

WTIO30 FMEE 071830

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 11/10/20202021

1.A INTENSE TROPICAL CYCLONE 10 (FARAJI)

2.A POSITION 2021/02/07 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 14.6 S / 80.3 E
(FOURTEEN DECIMAL SIX DEGREES SOUTH AND
EIGHTY DECIMAL THREE DEGREES EAST)

MOVEMENT: EAST-NORTH-EAST 4 KT

3.A DVORAK ANALYSIS: 5.5/6.0/W 1.5/12 H

4.A CENTRAL PRESSURE: 945 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 100 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): 1006 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/02/08 06 UTC: 14.5 S / 81.1 E, VENT MAX= 100 KT, INTENSE TROPICAL
CYCLONE

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

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

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

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

24H: 2021/02/08 18 UTC: 14.4 S / 82.3 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 150 SE: 230 SW: 240 NW: 155

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

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

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

36H: 2021/02/09 06 UTC: 14.5 S / 83.6 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 165 SE: 240 SW: 220 NW: 165

34 KT NE: 140 SE: 130 SW: 120 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 18 UTC: 15.0 S / 84.8 E, VENT MAX= 075 KT, TROPICAL CYCLONE

28 KT NE: 150 SE: 270 SW: 250 NW: 165

34 KT NE: 130 SE: 150 SW: 130 NW: 120

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

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

60H: 2021/02/10 06 UTC: 15.6 S / 85.8 E, VENT MAX= 065 KT, TROPICAL CYCLONE

28 KT NE: 140 SE: 270 SW: 250 NW: 130

34 KT NE: 130 SE: 150 SW: 140 NW: 100

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

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

72H: 2021/02/10 18 UTC: 16.2 S / 86.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 130 SE: 270 SW: 260 NW: 140

34 KT NE: 120 SE: 150 SW: 130 NW: 100

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

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/11 18 UTC: 16.8 S / 85.8 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM

28 KT NE: 110 SE: 165 SW: 195 NW: 100

34 KT NE: 100 SE: 140 SW: 110 NW: 45

120H: 2021/02/12 18 UTC: 17.1 S / 84.1 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 10 SE: 30 SW: 75 NW: 85

2.C ADDITIONAL INFORMATION:

T=5.5 CI=6.0

DURING THE LAST 6 HOURS, CONVECTIVE RING AROUND FARAJI EYE HAS MOSTLY CONTINUED TO WARM UP PROBABLY IN RELATION WITH THE DIURNAL CYCLE OVERSEA BUT ALSO MAY BE IN RELATION WITH THE COOLING OF THE WATERS BENEATH. SINCE THE LAST FEW HOURS THE CONVECTION SEEMS TO COOL DOWN AGAIN

SINCE A FEW HOURS, THE MORE SUSTAINED EASTWARD MOTION SEEMS TO BE ALSO CONFIRMED . IN AGREEMENT WITH SUBJECTIVE AND OBJECTIVE DVORAK ANALYSIS, INTENSITY HAS BEEN REDUCED TO 100KT.

IN TERMS OF TRACK, FARAJI IS MOVING EASTWARD, UNER THE INFLUENCE OF THE EQUATORIAL RIDGE NORTH OF THE SYSTEM. IN THE MIDDLE OF NEXT WEEK, WITH THE WEAKENING OF THE SYSTEM AND THE LEVEL OF THE STEERING FLOW GOING DOWN, THE SYSTEM IS EXPECTED TO PROGRESSIVELY BE UNDER THE INFLUENCE OF THE LOW LEVEL SUBTROPICAL RIDGE AT SOUTH. GIVEN THE TIGHT LINK BETWEEN THE RATE OF DECAY AND THE TRACK, THE FORECAST IS HIGHLY UNCERTAIN. IT IS SHOWN BY STRONG SPREAD AMONG THE NUMERICAL GUIDANCE. CURRENT FORECAST IS A CONSENSUS OF THE MAIN DETERMINISTIC AND ENSEMBLE MEANS.

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 FARAJI CONTINUES TO MOVE STEADILY, IT SHOULD ESCAPE THIS WEAKENING. 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.