

## **Tropical Cyclone Rosita**

4 – 17 January 1990
Perth Tropical Cyclone Warning Centre
Bureau of Meteorology

## A. Summary

Intensification of the small cyclone, *Rosita*, was continuously inhibited by vertical shear which contained the major convection westward of the low-level centre. Although cyclone intensity was maintained for only 2.5 days, the low-level circulation was evident for almost 13 days.

Rosita began as a low pressure centre near 12.7°S, 111.7°E at 1800 UTC 4 January. It tracked steadily in a general westerly direction and developed slowly until 0600 UTC 6 January when it slowed and weakened slightly under the influence of an increasing vertical shear. It remained almost stationary until 9 January when it was shunted northwest by a developing ridge in the middle latitudes.

The low appeared very weak and sheared on satellite imagery as it moved equatorward but, by 0600 UTC 10 January, convection redeveloped and consolidated around it during 11 and 12 January as the low began to slowly intensify. Gales had developed around the centre by 1500 UTC 13 January.

Rosita was tracking south-southeast and was still under the influence of vertical shear which had displaced most of the convection to the west of the low-level centre. The cyclone changed direction again around 2100 UTC 14 January and tracked northwest as it weakened to below tropical cyclone intensity. It was tracking around the periphery of the larger tropical cyclone *Sam*. The remnants of *Rosita* tracked equator- ward until they had dissipated on 17 January.

Table 1. Best track summary for Rosita, 4-17 January 1990 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
	Month	Day	(UTC)	S	Ĕ	knots	hPa	nm
1990	01	4	1800	12.7	111.7	25	1004	
1990	01	5	0000	12.8	110.6	25	1004	
1990	01	5	0600	12.9	109.8	25	1002	
1990	01	5	1200	13.0	108.5	30	1001	
1990	01	5	1800	13.2	107.0	30	1001	
1990	01	6	0000	13.4	105.7	30	1000	
1990 1990	01 01	6	0600	13.8	104.4	35	998	
1990	01	6	1200 1800	14.0 14.3	104.2 103.8	30 30	1000 1000	
1990	01	7	0000	14.6	103.6	30	1000	
1990	01	7	0600	15.0	103.4	30	1000	
1990	01	7	1200	15.2	103.4	30	1000	
1990	01	7	1800	15.2	103.8	30	1001	
1990	01	8	0000	15.1	104.2	25	1001	
1990	01	8	0600	14.9	104.3	25	1002	
1990	01	8	1200	14.4	104.3	25	1002	
1990	01	8	1800	14.0	104.2	25	1002	
1990	01	9	0000	13.5	104.1	25	1003	
1990	01	9	0600	13.2	103.8	25	1004	
1990	01	9	1200	12.3	103.2	25	1004	
1990	01	9	1800	11.6	102.6	25	1003	
1990	01	10	0000	10.8	102.0	25	1002	
1990	01	10	0600	10.0	101.3	30	1000	
1990	01	10	1200	9.8	100.4	30	1000	
1990	01	10	1800	10.0	100.2	30	1000	
1990	01	11	0000	10.3	100.1	30	1000	
1990	01	11	0600	10.5	100.1	30	1000	
1990	01	11	1200	10.8	100.1	30	1000	
1990	01	11	1800	11.0	100.3	30	1000	
1990	01	12	0000	11.1	100.6	30	1000	
1990	01	12	0600	11.3	101.1	35	998	
1990	01	12	1200	11.8	101.4	35	998	
1990	01	12	1800	12.3	101.7	35	997	
1990	01	13	0000	12.9	101.9	40	995	
1990	01	13	0600	13.4	102.1	45	992	10F
1990	01	13	1200	13.9	102.2	45 50	990	195
1990 1990	01 01	13 14	1800 0000	14.4	102.3	50	988	185
1990	01	14	0600	14.9	102.5	50 45	988	150
1990	01	14	1200	15.4 15.8	102.6 102.6	45 45	990 990	110
1990	01	14	1800	16.4	102.6	40	990	110
1990	01	15	0000	16.6	102.6	35	994	
1990	01	15	0600	16.3	101.6	35	997	
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1990	01	15	1800	15.6	100.5	35	999	
1990	01	16	0000	15.2	100.0	30	1000	
1990	01	16	0600	14.4	99.6	30	1000	
1990	01	16	1200	13.8	99.2	30	1000	
1990	01	16	1800	13.2	98.8	30	1000	
1990	01	17	0000	12.6	98.6	30	1000	
1990	01	17	0600	12.0	98.3	30	1001	
1990	01	17	1200	11.2	98.1	25	1002	

Figure 1. Track of Tropical Cyclone *Rosita*, 5 – 17 January 1990 *All times in WST.* 

