

WTIO30 FMEE 171838

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 22/10/20192020

1.A TROPICAL CYCLONE 10 (HEROLD)

2.A POSITION 2020/03/17 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 20.9 S / 63.5 E

(TWENTY DECIMAL NINE DEGREES SOUTH AND
SIXTY THREE DECIMAL FIVE DEGREES EAST)

MOVEMENT: EAST-SOUTH-EAST 18 KT

3.A DVORAK ANALYSIS: 4.0/5.0/W 1.0/24 H

4.A CENTRAL PRESSURE: 975 HPA

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

RADIUS OF MAXIMUM WINDS (RMW): 41 KM

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

28 KT NE: 440 SE: 180 SW: 220 NW: 260

34 KT NE: 170 SE: 150 SW: 170 NW: 170

48 KT NE: 90 SE: 90 SW: 90 NW: 90

64 KT NE: 50 SE: 50 SW: 50 NW: 50

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 800 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS:

12H: 2020/03/18 06 UTC: 22.4 S / 65.8 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

24H: 2020/03/18 18 UTC: 23.5 S / 67.9 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

36H: 2020/03/19 06 UTC: 24.5 S / 69.6 E, VENT MAX= 025 KT, FILLING UP

48H: 2020/03/19 18 UTC: 25.3 S / 70.7 E, VENT MAX= 020 KT, POST-TROPICAL
DEPRESSION

60H: 2020/03/20 06 UTC: 27.5 S / 71.8 E, VENT MAX= 020 KT, POST-TROPICAL
DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=4.0- CI=5.0

AFTER REACHING ITS PEAK INTENSITY THIS MORNING, HEROLD STARTED TO
WEAKEN RAPIDLY UNDERGOING A STRONG VERTICAL WIND SHEAR (IN MID

TROPOSPHERE ESPECIALLY). THIS CONSTRAINT ASSOCIATED WITH DRY AIR ISOLATED THE CENTRE FROM THE CONVECTIVE ACTIVITY (IN THE SOUTH EASTERN QUADRANT), AS SHOWN BY THE LAST MICROWAVE DATA (GMI 1421Z, WINDSAT 1414Z AND SSMIS 1330Z). GIVEN THAT EVOLUTION, WITH THE LACK OF RELIABLE OBJECTIVE ESTIMATES OR DIRECT MEASURE, INTENSITY IS LOWERED TO 65KT. ACCORDING TO THE AVAILABLE DATA, HEROLD CENTER PASSED AROUND 100KM SOUTH-WEST OF RODRIGUES AT 15Z, WHERE MINIMAL PRESSURE WAS 996HPA (POINT CANON) AND HIGHEST GUSTS WAS 70KT (PLAINE CORAIL).

HEROLD CONTINUE TO MOVE RAPIDLY ON A HEADING OSCILLATING BETWEEN THE SOUTH-EAST AND THE EAST-SOUTH-EAST UNDER THE INFLUENCE OF THE MID-TROPICAL RIDGE TO THE NORTHEAST WHICH GOVERNS ITS TRACK. FROM WEDNESDAY, HEROLD WILL MOVE UNDER THE INFLUENCE OF A DEEP TROUGH TO ITS SOUTH-WEST BEFORE MERGING WITH IT BY THE END OF THE WEEK. THERE IS STILL SOME GOOD AGREEMENT BETWEEN THE GUIDANCE ON THIS TRACK.

UNDER THE INCREASING IMPACT OF THE NORTHWEST SHEAR AND ASSOCIATED DRY AIR INTRUSION, THE RAPID WEAKENING IS EXPECTED TO KEEP ON GOING. BY 48H THERE SHOULD BE NO LONGER GALE FORCE WIND.

AFTER HEROLD PASSAGE, DUE TO ITS MOVEMENT AND ITS STRUCTURE, WEATHER CONDITIONS ARE EXPECTED TO IMPROVE RAPIDLY OVERNIGHT IN RODRIGUES.