

WTIO30 FMEE 060013

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 19/10/20182019

1.A TROPICAL CYCLONE 10 (HALEH)

2.A POSITION 2019/03/06 AT 0000 UTC:

WITHIN 20 NM RADIUS OF POINT 22.3 S / 70.7 E

(TWENTY TWO DECIMAL THREE DEGREES SOUTH AND
SEVENTY DECIMAL SEVEN DEGREES EAST)

MOVEMENT: SOUTH-WEST 9 KT

3.A DVORAK ANALYSIS: 5.5/5.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 956 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 37 KM

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

28 KT NE: 220 SE: 330 SW: 460 NW: 220

34 KT NE: 190 SE: 200 SW: 320 NW: 190

48 KT NE: 110 SE: 110 SW: 140 NW: 110

64 KT NE: 70 SE: 70 SW: 80 NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/03/06 12 UTC: 23.9 S / 69.0 E, VENT MAX= 080 KT, TROPICAL CYCLONE

24H: 2019/03/07 00 UTC: 25.1 S / 67.5 E, VENT MAX= 075 KT, TROPICAL CYCLONE

36H: 2019/03/07 12 UTC: 27.0 S / 66.7 E, VENT MAX= 070 KT, TROPICAL CYCLONE

48H: 2019/03/08 00 UTC: 29.9 S / 65.5 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

60H: 2019/03/08 12 UTC: 32.6 S / 64.5 E, VENT MAX= 050 KT, POST-TROPICAL
DEPRESSION

72H: 2019/03/09 00 UTC: 35.8 S / 64.5 E, VENT MAX= 045 KT, POST-TROPICAL
DEPRESSION

2.B LONGER-RANGE OUTLOOK:

96H: 2019/03/10 00 UTC: 41.9 S / 72.1 E, VENT MAX= 040 KT, EXTRATROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=5.5- CI=5.0+

THE CDO PATTERN HAS LASTED FOR THE LAST 6 HOURS, BUT ON THE LAST

INFRARED IMAGES THE FIRST SIGNS OF AN EYE ARE FELT. THE STRONGEST CONVECTION MIGRATED TO THE SOUTHERN SECTOR, WHILE THE LATEST MICROWAVE DATA FROM 2050UTC DO NOT ALLOW US TO JUDGE A REAL WEAKNESS IN CIRCULATION. FOLLOWING THESE LAST INFORMATIONS, AN ESTIMATE OF THE MAXIMUM WINDS IN THE ORDER OF 85KT WAS MADE.

THE TRACK FORECAST DOES NOT EVOLVE : THE TRACK IS ORIENTED SOUTHWESTWARD, STEERED BY THE WESTWARD SHIFT OF A MID-LEVEL RIDGE THAT CRAWLS ITS WAY SOUTH OF THE SYSTEM. FROM WEDNESDAY, THE TRACK SHOULD BEND AGAIN SOUTHSOUTHWESTWARD WITH THE WEAKENING OF THIS RIDGE AND ITS SHIFT TO THE EAST. FROM FRIDAY/SATURDAY, AHEAD A DEEP MID-LATITUDES TROUGH, THE SYSTEM IS FORECASTED TO EVACUATE TOWARD THE SOUTHEAST.

THE SYSTEM CONTINUES TO BENEFIT FROM A GOOD ALTITUDE DIVERGENCE THROUGH A WELL-DEFINED POLEWARD OUTFLOW CHANNEL AND A LOW WINDSHEAR ENVIRONMENT. THIS ENVIRONMENT SHOULD ALLOW HALEH TO MAINTAIN ITS INTENSITY, OR EVEN TO INTENSIFY SLIGHTLY ABOVE WATERS WITH A FAVORABLE OCEANIC HEAT POTENTIAL. ON WEDNESDAY, THE ARRIVAL OF A NEW UPPER TROUGH, TRAVELLING SOUTH, SHOULD REINFORCE THE POLEWARD DIVERGENCE AGAIN BUT ALSO IMPOSE A NORTH-WESTERN SECTOR WIND SHEAR WHICH WILL BE LIMITING FOR THE HALEL INTENSITY: FROM THURSDAY, THE NORTH-WESTERN WIND SHEAR IS EXPECTED TO STRENGTHEN LEADING TO A MORE RAPID WEAKENING OF THE CIRCULATION. AT THE END OF FRIDAY, OVER WATERS WITH AN INSUFFICIENT HEAT POTENTIAL, THE SYSTEM SHOULD LOSE ITS PURELY TROPICAL CHARACTERISTICS, BEFORE BEING CAUGHT IN THE CIRCULATION OF SOUTHERN LATITUDES FROM SUNDAY.