

Tropical Cyclone *Errol*

9 - 10 May 2002

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

A. Summary

TC *Errol* was a weak late season system that briefly attained tropical cyclone intensity on 9 May before weakening early on 10 May, about 600 km north of Cocos Is. The system did not impact any island communities although eventually it did pass to the east of Cocos Is on 15 May as a weak tropical low. Operationally it was maintained at tropical cyclone intensity until 14 May, however reanalysis indicates that winds around the system were below gale force from early on 10 May.

B. Meteorological Description

Intensity Analysis

A late season tropical low developed in the monsoon trough associated with a Madden Julian Oscillation (MJO) burst off Sumatra on 8 May. On 9 May it reached tropical cyclone intensity as seen in the 1230 WST visible image on 9 May but weakened on 10 May. Its development was hampered by shear throughout its lifetime and also by its proximity to the equator. It remained a tropical low for several days and showed periodic signs of intensifying before eventually moving southwards and being strongly sheared on 14 and 15 May.

Motion

After initially moving to the southeast, *Errol* moved erratically on 10 May then was steered to the west. By 12 May, the low tracked to the south southeast eventually passing to the east of Cocos Islands late on 14 May.

Structure

TC *Errol* showed continued signs of shear. At the time of cyclone intensity the low level centre was exposed to the east of deep convection. Possibly there were multiple centres along the monsoon trough before and after it was at cyclone intensity.

C. Impact

There were no known impacts from TC *Errol*.

D. Observations

Nil.

Table 1. Best track summary for *Errol*, 8 - 14 May 2002. All times in WST.

Year	Month	Day	Hour (UTC)	Position Latitude S	Position Longitude E	Max wind 10min knots	Central Pressure hPa	Rad. of Gales nm
2002	05	8	0300	5.3	97.3	20	1005	
2002	05	8	0600	5.5	97.2	20	1005	
2002	05	8	1200	5.7	97.3	25	1002	
2002	05	8	1800	5.8	97.4	25	1000	
2002	05	9	0000	6.0	97.5	35	995	
2002	05	9	0600	6.6	97.6	35	995	50
2002	05	9	1200	6.7	97.3	35	995	50
2002	05	9	1800	6.7	97.1	35	995	25
2002	05	10	0000	6.5	97.3	30	998	
2002	05	10	0600	6.4	97.6	25	1000	
2002	05	10	1200	6.6	97.9	25	1000	
2002	05	10	1800	6.8	97.7	25	1000	
2002	05	11	0000	6.4	97.2	25	1000	
2002	05	11	0600	6.2	96.8	30	998	
2002	05	11	1200	6.2	96.3	25	1002	
2002	05	11	1800	6.3	96.0	25	1002	
2002	05	12	0000	6.3	96.2	25	1002	
2002	05	12	0600	6.2	95.7	25	1002	
2002	05	12	1200	7.0	95.4	25	1002	
2002	05	12	1800	7.9	95.4	25	1002	
2002	05	13	0000	8.5	95.6	25	1002	
2002	05	13	0600	8.8	95.6	25	1002	
2002	05	13	1200	9.0	96.0	25	1002	
2002	05	13	1800	9.2	96.3	20	1005	
2002	05	14	0000	9.6	96.6	20	1005	

Figure 1. Track of Tropical Cyclone Errol 8 – 14 May 2002 *All times in WST.*

