



Australian Government
Bureau of Meteorology

Tropical Cyclone *Emma* 2 – 16 December 1995

Perth Tropical Cyclone Warning Centre
Bureau of Meteorology

A. Summary

TC *Emma* began as a low level centre near Christmas Island on 2 December. *Emma* was a sheared system for its whole lifetime. As it moved westwards it passed quite close to Christmas Island during the morning of 2 December but winds about the island remained light. It continued westward reaching minimal cyclone intensity from late on 4 December until about midnight on 5 December when it was to the northwest of Cocos Islands. It weakened below cyclone intensity early on 6 December and continued a general westward movement until 1300UTC 7 December when it stopped and then commenced an eastward arc passing to the north of Cocos Island during 10 December. It continued an eastward movement, passing about 50 kilometres to the south of Christmas Island about 0000UTC 12 December, causing strong, squally winds and some damage to the island, however sustained gales were not reported. Ex-TC *Emma* retained a low-level centre until 17 December.

B. Meteorological Description

Intensity analysis

Tropical cyclone *Emma* was a system with its associated convective cloud sheared by upper winds from its centre throughout its lifetime. Consequently, it never intensified beyond minimal tropical cyclone intensity. *Emma* began as a low-level circulation near 10°s 106°E around 2100 UTC 1 December. It was embedded in a well-developed monsoon trough and laid to the north of a firm middle-level ridge which steered it westwards. The cyclone continued moving westwards for the next five days and reached minimal tropical cyclone intensity from 1200 UTC 4 December until 1500 UTC 5 December passing within 120 km of Cocos Island at 0600 UTC 4 December. Ex-TC *Emma* retained a low-level centre until 17 December when it was eventually absorbed into the westerly monsoon flow to the east of Christmas Island.

Motion and Structure

Emma's initial westward movement was under the influence of mid-level easterly flow. As TC *Frank* began to form and intensify to the south of Timor, *Emma*'s westward movement slowed. By 1200 UTC 7 December *Emma* had begun to move eastwards and increasingly came under the influence of the developing cyclonic circulation around TC *Frank*.

C. Impact

Some minor damage was reported at Christmas Island.

D. Observations

Wind/Pressure and Rainfall

There were no reports of significant wind and rainfall associated with TC *Emma*.

Table 1. Best track summary for *Emma*, 1 – 16 December 1995

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

Year	Month	Day	Hour (UTC)	Position Latitude S	Position Longitude E	Max wind 10min knots	Central Pressure hPa	Rad. of Gales nm
1995	12	1	2200	10.0	105.9	20	1005	
1995	12	2	0100	10.0	105.5	20	1005	
1995	12	2	0400	10.1	105.1	20	1005	
1995	12	2	0700	10.2	104.7	20	1005	
1995	12	2	1000	10.4	104.3	20	1005	
1995	12	2	1300	10.6	103.9	20	1005	
1995	12	2	1600	10.8	103.5	20	1005	
1995	12	2	1900	11.0	103.1	20	1005	
1995	12	2	2200	11.2	102.7	20	1005	
1995	12	3	0100	11.4	102.3	20	1003	
1995	12	3	0400	11.6	101.9	20	1003	
1995	12	3	0700	11.8	101.5	20	1003	
1995	12	3	1000	11.9	101.0	20	1003	
1995	12	3	1300	11.9	100.5	20	1003	
1995	12	3	1600	11.8	100.0	25	1000	
1995	12	3	1900	11.7	99.5	25	1000	
1995	12	3	2200	11.6	99.0	25	1000	
1995	12	4	0100	11.5	98.5	25	1000	
1995	12	4	0400	11.4	98.0	30	998	
1995	12	4	0700	11.3	97.6	30	998	
1995	12	4	1000	11.1	97.2	30	998	
1995	12	4	1300	10.9	96.8	35	995	55
1995	12	4	1600	10.6	96.5	35	995	55
1995	12	4	1900	10.3	96.2	40	990	55
1995	12	4	2200	10.0	95.9	40	990	55
1995	12	5	0100	9.8	95.6	35	995	55
1995	12	5	0400	9.6	95.3	35	995	55
1995	12	5	0700	9.4	95.0	35	995	55
1995	12	5	1000	9.3	94.7	35	995	55
1995	12	5	1300	9.4	94.5	35	995	55
1995	12	5	1600	9.5	94.3	35	995	55
1995	12	5	1900	9.6	94.1	30	997	
1995	12	5	2200	9.7	94.0	30	997	
1995	12	6	0100	9.8	93.9	30	997	
1995	12	6	0400	9.9	93.7	30	997	
1995	12	6	0700	10.2	93.5	30	997	
1995	12	6	1000	10.5	93.3	30	997	
1995	12	6	1300	10.6	93.1	30	997	
1995	12	6	1600	10.7	92.9	30	997	
1995	12	6	1900	10.7	92.7	30	997	
1995	12	6	2200	10.7	92.5	30	997	
1995	12	7	0100	10.7	92.2	30	997	
1995	12	7	0400	10.7	91.9	30	997	
1995	12	7	0700	10.8	91.6	30	997	

1995	12	7	1000	10.9	91.3	30	997	
1995	12	7	1300	10.8	91.1	30	997	
1995	12	7	1600	10.7	91.1	30	997	
1995	12	7	1900	10.6	91.2	30	997	
1995	12	7	2200	10.5	91.3	30	997	
1995	12	8	0100	10.3	91.4	30	997	
1995	12	8	0400	10.0	91.5	30	997	
1995	12	8	0700	9.7	91.7	30	997	
1995	12	8	1000	9.5	91.9	30	997	
1995	12	8	1300	9.4	92.2	30	997	
1995	12	8	1600	9.3	92.5	30	997	
1995	12	8	1900	9.2	92.8	30	997	
1995	12	8	2200	9.1	93.1	30	997	
1995	12	9	0100	9.1	93.4	30	997	
1995	12	9	0400	9.2	93.7	30	997	
1995	12	9	0700	9.1	94.0	30	997	
1995	12	9	1000	9.1	94.3	30	997	
1995	12	9	1300	9.1	94.6	30	997	
1995	12	9	1600	9.1	94.9	30	997	
1995	12	9	1900	9.1	95.3	30	997	
1995	12	9	2200	9.1	95.7	30	997	
1995	12	10	0100	9.2	96.2	30	997	
1995	12	10	0400	9.3	96.7	30	997	
1995	12	10	0700	9.4	97.2	30	997	
1995	12	10	1000	9.5	97.7	30	997	
1995	12	10	1300	9.7	98.4	30	997	
1995	12	10	1600	9.9	99.2	30	997	
1995	12	10	1900	10.0	100.0	30	997	
1995	12	10	2200	10.1	100.7	30	997	
1995	12	11	0100	10.2	101.3	30	997	
1995	12	11	0400	10.2	101.8	30	997	
1995	12	11	0700	10.3	102.3	30	997	
1995	12	11	1000	10.4	102.9	30	997	
1995	12	11	1300	10.6	103.5	30	997	
1995	12	11	1600	10.8	104.1	30	997	
1995	12	11	1900	10.9	104.7	30	997	
1995	12	11	2200	11.0	105.3	30	997	
1995	12	12	0100	11.0	105.9	30	997	
1995	12	12	0400	11.0	106.5	30	997	
1995	12	12	0700	11.0	107.0	30	997	
1995	12	13	0100	11.5	109.5	25	1000	
1995	12	14	0100	12.3	111.2	20	1003	
1995	12	15	0100	13.0	113.0	20	1005	
1995	12	15	1300	13.0	114.0	20	1005	
1995	12	16	0100	13.0	115.0	20	1005	
1995	12	16	1600	13.0	115.0	20	1005	

Figure 1. Track of Tropical Cyclone Emma, 2 – 16 December 1995.
All times in WST.

