



## SIGNIFICANT WEATHER – October 2008

### SUMMARY

A large area of storms developed through the southeast and central interior in Queensland causing significant damage. In New South Wales severe thunderstorms with large hail occurred in some coastal districts late in the month causing major damage to fruit crops, followed by a cold southwesterly outbreak with light snowfalls along the tablelands. In Tasmania, a severe frost affected several parts of the state. In New South Wales gale force winds during the middle of the month uprooted hundreds of trees. Damaging winds were also reported in Victoria, south Australia and Western Australia.

### THUNDERSTORMS/TORNADOES

#### Queensland

A large area of storms developed through the southeast and central interior with many being severe. Some of the more significant reports were:

On the 15th at Kippa-Ring, trees were brought down, 33mm of rain was recorded and wind gusts to 102 km/h occurred. Hail 2cm in diameter was reported in Gatton and southsouthwest of Esk and 4cm hail was reported at Carseldine. Golf ball and peach sized hail was reported at Grantham, near Gatton. There was extensive damage to the Margate/Redcliffe Leagues Club with wind gusts to 70-80 km/h and large trees were brought down. There was also damage to shades at a school and power was cut to 32,000 homes. At Bracken Ridge 47.5mm of rain was recorded in 25 minutes. Hurricane winds were experienced at Thangool.

On the 21st severe thunderstorms developed over the southeast coast and Darling Downs; 100 km/h wind gusts and marble sized hail were observed at Amberley. Hail 3cm in diameter was reported west of Toowoomba. Hail was also observed at Kooralbyn. Marble sized hail was reported at Yamanto, golf ball sized hail was observed at Boonah and Harrisville and 4cm hail was reported at Ipswich. At Karalee 1-2cm hail was observed and continued to fall for 10 minutes.

On the 22nd a severe thunderstorm affected southeast Queensland, affecting the Gold Coast and border ranges. Golf ball sized hail and severe winds

were reported at Robina. Much hail was reported at Nerang.

On the 25th severe thunderstorms developed along the southeast coastal fringe. Golf ball sized hail was observed at Banyo and 3-4cm hail near Peachester with one piece 6cm long and 1.5cm around. Golf ball sized hail was reported at Tin Can Bay.

#### New South Wales

On the 4th a thunderstorm with strong winds tore the roof off a house in Bourke. The 24 hour rainfall to 9am on the 5th of 54.8mm was the wettest October day on record in Bourke since records began in 1871).

On the 10th thunderstorms and locally strong winds in the Blayney-Orange area caused damage to houses which brought down trees. Heavy hail accumulated to a depth of 10cm on the ground, briefly disrupting road traffic.

On the 13th a thunderstorm produced small hail and strong winds brought down trees in northern Canberra. The winds caused minor structural damage in the Queanbeyan area.

On the 20th a thunderstorm at Mount Boyce (Central Tablelands) produced golf ball size hail. Nearby Faulconbridge reported close to 2cm size hail. Smaller hail fell at Springwood and Kings Langley.

On the 21st a severe thunderstorm produced 2-3cm hail in the Kempsey-South West Rocks-Crescent Head area on the Mid North Coast. Farmers at Stuarts Point and Grassy Head were worst hit with reports of up to 100% damage to fruit crops. The area was declared a natural disaster zone with the damage bill estimated at around \$2 million. Hail up to 7cm size was reported at Mullaway, north of Coffs Harbour. Nearby Woolgoolga reported golf ball size hail and Grafton, 2cm hail. A thunderstorm with very heavy rain at Bellingen on the Mid North Coast produced 24 mm in 20 minutes.

On the 22nd on the North Coast, Mc Leans Ridges (Lismore area) reported 3cm hail and heavy rain (17 mm in 10 minutes). Nearby Tabulam reported 2cm hail and Murwillumbah 3cm hail. A report of 'tennis ball size' hail was reported from Bangalow, near Byron Bay.

## Victoria

On the 6th there was small hail reported in Pascoe Vale and Melton.

## Northern Territory

On the 14th and 15th two long-lived severe squall lines moved through the Darwin and rural area. The first brought down several large trees in Humpty Doo and Palmerston while the second recorded a 102 km/h gust at Darwin Airport.

## WIND

## New South Wales

On the 3rd a thunderstorm at White Cliffs in far western New South Wales produced a wind gust of 107 km/h.

On the 6th there was localised damage to trees and houses in the Fairfield-Cabramatta area. The Sydney region recorded strong winds which caused power outages to 16,000 houses. Boats on Botany Bay were washed onto rocks and cars were crushed in the central business district when construction scaffolding collapsed. Fallen trees also blocked roads. Winds reached 100 km/h in the Illawarra, 91 km/h in the Blue Mountains and 87 km/h at Badgerys Creek in western Sydney.

On the 14th a severe thunderstorm caused gale force wind at Kingstown, near Uralla on the Northern Tablelands. Hundreds of trees were uprooted and houses and farm buildings damaged. Hundreds of homes lost power as tree branches and tin from rooves were blown onto power lines, causing blackouts. Rainfalls of up to 52mm were recorded at Manilla.

On the 22nd strong winds caused power outages to 5,000 homes in Baulkham Hills, Hawkesbury, Blacktown, St Leonards and Lane Cove.

On the 31st during a brief thunderstorm, wind gusts reached 111 km/h at Narrabri Airport (North West Slopes), the highest wind gust in October at that site for at least 6 years.

## Victoria

On the 2nd maximum wind gusts of 113 km/h were recorded at Mount Hotham.

On the 27th maximum wind gusts of 117 km/h were recorded at Mount Buller and Wilsons Promontory.

## Tasmania

On the 7th maximum wind gusts of 143 km/h were recorded at Mount Wellington and 109 km/h at Cape Bruny.

## South Australia

On the 1st gale force north to northwest winds, with gusts to 100 km/h affected several locations on Eyre Peninsula, Yorke Peninsula and in the Mid North ahead of a strong spring-time cold front.

On the 3rd a high based thunderstorm produced a wind gust of 91 km/h at Moomba.

## Western Australia

On the 21st a thunderstorm in the Central Wheat Belt produced a wind gust of 93 km/h at Cunderdin Airport.

On the 22nd at Cunderdin Airport a wind gust of 96 km/h was recorded and 16mm of rain in 10 minutes as a severe thunderstorm passed through the Central Wheat belt.

On the 24th the passage of a cold front and cold pool of air over the South West Land Division produced a wind gust of 104 km/h at Rottneest Island. Eight houses in east Kambalda near Kalgoorlie lost their roofs and many more were damaged.

On the 28th a deep surface trough combined with a middle level low to produce severe thunderstorms across parts of the South West Land Division. A strong easterly gradient between the trough and a ridge to the south resulted in strong to gale force easterly winds along the south coast of Western Australia. Cape Leeuwin recorded a wind gust of 102 km/h and Hopetoun North recorded 96 km/h. The Hopetoun Hotel veranda was torn off while many trees were uprooted and power poles were knocked down in the area, with thousands of homes losing their power as a result. Flash flooding in York caused road and fence damage and one dam burst its banks. A storm spotter in Karragullen reported 1cm hail with 20mm of rain in 10 minutes. Localised hail damage occurred to fruit crops and large hail was reported near Williams in the Great Southern district. The highest rainfall reported in the 24 hours to 9am on the 29th was 68mm at Ygnattering (north of Cunderdin), followed by Frenchman Bay (near Albany) and Newdegate Research Station with 43mm.

## DUST STORMS

## New South Wales

On the 6th the Riverina experienced reduced visibility to 800 metres at Hay and 5 kilometres at Lake Cargelligo.

On the 13th a dust storm was reported at Hay in the Riverina.

On the 26th a dust storm was experienced at Broken Hill and Menindee in the far west of New South Wales. Visibility was 5 kilometres at Broken Hill.

## FROST

### Tasmania

Severe frost on the morning of the 23rd ruined thousands of hectares of cereal crops, particularly in the Midlands. Canola, wheat and barley were most severely damaged. Some vineyards in the Coal River Valley and Upper Derwent Valley had most of their crops wiped out. Some orchards were also damaged particularly in the Derwent and Huon Valleys.

## SNOW

### New South Wales

On the 6th light snow settled in the Snowy Mountains with snow flurries extended to lower elevations at Cooma and Jindabyne (Southern Tablelands) and Sunny Corner (Central Tablelands).

On the 22nd a very cold outbreak brought snowfalls along the higher parts of the New South Wales Tablelands. The Snowy Mountains received its only significant snowfall for the month with about 5cm recorded at Perisher Valley. At lower elevations, 2cm of snow fell at Dalgety with light snow at Cooma and Bombala in the Monaro district. On the Central Tablelands, snowfalls of up to 5cm fell at Mount Lambie between Lithgow and Bathurst, with lighter falls at Katoomba. Light snow fell as far north as Guyra and Walcha on the Northern Tablelands.

### Tasmania

Snow fell to 600 metres in the south on the 22nd, with light falls reported at Fern Tree and parts of south Hobart.

## BUSHFIRES

### Tasmania

Numerous bushfires were reported around the state during the month. The largest burnt around 1,200 hectares near Pipers River. Another at Auburn Road in the Northern Midlands burnt around 900 hectares while one at Mawbanna (in the northwest) burnt about 300 hectares.

## TEMPERATURE

**Note:** The record tables below are only shown for sites with 30 years or more of observations. (Northern Territory is 20 or more years).

### Highest Mean Maximum Temperature for October

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>				
Cobar Meteorological Office	29.7	29.1	2006	47
Condobolin Ag Research Stn	28.3	28.1	1991	46
<b>Victoria</b>				
East Sale Aero	21.6	21.3	1977	64
<b>Tasmania</b>				
Eddystone Point	18.0	18.0	2006	51
Flinders island A/P	18.3	18.3	1963	46
<b>South Australia</b>				
Streaky Bay	25.6	25.6	2004	81
Ceduna AMO	26.9	26.6	1988	67
Murray Bridge Comp	25.9	25.9	2004	42
<b>Northern Territory</b>				
Darwin Airport	34.4	34.4	1973	66
Pirlangimpi AWS	34.9	34.2	2002	23

### Highest Mean Minimum Temperature for October

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>Queensland</b>				
Lockhart River Airport	24.0	23.9	1988	43
<b>New South Wales</b>				
Tibooburra PO	17.1	17.0	2006	87
<b>South Australia</b>				
Streaky Bay	13.0	12.9	1999	82
Nonning	11.0	10.9	1999	38
<b>Western Australia</b>				
Gascoyne Junction	17.9	17.5	2006	46
Albany Airport	10.6	10.4	1976	45
Jurien Bay	12.8	12.6	1979	41
Emu Creek Station	19.3	18.8	1982	38
<b>Northern Territory</b>				
Warruwi AWS	26.8	26.7	1998	38

### Highest Daily Maximum Temperature for October

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>					
Bombala (Therry St)	31.5	19	31.1	1990	42
<b>Western Australia</b>					
Cape Leeuwin	31.8	20	31.7	1944	102
Eucla	42.9	24	42.6	1987	47
<b>Northern Territory</b>					
Pirlangimpi AWS	37.7	22	37.7	1982	23

### Lowest Daily Maximum Temperature for October

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>Queensland</b>					
Oakey Aero	17.1	10	17.1	1984	36
<b>New South Wales</b>					
Lostock Dam	12.0	22	12.4	1976	36
Paterson (Tocal AWS)	13.6	22	15.0	1976	36

### Highest Daily Minimum Temperature for October

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>					
Nyngan Airport	25.5	31	25.0	1963	50
Cobar MO	26.1	31	26.1	1968	47
Condobolin Ag Research Station	23.5	31	23.0	1991	44
Cowra Research Centre	21.0	31	20.0	2006	44
Coonamble	23.1	31	23.0	1991	43
Trangie Research Station AWS	23.3	31	20.6	1981	40
Brewarrina	25.5	31	24.5	2006	39
Orange Airport	15.6	03	15.6	2006	39
Tocumwal Airport	19.2	13	19.0	2006	38
<b>Victoria</b>					
Ouyen PO	22.5	26	22.5	1977	52
<b>Tasmania</b>					
Eddystone Point	14.5	27	14.4	2005	52
Bicheno (Council Depot)	15.9	27	15.9	2006	35
<b>Western Australia</b>					
Leonora	27.8	24	27.0	1995	52
Badgingarra Res Stn	20.7	20	19.5	1983	43
Wongan Hills	22.2	20	20.3	1983	42
Emu Creek Stn	24.6	19	24.4	2006	38
Yeelirrie	25.8	21	24.5	1995	36

### Lowest Daily Minimum Temperature for October

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>New South Wales</b>					
Brewarrina	4.0	23	4.2	2003	39
Tabulam (Muirne)	5.6	23	6.0	1976	39
<b>South Australia</b>					
Arkaroola	0.0	20	1.0	1988	32
<b>Western Australia</b>					
Eucla	1.5	04	2.6	2002	48

## RAINFALL

**Note:** The record tables below are only shown for sites with 30 years or more of observations. (Northern Territory is 20 or more years).

### Highest Monthly Rainfall on Record for October

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Queensland</b>				
Heathlands National Park	78.6	72.1	2000	32
<b>Western Australia</b>				
Gnowangerup	86.8	84.0	1977	94
Ygnattering	96.0	62.0	1932	81
Holt Rock	90.4	79.7	1932	80
Hyden	103.4	79.4	1932	80
Graham Rock	90.2	88.5	1935	75
Karlgarin	128.4	72.3	1939	72
Lochnagar	77.4	53.6	1995	66
Amrista Park	92.8	62.0	2005	52
Mount Walker	71.1	53.6	1990	51
Yalleen	22.3	8.4	1931	50
Onslow Airport	15.0	9.9	1966	46
Monte Vista	92.0	87.5	1976	41
North Ravensthorpe	91.4	64.0	1973	41
Jurien Bay	66.6	56.9	1977	38
Pannawonica	26.0	20.1	1975	36

### Lowest Monthly Rainfall on Record for October

Station	Actual mm	Previous Lowest mm	Year	Years of Record
<b>Queensland</b>				
Brigooda	0.0	3.5	2006	48
<b>New South Wales</b>				
Broken Hill (Langawirra)	0.0	0.0	Numerous years	117
Umberumberka	0.0	0.0	Numerous years	97
Broken Hill (Waterbag)	0.0	0.0	Numerous years	62
Croppa Creek (Rawdon)	0.0	0.0	1987	36
<b>Victoria</b>				
Morrison's (Ballark)	8.2	8.4	1967	119
Seaspray (Burong)	3.6	3.8	1914	110
Meredith	6.4	9.7	1967	109
Giffard	5.2	6.6	1914	101
Watchem	0.0	0.0	1914	101
Tongio (Brooklands)	6.9	7.4	2006	85
Mitcham	18.4	23.8	1938	72
East Sale Airport	5.2	8.6	2006	66
Dergholm (Dorodong)	7.4	7.5	1969	64
Heywood Forestry	16.6	18.2	1967	59
Omeo Shannon Vale	13.5	18.8	1991	56
Darriman (Tarralangi)	9.4	11.0	1967	55
Tanybryn	34.4	61.2	1961	43
Maroona (Hillenvale)	3.0	7.4	2006	41
Simpson South	33.2	41.4	2006	41
Moorooduc	15.0	15.8	1969	40
Buckley (Balliwindi)	13.4	18.0	1991	39
Stratford	11.2	11.2	2006	39
Briagolong	8.6	9.2	2006	38
Neerim South (Tarago Reservoir)	36.5	41.4	2006	36
Paynesville	12.6	21.0	1977	36
Altona (City Offices)	8.6	16.4	1984	32
<b>Tasmania</b>				
Laura	0.0	0.0	2006	133
Gammon Ranges (Wooltana)	0.0	0.0	2006	132
Blinman (Wirrealpa)	0.0	0.0	2002	131
Port Augusta (Carriewerloo Stn)	0.0	0.0	1982	127
Woomera (South Gap Stn)	0.0	0.0	2002	127
Yunta (Paratoo)	0.0	0.0	2006	124
Hawker (Wilson)	0.0	0.0	2006	123
Cockburn	0.0	0.0	2002	118
Mount Eba	0.0	0.0	2002	95
Karcultaby	0.0	0.0	2006	86
Wudinna	0.0	0.0	2006	82
Kyancutta	0.0	0.0	2006	79
Kokatha	0.0	0.0	1994	77
Arkaroola	0.0	0.0	2002	70
Mooleuloooloo	0.0	0.0	2002	70
Danggali Cons Park (Hypurna)	0.0	0.0	2006	48
Marree (Clayton)	0.0	0.0	2003	45
Courela (Lindarnoe)	0.0	0.0	2006	42
Mount Schank (Jethia)	14.8	17.4	2006	40
Parachilna (Motpena)	0.0	0.0	2002	40
Mount Victor	0.0	0.0	2006	38
Port Parham	4.4	4.6	1969	38
Danggali Cons Park (Canopus)	0.0	0.0	1991	37
<b>Tasmania</b>				
Bushy Park (Bushy Park Estates)	9.2	14.8	1914	135
Swansea PO	5.6	6.4	1965	124
Mangalore (Mangalore Farm)	9.2	9.4	1982	105
Lilydale PO	11.4	17.3	1940	102
Yolla (Sea View)	19.2	28.8	1914	102
Bothwell (Cluny)	7.6	15.3	1961	94
Railton (Cement Australia)	15.3	16.6	1991	86
Elliott Research Stn	6.8	10.2	1914	85
Maria Island (Darlington)	3.2	8.1	1930	85

Bagdad PO	6.7	11.6	1982	83
Connorville (Lake River)	5.4	10.4	2006	79
Hillwood (Hillwood Strawberry Farm)	5.7	7.0	2006	79
Launceston Airport Comparison	11.0	13.7	1940	78
Windermere (Acacia House)	8.0	9.4	2006	71
Cressy Research (Main Office)	3.6	8.0	2006	69
Flinders Island A/P	2.8	15.1	1969	65
Burnie (Round Hill)	9.8	13.0	2006	64
Mawbanna (Mawbanna Road)	21.0	38.1	1972	61
Glenorchy (Glenorchy Reservoir)	19.2	19.5	1982	59
Dunorlan (Sharmans Road)	9.2	10.2	1945	56
Grove (Comparison)	21.8	24.8	1953	56
Redpa (Greenes Rd)	29.6	41.6	1991	54
Lorinna	16.8	32.5	1963	53
Hobart A/P	13.2	14.4	1959	51
Devonport A/P	4.8	5.8	2006	46
Memana (Babel Farm)	7.8	13.8	2006	45
Taroona (Taroona Crescent)	13.8	14.5	1982	45
Tooms Lake (Tooms River)	5.6	13.7	1965	43
Barrington PO	13.7	16.5	2006	42
Forthside Research Stn	9.4	13.2	2006	42
Marawah	29.2	41.0	1991	38
Scottsdale (West Minstone Road)	19.4	30.6	2006	38
Evandale (Cambock Lane)	14.6	15.8	1967	37
Rotherwood	14.0	22.6	1982	37
Woolmoor (Macquarie River)	4.2	15.2	2006	37
Wynyard Airport	11.6	20.4	2006	37
King Island A/P	18.8	27.2	1991	34
Gowrie Park	10.4	26.9	1965	30

#### Highest Daily Rainfall on Record for October

Station	Actual mm	Previous Date	Highest mm	Year	Years of Record
<b>Queensland</b>					
Glenlands	76.0	09	73.4	2000	80
Betanga	88.6	10	72.1	1908	71
Kuyura	90.6	17	78.7	1959	50
Heathlands National Park	70.0	20	52.2	1980	32
<b>Western Australia</b>					
Ygnattering	68.0	29	31.8	1966	81
Noongaar	41.4	31	37.3	1935	80
Boodarockin	43.6	31	36.6	1935	74
Karlgarin	49.6	31	38.0	2005	71
Lake King	66.0	31	56.4	1941	71
Newdegate Res Stn	43.0	29	40.6	1995	54
Pyramid Station	10.4	10	9.7	1957	52
Yalleen	20.8	09	1.0	1982	38
Chesalon	50.0	31	46.4	1999	43
Onslow Airport	10.2	09	9.9	1966	43
Tamaru	42.0	28	31.8	2003	43
Monte Vista	48.4	31	41.7	1973	41
North Ravensthorpe	59.6	31	33.0	1973	41
Bodallin North	32.5	31	32.2	1982	40
Jurien Bay	25.2	29	25.0	1975	39
Kimberley	38.2	29	38.0	1977	39
Karralea	44.6	29	42.6	1989	32

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