### AWIO20 FMEE 011238 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2023/03/01 AT 1200 UTC

PART 1: WARNING SUMMARY:

Nil.

### PART 2 : TROPICAL WEATHER DISCUSSION:

The Monsoon trough (MT) is present east of 58E, oscillating between 08S and 12S. The convective activity over the basin is located mainly over the African continent and Madagascar. It is also moderate in the South and South-East of the remnant of the FREDDY overland depression. There is also some activity on the equatorial side of the MT.

### **Remnant Low ENALA:**

Information at 09UTC Location : 25.8S / 68.4E Movement : WNW at 3 kt Max wind over 10min : 28 kt Central pressure : 1004 hPa

#### In the Mozambique Channel:

The center of the remnant FREDDY vortex is rather poorly defined, probably located on the Mozambique coast in the North of Inhambame. The vorticity in low layers is rather elongated and the presence of a shear in the middle troposphere limits its formation. However, the exit of the vortex over the Mozambique Channel, the decrease in vertical shear and the altitude divergence allow this circulation to reform according to deterministic models. The IFS and GFS models propose an outflow on Wednesday night to Thursday. IFS proposes a closed, unstretched circulation from Thursday, while GFS is having trouble redrawing this same circulation. In addition, IFS is deepening the system much faster than GFS and making it reach the stage of a Moderate Tropical Storm much earlier. The ensemble models follow the same trend.

# The risk of development of a moderate tropical storm in the Mozambique Channel remains low from Saturday and moderate from 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 Indian Ocean basin extends from the equator to 40S and from the african coastlines to 90E.*