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WTIO30 FMEE 231818

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

0.A WARNING NUMBER: 3/8/20172018
1.A SEVERE TROPICAL STORM 8 (FAKIR)

2.A POSITION 2018/04/23 AT 1800 UTC:
WITHIN 30 NM RADIUS OF POINT 17.3 S / 53.8 E
(SEVENTEEN DECIMAL THREE DEGREES SOUTH AND FIFTY THREE DECIMAL EIGHT DEGREES EAST)
MOVEMENT : SOUTH-SOUTH-EAST 16 KT

3.A DVORAK ANALYSIS: 3.5/3.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 990 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT
RADIUS OF MAXIMUM WINDS (RMW) :28 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 280 SE: 310 SW: 190 NW: 190
34 KT NE: 110 SE: 110 SW: 70 NW: 70
48 KT NE: 40 SE: 40 SW: 40 NW: 40

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 700 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:
12H: 2018/04/24 06 UTC: 20.1 S / 55.5 E, MAX WIND=045 KT, MODERATE TROPICAL STORM
24H: 2018/04/24 18 UTC: 22.6 S / 56.5 E, MAX WIND=035 KT, MODERATE TROPICAL STORM
36H: 2018/04/25 06 UTC: 24.3 S / 57.5 E, MAX WIND=030 KT, POST-TROPICAL DEPRESSION
48H: 2018/04/25 18 UTC: 25.3 S / 58.3 E, MAX WIND=025 KT, POST-TROPICAL DEPRESSION
60H: 2018/04/26 06 UTC: 25.2 S / 59.1 E, MAX WIND=025 KT, LOW
72H: 2018/04/26 18 UTC: 24.3 S / 61.0 E, MAX WIND=020 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK :

2.C ADDITIONAL INFORMATIONS:
T=CI=3.5

THE PREVIOUS CLOUD PATTERN IN CURVED BAND TENDS PROGRESSIVELY TOWARDS A SHEARED PATTERN, WITH HOWEVER A LOCATION OF THE CENTER THAT REMAINS VERY CLOSE TO THE DEEPEST CONVECTION. INFRARED IMAGES ALLOW TO NOTICE THAT CONVECTION BEGINS TO WEAKEN IN THE SOUTHERN PART OF THE SYSTEM. THE 1727UTC ASCAT SWATH DOES NOT ALLOW A PRECISE LOCATION OF FAKIR CENTER BUT SUGGESTS A COMPACT STRUCTURE WITH THE STRONGEST WINDS WHICH ARE INCREASED BY THE RAPID MOVEMENT OF THE SYSTEM. DVORAK ANALYSIS ALLOWS TO ESTIMATE MAXIMUM WINDS OF 50KT AND FAKIR IS NOW CLASSIFIED IN SEVERE TROPICAL STORM.

THE TRACK OF FAKIR REMAINS SIGNIFICANTLY THE SAME WITH RAPID MOVEMENT SOUTH-SOUTH-EAST, BETWEEN A RIDGE AT EAST AND A DEEP UPPER TROUGH AT WEST. THE LATEST LOCALIZATION OF THE CENTER OBTAINED BY THE MICROWAVE IMAGES LEAVE A SLIGHT SHIFT OF THE INITIAL TRACK, LOCATED THE FORECASTED TRACK SLIGHTLY EAST OF THE REUNION ISLAND. FROM WEDNESDAY AND THURSDAY, THE SYSTEM IS LIKELY TO SLOW DOWN WITH THE ARRIVAL OF A NEW RIDGE FROM THE WEST. FAKIR MAY THEN MOVE TO THE NORTHEAST MARKING THE BEGINNING OF THE SYSTEM FILLING. THE NUMERICAL MODELS ARE, HOWEVER, IN LESS-GOOD AGREEMENT IN THE SLOWING DOWN AT LONG RANGE.

FAKIR CONTINUES TO INTENSIFY IN THE LAST HOURS, BENEFITING FROM EXCELLENT DIVERGENCE IN THE SOUTHERN SEMI-CIRCLE. HOWEVER, THE FAVORABLE WINDOW FOR ITS INTENSIFICATION HAS BOUND TO END WITH THE ACTION OF THE NORTHWEST SHEAR BEFORE THE TALWEG. A POSSIBLE ACCELERATION OF THE TRACK COULD ALLOW FAKIR TO RESIST LONGER TO THE WINDSHEAR AND THUS TO MAINTAIN FOR A LONGER ITS MAXIMUM INTENSITY CLOSE DIRECTLY FROM THE REUNION ISLAND AND MAURITIUS. HOWEVER, UPPER LEVEL DYNAMISM WILL EVEN MAKE EFFECT AND DURING WEDNESDAY, IN AN MORE BAROCLINIC ENVIRONMENT, THE LOW MAY LOOSE SOME TROPICAL CHARACTERISTICS. MOVING OVER COOLER WATER AND ALWAYS UNDER A STRONG NORTH-WESTERLY UPPER CONSTRAINT, THE SYSTEM IS LIKELY TO FILL UP ON THURSDAY.

FAKIR IS EXPECTED TO TRIGGER A SIGNIFICANT DETERIORATION OF THE WEATHER CONDITIONS IN THE MASCARENE ISLANDS OF TONIGHT IN THE TERM OF RAINFALL. FURTHERMORE, THE WINDS COULD BE STRONGER THAN INITIALLY EXPECTED AS A RESULT OF STRONGER STRENGTHENING TO THE UPPER LEVEL DYNAMICS. INHABITANTS ARE THUS, INVITED TO FOLLOW REGULARLY THE UPDATES ON THIS SYSTEM.