AWIO20 FMEE 261132 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2023/03/26 AT 1200 UTC

PART 1: WARNING SUMMARY:

Nil.

PART 2 : TROPICAL WEATHER DISCUSSION: A monsoon trough is timidly emerging on the western part of the basin extended by the low-pressure area in the northeast of the Mascarene Islands. This zone can be defined as a zone of disturbed weather described more precisely below, not being followed by RSMC bulletins or others. The convective activity is marked near this area mainly in the South-East semicircle but over the northern Mozambique Channel.

In the Indonesian and Australian areas :

A weak low-pressure circulation has the potential to develop during the next week, but this system should remain east of 90°E, initially carried by the near-equatorial westerly wind. It should therefore not concern our basin for the next 5 days.

Over the center of the basin, in the northeast of the Mascarene Islands :

The weak low-pressure system under surveillance yesterday has moved generally southward. During the last 24 hours, the low-level circulation has improved slightly, as shown by the visible imagery, and the last partial GCOM pass of 09h15utc. This system is therefore classified as a zone of disturbed weather with a difficult to locate center at about 15.9S/61.9E about 250 km east of Saint Brandon.

The deep convection is still breathing heavily, and extends from 60E to 69E between 11S and 20S. It benefits from a very good altitude divergence associated with the trough that transits south of the sister islands.

The last scatterometric runs suggest a weak circulation of about 10/15kt, reaching 20kt in the gradient in the southern semicircle.

In the next few days, the feeding on the equatorial side, becomes progressively more indirect, with the construction of an equatorial ridge to the north of the system. Convergence will deteriorate on the polar side in connection with the weakening of the subtropical high pressure. In addition, the vertical westerly wind shear, which will strengthen from tonight, will introduce dry air in the middle and upper troposphere over the system.

This should greatly limit the potential development of this system.

The vast majority of deterministic and ensemble modelling confirm these unfavourable conditions and do not suggest any significant deepening over the next 5 days. Only the deterministic Arome and some very isolated members of the ensemble forecast of the AROME model still propose a deepening in depression off the northeast of the Mascarene Islands, but this signal is decreasing, and this scenario is no longer considered. The risk of cyclogenesis is now considered non-existent for the next 5 days.

Nevertheless, this system should contribute to a deterioration of the weather over the Mascarenes, from now on for the Eastern islands and during the week for the sister islands.

Consequently, there is no risk of a moderate tropical storm developing over the basin during the next 5 days.

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.