

WTIO30 FMEE 051231

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

0.A WARNING NUMBER: 23/1/20172018

1.A TROPICAL CYCLONE 1 (AVA)

2.A POSITION 2018/01/05 AT 1200 UTC:

WITHIN 10 NM RADIUS OF POINT 18.1 S / 49.4 E

(EIGHTEEN DECIMAL ONE DEGREES SOUTH AND FORTY NINE DECIMAL FOUR
DEGREES EAST)

MOVEMENT : SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 1.5/24 H

4.A CENTRAL PRESSURE: 965 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 85 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: 2018/01/06 00 UTC: 19.2 S / 48.9 E, MAX WIND=060 KT, OVERLAND DEPRESSION

24H: 2018/01/06 12 UTC: 20.8 S / 48.4 E, MAX WIND=050 KT, OVERLAND DEPRESSION

36H: 2018/01/07 00 UTC: 22.4 S / 48.3 E, MAX WIND=040 KT, MODERATE TROPICAL
STORM

48H: 2018/01/07 12 UTC: 23.2 S / 48.3 E, MAX WIND=045 KT, MODERATE TROPICAL
STORM

60H: 2018/01/08 00 UTC: 24.1 S / 48.6 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

72H: 2018/01/08 12 UTC: 25.1 S / 48.0 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/09 12 UTC: 27.2 S / 47.2 E, MAX WIND=045 KT, MODERATE TROPICAL
STORM

120H: 2018/01/10 12 UTC: 27.3 S / 49.4 E, MAX WIND=035 KT, MODERATE TROPICAL
STORM

2.C ADDITIONAL INFORMATION:

T=CI=5.5-

OVER THE LAST 6 HOURS, THE EYE HAS BEEN MAINTAINED AND THE DEEP CONVECTION DEFINES A WELL CLOSED RING. THE INTENSITY HAS INCREASED TO REACH WINDS OF ABOUT 85 KT JUST BEFORE THE LANDFALL, WHICH IS CURRENTLY NEAR TOAMASINA. THE LAST DATA OF TOAMASINA STATION WERE 65KTS OF WINDS WHEN THE EYEWALL WAS MOVED TO 0930UTC AND A PRESSURE OF 966.5HPA TO 1100UTC JUST BEFORE THE ARRIVAL OF THE EYE.

AT THE MAXIMUM STAGE OF TROPICAL CYCLONE, AVA IS A THREATENING SYSTEM GENERATING A SIGNIFICANT DETERIORATION OF THE CONDITIONS IN THE LANDFALL REGION WITH IMPORTANT RAINFALL UP TO OVER 150KM IN THE LAND. 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 AFTER 24 HOURS. LATER, THE ARRIVAL OF A MID LATITUDES TROUGH 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.