

WTIO30 FMEE 201922

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

0.A WARNING NUMBER: 11/5/20182019

1.A INTENSE TROPICAL CYCLONE 5 (CILIDA)

2.A POSITION 2018/12/20 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 13.9 S / 58.7 E

(THIRTEEN DECIMAL NINE DEGREES SOUTH AND FIFTY EIGHT DECIMAL SEVEN
DEGREES EAST)

MOVEMENT : SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 2.0/24 H

4.A CENTRAL PRESSURE: 955 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 95 KT

RADIUS OF MAXIMUM WINDS (RMW) :19 KM

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

28 KT NE: 170 SE: 280 SW: 310 NW: 90

34 KT NE: 130 SE: 150 SW: 150 NW: 60

48 KT NE: 70 SE: 80 SW: 80 NW: 60

64 KT NE: 60 SE: 60 SW: 60 NW: 40

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/21 06 UTC: 14.9 S / 57.5 E, MAX WIND=105 KT, INTENSE TROPICAL
CYCLONE

24H: 2018/12/21 18 UTC: 15.9 S / 57.2 E, MAX WIND=105 KT, INTENSE TROPICAL
CYCLONE

36H: 2018/12/22 06 UTC: 17.2 S / 57.7 E, MAX WIND=105 KT, INTENSE TROPICAL
CYCLONE

48H: 2018/12/22 18 UTC: 18.9 S / 58.6 E, MAX WIND=095 KT, INTENSE TROPICAL
CYCLONE

60H: 2018/12/23 06 UTC: 21.0 S / 60.1 E, MAX WIND=085 KT, TROPICAL CYCLONE

72H: 2018/12/23 18 UTC: 22.9 S / 61.8 E, MAX WIND=075 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/12/24 18 UTC: 27.0 S / 65.6 E, MAX WIND=050 KT, POST-TROPICAL
DEPRESSION

120H: 2018/12/25 18 UTC: 32.4 S / 68.3 E, MAX WIND=035 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=5.5+

RAPID INTENSIFICATION IS STILL UNDERWAY WITH AN IMPROVING ALTHOUGH STILL SOMEWHAT FLUCTUATING EYE PATTERN (SMALL EYE SURROUNDING BY VERY COLD CLOUD TOPS). LATEST SUBJECTIVE ANALYSIS ARE ALL AT 5.5 AT 18Z AND IN FACT THE 3H AVERAGE DT NUMBER IS AT 5.7. THEREFORE THE INTENSITY IS SET AT 95 KT.

THE SYSTEM HAS TRACKED DUE SOUTHWESTWARDS AT SLIGHTLY FASTER FORWARD MOTION.

NO SIGNIFICANT CHANGE ON THE TRACK FORECAST : CILIDA IS STILL STEERED BY A MID-TROPOSPHERE SUBTROPICAL RIDGE IN THE SOUTH-EAST THAT DRIVES A GENERALLY SOUTH-WESTWARD MOTION UNTIL FRIDAY. THEN, WITH THE EASTWARD SHIFT OF THE SUBTROPICAL HIGH GEOPOTENTIALS AND THE ARRIVAL OF A MID-LEVEL TROUGH FROM THE WEST (SEEN OVER AUSTRAL AFRICA IN WV IMAGERY), CILIDA SHOULD SLOW DOWN WHILE GRADUALLY TURNING SOUTH-SOUTH-EASTWARDS AND THEN SOUTH-EASTWARD AS IT WILL ACCELERATE SATURDAY. THE MODEL DISPERSION REMAINS RELATIVELY LOW, SPECIALLY REGARDS TO CROSS TRACK SPREAD. ACCORDING TO LATEST MODELS CYCLES, THE OFFICIAL TRACK FORECAST HAS BEEN NUDGED WESTWARDS AT SHORT RANGE AND LONG RANGE OF THE FORECAST PERIOD.

THE STILL MODERATE EAST-NORTH-EASTERLY CONSTRAINT (NEAR 20 KT ACCORDING TO CIMSS DATA) WILL EASE AS THE SYSTEM MOVE CLOSER TO THE UPPER LEVEL RIDGE AND BENEFIT FROM VERY GOOD ENVIRONMENTAL CONDITIONS UNTIL SATURDAY (WITH A VERY GOOD UPPER DIVERGENCE INCREASED BY TWO OUTFLOW CHANNELS). FROM SATURDAY, A STRENGTHENING OF THE WEST-NORTH-WESTERLY SHEAR AHEAD OF AN UPPER TROUGH AND A DRIER MID-LEVEL ENVIRONMENT SHOULD TRIGGER THE WEAKENING OF THE SYSTEM, AS IT EVACUATES TOWARDS THE MID-LATITUDES. AT THE END OF THE PERIOD, UNDER THE INFLUENCE OF THIS UPPER TROUGH THAT SHOULD EVENTUALLY CATCH UP, THE SYSTEM SHOULD BEGIN AN EXTRATROPICALISATION PHASE.

THIS VERY DANGEROUS TROPICAL CYCLONE IS POSING A POTENTIAL THREAT TO THE MASCARENES ISLANDS (MAINLY MAURITIUS AND RODRIGUES ISLANDS). THE INHABITANTS OF THESE ISLANDS ARE INVITED TO CLOSELY MONITOR THE PROGRESS OF CILIDA.

THE LAST TIME THAT TWO TROPICAL CYCLONES WERE PRESENT AT THE SAME TIME OVER THE BASIN WAS 5 YEARS AGO (SAME DATE) WITH TC AMARA AND BRUCE (DECEMBER 2013).