

AWIO20 FMEE 201204

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2022/01/20 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The trans-equatorial monsoon flow is present over almost the entire width of the basin and will strengthen in the next few days with the active phase of the MJO and the passage of an Equatorial Rossby wave. The Monsoon trough (TM), which is currently poorly defined, will progressively strengthen itself by the end of the week on a 17S/55E 8S/85E axis within which two areas of cyclogenesis are being monitored. A closed circulation is currently present in the North-East of the Mascareignes.

Northeast of the Mascarene Islands:

Currently a closed circulation is present north-northwest of Saint-Brandon thanks to the surge of the monsoon flow and the strengthening of the trade wind flow. The 0530Z ASCAT-C pass depicts a closed circulation but still rather ill defined with average winds of about 20 kt maximum, in its northern semicircle, in connection with the monsoon flow.

In a rather favorable environment, moderate Easterly shear aloft, a very good divergence in the western semicircle, and a strong oceanic potential, this system could begin a phase of intensification before landing on the northeast of Madagascar this weekend.

Deterministic and ensemble numerical models are in fairly good agreement on this first part with some differences in the speed of deepening of the system and the timing of the landing. GFS remains more reactive and slower to approach the coast of Madagascar compared to other global models. Given the change in the structure of the system itself, the proximity of the Malagasy coast and the consensus with the ensemble models, the current forecast favors more the scenarios close to the European model IFS, especially its run of 00Z.

The risk of formation of a moderate tropical storm is moderate from Friday East of Madagascar.

At the end of the weekend, beginning of next week, in the event of a landing of the system on Madagascar, the low could go out on the channel of Mozambique and begin again a phase of intensification in favorable conditions. However, it is still too early to have a clear idea of the possible trajectory of the system. The ensemble models show a much more marked spread at these times following a possible change in the trajectory of the system.

The risk of re-emergence and a new intensification of the storm stage of this system in the Mozambique Channel is important from Monday.

South of Diego-Garcia :

Over the eastern end of the TM around 75/80E, a second tropical minimum could develop as surface convergence improves. However, the intensification could be delayed by a temporary weakness of the polar trade winds. Aloft, conditions seem favorable under the ridge of high pressure protecting it from shear from the beginning of next week.

The risk of formation of a tropical storm becomes weak on Sunday, then moderate from Tuesday south of Diego-Garcia.

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.