

WTIO30 FMEE 050628

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

0.A WARNING NUMBER: 22/1/20172018

1.A TROPICAL CYCLONE 1 (AVA)

2.A POSITION 2018/01/05 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 17.7 S / 50.2 E

(SEVENTEEN DECIMAL SEVEN DEGREES SOUTH AND FIFTY DECIMAL TWO DEGREES EAST)

MOVEMENT : SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 1.0/24 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 70 KT

RADIUS OF MAXIMUM WINDS (RMW) :37 KM

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

28 KT NE: 280 SE: 280 SW: 170 NW: 170

34 KT NE: 150 SE: 150 SW: 90 NW: 90

48 KT NE: 70 SE: 70 SW: 60 NW: 60

64 KT NE: 50 SE: 50 SW: 50 NW: 50

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1003 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/05 18 UTC: 18.5 S / 49.2 E, MAX WIND=055 KT, OVERLAND DEPRESSION

24H: 2018/01/06 06 UTC: 19.8 S / 48.7 E, MAX WIND=045 KT, OVERLAND DEPRESSION

36H: 2018/01/06 18 UTC: 21.6 S / 48.4 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

48H: 2018/01/07 06 UTC: 22.8 S / 48.4 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

60H: 2018/01/07 18 UTC: 23.7 S / 48.6 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

72H: 2018/01/08 06 UTC: 24.5 S / 48.5 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/09 06 UTC: 26.7 S / 47.2 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

120H: 2018/01/10 06 UTC: 27.4 S / 48.7 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

2.C ADDITIONAL INFORMATION:

T=CI=4.5+

OVER THE LAST 6 HOURS, AN EYE IS VISIBLE IN INFRARED DATA AND THE DEEP CONVECTION DEFINES A RING WITH WEAKNESS IN THE WEST SECTOR. THE CYCLONE CONTINUES TO DEEP WITH A CENTER THAT IS CURRENTLY LESS THAN 80KM FROM THE COAST OF MADAGASCAR.

AVA CONTINUE WITH A SOUTH-WEST TRACK FOR MORE THAN 6 HOURS. CONSEQUENTLY, THE LANDFALL OF AVA SHOULD BE TAKEN NEAR TOAMASINA BY THE END OF THIS FRIDAY, THUS LATER THAN INITIALLY EXPECTED. AVA IS A THREATENING SYSTEM GENERATING A SIGNIFICANT DETERIORATION OF THE CONDITIONS IN THE LANDFALL REGION. A CYCLONIC SURGE OF ABOUT 1 TO 2M IS FORECAST ESPECIALLY IN THE AREAS SOUTH OF THE CENTER.

AFTER ITS LANDING, THE SYSTEM IS EXPECTED TO LONG THE COAST BEFORE COMING BACK TO SEA. LATER, THE ARRIVAL OF A THALWEG OF MID LATITUDES IN THE SOUTH SHOULD SLOW DOWN AVA, WHICH COULD TEMPORARILY MOVE EASTWARD BUT CONFIDENCE IN THE LONG-TERM FORECAST IS POOR.

WHEN EXITING OVER THE OCEAN, AVA MAY ENCOUNTER VERY FAVORABLE CONDITIONS, WHETHER ATMOSPHERIC OR OCEANIC, FOR A NEW INTENSIFICATION PHASE. A SHORTEST TRACK ON MALAGASY LANDS MAY MAINTAIN MORE IMPORTANT INTENSITY IN THE SYSTEM.