

WTIO30 FMEE 150732

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 25/6/20222023

1.A POST-TROPICAL DEPRESSION 6 (EX-DINGANI)

2.A POSITION 2023/02/15 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 26.8 S / 69.8 E

(TWENTY SIX DECIMAL EIGHT DEGREES SOUTH AND  
SIXTY NINE DECIMAL EIGHT DEGREES EAST)

MOVEMENT: SOUTH-WEST 14 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 993 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 220 SE: 280 SW: 205 NW: 120

34 KT NE: 155 SE: 205 SW: 130 NW: 95

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/02/15 18 UTC: 29.0 S / 67.7 E, VENT MAX= 045 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 230 SE: 305 SW: 220 NW: 120

34 KT NE: 110 SE: 220 SW: 155 NW: 75

24H: 2023/02/16 06 UTC: 30.4 S / 66.6 E, VENT MAX= 040 KT, POST-TROPICAL  
DEPRESSION

28 KT NE: 260 SE: 185 SW: 165 NW: 100

34 KT NE: 120 SE: 155 SW: 85 NW: 0

36H: 2023/02/16 18 UTC: 31.7 S / 67.8 E, VENT MAX= 035 KT, FILLING UP

28 KT NE: 250 SE: 165 SW: 100 NW: 0

34 KT NE: 110 SE: 140 SW: 75 NW: 0

48H: 2023/02/17 06 UTC: 33.2 S / 71.1 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 260 SE: 175 SW: 0 NW: 0

60H: 2023/02/17 18 UTC: 34.7 S / 75.8 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 195 SE: 175 SW: 0 NW: 0

2.B LONGER-RANGE OUTLOOK:  
NIL

2.C ADDITIONAL INFORMATION:

PHASE ANALYSES (MOE WEBSITE) SHOW THAT THE WARM CORE OF DINGANI IS NOW SHALLOW DUE TO THE BAROCLINIC INTERACTION WITH THE HIGH TO MEDIUM TROPO CUT-OFF LOCATED NORTHWEST OF THE SYSTEM (CF WATER VAPOR LOOP). AS A CONSEQUENCE, THE SYSTEM HAS BEEN DOWNGRADED SINCE 00Z TO A POST-TROPICAL SYSTEM (AND THUS HAS BECOME EX-DINGANI). THE S1-A PASS AT 0042Z SHOWS THAT STORM WINDS STILL EXIST IN THE CIRCULATION. THE PARTIAL ASCAT OF 0506Z SHOWS ONLY MAX WINDS AT 40 KTS. THE INTENSITY IS THEREFORE ESTIMATED AT 45 KTS.

NO CHANGE IN THE FORECAST : AS FAR AS THE TRAJECTORY IS CONCERNED, WE KEEP LITTLE DISPERSION UNTIL THE END OF THE SYSTEM'S LIFE. DINGANI WILL CONTINUE ITS SOUTH-SOUTHWESTWARD TRACK IN CONNECTION WITH THE EASTWARD RETREAT OF THE SUBTROPICAL RIDGE AND THE DESCENT OF THE LEVEL OF THE STEERING FLOW WITH THE WEAKENING OF THE SYSTEM. ON THURSDAY, THE SYSTEM WILL BEGIN A SOUTHEASTWARD TURN SLOWING IN A BAROMETRIC PASS, THEN WILL BE PICKED UP AGAIN IN THE MID-LATITUDE CIRCULATION, REGAINING SPEED.

THE ENVIRONMENTAL CONDITIONS WILL CONTINUE TO DETERIORATE EVEN IF WE NOTE THAT TEMPORARILY DURING THE NEXT 24 TO 36 HOURS THE SYSTEM COULD EVOLVE VERY TEMPORARILY UNDER THE ALTITUDE CUT-OFF WITH A DECREASE IN SHEAR. HOWEVER THIS SHOULD BE INSUFFICIENT TO GENERATE A SIGNIFICANT RECOVERY OF THE SYSTEM. ON FRIDAY, IN A TOTALLY HOSTILE ENVIRONMENT, DINGANI SHOULD WEAKEN DEFINITELY AND MERGE INTO THE MID-LATITUDE CIRCULATION.