

WTIO30 FMEE 230105

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

0.A WARNING NUMBER: 20/5/20182019

1.A TROPICAL CYCLONE 5 (CILIDA)

2.A POSITION 2018/12/23 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 19.8 S / 60.2 E

(NINETEEN DECIMAL EIGHT DEGREES SOUTH AND SIXTY DECIMAL TWO DEGREES EAST)

MOVEMENT : SOUTH-EAST 11 KT

3.A DVORAK ANALYSIS: 5.0/5.5/W 1.0/24 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: 250 SE: 260 SW: 170 NW: 150

34 KT NE: 170 SE: 170 SW: 120 NW: 110

48 KT NE: 110 SE: 110 SW: 90 NW: 80

64 KT NE: 70 SE: 70 SW: 70 NW: 60

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/23 12 UTC: 21.8 S / 61.6 E, MAX WIND=080 KT, TROPICAL CYCLONE

24H: 2018/12/24 00 UTC: 23.8 S / 63.4 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

36H: 2018/12/24 12 UTC: 25.6 S / 65.3 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

48H: 2018/12/25 00 UTC: 27.2 S / 66.9 E, MAX WIND=045 KT, POST-TROPICAL
DEPRESSION

60H: 2018/12/25 12 UTC: 29.5 S / 68.4 E, MAX WIND=045 KT, POST-TROPICAL
DEPRESSION

72H: 2018/12/26 00 UTC: 32.5 S / 70.4 E, MAX WIND=040 KT, POST-TROPICAL
DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2018/12/27 00 UTC: 36.3 S / 75.6 E, MAX WIND=035 KT, POST-TROPICAL
DEPRESSION

120H: 2018/12/28 00 UTC: 37.2 S / 82.2 E, MAX WIND=030 KT, REMNANT LOW

2.C ADDITIONAL INFORMATION:

T=5.0- CI=5.5-

DURING THE PAST 6 HOURS, THE CLOUD PATTERN OF CILIDA HAS OSCILLATED BETWEEN EMBEDDED CENTER AND AN ILL DEFINED EYE PATTERN. 89 GHZ AMSR2 IMAGERY AT 2057Z SHOW THAT THE ERC IS NOW COMPLETED WITH A LARGER EYE. IT APPEARS LIKELY THAT THE EXPANSION OF THE WIND FIELDS HAS ONLY AFFECTED THE INNER CORE WINDS RADII (64 KT AND 48 KT WINDS RADII) WITH LITTLE OR NO EXPANSION OF THE OUTER WINDS RADII (34 KT AND 28 KT). WITHOUT ANY CLEAR INDICATION AT THIS TIME OF RE-INTENSIFICATION, THE INTENSITY IS UNCHANGED AT 85 KT AND IT IS SUPPORT BY THE SOMEWHAT SOLID PRESENTATION SEEN ON THE 89GHZ IMAGERY.

CILIDA'S HEADING IS NOT VERY REGULAR BUT A 6 HOURS SMOOTH MOTION IS NOW DUE SOUTH-EASTWARDS SINCE YESTERDAY EVENING. THE FORWARD MOTION OF CILIDA REMAINS STEERED BY THE SOUTH-WESTERN EDGE OF A NEAR EQUATORIAL RIDGE. THE GRADUAL EASTWARD SHIFT OF THESE HIGH GEOPOTENTIALS AND THE ARRIVAL OF A MID-LEVEL TROUGH FROM THE WEST, MAINTAIN A GENERAL SOUTHEASTWARDS MOTION FOR THE NEXT 72 HOURS. AS THE DISPERSION OF THE MODELS REMAINS RELATIVELY LOW, A GOOD CONFIDENCE IS GIVEN TO THE TRACK FORECAST.

THE SYSTEM IS NOW MOVING AWAY OF THE UPPER LEVEL RIDGE. THE DEEP LAYERS SHEAR HAS STARTED TO INCREASE AND TURN TO THE NORTH-NORTH-WEST (15 KT ACCORDING CIMSS DATA AT 21Z). A SIGNIFICANT INCREASE OF WIND SHEAR AHEAD OF AN UPPER TROUGH AND A DRIER ENVIRONMENT ON AVERAGE TROPO SHOULD CONTINUE THE WEAKENING TREND OF THE SYSTEM SPECIALLY FROM SUNDAY NIGHT. EVEN IF IT IS NOT SHOWN IN THE OFFICIAL FORECAST, SOME TEMPORARILY POST-ERC RE-STRENGTHENING IS STILL POSSIBLE TODAY

MONDAY NIGHT, WITHIN AN INCREASING BAROCLINIC ENVIRONMENT AND OVER VERY LOW HEAT CONTENT WATERS, THE SYSTEM IS EXPECTED TO ACQUIRE MIXED CHARACTERISTICS AND BECOME A POST-TROPICAL SYSTEM.

THE CLOSEST POINT APPROACH (CPA) OF MAURITIUS OCCURRED AROUND 20Z-21Z AT A LITTLE LESS THAN 240 KM TO THE NORTH-EAST. CPA OF RODRIGUES WITHIN THE NEXT FEW HOURS BUT FAR ENOUGH FROM THE COASTS.