AWIO20 FMEE 101249 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2021/04/10 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2:

TROPICAL WEATHER DISCUSSION:

The basin is in a near-equatorial trough (NET) pattern east of 60E and along 5S to 8S from west to east.

Within an ongoing dry phase of the Madden-Julian oscillation (MJO), convection along the ITCZ is generally weak. Nevertheless, a broad and elongated clockwise circulation associated with moderate convective activity can be found to the east of the Chagos archipelago, embedded in the NET. Moreover, sparse active storms are still ongoing close to the Comoros and off eastern Madagascar's coast.

In a large-scale unfavorable background (dry MJO phase, moderate wind shear), the circulation embedded in the NET and centered around 79E/7S this Saturday is the only area that has a small potential of development by the end of next week, according to some determinist NWP models. Some slightly more favorable conditions could emerge, especially the strengthening of eastnortheast winds on the equator side of the NET helped by a weak Equatorial-Rossby wave, which could improve low level convergence with the trade winds. Improved upper divergence under the upper-tropospheric ridge could also be a factor, and a moderatly moist mid-troposphere in that area could resist the MJO-triggered "dry invader" (still a bit uncertain though). Thus a few model runs have it develop into a weak tropical storm at the end of next week. Scenarios remain dispersed and the unfavorable large-scale conditions are reflected by a still very shy ensemblist signal. Consequently, the risk is still very low and will need further confirmation in the coming days.

Risk of development of a Moderate Tropical Storm is very low from next Thursday near the Chagos archipelago.

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.