AWIO20 FMEE 111237
TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2023/05/11 AT 1200 UTC

PART 1:
WARNING SUMMARY:

Nil.

PART 2 :
TROPICAL WEATHER DISCUSSION:

The basin is in a Near-Equatorial Trough (NET) configuration that extends over most of the basin, between 2 and 6°S. Convective activity is moderate to strong in the eastern part of the NET, around a low-pressure system currently in the Indonesian zone, east of 90E. In a favorable large-scale context (humid MJO phase, presence of MRG/Rossby wave and the arrival of a westerly surge linked to a Kelvin wave), a cyclogenesis is possible.

East of the basin :

A large elongated circulation is currently present around 4S 92E in the Indonesian area as shown by the latest observations (notably, the 2356Z HY-2B pass and 0735Z AMSR2) but no well-defined center is currently present.

Over the next few days, this circulation should enter our area of responsibility. Environmental conditions will also improve with the strengthening of the convergence on the equatorial side as MOCHA moves northward in the other hemisphere from Saturday. To a lesser extent, the polar trade winds should also strengthen over the weekend. Although currently experiencing northeasterly upper shear, this system could be in a weakly sheared area between 5 and 10S by early next week, thus favoring a development of this minimum.

Among the deterministic models, as is often the case, GFS is the most reactive, proposing a storm as early as Sunday, while CEP suggests a slower development accelerating early next week. Their ensemble models reflect the same trends. However, other models such as Arpege or UKMO are not significantly developing this system at the moment, probably due to a weaker equatorial convergence.

The probability for the formation of a tropical storm over the east of the basin becomes very low on Saturday, low on Sunday and moderate from Monday.

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.