

WTIO30 FMEE 200133

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

0.A WARNING NUMBER: 8/5/20182019

1.A SEVERE TROPICAL STORM 5 (CILIDA)

2.A POSITION 2018/12/20 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 12.4 S / 59.7 E

(TWELVE DECIMAL FOUR DEGREES SOUTH AND FIFTY NINE DECIMAL SEVEN
DEGREES EAST)

MOVEMENT : SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 4.0/4.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 988 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT

RADIUS OF MAXIMUM WINDS (RMW) :56 KM

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

28 KT NE: 170 SE: 260 SW: 170 NW: 130

34 KT NE: 110 SE: 110 SW: 110 NW: 70

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

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

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/20 12 UTC: 13.4 S / 58.9 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

24H: 2018/12/21 00 UTC: 14.2 S / 58.2 E, MAX WIND=070 KT, TROPICAL CYCLONE

36H: 2018/12/21 12 UTC: 15.3 S / 57.7 E, MAX WIND=080 KT, TROPICAL CYCLONE

48H: 2018/12/22 00 UTC: 16.2 S / 57.9 E, MAX WIND=090 KT, INTENSE TROPICAL
CYCLONE

60H: 2018/12/22 12 UTC: 17.8 S / 58.8 E, MAX WIND=095 KT, INTENSE TROPICAL
CYCLONE

72H: 2018/12/23 00 UTC: 19.6 S / 59.9 E, MAX WIND=080 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/12/24 00 UTC: 23.5 S / 63.2 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

120H: 2018/12/25 00 UTC: 27.1 S / 67.0 E, MAX WIND=045 KT, MODERATE TROPICAL
STORM

2.C ADDITIONAL INFORMATION:

T=CI=4.0-

DURING THE LAST 6 HOURS, CLOUD PATTERN HAS IMPROVED WITH A DEEP CONVECTION THAT HAS CONSOLIDATED NEAR THE CENTER WITH A CURVATURE MORE APPARENT. IT IS NOTED THAT THE CURRENT INTENSITY IS SLIGHTLY HIGHTER THAN THE OBJECTIVE DVORAK TECHNIQUE.

NO CHANGE FOR THE TRACK FORECAST: OVER THE NORTHWESTERN EDGE OF A BUILDING MID LEVEL SUBTROPICAL RIDGE, THE SYSTEM IS EXPECTED TO KEEP ON A GENERAL SOUTHWESTWARDS TRACK UP TO FRIDAY. LATER IN THE WEEK A DEEP UPPER TO MID-LEVEL RIDGE IS EXPECTED TO MOVE SOUTH OF THE MASCAREIGNES ISLANDS, RESULTING IN A SIGNIFICANT AND PERSISTENT BREAK IN THE SUBTROPICAL RIDGE. THEREFORE, THE TRACK IS EXPECTED TO SLOW DOWN FRIDAY BEFORE GRADUALLY ACCELERATING SOUTH-SOUTH-EASTWARDS SATURDAY AND SUNDAY. THE PHILOSOPHY OF THE TRACK FORECAST IS IN GOOD AGREEMENT BETWEEN THE DIFFERENT MODELS (SPECIALLY GFS AND IFS) HOWEVER THERE IS UNCERTAINTY ABOUT THE VELOCITY OF DISPLACEMENT DURING ACCELERATION TOWARDS THE SOUTH-SOUTHEAST.

AS THE SYSTEM WILL GAIN LATITUDES, IT IS EXPECTED TO MOVE UNDER THE UPPER LEVEL RIDGE WITHIN FAVORABLE TO VERY FAVORABLE ENVIRONMENT UP TO SATURDAY (WITH SPECIALLY ENHANCED UPPER LEVEL DIVERGENCE ASSOCIATED WITH TWO EFFICIENT OUTFLOW CHANNELS). WITHIN THE NEXT 24H TO 48H, A RAPID INTENSIFICATION SEEMS LIKELY. FROM SUNDAY AND BEYOND, INCREASING WEST-NORTH-WESTERLY SHEAR ALONG WITH A DRYER MID LEVEL ENVIRONMENT SHOULD START TO WEAKEN THE SYSTEM, HOWEVER IT MAY RESIST DUE TO A RATHER FAST MOVEMENT.

THIS TROPICAL SYSTEM HAS THE POTENTIAL TO BECOME A DANGEROUS TROPICAL CYCLONE AND MAY POSE A THREAT TO THE MASCAREIGNES ISLANDS LATER THIS WEEK. INHABITANTS OF THOSE ISLANDS SHOULD MONITOR THE PROGRESS OF THIS SYSTEM.