

AWIO20 FMEE 211232

TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2019/04/21 AT 1200 UTC

PART 1:

WARNING SUMMARY:

Nil.

PART 2 :

TROPICAL WEATHER DISCUSSION:

The basin is in a near-equatorial trough (NET) pattern axed between 5°S and 10°S, with westerly winds at the equator. 3 areas of enhanced low level vorticity that are concentrated the convective activity is located within the NET over the southern Indian ocean : to the North-East of Madagascar near 10°S between 50°E and 55°E, East of Diego Garcia north pf 5°S and near 80°E and the last one outside our AoR between 5-10°S and near 95°E.

The development of two suspect areas over our basin is still suggested by most of the available NWP models during the next week.

North-East of Madagascar :

Satellite data show that deep convective activity has increased over the last 24 hrs along with falling environmental pressure and increasing signs of early banding features within the convective clouds. Scatt data of this morning show no evident surface circulation but latest satellite imagery suggest an area of enhanced vorticity centered near 9.5°S / 53.7°Eat 10:30 UTC. During the next few days, environmental conditions appear conducive for the building of a defined surface circulation and further deepening. The system is located near the northern edge of the upper level ridge, with enhanced low level convergence and sufficient oceanic potential. It is expected to move westwards over the northern edge of a low to mid level ridge that should strengthen from Tuesday.

On this track, the system is expected to bring a deterioration of the meteorological conditions next week over some territories of the northern channel, including the south-western outer islands of the Seychelle archipelago, Mayotte and the Comoros archipelago. Later next week, some influence are likely over part of eastern Africa (Southern Tanzania and northern Mozambique). The inhabitants of those areas should monitor the progress of this system next week.

For the next five days, the risk of formation of a moderate tropical storm becomes moderate Tuesday over the northern channel and high Wednesday.

East of Diego Garcia :

The Ascat data of this morning show a low level circulation near 4°S and 79°E. The system is located within an area of moderate to strong easterly shear that should eased within the next few days as the system is expected to move closer of the upper level ridge on a generally south-eastwards track steered by a low to mid level equatorial ridge. The low level convergence may be lowered due to the vicinity with the suspect area located within the Indonesian AoR. The available guidance are still in good agreement to forecast a moderate cyclogenesis risk for the second half of next week.

For the next five days, the risk of formation of a moderate tropical storm becomes low Wednesday then moderate from Thursday east of Diego Garcia.

The strengthening of the cyclonic activity expected next week over the basin is linked with the emergence of a MJO signal and the combined passages of a Kelvin and an Equatorial Rossby waves.

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.