

WTIO30 FMEE 041252

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/8/20182019

1.A TROPICAL DISTURBANCE 8

2.A POSITION 2019/02/04 AT 1200 UTC:

WITHIN 21 NM RADIUS OF POINT 13.9 S / 68.9 E

(THIRTEEN DECIMAL NINE DEGREES SOUTH AND  
SIXTY EIGHT DECIMAL NINE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 1.5/1.5/S 0.0/0 H

4.A CENTRAL PRESSURE: 1006 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 20 KT

RADIUS OF MAXIMUM WINDS (RMW): 56 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):

NIL

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/02/05 00 UTC: 14.8 S / 67.9 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

24H: 2019/02/05 12 UTC: 16.0 S / 66.5 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

36H: 2019/02/06 00 UTC: 17.1 S / 65.6 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

48H: 2019/02/06 12 UTC: 18.7 S / 65.5 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

60H: 2019/02/07 00 UTC: 20.2 S / 66.3 E, VENT MAX= 050 KT, MODERATE TROPICAL  
STORM

72H: 2019/02/07 12 UTC: 21.0 S / 67.1 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2019/02/08 12 UTC: 24.1 S / 70.4 E, VENT MAX= 065 KT, TROPICAL CYCLONE

120H: 2019/02/09 12 UTC: 26.3 S / 75.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

2.C ADDITIONAL INFORMATION:

THE CONVECTION ASSOCIATED WITH THE LOW LEVEL CLOCKWISE CIRCULATION  
FOLLOWED FOR SEVERAL DAYS HAS BEEN MAINTAINED OVER THE LAST 24 HOURS.  
THE 0448UTC ASCAT SWATH PASS ALLOWS TO ESTIMATE WINDS OF ABOUT 20KT,  
BUT ON THE LAST MICROWAVE IMAGES OF 0850UTC AND 1058UTC THE LOW LEVEL

CLOCKWISE CIRCULATION STILL SEEMS POORLY DEFINED.

THE SYNOPTIC CONFIGURATION OVER THE BASIN, WHETHER AT UPPER LEVEL OR LOW LEVEL, MAKES IT POSSIBLE TO DEFINE A GOOD CONFIDENCE IN TERMS OF TRACK. AFTER A SOUTH-WEST ORIENTATION AT THE BEGINNING, SLIDING ON THE HIGH GEOPOTENTIALS CURRENTLY POSITIONED IN THE CENTER OF THE BASIN, THE DEEP TROUGH WHICH CIRCULATES TO THE SOUTH WILL CREATE AN EVACUATION CHANNEL AT 36H, SHIFTING THE HIGH GEOPOTENTIALS TO THE EASTERN PART OF THE BASIN. THIS CHANNEL WILL ALLOW A WELL-DEFINED TRACK TOWARDS THE SOUTH-EAST FROM WEDNESDAY.

THE UNCERTAINTY IS RATHER PLACED IN TERMS OF FORECASTING INTENSITY DUE TO THE JOINT INFLUENCE WITH A SECOND CIRCULATION LOCATED SOUTHEAST OF AGALEGA. THE NUMERICAL MODELS ARE IN TOTAL DISAGREEMENT ON THE EVOLUTION OF ITS TWO SYSTEMS: THE DEVELOPMENT OF ONE GOING AGAINST THE OTHER. THE CURRENT FORECAST OF THE RMSC OF METEO-FRANCE FOCUSES ON THE DEVELOPMENT OF THE 08-20182019 SYSTEM TO THE DETRIMENT OF THE CIRCULATION TO THE SOUTHEAST OF AGALEGA. CURRENTLY UNDER A WEAK TO MODERATE WINDSHEAR, THE TROPICAL DISTURBANCE WILL GRADUALLY INCREASE IN INTENSITY. WITHOUT OCEANIC CONSTRAINTS, IT IS THE ATMOSPHERIC CONDITIONS THAT PLAY A ROLE: THE INCREASE IN WINDSHEAR ALONG THE TRACK OF THE SYSTEM AND A RELATIVELY DRY ENVIRONMENT IN THE SOUTHERN PART WILL HOWEVER LIMIT THIS INTENSIFICATION, ALLOWING THE 08-20182019 SYSTEM TO REACH THE CYCLONE THRESHOLD ONLY FAIRLY LATE, BEFORE BEING TOTALLY AFFECTED BY THE STRONG WINDSHEAR PRESENT SOUTH OF 25S AT THE END OF THE WEEK.