

WTIO30 FMEE 081255

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 20/13/20202021

1.A TROPICAL CYCLONE 13 (HABANA)

2.A POSITION 2021/03/08 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 18.4 S / 80.9 E

(EIGHTEEN DECIMAL FOUR DEGREES SOUTH AND
EIGHTY DECIMAL NINE DEGREES EAST)

MOVEMENT: QUASI-STATIONARY.

3.A DVORAK ANALYSIS: 4.0/4.5/W 0.5/6 H

4.A CENTRAL PRESSURE: 979 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW): 15 KM

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

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

34 KT NE: 95 SE: 110 SW: 95 NW: 95

48 KT NE: 45 SE: 45 SW: 50 NW: 45

64 KT NE: 20 SE: 20 SW: 20 NW: 20

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/03/09 00 UTC: 18.7 S / 79.8 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 150 SE: 165 SW: 195 NW: 150

34 KT NE: 100 SE: 110 SW: 120 NW: 100

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

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

24H: 2021/03/09 12 UTC: 18.4 S / 78.6 E, VENT MAX= 080 KT, TROPICAL CYCLONE

28 KT NE: 140 SE: 175 SW: 185 NW: 140

34 KT NE: 100 SE: 110 SW: 120 NW: 100

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

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

36H: 2021/03/10 00 UTC: 17.9 S / 77.2 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

28 KT NE: 140 SE: 195 SW: 185 NW: 150

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

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

64 KT NE: 65 SE: 55 SW: 55 NW: 55

48H: 2021/03/10 12 UTC: 17.7 S / 76.0 E, VENT MAX= 100 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 140 SE: 195 SW: 185 NW: 150
34 KT NE: 110 SE: 120 SW: 120 NW: 120
48 KT NE: 85 SE: 85 SW: 75 NW: 75
64 KT NE: 65 SE: 55 SW: 55 NW: 55

60H: 2021/03/11 00 UTC: 17.8 S / 74.9 E, VENT MAX= 105 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 150 SE: 215 SW: 215 NW: 140
34 KT NE: 120 SE: 140 SW: 140 NW: 110
48 KT NE: 85 SE: 85 SW: 75 NW: 75
64 KT NE: 55 SE: 45 SW: 55 NW: 55

72H: 2021/03/11 12 UTC: 18.2 S / 73.8 E, VENT MAX= 110 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 155 SE: 205 SW: 195 NW: 155
34 KT NE: 120 SE: 130 SW: 130 NW: 120
48 KT NE: 75 SE: 85 SW: 75 NW: 85
64 KT NE: 55 SE: 55 SW: 55 NW: 55

2.B LONGER-RANGE OUTLOOK:

96H: 2021/03/12 12 UTC: 19.4 S / 72.3 E, VENT MAX= 110 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 185 SE: 260 SW: 230 NW: 150
34 KT NE: 130 SE: 175 SW: 155 NW: 130
48 KT NE: 85 SE: 95 SW: 85 NW: 85
64 KT NE: 65 SE: 55 SW: 65 NW: 55

120H: 2021/03/13 12 UTC: 21.3 S / 72.3 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 195 SE: 280 SW: 250 NW: 150
34 KT NE: 130 SE: 185 SW: 175 NW: 140
48 KT NE: 80 SE: 80 SW: 90 NW: 80
64 KT NE: 50 SE: 40 SW: 50 NW: 60

2.C ADDITIONAL INFORMATION:

T=4.0;CI=4.5-

OVER THE PAST 6 HOURS, HABANA'S PATTERN HAS KEPT SLIGHTLY DETERIORATING. THE LAST AVAILABLE MICROWAVE IMAGES (AMSR2 OF 0829Z, SSMI OF 1005Z) SHOW A CORE LESS WELL STRUCTURED THAN THIS MORNING AND ATTACKED ON ITS EASTERN FLANK BY AN INTRUSION OF DRY AIR. THE EYE OF THE SYSTEM REMAINS DISCERNIBLE ONLY IN VISIBLE IMAGERY. DVORAK ANALYSIS PLEADS FOR A WEAKENING, A TREND WHICH IS ALSO CONFIRMED BY OBJECTIVE ESTIMATES. THE INTENSITY IS THEREFORE ESTIMATED AT 65KT, WHILE WAITING TO SEE IF THE DEGRADATION DETECTED IN MICROWAVES WILL BE REFLECTED OR NOT IN CONVENTIONAL IMAGERY.

HABANA IS COMPLETING ITS U-TURN AND PREPARING TO ACCELERATE AGAIN IN A WEST-SOUTHWESTWARD DIRECTION, UNDER THE STEERING INFLUENCE OF THE SUBTROPICAL RIDGE TO ITS SOUTHEAST. FROM TUESDAY, A NEW RIDGE SETTling

TO THE SOUTHWEST OF THE SYSTEM SHOULD INFLECT THE TRACK WEST-NORTHWESTWARD. COMPARED TO THE PREVIOUS FORECASTS, THE LAST AVAILABLE GUIDANCES HAVE REINFORCED THE EQUATORWARD MOVEMENT BETWEEN TUESDAY AND WEDNESDAY IN CONNECTION WITH A STRONGER RIDGE TO THE SOUTH-WEST OF THE SYSTEM. THIS CHANGE HAS BEEN TAKEN INTO ACCOUNT IN THE RSMC'S FORECAST. FROM THURSDAY, MOST MODELS SUGGEST A SOUTHWESTWARD DIVE, AND THEN SOUTHWARD FROM FRIDAY. NEVERTHELESS THERE IS STILL A STRONG DISPERSION BETWEEN MODELS ABOUT THIS TRACK. THE RSMC'S FORECAST IS BASED ON A COMPROMISE BETWEEN THE BEST AVAILABLE GUIDANCE.

IN TERMS OF INTENSITY, AFTER THE WEAKENING TREND OBSERVED THIS MONDAY, THE WESTWARD ACCELERATION OF THE SYSTEM IN THE DIRECTION OF THE WIND SHEAR (WHICH REMAINS WEAK) SHOULD FREE IT FROM OTHER DRY AIR INTRUSIONS. IT WILL THEN BENEFIT FROM GOOD UPPER DIVERGENCE AND FAVORABLE OCEANIC POTENTIAL. INTENSIFICATION SHOULD THUS RESUME AS FROM TUESDAY AND UNTIL THURSDAY OR FRIDAY. AT THE VERY END OF THE FORECAST PERIOD, A POSSIBLE INCREASE IN WEST-NORTHWESTERLY WIND SHEAR AHEAD OF A TROUGH COULD INITIATE HABANA'S WEAKENING.

OVER THE NEXT 5 DAYS, HABANA DOES NOT POSE ANY THREAT TO INHABITED LANDS.