

# **Severe Tropical Cyclone Bobby**

17 - 22 February 1984

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

## A. Summary

Tropical cyclone *Bobby* formed on 18 February north of the Pilbara coast and took a general southwest track remaining sufficiently offshore not to seriously impact the coast. *Bobby* peaked in intensity on 21 February northwest of Northwest Cape then gradually weakened, dissipating on 23 February.

Although there were financial losses to industry, there was no known impact to coastal communities. *Bobby* was the 14th cyclone for the season of 1983-84

### **B.** Meteorological Description

Bobby formed rapidly in a developing monsoon trough to the northwest of Broome during 17 February and moved quickly to the southwest. Cyclonic intensity was reached at 0000 UTC 18 February. Steered by upper-level winds associated with the western sector of an upper high over northern Australia, *Bobby* maintained a track almost parallel to the coast.

The cyclone intensified steadily as it continued around the coast and became severe at about 1600 UTC 18 February when located approximately 380 km northwest of Port Hedland. Peak intensity was reached at 0000 UTC 21 February with an estimated central pressure of 950 hPa when centred at 20.7°S 110.3°E. A clearly defined circulation centre or eye from GMS imagery was visible for most of *Bobby*'s lifetime. The low-level circulation of *Bobby* was forced southwest over cooler waters during 22 February and upper-level north-westerly winds sheared the top off the storm. By about 1200 UTC 23 February, the system had lost cyclone status and then rapidly decayed.

#### C. Impact

Although *Bobby* did not make landfall, it followed the northwest coast of Western Australia at a distance of between 250 and 400 km from Broome to Carnarvon and it was necessary to issue warnings for four days to successive sections of the coast. The cyclone attracted considerable media interest, particularly as it moved further south and posed a possible threat to more populous regions of the State.

#### D. Observations

The strongest reported wind was 111 km/h (60 knots) by a ship 130 km from the centre when the cyclone was near 23.5°S 108.7°E. Gale-force winds were experienced briefly on the coast in the Learmonth-Northwest Cape area.

Table 1. Best track summary for Tropical Cyclone *Bobby*, 17 - 23 February 1984. Note: Add 8 hours to convert to WST. Refer to best track database for complete track details.

Year	Month	Day	Hour (UTC)	Latitude S	Longitude E	Max Wind knots	Central Pressure hPa	Radius of Gales nm
1984	2	17	1200	16.2	120.0		996	
1984	2	17	1800	17.5	118.8		995	
1984	2	18	0000	18.0	118.3		980	
1984	2	18	0600	18.4	117.3		975	
1984	2	18	1200	18.3	116.3		975	
1984	2	18	1800	18.2	115.8		970	
1984	2	19	0000	18.2	115.3		970	
1984	2	19	0600	18.2	114.8		965	
1984	2	19	1200	18.4	114.1		955	
1984	2	19	1800	18.8	113.1		955	
1984	2	20	0000	19.1	112.9		955	
1984	2	20	0600	19.1	112.2		955	
1984	2	20	1200	19.4	111.4		955	
1984	2	20	1800	20.0	111.0		955	
1984	2	21	0000	20.7	110.3		950	
1984	2	21	0600	22.0	110.0		955	
1984	2	21	1200	22.9	109.9		955	
1984	2	21	1800	23.5	109.7		964	
1984	2	22	0000	23.5	109.4		968	
1984	2	22	0600	23.5	109.1		980	
1984	2	22	1200	23.5	108.5		984	
1984	2	22	1800	24.4	107.3		986	
1984	2	23	0000	25.8	106.1		990	
1984	2	23	0600	26.6	104.1		992	
1984	2	23	1200	27.0	103.0		998	

Figure 1. Track of Severe Tropical Cyclone *Bobby*, 17 – 23 February 1984. *All times in WST.* 

