

AWIO20 FMEE 191214

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2023/02/19 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Warnings WTIO30 FMEE n°020/07 and WTIO20 FMEE n°020/07 issued at 06UTC on Intense  
Tropical Cyclone FREDDY.

Next warning issued at 12UTC.

PART 2 :

TROPICAL WEATHER DISCUSSION:

Monsoon trough (MT) is almost non-existent. However, a branch remains settled east of 50°E until the Very Intense Tropical Cyclone FREDDY, undulating between 09 and 11°S. Convective activity is moderate, localized on the equatorial side of the MT, in the slowdown of the monsoon flow slightly higher compared to yesterday. Convective activity is also present in the Mozambique Channel along the coast of Madagascar. A new phase of cyclogenesis could appear on the central part of the basin, during the next week.

**Very Intense Tropical Cyclone FREDDY :**

Information at 09UTC

Position : 17.1S / 64.8E

Movement : West-southwest 14 kt

Max wind over 10min : 120 kt

Central pressure : 931 hPa

*For more information, please refer to bulletins WTIO31 and WTIO21 to come at 12UTC and following.*

**Zone of disturbed weather over the extreme east of the basin:**

A surface low-pressure area is currently observed on classic satellite imagery over the extreme east of our area of responsibility, centered at 9.3°S and 89.6°E. The wind has strengthened near the center in recent hours (15kt Saturday 18 at 15h45UTC and 25kt Sunday 19 at 03h38UTC on ASCAT swaths). Also the convection is more vigorous and covers a larger geographical area, which indicates a tendency to intensify the system. However, the circulation, although closed, is still quite stretched. Indeed, the vorticity and the convergence of low layers are still not well established. Moreover, deep shears (20kt) and medium tropo (30kt) are present and are not favorable to the formation of a moderate tropical storm. On the satellite image we can indeed see a sheared pattern with a center in low layers decorrelated from the deep convection. Moreover, the assembly models make it follow a track similar to that of DINGANI, which has already consumed a good part of the oceanic potential (ISO26°C depth below 40m).

IFS does not propose any wind above 30kt. This is not the case for the deterministic GFS and some EPS members who are upgrading it to a Moderate Tropical Storm as early as Thursday for a short period.

**Over the next 5 days, there is a risk of another tropical storm developing south of Diego-Garcia, weak from Wednesday and moderate from Thursday.**

*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:*

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

*The Southwestern Indian Ocean basin extends from the equator to 40S and from the african*

*coastlines to 90E.*