

# **Tropical Cyclone Norman**

29 February - 8 March 2000

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

### A. Summary

Tropical cyclone *Norman* developed from a low that moved off the west Kimberley coast. The cyclone tracked parallel to the Pilbara coastline for three days at a distance of about 250 kilometres, before continuing on a westward track away from the West Australian coast. *Norman* quickly reached a category 5 cyclone on 2 March but weakened over the following 2 days. The system finally sheared during the 8-9 February with the low level centre moving in a northwest direction before dissipating.

While there were no direct impacts to coastal or island communities there was an economic impact owing to the disruption to industry in the northwest.

## **B. Meteorological Description**

#### Intensity

*Norman* started as a low over the west Kimberley, north east of Broome on 28 February. The low moved west offshore north of Broome on 29 February and quickly developed into a category 1 cyclone.

#### Motion

Norman was located north of the mid-level ridge and for most of its lifetime the cyclone moved steadily westward. On 4 March Norman began a southerly movement as it moved through the ridge and by 6 March the weakening system had become captured in a middle level westerly steering flow. The low level centre recommenced a west northwest track however as the cyclone sheared apart and weakened to below cyclone strength on 8 March.

#### Structure

Norman was located north of the high level ridge axis and experienced some shear in the early stages of it life. By 2 March the shear decreased and Norman intensified, becoming more symmetrical and forming an eye. Norman had a large radius to gales of 225 km and an eye diameter of 50 km.

#### C. Impact

While there were no direct impacts to coastal or island communities there was an economic impact owing to the disruption to industry in the northwest.

#### **D.** Observations

Nil.

Table 1. Best track summary for Tropical Cyclone *Norman*, 28 February – 10 March 2000.

Note: Add 8 hours to convert to WST. Refer to best track database for complete track details.

			Hour	Position Latitude	Position Longitude	Max wind 10min	Central Pressure	Rad. of Gales
Year	Month	Day	(UTC)	S	E	knots	hPa	nm
2000	02	28	2200	17.3	123.0	25	1000	
2000	02	29	0400	17.5	122.2	25	1000	
2000	02	29	1000	17.8	120.6	35	995	
2000	02	29	1600	18.2	119.0	40	990	80
2000	02	29	2200	18.6	117.8	50	985	80
2000	03	1	0400	18.6	116.8	55	980	80
2000	03	1	1000	18.7	115.8	60	975	80
2000	03	1	1600	18.6	114.9	70	965	80
2000	03	1	2200	18.7	113.8	75	960	110
2000	03	2	0400	18.9	112.8	80	955	120
2000	03	2	1000	19.2	111.5	85	950	120
2000	03	2	1600	19.5	109.9	95	940	120
2000	03	2	2200	19.7	108.2	100	930	120
2000	03	3	0400	19.7	106.9	85	950	120
2000	03	3	1000	20.0	105.0	70	965	110
2000	03	3	1600	20.0	103.0	70	965	80
2000	03	3	2200	20.3	101.2	70	965	80
2000	03	4	0400	20.4	99.3	60	975	80
2000	03	4	1000	20.4	97.8	55	980	80
2000	03	4	1600	20.4	96.6	55	980	80
2000	03	4	2200	20.3	95.4	55	980	80
2000	03	5	0400	20.4	94.6	55	980	80
2000	03	5	1000	20.6	93.9	55	980	80
2000	03	5	1600	20.6	93.3	55	980	80
2000	03	5	2200	20.7	92.8	55	980	80
2000	03	6	0400	20.8	92.2	55	980	80
2000	03	6	1000	21.3	92.0	55	980	80
2000	03	6	1600	21.8	91.9	55	980	80
2000	03	6	2200	22.5	91.5	50	985	80
2000	03	7	0400	23.1	91.6	50	985	80
2000	03	7	1000	23.7	91.8	50	985	80
2000	03	7	1600	23.8	92.0	40	990	80
2000	03	7	2200	23.9	92.2	35	995	80
2000	03	8	0400	24.0	92.5	35	995	80
2000	03	8	1000	23.9	92.8	35	995	80
2000	03	8	1600	23.8	92.6	25	1000	
2000	03	8	2200	23.7	92.3	25	1000	
2000	03	9	0400	23.7	91.9	25	1000	
2000	03	9	1000	23.5	90.5	25	1000	
2000	03	9	1600	23.2	89.8	25	1000	
2000	03	9	2200	23.0	88.2	20	1005	
2000	03	10	0400	22.8	87.8	20	1005	

Figure 1. Track of Tropical Cyclone *Norman,* 29 February – 10 March 2000. All times in WST.

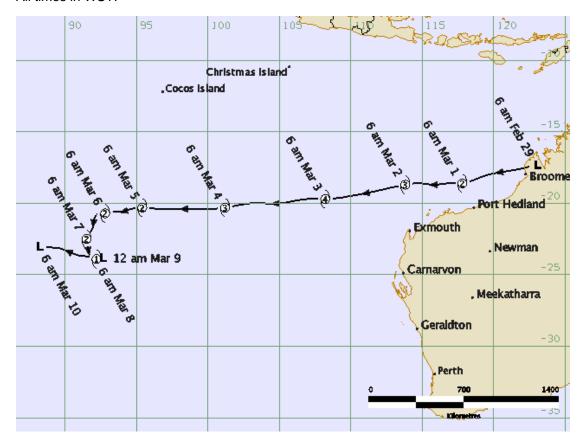


Figure 2. Microwave image of Tropical Cyclone *Norman* close to maximum intensity, 1711 UTC 2 March 2000. (image courtesy of US NRL: http://www.nrlmry.navy.mil/)

