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**********CORRECTIVE**********
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 4/10/20222023
1.A TROPICAL DEPRESSION 10

2.A POSITION 2023/05/14 AT 0000 UTC:
WITHIN 30 NM RADIUS OF POINT 4.5 S / 83.4 E
(FOUR DECIMAL FIVE DEGREES SOUTH AND
EIGHTY THREE DECIMAL FOUR DEGREES EAST)
MOVEMENT: SOUTH-WEST 11 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 1003 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT
RADIUS OF MAXIMUM WINDS (RMW): NIL

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 0 SE: 0 SW: 150 NW: 150

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 700 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):
12H: 2023/05/14 12 UTC: 5.2 S / 81.3 E, VENT MAX= 035 KT, MODERATE TROPICAL STORM
28 KT NE: 0 SE: 150 SW: 140 NW: 130
34 KT NE: 0 SE: 0 SW: 75 NW: 0

24H: 2023/05/15 00 UTC: 5.7 S / 79.3 E, VENT MAX= 040 KT, MODERATE TROPICAL STORM
28 KT NE: 0 SE: 150 SW: 140 NW: 130
34 KT NE: 0 SE: 0 SW: 75 NW: 0

36H: 2023/05/15 12 UTC: 6.1 S / 77.5 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM
28 KT NE: 0 SE: 150 SW: 140 NW: 130
34 KT NE: 0 SE: 75 SW: 75 NW: 75
48 KT NE: 0 SE: 0 SW: 35 NW: 45

48H: 2023/05/16 00 UTC: 6.9 S / 76.0 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM
28 KT NE: 95 SE: 150 SW: 140 NW: 130
34 KT NE: 65 SE: 55 SW: 65 NW: 75
48 KT NE: 45 SE: 35 SW: 45 NW: 45

60H: 2023/05/16 12 UTC: 7.8 S / 74.7 E, VENT MAX= 070 KT, TROPICAL CYCLONE
28 KT NE: 100 SE: 205 SW: 175 NW: 130
34 KT NE: 75 SE: 85 SW: 110 NW: 85
48 KT NE: 45 SE: 55 SW: 55 NW: 65
64 KT NE: 35 SE: 30 SW: 30 NW: 30

72H: 2023/05/17 00 UTC: 8.7 S / 73.8 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 120 SE: 215 SW: 205 NW: 140
34 KT NE: 95 SE: 95 SW: 110 NW: 95
48 KT NE: 55 SE: 65 SW: 65 NW: 65
64 KT NE: 45 SE: 45 SW: 45 NW: 45

2.B LONGER-RANGE OUTLOOK:
96H: 2023/05/18 00 UTC: 10.2 S / 72.4 E, VENT MAX= 080 KT, TROPICAL CYCLONE
28 KT NE: 120 SE: 240 SW: 220 NW: 155
34 KT NE: 95 SE: 110 SW: 130 NW: 110
48 KT NE: 65 SE: 65 SW: 75 NW: 75
64 KT NE: 55 SE: 45 SW: 45 NW: 45

120H: 2023/05/19 00 UTC: 10.8 S / 71.0 E, VENT MAX= 070 KT, TROPICAL CYCLONE
28 KT NE: 120 SE: 205 SW: 220 NW: 175
34 KT NE: 95 SE: 95 SW: 130 NW: 120
48 KT NE: 60 SE: 60 SW: 60 NW: 70
64 KT NE: 60 SE: 50 SW: 50 NW: 50

2.C ADDITIONAL INFORMATION:
FT=CI=2.5-

DURING THE LAST SIX HOURS, THE CLOUD PATTERN HAS IMPROVED WITH STRONGER CONVECTION NEAR THE CENTER. THE LATTER IS LOCATED ON THE SOUTHEAST EDGE OF THE CDO AS A RESULT OF THE STILL PRESENT EASTERLY SHEAR. THE LAST MICROWAVE IMAGES (1946Z AMSR2 AND 2153Z SSMIS) SHOW SHARPER SIGNS OF CURVATURE. CONSEQUENTLY SYSTEM 10 HAS BEEN RECLASSIFIED AS A TROPICAL DEPRESSION.

IN TERMS OF TRAJECTORY, IN THE COMING DAYS THE SYSTEM SHOULD KEEP ON MOVING WEST-SOUTHWEST TO SOUTHWESTWARD UNDER THE INFLUENCE OF A SUBTROPICAL RIDGE LOCATED TO THE SOUTHEAST. FROM THE MIDDLE OF NEXT WEEK, MORE CONTRADICTORY STEERING FLOWS DRIVEN BY THE NEAR EQUATORIAL RIDGE AND SUBTROPICAL RIDGES SHOULD CAUSE A SLOWING DOWN OF ITS MOVEMENT, LEADING TO AN INCREASE IN UNCERTAINTY ON THE LATE TRACK. THE RSMC FORECAST REFLECTS A COMPROMISE BETWEEN THE EUROPEAN AND AMERICAN MODELS, BUT CLOSER TO THE EUROPEAN SCENARIO, WHICH SEEMS TO BE MORE CONSISTENT WITH THE INITIAL STATE. THIS SYSTEM IS EXPECTED TO REMAIN EAST OF THE CHAGOS ARCHIPELAGO WITH NO DIRECT THREAT TO THE OTHER INHABITED ISLANDS OF THE BASIN.

IN TERMS OF INTENSITY, THE SHORT-TERM DEVELOPMENT OF THE SYSTEM IS LIMITED BY THE MODERATE EAST-NORTHEASTERLY SHEAR, THE LOW LATITUDE (NORTH OF 5S) AS WELL AS A WEAKER SURFACE FEEDING ON THE EQUATORIAL SIDE (DUE TO CYCLONE MOCHA IN THE NORTHERN HEMISPHERE). PROGRESSIVELY TODAY AND MOSTLY FROM MONDAY, WITH THE DECREASE OF THIS SHEAR, THE

IMPROVEMENT OF THE LOW LEVEL CONVERGENCE AND THE GOOD ALOFT DIVERGENCE, A STRONGER INTENSIFICATION IS EXPECTED. THE RSMC FORECAST THUS ANTICIPATES AN INITIALLY SLOW DEVELOPMENT BECOMING MORE RAPID EARLY NEXT WEEK, WHICH COULD LEAD THE SYSTEM TO BECOME A TROPICAL CYCLONE IN MID-WEEK. THIS IS SUGGESTED BY MOST MODELS, NOTABLY IFS AND GFS.