

WTIO30 FMEE 150014

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 11/10/20192020

1.A SEVERE TROPICAL STORM 10 (HEROLD)

2.A POSITION 2020/03/15 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 15.0 S / 51.3 E  
(FIFTEEN DECIMAL ZERO DEGREES SOUTH AND  
FIFTY ONE DECIMAL THREE DEGREES EAST)  
MOVEMENT: QUASI-STATIONARY.

3.A DVORAK ANALYSIS: 4.0/4.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 985 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 55 KT  
RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 130 SE: 200 SW: 170 NW: 100  
34 KT NE: 90 SE: 90 SW: 110 NW: 90  
48 KT NE: 60 SE: 60 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2020/03/15 12 UTC: 15.1 S / 51.8 E, VENT MAX= 065 KT, TROPICAL CYCLONE

24H: 2020/03/16 00 UTC: 15.6 S / 53.4 E, VENT MAX= 080 KT, TROPICAL CYCLONE

36H: 2020/03/16 12 UTC: 16.7 S / 55.9 E, VENT MAX= 090 KT, INTENSE TROPICAL  
CYCLONE

48H: 2020/03/17 00 UTC: 18.5 S / 59.1 E, VENT MAX= 085 KT, TROPICAL CYCLONE

60H: 2020/03/17 12 UTC: 20.5 S / 62.2 E, VENT MAX= 075 KT, TROPICAL CYCLONE

72H: 2020/03/18 00 UTC: 22.2 S / 64.6 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2020/03/19 00 UTC: 25.3 S / 68.4 E, VENT MAX= 045 KT, POST-TROPICAL  
DEPRESSION

120H: 2020/03/20 00 UTC: 28.6 S / 72.4 E, VENT MAX= 035 KT, POST-TROPICAL  
DEPRESSION

2.C ADDITIONAL INFORMATION:

FT=CI=4.0

OVER THE LAST 6 HRS, THE CLOUD TOPS OF THE CENTRAL CONVECTION REMAINED

RELATIVELY WARM, PROBABLY BECAUSE OF THE WEAKENING OCEANIC ENERGY DUE TO THE LACK OF MOTION OBSERVED OVER THE LAST 30 HRS. MEANWHILE, CONVECTIVE BANDS CONTINUED TO WRAP TIGHTLY AROUND THE CENTER AND A BANDING EYE PATTERN APPEARED. THE RSMC INTENSITY ESTIMATE IS IN AGREEMENT WITH THE AVAILABLE OBJECTIVE AND SUBJECTIVE DATA.

NO MAJOR CHANGES IN THE TRACK FORECAST : THE SYSTEM REMAINS QUASI-STATIONARY, STUCK BETWEEN A SUBTROPICAL RIDGE IN THE SOUTH-WEST AND AN OTHER RIDGE IN THE NORTH-EAST. HEROLD IS STILL EXPECTED TO REMAIN DANGEROUSLY CLOSE TO THE MADAGASCAN COASTS TODAY, AS CLOSE AS 50 KM. THIS AFTERNOON, THE SYSTEM SHOULD BEGIN TO ACCELERATE SOUTH-EASTWARD UNDER THE GROWING INFLUENCE OF THE MID-LEVEL RIDGE IN THE NORTH-EAST. SOME ALONG-TRACK DIFFERENCES BETWEEN MODELS REMAIN, BUT THOSE ARE WEAKER THAN IN PREVIOUS RUNS. FROM WEDNESDAY, UNDER THE INFLUENCE OF A SECOND RIDGE IN THE EAST, THE SYSTEM KEEPS ON HEADING SOUTHEASTWARD AHEAD OF A MID-LATITUDE TROUGH.

ATMOSPHERIC CONDITIONS ARE CONDUCIVE FOR INTENSIFICATION, HOWEVER THE OCEANIC POTENTIAL IS LIKELY LIMITING THE INTENSIFICATION PACE DUE TO THE ABSENCE OF MOTION. TONIGHT, WITH THE SPEED INCREASE, THE AVAILABLE GUIDANCE SUGGEST A SUSTAINED DEEPENING UNTIL MONDAY NIGHT. FROM MONDAY, THE ARRIVAL OF A NEW UPPER LEVEL TROUGH FROM THE SOUTH-WEST DRIVES THE STRENGTHENING OF A NORTHWESTERLY VERTICAL WINDSHEAR. THE SYSTEM SHOULD THUS WEAKEN FROM TUESDAY BEFORE LOOSING ITS PURELY TROPICAL CHARACTERISTICS.

HEROLD'S PROXIMITY TO THE MADAGASCAN EAST COAST BETWEEN 14S AND 16S CONTINUES TO BRING HAZARDOUS CONDITIONS WITHIN THE NEXT 24 HOURS. DAMAGING WINDS (GUSTS UP TO 120 KM/H) ARE EXPECTED ALONG THE COASTS. THESE SOUTHERLY WINDS MAY CAUSE SOME MINOR STORM SURGE (30 TO 40 CM) IN SOME EXPOSED AREAS, SUCH AS ANTONGIL BAY. MOREOVER, HEAVY RAINS WITH DAILY AMOUNTS THAT COULD EXCEED 150 MM (LOCALLY EXCEEDING 250MM) ARE EXPECTED BETWEEN SAMBAVA TO THE NORTH AND CAP MASOALOA TO THE SOUTH.

AT THE END OF THE WEEK-END AND EARLY NEXT WEEK, THE INHABITANTS OF THE MASCARENES ISLANDS, AND ESPECIALLY MAURITIUS AND RODRIGUES ISLANDS, ARE INVITED TO MONITOR THE EVOLUTION OF THE SITUATION, HEROLD TRANSITING AT A DISTANCE OF LESS THAN 200KM FROM THE COASTS.