

Tropical Cyclone Isobel

27 January – 1 February 1996

Perth Tropical Cyclone Warning Centre Bureau of Meteorology

A. Summary

Isobel was a weak category one cyclone north of Western Australia. It originated in the monsoon trough north of the Kimberley coast. The system moved west then southwest across the Timor Sea while north of a deep layered ridge. Good low-level cross-equatorial flow fed into the system and it reached weak category one intensity at 0600 UTC 29 January. The system became embedded in strong upper northwesterly flow which stripped convective cloud off the centre exposing the low-level cloud signature on satellite imagery. By 0000 UTC 1 February it had dissipated 400 km off the Pilbara coast.

B. Meteorological Description

Intensity analysis

TC *Isobel* was a very marginal cyclone, due to the influence of upper level shear, off the northwest Australian coast with no coastal impact. A broad monsoon low with no consistent low level centre formed between the north Kimberley and Darwin during 25 January. This system slowly moved east and began to develop a low-level centre during 27 January. *Isobel* reached marginal cyclone status during 29 January as it moved southwest. By the morning of 30 January the cyclone had sheared and the low-level centre was clearly visible on satellite imagery. During the next twenty four hours, spasmodic thunderstorm activity near the low-level centre helped to keep *Isobel* a marginal cyclone as it tracked southsouthwest, but by the morning of 31 January the system had weakened to a tropical low and by the morning of 1 February had dissipated, 400 kilometres off the Pilbara coast.

Motion and Structure

TC *Isobel* was north of the low to mid-level ridge in its formative stages and tracked basically west. During 28 January Isobel began to move west southwest then southwest during 29 January around the shoulder of the mid-level high to its southeast. *Isobel* then sheared due to the strengthening upper northeasterlies and the low-level centre then tracked southsouthwest before dissipating by 1 February.

C. Impact

There was no known impact associated with TC Isobel.

D. Observations

Nil.

Table 1. Best track summary for *Isobel 27 January – 1 February 1996*Note: Add 8 hours to convert to WST. Refer to best track database for complete track details.

				Position	Position	Max wind	Central	Rad. of
			Hour	Latitude	Longitude	10min	Pressure	Gales
Year	Month	Day	(UTC)	S	Ē	knots	hPa	nm
1996	01	27	0100	12.4	122.8	25	1000	
1996	01	27	0700	12.3	122.1	25	1000	
1996	01	27	1300	12.2	121.5	25	1000	
1996	01	27	1900	12.1	120.9	25	1000	
1996	01	28	0100	12.0	120.2	25	1000	
1996	01	28	0400	12.1	119.8	25	1000	
1996	01	28	0700	12.3	119.5	25	1000	
1996	01	28	1000	12.5	119.0	25	1000	
1996	01	28	1300	12.7	118.6	25	1000	
1996	01	28	1600	13.0	118.2	25	1000	
1996	01	28	1900	13.3	117.8	25	1000	
1996	01	28	2200	13.5	117.4	30	998	
1996	01	29	0100	13.7	117.0	30	998	
1996	01	29	0400	13.9	116.7	30	998	
1996	01	29	0700	14.0	116.4	35	995	45
1996	01	29	1000	14.2	116.2	35	995	45
1996	01	29	1300	14.1	116.2	35	995	45
1996	01	29	1600	14.1	116.2	35	995	45
1996	01	29	1900	14.1	116.2	35	995	45
1996	01	29	2200	14.1	116.2	35	995	45
1996	01	30	0100	14.2	116.1	35	995	45
1996	01	30	0400	14.4	115.8	35	995	45
1996	01	30	0700	14.8	115.6	35	995	45
1996	01	30	1000	14.9	115.6	35	995	45
1996	01	30	1300	15.2	115.6	35	995	45
1996	01	30	1600	15.4	115.5	35	995	45
1996	01	30	1900	15.6	115.4	35	995	45
1996	01	30	2200	15.9	115.3	35	995	45
1996	01	31	0100	16.2	115.0	30	998	
1996	01	31	0400	16.2	115.0	30	998	
1996	01	31	0700	16.3	114.4	25	1000	
1996	01	31	1000	16.4	114.8	25	1000	
1996	01	31	1300	16.5	114.8	25	1000	
1996	01	31	1600	16.7	114.7	25	1002	
1996	01	31	1900	16.9	114.7	25	1002	
1996	01	31	2200	17.1	114.7	25	1002	
1996	02	1	0100	17.3	114.6	25	1002	

Figure 1. Track of Tropical Cyclone *Isobel*, 27 January – 1 February 1996. *All times in WST.*

