

BULLETIN FOR CYCLONIC ACTIVITY AND SIGNIFICANT TROPICAL WEATHER
IN THE SOUTHWEST INDIAN OCEAN

DATE: 24/12/2025 AT 1200 UTC

PART 1: WARNING SUMMARY

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION

There are two branches of the Monsoon Trough (MT) in the southwestern Indian Ocean basin: the first between 52 and 78°E and between 6 and 9°S, and the second south of the Mozambique Channel. Convective activity is weak to moderate along these two MT.

Despite the anomaly still present at low frequency, the wave pattern becomes more and more favorable for cyclogenesis over the next 5 days with the resurgence of an active MJO phase over the western basin. It intersects with a strong Kelvin wave and a mixed Rossby-Gravity wave, with maximum intensity at the end of the weekend or beginning of the week, thus promoting convergence and cyclogenesis in the Mozambique Channel. We should also note the arrival of a weak equatorial Rossby wave from the east of the basin.

Risk of tropical low-pressure system GRANT entering from the Australian area of responsibility :

The GRANT system, tracked by the BOM (latest bulletin IDW27700), was located at 06UTC around 11.9°S and 97.8°E. GRANT is expected to continue westward, and most ensemble and deterministic models suggest it will enter the far east of our basin by December 27.

Over the next five days, there is a low risk that tropical low-pressure system GRANT will enter the far east of our basin from the Australian area of responsibility from Friday, December 26. This risk becomes moderate during the night from Friday to Saturday and then high on Saturday, December 27.

Suspect area off the coast of Mozambique :

The monsoon flow runs along the African coast and takes a cyclonic curve in the middle of the Mozambique Channel under the effect of the trade winds passing south of Madagascar. At the same time, a wide low-pressure area is forming over the continent. The deep shear over this area of the Canal seems to prevent rapid cyclogenesis. It will also be obstructed by the proximity of the Madagascan and/or Mozambican coasts. But this shear is expected to decrease, which could make conditions more favorable.

Deterministic and ensemble models suggest the formation of a low-pressure system in the central part of the Mozambique Channel at the end of the week. However, European models (IFS/EPS) suggest the formation of a baroclinic low under the influence of a high-level through circulating south of Madagascar, while American models suggest the formation of a tropical low. In addition, the center deepened by IFS would be more on land, while the one deepened by GFS would be more in the middle of the channel, allowing it to benefit from warm waters to intensify more quickly.

For the next 5 days, there is a very low risk of a tropical storm forming in the middle of the Mozambique Channel starting on Friday, December 26, which will become low starting on December 27.

10-day outlook :

The deterministic IFS will finally deepen the system in the Mozambique Channel from Wednesday or Thursday, and the wave pattern may help to finalize cyclogenesis if it has not yet been completed within the next five days.

NOTA BENE: The likelihood is an estimate of the chance of genesis of a moderate tropical storm over the basin within the next five days:

Very low: less than 10% Moderate: 30% to 60% Very high: over 90%
Low: 10% to 30% High: 60% to 90%

The Southwestern Indian ocean basin extends from the Equator to 40S and from the african coastlines to 90E.