AWIO20 FMEE 241206 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2022/01/24 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Warning WTIO24 and WTIO30 FMEE 011/01 issued at 06UTC on Moderate Tropical Storm ANA. Next warnings issued at 12Z and following

PART 2:

TROPICAL WEATHER DISCUSSION:

The trans-equatorial monsoon flow is present over the entire width of the basin and feeds the Monsoon Trough (MT) which undulates from 17S East of Madagascar to 10S/88E in the extreme east of the basin.

Nestled within this trough several areas of vorticity are monitored: over the center and East of the basin, towards 73E and 88E.

Moderate Tropical Storm ANA:

Position at 09 UTC: 16.4°S / 39.4°E (on land)

Movement: West at 20 kt

Average wind over 10 minutes: 45 kt (gusts to 65 kt)

Estimated MSLP: 990 hPa

Landing of ANA around 08 UTC at 45 kt at the stage of a Moderate Tropical Storm, immediately south of the city of Angoche (Mozambique).

For more information, refer to the technical bulletins WTI024 and WTIO31 which will be issued at 12UTC and following.

Over the central and eastern part of the basin:

Several low pressure area are nest within the TM over this part of the basin.

A first one is located around 10S/73E according to satellite images. But it is lacking of deep convection and the last scatterometer datas place it in the middle of a large area of light winds within the TM. The conditions are therefore unconducive in the short term for this first vortex, especially since it will compete with the minimum further east, detailed below.

Further east, the HY-2B and HY-2C passes, respectively at 2330Z and 0230Z, depict a closed circulation with possible near gale force winds in the monsoon flow. On the equatorial side, the intensity of the trade winds is around 20 KT. According to the CIMSS analysis, this low-level vortex is currently benefiting from good environmental conditions for its development: good low level convergence, good altitude divergence on its western semicircle. However, this potential is offset by a moderate east-southeasterly wind shear aloft, at the northern edge of the upper ridge. During the next week, this tropical low will track towards southwesterly and will encounter rather conducive conditions despite a slight easterly constraint and less convergence on the equatorial side, due to a Fugiwara interaction with a the low present further west. The contribution of moisture carried by the trade winds, the strong oceanic potential and a good divergence aloft suggest that this harbinger has a good chance of deepening at the end of next week. This is what is suggested by the latest guidance available despite a disagreement on the timing of the digging.

Thus, over the next few days, the evolution of these two areas seems closely linked. The ensemble models now seem to favor the possibility of cyclogenesis in the eastern area of the basin to the detriment of the central one.

The risk of formation of a tropical storm in the east of the basin is low on Tuesday and becomes moderate from Wednesday.

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.