



**Australian Government**  
**Bureau of Meteorology**

**Tropical Cyclone *Raymond***  
1 – 2 January 2005

Perth Tropical Cyclone Warning Centre  
Bureau of Meteorology

**A. Summary**

Tropical cyclone *Raymond* was a category one cyclone that moved eastwards crossing the north Kimberley coast and weakening over land. It was short lived, remaining a cyclone for about 24 hours. There was no known damage although it did bring the first significant rainfall of the season to the northern Kimberley.

**B. Meteorological Description**

*Intensity*

A low developed on 30 December being steered initially to the southeast. Deep convection persisted near the centre the following day. On 1 January the low level centre moved east away from the area of deep convection during the day but that evening deep convection flared over the circulation and the system rapidly deepened and cyclone intensity was estimated at 1800 UTC 1 January.

The system passed close to Browse Island (14.1°S 123.5°E) at about 0300 UTC when Browse Island AWS transmitted its only observation for the day (power problems prevented other transmissions), reporting a pressure of 986 hPa and 33 knot winds. A nearby privately operated weather station also recorded gales during this period. A Quikscat pass at 1000 UTC showed an area of strong gales to the north just prior to coastal crossing. The maximum intensity was estimated at 45 knots which is consistent with the Dvorak analysis, observations, and Quikscat analysis. The single Browse Island pressure reading is quite low, however the environmental pressure was also low at 1005 hPa and it is likely that this reading occurred when the system was at its closest point to Browse Island.

Raymond was tracked by the Wyndham radar as it crossed the north Kimberley coast at about 1300-1400 UTC. By this time, convection had diminished and the system appeared to rapidly weaken as it accelerated eastwards reaching a speed of over 20 knots as it crossed the NT Border near Wyndham.

Aside from making landfall, Raymond was constrained by east to northeasterly wind shear on the order of 30 knots, being located north of the shear minimum.

### *Motion*

Raymond tracked on a general east to east southeast track under the influence of a stronger monsoon flow to the north.

### *Structure*

Raymond exhibited monsoonal characteristics having the strongest winds in the northwesterly flow north of the centre.

## **C. Impact**

There was no known damage although it did bring the first significant rainfall of the season to the northern Kimberley.

## **D. Observations**

The heaviest daily fall recorded was 162.2 mm at Kununurra on 2 January. These were the first heavy rains of the season.

Browse Island (14.1°S 123.5°E) reported a pressure of 986 hPa and mean winds of 33 knots at 0300 UTC but this was the only reported observation for the day (power problems prevented other transmissions)

Troughton Island briefly registered gale force winds.

Table 1 Best track summary for Tropical Cyclone *Raymond* 30 December 2004 – 10 January 2005. Note: Add 8 hours to convert to WST. Refer to best track database for complete track details.

Year	Month	Day	Hour	Latitude	Longitude	Max Wind Knots	Central Pressure hPa	Radius Gales nm
2004	12	30	0000	12.9	119.8	20	1004	
2004	12	30	0600	13.3	120.2	25	1002	
2004	12	30	1200	13.7	120.6	25	1002	
2004	12	30	1800	14.0	120.9	25	1000	
2004	12	31	0000	14.2	121.1	25	998	
2004	12	31	0600	14.3	121.2	30	995	
2004	12	31	1200	14.5	121.3	30	995	
2004	12	31	1800	14.6	121.3	30	995	
2005	1	1	0000	14.3	121.3	30	995	
2005	1	1	0600	14.4	121.8	30	995	
2005	1	1	1200	14.5	122.3	30	995	
2005	1	1	1800	14.4	122.7	35	990	55
2005	1	2	0000	14.2	123.2	45	985	55
2005	1	2	0600	14.0	124.0	45	985	55
2005	1	2	1200	14.2	125.3	45	985	55
2005	1	2	1500	14.4	126.4	35	990	45
2005	1	2	1800	14.8	127.5	35	993	45
2005	1	3	0000	15.2	129.2	30	1000	
2005	1	3	0600	16.5	130.2	20	999	
2005	1	3	1200	17.3	130.7	15	999	
2005	1	3	1800	17.5	132.0	15	999	
2005	1	4	0000	17.8	134.2	15	999	
2005	1	4	0600	18.4	134.5	15	997	
2005	1	4	1200	18.5	136.5	15	999	
2005	1	4	1800	18.0	137.0	15	999	
2005	1	5	0000	17.5	137.5	15	1000	
2005	1	5	0600	17.1	137.8	15	999	
2005	1	5	1200	16.8	138.3	15	999	
2005	1	5	1800	16.6	138.7	15	1000	
2005	1	6	0000	16.2	139.1	15	1001	
2005	1	6	0600	16.2	139.8	15	1001	
2005	1	6	1200	16.8	140.1	15	1002	
2005	1	6	1800	16.7	140.4	15	1002	
2005	1	7	0000	16.3	140.6	15	1002	
2005	1	7	0600	16.0	139.6	15	1001	
2005	1	7	1200	15.9	139.4	15	1001	
2005	1	7	1800	15.6	138.9	15	1001	
2005	1	8	0000	15.5	138.9	15	1001	
2005	1	8	0600	15.3	138.8	15	1001	
2005	1	8	1200	15.2	138.7	15	1002	
2005	1	8	1800	15.1	138.6	15	1002	
2005	1	9	0000	14.6	138.2	15	1002	
2005	1	9	0600	14.6	138.1	15	1002	
2005	1	9	1200	14.6	137.6	15	1003	
2005	1	9	1800	14.6	137.1	15	1003	
2005	1	10	0000	14.7	136.6	15	1004	

Figure 1. Track of Tropical Cyclone *Raymond* 30 December 2004 – 10 January 2005. All times in WST.

