

WTIO30 FMEE 070025

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 8/10/20202021

1.A TROPICAL CYCLONE 10 (FARAJI)

2.A POSITION 2021/02/07 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 14.9 S / 79.6 E

(FOURTEEN DECIMAL NINE DEGREES SOUTH AND
SEVENTY NINE DECIMAL SIX DEGREES EAST)

MOVEMENT: SOUTH 2 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 1.0/6 H

4.A CENTRAL PRESSURE: 965 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 19 KM

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

28 KT NE: 185 SE: 280 SW: 280 NW: 185

34 KT NE: 130 SE: 110 SW: 150 NW: 130

48 KT NE: 75 SE: 75 SW: 70 NW: 75

64 KT NE: 35 SE: 35 SW: 35 NW: 35

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/07 12 UTC: 15.1 S / 79.9 E, VENT MAX= 095 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 165 SE: 220 SW: 250 NW: 185

34 KT NE: 130 SE: 110 SW: 130 NW: 130

48 KT NE: 85 SE: 75 SW: 65 NW: 75

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

24H: 2021/02/08 00 UTC: 15.1 S / 80.4 E, VENT MAX= 100 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 165 SE: 250 SW: 240 NW: 155

34 KT NE: 130 SE: 130 SW: 130 NW: 130

48 KT NE: 95 SE: 85 SW: 75 NW: 85

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

36H: 2021/02/08 12 UTC: 14.9 S / 81.3 E, VENT MAX= 105 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 165 SE: 260 SW: 270 NW: 155

34 KT NE: 130 SE: 130 SW: 140 NW: 120

48 KT NE: 85 SE: 85 SW: 75 NW: 85
64 KT NE: 65 SE: 65 SW: 65 NW: 55

48H: 2021/02/09 00 UTC: 14.9 S / 82.3 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 165 SE: 270 SW: 270 NW: 155
34 KT NE: 140 SE: 140 SW: 140 NW: 130
48 KT NE: 95 SE: 85 SW: 75 NW: 75
64 KT NE: 55 SE: 55 SW: 55 NW: 55

60H: 2021/02/09 12 UTC: 15.0 S / 83.3 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 165 SE: 280 SW: 270 NW: 155
34 KT NE: 140 SE: 150 SW: 140 NW: 120
48 KT NE: 85 SE: 75 SW: 75 NW: 75
64 KT NE: 55 SE: 55 SW: 55 NW: 55

72H: 2021/02/10 00 UTC: 15.3 S / 84.1 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 155 SE: 270 SW: 260 NW: 155
34 KT NE: 140 SE: 140 SW: 140 NW: 110
48 KT NE: 85 SE: 75 SW: 65 NW: 75
64 KT NE: 55 SE: 45 SW: 45 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/11 00 UTC: 15.9 S / 84.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM
28 KT NE: 140 SE: 280 SW: 260 NW: 110
34 KT NE: 130 SE: 150 SW: 120 NW: 85
48 KT NE: 85 SE: 55 SW: 55 NW: 75

120H: 2021/02/12 00 UTC: 16.0 S / 83.1 E, VENT MAX= 035 KT, FILLING UP

28 KT NE: 100 SE: 220 SW: 240 NW: 85
34 KT NE: 95 SE: 120 SW: 100 NW: 75

2.C ADDITIONAL INFORMATION:

T=CI=5.5-

DURING THE LAST 6 HOURS, THE EYE INITIATION WAS CONFIRMED, WITH A CONVECTIVE RING WITH FLUCTUATING TEMPERATURE OF CLOUD TOPS. IN THIS CONFIGURATION, A DVORAK ANALYSIS OF A SYSTEM IN EYE IS QUITE FLUCTUATING BUT CAN BE DONE AT 5.5-. A PHASE OF RAPID INTENSIFICATION THUS CONCERNS FARAJI. THIS STILL LEAVES FARAJI AT THE TROPICAL CYCLONE STAGE, BUT NOT FOR LONG. MAXIMUM WINDS CAN BE ESTIMATED AT 85KT.

IN TERMS OF TRACK, THE RIDGE TO THE EAST OF THE SYSTEM IS STARTING TO FADE AWAY WHICH WILL ALLOW A START OF EASTWARD MOVEMENT IN THE NEXT FEW HOURS, UNDER THE INFLUENCE OF THE EQUATORIAL RIDGE LOCATED TO THE NORTH OF THE SYSTEM. WITH THE DISAPPEARANCE OF THESE CONTRADICTORY INFLUENCES, FARAJI'S TRACK IS EXPECTED TO TAKE A MORE EASTERLY TRACK AND ACCELERATE. AT THE END OF THE PERIOD, A RIDGE IS AGAIN STRENGTHENING EAST OF THE SYSTEM, AS IS THE SUBTROPICAL RIDGE, WHICH IS GRADUALLY REGAINING THE UPPER HAND OVER THE GUIDING FLOW. UNDER THE INFLUENCE

OF THESE TWO CENTERS, FARAJI SHOULD MAKE A WESTWARD TURN IN RELATION TO ITS WEAKENING. THESE MULTIPLE INFLUENCES REMAIN DIFFICULT TO MANAGE FOR THE MODELS, WHICH GENERATES A STRONG DISPERSION REFLECTING A STRONG UNCERTAINTY ON FARAJI'S TRACK FROM MONDAY. THE DIVERGENCE OF THE MODELS IS RATHER ON THE SPEED OF DISPLACEMENT AND THE CHRONOLOGY OF THE WESTWARD TURN, DURING THE RESUMPTION OF THE LOW LEVEL FLOW WHEN THE SYSTEM WILL HAVE WEAKENED.

FARAJI REMAINS UNDER THE AXIS OF THE RIDGE OF ALTITUDE WHICH ALLOWS HIM TO BENEFIT FROM A GOOD DIVERGENCE OF ALTITUDE WHILE ESCAPING THE WIND SHEAR. ON WATERS WITH HIGH ENERGY POTENTIAL, FARAJI SHOULD CONTINUE TO EXPERIENCE A PHASE OF RELATIVELY RAPID INTENSIFICATION OVER THE NEXT 36 HOURS. STARTING MONDAY, A TROUGH IS APPROACHING THE SYSTEM FROM THE SOUTHWEST, SHOWING SOUTHWESTERN SHEAR IN THE MID-TROPOSPHERE. ASSOCIATED WITH DRY AIR, THIS STRESS SHOULD STOP THE INTENSIFICATION FROM MONDAY AND THEN WEAKEN THE SYSTEM MORE STRONGLY ON TUESDAY. THE AVAILABLE MODELS ARE IN GOOD AGREEMENT ON THIS INTENSITY CHRONOLOGY (CONTRARY TO THE TRACK DIVERGENCE), SEVERAL SUGGESTING NOW A GOOD PROBABILITY TO REACH THE STAGE OF INTENSE TROPICAL CYCLONE.

THIS SYSTEM DOES NOT PRESENT ANY PARTICULAR RISK FOR INHABITED LANDS.