

WTIO30 FMEE 141822

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

0.A WARNING NUMBER: 3/7/20172018

1.A TROPICAL DEPRESSION 7

2.A POSITION 2018/03/14 AT 1800 UTC:

WITHIN 21 NM RADIUS OF POINT 14.1 S / 55.0 E

(FOURTEEN DECIMAL ONE DEGREES SOUTH AND FIFTY FIVE DECIMAL ZERO  
DEGREES EAST)

MOVEMENT : WEST 7 KT

3.A DVORAK ANALYSIS: 2.5/2.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 994 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: 280 NW:

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/03/15 06 UTC: 14.9 S / 53.4 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

24H: 2018/03/15 18 UTC: 15.6 S / 51.9 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

36H: 2018/03/16 06 UTC: 15.9 S / 50.8 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

48H: 2018/03/16 18 UTC: 16.3 S / 49.6 E, MAX WIND=050 KT, OVERLAND DEPRESSION

60H: 2018/03/17 06 UTC: 16.9 S / 49.2 E, MAX WIND=040 KT, OVERLAND DEPRESSION

72H: 2018/03/17 18 UTC: 17.9 S / 49.2 E, MAX WIND=030 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/18 18 UTC: 20.8 S / 50.5 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

120H: 2018/03/19 18 UTC: 24.9 S / 53.1 E, MAX WIND=045 KT, MODERATE TROPICAL  
STORM

2.C ADDITIONAL INFORMATION:

T=2.5- CI=2.0

THE CONVECTIVE ACTIVITY STRENGTHENED DURING THE LAST 6 HOURS AND A CURVED BAND PATTERN ARE DRAWN ALL RECENTLY PERMITTING TO DEFINE A DVORAK ANALYSIS. THE 1306UTC MICROWAVE IMAGES INDICATE TEMPORARY MOVEMENT WESTWARD AND 30KT WINDS ARE TAKEN OVER TROMELIN ISLAND AT 1800UTC AT 100 NM IN THE SOUTH. THE MOUSSON DEPRESSION STRUCTURE REMAINS VALID WHILE THE WINDS SEEM TO FOCUS A LITTLE MORE AROUND THE CENTER.

GUIDED BY THE SOUTH MID-RIDGE, THE SYSTEM 07 WILL START A TRACK TOWARDS WEST-SOUTHWEST UP TO LANDING OVER MADAGASCAR DURING FRIDAY DAY IN THE MASOALA PENINSULA REGION. AT THIS SAME PERIOD, THE ARRIVAL OF AN UPPER TROUGH SOUTH OF MADAGASCAR AND THE DECAY OF THE RIDGE SHOULD BE EXPECTED TO SLOW DOWN THE MINIMUM AND BEND ITS TRACK PROGRESSIVELY TOWARDS THE SOUTH-SOUTH-EAST, MOVING THE SYSTEM 07 ON THE EAST COAST OF MADAGASCAR. PREVIOUS DIFFERENCES IN THE TRACK FORECAST REMAINED. A CONSENSUS SCENARIO SEEMS TO BE APPEARING IN THE LATEST DATA TO MAKE THE SYSTEM OUT OVER THE SEA IN THE NIGHT OF SATURDAY TO SUNDAY.

IN TERM OF INTENSITY, THE ENVIRONMENT IS FAVORABLE TO AN INTENSIFICATION OF THE SYSTEM BUT STILL BROAD INTERNAL STRUCTURE IS LIKELY TO SLOW DOWN THE DEEPENING RATE. THE SYSTEM IS EXPECTED TO LAND AT ITS MAXIMUM INTENSITY OF SEVERE TROPICAL STORM. ONCE ON LAND, THE SYSTEM WILL WEAKEN AND THE INCREASE OF A NORTH-WESTERLY UPPER CONSTRAINT AHEAD OF THE TROUGH SHOULD RESTRICT SIGNIFICANT DEEPENING ONCE OVER THE SEA BEYOND SUNDAY.

THIS SYSTEM MAY BECOME DANGEROUS AND THREATEN THE NORTH-EASTERN COAST OF MADAGASCAR FROM THURSDAY AND IN PARTICULAR FRIDAY DURING ITS LANDING.