



## SIGNIFICANT WEATHER – February 2009

### SUMMARY

There were two tropical cyclones during the month, *Ellie* in Queensland and *Freddy* northwest of Western Australia.

Thunderstorms with hail and heavy rainfall were reported in most states.

Victoria experienced extreme fire weather conditions that led to the significant loss of life.

The exceptional heatwave which affected south-eastern Australia during late January continued into early February. The extreme conditions, affected most of Victoria and adjacent border areas of New South Wales, and southern South Australia, with many temperature records set.

### TROPICAL CYCLONES

#### Queensland

A low pressure system deepened into tropical cyclone *Ellie* in the Coral Sea east of Cairns early on the 1st and crossed the coast near midnight north of Cardwell. Heavy flood rains developed about the coast and ranges between Cardwell and Bowen.

On the 2nd the Yourka gauge on the Herbert River recorded 156mm and Bolinda Estate on the Tully River recorded 111mm in 2 hours, severe thunderstorms occurred in the Tombolia area after tropical cyclone *Ellie* crossed the coast, these falls being greater than 1 in 100 year rainfall events.

The track map and report can be found [on the Bureau's web site](#).

#### Western Australia

A low that developed over the Kimberley on the 3rd, moved off the west coast on the 4th and slowly developed as it tracked west over open waters. The low reached tropical cyclone intensity early on the 7th, and was named tropical cyclone *Freddy*, about 650 kilometres north of Exmouth. After peaking at category 2 intensity on the 8th, tropical cyclone *Freddy* gradually weakened as it began to track west-southwest and move over progressively cooler ocean waters. Tropical cyclone *Freddy* was downgraded below tropical cyclone intensity late on the 10th. There were no known direct impacts from tropical cyclone *Freddy*, although there were disruptions to some offshore industry operations.

The track map and report can be found [on the Bureau's web site](#).

### TROPICAL LOW

#### Western Australia

A weak low moved off the northwest Kimberley coast on the 11th and struggled to develop under strong wind shear. The low was well off the Kimberley and Pilbara coasts, before the low approached the far west Pilbara coast from the north on the 16th and combined with a mid-latitude upper trough to cause heavy rainfall over the western Pilbara and significant flooding on the Robe, Fortescue and Ashburton Rivers. The low slowed and crossed the west Pilbara coast near Onslow on the 17th, then slowly weakened over the west Pilbara over the following days. Karratha Airport reported 139.6mm of rainfall to 9am on the 15th; Thevenard Island 128.4mm to 9am on the 16th; and Yalleen 300.0mm; Pannawonica 244.6mm to 9am on the 17th; and Thevenard Island recorded a wind gust of 93 km/h on the 16th.

Several mining rail bridges and roads in the area were extensively damaged. Residents at Yarraloola homestead were evacuated by helicopter with floodwaters one metre deep through the homestead and rising when they left. The water pipeline servicing the Karratha region was damaged.

### THUNDERSTORMS/TORNADOES

#### Queensland

There were many severe thunderstorms which triggered very high rainfall events during the month, the most significant being 88mm in 1 hour at West Bellthorpe on the Mary River during the 19th, this having a return period between 50 and 100 years.

On the 20th flash flooding was reported on two occasions, at Peachester and Guanaba in southeast Queensland.

#### New South Wales

On the 1st a tornado or thunderstorm microburst about 20 kilometres north of Griffith in the Riverina was reported.

On the 9th a thunderstorm with heavy rain and strong winds was reported at Bathurst on Central Tablelands and 23mm recorded in 10 minutes. Trees were brought down and there was roof damage

reported in the Lithgow-Bathurst area. Hail 2cm in diameter was reported at nearby Blackheath.

On the 13th severe thunderstorms were reported at Bourke (Upper Western) with very heavy rain over 12 hours. There was a total of 197.6mm to 9am on the 14th which was the wettest day on record for the Bourke area since records commenced in 1871. Previous wettest day was 185.9mm on 25 January 1874 at Bourke Post Office. Large hail was also reported on the outskirts of Bourke. A state of emergency was declared for the township as many houses were inundated. The total damage bill will exceed \$6 million.

On the 18th thunderstorms and heavy rain at Coonamble (Central West Plains) caused local flash flooding. At Coonamble 67mm was recorded in 3 hours.

On the 21st a severe storm in western and northern Sydney was reported with flash flooding at Parramatta and Berowra. Trees were blown over and golf ball size hail was recorded at Cowan. Nearly 5,000 homes on the North Shore lost power after strong winds brought down powerlines. Thunderstorms and heavy rain (32mm in one hour) and 2.5cm hail were reported at Mount Wilson on the Central Tablelands. A supercell thunderstorm in the Putty-Singleton area produced large hail up to 6cm size and flattened trees. There was very heavy rain from thunderstorms at Wittittrin, (82mm in 30 minutes) which represents a return period of 1 in 100 years.

On the 23rd a thunderstorm with very heavy rain occurred in western Sydney. At Richmond, 41mm was recorded in an hour. Hail up to 3cm diameter was reported near Katoomba. Thunderstorms with heavy rain occurred at Cringila (suburb of Wollongong) with 35mm recorded in 30 minutes causing flash flooding. Three cars were trapped in floodwaters which rose 1 metre deep over roads.

### **Victoria**

On the 1st, isolated thunderstorms developed in the northeast of the state. There was a report of hail of 2cm in diameter and heavy rain at Mt Beauty.

### **Tasmania**

On the 20th intense thunderstorms developed in the northern Midlands and northeast of the state, producing localised torrential rainfall over a short period of time. The thunderstorms were triggered by a small, weak low pressure system which moved over the state. At Launceston Airport, over 15mm of rain fell in less than 20 minutes. Nearby Relbia recorded a total of 47.2mm for the event, and several other sites received in excess of 20mm. There were also reports of strong winds in the northern Midlands which combined with the heavy rain scattered debris over the highway between Campbell Town and Launceston, particularly near Epping Forest. Low visibility was thought to be a factor in two car crashes

in the area where visibility as low as 350 metres was at Launceston Airport during the thunderstorms.

On the 23rd a line of intense thunderstorms moved across western, central and southern areas on the leading edge of a cold front. The storms became severe as they moved further to the east, with wind gusts of up to 100 km/h recorded in Hobart. On the Central Plateau there were reports of hail with a diameter of 3cm, there were 50 claims arising from lightning damage to electrical gear. Houses were flooded and hail damaged roof gutters in Blackmans Bay.

### **Western Australia**

On the 4th, a squall line moved through the inland Pilbara with North Pole Mine (near Marble Bar) recording 141.2mm of rainfall in 1 hour, which represents an annual return rate over 1 in 100 years.

On the 28th, a thunderstorm caused house damage between Chittering and Toodyay. Seven houses were affected with three suffering roof damage. A severe thunderstorm with strong winds was also reported from Mullewa, trees were down and power was interrupted.

### **Northern Territory**

Minor damage was reported around the Darwin area on the 1st due to an intense monsoonal squall line.

## **WIND**

### **New South Wales**

On the 2nd Bombala Airport recorded a wind gust of 98 km/h from a thunderstorm.

On the 3rd strong winds from thunderstorms at Young (South West Slopes) caused damage to the local community centre and several houses.

On the 10th strong winds were reported from a thunderstorm downburst at Gunnedah Airport (North West Slopes). The highest wind gust was 124 km/h. Narrabri West airport (North West Slopes) recorded a wind gust of 102 km/h.

On the 23rd strong winds from a storm at Lake Cargelligo (Riverina) destroyed a 100 year old farmhouse with damage confined to a narrow swathe.

### **South Australia**

On the 7th the passage of a front resulted in wind gusts to 91 km/h at Mount Crawford in the Mount Lofty Ranges.

## DUST STORMS

### New South Wales

On the 7th there were dust storms and raised dust at Hay, Hillston, Narrandera (Riverina) and Ivanhoe (Lower Western). Visibility at Hay was reduced to 800 metres.

## FLOODING

### Queensland

During February, most Gulf Country rivers experienced moderate to major flooding causing the second consecutive month of prolonged inundation throughout the area.

A low deepened slowly and drifted northeast to be positioned over the southern Gulf of Carpentaria by 29 January. The result was further heavy rainfall over the Gulf rivers catchments, in particular the Nicholson, Leichhardt, Norman and Flinders river catchments where scattered rainfalls of between 50 mm and 150 mm were recorded. Renewed river rises and major flooding occurred again in the already flooded Gulf rivers.

Further showers and thunderstorms about an active monsoon trough produced heavy rainfall during the period 13th to 25th over the southern Cape York Peninsula and caused multiple renewed rises in the Gilbert and Flinders rivers around the Gulf of Carpentaria.

#### Cooper Creek:

Large rainfall totals were recorded during the period 9th to 11th across the Thomson-Barcoo-Cooper catchment, particularly north of Longreach and east of Wahroongah. This caused riverine flooding in the Landsborough, Darr, Alice, Barcoo and Thomson Rivers and their tributary creeks. Flood peaks were recorded in these rivers and creeks during the three days following the heavy rain.

The floodwaters from the Landsborough river and Cornish and Aramac creeks caused moderate flooding downstream in the Thomson river. A moderate flood peak was reached at Camoola Park on the 12th. A major flood peak was recorded at Longreach on the 12th. Moderate to major flooding extended downstream of Longreach to Jundah. The combined floodwaters from the Barcoo river and the Thomson river resulted in a major flood peak at Windorah on the 21st.

#### Diamantina River:

Rainfall was recorded during the 9–10 February, with the largest falls occurring in the Mackunda Downs area, which resulted in second flood peaks. A flood peak as a result of this rainfall was first recorded at Elderslie on the 11th.

#### Georgina River and Eyre Creek:

Rainfall was recorded between the 9th and 10th, with the largest falls occurring at Camooweal, Urandangi and Trepell, which subsequently caused renewed river rises and a second flood peak at Urandangi on the 12th. These floodwaters then moved downstream over the following two weeks to peak at Glengyle on the 26th.

#### Johnstone River:

The moderate to major flood event in the Johnstone river catchment can be attributed to a weak tropical low which was embedded in the monsoon trough. As this low crossed the coast at Innisfail on the 6th, it slowly tracked through the more coastal areas of the catchment and rainfall totals of over 475mm were recorded in some areas to 9am on the 7th. A moderate flood peak of 5.68 metres was recorded at Innisfail Wharf on the 6th.

#### Tully/Murray Rivers:

On the 1st and 2nd, further heavy rainfall was received in the Tully and Murray catchments. This rainfall was due to the approaching tropical cyclone *Ellie* and caused renewed river rises in the Tully and Murray rivers. River levels in the Tully river at Bolinda Estate and Euramo rose to a moderate flood peak during the 2nd and 3rd. Prolonged moderate flooding resulted in the Murray river at Murray Flats, reaching a moderate flood peak on the 3rd.

Further heavy rainfall occurred on the 6th and 7th due to a weak low which had developed on the monsoon trough to the east of Cairns. As a result of the previous large rainfall events, the catchment was saturated leading to reduced losses, very rapid runoff and fast river rises.

The Tully river at Bolinda Estate rose to a moderate flood peak on the 6th, while a major flood peak was reached at Euramo on the 7th. In the Murray river at both Murray Flats and Upper Murray River, levels rapidly rose to a major flood level on the 7th.

#### Herbert River:

The rainfall recorded in the lower Herbert river in the 24 hours to 9am on the 13th was sufficient to produce a moderate flood at Halifax.

The first heavy rainfall event, caused by the passage inland of tropical cyclone *Ellie* on the 2nd, produced severe major flooding throughout the Herbert river catchment. The Herbert river at Gairloch, near Ingham, peaked at 12.25 metres on the 3rd. River levels in the lower Herbert then began to ease, after the crossing of tropical cyclone *Ellie*, however, a second peak of 12.25 metres was recorded again at Gairloch on the 7th.

Due to the catchment-wide nature of the rainfall associated with tropical cyclone *Ellie*, the upstream waters that travelled down the Herbert river prevented river levels returning to normal flows downstream. The combination of this and the short time between all three periods of heavy rainfall kept

the Herbert river above major flood level for one week in some locations.

#### Haughton River:

Very heavy rainfall was recorded over the 4 days to 9 am on the 4th. On the 3rd, the Haughton river at Giru peaked at 2.94 metres. The heavy rainfall recorded in the Calcium area between the 7th–8th February, with totals over 100mm in parts of Major creek, produced a major flood peak downstream at Giru of 2.74 metres. Again, the heavy rainfall recorded in the Calcium area between the 12th–13th combined with totals in excess of 100mm in the rest of the Haughton catchment, produced a major flood peak at Giru of 2.69 metres.

The passage inland of tropical cyclone *Ellie*, resulted in moderate to major flooding in both the upper and lower Burdekin river.

#### New South Wales

On the 13th heavy continuous rain overnight caused severe flooding at Bourke, 197.6mm of rain was recorded in 24 hours, the wettest day on record for Bourke (records since 1871). Over 30 houses were flooded, several major roads closed and Bourke's sewage system damaged when floodwaters pooled behind levee banks. The New South Wales government declared the town a natural disaster zone with a damage bill over \$6 million.

On the 16th and 17th an east coast low pressure system caused continuous heavy rain on the Mid North Coast and Hunter with flooding of coastal rivers and inundating parts of Bellingen and Maitland. Numerous roads were closed due to floodwaters in the lower Hunter. A person was rescued from a tree at Bulahdelah while trying to cross a flooded causeway. Major flooding occurred in the Bellinger River peaking at 8 metres in Bellingen.

Moderate flooding occurred in the Nambucca, Orara and Hastings rivers with several hundred people being evacuated from the town of Urunga, south of Coffs Harbour.

#### Western Australia

A tropical low, which developed in the Gulf of Carpentaria on the 20th, tracked westward along the Northern Territory Top End coast and north of the Kimberley. The low moved southwest off the Kimberley and Pilbara coast and on the 28th began to move southward and crossed the Pilbara coast near Port Hedland. Heavy rain occurred on the 28th and combined with further rainfall on the 1st to cause flooding from the east Pilbara extending to the eastern Gascoyne and adjacent northern Goldfields and Interior early in March. Roads were closed as a result and some mining operations were disrupted.

#### Northern Territory

Major flooding was reported at Dorisvale Crossing in the Katherine River catchment. Moderate to minor flooding reported in the Victoria River, Darwin Daly and Roper McArthur districts due to widespread rainfall in the region.

## HEAT WAVE

#### South-eastern Australia

The second acute stage of the heatwave which commenced in late January occurred on – 6th to 8th February.

After a slight drop in temperatures during the first few days of February, extreme heat returned to the southeast on the 6th. Temperatures rose sharply in South Australia and western Victoria on the 6th, but it was the 7th which saw the most exceptional heat of the whole event.

On the 7th, the focus of the most extreme heat, which was accompanied by high winds and very low humidity, was in Victoria. An all-time state record was set at Hopetoun, in the state's north-west, when the temperature reached 48.8°C, exceeding the old record of 47.2°C, set at Mildura in January 1939 by a considerable margin. Seven other sites, in the Wimmera and in the area immediately west of Melbourne, also exceeded the old record, including Avalon Airport (47.9°C), Horsham (47.6°C), Longerenong (47.6°C) and Laverton (47.5°C). The Hopetoun temperature is also believed to be the highest ever recorded in the world so far south. A total of 14 sites exceeded the previous Victorian February record of 46.7°C.

Many all-time site records were also set in Victoria on the 7th, including Melbourne (154 years of record), where the temperature reached 46.4°C, far exceeding its previous all-time record of 45.6°C set on Black Friday (13th January) 1939. It was also a full 3.2°C above the previous February record, set in 1983. Three of Melbourne's five hottest days occurred during this event.

Geelong (47.4°C) and Wilsons Promontory (42.0°C) were among long-term sites which broke all-time records which had been set only the previous week. In total, of the 31 currently open sites in Victoria with 30 years or more of data which reported on the 7th, 21 set all-time records, five set February records, and only five failed to set records at all. 7 Record high temperatures for February were set over 87% of Victoria.

The extreme heat on the 7th also affected eastern South Australia and the southern fringe of New South Wales. In South Australia, Renmark (48.2°C) set a February record for South Australia; this was also the highest temperature ever recorded in South Australia outside the pastoral districts or the Eyre Peninsula.

Port Augusta (48.1°C) and Whyalla (48.0°C) also exceeded the previous South Australian record. No state records were set in New South Wales, where the highest temperature was 46.8°C at Menindee, but all-time records were set at a few locations in the state's south, with Wagga Wagga Airport (45.2°C) exceeding 45°C for the first time.

The heatwave largely ended on the 8th, as a cool change crossed the south-east, although temperatures remained very high in New South Wales and the far north-east of Victoria.

A report on [the exceptional January-February 2009 heatwave in South-eastern Australia](#) is available on the Bureau's web site.

## BUSHFIRES

### New South Wales

From 20 January to 9 February at Budawang National Park, 20 kilometres east of Braidwood on the South Coast a bushfire was started by lightning, the total area burnt was 2,089 hectares.

From 24 January to 16 February at Jingera Rocks near Wyndham in Bega Valley, South Coast a bushfire was started by lightning, the total area burnt was 2,400 hectares.

From 5 to 13 February at Belimbla in Deua National Park, 55 kilometres westsouthwest of Moruya on South Coast a bushfire was started by lightning, the total area burnt was 1,200 hectares.

From 6 to 11 February at Putty State Forest, 20 kilometres northwest of Putty (near Singleton) in the Hunter, a bushfire burnt a total area of 1,900 hectares.

### Victoria

February was a month dominated by high temperatures and extreme fire weather conditions that led to tragic losses.

On the 7th, a strong and gusty northerly airstream and record maximum temperatures for many areas led to extreme fire danger. Wind gusts to 115 km/h were reported at Mt William and Mt Gellibrand, while gusts over 90 km/h were recorded at a number of sites including Port Fairy, Aireys Inlet, Kilmore Gap, Dunns Hill and Mt Hotham. Several bushfires started on this day resulting in losses of life and property.

These fires continued to burn for the rest of the month, estimated losses were:

- Fatalities: 173
- Private Dwellings: 2,029
- Agricultural buildings: 2,498
- Stock: 8,217

- Timber plantations: 21,320 hectares
- Total area burnt: 302,875 hectares.

The main fire complexes were:  
 Kilmore East - Murrindindi North,  
 Kilmore East - Murrindindi South,  
 Wilsons Promontory - Cathedral,  
 Churchill Jerralang,  
 Bunyip State Park,  
 Dargo - White Timber Spur,  
 Beechworth - Library Road,  
 East Tyers - Thompson.

A report with analysis charts, satellite and radar images can be found at:- [Bushfires in Victoria, 7-8 February 2009](#) on the Bureau's web site.

## SMOKE HAZE

### New South Wales

From the 8th to 13th there was a thick smoke haze over New South Wales west of the tablelands due to major bushfires in Victoria. Visibility in southern districts was reduced to less than 2 kilometres, particularly on the South West Slopes, and about 5 kilometres in northern and western New South Wales.

Visibility as low as 500 metres was reported at Bourke on the 12th and 1 kilometre at both Corowa and Narrandera (Riverina) due to smoke.

## 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 Minimum Temperature for February

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>Queensland</b>				
Lockhart River Airport	24.3	24.3	2004	43
<b>Western Australia</b>				
Yeelirrie	23.7	23.5	2007	35

### Lowest Mean Minimum Temperature for February

Station	Actual °C	Previous Lowest °C	Year	Years of Record
<b>Queensland</b>				
Mount Isa Aero	20.9	21.8	2005	42

### Highest Daily Maximum Temperature for February

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>					
Lake Victoria Storage	46.4	07	45.7	1933	84
Wagga Wagga	45.2	07	44.6	1968	68
Taralga PO	39.8	08	38.7	2004	49

## Significant Weather – February 2009

Katoomba	37.6	08	36.6	2004	47
Burrinjuck Dam	42.4	07	41.7	1968	44
Hume Reservoir	44.9	07	43.7	1968	43
Tumbarumba PO	40.2	07	39.4	1968	42
Quandialla PO	44.8	06	43.8	2004	40
Tocumwal Airport	45.7	07	43.7	1983	39
Corowa Airport	46.0	07	43.0	1983	37
Thredbo Village	33.0	07	30.7	2004	37
Nerriga	39.8	08	38.8	1979	36
Cooma Visitors Centre	38.3	07	37.8	2004	35
Griffith Airport AWS	45.2	07	45.0	2006	34
Goulbourn TAFE	39.7	07	39.2	2004	33
Perisher Valley	28.7	08	27.2	2004	31
<b>Victoria</b>					
Melbourne RO	46.4	07	43.2	1983	154
Laverton RAAF	47.5	07	45.0	1983	66
East Sale Airport	44.4	07	43.6	1983	64
Mildura Airport	46.7	07	45.6	2004	63
Echuca Aerodrome	46.8	07	44.6	1979	53
Omeo Comparison	40.0	07	40.0	1968	53
Ouyen (Post Office)	46.8	07	46.7	2004	53
Wilsons Promontory Lighthouse	42.0	07	39.0	1983	53
Ballarat Aerodrome	44.1	07	40.9	1983	52
Mangalore Airport	46.1	07	43.6	2004	51
Orbost (Comparison)	44.6	07	43.0	1983	51
Horsham Polkemmet Rd	47.6	07	45.2	2004	49
Kerang	46.9	07	45.1	2004	45
Longerenong	47.6	07	45.3	2004	45
Maryborough	45.4	07	42.8	2004	45
Tatura Inst					
Sustainable Ag	44.8	07	41.4	1983	45
Kyabram DPI	46.6	07	43.3	1968	44
Walpeup Research	48.1	07	46.3	2004	43
Scoresby Research Institute	46.1	07	41.8	1968	42
Ararat Prison	44.7	07	42.6	2004	40
Essendon Airport	47.3	07	42.2	1968	40
Wonthaggi	45.0	07	42.0	1983	40
Lake Eildon	45.4	07	41.0	2004	39
Melbourne Airport	46.8	07	43.3	1983	39
Point Hicks (Lighthouse)	40.4	07	39.9	1983	39
Castlemaine Prison	43.9	07	42.3	1968	38
Moorabbin Airport	46.7	07	43.2	1983	38
Warracknabeal Museum	46.8	07	45.5	2004	36
Strathbogie	42.0	07	39.5	1983	32
<b>South Australia</b>					
Woomera Aero	46.2	07	45.6	1981	60
Lameroo Comparison	46.4	07	46.2	2004	53
Mount Barker	41.9	06	41.8	1983	53
Yongala	44.0	07	43.2	2004	53
Port Pirie Nyrstar	45.5	06	45.2	1981	51
Rosedale (Turretfield Res Stn)	46.3	07	45.6	2004	48
Eudunda	43.9	07	43.5	2004	45
Kimba	44.5	06	44.1	1980	42
Nonning	45.5	07	44.9	1980	39
Hawker	44.5	07	44.0	2004	37

### Lowest Daily Maximum Temperature for February

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>New South Wales</b>					
Williamtown RAAF	19.1	14	19.2	1952	59
Tenterfield (Federation Park)	16.5	13	17.0	1994	45
Bathurst Ag Stn	13.5	14	14.9	1973	44
Yarras (Mt Seaview)	18.2	13	18.7	1992	41
Lockstock Dam	17.4	14	18.0	1973	38
Glen Innes Ag Res Stn	15.5	13	16.0	1975	34
Paterson (Tocul AWS)	18.4	14	19.0	1973	34
<b>South Australia</b>					
Price	19.6	11	19.9	2008	45

### Highest Daily Minimum Temperature for February

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>					
Norfolk Island Aero	24.3	20	23.9	1996	70
Parkes (Macarthur St)	29.5	07	28.6	2004	53
Menindee PO	30.0	07	29.0	2004	48
Katoomba	24.0	07	22.6	1991	47
White Cliffs PO	32.0	07	31.0	2004	46
Wyalong PO	28.2	08	28.2	1981	45
Burrinjuck Dam	26.8	06	26.0	1997	44
Condobolin Ag RES Stn	31.4	07	30.3	1973	44
Cowra Res Centre	28.0	07	27.6	1983	44
Thredbo Village	20.2	08	20.0	2004	35
<b>Victoria</b>					
Dartmouth Reservoir	24.0	01	21.7	2004	30
<b>Western Australia</b>					
Eucla	30.2	26	29.4	1997	48

### Lowest Daily Minimum Temperature for February

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>Queensland</b>					
Clermont Sirius St	14.0	15	14.8	1996	48
Mount Isa Aero	13.6	14	14.6	1999	43
<b>Western Australia</b>					
Pingelly	6.4	26	7.0	1974	38
Kalbarri	11.9	26	12.3	1994	36
<b>Northern Territory</b>					
Kulgera	10.8	12	11.0	1999	27

## 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).

### Queensland

On the 6th a low pressure system led to the Nerada Alert gauge on the Johnstone River exceeding a 1 in 100 year rainfall event with 116mm in 1 hour during the afternoon.

### Highest Monthly Rainfall on Record for any Month

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Queensland</b>				
Yabulu QLD Nickel	1084.0	1024.4	Jan, 1953	90
Upper Stone Exelby	969.8	968.5	Jan, 1974	70
Ayr DPI Res Stn	880.0	799.4	Jan, 1974	57
Oonoonba	980.4	951.0	Jan, 1974	49
Goshen Station	594.2	533.2	Feb, 1977	35
Horse Shoe Bend	671.8	589.2	Jan, 1974	34
Turrawulla Station	407.5	312.2	Apr, 1989	33

### Highest Monthly Rainfall on Record for February

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Queensland</b>				
Selheim	519.8	440.6	1958	113
Halifax Macrossan St	1346.9	1188.8	2000	111
Hillgrove Station	480.2	361.2	1991	108
Manfred Downs Station	469.4	427.5	1968	105
Mt Garnet PO	552.7	538.0	1977	104
Yabulu QLD Nickel	1084.0	963.0	1989	90
Majors Creek	1117.8	1117.5	1940	74

## Significant Weather – February 2009

Upper Stone Exelby	969.8	966.9	2000	70
Townsville Aero	960.8	904.2	1968	69
Brinard Station	412.0	388.2	1976	66
Ayr DPI Res Stn	880.0	683.8	2000	57
Blue Range	401.1	384.0	2000	57
Ooonoonba	980.4	830.9	2000	49
Mirambeena	527.8	464.4	1981	47
Christmas Creek Stn	514.0	403.9	1895	46
Ingham Composite	1400.6	1221.6	1994	42
Wattlevale Station	680.8	636.2	2000	39
Paluma Ivy Cottage	1484.3	1379.8	1991	38
Goshen Station	594.2	533.2	1977	35
Rollingstone	1127.0	916.0	2000	35
Horse Shoe Bend	671.8	586.6	1991	34
Turrawulla Station	407.5	306.2	1991	33
<b>New South Wales</b>				
Urunga (Sunset Place)	547.0	632.7	1922	96
Smoky Cape LH	508.0	405.4	1954	70
Yarras (Mount Seaview)	682.4	578.6	1990	61
Long Flat PO	423.8	375.8	1990	59
Crescent Head	571.6	385.9	1985	54
Nana Glen	448.2	404.4	2008	51
Upper Rollands Plains (Greenacres)	550.2	422.0	1990	47
Gloucester (Upper Bowman)	365.6	362.4	1990	44
Coonamble (Myall Downs)	144.0	141.8	1975	42
Come By Chance Store	208.5	174.4	1904	41
Thumb Creek (Figtree)	475.4	394.8	2001	41
Birdwood	441.4	404.4	1990	40
Eungai Creek (Southbank Rd)	502.8	495.2	1985	38
Bowraville (Cow Cownty)	485.2	440.8	1976	34
Wittitrin	522.0	390.9	1976	34
<b>Western Australia</b>				
Yalleen	507.1	417.0	1995	52
<b>Northern Territory</b>				
Bullita	637.6	585.6	1969	37
Kidman Springs	462.0	395.3	1980	36
Jindare	680.0	632.5	1968	34

## Highest Daily Rainfall on Record for February

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
<b>New South Wales</b>					
Bourke Airport AWS	197.6	14	185.9	1874	124
Branxton (Dalwood Vineyard)	182.0	15	145.4	1990	120
Bowraville Rec Club	272.0	17	249.2	1954	118
Clarence Town	195.4	15	156.4	1990	114
Gresford PO	147.0	15	144.8	1955	114
Seal Rocks	211.8	15	122.2	1956	112
Moonbi (Bellview)	72.0	15	63.2	1977	51
Glendon Brook (Lilyvale)	108.8	15	96.8	1990	49
Upper Rouchel (Mount View)	83.0	16	58.0	1994	48
Kangaroo Creek (Jaloom)	156.4	17	111.9	1976	47
Willawarrin (Denleigh)	165.4	17	129.5	1971	47
Promised Land (Bellinger)	319.0	17	209.0	1995	43
Wooli Beach	210.5	17	188.0	1969	43
Thumb Creek (Figtree)	177.2	17	156.6	1995	40
Nulkaba (O'Connors Rd)	94.0	15	89.6	2002	39
Eungai Creek (Southbank Rd)	145.2	17	144.0	1985	38
Leigh (Rolling Acres)	192.4	17	163.0	2001	36
Wittitrin	156.5	17	143.0	1971	34
Werris Creek (Maneroo)	75.0	15	71.0	1977	32
Macquarie Marshes (Willie Retreat)	62.5	13	61.0	1992	30
<b>Tasmania</b>					
Strathgordon Village	92.4	24	56.4	1969	41
Strath Gordon (Gordon Power Station)	125.0	24	101.2	1998	38
<b>Western Australia</b>					
Millstream	208.0	17	133.1	1949	101
Red Hill	230.8	17	158.5	1995	99
Pannawonica	244.6	17	228.0	1989	38
Yalleen	300.0	17	150.0	1993	38
<b>Northern Territory</b>					
Bullita	160.3	04	145.0	1994	37

## Lowest Monthly Rainfall on Record for February

Station	Actual mm	Previous Lowest mm	Year	Years of Record
<b>New South Wales</b>				
Nowendoc (Green Hills)	0.0	34.4	2000	36
<b>Victoria</b>				
Port Campbell PO	0.4	0.8	1991	124
Warrion	0.4	0.5	1970	105
Lismore (Post Office)	0.6	1.1	1970	91
Derrinallum (Post Office)	0.4	1.4	1991	53
Camperdown	0.0	2.2	1991	48
Donalds Hill				
<b>Tasmania</b>				
Naracoopa	4.6	6.4	1965	96
Harwell	3.8	5.4	1991	69
King Island Airport	1.6	3.0	1983	36
Yarra Creek	5.8	9.2	1985	35
<b>South Australia</b>				
Millicent	0.0	0.3	1956	133

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