AWIO20 FMEE 301145
TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2022/09/30 AT 1200 UTC

PART 1:
WARNING SUMMARY:

Nil.

PART 2 :
TROPICAL WEATHER DISCUSSION:

The basin currently display a classic winter pattern with the presence of trans-equatorial trade winds, west of 63°E. At present, there is almost no convective activity over the entire basin.

We notice the presence of the dissipating low ASHLEY, centered around 21.5S / 69.1E at 09 UTC, which presents average mean speed wind of about 25kt in the southwest semicircle of the low-level clockwise circulation, according to the 0419Z ASCAT swath. The estimated central pressure is 1010 hPa at 09 UTC. In the short term, the remains of ASHLEY will evacuate at the beginning of the weekend towards the mid-latitudes, in front of a low level trough, and thus should not concern directly the Mascarene archipelago.

At the end of the weekend, the basin pattern could evolve progressively into a Near Equatorial Trough (NET), due to a strengthening of the surface winds near the equator, thanks to the circulation of a Rossby equatorial wave, crossed with a Kelvin wave and the emergence of a new MJO phase. This dynamic pattern, should reinforce the low-level vorticity over the east of this TPE and thus give rise to a new surface precursor for a possible future cyclogenesis phase.

Over the next five days, low level surface environmental conditions should remain good. However, it will be necessary to count on a moderate or even strong Eastward upper shear, present on the northern edge of the near equatorial ridge in the middle and upper troposphere.

The main guidelines do not suggest any significant deepening until next Wednesday. The European and American deterministic models suggest at most strong breeze force 6 (25kt) by gradient effect in the southern semicircle of the system. The European Ensemble model (EPS) suggest a low probability of deepening from next Tuesday, and the American one present a significant dispersion of the ensemble members pressure centers digging over the extreme Northeast of the basin.

Thus for the next five days, the risk of formation of a tropical storm is very low from tuesday on the extreme North-Est of the basin.

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.