

WTIO30 FMEE 240048

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 10/1/20212022

1.A MODERATE TROPICAL STORM 1 (ANA)

2.A POSITION 2022/01/24 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 16.1 S / 42.2 E
(SIXTEEN DECIMAL ONE DEGREES SOUTH AND
FORTY TWO DECIMAL TWO DEGREES EAST)
MOVEMENT: WEST 10 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/12 H

4.A CENTRAL PRESSURE: 992 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT
RADIUS OF MAXIMUM WINDS (RMW): 56 KM

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

28 KT NE: 220 SE: 220 SW: 230 NW: 220
34 KT NE: 95 SE: 95 SW: 95 NW: 95

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1003 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/01/24 12 UTC: 16.1 S / 39.2 E, VENT MAX= 035 KT, OVERLAND DEPRESSION
28 KT NE: 220 SE: 285 SW: 260 NW: 205
34 KT NE: 130 SE: 155 SW: 140 NW: 120

24H: 2022/01/25 00 UTC: 15.7 S / 36.5 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

36H: 2022/01/25 12 UTC: 15.8 S / 34.3 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

48H: 2022/01/26 00 UTC: 15.9 S / 32.5 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

60H: 2022/01/26 12 UTC: 16.5 S / 30.0 E, VENT MAX= 015 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=3.0

DURING THE LAST SIX HOURS, THE CLOUD PATTERN OF THE SYSTEM HAS IMPROVED, LEADING THE SYSTEM TO BE NAMED AT 20UTC. THE SATELLITE ANIMATION AND THE LAST GMI MICROWAVE DATA OF 2247Z, SHOW THE RECONSTRUCTION OF THE DEEP CONVECTION ABOVE THE CENTER AND A BI STRUCTURE OF A LITTLE REACHING NOW A LITTLE MORE THAN HALF A TURN.

THE SYSTEM IS CURRENTLY MOVING WEST-SOUTHWESTWARD UNDER THE EFFECT OF THE LOW AND MEDIUM TROPOSPHERE STEERING FLOW INDUCED BY THE HIGH PRESSURE CELL PRESENT ON THE SOUTH OF THE CHANNEL, AND SHOULD STRAIGHTEN UP SLIGHTLY WESTWARD UNDER THE EFFECT OF A HIGH PRESSURE PUSH TO THE SOUTH. THIS TRAJECTORY DIRECTS IT TOWARDS THE MOZAMBICAN COASTS WHICH IT WILL REACH AT THE END OF THE MORNING, A LITTLE AFTER 06UTC.

THE DEPRESSION ON LAND SHOULD CONTINUE TOWARDS THE WEST THEN THE WEST SOUTH-WEST, INLAND OF MOZAMBIQUE. THEN SOUTHERN MALAWI. THE CMRS FORECAST IS BASED ON A COMPROMISE BETWEEN THE BEST AVAILABLE GUIDANCE, WHOSE DISPERSION IS LOW COMPARED TO PREVIOUS NETWORKS, INDUCING A FAIRLY GOOD CONFIDENCE ON THE TRAJECTORY LEADING TO MOZAMBIQUE.

IN TERMS OF INTENSITY, THE SYSTEM HAS FOUND MORE FAVORABLE ENVIRONMENTAL CONDITIONS FOR ITS DEVELOPMENT:

A STRONG OCEANIC POTENTIAL IN THE NORTHERN PART OF THE CHANNEL COMBINED WITH A GOOD CONVERGENCE OF LOW LAYERS BETWEEN THE MONSOON FLOW IN THE NORTHERN PART OF THE CHANNEL AND A SOUTHERLY FLOW RISING IN THE SOUTHERN PART OF THE CHANNEL.

IN A HUMID TROPOSPHERIC ENVIRONMENT, WITH A GOOD ALTITUDE DIVERGENCE AND AN EQUATORIAL EVACUATION CHANNEL, THIS SYSTEM IS EXPECTED TO TO DEEPEN QUITE RAPIDLY.

IT IS EXPECTED TO DEVELOP RELATIVELY QUICKLY TO REACH THE MINIMUM STAGE OF A STRONG TROPICAL STORM JUST BEFORE LANDING ON THE MOZAMBICAN COAST.

ONCE ON LAND, THE GRADUAL WEAKENING OF THE SYSTEM'S WINDS, HOWEVER, WILL LEAVE SUSTAINED NORTHERLY TO NORTHEASTERLY WINDS ALONG THE MOZAMBICAN COAST UNTIL TUESDAY QUITE FAR FROM THE CENTER.

EXPECTED CONSEQUENCES ON INHABITED LANDS :

- MADAGASCAR : HEAVY RAINS ALREADY PRESENT OVER THE NORTHWESTERN REGIONS OF THE ISLAND, WILL CONTINUE ON MONDAY MAINLY OVER THE NORTHWESTERN COASTAL REGIONS. STRONG GUSTS ARE POSSIBLE OVER THE WEST BETWEEN MAHAJANGA AND MAINTIRANO UNTIL TOMORROW IN THE WAKE OF THE SYSTEM.

- MOZAMBIQUE (AND NEIGHBORING COUNTRIES INLAND): COASTAL GUSTS OF MORE THAN 110/120 KM/H POSSIBLE TONIGHT AND ESPECIALLY DURING THE DAY ON MONDAY WHEN THE SYSTEM WILL LAND BETWEEN QUELIMANE AND MOZAMBIQUE ISLAND. IMPORTANT RAINFALL TOTALS NORTH OF BEIRA AT FIRST THEN FURTHER INLAND TO THE SOUTH OF MALAWI AND OVERFLOWING TO THE CENTER OF MOZAMBIQUE.

A SURGE OF ABOUT 40/50CM IS EXPECTED BETWEEN ANTIOCHE AND BEIRA (EVEN 60/80CM IN THE BEIRA AREA ON MONDAY AND TUESDAY)

