

WTIO30 FMEE 070701

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 9/10/20202021

1.A INTENSE TROPICAL CYCLONE 10 (FARAJI)

2.A POSITION 2021/02/07 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 14.8 S / 79.7 E

(FOURTEEN DECIMAL EIGHT DEGREES SOUTH AND  
SEVENTY NINE DECIMAL SEVEN DEGREES EAST)

MOVEMENT: QUASI-STATIONARY.

3.A DVORAK ANALYSIS: 6.5/6.5/D 2.5/24 H

4.A CENTRAL PRESSURE: 939 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 105 KT

RADIUS OF MAXIMUM WINDS (RMW): 19 KM

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

28 KT NE: 150 SE: 220 SW: 220 NW: 165

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

48 KT NE: 85 SE: 85 SW: 80 NW: 85

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/07 18 UTC: 14.9 S / 80.1 E, VENT MAX= 095 KT, INTENSE TROPICAL  
CYCLONE

28 KT NE: 155 SE: 230 SW: 240 NW: 175

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

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

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

24H: 2021/02/08 06 UTC: 14.9 S / 80.8 E, VENT MAX= 090 KT, INTENSE TROPICAL  
CYCLONE

28 KT NE: 155 SE: 250 SW: 250 NW: 150

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

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

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

36H: 2021/02/08 18 UTC: 14.8 S / 81.9 E, VENT MAX= 085 KT, TROPICAL CYCLONE

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

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

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

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

48H: 2021/02/09 06 UTC: 14.9 S / 83.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE  
28 KT NE: 155 SE: 280 SW: 250 NW: 155  
34 KT NE: 130 SE: 150 SW: 130 NW: 120  
48 KT NE: 85 SE: 75 SW: 65 NW: 85  
64 KT NE: 55 SE: 55 SW: 55 NW: 55

60H: 2021/02/09 18 UTC: 15.4 S / 83.9 E, VENT MAX= 065 KT, TROPICAL CYCLONE  
28 KT NE: 140 SE: 270 SW: 220 NW: 150  
34 KT NE: 130 SE: 150 SW: 130 NW: 130  
48 KT NE: 85 SE: 65 SW: 65 NW: 75  
64 KT NE: 45 SE: 45 SW: 45 NW: 55

72H: 2021/02/10 06 UTC: 15.7 S / 84.5 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM  
28 KT NE: 140 SE: 220 SW: 250 NW: 150  
34 KT NE: 130 SE: 130 SW: 120 NW: 100  
48 KT NE: 85 SE: 75 SW: 65 NW: 75

#### 2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/11 06 UTC: 16.7 S / 85.0 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM  
28 KT NE: 150 SE: 260 SW: 280 NW: 175  
34 KT NE: 140 SE: 195 SW: 155 NW: 100

120H: 2021/02/12 06 UTC: 17.5 S / 83.9 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM  
28 KT NE: 120 SE: 150 SW: 175 NW: 120  
34 KT NE: 110 SE: 140 SW: 110 NW: 65

#### 2.C ADDITIONAL INFORMATION:

T=CI=6.5-

DURING THE LAST 6 HOURS, FARAJI EYE GOT CLEARER IN CLASSICAL IMAGES. SUBJECTIVE DVORAK ANALYSIS ARE AROUND 6.5 FOR A FEW HOURS. THE MICROWAVE DATA CONFIRM THE IMPROVEMENT OF THE EYEWALL (2325Z SSMIS). A SMAP SWATH (0033Z) INDICATES MAXIMUM WINDS AROUND 88KT. INTENSE TROPICAL CYCLONE IS THEREFORE REACHED AND IN AGREEMENT WITH THE MAIN SUBJECTIVE AND OBJECTIVE ANALYSIS, INTENSITY IS SET TO 105KT.

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 DIRECTION AND ACCELERATE. AT LONGER RANGE, A RIDGE IS AGAIN STRENGTHENING EAST OF THE SYSTEM, WHICH WILL HELP THE SUBTROPICAL RIDGE, GRADUALLY TAKING OVER THE STEERING FLOW. UNDER THE INFLUENCE OF THESE TWO CENTERS, FARAJI SHOULD MAKE A WESTWARD TURN SIMULTANEOUS TO ITS WEAKENING. THESE MULTIPLE INFLUENCES GENERATE A LOT OF UNCERTAINTIES AND A STRONG SPREAD AMONG THE GUIDANCE EVEN IF IT IS DECREASING. SPEED MOTION IS ONE OF THE MOST DIVERGENT PARAMETERS IN THE LAST RUNS.

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. DESPITE ITS PRESENCE OVER HIGH POTENTIAL WATERS, FARAJI SLOW MOTION PUTS IT UNDER RISK OF COOLING THE WATERS BENEATH. IF THE FARAJI STARTS MOVING AGAIN, IT SHOULD ESCAPE THE WEAKENING FORECAST AT SHORT RANGE. AN EYEWALL REPLACEMENT CYCLE IS ALSO POSSIBLE. STARTING MONDAY, A TROUGH APPROACHING THE SYSTEM FROM THE SOUTHWEST, IS EXPECTED TO GENERATE A SOUTHWESTERN SHEAR IN THE MID-TROPOSPHERE. ASSOCIATED WITH DRY AIR, THIS STRESS SHOULD STOP THE INTENSIFICATION AND THEN WEAKEN THE SYSTEM MORE STRONGLY ON TUESDAY. THE AVAILABLE MODELS ARE IN GOOD AGREEMENT ON THIS CHRONOLOGY.

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