



## **SIGNIFICANT WEATHER – March 2004**

### **SUMMARY**

Tropical Cyclones *Grace, Monty, Nicky, Fay, Oscar* and *Evan* affected the Australian region in March. There was wide spread flooding in Queensland, Western Australia and the Northern Territory. Several landslides were reported around Cairns in Queensland damaging homes and roads.

A tropical low which developed near Willis Island on the 2nd moved southwest bringing strong to gale force winds, large seas and heavy rain to southeast Queensland and Northern New South Wales. Many east coast locations recorded more than 200mm in the 24 hours to 9am on the 6th. There were three fatalities associated with this event: 1 person drowned in Queensland and 2 people drowned in New South Wales.

Severe thunderstorms with heavy rain, flash flooding, hail and strong winds were reported in most states during the month interrupting power supplies and damaging property.

### **TROPICAL CYCLONES AND OTHER TROPICAL LOWS**

#### **Queensland**

A developing tropical low near Willis Island triggered wind warnings for ocean areas from the 2nd. An upper trough amplified across southeast Australia and the Coral Sea and intensified the low which then moved south. On the 3rd strong to gale force winds, large seas and heavy rain developed in the onshore stream as the low moved southwest to cross the coast near Hervey Bay late on the 5th and across the Darling Downs before weakening over New South Wales and moving off to the southeast.

Many east coast locations recorded more than 200mm in the 24 hours to 9am on the 6th. Storm force winds were recorded at Cape Moreton and Double Island Point on 5 March. A 10 minute mean wind of 104 km/h was recorded at Cape Moreton at 3pm on 5 March. The low produced wind speeds normally associated with tropical Cyclones, but the structure of the low was not of the tropical cyclone type.

There were three fatalities associated with this event. In Queensland a man drowned in the flooded Mary River near Gympie. In New South Wales a 10-year-old boy was drowned after being swept away from his family when they tried to cross a creek in the Tweed River catchment and an elderly woman drowned in a creek near Nambucca Heads (South of Coffs Harbour).

Around 106,000 homes lost power during the storm. Minor roof damage occurred to homes in Brisbane, Sunshine Coast and Gold Coast. There were many trees and power lines down across Brisbane, the Gold Coast, the Sunshine Coast, Ipswich and Toowoomba. On the Gold Coast, some cars became bogged in flooded roadways, although there are no reports of injuries. The Warrego highway at Cunningham's Gap, west of Brisbane, was closed due to rockslides. Four metres of roadway were washed away on Sydney Street at Brassall in Ipswich as a bus passed over it.

Very large long period waves were generated by the storm. Significant wave heights of almost 6 metres and maximum heights of almost 12 metres were recorded on the Mooloolaba wave rider buoy on the 5th. On the buoy off Stradbroke Island the corresponding readings were 7.1 metres and 14.3 metres. The peak height measured on the Tweed buoy was just over 14 metres on the 6th.

The worst effect from storm surge was at Currumbin on the Gold Coast, when cars were floating around the car park.

From the 18th a tropical low deepened off the north coast with widespread rain and heavy falls leading to flooding in coastal rivers and increased onshore winds. On the 21st the low began to shift to the southeast. It deepened into tropical cyclone *Grace* early on the 22nd whilst well east of the Whitsunday Islands and continued steadily southeast bringing the strong winds further south along the east coast with heavy swells.

There were several landslides around the Cairns Region. Landslides isolated Port Douglas and a large landslide with boulders as large as cars closed the highway between Cairns and Port Douglas. Residents were evacuated from the Whitfield range area by the landslides. There was widespread flooding around Cairns especially on the morning high tides. Winds and waves brought tide levels above the highest tides of the year and this was particularly evident at Cooktown. Several roads were closed, including the Bruce Highway south of Cairns, where the Tully River flooded.

On the evening of the 19th a landslide in the exclusive Cairns hillside suburb of Whitfield sent trees, rocks and tonnes of mud down into houses below.

On 24th the wave rider buoys near Brisbane had significant wave heights to 4.8 metres with maximum heights to 9 metres from the northeast. The large waves caused erosion on south coast beaches.

## **Western Australia**

A low moved off the Kimberley coast near Broome and rapidly formed into tropical cyclone *Monty* late on 27th February. *Monty* moved roughly parallel with the Pilbara coast and developed to category 4 intensity before moving towards the west Pilbara coast on the 1st. After causing hurricane-force winds at offshore reporting sites, *Monty* crossed the coast as a category 3 system near Mardie station, between Onslow and Dampier, about 9pm on the 1st.

Only minor property damage occurred. Two vessels in Mermaid Sound broke their moorings and ran aground causing significant damage. Although rapidly weakening later on the 1st, *Monty* produced widespread rainfall over the Pilbara causing significant flooding. Two people were rescued from the roof of the Yarraloola homestead on the Robe River and the town of Pannawonica was cut-off. The bridge over the Maitland River on the Northwest Coastal highway was destroyed.

A low that developed in the Gulf of Carpentaria and moved westward into the Timor Sea was named tropical cyclone *Fay* on the 16th, about 400 kilometres north of Wyndham. Strong to gale force winds were reported along the northern Kimberley coast as *Fay* remained seawards coming within 135 kilometres of Kalumburu on the 18th before moving away from the coast. The cyclone steadily intensified reaching peak intensity late on the 21st approximately 280 km north-north-west of Cape Leveque, when wind gusts near the centre were estimated to be about 300 km/h (Category 5 intensity). *Fay* continued moving in a general west-south-west direction until the 23rd when it abruptly turned to the south-south-east toward the west Kimberley coast and weakened.

Early on the 25th, *Fay* re-intensified to category 3 intensity and approached to within 90 kilometres of Broome before taking on a more southwesterly track. Broome experienced strong winds with gale-force gusts, some heavy rain and heavy seas, but escaped serious damage. *Fay* eventually crossed the east Pilbara coast about 160 km east-north-east of Port Hedland (between Pardoo and Wallal) between 8am and 9am WST on the 27th as a Category 4 storm with estimated maximum wind gusts of around 235 km/h near the centre.

The cyclone began weakening as it moved further inland. It passed close to the Yarrie mine where accommodation units were blown over and some other structural damage occurred. *Fay* weakened below cyclone strength during the evening of the 28th between Nullagine and Telfer. Little damage was reported from the storm despite its intensity as it made landfall in a remote part of the Western Australian coast and consequently only made impact on sparsely populated pastoral and mining areas. The resultant heavy rain caused

flooding in the De Grey and Oakover river systems, cumulative rainfall totals up to 300mm. Parts of Nullagine were evacuated due to a potential flood. Floodwaters inundated the Mulyie station homestead on the 30th.

A low developed west of Cocos (Keeling) Islands on the 8th and was named Tropical Cyclone *Nicky* on the 9th. The system intensified as it moved to the south-south-west reaching category 2 intensity before being renamed *Helma* by La Reunion TCWC early on the 11th.

An Indian Ocean low developed between Cocos and Christmas Islands on the 20th initially moving to the south then to the west on the 22nd. The system was named tropical cyclone *Oscar* late on the 23rd. *Oscar* continued its westward movement until the 25th when it tracked to the southwest and developed, reaching category 4 intensity on the 26th. Increasing wind shear weakened the system markedly on the 27th. On the 28th the cyclone entered La Reunion's area of responsibility and was renamed *Itse*. The system continued to weaken and was below cyclone intensity late on the 28th. There were no known impacts from this cyclone.

### **Northern Territory**

On the 27th of February a tropical low formed in the monsoon trough near Weipa and moved slowly west during the next 2 days. Early on the 1st the low commenced a steady west southwest movement and deepened rapidly during the afternoon. Tropical cyclone *Evan* was named about 70 kilometres east of Groote Eylandt. The category 1 cyclone crossed the island during the evening and made landfall on the mainland coast on the 2nd and weakened into a rain depression.

A brief period of gales was recorded at Northeast Island on the 1st, about 50 kilometres west northwest of the centre of tropical cyclone *Evan*. In the 24 hours to 9am on the 2nd, Groote Eylandt AWS recorded 313mm, Northeast Island 186mm, and Numbulwar recorded 184mm. On Groote Eylandt, trees were toppled onto power lines at Alyangula and there was local flooding at Angurugu (20 km south of Alyangula). Calm winds were reported from Alyangula as the weakening cyclone passed over the town. A boat was sunk in Alyangula harbour.

At Bickerton Island, between Groote Eylandt and the mainland, a small storm tide was reported on the 1st. At Numbulwar, on the mainland coast residents were evacuated from houses along the foreshore but no significant storm tide occurred. There were no reports of damage to trees or structures at Numbulwar.

Ex-tropical cyclone *Evan* moved steadily westward across the Top End, passing close to Katherine and Port Keats. Easterly vertical wind shear prevented redevelopment of the ex-cyclone as it crossed Joseph Bonaparte Gulf on the 3rd, traversed the north Kimberley region of Western Australia and moved out into the Indian Ocean on the 5th.

Heavy rainfall associated with ex-tropical cyclone *Evan* affected the Arnhem, Darwin-Daly, Katherine and northern Victoria river districts, resulting in flooding in many catchments throughout the Top End. Residents were evacuated from flooded homes and businesses on the outskirts of Katherine on the 4th. The Stuart Highway was cut south of Katherine by the King river on the 2nd and at Tindal Creek from the 4th. Some significant 24-hour rainfall totals to 9am on the 3rd in the Katherine and Darwin-Daly districts included: 144mm at 17 Mile Creek, 117mm at Nitmiluk Rangers, 116mm at Tindal RAAF Base, 126mm at Dum in Mirrie Island and 110mm at Channel Point.

A weak tropical low was identified in the monsoon trough east of Cape York on the 12th. The low slowly deepened during the next 3 days as it moved steadily westwards across the Arafura Sea. Early on the 16th, a weakening of the sub-tropical ridge south of the low allowed it to turn southwest into the Timor Sea, passing close to the Tiwi Islands. Tropical cyclone *Fay* was named on the 16th about 330 kilometres west northwest of Darwin, while moving slowly southwest across the southern Timor Sea. The cyclone intensified gradually to category 3 as it approached to within 135 kilometres of Kalumburu on the north Kimberley coast late on the 18th before turning northwest and temporarily moving away from the coast.

About 10 hours of gale-force winds were recorded on the 18th at Troughton Island, northwest of the Kimberley coast, with a peak wind gust of 93 km/h. Gale-force winds with

large seas and swell were reported from Timor Sea drilling platforms between the 17th and 19th. 24-hour rainfall totals exceeding 100mm were recorded at Northern Territory and north Kimberley coastal locations, including 180mm at Point Fawcett (Bathurst Island, Northern Territory) on the 16th and 120mm at Troughton Island (Western Australia) on the 18th.

## THUNDERSTORMS

### New South Wales

Storms on the 12th flooded the Newell highway between Goondiwindi and Moree, closing the road to all but heavy vehicles. At Rylestone (Central Tablelands) 15mm of rain in 15 minutes was recorded during a thunderstorm.

On the 14th at Nundle (North West Slopes) 53mm in 24 hours caused local flooding of Peel River and evacuation of a caravan park. Storms caused power blackouts in the Sussex Inlet area on the south coast.

On the 16th at Dapto (Illawarra) very heavy rain and flash flooding were reported.

On the 18th at Boat Harbour (Northern Rivers) 58mm in 1 hour was recorded. At Murwillumbah – Uki (Northern Rivers) very heavy rain, hail to 1.5cm in size and strong winds were reported; 34mm of rain in 30 minutes was recorded and there was a spotters report of 89mm in 20 minutes. Winds were estimated at over 100 km/h with a funnel cloud seen. Roofs were torn off houses, trees and power lines brought down. At Kempsey (Mid North Coast) 4cm diameter hail was reported; 40 kilometres west of Kempsey, there were strong winds and flash flooding (19mm of rain in 15 minutes). At Casino (Northern Rivers) strong winds uprooted trees causing power outages and there was flash flooding. At Lismore (Northern Rivers) flash flooding was also reported.

On the 21st at Manildra (Central West Slopes) there was 30mm of rain in about 50 minutes and pea-size hail; strong winds brought down trees causing power outages. Flash flooding covered roads to a depth of half metre. Between Narromine and Dubbo, there was 54mm of rain in 14 minutes, flash flooding and small hail.

On the 22nd at Bulahdelah (Mid North Coast) heavy rain was reported and a person was evacuated from a flooded house.

### Western Australia

On the 1st a severe thunderstorm at Merredin Airport caused wind gusts to 130 km/h that unroofed one building, damaged many aircraft, uprooted trees and sandblasted cars. Heavy rain also fell in the district with Southern Cross recording 34mm of rain between 3pm and 6pm that evening.

### Northern Territory

On the 12th an evening thunderstorm downburst felled trees, damaged homes, cars and power lines in a narrow path through Katherine. Lightning also interrupted power supplies at Larrimah in the Roper McArthur district on the same day.

On the 13th a long-lived evening squall line affected large parts of the western Top End causing severe winds. The maximum wind gust recorded was 80 km/h at Delamere AWS (Darwin-Daly district).

On the 21st a slow-moving afternoon thunderstorm produced heavy rainfall and localised flooding at Darwin River Dam. 132mm of rain was recorded in 2 hours, an event with an average recurrence interval (ARI) of 50-100 years.

On the 25th a slow-moving evening thunderstorm produced 134mm of rain in 2 hours at Central Arnhem Plateau (Arnhem district), an event with an ARI of greater than 100 years.

## WIND

### Queensland

On the 5th at Cape Moreton a wind gust of 124 km/h was recorded.

## **New South Wales**

The following wind gusts were reported:

5th Byron Bay 109 km/h  
6th Byron Bay 98 km/h  
8th Thredbo 104 km/h.  
12th Coonamble 109 km/h  
18th Norah Head 96 km/h.

## **Victoria**

On the 25th a gusty wind change moved across the state and Wilsons Promontory recorded a maximum wind gust of 107km/h.

On the 29th gale force winds occurred in Alpine areas as a low pressure system moved over Bass Strait. The highest wind gusts recorded were 113km/h at Mt Hotham, 109km/h at Mt Buller, 93km/h at Mt Gellibrand and 90km/h at Falls Creek. Strong, gusty winds caused tree and building damage over the Bellarine and Mornington Peninsulas during the evening.

## **South Australia**

On the 3rd a damaging dust devil affected several properties in Whyalla West. A fence was blown down, a bird aviary and shed wrecked, with a sheet of iron thrown onto power lines, causing extensive power outages. The dust devil formed on the inland edge of an easterly Gulf breeze circulation, in a hot, very dry northerly airstream.

## **Tasmania**

Squalls and gusts associated with a sharp cold front caused extensive (though generally minor) damage especially in the south, southeast and west of Tasmania on the 25th. Thunderstorms were also reported. There was disruption to power supplies, road closures due to wind blown debris and damage to a number of large trees in Hobart; 40 separate bush fires were reported.

Storm force mean winds were reported at Droughty Hill (111 km/h), Maatsuyker Island (96 km/h), Mount Wellington (93 km/h) and Scotts Peak Dam (89 km/h). Also on that day, storm force gusts were reported at many sites.

The peak gusts for the day were:

Droughty Hill (TERSS)	178 km/h
Maatsuyker Island	152 km/h
Scotts Peak Dam	139 km/h
Cape Bruny	139 km/h
Mount Wellington	133 km/h
Hartz Mountains (Keoghs Pimple)	120 km/h
Tasman Island	117 km/h
Hobart Airport	111 km/h
Bushy Park	109 km/h
Mount Read	107 km/h
Tunnack Fire Station	100 km/h
Hobart (Ellerslie Road)	94 km/h
Eddystone Point	93 km/h

The Droughty Hill gust of 178 km/h was the highest recorded since the site opened in 1995. It is the second highest wind gust ever recorded in Tasmania (the highest being 200 km/h at Mount Wellington on 20 March 1998).

## **Western Australia**

On the 4th-5th a severe squall line moved through the Pilbara causing wind gusts to 100 km/h at Karratha.

## **Northern Territory**

On the 12th an evening thunderstorm downburst felled trees, damaged homes, cars and power lines in a narrow path through Katherine. Lightning also interrupted power supplies at Larrimah in the Roper-McArthur district on the same day.

On the 13th a long-lived evening squall line affected large parts of the western Top End, causing severe winds. The maximum wind gust recorded was 80 km/h at Delamere AWS (Darwin-Daly district).

## **FLOODING**

## **Queensland**

Flooding continued in southwestern Queensland during the first week of March. Heavy monsoon rainfall also brought flooding to southeast Queensland early in the month and the north tropical coast in the middle of the month.

Between the 6th and 9th heavy rain resulted in flooding in some of the coastal rivers and streams from Maryborough to the Gold Coast.

#### *Logan-Albert Rivers*

Heavy rainfall overnight on the 5th resulted in sharp river rises and moderate flooding in the upper reaches of the Albert and Logan River during the 6th.

From the 18th and 20th, there was flooding in coastal rivers and streams from Cooktown to Ingham.

#### *Tully and Murray Rivers*

Minor to moderate flooding occurred in both the Tully and Murray Rivers between the 15th and 23rd. Heavy rain commenced late on the 11th and continued intermittently for a week. The Tully and Murray Rivers commenced to rise on 15th and minor to moderate flooding continued for the next week. At the peak of the flood on the weekend of the 20th/21st, rising flood waters cut the Bruce Highway at several locations in the Euramo area.

#### *Johnstone River*

Moderate rainfall commenced in the Johnstone system on the 17th but it was not until Friday night that the heavy rain commenced which resulted in moderate flooding at Innisfail in the early hours of Saturday morning.

#### *Mulgrave-Russell River*

In the days leading up to Thursday the 18th the Mulgrave-Russell system had received enough rain to saturate the catchment. During the next 48 hours very heavy rainfall resulted in fast river rises especially on the night of the 19th which resulted in flood waters overtopping the Bruce Highway bridge at Gordonvale.

#### *Georgina River and Eyre Creek*

Flooding in the lower reaches of Eyre Creek, which commenced in January, had eased by the first week of March.

## **New South Wales**

On the 5th at Murwillumbah (Northern Rivers) heavy rain caused flash flooding. A ten year old boy drowned when he was swept into a flooded creek.

On the 5th at Bowraville (Mid North Coast) heavy rain caused flash flooding, an elderly woman drowned in a flooded creek.

## **Northern Territory**

### *Daly River:*

The Fergusson River reached moderate flood level on 5 & 6 March, peaking at 11.3 metres. Dorisvale Crossing reached major flood level on 10 March, peaking at 20.63 metres. During, 22-24 March the river here again reached major flood level, peaking at 18.63 metres on 23 March. Downstream, at Beeboom Crossing, the river rose above major flood level for the period 6-11 March, peaking at 16.43 metres on 10 March. Further downstream, at Mount Nancar, the river was above moderate flood level for the period 4-16 March, peaking at 16.45 metres on 12 March. At the Daly River Police Station the river reached major flood level on 12 March, peaking at 13.74 metres.

### *Roper River:*

The Waterhouse River at Beswick, rose above major flood level several times during the month, peaking at 9.12 metres on 3 March, 8.68 metres on 5 March and 8.52 metres on 19 March. Each of these floods necessitated evacuations of houses in the lower-lying areas of the town. Downstream at the DIPE gauging station, the river reached moderate flood level, peaking at 8.66 metres on 4 March. At Elsey Homestead the river reached moderate flood level peaks of 7.3 metres on 1 March and 8.0 metres on 21 March.

<b>BUSHFIRES</b>
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## **Tasmania**

A fire at Montumana in the northwest burnt nearly 1,200 hectares of mostly state forest. Numerous small fires also occurred as a result of lightning strikes.

## TEMPERATURE

### Highest Mean Maximum Temperature for March

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>				
Thredbo Village	20.7	20.7	1986	34

### Highest Mean Minimum Temperature for March

Station	Actual °C	Previous Highest °C	Year	Years of Record
<b>Queensland</b>				
Kowanyama A/P	24.6	24.5	2001	33

### Lowest Mean Minimum Temperature for March

Station	Actual °C	Previous Lowest °C	Year	Years of Record
<b>New South Wales</b>				
Narrandera	11.0	11.2	1984	35

### Highest Daily Maximum Temperature for March

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>Queensland</b>					
Texas	40.1	10	40.0	1998	33
Cunnamulla PO	42.0	09	41.5	1973	46
<b>New South Wales</b>					
Trangie	40.9	09	40.0	2002	36
Gulgong	38.1	09	38.0	1998	35
Charlotte Pass	24.5	07	23.0	1998	37
<b>Western Australia</b>					
Bridgetown Comp	41.2	22	40.8	1998	47
Donnybrook	41.8	22	40.5	2003	44
Manjimup	39.7	22	39.0	1998	44

### Highest Daily Minimum Temperature for March

Station	Actual °C	Date	Previous Highest °C	Year	Years of Record
<b>New South Wales</b>					
Nelson Bay	22.0	10	21.5	2002	36
Taree	23.4	10	23.1	1980	40
<b>Western Australia</b>					
Dalwallinu Comp	28.3	01	27.3	1961	45
Wongan Hills	26.1	01	25.8	2000	36
<b>Northern Territory</b>					
Jervois	29.0	17	27.5	1983	34
Pirlangimpi	29.0	21	28.1	1980	25

### Lowest Daily Minimum Temperature for March

Station	Actual °C	Date	Previous Lowest °C	Year	Years of Record
<b>Western Australia</b>					
Albany Airport	4.3	28	4.5	1981	38
Perth Airport	4.0	08	4.7	2001	59

## RAINFALL

### Highest Monthly Rainfall on Record for Any Month

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Queensland</b>				
Cape Tribulation	1660.2	1610.4	1983	58
Store				
Julatten	910.4	856.1	1939	68
Daintree Tea	1643.0	1488.0	1996	39
Mt Sophia	1506.0	1300.0	1999	36
Bellenden Ker	2113.0	1682.0	1999	31
Bottom Stn				
Bellenden Ker Top	3064.0	2673.0	1999	31
Stn				
Talwood State	208.2	196.1	1941	89
School				

### Highest Monthly Rainfall on Record for March

Station	Actual mm	Previous Highest mm	Year	Years of Record
<b>Western Australia</b>				
Karratha Aero	291.2	221.2	2000	30
Telfer Aero	414.2	267.0	2000	30
Yalleen	415.4	308.6	2000	46
<b>Northern Territory</b>				
Tindal RAAF AWS	396.0	345.5	1982	22

### Lowest Monthly Rainfall on Record for March

Station	Actual mm	Previous Lowest mm	Year	Years of Record
<b>Queensland</b>				
Lansdown CSIRO	11.0	11.4	1996	41
<b>New South Wales</b>				
White Cliffs	0.0	0.0	Numerous	104
Pooncarie	0.0	0.0	Numerous	119
Menindee	0.0	0.0	Numerous	129
Wanaaring	0.0	0.0	Numerous	120
Mount Hope	0.0	0.0	Numerous	119
Willandra National	0.0	0.0	Numerous	104
Park				
Cobar (Taringo	0.0	0.0	Numerous	96
Downs)				
Yalgogrin North	0.0	0.0	Numerous	117
Nimmitabel	7.4	16.4	1992	34
(Cottesloe)				

<i>Cooma</i>	0.7	5.5	1998	31
<i>Charlotte Pass</i>	16.9	25.4	1940	74
<i>Thredbo</i>	10.4	25.0	2002	38
<i>(Crackenback)</i>				
<i>Thredbo Village</i>	10.4	19.8	1998	34
<i>Adelong</i>	0.0	0.4	1995	121
<i>Batlow</i>	0.2	0.8	1889	119
<i>Wagga Wagga</i>	0.0	0.0	1995	63
<i>Temora</i>			1998,1995	
<i>(Research Station)</i>	0.0	0.0	1964,1940	70
<i>Narrandera</i>	0.0	0.0	1998,1995	35
<i>Hillston</i>	0.0	0.0	Numerous	124
<i>Lake Cargelligo</i>	0.0	0.0	Numerous	123
<i>Moulamein</i>	0.0	0.0	Numerous	117

### **Highest Daily Rainfall on Record for March**

<i>Station</i>	<i>Actual</i>	<i>Date</i>	<i>Previous</i>	<i>Year</i>	<i>Years of</i>
	<i>mm</i>		<i>Highest</i>		<i>Record</i>
			<i>mm</i>		
<b>Queensland</b>					
<i>Kholo</i>	126.3	06	116.3	1951	58
<i>Lake Manchester</i>	160.0	06	150.6	1946	87
<i>Proston PO</i>	84.0	08	81.5	1973	67
<i>Maroon</i>	91.0	06	90.2	1978	56
<i>Ripley Valley</i>	109.0	06	94.8	1994	43
<i>Wamuran PO</i>	160.5	06	134.0	1992	48
<i>Buaraba</i>	122.0	06	118.1	1955	50
<i>Marodian</i>	123.0	06	121.0	1992	80
<i>Homestead</i>					
<i>Little Nerang Dam</i>	238.0	06	230.0	1974	78
<i>Hinze Dam</i>	194.0	06	180.0	1987	30
<i>Highvale</i>	155.2	06	129.3	1974	40
<i>Boonara Romley</i>	97.6	06	93.8	1992	43
<i>Queen Mary Falls</i>	129.0	06	100.2	1978	46
<i>Tannymorel</i>	88.8	06	84.3	1955	84
<b>New South Wales</b>					
<i>Croppa Creek</i>	130.2	13	99.1	1937	91
<i>(Krui Plains)</i>					
<i>Croppa Creek</i>	86.2	13	61.5	1994	36
<i>(Rawdon)</i>					
<b>Western Australia</b>					
<i>Country Downs</i>	120.0	25	119.8	1988	31
<i>Karratha Aero</i>	190.8	02	89.0	2000	30
<i>Telfer Aero</i>	199.6	29	175.0	2003	30
<i>Warrawagine</i>	134.0	28	126.2	2000	85
<b>Northern Territory</b>					
<i>Tindal RAAF AWS</i>	116.2	03	90.0	1997	24

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