

WTIO30 FMEE 060011

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 4/10/20202021

1.A MODERATE TROPICAL STORM 10 (FARAJI)

2.A POSITION 2021/02/06 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 13.7 S / 80.4 E

(THIRTEEN DECIMAL SEVEN DEGREES SOUTH AND
EIGHTY DECIMAL FOUR DEGREES EAST)

MOVEMENT: SOUTH 5 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 1.0/24 H

4.A CENTRAL PRESSURE: 996 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

28 KT NE: 150 SE: 370 SW: 370 NW: 95

34 KT NE: 35 SE: 35 SW: 35 NW: 35

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/06 12 UTC: 14.3 S / 80.4 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 140 SE: 220 SW: 250 NW: 175

34 KT NE: 95 SE: 85 SW: 95 NW: 120

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

24H: 2021/02/07 00 UTC: 14.7 S / 80.6 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 165 SE: 250 SW: 240 NW: 175

34 KT NE: 100 SE: 100 SW: 100 NW: 110

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

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

36H: 2021/02/07 12 UTC: 14.9 S / 81.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 165 SE: 270 SW: 260 NW: 185

34 KT NE: 95 SE: 110 SW: 120 NW: 120

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

64 KT NE: 35 SE: 35 SW: 45 NW: 55

48H: 2021/02/08 00 UTC: 14.8 S / 81.6 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 175 SE: 280 SW: 260 NW: 175

34 KT NE: 100 SE: 110 SW: 120 NW: 130

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

60H: 2021/02/08 12 UTC: 14.7 S / 82.5 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 175 SE: 270 SW: 280 NW: 165
34 KT NE: 100 SE: 110 SW: 130 NW: 130
48 KT NE: 75 SE: 75 SW: 65 NW: 85
64 KT NE: 55 SE: 55 SW: 55 NW: 55

72H: 2021/02/09 00 UTC: 14.7 S / 83.7 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 175 SE: 295 SW: 270 NW: 165
34 KT NE: 100 SE: 130 SW: 120 NW: 120
48 KT NE: 75 SE: 75 SW: 65 NW: 85
64 KT NE: 55 SE: 55 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/10 00 UTC: 15.6 S / 85.7 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 175 SE: 295 SW: 285 NW: 155
34 KT NE: 100 SE: 130 SW: 140 NW: 120
48 KT NE: 65 SE: 55 SW: 75 NW: 75
64 KT NE: 45 SE: 35 SW: 35 NW: 55

120H: 2021/02/11 00 UTC: 17.0 S / 86.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 155 SE: 285 SW: 240 NW: 120
34 KT NE: 95 SE: 130 SW: 100 NW: 85
48 KT NE: 60 SE: 60 SW: 60 NW: 70

2.C ADDITIONAL INFORMATION:

T=CI=3.0+

OVER THE LAST 6 HRS, THE CLOUD PATTERN IMPROVED AGAIN WITH CONVECTION WRAPPING MORE TIGHTLY AROUND THE CENTER. THE 37GHZ AMSR2 2003Z IMAGE ILLUSTRATES THE CONSOLIDATION OF FARAJI'S INNER CORE, ALREADY WELL DEFINED IN THE LOW LEVELS. THIS STRUCTURE AND GOOD UPPER DIVERGENCE ARE SUGGESTING A FAIR CHANCE OF RAPID INTENSIFICATION OVER THE NEXT 24 HRS.

IN TERMS OF TRACK FORECAST, FARAJI REMAINS UNDER OPPOSITE INFLUENCES : THE SUBTROPICAL RIDGE IN THE SOUTH-SOUTH-WEST AND THE EQUATORIAL RIDGE IN THE NORTH. UNDER THESE CONTRARY INFLUENCES, THE TRACK IS EXPECTED TO BE QUITE ERRATIC AND SLOW OVER THE NEXT 24 HRS, FOLLOWING A GENERALLY SOUTHWARD MOTION. THEN, A MID-LEVEL CUT-OFF LOW SHOULD ISOLATE ITSELF IN THE SOUTH-WEST OF FARAJI AND PUSH IT MORE STRONGLY EASTWARD AND THEN SOUTHEASTWARD. THESE MULTIPLE INFLUENCES ARE DIFFICULT TO HANDLE FOR THE NUMERICAL GUIDANCE, YIELDING A LARGE MODEL SPREAD ILLUSTRATING A STRONG UNCERTAINTY ON FARAJI'S LOCATION FROM MONDAY.

FARAJI SHOULD RELOCATE UNDER THE AXIS OF THE UPPER RIDGE AS IT SHIFTS SOUTHWARD, WHICH SHOULD ALLOW IT TO STILL BENEFIT FROM A GOOD UPPER

DIVERGENCE WHILE ESCAPING THE SHEAR. OVER WATERS WITH HIGH HEAT CONTENT, FARAJI SHOULD INTENSIFY QUITE QUICKLY OVER THE WEEK-END. FROM MONDAY, A TROUGH IS COMING CLOSER FROM THE SOUTH-WEST AND SHOULD DRIVE THE EMERGENCE OF A MID-LEVEL SOUTHWESTERLY SHEAR. ASSOCIATED TO DRY AIR, THIS CONSTRAINT IS EXPECTED TO SLOW FARAJI'S DEVELOPMENT DOWN, OR EVEN STOP IT TUESDAY. FROM TUESDAY NIGHT, THE UPPER SHEAR WILL ALSO STRENGTHEN AND SHOULD WEAKEN THE STORM MORE EFFICIENTLY. AVAILABLE GUIDANCE IS IN RATHER GOOD AGREEMENT ON THIS SCENARIO, AND NOW SUGGEST THAT THERE IS A FAIR PROBABILITY OF FARAJI REACHING THE STAGE OF INTENSE TROPICAL CYCLONE.

THIS SYSTEM DOES NOT POSE ANY THREAT FOR INHABITED LANDS.