

WTIO30 FMEE 050016

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 3/8/20182019

1.A TROPICAL DEPRESSION 8

2.A POSITION 2019/02/05 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 14.7 S / 65.8 E

(FOURTEEN DECIMAL SEVEN DEGREES SOUTH AND  
SIXTY FIVE DECIMAL EIGHT DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 9 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 1.0/12 H

4.A CENTRAL PRESSURE: 1001 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): 74 KM

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

28 KT NE: 150 SE: 130 SW: NW:

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/02/05 12 UTC: 15.6 S / 64.7 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

24H: 2019/02/06 00 UTC: 16.7 S / 64.4 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

36H: 2019/02/06 12 UTC: 17.6 S / 64.7 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

48H: 2019/02/07 00 UTC: 19.0 S / 65.6 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

60H: 2019/02/07 12 UTC: 20.8 S / 67.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE

72H: 2019/02/08 00 UTC: 22.8 S / 68.6 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2019/02/09 00 UTC: 28.6 S / 74.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

120H: 2019/02/10 00 UTC: 38.7 S / 78.0 E, VENT MAX= 040 KT, POST-TROPICAL  
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=2.5-

DURING THE LAST 6 HOURS, CONVECTION HAS REMAINED VERY STRONG WITHIN  
THE NORTHERN SEMI-CIRCLE BUT VERY FLUCTUATING. OVER THE SOUTHERN  
QUADRANT, CONVECTION ALWAYS SEEMS DISTURBED BY DRY AIR ADVECTED BY

THE TRADE WINDS. HOWEVER, 2207Z 37GHZ MICROWAVE IMAGERY SHOWS A LOW LEVEL CIRCULATION BETTER AND BETTER 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. THE SYSTEM IS EXPECTED TO MOVE SOUTHWESTWARD STEERED BY THE LOW/MID LEVEL RIDGE LOCATED SOUTHEASTERN OF THE SYSTEM. FROM WEDNESDAY, THE RIDGE SHOULD SHIFT EASTWARD AHEAD A DEEP MID-LATITUDES TROUGH. THE TRACK SHOULD BEND SOUTHWARD AND THEN ACCELERATING SOUTHEASTWARD FROM THURSDAY.

ON THIS TRACK, ENVIRONMENTAL CONDITIONS ARE RATHER GOOD UNTIL THURSDAY. LOW LEVEL EQUATORWARD FEEDING IS VERY GOOD AND SHOULD BE SUFFICIENT POLERWARD BEFORE THE ARRIVAL OF THE DEEP TROUGH. UPPER LEVEL CONDITIONS ARE EXCELLENT WITH A GOOD DIVERGENCE BOTH EQUATORWARD AND POLERWARD AND WITH A WEAK VERTICAL WIND SHEAR. ONLY DRY AIR ADVECTED BY THE LOW LEVEL RIDGE SHOULD SLOW DOWN THE INTENSIFICATION OF THE SYSTEM. FROM FRIDAY, THE WESTERN VERTICAL WINDSHEAR AHEAD THE UPPER LEVEL TROUGH SHOULD BECOME MODERATE TO STRONG AND WEAKEN THE SYSTEM. FROM THE END OF THE WEEK, THE SYSTEM SHOULD LOOSE ITS PURELY TROPICAL CHARACTERISTICS AS IT INTERACTS WITH THE SUBTROPICAL JET. MODELS ARE OVERALL IN GOOD AGREEMENT WITH THIS SCENARIO.