

WTIO30 FMEE 171255

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 11/6/20232024

1.A TROPICAL CYCLONE 6 (DJOUNGOU)

2.A POSITION 2024/02/17 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 16.5 S / 70.2 E

(SIXTEEN DECIMAL FIVE DEGREES SOUTH AND
SEVENTY DECIMAL TWO DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 13 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 974 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 70 KT

RADIUS OF MAXIMUM WINDS (RMW): 33 KM

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

28 KT NE: 480 SE: 425 SW: 445 NW: 405

34 KT NE: 240 SE: 240 SW: 240 NW: 185

48 KT NE: 100 SE: 100 SW: 110 NW: 95

64 KT NE: 55 SE: 55 SW: 55 NW: 55

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1300 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/02/18 00 UTC: 17.7 S / 73.0 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 510 SE: 315 SW: 435 NW: 315

34 KT NE: 295 SE: 155 SW: 185 NW: 165

48 KT NE: 110 SE: 85 SW: 75 NW: 75

64 KT NE: 65 SE: 55 SW: 45 NW: 45

24H: 2024/02/18 12 UTC: 19.8 S / 76.9 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 520 SE: 325 SW: 465 NW: 315

34 KT NE: 295 SE: 155 SW: 205 NW: 175

48 KT NE: 110 SE: 85 SW: 85 NW: 85

64 KT NE: 75 SE: 55 SW: 55 NW: 55

36H: 2024/02/19 00 UTC: 22.7 S / 81.4 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 490 SE: 370 SW: 435 NW: 295

34 KT NE: 280 SE: 195 SW: 240 NW: 175

48 KT NE: 110 SE: 100 SW: 100 NW: 85

64 KT NE: 75 SE: 65 SW: 65 NW: 55

48H: 2024/02/19 12 UTC: 25.5 S / 85.5 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 520 SE: 280 SW: 435 NW: 260
34 KT NE: 280 SE: 130 SW: 150 NW: 130
48 KT NE: 110 SE: 75 SW: 65 NW: 65

60H: 2024/02/20 00 UTC: 26.6 S / 89.0 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION
28 KT NE: 400 SE: 280 SW: 390 NW: 325
34 KT NE: 195 SE: 130 SW: 195 NW: 150

72H: 2024/02/20 12 UTC: 26.9 S / 91.0 E, VENT MAX= 035 KT, FILLING UP
28 KT NE: 230 SE: 270 SW: 350 NW: 185
34 KT NE: 85 SE: 120 SW: 155 NW: 75

2.B LONGER-RANGE OUTLOOK:
NIL

2.C ADDITIONAL INFORMATION:
T=CI=4.5+

OVER THE LAST 6 HOURS, THE SYSTEM'S CDO HAS GRADUALLY EVOLVED INTO AN EYE PATTERN, WITH AN EYE REMAINING RATHER ELONGATED AND RAGGED FOR THE MOMENT, SURROUNDED BY INTENSE CONVECTIVE BURSTS. SUBJECTIVE DVORAK ANALYSIS TAKING INTO ACCOUNT THE IRREGULAR EYE GIVES A 3H-AVERAGED DT IN EXCESS OF 4.5. THE 1128Z SSMIS-F18 MICROWAVE IMAGE CONFIRMS THE IMPROVED INNER STRUCTURE, BUT WITH A CENTRAL CONVECTIVE RING THAT HAS NOT YET FULLY CLOSED. THE 70KT ESTIMATED INTENSITY AT 12UTC IS MAINLY BASED ON DVORAK ANALYSIS.

DJOUNGOU WILL CONTINUE TO ACCELERATE EAST-SOUTHEASTWARD THEN SOUTHEASTWARD UNTIL MONDAY, CHANNLED BETWEEN A RIDGE OF HIGH PRESSURE TO THE EAST-NORTHEAST AND A TROUGH TO THE SOUTH. ITS MOVEMENT SHOULD SLOW ON TUESDAY AS IT WEAKENS. THE SYSTEM COULD THEN LEAVE THE SOUTH-WEST INDIAN OCEAN BASIN AND ENTER THE AUSTRALIAN AREA OF RESPONSIBILITY.

ENVIRONMENTAL CONDITIONS ARE STILL VERY FAVORABLE FOR SHORT-TERM INTENSIFICATION, WITH STRONG OCEANIC POTENTIAL, LOW VERTICAL WIND SHEAR, AND EXCELLENT UPPER DIVERGENCE WITH AN OUTFLOW CHANNEL IN THE SYSTEM'S SOUTHEASTERN QUADRANT. A MORE OR LESS RAPID INTENSIFICATION IS EXPECTED OVER THE NEXT HOURS. DJOUNGOU COULD THEREFORE REACH INTENSE TROPICAL CYCLONE STAGE BY SUNDAY MORNING. ON SUNDAY EVENING, CONDITIONS SHOULD BEGIN TO DETERIORATE WITH A RAPID STRENGTHENING OF WEST-NORTH-WESTERLY SHEAR AND DRY AIR INTRUSIONS. FROM MONDAY, THIS SHOULD BE ACCOMPANIED BY DECREASING OCEANIC POTENTIAL AS THE SYSTEM MOVES OVER COOLER SEAS. THE SYSTEM SHOULD THEN GRADUALLY LOSE ITS TROPICAL CHARACTERISTICS BEFORE EVOLVING INTO A REMNANT LOW BY MID-WEEK.

EXPECTED IMPACTS ON RODRIGUES ISLAND :

- AVERAGE WAVES BETWEEN 4 AND 5 METERS TONIGHT. IMPROVEMENT TOMORROW (SUNDAY) AS THE SYSTEM MOVES AWAY.