AWIO20 FMEE 211029 TROPICAL CYCLONE CENTER / RSMC LA REUNION / METEO-FRANCE

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

DATE: 2019/01/21 AT 1200 UTC

PART 1: WARNING SUMMARY:

Warnings WTIO24 and WTIO30 FMEE n°008/6 issued at 06 UTC on the Moderate Tropical Storm 06 DESMOND. Next warning at 12Z.

PART 2 : TROPICAL WEATHER DISCUSSION: West of 60E, the monsoon flow is located South of 15S and feeds the suspect area described in yesterday's bulletin, located in the North-East of Madagascar. In the Mozambique Channel, the moderate tropical storm DESMOND is coming closer to the Mozambican coastlines and should land later tonight.

Suspect area to the North-East of Madagascar:

In the end of last night, a rather well-defined circulation emerged at the Southern border of the convection on the colored composition imagery, just before its landing over the Masoala peninsula around 03Z. This weak system brings important rainfall over the Northern regions of Madagascar. A convergence area with the monsoon flow is also influencing the weather over the Comoros archipelago and Mayotte by favoring a strong thunderstorm activity. The last available runs still suggest that a residual low may come back over sea in the South of the Mozambique Channel sometime tomorrow. Over warm waters, the low could benefit from a good poleward divergence aloft to redevelop significantly. The main available models are in agreement over this scenario.

The risk that this system becomes a moderate tropcial storm becomes high from Wednesday.

Moderate Tropical Storm n°06 DESMOND:

Position at 09UTC : 19.8S / 37.6E Movement : North-North-Westward 8 kt. Maximum mean winds : 35 kt in the western semi-cercle. Central pressure : 997 hPa

For further information, please refer to WTIO30 and WTIO24 issued at 06Z and followings.

East of 60E, the flow remains Northerly at the equator and converges with the trade winds between 6/8S to form a monsoon trough (MT) pattern. The convective activity is mainly located on the equatorial side of the MT. Out of the basin, a wide circulation is located within the trough, West of the Cocos Islands.

Suspect area West of Cocos Islands :

The convection is moderate and located only over the Southern semi-circle yet. This morning ASCAT swath shows a wide circulation with 10-kt winds. While crossing the 90th meridian Wednesday evening or Thursday, this system could begin to develop thanks to a decrease of the Easterly shear aloft, a good poleward divergence and especially to a westerly burst in the low-levels on the equatorial side that could be linked to an Equatorial-Rossby wave. GFS and IFS both suggest the formation of a significant system by the end of the week, with a globally Wesward track on the Northern side of the mid-latitude high pressure belt.

The risk that this system becomes a moderate tropical storm becomes moderate from Thursday.

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 50%	Very high:	over 90%
Low:	10% to 30%	High:	50% to 90%		

The Southwestern Indian Ocean basin extends from the equator to 40S and from the african coastlines to 90E.