

Severe Tropical Cyclone Enid

15 – 18 February 1980

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

A. Summary

A low that tracked west across the Kimberley moved offshore north of Broome on 15 February and rapidly intensified. *Enid* tracked south on 16 February crossing the coast near Wallal station as an intense cyclone on the morning of 17 January. Severe damage occurred at Wallal station and to the inland town of Shay Gap, though only minor injuries were sustained.

Enid was the third intense tropical cyclone after *Amy* and *Dean* to cross the east Pilbara coast in a five week period.

B. Meteorological Description

Enid developed from a weak surface low that was first evident near Victoria River Downs in the Northern Territory on 12 February. As the low moved generally westward across the Kimberley it gradually deepened so that when it moved offshore about 70 km north of Broome on 15 February it already had a central pressure of 990 hPa. Once over warm water Enid intensified rapidly. After moving slowly and somewhat erratically for 15 hours after 1000 UTC 15 January, the cyclone began to move steadily towards the south and crossed the coast at 0200 UTC 17 January some 25 km west of Wallal with its central pressure estimated to be 930 hPa. At about 0700UTC 17 January Enid passed within 30 km of Shay Gap.

C. Impact

Severe damage to buildings and windmills occurred at Wallal station and cattle valued at \$200 000 were drowned in the ocean. The only structure left standing was the stone homestead but it had no roof or windows left. At Shay Gap severe damage was sustained to blocks of flats and houses which were unroofed. Fortunately no lives were lost and only minor injuries were sustained. The total damage loss due to *Enid* was estimated to be of the order of several million dollars.

D. Observations

Wind/Rain

Although wind gusts exceeding 200 km/h are estimated to have occurred near Wallal no measured wind speeds are available.

Heavy rain accompanied *Enid* along the full length of its overland track. The highest 24-hour falls reported were 115 mm at Bonney Downs, 113 mm at Marble Bar and 99 mm at Newman.

Table 1. Best track summary for Tropical Cyclone $\it Enid$, 12 - 18 February 1980 . 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 of Gales nm
1980	2	12	0000	16.3	130.9		1001	
1980	2	12	0600	16.0	130.7		1001	
1980	2	12	1200	15.6	130.3		1001	
1980	2	12	1800	15.4	129.8		1000	
1980	2	13	0000	15.4	129.2		1000	
1980	2	13	0600	15.9	128.5		999	
1980	2	13	1200	16.3	127.8		998	
1980	2	13	1800	16.6	127.2		997	
1980	2	14	0000	16.8	126.3		996	
1980	2	14	0600	16.9	125.5		995	
1980	2	14	1200	17.0	124.5		993	
1980	2	14	1800	17.2	123.2		992	
1980	2	15	0000	17.4	122.1		990	
1980	2	15	0600	17.9	121.2		985	
1980	2	15	1200	17.8	120.6		979	
1980	2	15	1500	17.7	120.3		976	
1980	2	15	1800	17.6	120.4		973	
1980	2	15	2100	17.7	120.8		969	
1980	2	16	0000	17.9	120.6		965	
1980	2	16	0600	18.3	120.5		957	
1980	2	16	1200	18.7	120.4		950	
1980	2	16	1800	19.1	120.4		943	
1980	2	17	0000	19.5	120.4		930	
1980	2	17	0600	20.3	120.3		940	
1980	2	17	1200	21.1	120.1		955	
1980	2	17	1800	21.8	119.9		975	
1980	2	18	0000	22.6	119.8		990	

Figure 1. Track of Tropical Cyclone *Enid*, 12-18 February 1980. *All times in WST.*

