

WTIO30 FMEE 081845
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 15/10/20202021

1.A VERY INTENSE TROPICAL CYCLONE 10 (FARAJI)

2.A POSITION 2021/02/08 AT 1800 UTC:
WITHIN 20 NM RADIUS OF POINT 14.2 S / 82.5 E
(FOURTEEN DECIMAL TWO DEGREES SOUTH AND
EIGHTY TWO DECIMAL FIVE DEGREES EAST)
MOVEMENT: EAST 5 KT

3.A DVORAK ANALYSIS: 7.0/7.0/D 1.5/24 H

4.A CENTRAL PRESSURE: 927 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 125 KT
RADIUS OF MAXIMUM WINDS (RMW): 19 KM

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

28 KT NE: 165 SE: 250 SW: 280 NW: 150

34 KT NE: 85 SE: 140 SW: 185 NW: 100

48 KT NE: 55 SE: 65 SW: 80 NW: 75

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/09 06 UTC: 14.3 S / 83.9 E, VENT MAX= 110 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 205 SE: 250 SW: 250 NW: 155

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

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

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

24H: 2021/02/09 18 UTC: 14.7 S / 85.2 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 165 SE: 285 SW: 260 NW: 140

34 KT NE: 110 SE: 155 SW: 140 NW: 130

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

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

36H: 2021/02/10 06 UTC: 15.2 S / 85.9 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 175 SE: 295 SW: 260 NW: 130

34 KT NE: 120 SE: 165 SW: 150 NW: 110

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

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

48H: 2021/02/10 18 UTC: 15.8 S / 86.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE
28 KT NE: 155 SE: 285 SW: 240 NW: 100
34 KT NE: 110 SE: 165 SW: 130 NW: 95
48 KT NE: 75 SE: 65 SW: 65 NW: 75
64 KT NE: 45 SE: 45 SW: 55 NW: 55

60H: 2021/02/11 06 UTC: 16.2 S / 85.7 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 120 SE: 295 SW: 215 NW: 85
34 KT NE: 100 SE: 165 SW: 95 NW: 75
48 KT NE: 75 SE: 55 SW: 45 NW: 65

72H: 2021/02/11 18 UTC: 16.6 S / 85.2 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM
28 KT NE: 130 SE: 220 SW: 230 NW: 85
34 KT NE: 100 SE: 120 SW: 110 NW: 75
48 KT NE: 55 SE: 55 SW: 65 NW: 65

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/12 18 UTC: 17.1 S / 84.0 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 75 SE: 215 SW: 270 NW: 100
34 KT NE: 65 SE: 175 SW: 155 NW: 55

120H: 2021/02/13 18 UTC: 17.4 S / 82.0 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 155 SE: 75 SW: 65 NW: 140
34 KT NE: 65 SE: 65 SW: 45 NW: 130

2.C ADDITIONAL INFORMATION:

T=CI=7.0

FARAJI'S EYE CONFIGURATION IN IR IMAGERY CONTINUED TO IMPROVE TONIGHT WITH A RING OF THICKER AND THICKER COLD CLOUD TOPS COMBINED WITH A WARM EYE, THOUGH A BIT RAGGED AT TIMES. THE END-OF-DAY MICROWAVES SHOWED AN IMPRESSIVE CENTRAL STRUCTURE. OBJECTIVE AND SUBJECTIVE ESTIMATES AVAILABLE ARE 125-130 KT IN 10-MINUTE WINDS AND THE FINAL INTENSITY IS ESTIMATED AT 125 KT. IT SHOULD BE NOTED THAT A RADARSAT2 PASS AROUND 13Z REPORTED WINDS OF 135 KT (EQUIVALENT TO 1 MIN WINDS, OR NEARLY 120 KT IN 10 MIN WINDS) IN THE SOUTHWEST QUADRANT.

LITTLE CHANGE IN THE FORECAST REASONING:

FARAJI IS TRACKING EASTWARD, UNDER THE INFLUENCE OF THE EQUATORIAL RIDGE. BY MID-WEEK, WITH THE WEAKENING OF THE SYSTEM AND THE STEERING FLOW GOES DOWN TO A LOWER LEVEL. THE SYSTEM SHOULD GRADUALLY BE INFLUENCED BY THE SUBTROPICAL LOW-LEVEL RIDGE TO THE SOUTH, AND THUS TRACK IN A GENERAL WESTERLY DIRECTION.

DUE TO THE CLOSE LINK BETWEEN THE WEAKENING PACE AND THE TRACK, THE FORECAST IS PARTICULARLY UNCERTAIN. THIS RESULTS IN A STRONG DISPERSION WITHIN THE NUMERICAL MODELS. CURRENT TRACK FORECAST IS BASED ON A CONSENSUS OF THE MAIN DETERMINISTIC AND ENSEMBLE NUMERICAL MODELS. IT IS SHIFTED TO THE NORTH FROM THE 11TH COMPARED TO THE LAST FORECAST

IN ACCORDANCE WITH THE LATEST GUIDANCE AVAILABLE.

FARAJI REMAINS UNDER THE AXIS OF THE UPPER RIDGE. THE MID-LAYER SHEAR IS SLOWLY STARTING TO SET UP ACCORDING TO THE CIMMS ANALYSIS. FROM TOMORROW, AN INTRUSION OF MID-LEVEL DRY AIR IS ADDED, WHICH SHOULD STOP THE INTENSIFICATION PROCESS AND LEAD TO A WEAKENING TREND, DESPITE THE PERSISTENCE OF A STRONG ENERGY POTENTIAL AND AN UPPER DIVERGENCE. THE LATEST AVAILABLE MODELS DIVERGE ON THIS CHRONOLOGY; SOME MODELS WEAKEN THE METEOR MORE RAPIDLY THAN OTHERS (NOTABLY GFS COMPARED TO IFS).

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