

WTIO30 FMEE 270714

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/9/20222023

1.A TROPICAL DEPRESSION 9

2.A POSITION 2023/03/27 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 17.1 S / 63.7 E

(SEVENTEEN DECIMAL ONE DEGREES SOUTH AND
SIXTY THREE DECIMAL SEVEN DEGREES EAST)

MOVEMENT: SOUTH 8 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D

4.A CENTRAL PRESSURE: 1004 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 0 SE: 185 SW: 110 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/03/27 18 UTC: 17.4 S / 63.1 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

24H: 2023/03/28 06 UTC: 17.7 S / 62.0 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

36H: 2023/03/28 18 UTC: 17.9 S / 60.7 E, VENT MAX= 020 KT, TROPICAL DISTURBANCE

48H: 2023/03/29 06 UTC: 18.0 S / 59.7 E, VENT MAX= 020 KT, FILLING UP

60H: 2023/03/29 18 UTC: 18.0 S / 58.4 E, VENT MAX= 020 KT, FILLING UP

72H: 2023/03/30 06 UTC: 17.6 S / 56.5 E, VENT MAX= 020 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=2.5

THE DISTURBED AREA FOLLOWED FOR SEVERAL DAYS THROUGH AWIO20 FMME
WARNING HAS SHOWN SIGNS OF ORGANIZATION IN THE LOW LEVEL CIRCULATION
AND IN ITS CLOUD PATTERN. ALTHOUGH THE DVORAK ANALYSIS IS FAIRLY RECENT

WITH A FAIRLY RECENT CURVED BAND STRUCTURE, AN ESTIMATE OF 2.5 CAN BE MADE. THIS INDUCES ESTIMATED WINDS OF THE ORDER OF 30KT. THE ASCAT PASS OF 0437UTC ALLOWS TO VALIDATE THIS VALUE ONLY IN THE SOUTHERN SEMICIRCLE, PRESENTING HOWEVER MAXIMUM VALUES AT 35KT UNDER CONVECTION AND LOCALLY IN THE SOUTHWEST QUADRANT. ACCORDING TO THIS ANALYSIS, THE SYSTEM 09-20222023 IS CLASSIFIED AS A TROPICAL DEPRESSION AT 30KT, I.E. UNDER THE NAMING THRESHOLD.

CURRENTLY SHOWING AN OVERALL SOUTHWARD MOVEMENT, THE SYSTEM WILL GRADUALLY ORIENT ITS TRACK TOWARDS THE WEST-SOUTHWEST UNDER THE INFLUENCE OF A FAIRLY LOW DIRECTIONAL FLOW LINKED TO THE SUBTROPICAL RIDGE LOCATED SOUTHEAST OF THE SYSTEM. THEN, STILL UNDER THE INFLUENCE OF LOW DIRECTIONAL FLOWS, THE SYSTEM WILL TAKE A MORE WESTERLY ORIENTATION IN THE NEXT 48 HOURS MAKING IT TRANSIT NORTH OF THE MASCARENE ISLANDS IN PHASE OF FILLING

AS FOR THE INTENSITY FORECAST, THE TROPICAL DEPRESSION WILL NOT SHOW SIGNIFICANT INTENSIFICATION DUE TO THE PRESENCE OF DRY AIR IN THE NORTHERN SEMICIRCLE AND MODERATE SHEAR OVER THE SOUTHERN PART. IN THESE CONDITIONS, THE SYSTEM SHOULD KEEP ITS INTENSITY OF 30KT DURING THE NEXT 24 HOURS BEFORE GRADUALLY WEAKENING AND EVOLVING INTO A LOW LEVEL TROUGH BY ELONGATION OF THE CIRCULATION. IT IS THUS AT THE STAGE OF DEPRESSION FILLING THEN RESIDUAL DEPRESSION THAT THE SYSTEM WILL TRANSIT AT ABOUT 250KM OF THE COASTS OF THE MAURITIUS ISLAND AND A LITTLE MORE FOR THE REUNION.

THIS SYSTEM DOES NOT PRESENT ANY PARTICULAR DANGER FOR THE EMERGED LANDS ALTHOUGH IT CAN CAUSE A DEGRADATION OF THE WEATHER ON THE ISLANDS OF THE MASCAREIGNES. THE INHABITANTS ARE HOWEVER INVITED TO STAY INFORMED OF THE SITUATION.