

WTIO30 FMEE 041824

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

0.A WARNING NUMBER: 11/6/20172018

1.A TROPICAL CYCLONE 6 (DUMAZILE)

2.A POSITION 2018/03/04 AT 1800 UTC:

WITHIN 25 NM RADIUS OF POINT 19.3 S / 50.5 E

(NINETEEN DECIMAL THREE DEGREES SOUTH AND FIFTY DECIMAL FIVE DEGREES EAST)

MOVEMENT : SOUTH-SOUTH-WEST 7 KT

3.A DVORAK ANALYSIS: 4.5/4.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 975 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW) :46 KM

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

28 KT NE: 430 SE: 410 SW: 300 NW: 190

34 KT NE: 220 SE: 220 SW: 190 NW: 150

48 KT NE: 70 SE: 110 SW: 110 NW: 70

64 KT NE: 60 SE: 60 SW: 60 NW:

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 1200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/03/05 06 UTC: 21.4 S / 50.8 E, MAX WIND=080 KT, TROPICAL CYCLONE

24H: 2018/03/05 18 UTC: 23.0 S / 51.4 E, MAX WIND=085 KT, TROPICAL CYCLONE

36H: 2018/03/06 06 UTC: 24.6 S / 52.5 E, MAX WIND=070 KT, TROPICAL CYCLONE

48H: 2018/03/06 18 UTC: 26.0 S / 53.6 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

60H: 2018/03/07 06 UTC: 27.3 S / 54.9 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

72H: 2018/03/07 18 UTC: 29.0 S / 56.6 E, MAX WIND=050 KT, POST-TROPICAL  
DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/08 18 UTC: 33.5 S / 61.6 E, MAX WIND=045 KT, POST-TROPICAL  
DEPRESSION

120H: 2018/03/09 18 UTC: 44.9 S / 64.8 E, MAX WIND=045 KT, EXTRATROPICAL  
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=4.5-

THE PSEUDO-EYE PATTERN THAT EMERGED AROUND 12Z QUICKLY DISAPPEARED, REPLACED BY A CURVED BAND RAPIDLY WRAPPING AROUND DUMAZILE'S CENTER WHILE CLOUD TOPS REMAINS VERY COLD. 37GHZ MW IMAGE FROM THE 1459Z WINDSAT SWATH REVEALS AN ONGOING CONSOLIDATION OF THE INNER-CORE. 1540Z SSMIS 91GHZ IMAGE ALSO SHOWS AN IMPROVING MID-LEVEL STRUCTURE WITH AN ALMOST CLOSED CONVECTION RING. AWAITING THE EMERGENCE OF A BETTER DEFINED EYE PATTERN THAT MIGHT APPEAR ON IR IMAGERY OVERNIGHT, THE SYSTEM IS RETAINED AT THE MINIMAL TROPICAL CYCLONE STAGE.

DURING THE LAST HOURS, DUMAZILE CONTINUED TO TRACK SOUTH SOUTH-WESTWARD, UNDER THE INFLUENCE OF A MID-LEVEL RIDGE BUILDING EAST OF THE SYSTEM. TONIGHT, AS DUMAZILE CIRCUMVENTS THE RIDGE, ITS TRACK SHOULD BEND SOUTH THEN SOUTH-SOUTH-EASTWARD TOMORROW. THURSDAY EVENING, A MID-LATITUDES TROUGH CIRCULATING IN THE SOUTH SHOULD ALLOW A QUICK EVACUATION TOWARDS THE WESTERLIES CIRCULATION. THE MODEL DISPERSION REMAINS RATHER WEAK, WHICH GIVES A GOOD CONFIDENCE IN THIS TRACK FORECAST.

THE UPPER DIVERGENCE IS STILL EXCELLENT. DUMAZILE WILL TRACK WITHIN VERY CONDUCTIVE CONDITIONS FOR ITS INTENSIFICATION UNTIL MID-DAY TOMORROW. THEN, THE ARRIVAL OF AN UPPER TROUGH FROM THE WEST WILL DRIVE A STRENGTHENING WESTERLY TO NORTHWESTERLY WINDSHEAR CONSTRAINT OVER THE SYSTEM. THIS SIGNIFICANT DEGRADATION OF THE ENVIRONMENTAL CONDITIONS INITIATES THE WEAKENING PHASE OF THE METEOR AND SHOULD CONTINUE TUESDAY AND WEDNESDAY. WITHIN A MORE AND MORE BAROCLINIC ENVIRONMENT WITH COOLER WATERS SOUTH OF 27S, THE SYSTEM SHOULD BEGIN ITS POST-TROPICAL TRANSITION DURING THE MIDDLE OF NEXT WEEK.