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

0.A WARNING NUMBER: 31/2/20132014

1.A INTENSE TROPICAL CYCLONE 2 (AMARA)

2.A POSITION 2013/12/22 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 21.7 S / 66.0 E

(TWENTY ONE DECIMAL SEVEN DEGREES SOUTH AND SIXTY SIX DECIMAL ZERO DEGREES EAST)

MOVEMENT : SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 4.5/5.5/W 1.5/12 H

4.A CENTRAL PRESSURE: 958 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 90 KT

RADIUS OF MAXIMUM WINDS (RMW) :41 KM

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

28 KT NE: 210 SE: 260 SW: 260 NW: 200

34 KT NE: 190 SE: 190 SW: 180 NW: 170

48 KT NE: 100 SE: 120 SW: 100 NW: 100

64 KT NE: 80 SE: 90 SW: 80 NW: 80

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2013/12/22 12 UTC: 22.3 S / 66.8 E, MAX WIND=070 KT, TROPICAL CYCLONE

24H: 2013/12/23 00 UTC: 22.1 S / 67.2 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

36H: 2013/12/23 12 UTC: 21.8 S / 67.5 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

48H: 2013/12/24 00 UTC: 21.4 S / 67.9 E, MAX WIND=030 KT, TROPICAL DEPRESSION

60H: 2013/12/24 12 UTC: 21.0 S / 67.9 E, MAX WIND=030 KT, TROPICAL DEPRESSION

72H: 2013/12/25 00 UTC: 20.5 S / 67.5 E, MAX WIND=025 KT, TROPICAL DISTURBANCE

2.B LONGER-RANGE OUTLOOK :

96H: 2013/12/26 00 UTC: 20.5 S / 63.7 E, MAX WIND=020 KT, LOW

120H: 2013/12/27 00 UTC: 21.3 S / 59.9 E, MAX WIND=020 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

T=4.5 AND CI=5.5

SINCE 1200Z, AMARA IS WEAKENING PROGRESSIVELY UNDER THE DOUBLE CONSTRAINT OF A STRENGTHENING NORTH-WESTERLY VERTICAL WINDSHEAR AND LOWER OCEANIC HEAT POTENTIAL.

LAST AVAILABLE MICROWAVE IMAGERY (TRMM 1912Z - AMSR2 1955Z - N19 2125Z) SHOWS OBVIOUSLY THIS NORTH-WESTERLY VERTICAL WINDSHEAR WITH LLCC DEPHASED ON THE NORTH-WEST COMPARE TO THE MID-LEVEL CIRCULATION CENTRE.

UNTIL SUNDAY EVENING, AMARA SHOULD KEEP A SOUTH-EASTWARDS TRACK IN RELATIONSHIP WITH THE WEAKENING OF THE MID-TROPOSPHERIC SUBTROPICAL HIGH PRESSURES EXISTING EASTWARD AND THE TRANSIT OF THE HIGH TO MID-LEVEL TROUGH SOUTH OF THE SYSTEM. SYSTEM IS EXPECTED TO WEAKEN RATHER RAPIDLY UNDERGOING THE WEST-NORTH-WESTERLY VERTICAL WINDSHEAR.

DURING THE NIGHT BETWEEN SUNDAY AND MONDAY, THE WEAKENING SYSTEM IS EXPECTED TO SLOW DOWN UNDER THE INFLUENCE OF A WEAK STEERING FLOW WITHIN THE MID TO LOW TROPOSPHERE. FROM TUESDAY, THE WEAKENED SYSTEM SHOULD GO BACK WESTWARD WITH THE STEERING FLOW OF THE SUBTROPICAL HIGH PRESSURES REBUILDING SOUTH OF THE MASCARENES ISLANDS. AS BRUCE SHOULD BE LOCATED TO THE SOUTH-EAST OF AMARA AT THIS TIME, THERE IS STILL SOME UNCERTAINTY IN THE TIMING OF THIS RECURVING SCENARIO.