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WTIO30 FMEE 221840
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 3/12/20212022
1.A TROPICAL DISTURBANCE 12

2.A POSITION 2022/04/22 AT 1800 UTC:
WITHIN 20 NM RADIUS OF POINT 13.8 S / 42.3 E
(THIRTEEN DECIMAL EIGHT DEGREES SOUTH AND
FORTY TWO DECIMAL THREE DEGREES EAST)
MOVEMENT: WEST-SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 2.0/2.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 1005 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT
RADIUS OF MAXIMUM WINDS (RMW): NIL

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 600 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):
12H: 2022/04/23 06 UTC: 14.5 S / 40.8 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 110 SE: 240 SW: 0 NW: 100
34 KT NE: 85 SE: 100 SW: 0 NW: 75

24H: 2022/04/23 18 UTC: 16.0 S / 40.2 E, VENT MAX= 030 KT, OVERLAND DEPRESSION
28 KT NE: 0 SE: 165 SW: 0 NW: 0

36H: 2022/04/24 06 UTC: 17.7 S / 40.1 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 95 SE: 155 SW: 0 NW: 0
34 KT NE: 65 SE: 0 SW: 0 NW: 0

48H: 2022/04/24 18 UTC: 18.8 S / 40.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM
28 KT NE: 95 SE: 150 SW: 85 NW: 85
34 KT NE: 65 SE: 0 SW: 55 NW: 55
48 KT NE: 35 SE: 0 SW: 35 NW: 35

60H: 2022/04/25 06 UTC: 19.5 S / 40.3 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM
28 KT NE: 0 SE: 155 SW: 0 NW: 0

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

72H: 2022/04/25 18 UTC: 19.9 S / 40.6 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 0 SE: 140 SW: 0 NW: 0
34 KT NE: 0 SE: 75 SW: 0 NW: 0

2.B LONGER-RANGE OUTLOOK:
96H: 2022/04/26 18 UTC: 19.6 S / 41.2 E, VENT MAX= 035 KT, TROPICAL DEPRESSION
28 KT NE: 130 SE: 110 SW: 0 NW: 0
34 KT NE: 100 SE: 75 SW: 0 NW: 0

120H: 2022/04/27 18 UTC: 18.7 S / 41.3 E, VENT MAX= 030 KT, FILLING UP
28 KT NE: 155 SE: 110 SW: 0 NW: 0

2.C ADDITIONAL INFORMATION:
T=CI=2.0+

DURING THE LAST 6 HOURS, THE CURVED BAND CLOUD PATTERN HAS BEEN MAINTAINED WITH MORE MARKED CONVECTION DURING THE LAST MOMENTS. THE LAST MICROWAVE DATA STILL SHOW A POORLY DEFINED LOW-LEVEL VORTEX. THE PRECISE LOCALIZATION REMAINS THEREFORE RATHER DELICATE. IN THE ABSENCE OF DIFFUSIOMETRIC DATA, THE DVORAK ANALYSIS OF 2.0+ ALLOWS TO MAINTAIN AN INTENSITY OF ABOUT 25KT, LOCALLY 30KT, AT THE STAGE OF A TROPICAL DISTURBANCE.

THE MOVEMENT OF THE SYSTEM TOWARDS THE WEST-SOUTHWEST IS GUIDED BY THE NORTHWESTERN EDGE OF A LARGE SUBTROPICAL RIDGE, BRINGING THE SYSTEM TO A POSSIBLE LANDING ON THE PROVINCE OF NAMPULA. THIS RIDGE IS WEAKENING AND PROGRESSIVELY SHIFTING TOWARDS THE SOUTHEAST LEAVING A CLEARER TRACK TOWARDS THE SOUTH AFTER ITS LANDING WITH A RATHER SHORT TRANSIT ON THE COASTS OF MOZAMBIQUE. THE SYSTEM SHOULD EMERGE AT SEA FAIRLY QUICKLY DURING THE NIGHT FROM SATURDAY TO SUNDAY WITH A TRACK TOWARDS THE SOUTH WHICH IS SLOWING DOWN UNDER THE EFFECT OF TWO CONTRADICTORY FLOWS WHICH ARE NOT VERY MARKED: THE SUBTROPICAL RIDGE WHICH CONTINUES TO FAIL AND TO SHIFT TOWARDS THE SOUTH-EAST AND HIGH GEOPOTENTIALS WHICH ARE BEING SET UP ON THE AFRICAN CONTINENT ACCORDING TO SOME SCENARIOS FAVOURED BY THE RSMC, THE MAIN STEERING FLOW SHOULD SWITCH ON THE AFRICAN RIDGE OF MIDDLE TROPOSPHERE LEAVING THE SYSTEM TO TURN BACK ON TUESDAY OR WEDNESDAY, WHILE ITS INTENSITY WILL BE WEAKENING. WE WILL NOTE A STRONG DISPERSION OF THE MODELS, LEAVING A POSSIBILITY FOR THE SYSTEM TO TRANSIT LONGER ON LAND AND WEAKENING MORE QUICKLY, SCENARIO THAT IS NOT FOLLOWED BY THE RSMC.

IN TERMS OF INTENSITY, THE SYSTEM BENEFITS GLOBALLY FROM GOOD ENVIRONMENTAL CONDITIONS. THUS, IN THE SHORT TERM, PROBABLY BEFORE THE EVENTUAL LANDING ON MOZAMBIQUE, AN INTENSIFICATION TO THE MODERATE TROPICAL STORM STAGE IS POSSIBLE. FOLLOWING A SHORT TRANSIT OVER AFRICA, THE SYSTEM SHOULD NOT WEAKEN TOO MUCH AND WILL PRESENT A NEW PHASE OF INTENSIFICATION ON SUNDAY. FROM THE BEGINNING OF NEXT WEEK, THE SYSTEM COULD WEAKEN REGULARLY, BY THE INCREASE OF A WESTERN

CONSTRAINT IN ALTITUDE, BRINGING MORE SIGNIFICANTLY DRY AIR ABOVE THE SYSTEM.

IMPACTS ON THE INHABITED LANDS
- GUSTS: THIS WEEKEND, WHEN PASSING CLOSE TO MOZAMBIQUE COASTS, THE GUSTS WILL BE MAINLY OVER THE MARITIME FRINGE OF THE PROVINCE OF NAMPULA AND MAY REACH 70/90 KM/H . THE STRONGEST GUSTS WILL BE RECORDED AT SEA FOR 100/120 KM/H MAXIMUM. THE GUSTS WILL BE RESIDUAL ON THE COAST AT THE BEGINNING OF NEXT WEEK.
- RAINS: FROM THIS WEEKEND, THE HEAVIEST ACCUMULATIONS ARE EXPECTED ON THE COASTAL EDGE OF THE PROVINCE OF NAMPULA (MOZAMBIQUE) BETWEEN 80 AND 100 MM/24H ON AVERAGE FOR THE DAY OF SATURDAY. WITH THE DISTANCE OF THE SYSTEM AT THE BEGINNING OF NEXT WEEK, THE RAINS WILL THEN SHIFT TO THE PROVINCE OF ZAMBEZIA WHILE LOSING STRENGTH.
- SEA: HEAVY TO LOCALLY VERY HEAVY TODAY OFF THE COAST OF MOZAMBIQUE GRADUALLY DIMINISHING DURING THE WEEKEND WITH THE EVACUATION OF THE SYSTEM TO THE SOUTH.