

WTIO30 FMEE 230648

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 8/8/20222023

1.A SEVERE TROPICAL STORM 8 (ENALA)

2.A POSITION 2023/02/23 AT 0600 UTC:

WITHIN 10 NM RADIUS OF POINT 17.2 S / 71.9 E

(SEVENTEEN DECIMAL TWO DEGREES SOUTH AND  
SEVENTY ONE DECIMAL NINE DEGREES EAST)

MOVEMENT: SOUTH-WEST 11 KT

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 990 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT

RADIUS OF MAXIMUM WINDS (RMW): 28 KM

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

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

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

48 KT NE: 45 SE: 35 SW: 40 NW: 45

64 KT NE: 0 SE: 0 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 200 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/02/23 18 UTC: 18.9 S / 70.8 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 130 SE: 150 SW: 120 NW: 95

34 KT NE: 75 SE: 85 SW: 75 NW: 65

48 KT NE: 35 SE: 0 SW: 0 NW: 45

24H: 2023/02/24 06 UTC: 20.6 S / 69.8 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 130 SE: 155 SW: 100 NW: 95

34 KT NE: 75 SE: 95 SW: 75 NW: 65

48 KT NE: 35 SE: 0 SW: 0 NW: 45

36H: 2023/02/24 18 UTC: 22.1 S / 68.8 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

28 KT NE: 130 SE: 155 SW: 140 NW: 95

34 KT NE: 65 SE: 100 SW: 0 NW: 0

48H: 2023/02/25 06 UTC: 23.6 S / 67.7 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 130 SE: 150 SW: 120 NW: 75

34 KT NE: 0 SE: 95 SW: 0 NW: 0

60H: 2023/02/25 18 UTC: 24.6 S / 66.5 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM

28 KT NE: 100 SE: 165 SW: 100 NW: 75

34 KT NE: 0 SE: 110 SW: 75 NW: 0

72H: 2023/02/26 06 UTC: 25.6 S / 65.1 E, VENT MAX= 030 KT, REMNANT LOW

28 KT NE: 100 SE: 140 SW: 140 NW: 55

#### 2.B LONGER-RANGE OUTLOOK:

96H: 2023/02/27 06 UTC: 26.9 S / 63.1 E, VENT MAX= 025 KT, REMNANT LOW

120H: 2023/02/28 06 UTC: 27.6 S / 62.5 E, VENT MAX= 025 KT, REMNANT LOW

#### 2.C ADDITIONAL INFORMATION:

T=CI=4.0.

DURING THE LAST 6 HOURS, THE CLOUD PATTERN OF ENALA HAS CHANGED LITTLE MAINTAINING A CDO STRUCTURE. THE DISPLACEMENT OF THE SYSTEM SEEMS TO COMPENSATE THE NORTH TO NORTHWEST CONSTRAINT SUFFERED BY THE SYSTEM.

THE MICROWAVE PASS F17 OF 0210Z SHOWS A FIRM EYE IN 85GHZ, THE INTENSITY HAS BEEN ESTIMATED AT 55KT, INTENSITY CONFIRMED BY THE ASCAT DATA OF 05UTC AND THE SMOS PASS OF 0108Z.

THE SYSTEM IS HEADING SOUTH-SOUTHWESTWARDS BETWEEN THE SUBTROPICAL HIGH GEOPOTENTIALS SHIFTING TO THE SOUTHEAST, PROLONGED BY A SECONDARY RIDGE ALONG THE EASTERN SIDE OF THE SYSTEM, AND A WEAK TROUGH TO THE SOUTH-WEST OF THE SYSTEM. THIS WEEKEND, WHILE THE SYSTEM SHOULD WEAKEN AND STEERING FLOW SHOULD RETURN TO LOWER LEVELS, THE TRACK SHOULD SHIFT WEST-SOUTHWESTWARDS. ALTHOUGH THERE IS SOME UNCERTAINTY ABOUT THE EXACT TRACK AT THE END OF THE FORECAST PERIOD, VARIOUS ENSEMBLE FORECAST PLUMES CONFIRM THAT THIS SYSTEM DOES NOT POSE ANY THREAT TO INHABITED LANDS.

WITH SEVERAL INDICATORS IN THE GREEN (A GOOD DIVERGENCE ON THE POLAR COAST AND A STILL VERY FAVORABLE OCEANIC POTENTIAL FOR THE NEXT 12 HOURS, BUT DECREASING AFTERWARDS), THE CONSTRAINT IN THE MIDDLE TROPOSPHERE ALSO SEEN BY THE LAST RUNS, WHICH SEEMS TO BE LIMITED FOR THE MOMENT BY THE DISPLACEMENT OF THE SYSTEM, COULD FINALLY LIMIT THE DEVELOPMENT OF ENALA FROM NEXT NIGHT.

FROM FRIDAY AND ESPECIALLY SATURDAY, THE STRENGTHENING OF THE NORTH-WESTERN SHEAR ASSOCIATED WITH THE UPPER TROUGH SHOULD HOWEVER CAUSE INTRUSIONS OF MORE MARKED DRY AIR, HENCE A MORE OR LESS RAPID WEAKENING EXPECTED OVER THE WEEKEND. THE GUIDELINES ARE VERY SCATTERED ON THIS WEAKENING.

SOME MODELS PROPOSE INTENSIFICATIONS AT THE END OF THE RANGE IN A LESS SHEARED ENVIRONMENT. HOWEVER, THE SLIGHT DROP IN POTENTIAL AND ESPECIALLY THE EXPECTED WEAKENING MAKES THIS SCENARIO NOT VERY CREDIBLE FOR THE MOMENT. THE CMRS FORECAST DOES NOT TAKE THIS INTO ACCOUNT AT THIS TIME.

ENALA DO NOT THREATEN THE INHABITED ISLANDS.