

WTIO30 FMEE 141255

RSMC / TROPICAL CYCLONE CENTER / LA REUNION  
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 2/7/20172018

1.A TROPICAL DEPRESSION 7

2.A POSITION 2018/03/14 AT 1200 UTC:

WITHIN 25 NM RADIUS OF POINT 13.8 S / 55.7 E

(THIRTEEN DECIMAL EIGHT DEGREES SOUTH AND FIFTY FIVE DECIMAL SEVEN  
DEGREES EAST)

MOVEMENT : SOUTH-SOUTH-WEST 7 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 996 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :93 KM

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

28 KT NE: 280 SE: 280 SW: NW:

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/03/15 00 UTC: 14.7 S / 54.3 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

24H: 2018/03/15 12 UTC: 15.5 S / 52.7 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

36H: 2018/03/16 00 UTC: 15.7 S / 51.5 E, MAX WIND=045 KT, MODERATE TROPICAL  
STORM

48H: 2018/03/16 12 UTC: 15.9 S / 50.5 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

60H: 2018/03/17 00 UTC: 16.2 S / 49.8 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

72H: 2018/03/17 12 UTC: 16.9 S / 49.7 E, MAX WIND=045 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/18 12 UTC: 19.5 S / 50.7 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

120H: 2018/03/19 12 UTC: 23.9 S / 53.0 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

2.C ADDITIONAL INFORMATION:

OVER THE LAST SIX HOURS, CONVECTIVE ACTIVITY MAINLY OCCURRED IN

PERIPHERAL BANDS FAR FROM THE SYSTEM CORE. HIGH RESOLUTION IMAGERY SHOWED A LOW LEVEL VORTEX TAKEN IN THE INNER ROTATION. THESE OBSERVATIONS SUGGEST A MONSOON DEPRESSION STRUCTURE. INTENSITY WAS NEVERTHELESS INCREASED DUE TO AN APPARENT STRONGER VORTICITY ESPECIALLY IN THE EASTERN SEMI-CIRCLE, WHERE 30KT ARE LIKELY REACHED ON A SIGNIFICANT AREA FAR FROM THE CENTER.

ON THE NORTH-EASTERN THEN NORTHERN EDGE OF AN STRONG MID-RIDGE, THE SYSTEM IS MOVING SOUTH-WESTWARD BEFORE BENDING WEST-SOUTH-WESTWARD. BY THE END OF THE WEEK, THE ARRIVAL OF AN UPPER TROUGH SOUTH OF MADAGASCAR AND THE DECAY OF THE RIDGE ARE EXPECTED TO SLOW DOWN THE MINIMUM AND BEND ITS TRACK PROGRESSIVELY TOWARDS THE SOUTH-EAST, ON FRIDAY. EVEN IF THE AGREEMENT ON THE TURN TIMING IS VERY GOOD AMONG NUMERICAL GUIDANCE, PREVIOUS DIFFERENCES IN THE TRACK FORECAST REMAINED. A CONSENSUS SCENARIO SEEMS TO BE APPEARING IN THE LATEST DATA. HOWEVER, MALAGASY COASTS PROXIMITY AT THE TURNING TIME DO NOT ALLOW TO PRECISE THE POTENTIAL LANDFALL. THE RSMC FORECAST IS BASED ON A CONSENSUS OF MAIN EUROPEAN MODELS (UKMO AND IFS, REMAINING OFF SHORE) AND AMERICANS (GFS, LANDING NORTH AND ON MASOALA PENINSULA).

IN TERMS OF INTENSITY, ENVIRONMENT IS CONDUCIVE FOR A DEEPENING WITH AN EXCELLENT UPPER DIVERGENCE AND THE BUILDING OF TWO OUTFLOW CHANNELS (IN THE NORTH-WEST AND SOUTH-EAST) UP TO THE WEEKEND. HOWEVER, THE STILL BROAD INTERNAL STRUCTURE IS LIKELY TO SLOW DOWN THE DEEPENING RATE. INTENSITY FORECAST IS VERY UNCERTAIN AFTER THIS WEEK-END, GIVEN THE POSSIBLE OUTCOMES (LANDING OR REMAINING OFF SHORES). THE INCREASE OF A NORTH-WESTERLY UPPER CONSTRAINT AHEAD OF THE TROUGH, IS EXPECTED TO PREVENT FROM ANY SIGNIFICANT DEEPENING BEYOND SUNDAY.

THIS SYSTEM MAY BECOME DANGEROUS AND THREATEN THE NORTH-EASTERN COAST OF MADAGASCAR FROM THURSDAY.