

WTIO30 FMEE 310113

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/6/20202021

1.A ZONE OF DISTURBED WEATHER 6

2.A POSITION 2020/12/31 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 12.4 S / 72.9 E

(TWELVE DECIMAL FOUR DEGREES SOUTH AND  
SEVENTY TWO DECIMAL NINE DEGREES EAST)

MOVEMENT: SOUTH-EAST 3 KT

3.A DVORAK ANALYSIS: 1.5/1.5/D 1.0/24 H

4.A CENTRAL PRESSURE: 1001 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 0 SE: 260 SW: 165 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2020/12/31 12 UTC: 12.2 S / 73.4 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 65 SE: 345 SW: 270 NW: 55

24H: 2021/01/01 00 UTC: 11.9 S / 74.0 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 75 SE: 345 SW: 270 NW: 65

36H: 2021/01/01 12 UTC: 11.7 S / 74.6 E, VENT MAX= 030 KT, TROPICAL DEPRESSION  
28 KT NE: 95 SE: 185 SW: 185 NW: 110

48H: 2021/01/02 00 UTC: 11.4 S / 75.1 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 270 SE: 85 SW: 100 NW: 345

34 KT NE: 130 SE: 75 SW: 95 NW: 165

60H: 2021/01/02 12 UTC: 11.1 S / 76.0 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 270 SE: 95 SW: 120 NW: 345

34 KT NE: 130 SE: 75 SW: 100 NW: 175

72H: 2021/01/03 00 UTC: 12.0 S / 77.3 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 270 SE: 100 SW: 140 NW: 345

2.B LONGER-RANGE OUTLOOK:

96H: 2021/01/04 00 UTC: 16.3 S / 77.0 E, VENT MAX= 025 KT, DISSIPATING

2.C ADDITIONAL INFORMATION:

FT=CI=1.5

THE LOW PRESSURE AREA LOCATED SOUTH OF THE CHAGOS HAS SHOWN SIGNS OF ORGANIZATION IN THE LAST 24 HOURS WITH THE DEVELOPMENT OF MORE INTENSE CONVECTIVE ACTIVITY NEAR THE CENTER. THE LAST AVAILABLE OBSERVATIONS (BUT WHICH DATE FROM THE FIRST PART OF THE NIGHT) SHOWED A POORLY DEFINED AND ELONGATED CENTER DESPITE THE ORGANIZATION OF A BETTER CIRCULATION OF LOW LAYERS EARLIER YESTERDAY. THE ASCAT DATA ALSO SHOW THAT NEAR GALE FORCE WINDS ARE PRESENT IN THE WHOLE SOUTHERN SEMICIRCLE.

IN THE SHORT TERM, THE SYSTEM'S ENVIRONMENT IS marginally favorable TO INTENSIFICATION: A NORTHERLY SHEAR CONSTRAINT IS WELL PRESENT AND DRY AIR IN THE MIDDLE TROPOSPHERE HAS SETTLED SINCE YESTERDAY OVER THE WHOLE NORTHERN SEMICIRCLE. IT WOULD BE NECESSARY TO WAIT UNTIL SATURDAY FOR THE SYSTEM TO BENEFIT FROM A MORE MOIST (BUT STILL SHEARED) ENVIRONMENT. SO WHILE THE SYSTEM SHOULD DRIFT SLOWLY IN A GENERAL EAST-NORTH-EASTERLY DIRECTION DURING THE NEXT 2 TO 3 DAYS ON THE MARGIN OF THE WESTERLY FLOW PRESENT NORTH OF THE MONSOON TROUGH AND OF THE LOW PRESSURE CIRCULATION NR 05, A SLOW INTENSIFICATION IS EXPECTED WHICH COULD HOWEVER BRING IT TO THE TROPICAL STORM STAGE BY SATURDAY.

DURING THE WEEK-END, THE SYSTEM COULD INTERACT WITH SYSTEM NR 05 LOCATED FURTHER EAST. THE ASSOCIATED FUJIWHARA EFFECT WILL IMPACT BOTH THE TRACK OF THE SYSTEM (WITH A STEERING FLOW ASSOCIATED WITH THE OTHER CLOCKWISE CIRCULATION) AND ITS INTENSITY. THE SYSTEM COULD THUS BE IMPACTED BY THE OUTFLOW OF THE OTHER CIRCULATION AND EXPERIENCE A SHEAR CONSTRAINT FROM THE SOUTHEASTERLY TO SOUTHERLY, INDUCING SOME WEAKENING. AT THE END OF THIS INTERACTION (EARLY NEXT WEEK), ALL THE GUIDANCE SUGGESTS THAT ONE OF THE TWO CIRCULATIONS WILL EVENTUALLY BE ABSORBED BY THE OTHER. HOWEVER, IT IS VERY DIFFICULT TO ANTICIPATE WHICH OF THE TWO WILL SUCCEED IN WINNING. THE PRESENT FORECAST SHOW THE MAINTENANCE OF THE SYSTEM NR 05 (AND DISSIPATION OF SYSTEM NR 06) BASED ON THE ENSEMBLE FORECAST DATA FROM THE EUROPEAN CENTER. HOWEVER, CONFIDENCE IS LOW THROUGHOUT THIS PART OF THE FORECAST.

THE CURRENT INTENSITY DOES NOT REQUIRED THE ISSUANCE OF REGULAR ADVISORY AT THIS TIME.