

WTIO30 FMEE 060705

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

0.A WARNING NUMBER: 17/6/20172018

1.A TROPICAL CYCLONE 6 (DUMAZILE)

2.A POSITION 2018/03/06 AT 0600 UTC:

WITHIN 30 NM RADIUS OF POINT 24.2 S / 53.5 E

(TWENTY FOUR DECIMAL TWO DEGREES SOUTH AND FIFTY THREE DECIMAL FIVE DEGREES EAST)

MOVEMENT : SOUTH-EAST 10 KT

3.A DVORAK ANALYSIS: 4.5/5.0/W 1.0/24 H

4.A CENTRAL PRESSURE: 957 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 75 KT

RADIUS OF MAXIMUM WINDS (RMW) :69 KM

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

28 KT NE: 460 SE: 590 SW: 460 NW: 310

34 KT NE: 300 SE: 390 SW: 350 NW: 190

48 KT NE: 150 SE: 170 SW: 150 NW: 80

64 KT NE: 110 SE: 110 SW: 110 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : UNKNOWN

1.B FORECASTS:

12H: 2018/03/06 18 UTC: 25.8 S / 54.8 E, MAX WIND=065 KT, TROPICAL CYCLONE

24H: 2018/03/07 06 UTC: 27.6 S / 55.7 E, MAX WIND=060 KT, POST-TROPICAL DEPRESSION

36H: 2018/03/07 18 UTC: 29.1 S / 56.5 E, MAX WIND=050 KT, POST-TROPICAL DEPRESSION

48H: 2018/03/08 06 UTC: 30.5 S / 58.4 E, MAX WIND=045 KT, POST-TROPICAL DEPRESSION

60H: 2018/03/08 18 UTC: 33.6 S / 60.8 E, MAX WIND=050 KT, POST-TROPICAL DEPRESSION

72H: 2018/03/09 06 UTC: 38.3 S / 61.6 E, MAX WIND=050 KT, EXTRATROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/03/10 06 UTC: 46.6 S / 69.1 E, MAX WIND=045 KT, EXTRATROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=4.5- CI=5.0-

MW IMAGERY OF THIS MORNING HAS SHOWN THAT THE INNER-CORE OF THE SYSTEM IS SEVERELY ERODED OVER THE NORTHERN PART. THE MW EYE PATTERN HAS GONE. ON CLASSICAL IMAGERY, AN EMBEDDED PATTERN WAS MOST OF THE TIME PRESENT ON IR IMAGERY AND VIS IMAGERY REVEAL A CURVED BAND AT 1.1-1.2 TOUR ON LOG10 SPIRAL ON THE VERY LAST IMAGES. THE BUOY 5601501 WENT THROUGH THE EYE OF DUMAZILE BETWEEN 00-01Z AND REPORTED A MINIMAL PRESSURE OF 953.7 HPA (CORRECTED FROM THE BAROMETRIC TIDE).

WV LOOP SHOW ENHANCED UPPER LEVEL DIVERGENCE OVER THE EASTERN SIDE WHILE POOR OR VERY LIMITED OVER THE WESTERN SIDE. WESTERLY SHEAR APPEAR NOT SO STRONG BASED ON 03Z CIMSS ANALYSIS BUT THE WV IMAGERY SUGGEST THAT THE SYSTEM HAS STARTED TO INTERACT WITH THE APPROACHING UPPER LEVEL TROUGH TO ITS SOUTH-WEST. THIS SIGNIFICANT DETERIORATION OF THE ENVIRONMENTAL CONDITIONS SHOULD ACCELERATE THE WEAKENING. WITHIN A MORE AND MORE BAROCLINIC ENVIRONMENT, OVER COOLER WATERS SOUTH OF 27S, THE SYSTEM SHOULD BEGIN TO GAIN EXTRA-TROPICAL FEATURES FROM WEDNESDAY.

THE SYSTEM IS EXPECTED TO KEEP ON ITS TRACK SOUTH-EASTWARD CIRCUMVENTING THE MID-LEVEL RIDGE. 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 EMBEDDED WITHIN MID-LAT WESTERLIES TOWARDS THE KERGUELEN ISLAND WHERE A SIGNIFICANT DETERIORATION OF THE WEATHER CONDITIONS IS POSSIBLE LATER THIS WEEK.