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

0.A WARNING NUMBER: 11/4/20122013

1.A INTENSE TROPICAL CYCLONE 4 (CLAUDIA)

2.A POSITION 2012/12/08 AT 1800 UTC:

WITHIN 15 NM RADIUS OF POINT 14.6 S / 74.4 E

(FOURTEEN DECIMAL SIX DEGREES SOUTH AND SEVENTY FOUR DECIMAL FOUR DEGREES EAST)

MOVEMENT : WEST 2 KT

3.A DVORAK ANALYSIS: 6.0/6.0/D 1.5/12 H

4.A CENTRAL PRESSURE: 950 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :22 KM

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

28 KT NE: 170 SE: 220 SW: 300 NW: 170

34 KT NE: 140 SE: 180 SW: 220 NW: 140

48 KT NE: 90 SE: 100 SW: 100 NW: 90

64 KT NE: 60 SE: 60 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2012/12/09 06 UTC: 15.2 S / 74.3 E, MAX WIND=095 KT, INTENSE TROPICAL CYCLONE

24H: 2012/12/09 18 UTC: 16.0 S / 74.2 E, MAX WIND=085 KT, TROPICAL CYCLONE

36H: 2012/12/10 06 UTC: 17.1 S / 74.1 E, MAX WIND=080 KT, TROPICAL CYCLONE

48H: 2012/12/10 18 UTC: 18.7 S / 73.7 E, MAX WIND=070 KT, TROPICAL CYCLONE

60H: 2012/12/11 06 UTC: 20.3 S / 73.2 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

72H: 2012/12/11 18 UTC: 22.7 S / 73.0 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2012/12/12 18 UTC: 29.5 S / 75.7 E, MAX WIND=045 KT, EXTRATROPICAL SYSTEM

120H: 2012/12/13 18 UTC: 34.1 S / 82.6 E, MAX WIND=040 KT, EXTRATROPICAL SYSTEM

2.C ADDITIONAL INFORMATION:

T=CI=6.0-

THE SYSTEM HAS MAINTAINED AN EYE PATTERN ASSOCIATED WITH COLD CLOUD TOPS DURING THE LAST 6 HOURS. THE AVERAGE T-NUM OVER 6HRS AND 3 HRS GIVES RESP. 5.8 AND 5.7. PGTW AND SAB GIVE RESP. 6.0 AND 5.5. AT 17Z, ADT GIVE A 3HRS MEAN T-NUM AT 5.9. SATCON AT 16Z IS AT 107 KT (1 MIN WINDS). ALL THIS

ESTIMATIONS SUGGEST AN INTENSITY IN THE 95-100 KT RANGE. HOWEVER, LATEST AVAILABLE MICROWAVE IMAGERY (SSMIS AT 1230Z, 1449Z AND AMSUB AT 1628Z) SHOW THAT A WEAKNESS EXISTS IN THE EASTERN AND SOUTHEASTERN EYEWALL (POTENTIALLY DU TO THE EASTERLY CONSTRAINTS SHOW BY THE CIMSS SHEAR ANALYSIS AT 12Z). IN FACT THE MICROWAVE SIGNATURE DOES NOT SUGGEST SUCH AN INTENSITY. THE FINAL INTENSITY IS THEREFORE ASSESSED AT 90 KT.

THE SYSTEM HAS SLOW DOWN AGAIN ON A WEST-SOUTH-WESTWARD TRACK AS STEERING MID-TROPOSPHERIC FLOW REMAINS WEAK. TOMORROW, THE MID LEVEL RIDGE EXISTING EAST OF THE SYSTEM IS EXPECTED TO STRENGTHEN, PRODUCING A NORTHERLY STEERING FLOW. THEREFORE CLAUDIA SHOULD TRACK SOUTHWARD AT A GRADUAL FASTER SPEED.

ON THIS FORECAST TRACK, ENVIRONMENTAL CONDITIONS ARE EXPECTED TO KEEP ON BEING FAVOURABLE UNTIL SUNDAY NIGHT INTO MONDAY. LATEST AVAILABLE OBJECTIVE NUMERICAL GUIDANCE (ALADIN 12Z AND STIPS 12Z) SHOW SOME DISAGREEMENT. ALADIN-REUNION NOW WEAKENS CLAUDIA TOMORROW AFTER A PEAK IN MAX WINDS AT 95 KT AT 15Z AND 18Z (RIGHT NOW). STIPS STILL SUGGEST A MAX INTENSITY AT 95 KT TOMORROW. THE PRESENT FORECAST FOLLOWS STIPS AND REMAINS IN LINE WITH THE PREVIOUS PACKAGE.

ON AND AFTER MONDAY, SYSTEM IS EXPECTED TO KEEP ON TRACKING SOUTHWARD BY GETTING AROUND MID-LEVEL HIGH PRESSURES AND SO TO EVOLVE OVER MARGINAL HEAT OCEANIC CONTENT ASSOCIATED WITH STRONGER VERTICAL NORTHERLY WINDSHEAR. A WEAKENING TREND MIGHT START BY THAT TIME. FROM TUESDAY NIGHT OR WEDNESDAY, SYSTEM SHOULD CURVE SOUTH-EASTWARD AND START ITS EXTRA-TROPICAL PROCESS WITH WINDS THAT COULD REMAIN STRONG.