

WTIO30 FMEE 031234

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

0.A WARNING NUMBER: 15/1/20172018

1.A MODERATE TROPICAL STORM 1 (AVA)

2.A POSITION 2018/01/03 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 16.2 S / 53.2 E

(SIXTEEN DECIMAL TWO DEGREES SOUTH AND FIFTY THREE DECIMAL TWO DEGREES EAST)

MOVEMENT : SOUTH 10 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/24 H

4.A CENTRAL PRESSURE: 993 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :46 KM

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

28 KT NE: 150 SE: 130 SW: 90 NW: 150

34 KT NE: 90 SE: 0 SW: 0 NW: 0

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/04 00 UTC: 17.0 S / 51.8 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

24H: 2018/01/04 12 UTC: 17.4 S / 51.1 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

36H: 2018/01/05 00 UTC: 17.9 S / 49.8 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

48H: 2018/01/05 12 UTC: 18.6 S / 49.0 E, MAX WIND=040 KT, OVERLAND DEPRESSION

60H: 2018/01/06 00 UTC: 19.6 S / 48.6 E, MAX WIND=040 KT, OVERLAND DEPRESSION

72H: 2018/01/06 12 UTC: 20.8 S / 48.4 E, MAX WIND=040 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/07 12 UTC: 23.7 S / 48.3 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

120H: 2018/01/08 12 UTC: 25.5 S / 48.1 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

2.C ADDITIONAL INFORMATION:

FT=CI=2.5+

OVER THE LAST 6 HOURS, CLOUD PATTERN RAPIDLY EVOLVED TOWARDS A SHEARED ASPECT WITH AN APPARENT INNER CORE. A SOUTH-EASTERLY UPPER CONSTANT IS ANALYSED BY CIMSS NEAR 20KT. COMPLEMENTARY DATA FROM THIS MORNING ASCAT SWATH, SHOW THAT GALE FORCE WIND ARE MOSTLY LOCATED IN THE NORTH-EASTERN QUADRANT.

OVER THE LAST HOURS, THE SYSTEM PROGRESSIVLY MOVED SOUTHWARDS, SOUTHWARDS, BECAUSE OF A FLAT LOW CIRCULATING AT SOUTH. FROM TOMORROW, THE AVAILABLE GUIDANCE IS IN GOOD AGREEMENT TO FORECAST A SOUTH-WESTWARD TRACK, WITH THE REBUILDING OF THE MID LEVEL RIDGE. A LANDFALL OVER THE MALAGASY COASTLINE, NEAR TAMATAVE IS POSSIBLE DURING THURSDAY TO FRIDAY NIGHT. HOWEVER THE ARRIVAL OF A NEW UPPER TROUGH ON FRIDAY IS LIKELY TO ATTRACT AVA SOUTHWARD. THE LOW MAY COME BACK OVER THE OCEAN OR EVEN STAY ALL THE TIME OFFSHORE. UNCERTAINTY IS THUS IMPORTANT FROM FRIDAY.

ENVIRONMENTAL CONDITIONS ARE FORECAST TO BECOME RATHER CONDUCTIVE FOR AN INTENSIFICATION UP TO THE LANDFALL. THE UPPER VERTICAL WIND SHEAR IS EXPECTED TO DECAY WHILE MOVING SOUTH, WITH STILL A GOOD UPPER DIVERGENCE IN THE NORTH-WESTERN QUADRANT. SO SEVERE TROPICAL STORM STATUS IS STILL FORECAST. FOR THE LONG RANGE, INTENSITY FORECAST IS ALSO UNCERTAIN TO THE DIFFERENT POSSIBLE TRACKS. A NEW INCREASE OF THE VERTICAL WIND SHEAR AND THE DIMINUTION OF OCEANIC HEAT POTENTIAL UNDERNEATH SOUTH OF 25S PREVENT SYSTEM FROM DEEPENING SIGNIFICANTLY.

THE PERIPHERAL THUNDERSTORMS BANDS ASSOCIATED TO THE SYSTEM ARE BEGINNING TO AFFECT THE WEATHER ON THE MALAGASY COASTLINES AND ON THE MASCARENES ARCHIPELAGO.