

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

DATE: 02/12/2024 AT 1200 UTC

## PART 1: WARNING SUMMARY

Nil.

## PART 2 : TROPICAL WEATHER DISCUSSION

The basin is in a Near Equatorial Trough (NET) pattern east of 60E, between 6 and 10S. Convective activity is moderate on the northern edge of this NET, and a bit stronger over the eastern part of the basin, where two low-pressure areas are located respectively near 10S/81E and 9S/92E.

Moreover, ROBYN's remnant low is slowly drifting back towards our area of responsibility, near 21S/90E, still without any deep convection associated, and without any intensification potential. It is forecast to dissipate by Wednesday.

The wet phase of the MJO has shifted towards the maritime continent and still enhances vorticity and convection over the extreme east of our basin and in the Indonesian area. A powerful equatorial Rossby wave favors vorticity and moisture convergence on the equatorial side of the NET over the east of the basin thanks to a north-westerly wind burst. However, the persistence of ROBYN's remnants south of the NET until Wednesday should induce a lack of convergence on the southern side of the NET and thus limit cyclogenesis potential until mid-week. At the end of the week, convergence within the NET should gradually get better. It will further increase from next weekend onwards with the help of a new Kelvin wave.

**Over the far east of the basin :**

In the second half of the week, strengthening of convergence over the basin's far east should enable the development of one or several low pressure areas within the NET, most importantly the weak area currently located near 9S/92E, which is expected to move back into our area of responsibility from Thursday onwards. It could then encounter more favorable conditions for development and could become a tropical storm while moving westwards. However, possible lack of convergence due to competition with other vortices or the presence of wind shear and dry air could limit its potential. Several scenarios from deterministic and ensemble models (especially the European EPS) suggest a risk of cyclogenesis, particularly from this weekend onwards, but dispersion remains strong and the GFS remains less favorable over our basin. Tropical storm development risk is therefore still considered fairly low for the next 5 days.

**The risk of tropical storm development over the east of the basin becomes very low from Friday December 6th then low from Saturday December 7th.**

*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.*