

WTIO30 FMEE 261825

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 22/8/20222023

1.A SEVERE TROPICAL STORM 8 (ENALA)

2.A POSITION 2023/02/26 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 28.8 S / 66.6 E

(TWENTY EIGHT DECIMAL EIGHT DEGREES SOUTH AND
SIXTY SIX DECIMAL SIX DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 3 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/6 H

4.A CENTRAL PRESSURE: 990 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 165 SE: 205 SW: 155 NW: 130

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

48 KT NE: 0 SE: 75 SW: 70 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1015 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2023/02/27 06 UTC: 29.1 S / 66.8 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 230 SE: 195 SW: 150 NW: 150

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

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

24H: 2023/02/27 18 UTC: 28.4 S / 67.3 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 205 SE: 185 SW: 155 NW: 140

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

36H: 2023/02/28 06 UTC: 27.7 S / 67.5 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

28 KT NE: 165 SE: 185 SW: 215 NW: 110

34 KT NE: 75 SE: 110 SW: 85 NW: 0

48H: 2023/02/28 18 UTC: 27.3 S / 67.5 E, VENT MAX= 035 KT, POST-TROPICAL
DEPRESSION

28 KT NE: 165 SE: 220 SW: 185 NW: 110

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

60H: 2023/03/01 06 UTC: 27.0 S / 67.2 E, VENT MAX= 040 KT, POST-TROPICAL DEPRESSION
28 KT NE: 185 SE: 250 SW: 205 NW: 110
34 KT NE: 85 SE: 130 SW: 130 NW: 65

72H: 2023/03/01 18 UTC: 27.0 S / 66.8 E, VENT MAX= 030 KT, FILLING UP
28 KT NE: 130 SE: 215 SW: 140 NW: 0

2.B LONGER-RANGE OUTLOOK:

96H: 2023/03/02 18 UTC: 29.3 S / 66.2 E, VENT MAX= 025 KT, FILLING UP

120H: 2023/03/03 18 UTC: 33.1 S / 69.1 E, VENT MAX= 030 KT, EXTRATROPICAL DEPRESSION
28 KT NE: 295 SE: 185 SW: 185 NW: 95

2.C ADDITIONAL INFORMATION:

T=CI=2.5

ENALA'S CLOUD PATTERN HAS IMPROVED OVER THE PAST SIX HOURS. WITH THE DECREASE IN SHEAR, THE DEEP CONVECTION HAS STRENGTHENED IN THE NORTH WESTERN QUADRANT AND IS WRAPPING AROUND THE CENTER IN INFRARED AND WATER VAPOR. EVEN IF A TILT IS STILL PRESENT BETWEEN THE UPPER AND LOWER CENTERS, THIS SHOWS THE DEVELOPMENT OF THE WARM CORE. THE 1704Z ASCAT DATA CONFIRMS THE INTENSITY ANALYZED BY THE 1354Z SMAP PASS WHICH GAVE 52KT. ENALA IS THEREFORE ANALYZED AT 18Z AS A SEVERE TROPICAL STORM 50KT.

ENALA HAS STARTED TO SLOW DOWN ON A GENERAL SOUTH-WEST OR SOUTH-SOUTH-WESTWARD TRACK UNTIL THE END OF NEXT NIGHT, WHILE A BAROMETRIC COL SITUATION IS OCCURRING SOUTH OF THE SYSTEM. FROM TOMORROW, ENALA SHOULD START A SLOW TURN ON A GENERAL NORTHWARD TRACK THAT SHOULD BE MAINTAINED UNTIL MID-WEEK. DURING THIS PERIOD THE STEERING FLOW SHOULD GRADUALLY COME UNDER THE INFLUENCE OF A LOW TO MID-LEVELS SUBTROPICAL RIDGE LOCATED WEST OF THE SYSTEM. FROM WEDNESDAY, THE STEERING FLOW SHOULD GO BACK DOWN IN THE LOW LEVELS FOLLOWING THE WEAKENING OF THE SYSTEM. ENALA SHOULD THEN BE ON THE NORTHWEST TO WEST SIDE OF A LOW LEVEL RIDGE, AHEAD OF A MID-LATITUDE TROUGH THAT WILL EVENTUALLY ABSORB IT IN THE SECOND PART OF THE WEEK. THE RSMC FORECAST IS BASED ON A COMPROMISE BETWEEN THE BEST AVAILABLE GUIDANCE. IF THE GLOBAL PHILOSOPHY OF THE FORECAST IS SHARED BY ALL THE MODELS, THERE ARE VARIATIONS FROM ONE MODEL TO ANOTHER ON THE PRECISE COURSE OF THE SCENARIO, LEADING TO A STILL SIGNIFICANT UNCERTAINTY ON THE FORECAST BEYOND D+2.

IN TERMS OF INTENSITY, ENALA IS TEMPORARILY LOCATED UNDER THE TROUGH IN A LOW SHEAR ENVIRONMENT. EVEN IF THE OCEANIC POTENTIAL IS VERY LOW, IT SHOULD BE ENOUGH TO MAINTAIN A SEVERE TROPICAL STORM TILL TOMORROW. ON MONDAY EVENING, THE WEST TO SOUTHWEST SHEAR SHOULD STRENGTHEN LEADING TO THE WEAKENING OF ENALA. BY TUESDAY, THE SYSTEM COULD TEMPORARILY BE IN A BAROCLINIC ENVIRONMENT INTERACTING WITH A BRANCH OF THE JOST. THE SYSTEM SHOULD THEN START TO LOSE ITS TROPICAL CHARACTERISTICS. A FINAL FILLING PHASE IS THEN EXPECTED FROM THE MIDDLE

OF THE WEEK.

ENALA DOES NOT POSE ANY THREAT TO LAND.