

WTIO30 FMEE 071855

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 17/13/20202021

1.A TROPICAL CYCLONE 13 (HABANA)

2.A POSITION 2021/03/07 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 17.6 S / 80.6 E

(SEVENTEEN DECIMAL SIX DEGREES SOUTH AND
EIGHTY DECIMAL SIX DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 5.0/5.5/W 1.0/12 H

4.A CENTRAL PRESSURE: 962 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 11 KM

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

28 KT NE: 150 SE: 220 SW: 220 NW: 150

34 KT NE: 100 SE: 100 SW: 100 NW: 100

48 KT NE: 55 SE: 55 SW: 60 NW: 55

64 KT NE: 35 SE: 35 SW: 35 NW: 35

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/03/08 06 UTC: 18.3 S / 80.6 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 150 SE: 185 SW: 175 NW: 130

34 KT NE: 110 SE: 100 SW: 100 NW: 100

48 KT NE: 75 SE: 85 SW: 75 NW: 75

64 KT NE: 55 SE: 55 SW: 55 NW: 55

24H: 2021/03/08 18 UTC: 18.8 S / 79.7 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 150 SE: 175 SW: 195 NW: 130

34 KT NE: 110 SE: 110 SW: 110 NW: 100

48 KT NE: 85 SE: 85 SW: 75 NW: 65

64 KT NE: 55 SE: 55 SW: 55 NW: 55

36H: 2021/03/09 06 UTC: 18.8 S / 78.4 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 140 SE: 195 SW: 195 NW: 130

34 KT NE: 100 SE: 110 SW: 110 NW: 100

48 KT NE: 75 SE: 85 SW: 75 NW: 75

64 KT NE: 55 SE: 55 SW: 55 NW: 55

48H: 2021/03/09 18 UTC: 18.5 S / 76.9 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 130 SE: 195 SW: 195 NW: 130

34 KT NE: 100 SE: 110 SW: 110 NW: 100

48 KT NE: 85 SE: 75 SW: 75 NW: 75

64 KT NE: 55 SE: 45 SW: 45 NW: 55

60H: 2021/03/10 06 UTC: 18.2 S / 75.5 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 140 SE: 205 SW: 185 NW: 140

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

48 KT NE: 85 SE: 85 SW: 75 NW: 75

64 KT NE: 55 SE: 55 SW: 55 NW: 55

72H: 2021/03/10 18 UTC: 18.2 S / 74.3 E, VENT MAX= 110 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 140 SE: 220 SW: 220 NW: 150

34 KT NE: 120 SE: 130 SW: 130 NW: 110

48 KT NE: 85 SE: 85 SW: 75 NW: 75

64 KT NE: 55 SE: 55 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/03/11 18 UTC: 18.7 S / 72.0 E, VENT MAX= 090 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 165 SE: 250 SW: 280 NW: 185

34 KT NE: 140 SE: 175 SW: 150 NW: 120

48 KT NE: 85 SE: 65 SW: 75 NW: 75

64 KT NE: 55 SE: 55 SW: 55 NW: 55

120H: 2021/03/12 18 UTC: 20.4 S / 71.3 E, VENT MAX= 065 KT, TROPICAL CYCLONE

28 KT NE: 205 SE: 270 SW: 285 NW: 185

34 KT NE: 165 SE: 205 SW: 140 NW: 120

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

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

2.C ADDITIONAL INFORMATION:

T=5.0 CI=5.5-

DURING THE LAST 6 HOURS, THE HABANA EYE PATTERN HAS CONTINUED TO DEGRADE TO EVOLVE INTO A CDO PATTERN. THE CLOUD TOPS HOWEVER CONTINUE TO REMAIN VERY COLD IN THE NORTHERN SECTOR OF CDO WHILE THE MICROWAVE TRANSMITTED DATA FROM 1331UTC SHOWED THAT THE LOW-LEVEL CIRCULATION WAS STILL QUITE SYMMETRICAL. BY INERTIA AND KEEPING A DVORAK ANALYSIS OF 5.5-, WE CAN STILL ESTIMATE WINDS OF ABOUT 85KT, LEAVING HABANA AT THE THRESHOLD OF A TROPICAL CYCLONE.

AS FAR AS THE TRACK FORECAST IS CONCERNED, NO CHANGE. HABANA HAS STARTED ITS TURN TO THE SOUTH-EAST AND WILL CONTINUE A SOUTHWARD TRACK DURING THE NEXT 12 HOURS BY SLOWING DOWN. UNDER THE GROWING INFLUENCE OF THE SUBTROPICAL RIDGE TO THE SOUTHEAST OF THE CYCLONE, THE TRACK WILL TAKE A GENERAL WESTERLY DIRECTION BY THE END OF THE DAY

ON MONDAY. THERE IS STILL A STRONG DISPERSION OF AVAILABLE MODELS ON THE EXACT TIMING AND LOCATION OF THE TURN WESTWARD AND AT A LONGER RANGE. THE RSMC HAS OPTED FOR A SOUTHWARD TURN AT FRIDAY.

THE NORTHERN SHEAR SHOULD START TO WEAKEN SOON WHICH COULD HELP HABANA TO INTENSIFY AGAIN FROM TUESDAY, ONCE HIS WESTWARD MOVEMENT HAS STARTED. A PERSISTENT SLOWER DISPLACEMENT COULD AGAIN LIMIT THE INTENSITY OF THE SYSTEM DUE TO THE LACK OF OCEANIC POTENTIAL. IN THIS CONTEXT, REINFORCED BY THE POTENTIAL OCCURRENCE OF AN EYE WALL REPLACEMENT CYCLE AND THE SMALL SIZE OF THE PHENOMENON, THE INTENSITY FORECAST IS PARTICULARLY UNCERTAIN. ACCORDING TO THE SCENARIO OF NO MAJOR CONSTRAINTS, THE RSMC OPTS FOR A PRESERVED INTENSIFICATION POTENTIAL. HABANA IS EXPECTED TO INTENSIFY AGAIN AT THE THRESHOLD OF AN INTENSE TROPICAL CYCLONE BEFORE WEAKENING MORE MARKEDLY FROM THURSDAY ONWARDS UNDER THE EFFECT OF THE RISING WESTERLY SHEAR AT THE FRONT OF A TROUGH.

DURING THE NEXT 5 DAYS, HABANA DO NOT THREATEN ANY INHABITED ISLAND.