



SIGNIFICANT WEATHER – February 2006

SUMMARY

Tropical cyclones *Kate* and *Emma* developed towards the end of the month. Thunderstorms occurred in all states with damaging winds and hail reported from many centres.

In Tasmania snow fell in the south of the state at the beginning of the month.

TROPICAL CYCLONES

Queensland

A developing tropical low east of the northern tip of Cape York was upgraded to tropical cyclone *Kate* on the 22nd as it moved slowly east and further upgraded to a category 2 tropical cyclone on the 23rd. The cyclone remained stationary then weakened to a low by early the next morning.

Western Australia

A low developed within an active monsoon trough to the north of North West Cape. The low reached tropical cyclone intensity and was named *Emma* on the 27th. It crossed the Pilbara coast near Mardie just before noon on the 28th. Heavy rain preceded landfall and Karratha registered 190mm in the 24 hours to 9am on the 28th with a total of 306mm for the event.

Heavy rainfall occurred as the low moved southsoutheastward. Six occupants were lucky to escape when their two vehicles were washed away on a flooded creek crossing south of Karratha. People from Yarraloola homestead were airlifted as floodwaters on the Robe River

rose. Mileura Homestead about 70 kilometres northwest of Meekatharra was flooded for the first time in 120 years. Strong winds downed power lines and damaged vegetation in the Goldfields including Kalgoorlie where a couple narrowly escaped injury when a tree fell on their car while they were driving.

TROPICAL LOW

Northern Territory

A tropical low formed in the Arafura Sea north of Nhulunbuy on the 24th. It moved northwest into the Banda Sea and deepened during the next two days. Through the remainder of February it moved slowly southsouthwest into the Timor Sea. The low persisted into March but did not reach cyclone intensity.

THUNDERSTORMS

Queensland

On the 1st a 96 km/h wind gust was recorded at Winton in a thunderstorm.

On the 2nd widespread severe thunderstorms occurred in the north of the state. These thunderstorms produced severe wind gusts. Some of these include: Richmond 119 km/h and Cloncurry 102 km/h. Severe gusts were also recorded at Julia Creek and Mt Isa.

On the 6th widespread severe thunderstorms occurred in the Darling Downs and Granite Belt, Maranoa and Warrego and Central West districts. The worst damage was reported in Surat, where sheds were blown away,

roofs torn off, power lines downed and trees uprooted. One building had its roof blown off and a hospital lost part of its roof. A wind gust of 96 km/h was recorded at Blackall. There were reports of damage to the north and south of Roma, a wind gust of 94 km/h was recorded and power lines were brought down about 60 kilometres north of Roma.

On the 12th very heavy rainfall occurred with widespread thunderstorms in the Southeast coastal region. Clearview on the Gold Coast reported 115mm of rain in 2 hours. At Grandchester near Ipswich 87mm of rain fell in 60 minutes.

On the 13th severe thunderstorms produced damaging wind gusts in the Gulf Country. A 93 km/h wind gust was recorded at Burketown. Further south at Century Mine 117 km/h wind gusts were recorded.

On the 19th destructive wind gusts were recorded in the Northern Goldfields and Upper Flinders district. Several wind gusts exceeding 93 km/h were recorded at Julia Creek with the highest gusts reaching 117 km/h.

On the 21st showers and some thunderstorms formed in a very unstable southeast stream. One of these thunderstorms produced very heavy rainfall at Tarome, near Aratula in the Southeast Coast district where 28mm of rain was recorded in 10 minutes, 43mm in 20 minutes and 48mm in 30 minutes.

New South Wales

On the 10th in Mudgee (Central Tablelands) a thunderstorm with strong winds brought down trees, power lines and damaged houses.

On the 14th at Maclean (Northern Rivers) a thunderstorm with heavy rain and strong winds brought down trees across the highway.

On the 15th at Dubbo (Central West Slops) heavy rain (11mm in 10 minutes) with marble sized hail was reported. In Orange, hail to 5cm was reported. At Gundaroo (Southern Tablelands) hail 6cm in diameter with heavy rain and strong winds were reported. Hail broke windows and killed birds near Canberra. In

Canberra a thunderstorm with heavy rain in the suburb of Higgins produced flash flooding with 43mm of rain in 30 minutes.

On the 18th at Llandilo (Metropolitan) hail 3cm in diameter was reported.

On the 20th at Ulan (Central Tablelands) a thunderstorm with heavy rain and 5cm hail occurred. Branches were downed and foliage stripped from trees 25 kilometres northeast of Gulgong. Also on the 20th at Nullamanna (Northern Tablelands) a thunderstorm with heavy rain and strong winds was reported. Hail 2cm in diameter was reported and 23mm of rain occurred in 25 minutes.

On the 26th thunderstorms caused flash flooding in parts of Sydney and Wollongong areas during the evening. A woman was swept to her death near Berry to the south of Wollongong after attempting to drive across a flooded causeway. Very heavy rain caused flash flooding in Penrith, Glenmore Park, St Marys and Northmead. Roads were closed and cars were stranded. Glenmore Park recorded 94mm of rain in 3 hours. In Sydney, heavy rain from thunderstorms caused flash flooding in parts of the metropolitan area. Horsley Park recorded 48.8mm in 60 minutes, Homebush 24.2mm in 30 minutes and Turramurra 40mm in 30 minutes. Avalon recorded 101mm in about 2 hours.

On the Illawarra coast significant rainfall totals were Reverces (113mm), Wonhawilli (110mm), Dombarton Loop (108mm) and Wattamolla (97mm).

Victoria

On the 6th a strong cold front produced a wind gust to 120 km/h at Wilsons Promontory.

On the 9th a strong cold front produced a wind gust to 105 km/h at Wilsons Promontory.

On the 25th widespread heavy rain with severe thunderstorms occurred over large parts of Melbourne suburbs. Some totals recorded in eastern suburbs were 1 to 50 year events with 48mm recorded in 60 minutes at Kew being a 1 in 100 year occurrence.

Tasmania

Thunderstorms on the afternoon of the 17th dropped 2cm hail on Dover in far southeast Tasmania and caused some flooding in the local supermarket. The storm tracked southeast and dropped hail on Cape Bruny 3.5-5cm in diameter and caused 106 km/h wind gusts. A few kilometers away on the Cape Bruny Road, 6cm hail occurred.

South Australia

An infed of surface moisture from the northeast and a middle level trough resulted in widespread instability on the 23rd and 24th. A thunderstorm southwest of Woomera produced very heavy rainfall at Mahanewo Station (33mm in 50 minutes). Also on the 23rd, a thunderstorm produced a gust to 107 km/h at Lameroo. On the 24th thunderstorms produced very heavy rainfall in the Adelaide and Mount Lofty Ranges districts. The more notable rainfalls were from the Heaslip road raingauge which recorded 28mm in 30 minutes and Edinburgh AWS which recorded 23mm in 30 minutes.

Western Australia

On the 11th several severe cells were observed in the Southwest land Division. At Goomalling a destructive track 10 kilometres by 500 metres was observed. Most of the damage was to trees. A farm shed was also destroyed.

On the 21st afternoon thunderstorms developed on the trough line near the west coast. Wind gusts were reported to 102 km/h at Pearce Airport and 100 km/h at Perth Airport. An aircraft was damaged when pushed into a hangar. At Gillingarra (near New Norcia) there was wind damage to sheds, silos and fences.

A thunderstorm caused heavy rain at Carnamah (22mm in 30 minutes) on the 10th. Water flowed across the road and paddocks were flooded. Tree branches were snapped by the wind associated with the storm.

Northern Territory

Around midday on the 1st a monsoon squall line passed through Darwin and went on to produce a 96 km/h gust at Woolner Station about 50 kilometres east of Darwin.

On the evening of the 4th a 96 km/h gust was produced by a thunderstorm at Wulungurru in the Western Alice Springs District.

On the 17th there were reports of very gusty winds and 3 trees were blown down by afternoon thunderstorms developing near Humpty Doo in the Darwin rural area.

Thunderstorms which formed in the evening of the 17th around 300 kilometres southeast of Tennant Creek produced gusty winds and lightning at Tennant Creek on the 18th. The strongest recorded gust was 87 km/h.

DUST STORM

On the 7th a dust storm enveloped Meekatharra reducing visibility to 100 metres in the town. Wind gusts recorded to 94 km/h snapped branched from trees but no other property damage was reported.

WIND

New South Wales

Wind gusts greater than 90 km/h were reported on:

6th	Thredbo 93 km/h, Kiama 96 km/h, Sydney Airport 93 km/h
9th	Thredbo 109 km/h, Montague Island 91 km/h, Murrurundi 104 km/h, Narrabri 120 km/h
13th	Gunnedah 100 km/h
15th	Dubbo 93 km/h, Gunnedah 98 km/h
18th	Trangie 94km/h
19th	Thredbo 93 km/h

Tasmania

Wind gusts in excess of 90 km/h were reported on the following days:

6th	Maatsuyker Island 120 km/h, Mount Wellington 115 km/h, Droughty Hill 113 km/h, Cape Grim 111 km/h,
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- Cape Bruny 106 km/h,
- Tasman Island 102 km/h,
- Scotts Peak Dam 98 km/h, Warra 96 km/h,
- Hartz Mountain 94 km/h, Hobart 94 km/h,
- Maria Island 94 km/h,
- Swan Island 93 km/h,
- Mount Read 91 km/h
- 7th Cape Bruny 98 km/h
- 10th Tasman Island 96 km/h
- 12th Mount Wellington 133 km/h,
- Maatsuyker Island 117 km/h,
- Droughty Hill 111 km/h,
- Scotts Peak Dam 96 km/h,
- Cape Grim 96 km/h, Maria Island 94 km/h,
- Cape Bruny 91 km/h
- 13th Maatsuyker Island 109 km/h,
- Mount Wellington 100 km/h
- 17th Cape Bruny 106 km/h,
- Hartz Mountain 98 km/h
- 20th Mount Wellington 102 km/h,
- Maatsuyker Island 93 km/h
- 21st Mount Wellington 102 km/h,
- Maatsuyker Island 93 km/h
- 28th Mount Wellington 113 km/h,
- Maatsuyker Island 96 km/h

BUSHFIRES

Tasmania

On the 15th a bulldozer ignited a fire on Robbins Island (off the northwest coast) which burnt over 4,000 hectares (on an island of about 10,000 hectares).

TEMPERATURE

Tasmania

A marked cold change on the night of the 6th saw snow settle to around 900 metres in the south of the state.

Highest Mean Maximum Temperature for any Month

Station	Actual °C	Previous Highest °C	Year	Years of Record
Queensland				
Baralaba PO	37.7	37.6	02/1994	37
Cape Moreton L/H	29.0	28.7	02/2004	93

Highest Mean Maximum Temperature for February

Station	Actual °C	Previous Highest °C	Year	Years of Record
Queensland				
Tambo PO	37.2	37.1	1965	76
Brigalow Res Stn	36.6	35.2	2002	37
Baralaba PO	37.7	36.1	1998	37
Monto Township	34.8	33.9	1990	33
Gladstone Radar	34.0	33.6	1990	49
Amberley AMO	33.2	33.1	1998	65
Cape Moreton L/H	29.0	28.7	2004	93
Brian Pastures	35.2	35.1	1983	36
Charleville Aero	38.0	37.4	2005	64
Quilpie A/P	40.2	39.8	1983	65
New South Wales				
Barraba	33.7	33.3	1981	39
Woolbrook	29.6	29.0	1981	36
Cooma (Visitor cent)	29.6	29.4	1997	32

Highest Mean Minimum Temperature for any Month

Station	Actual °C	Previous Highest °C	Year	Years of Record
Queensland				
Injune PO	21.5	21.4	02/1969	38
Cunnamulla PO	25.6	25.5	01/1939	99
Quilpie A/P	27.1	26.4	02/1983	65
New South Wales				
Newcastle Nobbys Signal Station	21.3	21.1	02/1926	142

Highest Mean Minimum Temperature for February

Station	Actual °C	Previous Highest °C	Year	Years of Record
Queensland				
Isisford PO	25.9	25.4	1926	92
Lady Elliot Island	25.3	25.2	1998	65
Injune PO	21.5	21.4	1969	38
Charleville Aero	24.7	24.2	1969	64
Cunnamulla PO	25.6	25.5	1939	99
Quilpie A/P	27.1	26.4	1983	65
New South Wales				
Brewarrina Hospital	23.4	23.3	1926	82
Newcastle Nobbys Signal Station	21.3	21.1	1926	142
Northern Territory				
Alice Springs A/P	24.1	23.5	1992	64
Jervois	25.3	24.2	1983	32

Highest Daily Maximum Temperature for any Month

Station	Actual °C	Previous Date Highest °C	Year	Years of Record
New South Wales				
Barraba	41.8	03 40.9	02/2004	39
Woolbrook	38.0	03 36.0	02/2004	36
Murrurundi	40.7	02 40.6	02/1983	41
Scone SCS	43.5	02 43.0	02/2004	41
Cessnock	44.9	02 44.4	02/2004	32
Quirindi PO	43.4	02 41.8	02/2004	41

Highest Daily Maximum Temperature for February

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
Queensland					
Isisford PO	44.6	05	43.9	1960	50
Oakey Aero	39.5	04	39.3	1983	33
Charleville Aero	43.4	05	43.2	1983	64
Cunnamulla PO	45.0	04	44.0	2004	49
Quilpie A/P	45.5	05	44.4	1993	50
New South Wales					
Menindee PO	46.4	01	46.2	2004	46
Jerrys Plains	45.5	02	45.3	1983	50
Oberon	34.5	02	34.3	1983	41
Barraba	41.8	03	40.9	2004	39
Woolbrook	38.0	03	36.0	2004	36
Murrurundi	40.7	02	40.6	1983	41
Scone SCS	43.5	02	43.0	2004	41
Cessnock	44.9	02	44.4	2004	32
Quirindi PO	43.4	02	41.8	2004	41

Lowest Daily Maximum Temperature for February

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
South Australia					
Streaky Bay	18.1	01	18.3	1960	49
Warooka	17.9	01	18.6	2005	41
Northern Territory					
Rabbit Flat	22.5	01	23.2	1993	35

Highest Daily Minimum Temperature for February

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
Queensland					
Isisford PO	30.2	01	29.7	1983	49
Monto Township	25.2	05	24.4	1991	33
Bollon Mary St	30.4	05	30.2	1993	49
New South Wales					
Collarenebri	31.3	03	28.7	2004	41
Nyngan	32.0	02	31.0	2004	47
Baradine	27.5	03	27.4	2005	41
Barraba	26.8	03	24.7	1981	39
Kempsey	25.0	04	24.5	1981	41
Wollongong	24.0	02	23.9	1991	35

Lowest Daily Minimum Temperature for February

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
New South Wales					
Gulgong	4.2	10	6.9	1993	35
Tasmania					
Cape Bruny L/H	2.6	07	3.3	1977	80
Scottsdale (West Minstone Road)	1.4	07	1.8	1982	34

RAINFALL

Highest Monthly Rainfall on Record for February

Station	Actual mm	Previous Highest mm	Year	Years of Record
Western Australia				
Dampier Salt	247.6	219.4	1999	36
Karratha Aero	325.6	291.0	1999	31

Lowest Monthly Rainfall on Record for February

Station	Actual mm	Previous Lowest mm	Year	Years of Record
Queensland				
North Head	16.0	35.0	1996	34
Mount Dangar	9.4	11.3	1969	45
Roma Peak	12.8	19.0	1969	43
Monduran	7.8	10.0	1983	46
Lady Elliot Is	2.4	17.7	1965	67
Monto Township	7.3	9.0	1983	65
Callide Open Cut	0.2	0.8	1996	51
New South Wales				
Cobar	0.0	0.3	1967	43
Condobolin	0.4	1.6	1965	51
Batlow	0.0	0.0	1982/1923	120
Barmedman	0.0	0.0	numerous	119
Temora	0.0	0.0	numerous	126
Wyalong	0.0	0.0	numerous	110
Moulamein	0.0	0.0	numerous	118
Northern Territory				
Howard Springs	105.3	122.7	1990	34
Larrakeyah	11.4	86.6	1990	31
The Pines	93.0	114.0	1986	31
Channel Island AWS	78.2	145.0	1937	30
McMinns Lagoon	118.4	141.2	2005	29
Nathan River	17.1	41.8	2005	20
Palmerston	40.0	99.0	1989	20

Highest Daily Rainfall on Record for February

Station	Actual mm	Date	Previous Highest mm	Year	Years of Record
Western Australia					
Dampier Salt	147.2	28	65.7	1975	35
Karratha Aero	189.8	28	132.0	1985	32
Northern Territory					
Suplejack	243.0	01	212.0	1993	24

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