

WTIO30 FMEE 051238

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 2/10/20202021

1.A MODERATE TROPICAL STORM 10 (FARAJI)

2.A POSITION 2021/02/05 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 13.2 S / 81.2 E

(THIRTEEN DECIMAL TWO DEGREES SOUTH AND
EIGHTY ONE DECIMAL TWO DEGREES EAST)

MOVEMENT: SOUTH 4 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 994 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 46 KM

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

28 KT NE: 55 SE: 55 SW: 185 NW: 150

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/06 00 UTC: 13.7 S / 81.1 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 45 SE: 150 SW: 280 NW: 110

34 KT NE: 35 SE: 100 SW: 120 NW: 100

24H: 2021/02/06 12 UTC: 14.1 S / 80.8 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 55 SE: 155 SW: 280 NW: 110

34 KT NE: 45 SE: 110 SW: 120 NW: 100

48 KT NE: 30 SE: 55 SW: 45 NW: 55

36H: 2021/02/07 00 UTC: 14.3 S / 81.2 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 65 SE: 155 SW: 280 NW: 110

34 KT NE: 55 SE: 120 SW: 130 NW: 100

48 KT NE: 35 SE: 55 SW: 45 NW: 65

48H: 2021/02/07 12 UTC: 14.1 S / 81.5 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 75 SE: 155 SW: 280 NW: 110

34 KT NE: 65 SE: 130 SW: 140 NW: 100

48 KT NE: 45 SE: 65 SW: 45 NW: 75

60H: 2021/02/08 00 UTC: 13.9 S / 81.9 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 95 SE: 165 SW: 280 NW: 110
34 KT NE: 85 SE: 140 SW: 140 NW: 100
48 KT NE: 55 SE: 65 SW: 45 NW: 75

72H: 2021/02/08 12 UTC: 13.7 S / 82.6 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 100 SE: 165 SW: 280 NW: 110
34 KT NE: 95 SE: 150 SW: 150 NW: 100
48 KT NE: 65 SE: 65 SW: 65 NW: 85
64 KT NE: 55 SE: 55 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/09 12 UTC: 14.0 S / 85.1 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 130 SE: 175 SW: 280 NW: 110
34 KT NE: 120 SE: 165 SW: 155 NW: 100
48 KT NE: 75 SE: 75 SW: 75 NW: 95
64 KT NE: 65 SE: 55 SW: 65 NW: 55

120H: 2021/02/10 12 UTC: 13.9 S / 86.7 E, VENT MAX= 060 KT, TROPICAL CYCLONE
28 KT NE: 155 SE: 195 SW: 280 NW: 120
34 KT NE: 150 SE: 185 SW: 175 NW: 110
48 KT NE: 90 SE: 80 SW: 50 NW: 100

2.C ADDITIONAL INFORMATION:

T=CI=3.0-

SUBJECT TO ENVIRONMENTAL CONDITIONS OF MORE AND MORE PROPICES, SYSTEM 10 CONTINUES TO STRENGTHEN TO REACH THE MODERATE TROPICAL STORM THRESHOLD. IT WAS NAMED FARAJI AT 11UTC BY THE MAURITIAN METEOROLOGICAL SERVICE. DURING THE LAST 6 HOURS, THE CLOUD PATTERN HAS FLUCTUATED BETWEEN A CURVED BAND AND A CENTRAL DENSE OVERCAST, WHICH IT CURRENTLY MAINTAINS. A DVORAK ANALYSIS OF 3.0- CAN BE DONE BY BREAKING THE EARLY LIFE CONSTRAINTS. THIS LEAVES A WIND ESTIMATE OF AROUND 40KT, SUGGESTING A POTENTIAL INTENSIFICATION.

IN TERMS OF TRACK FORECASTING, FARAJI REMAINS UNDER THE OPPOSITE INFLUENCE OF TWO CENTERS OF ACTION: THE SUB-TROPICAL RIDGE LOCATED SOUTH-SOUTHWEST OF THE SYSTEM AND THE EQUATORIAL RIDGE LOCATED IMMEDIATELY NORTH OF THE SYSTEM. UNDER THIS INFLUENCE, THE TRACK WILL BE RATHER ERRATIC OR SLOW IN A GLOBAL SOUTHWARD DIRECTION DURING THE NEXT 36 HOURS. THEREAFTER, WITH THE SHIFT AND WEAKENING OF THE SUBTROPICAL RIDGE, FARAJI WILL TAKE A MORE DIRECT EASTWARD TRACK AND ACCELERATE. BETWEEN THE DIFFERENT RUNS OF THE MODELS AND BETWEEN THE DIFFERENT GUIDELINES, THERE IS A CERTAIN DIVERGENCE FOR THE LONGER PERIODS OF TIME. THIS UNCERTAINTY IS TRANSLATED BY A RATHER WIDE ZONE AT THE END OF 4 TO 5 DAYS, BOTH IN SPEED OF DISPLACEMENT BUT ALSO IN LATITUDE AT THE END OF THE ERRATIC TRACK.

AS FAR AS THE INTENSITY FORECAST IS CONCERNED, FARAJI IS CURRENTLY UNDER WEAKENING WIND SHEAR CONDITIONS AND A WELL-DEFINED WET FEED IN ITS NORTHERN PART. UNDER THESE CONDITIONS, THE MODERATE TROPICAL STORM SHOULD BE ABLE TO INTENSIFY STEADILY OR EVEN RAPIDLY OVER THE NEXT 3 TO

4 DAYS. THIS WILL BRING IT TO THE THRESHOLD OF A TROPICAL CYCLONE OR EVEN MORE BEFORE THE DYNAMICS OF ALTITUDE FURTHER SOUTH INDUCE AN INCREASE IN SHEAR AND THE BEGINNING OF DRY AIR INTRUSION. THESE INGREDIENTS WILL LIMIT THE INTENSITY OF THE SYSTEM. AS WITH THE FORECAST TRACK FORECAST, THERE IS A CERTAIN DIVERGENCE BETWEEN THE DIFFERENT GUIDELINES. THE PRESENT INTENSITY FORECAST IS THEREFORE RATHER UNCERTAIN AND WILL TAKE 4 TO 5 DAYS TO COMPLETE.

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