Direction Interrégionale de Météo-France pour l'Océan Indien
50 Boulevard du Chaudron
97490 Sainte-Clotilde
Tél : 0262 92 11 00

WTIO30 FMEE 270627
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 24/8/20222023
1.A MODERATE TROPICAL STORM 8 (ENALA)

2.A POSITION 2023/02/27 AT 0600 UTC:
WITHIN 20 NM RADIUS OF POINT 29.2 S / 67.2 E
(TWENTY NINE DECIMAL TWO DEGREES SOUTH AND
SIXTY SEVEN DECIMAL TWO DEGREES EAST)
MOVEMENT: EAST-NORTH-EAST 5 KT

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

4.A CENTRAL PRESSURE: 995 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT
RADIUS OF MAXIMUM WINDS (RMW): NIL

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 185 SE: 205 SW: 130 NW: 175
34 KT NE: 140 SE: 140 SW: 95 NW: 100
48 KT NE: 0 SE: 0 SW: 0 NW: 0
64 KT NE: 0 SE: 0 SW: 0 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 18 UTC: 28.5 S / 67.7 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM
28 KT NE: 220 SE: 175 SW: 155 NW: 165
34 KT NE: 110 SE: 140 SW: 85 NW: 85

24H: 2023/02/28 06 UTC: 27.6 S / 67.9 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 155 SE: 175 SW: 215 NW: 120
34 KT NE: 75 SE: 140 SW: 0 NW: 0

36H: 2023/02/28 18 UTC: 27.2 S / 67.6 E, VENT MAX= 040 KT, POST-TROPICAL DEPRESSION
28 KT NE: 140 SE: 220 SW: 195 NW: 75
34 KT NE: 0 SE: 155 SW: 100 NW: 0

48H: 2023/03/01 06 UTC: 27.2 S / 67.0 E, VENT MAX= 035 KT, POST-TROPICAL DEPRESSION
28 KT NE: 165 SE: 250 SW: 220 NW: 140

34 KT NE: 75 SE: 165 SW: 85 NW: 65

60H: 2023/03/01 18 UTC: 27.5 S / 66.7 E, VENT MAX= 030 KT, POST-TROPICAL DEPRESSION
28 KT NE: 130 SE: 205 SW: 130 NW: 0

72H: 2023/03/02 06 UTC: 28.5 S / 66.5 E, VENT MAX= 025 KT, POST-TROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK:
96H: 2023/03/03 06 UTC: 32.4 S / 67.8 E, VENT MAX= 025 KT, EXTRATROPICAL DEPRESSION

120H: 2023/03/04 06 UTC: 36.4 S / 70.7 E, VENT MAX= 030 KT, EXTRATROPICAL DEPRESSION
28 KT NE: 435 SE: 220 SW: 185 NW: 195

2.C ADDITIONAL INFORMATION:
DURING THE LAST 6 HOURS, THE CONVECTION AROUND THE CENTER OF ENALA HAS INTENSIFIED, ESPECIALLY IN ITS SOUTHERN PART. IT HAS TEMPORARILY EVOLVED IN A LESS SHEARED ENVIRONMENT BEFORE RETURNING TO AN AREA WITH A 20-25KT WEST SHEAR, LEAVING ITS CENTER EXPOSED ON THE LAST VISIBLE IMAGES. THE ASCAT PASS OF 0515Z ALLOWS TO ESTIMATE THE INTENSITY AT 45KT. ENALA IS THEREFORE DOWNGRADED TO A MODERATE TROPICAL STORM AT 06UTC.

ENALA CONTINUES ITS TURN TOWARDS THE EAST THEN IT WILL CONTINUE ITS HALF TURN ON A SLOW TRACK IN GENERAL DIRECTION OF THE NORTH. THIS TRACK IS EXPECTED TO CONTINUE OVER THE NEXT 36 HOURS, UNDER THE INFLUENCE OF A SUBTROPICAL RIDGE OF LOW AND MEDIUM TROPOSPHERE LOCATED TO THE WEST OF THE SYSTEM. FROM WEDNESDAY, THE STEERING FLOW SHOULD GO BACK DOWN IN THE LOW LAYERS 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 CONCERNING THE INTENSITY OF THE SYSTEM, ENALA BENEFITED FROM A TEMPORARILY LESS SHEARED ENVIRONMENT UNDER THE THALWEG. EVEN IF THE OCEANIC POTENTIAL IS VERY WEAK, IT SHOULD BE ENOUGH TO MAINTAIN THE MODERATE TROPICAL STORM STAGE IN THE NEXT 18 HOURS. THEN, THE WEST TO SOUTHWEST SHEAR SHOULD STRENGTHEN LEADING TO THE WEAKENING OF ENALA WITH INTRUSIONS OF DRY AIR. FROM WEDNESDAY, THE SYSTEM COULD TEMPORARILY BE IN A BAROCLINIC ENVIRONMENT INTERACTING WITH THE ARRIVAL OF A NEW UPPER TROUGH. 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 A THREAT TO INHABITED LANDS.