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

0.A WARNING NUMBER: 21/2/20132014

1.A TROPICAL CYCLONE 2 (AMARA)

2.A POSITION 2013/12/19 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 17.8 S / 67.3 E

(SEVENTEEN DECIMAL EIGHT DEGREES SOUTH AND SIXTY SEVEN DECIMAL THREE DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 4.5/5.0/W 0.5/6 H

4.A CENTRAL PRESSURE: 960 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 85 KT

RADIUS OF MAXIMUM WINDS (RMW) :37 KM

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

28 KT NE: 240 SE: 350 SW: 280 NW: 220

34 KT NE: 150 SE: 170 SW: 170 NW: 150

48 KT NE: 110 SE: 120 SW: 120 NW: 110

64 KT NE: 70 SE: 70 SW: 70 NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2013/12/20 00 UTC: 18.3 S / 65.6 E, MAX WIND=085 KT, TROPICAL CYCLONE

24H: 2013/12/20 12 UTC: 18.8 S / 64.1 E, MAX WIND=080 KT, TROPICAL CYCLONE

36H: 2013/12/21 00 UTC: 19.6 S / 63.5 E, MAX WIND=080 KT, TROPICAL CYCLONE

48H: 2013/12/21 12 UTC: 20.2 S / 63.6 E, MAX WIND=075 KT, TROPICAL CYCLONE

60H: 2013/12/22 00 UTC: 20.6 S / 63.8 E, MAX WIND=065 KT, TROPICAL CYCLONE

72H: 2013/12/22 12 UTC: 20.8 S / 63.9 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2013/12/23 12 UTC: 20.9 S / 63.3 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

120H: 2013/12/24 12 UTC: 20.7 S / 62.1 E, MAX WIND=030 KT, TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=4.5 AND CI=5.0+

DURING THE PAST SIX HOURS, THE GENERAL CLOUD PATTERN OF THE SYSTEM AND OF THE EYE WERE FLUCTUANT. THE LAST ANIMATED INFRA-RED PICTURES SUGGEST THE EYE SHRINKING AND AN OUTFLOW BUILDING POLEWARD.

INDEED, THE SYSTEM IS MOVING OVER SST OF THE ORDER OF 26°C/26°5C, BUT IN A FAVORABLE UPPER LEVEL ENVIRONMENT. THIS CONDITIONS WILL KEEP ON DURING THE NEXT 24H/36H, CONSEQUENTLY, THE INTENSITY OF THE SYSTEM SHOULD CONTINUE TO FLUCTUATE AROUND THE ACTUAL INTENSITY.

UP TO FRIDAY, AMARA MAY KEEP ON MOVING GENERALLY SOUTH-WESTWARD TO WEST-SOUTH-WESTWARD UNDER THE STEERING INFLUENCE OF THE MID-TROPOSPHERIC SUBTROPICAL HIGH PRESSURES EXISTING SOUTH-EAST. FROM SATURDAY, THE SUBTROPICAL RIDGE IS EXPECTED TO WEAKEN AND A HIGH TO MID-LEVEL TROUGH IS EXPECTED TO MOVE IN THE SOUTH OF THE SYSTEM. THE SYSTEM IS FORECASTED TO RECURVE SOUTHWARD TO SOUTH-EASTWARD , AND BEGIN TO BE WEAKEN, UNDERGOING THE STRENGTHENING WINDSHEAR AHEAD OF THE UPPER LEVEL TROUGH.

FROM SUNDAY, THE WEAKENING SYSTEM IS FORECASTED TO SLOW DOWN UNDER A WEAK STEERING FLOW IN THE MID TO LOW TROPOSPHERE. AT THE END OF THE FORECASTED PERIOD, THE WEAKENED SYSTEM SHOULD GO BACK WESTWARD WITH THE STEERING FLOW OF THE SUBTROPICAL ANTICYCLONE REBUILDING SOUTH OF THE MASCARENES ISLANDS.

THE LAST DETERMINISTIC NWP MODELS OUTPUTS (19/00Z AND 19/06Z) AND THE LAST ECMWF ENSEMBLE OUTPUT (19/00Z) ARE IN RATHER GOOD AGREEMENT FOR THE TRACK UNTIL SATURDAY. AFTER SUNDAY, THE FORECASTED TRACKS ARE MORE SPREAD, BUT THE SYSTEM SHOULD HAVE WEAKEN SIGNIFICANTLY.