



Australian Government
Bureau of Meteorology

Severe Tropical Cyclone *Sharon*

12 – 22 March 1994

Perth Tropical Cyclone Warning Centre
Bureau of Meteorology

A. Summary

Tropical cyclone *Sharon* was the most intense cyclone of the season within the Perth TCWC warning area. *Sharon* formed in the monsoon trough in a region of upper diffluent easterly flow just to the south of the Indonesian Islands during 13 March. A 20 to 30 knots middle-level surge to the south of the genesis area in the previous 48 hours may have contributed to formation. There was no indication of a strong cross-equatorial surge. Intensification seems to have occurred as the low moved beneath the upper ridge axis.

The cyclone rapidly intensified to hurricane strength during 14 March while moving on a south-southwest path towards the coastline of Western Australia. A well-defined eye was clearly evident on satellite imagery until early on 16 March. Following cyclone formation a major upper trough intensified over southeastern Australia and extended northwestward, pushing the 500 hPa high over the northern part of the Kimberley. The cyclone was steered southsouthwest around the northwestern flank of the high. By 16 March it had moved into a region of increasing westerly shear (at 2300 UTC 15 March the 850-200 hPa shear near Exmouth, some 550 kilometres to the south-southeast of the cyclone centre, was westerly at 80 knots).

The cyclone then sheared and was steered away to the west under the influence of the lower/middle-level easterly flow. The weakening cyclone continued to be steered around the northwestern flank of the lower/middle-level (700 hPa) anticyclone. Continued shearing, and subsequent movement over cooler waters caused progressive weakening to below cyclone strength by the morning of the 18th.

There was no report of significant impact associated with TC *Sharon*.

B. Meteorological Description

See above.

C. Impact

There was no report of significant impact associated with TC *Sharon*.

D. Observations

Wind/Pressure and Rainfall

There was no report of significant wind and rainfall associated with TC *Sharon*.

Table 1. Best track summary for *Sharon 12 – 22 March 1994*

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 |
|------|-------|-----|------------|---------------------|----------------------|----------------------|----------------------|------------------|
| 1994 | 03 | 12 | 0600 | 9.9 | 119.0 | 20 | 1005 | |
| 1994 | 03 | 12 | 1200 | 9.9 | 118.2 | 20 | 1005 | |
| 1994 | 03 | 12 | 1800 | 9.9 | 117.4 | 25 | 1000 | |
| 1994 | 03 | 13 | 0000 | 9.9 | 116.6 | 25 | 1000 | |
| 1994 | 03 | 13 | 0300 | 10.1 | 116.2 | 25 | 1000 | |
| 1994 | 03 | 13 | 0600 | 10.3 | 115.8 | 25 | 1000 | |
| 1994 | 03 | 13 | 0900 | 10.5 | 115.4 | 25 | 1000 | |
| 1994 | 03 | 13 | 1200 | 10.7 | 115.0 | 35 | 995 | 55 |
| 1994 | 03 | 13 | 1500 | 10.8 | 114.7 | 35 | 995 | 55 |
| 1994 | 03 | 13 | 1800 | 10.9 | 114.5 | 35 | 995 | 55 |
| 1994 | 03 | 13 | 2100 | 11.1 | 114.5 | 40 | 990 | 55 |
| 1994 | 03 | 14 | 0000 | 11.4 | 114.5 | 40 | 990 | 55 |
| 1994 | 03 | 14 | 0300 | 11.7 | 114.5 | 40 | 990 | 70 |
| 1994 | 03 | 14 | 0600 | 12.2 | 114.4 | 45 | 985 | 70 |
| 1994 | 03 | 14 | 0900 | 12.7 | 114.2 | 55 | 980 | 80 |
| 1994 | 03 | 14 | 1200 | 13.1 | 114.1 | 60 | 975 | 95 |
| 1994 | 03 | 14 | 1500 | 13.4 | 113.8 | 65 | 970 | 95 |
| 1994 | 03 | 14 | 1800 | 13.7 | 113.6 | 70 | 965 | 110 |
| 1994 | 03 | 14 | 2100 | 13.9 | 113.5 | 75 | 960 | 110 |
| 1994 | 03 | 15 | 0000 | 14.2 | 113.5 | 80 | 955 | 125 |
| 1994 | 03 | 15 | 0300 | 14.5 | 113.2 | 85 | 950 | 135 |
| 1994 | 03 | 15 | 0600 | 14.9 | 112.9 | 90 | 945 | 135 |
| 1994 | 03 | 15 | 0900 | 15.4 | 112.8 | 95 | 935 | 150 |
| 1994 | 03 | 15 | 1200 | 15.9 | 112.7 | 100 | 930 | 150 |
| 1994 | 03 | 15 | 1500 | 16.3 | 112.4 | 95 | 935 | 150 |
| 1994 | 03 | 15 | 1800 | 16.6 | 112.3 | 90 | 945 | 150 |
| 1994 | 03 | 15 | 2100 | 16.9 | 112.2 | 85 | 950 | 150 |
| 1994 | 03 | 16 | 0000 | 17.2 | 112.2 | 80 | 955 | 150 |
| 1994 | 03 | 16 | 0300 | 17.4 | 112.1 | 75 | 960 | 135 |
| 1994 | 03 | 16 | 0600 | 17.5 | 111.7 | 70 | 965 | 110 |
| 1994 | 03 | 16 | 0900 | 17.6 | 111.3 | 65 | 970 | 110 |
| 1994 | 03 | 16 | 1200 | 17.7 | 110.8 | 60 | 975 | 110 |
| 1994 | 03 | 16 | 1500 | 17.8 | 110.4 | 55 | 980 | 110 |
| 1994 | 03 | 16 | 1800 | 17.8 | 109.9 | 55 | 980 | 110 |
| 1994 | 03 | 16 | 2100 | 17.9 | 109.5 | 45 | 985 | 95 |
| 1994 | 03 | 17 | 0000 | 18.0 | 109.1 | 45 | 985 | 95 |
| 1994 | 03 | 17 | 0300 | 18.2 | 108.7 | 45 | 985 | 95 |
| 1994 | 03 | 17 | 0600 | 18.4 | 108.3 | 45 | 985 | 80 |
| 1994 | 03 | 17 | 0900 | 18.7 | 107.9 | 45 | 985 | 80 |
| 1994 | 03 | 17 | 1200 | 18.9 | 107.4 | 40 | 990 | 70 |
| 1994 | 03 | 17 | 1500 | 19.2 | 107.1 | 40 | 990 | 55 |
| 1994 | 03 | 17 | 1800 | 19.5 | 106.7 | 40 | 990 | 55 |
| 1994 | 03 | 17 | 2100 | 19.9 | 106.3 | 35 | 995 | 40 |
| 1994 | 03 | 18 | 0000 | 20.3 | 105.9 | 35 | 995 | 25 |

| | | | | | | | | |
|------|----|----|------|------|-------|----|------|--|
| 1994 | 03 | 18 | 0600 | 20.9 | 105.4 | 35 | 995 | |
| 1994 | 03 | 18 | 1200 | 21.4 | 104.9 | 35 | 995 | |
| 1994 | 03 | 18 | 1800 | 22.1 | 104.4 | 35 | 995 | |
| 1994 | 03 | 19 | 0000 | 22.7 | 104.1 | 25 | 1000 | |
| 1994 | 03 | 19 | 0600 | 23.4 | 104.2 | 25 | 1000 | |
| 1994 | 03 | 19 | 0900 | 23.5 | 104.3 | 25 | 1000 | |
| 1994 | 03 | 19 | 1200 | 23.6 | 104.3 | 25 | 1000 | |
| 1994 | 03 | 19 | 1500 | 23.8 | 104.2 | 25 | 1000 | |
| 1994 | 03 | 19 | 1800 | 24.0 | 103.9 | 25 | 1000 | |
| 1994 | 03 | 19 | 2100 | 24.2 | 103.9 | 25 | 1000 | |
| 1994 | 03 | 20 | 0000 | 24.5 | 103.9 | 25 | 1000 | |
| 1994 | 03 | 20 | 0600 | 25.5 | 103.9 | 25 | 1000 | |
| 1994 | 03 | 20 | 1200 | 26.5 | 104.0 | 20 | 1005 | |
| 1994 | 03 | 20 | 1800 | 27.3 | 104.4 | 20 | 1005 | |
| 1994 | 03 | 21 | 0000 | 28.0 | 104.7 | 20 | 1005 | |
| 1994 | 03 | 21 | 0600 | 29.6 | 105.6 | 20 | 1005 | |
| 1994 | 03 | 21 | 1200 | 30.8 | 106.8 | 20 | 1005 | |
| 1994 | 03 | 21 | 1800 | 31.6 | 108.5 | 0 | 1010 | |
| 1994 | 03 | 22 | 0000 | 32.2 | 110.6 | 0 | 1010 | |

Figure 1. Track of Tropical Cyclone Sharon, 12 – 22 March 1994.
All times in WST.

