

WTIO30 FMEE 070705

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

0.A WARNING NUMBER: 30/1/20172018

1.A MODERATE TROPICAL STORM 1 (AVA)

2.A POSITION 2018/01/07 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 22.5 S / 48.8 E

(TWENTY TWO DECIMAL FIVE DEGREES SOUTH AND FORTY EIGHT DECIMAL EIGHT DEGREES EAST)

MOVEMENT : SOUTH-EAST 10 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 987 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW) :28 KM

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

28 KT NE: 370 SE: 460 SW: 370 NW:

34 KT NE: 190 SE: 190 SW: NW:

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : MEDIUM

1.B FORECASTS:

12H: 2018/01/07 18 UTC: 24.4 S / 49.0 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

24H: 2018/01/08 06 UTC: 25.3 S / 48.3 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

36H: 2018/01/08 18 UTC: 26.2 S / 47.7 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

48H: 2018/01/09 06 UTC: 27.8 S / 47.6 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

60H: 2018/01/09 18 UTC: 28.8 S / 49.1 E, MAX WIND=035 KT, POST-TROPICAL DEPRESSION

72H: 2018/01/10 06 UTC: 30.0 S / 51.4 E, MAX WIND=035 KT, POST-TROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/11 06 UTC: 32.2 S / 59.7 E, MAX WIND=035 KT, POST-TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

DURING THE PAST 6 HOURS, AVA CAME BACK OVER SEA. 0247Z WINDSAT MICROWAVE DATA SHOW THE EXISTENCE A DEFINED LOW LEVEL INNER CORE, WHILE THIS MORNING ASCAT SWATH SHOW NO GALE FORCE WIND NEAR THE CENTER. BUT A BUOY (3300535) MEASURED NEAR 990HPA AT 50 KM FROM THE CENTER. THAT OBSERVATION SEEMS TO CONFIRM THE MODERATE TROPICAL STORM STATUS. FAR FROM THE CENTER, ANALYSIS STILL SUGGEST THE PRESENCE OF GALE FORCE WINDS

STEERED BY THE RIDGE IN THE EAST AND A MID-LATITUDE TROUGH ATTRACTING IT IN THE SOUTH, AVA SHOULD TRACK SOUTHWARD TODAY. FROM TUESDAY UNCERTAINTY IS INCREASING : EITHER THE SYSTEM IS BLOCKED BY THE ARRIVAL OF THE NEW HIGH PRESSURE CELL IN THE SOUTH OR TAKEN AWAY BY THE WESTERLIES. THE ARRIVAL OF IRVING MAY ALSO INFLUENCE AVA'S TRACK. THE RSMC OFFICIAL FORECAST REMAINS THE SCENARIO OF TAKEN AWAY BY THE WESTERLIES.

AVA IS EXPECTED TO HAVE RATHER FAVORABLE CONDITIONS IN THE NEXT HOURS BUT ITS LONG TRACK ON MALAGASY LANDS HAS STRONGLY WEAKENED THE SYSTEM. ITS REINTENSIFICATION PHASE NEEDS THE REBUILDING OF A DEEP FLOW. FROM TUESDAY, A MODERATE TO STRONG WESTERLY SHEAR IS FORECAST TO IMPACT AVA. THE SYSTEM SHOULD THEN BEGIN TO WEAKEN GRADUALLY WHILE TRANSFORMING INTO A BAROCLINIC LOW UNDER THE INFLUENCE OF AN UPPER TROUGH COMING FROM THE WEST.