

WTIO30 FMEE 110012

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 24/10/20202021

1.A TROPICAL CYCLONE 10 (FARAJI)

2.A POSITION 2021/02/11 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 16.1 S / 85.1 E
(SIXTEEN DECIMAL ONE DEGREES SOUTH AND
EIGHTY FIVE DECIMAL ONE DEGREES EAST)
MOVEMENT: SOUTH-SOUTH-WEST 3 KT

3.A DVORAK ANALYSIS: 5.0/5.0/S 0.0/6 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 80 KT
RADIUS OF MAXIMUM WINDS (RMW): 19 KM

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

28 KT NE: 150 SE: 280 SW: 280 NW: 130
34 KT NE: 110 SE: 165 SW: 150 NW: 85
48 KT NE: 55 SE: 85 SW: 80 NW: 55
64 KT NE: 30 SE: 35 SW: 35 NW: 30

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: 2021/02/11 12 UTC: 16.4 S / 84.5 E, VENT MAX= 065 KT, TROPICAL CYCLONE
28 KT NE: 110 SE: 295 SW: 250 NW: 85
34 KT NE: 95 SE: 175 SW: 130 NW: 75
48 KT NE: 55 SE: 65 SW: 65 NW: 45
64 KT NE: 35 SE: 35 SW: 35 NW: 35

24H: 2021/02/12 00 UTC: 16.8 S / 83.6 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 100 SE: 280 SW: 220 NW: 95
34 KT NE: 85 SE: 165 SW: 120 NW: 45
48 KT NE: 55 SE: 75 SW: 65 NW: 35

36H: 2021/02/12 12 UTC: 17.0 S / 82.4 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 75 SE: 215 SW: 150 NW: 85
34 KT NE: 65 SE: 130 SW: 65 NW: 75

48H: 2021/02/13 00 UTC: 17.2 S / 81.4 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 75 SE: 185 SW: 150 NW: 55
34 KT NE: 65 SE: 110 SW: 85 NW: 35

60H: 2021/02/13 12 UTC: 17.3 S / 80.6 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 75 SE: 130 SW: 150 NW: 65
34 KT NE: 65 SE: 75 SW: 55 NW: 35

72H: 2021/02/14 00 UTC: 17.1 S / 79.6 E, VENT MAX= 030 KT, TROPICAL DEPRESSION
28 KT NE: 55 SE: 175 SW: 150 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/02/15 00 UTC: 16.5 S / 76.8 E, VENT MAX= 030 KT, TROPICAL DEPRESSION
28 KT NE: 45 SE: 215 SW: 150 NW: 55

120H: 2021/02/16 00 UTC: 15.8 S / 73.3 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 85 SE: 130 SW: 130 NW: 75
34 KT NE: 75 SE: 75 SW: 55 NW: 65

2.C ADDITIONAL INFORMATION:

T=CI=5.0

THE START OF AN EYE PATTERN CONFIGURATION STARTED 6 HOURS AGO HAS BEEN CONFIRMED. BECAUSE OF THE PRESENT SHEAR, THE EYE IS STILL QUITE COLD BUT WITH COLD TOPS AROUND. THE TEMPERATURE FLUCTUATIONS OF THE RING TOPS SHOW A GROWING EFFECT OF THE SHEAR. THE MICROWAVE DATA OF 2230UTC STILL SHOW A NICE HIGH ALTITUDE CIRCULATION BUT THE LOW LAYER VORTEX IS LESS WELL DEFINED WITH A WEAKNESS IN THE NORTHERN SECTOR. THE DVORAK ANALYSIS, USING A FINE MONITORING OF THE RING CONFIGURATION, IS SLIGHTLY INCREASED TO 5.0 WHILE THE OBJECTIVE ANALYSES ARE LOWER. BY THIS ANALYSIS, IT IS POSSIBLE TO ESTIMATE WINDS OF THE ORDER OF 80KT. FARAJI RESISTS WELL.

FARAJI HAS BEGUN ITS TURN TO THE SOUTHWEST GUIDED BY THE EQUATORIAL RIDGE TO THE NORTHEAST. MOST OF THE MODELS ARE NOW A LITTLE MORE IN AGREEMENT ON THE ASPECT OF THIS TURN SHOWING ALSO A BETTER AGREEMENT IN TERMS OF FORECAST INTENSITY PREDICTION DUE TO THE CLOSE LINK BETWEEN THE WEAKENING RATE AND THE TRACK. NO CHANGE FOR THE REST OF THE TRACK: THE STEERING FLOW GRADUALLY DESCENDS IN THE LOWER LAYERS AND THE SUBTROPICAL RIDGE TO THE SOUTH TAKES OVER THE TRACK INDUCING A MORE MARKED WEST-SOUTHWEST ORIENTATION. ON SUNDAY, A WEST-NORTHWEST TRACK IS EXPECTED WHILE THE RIDGE PIVOTS SOUTHWEST OF THE SYSTEM. THE CURRENT FORECAST IS BASED ON A CONSENSUS OF THE MAIN MODELS.

FARAJI CONTINUES TO MOVE FURTHER SOUTH WHERE DEEP SHEAR AND STRONGER MID-TROPOSPHERE SHEAR IS PREVALENT. THIS WILL INCREASINGLY AFFECT THE STRUCTURE OF THE VORTEX BY BRINGING DRY AIR CLOSE TO THE CORE OF THE SYSTEM AND THUS WEAKEN FARAJI MORE SIGNIFICANTLY. THIS SHEAR SHOULD WEAKEN ON FRIDAY BUT THE DRY AIR SHOULD ALREADY BE WELL ABOVE THE CENTER OF THE SYSTEM AND REMAIN THERE AFTERWARDS. THE

HIGHER SHEAR ENVIRONMENT SHOULD REMAIN AT THE SOUTHERN EDGE OF THE SYSTEM AS IT MOVES. THUS, THE AVAILABLE MODELS PROPOSE A PROGRESSIVE WEAKENING OF THE SYSTEM UNTIL SUNDAY, PROBABLY TO THE STAGE OF TROPICAL DEPRESSION. FROM MONDAY ONWARDS, WITH AN INCREASE IN DIVERGENCE, LESS DRY AIR AND A STRENGTHENING OF THE EQUATORIAL SURFACE CONVERGENCE, A REINTENSIFICATION REMAINS POSSIBLE. AS A CONSEQUENCE, THE RSMC FORECAST GOES BACK TO THE TROPICAL STORM STAGE AT 5 DAYS.

THIS SYSTEM DOES NOT PRESENT ANY PARTICULAR RISK FOR THE INHABITED LANDS DURING THE NEXT 5 DAYS.