

WTIO30 FMEE 050624

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

0.A WARNING NUMBER: 13/6/20172018

1.A TROPICAL CYCLONE 6 (DUMAZILE)

2.A POSITION 2018/03/05 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 21.1 S / 51.4 E

(TWENTY ONE DECIMAL ONE DEGREES SOUTH AND FIFTY ONE DECIMAL FOUR
DEGREES EAST)

MOVEMENT : SOUTH-EAST 11 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 958 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 85 KT

RADIUS OF MAXIMUM WINDS (RMW) :56 KM

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

28 KT NE: 460 SE: 460 SW: 330 NW: 220

34 KT NE: 220 SE: 280 SW: 220 NW: 150

48 KT NE: 140 SE: 170 SW: 140 NW: 110

64 KT NE: 70 SE: 80 SW: 70 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/03/05 18 UTC: 22.4 S / 52.2 E, MAX WIND=090 KT, INTENSE TROPICAL
CYCLONE

24H: 2018/03/06 06 UTC: 24.3 S / 52.7 E, MAX WIND=080 KT, TROPICAL CYCLONE

36H: 2018/03/06 18 UTC: 26.0 S / 53.6 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

48H: 2018/03/07 06 UTC: 27.6 S / 54.9 E, MAX WIND=055 KT, POST-TROPICAL
DEPRESSION

60H: 2018/03/07 18 UTC: 29.0 S / 56.3 E, MAX WIND=050 KT, POST-TROPICAL
DEPRESSION

72H: 2018/03/08 06 UTC: 30.6 S / 58.0 E, MAX WIND=045 KT, POST-TROPICAL
DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/09 06 UTC: 36.7 S / 61.9 E, MAX WIND=045 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=5.5-

OVER THE LAST 6 HOURS, ANIMATED GEOSTATIONARY SATELLITE IMAGERY HAS SHOWN AN EYE MORE AND MORE VISIBLE AND WARMER. HOWEVER, EYE REMAINS OVERALL ELONGATED THAT IS LIMITING THE STRENGTHENING INTENSITY OF THE SYSTEM. IN THE SAME WAY, THIS NIGHT MICROWAVE IMAGERIES (37GHZ 0210Z WINDSAT, 0254Z SSMIS) SHOWED AN INTERNAL CORE NOT COMPLETELY CONSOLIDATED WITHIN THE NORTHWESTERN QUADRANT THAT COULD BE ATTRIBUTE TO AN INTERACTION WITH THE MADAGASCAR'S HIGHLANDS.

AS DUMAZILE CIRCUMVENTS THE WESTERN REGION OF A MID-LEVEL RIDGE, ITS HAS BENT SOUTHEAST OVERNIGHT AND SHOULD CONTINUE SOUTH-SOUTH-EASTWARD NEXT NIGHT. THURSDAY EVENING, A MID-LATITUDES TROUGH CIRCULATING IN THE SOUTH SHOULD ALLOW A QUICK EVACUATION. THE MODEL DISPERSION REMAINS RATHER WEAK, WHICH GIVES A GOOD CONFIDENCE IN THIS TRACK FORECAST. THE UNCERTAINTY INCREASES FOR THE END OF THE FORECAST PERIOD, WHEN THE SYSTEM IS TAKEN AWAY BY THE MID-LATITUDES WESTERLIES.

THE UPPER DIVERGENCE IS STILL EXCELLENT. DUMAZILE WILL TRACK WITHIN VERY CONDUCTIVE CONDITIONS FOR ITS INTENSIFICATION UNTIL THIS EVENING. TONIGHT, 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 SHOULD INITIATE THE WEAKENING PHASE OF THE METEOR AND CONTINUE TUESDAY AND WEDNESDAY. WITHIN A MORE AND MORE BAROCLINIC ENVIRONMENT AND OVER COOLER WATERS SOUTH OF 27S, THE SYSTEM SHOULD BEGIN ITS POST-TROPICAL TRANSITION DURING THE MIDDLE OF NEXT WEEK.