# AWIO20 FMEE 011219 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2020/12/01 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

### PART 2:

#### TROPICAL WEATHER DISCUSSION:

The basin remains in a near-equatorial trough (NET) pattern, axed between 5S and 10S east of 70E. The convective activity is now rather localized in the northern part of the NET and in the vicinity of a Disturbed Weather Zone that entered yesterday on the North-Eastern part of our area of responsibility.

### **Zone of Disturbed Weather over the North-Eastern part of the basin:**

During the last 24 hours, the system has not shown any sign of intensification: the circulation center appears much less defined and the upper levels divergence is less marked. The system is estimated at 11 UTC around 10°S and 85.5°E with winds at 20/25 kt and minimum pressure at 1006 hPa. The system is currently moving towards the West-Northwest at about 8 kt. Environmental conditions are currently marginal for development: Dry air in the middle troposphere is present within the circulation. On the other hand, the convergence of low layers is rather poor on the equator side with a westerly flow feeding primarily the system developing in the Bay of Bengal. Finally, a moderate easterly constraint is present as the system evolves just north of the upper ridge.

Over the next few days, environmental conditions is expected to gradually improve. Vertical wind shear is expected to decrease with the northward motion of the upper levels ridge. Under the influence of an equatorial Rossby wave entering from the east of the basin, low levels cyclonism and convergence will gradually improve and by Friday or Saturday, the system should be in a very moist mid-levels environment. It should by that time take advantage of the important oceanic potential available in this part of the basin to finalize the cyclogenesis process.

The risk of a tropical storm formation is thus increasing later this week on the east side of the basin, however the timing of this cyclogenesis differs significantly among the deterministic and ensemble numerical guidance. The system should move more slowly over the next few days within the NET before moving generally South-Westwardsfrom Saturday or Sunday.

The risk of a tropical storm forming over the North-Eastern basin becomes low from Friday, then moderate on Sunday.

NOTA BENE: The likelihood is an estimate of the chance of the genesis of a moderate tropical storm over the basin and 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 coastlines to 90E.	Indian Ocean basin e.	xtends from the equ	ator to 40S and fro	m the african