WTIO30 FMEE 221232
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 4/1/20212022
1.A OVERLAND DEPRESSION 1

2.A POSITION 2022/01/22 AT 1200 UTC:
WITHIN 20 NM RADIUS OF POINT 17.4 S / 48.4 E
(SEVENTEEN DECIMAL FOUR DEGREES SOUTH AND
FORTY EIGHT DECIMAL FOUR DEGREES EAST)
MOVEMENT: WEST 20 KT

3.A DVORAK ANALYSIS: NIL
4.A CENTRAL PRESSURE: 1002 HPA
5.A MAX A VERAGE WIND SPEED (10 MN): 20 KT
RADIUS OF MAXIMUM WINDS (RMW): NIL

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

7.A FIRST CLOSED ISOBAR (PRESSURE / A VERAGE DIAM): 1005 HPA / 300 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):
12H: 2022/01/23 00 UTC: 16.6 S / 46.7 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

24H: 2022/01/23 12 UTC: 15.8 S / 45.2 E, VENT MAX= 025 KT, TROPICAL DISTURBANCE

36H: 2022/01/24 00 UTC: 15.3 S / 43.1 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 100 SE: 110 SW: 0 NW: 0
34 KT NE: 75 SE: 75 SW: 0 NW: 0

48H: 2022/01/24 12 UTC: 15.5 S / 40.9 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM
28 KT NE: 120 SE: 110 SW: 95 NW: 100
34 KT NE: 95 SE: 75 SW: 65 NW: 75
48 KT NE: 55 SE: 55 SW: 45 NW: 55

60H: 2022/01/25 00 UTC: 15.7 S / 39.5 E, VENT MAX= 035 KT, OVERLAND DEPRESSION
28 KT NE: 55 SE: 110 SW: 0 NW: 0
34 KT NE: 45 SE: 75 SW: 0 NW: 0

72H: 2022/01/25 12 UTC: 16.3 S / 38.3 E, VENT MAX= 035 KT, OVERLAND DEPRESSION
28 KT NE: 0 SE: 110 SW: 0 NW: 0
34 KT NE: 0 SE: 75 SW: 0 NW: 0
2.B LONGER-RANGE OUTLOOK:
96H: 2022/01/26 12 UTC: 17.1 S / 35.9 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

2.C ADDITIONAL INFORMATION:
T=CI=NIL

TROPICAL DEPRESSION 01-20212022 LANDED NEAR TAOMASINA SHORTLY BEFORE 0800UTC WITH ESTIMATED WINDS OF ABOUT 30KT. THE DATA OBSERVED IN MADAGASCAR DOES NOT ALLOW TO VALIDATE FOR THE MOMENT THE STAGE OF MODERATE TROPICAL STORM AT THE TIME OF ITS LANDING WHICH TOOK PLACE ALMOST 4H BEFORE THE RSMC FORECASTS. THE ASSOCIATED CONVECTIVE ACTIVITY REMAINS STRONG AND CAUSES HEAVY PRECIPITATIONS WHICH PENETRATE THE MALAGASY LANDS NORTH OF 21S. THE LAST MICROWAVE AT 1026UTC ALLOWS A RELATIVELY GOOD LOCALIZATION OF THE SYSTEM BUT ALSO SHOWS A SECONDARY CIRCULATION AROUND 16.6S/52.5E ASSOCIATED WITH A STRONG CONVECTIVE ACTIVITY.


THE LANDING HAVING TAKEN PLACE EARLIER THAN EXPECTED, THE DEPRESSION WILL TRANSIT DURING THE NEXT 24 HOURS ON LAND BEFORE COMING OUT TOWARDS MAHAJANGA AT THE END OF SUNDAY MORNING. FROM SUNDAY/MONDAY, THE CONDITIONS APPEAR RATHER FAVORABLE ON THE NORTH OF THE CHANNEL FOR A DEVELOPMENT (STRONG OCEANIC POTENTIAL, GOOD MONSOON FEEDING) WITHOUT BEING HOWEVER COMPLETELY OPTIMAL BECAUSE OF AN OMNIPRESENT SHEAR. THE INTENSITY FORECAST IS QUITE FAITHFUL TO THE LAST AVAILABLE GUIDANCE, PRESENTING A POTENTIAL OF INTENSIFICATION A LITTLE MORE MARKED. A LANDING ON THE AFRICAN COASTS AT THE STAGE OF A STRONG TROPICAL STORM IS THUS EXPECTED ON MONDAY AT THE END OF THE DAY.

EXPECTED CONSEQUENCES ON INHABITED LANDS:
- OVER MADAGASCAR, THE RAINS ALREADY PRESENT WILL CONTINUE WITH
RAINFALL TOTALS OF MORE THAN 100 MM BETWEEN SAINTE-MARIE ISLAND IN THE NORTH AND MAHANORO IN THE SOUTH (SIGNIFICANTLY MORE ON THE PLATEAUS) DURING THE NEXT 24 HOURS. THE RAINS WILL CONTINUE ON SUNDAY. WIND GUSTS WILL WEAKEN.

- NORTH MOZAMBIAN CHANNEL (COMOROS-MOZAMBIQUE ARCHIPELAGO): POTENTIALLY SIGNIFICANT RAINY AND WINDY DEGRADATION FROM SUNDAY (COMOROS ARCHIPELAGO) - MONDAY EVENING FOR MOZAMBIQUE.