	4.4	8.4	2006	38
South Australia				
Marree Comp	0.0	0.0	2002	123
Lameroo Comp	0.0	0.8	2006	109
William Creek	0.0	0.0	2002	83
Oodnadatta Airport	0.0	0.0	1982	59

Highest Daily Rainfall on Record for October

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
Queensland					
Greenvale Township	54.0	29	39.0	1998	94
Brian Pastures	86.0	11	74.0	2000	53
Dunwich	161.0	26	79.6	1984	40
Killara	67.4	30	59.9	1959	51
Mirrabooka	72.2	26	72.1	1972	46
Plevna Downs	38.0	10	35.5	1984	36
New South Wales					
Gyra (Gowan Brae)	50.6	26	46.6	2003	43
Mount Mitchell	90.0	29	71.4	2003	43
Western Australia					
Woodanilling	38.4	09	34.5	1947	70
Lorinna	34.2	28	27.0	1999	35
Windrush	35.0	09	34.4	1980	36
Glenvar	23.0	08	22.4	1947	35

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