

Tropical Cyclone Ivy 07/12/1972 – 10/12/1972

(i) General

Except during the period cyclone “Ivy” operated meteorological conditions during December were generally unfavourable for tropical cyclone development in the eastern half of the Indian Ocean. Moreover, while within this area, the cyclone was of only minor intensity.

“Ivy” gave the tropical cyclone season its latest start for four years and only briefly affected the Northwestern Australian Region.

(ii) Development

Cyclone “Ivy” operated in the Region for only one day although its lifespan was longer. Forming on 7th December just outside the northwestern corner of the Perth TCWC area of responsibility the cyclone passed through the Region on the following day travelling to the westsouthwest.

About 13th December when in the western Indian Ocean “Ivy” weakened. Five days later it re-developed and not until 23rd December when near 23°S 58°E did the cyclone finally fill.

As it originated near 9°S 86°E surface reports of the cyclone’s early history are lacking. As was the case with the three other cyclones in this season, the system would possibly have remained undetected for some days but for the satellite surveillance.

During 5th and 6th December cloudiness gradually increased over the area in which “Ivy” eventually formed and by the 7th December seedling development was apparent on satellite photographs. While still developing “Ivy” passed through the Northwestern Australian Region with an estimated minimum central pressure of 988 mb.

(iii) Features of the Track (fig. 1.1)

Although its overall lifespan was 16 days cyclone “Ivy” was located within the Region for one day. In that time it travelled a distance of about 500 km in a westsouthwesterly direction at an average speed of about 19 km/h. There were no unusual features in the track.

(iv) Winds, Seas and Related Damage

No reports from close to the cyclone centre were received. However it was estimated from satellite data that winds would have been approaching gale force as “Ivy” moved out of the Northwestern Australian Region.

(v) Satellite Analysis

The ESSA 8 and NOAA 2 satellites both provided photographic evidence and development and movement of cyclone “Ivy”. Data from an analysis using the Dvorak method are displayed in Table 1.1. While passing through the Northwestern Australian Region, cyclone “Ivy” was in its incipient stages and subsequently developed in the Mauritius area of responsibility.

Table 1.1 Data from Satellite Photographs

Satellite Name	Orbit Number	Date/Time (GMT)	Estimated posn. of centre °S	Estimated posn. of centre °E	Final T No.	Min. Sea Level Pressure (mb)
ESSA 8	18234	070351	9	86	2	101
NOAA 2	668	080158	10	83	2.5	997
ESSA 8	18259	0903399	11.5	79	3	992