AWIO20 FMEE 241210 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2024/03/24 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The basin is in Monsoon Thalweg (MT) configuration, mainly between 50 and 55°E, undulating between 7 and 12°S. Convective activity is mainly present on the equatorial side of the TM, notably near the suspect zone to the immediate west of Agalega, northeast of Madagascar. around 12°S 53°E. The ex-tropical cyclone NEVILLE (coming from the Australian zone of responsibility) has today entered the CMRS zone of responsibility on Reunion Island in the form of a tropical depression filling in. The ASCAT-C pass for 0337Z confirms that gale force winds are confined to the southern quadrant of the system, justifying its downgrading. Convective activity has decreased significantly over the past 24 hours. This system will therefore not be the subject of a special follow-up bulletin.

Suspect zone in northeast Madagascar:

A disturbed zone is currently present within the monsoon trough (MT) near Agalega. The ASCAT-B pass for 0604Z measures winds of around 25 kt in the eastern quadrant, where convective activity is greatest. However, the circulation is not yet well defined.

Despite weak convergence to the south and west at present, the circulation could improve over the next few days as the trade winds strengthen to the south. On the north coast, a light monsoon flow should persist. At present, this minimum is subject to W to NW shear stress, especially aloft, limiting the organization of convection. By mid-week, this shear could diminish, favoring a more significant intensification.

Given the uncertainties in the initial states of the models, and the small size of the circulation envisaged, a significant or even rapid intensification seems possible over the next few days. However, unfavorable short-term conditions should delay this risk until the second half of the week. This risk could also be carried by a new minimum forming within the MT.

The likelihood for the formation of a new moderate tropical storm is low up to Tuesday and becomes moderate afterwards.

Tropical depression filling in NEVILLE:

Information at 10h00UTC Position: 23.1°S / 89.6°E Movement: SW, 10kt

Max wind averaged over 10min: 40kt Estimated central pressure: 1006 hPa

This system will not be the subject of a specific follow-up bulletin.

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.