# AWIO20 FMEE 161153 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2024/02/16 AT 1200 UTC

#### PART 1:

#### WARNING SUMMARY:

Warnings WTIO20 and WTIO30 006/6 issued at 06Z on Moderate Tropical Storm DJOUNGOU (06-20232024).

Next warnings at 12Z.

#### PART 2:

## TROPICAL WEATHER DISCUSSION:

The basin is in a Monsoon Trough (MT) pattern, particularly in its western part between 40 and 70E around 15S. Within this MT, Tropical Storm DJOUNGOU and a low pressure area near the eastern coast of Madagascar concentrate most of the convective activity.

## **Moderate Tropical Storm DJOUNGOU:**

Informations at 09Z Location: 16.2S / 65.9E Motion: East-south-east, 4kt

Maximum 10 min averaged winds: 40kt

MSLP: 997 hPa

For further information, please refer to warnings WTIO20 and WTIO30 to be issued at 12Z and following.

### North-east of Madagascar then north of the Mascarene Islands:

The cyclonic circulation that crossed Madagascar yesterday emerged this Friday off the east coast with an ill-defined and elongated center, estimated around 19.1S / 49.4E, south-southeast of Toamasina. This morning's ASCAT passes indicate winds of around 10/15kt, with locally 20/30kt under convective bursts. A more compact and better-defined closed circulation could develop over the weekend or at the beginning of next week, thanks to good monsoon flow feeding and significant strengthening of the trade flow convergence with the arrival of the new high-pressure cell. However, a weak northwesterly mid-tropospheric shear stress the weakening of the monsoon flow during the week could more or less limit development pace. Deterministic and ensemblistic forecasts indicate an increased likelihood of cyclogenesis compared with yesterday's forecasts, and with an earlier start, possibly as early as Sunday according to some scenarios. The risk of tropical development is therefore considered moderate for the next 5 days, but could increase beyond that. The low could track near Tromelin island around Monday morning with at least near-gale or maybe gale force winds. By the end of the week, the system could turn southward and move nearer to the Mascarene Islands, although its future track is still very uncertain. It is therefore too early to precise potential threats to inhabited lands.

The risk of a new tropical storm forming north of the Mascarene Islands becomes low on Sunday February 18, then moderate from Tuesday February 20.

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.