

WTIO30 FMEE 241923

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 14/8/20222023

1.A SEVERE TROPICAL STORM 8 (ENALA)

2.A POSITION 2023/02/24 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 23.6 S / 69.5 E

(TWENTY THREE DECIMAL SIX DEGREES SOUTH AND
SIXTY NINE DECIMAL FIVE DEGREES EAST)

MOVEMENT: SOUTH-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 3.0/3.5/W 0.5/6 H

4.A CENTRAL PRESSURE: 984 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: 100 SE: 150 SW: 150 NW: 85

34 KT NE: 75 SE: 95 SW: 75 NW: 55

48 KT NE: 0 SE: 45 SW: 50 NW: 0

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: 2023/02/25 06 UTC: 25.8 S / 68.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 140 SE: 215 SW: 175 NW: 95

34 KT NE: 100 SE: 95 SW: 110 NW: 65

48 KT NE: 55 SE: 55 SW: 65 NW: 45

24H: 2023/02/25 18 UTC: 27.4 S / 67.5 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 140 SE: 230 SW: 195 NW: 110

34 KT NE: 95 SE: 100 SW: 120 NW: 65

36H: 2023/02/26 06 UTC: 28.6 S / 66.4 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 130 SE: 230 SW: 185 NW: 130

34 KT NE: 85 SE: 110 SW: 120 NW: 75

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

48H: 2023/02/26 18 UTC: 29.3 S / 65.3 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 150 SE: 195 SW: 175 NW: 120

34 KT NE: 100 SE: 100 SW: 110 NW: 85

60H: 2023/02/27 06 UTC: 29.6 S / 65.3 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 130 SE: 165 SW: 165 NW: 140

34 KT NE: 95 SE: 95 SW: 95 NW: 95

72H: 2023/02/27 18 UTC: 29.0 S / 65.6 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 140 SE: 165 SW: 185 NW: 130

34 KT NE: 85 SE: 95 SW: 110 NW: 85

2.B LONGER-RANGE OUTLOOK:

96H: 2023/02/28 18 UTC: 28.2 S / 66.4 E, VENT MAX= 035 KT, REMNANT LOW

28 KT NE: 150 SE: 175 SW: 155 NW: 85

34 KT NE: 100 SE: 95 SW: 85 NW: 55

120H: 2023/03/01 18 UTC: 29.8 S / 67.7 E, VENT MAX= 030 KT, REMNANT LOW

28 KT NE: 150 SE: 215 SW: 120 NW: 0

2.C ADDITIONAL INFORMATION:

T=3.0 CI=3.5+

DURING THE LAST 6 HOURS, THE ENALA CLOUD PATTERN REMAINED SHEARED WITH A PROMINENT LOW-LEVEL CENTER LOCATED ON THE NORTHERN PART WITHIN 30 NM OF THE DEEP CONVECTION EDGE. THE TOPS HAVE HOWEVER COOLED DOWN WITH A STILL NOTICEABLE ELECTRICAL ACTIVITY. THE DVORAK ANALYSIS IN SHEARED CONFIGURATION ALLOWS AN ESTIMATION OF ABOUT 50KT, WHILE A SMOS PASS GAVE VALUES OF 55KT 6 HOURS BEFORE. ENALA REMAINS A STRONG TROPICAL STORM.

LITTLE CHANGE ON THE TRACK FORECAST UNTIL TUESDAY. THE SOUTH-SOUTHWESTWARD TRACK IS EXPECTED TO CONTINUE UNTIL SATURDAY, GUIDED BETWEEN THE HIGH SUBTROPICAL GEOPOTENTIALS LOCATED EAST OF THE SYSTEM ON THE ONE HAND, AND A WEAK MID-TROPOSPHERE TROUGH THAT FAVORS THE SYSTEM'S DESCENT SOUTHWARD ON THE OTHER. THIS WEEKEND, CONTRADICTORY STEERING FLOWS AND THEN A BAROMETRIC COL SITUATION SHOULD PREVENT ENALA FROM EVACUATING TOWARDS THE MID LATITUDES. THE SYSTEM SHOULD THEN HAVE A SLOW OR EVEN QUASI-STATIONARY AND ERRATIC TRACK. THE LAST GUIDELINES SEEM TO OPT FOR AN EVACUATION TOWARDS THE SOUTHEAST DURING ITS DISSIPATION PHASE.

ENVIRONMENTAL CONDITIONS ARE CHANGING LITTLE IN THE VICINITY OF ENALA, EXCEPT FOR THE OCEANIC POTENTIAL WHICH WILL WEAKEN MORE MARKEDLY ON SUNDAY. UNDER THESE CONDITIONS, THE INTENSITY OF ENALA SHOULD BE MAINTAINED WITH SOME PERIODS OF WEAK RE-INTENSIFICATION DUE TO THE DYNAMICS OF ALOFT TRANSITING NEAR ENALA. BOOSTED BY THESE EFFECTS, ENALA COULD MAINTAIN ITS TROPICAL CHARACTERISTICS FOR LONGER. ON LONGER TIME SCALES, THE SYSTEM SHOULD WEAKEN WITHOUT SHOWING A CLEAR MIGRATION TO A POST-TROPICAL SYSTEM.

ENALA DOES NOT POSE A THREAT TO LAND.

