

WTIO30 FMEE 041900

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 2/3/20212022

1.A MODERATE TROPICAL STORM 3 (CLIFF)

2.A POSITION 2022/02/04 AT 1800 UTC:

WITHIN 30 NM RADIUS OF POINT 18.7 S / 83.5 E

(EIGHTEEN DECIMAL SEVEN DEGREES SOUTH AND  
EIGHTY THREE DECIMAL FIVE DEGREES EAST)

MOVEMENT: SOUTH-WEST 3 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 994 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 150 SE: 405 SW: 480 NW: 95

34 KT NE: 0 SE: 335 SW: 260 NW: 75

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/05 06 UTC: 19.2 S / 83.0 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 175 SE: 415 SW: 415 NW: 140

34 KT NE: 75 SE: 250 SW: 185 NW: 100

24H: 2022/02/05 18 UTC: 19.8 S / 81.6 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 195 SE: 435 SW: 415 NW: 140

34 KT NE: 85 SE: 260 SW: 185 NW: 100

36H: 2022/02/06 06 UTC: 20.8 S / 79.5 E, VENT MAX= 030 KT, TROPICAL DEPRESSION

28 KT NE: 215 SE: 445 SW: 415 NW: 140

48H: 2022/02/06 18 UTC: 21.7 S / 77.6 E, VENT MAX= 025 KT, REMNANT LOW

60H: 2022/02/07 06 UTC: 22.7 S / 75.7 E, VENT MAX= 025 KT, REMNANT LOW

72H: 2022/02/07 18 UTC: 23.6 S / 74.0 E, VENT MAX= 020 KT, FILLING UP

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=3.0-

DURING THE LAST 6 TO 12 HOURS, CONVECTION HAS CONTINUED TO DEVELOP NEAR THE LOW'S CENTER, EVOLVING INTO A CURVED BAND PATTERN. THE 0759Z AMSR2 AND 1303Z SSMIS PASSES CONFIRM THIS IMPROVED ORGANIZATION. THE 1626Z ASCAT PASS SHOWS A WIND AXIS REACHING UP TO 40KT IN THE SOUTHERN SEMICIRCLE. TROPICAL DEPRESSION 03-20212022 HAS THUS BEEN UPGRADED TO A MODERATE TROPICAL STORM AND NAMED CLIFF AT 1430UTC BY MAURITIUS METEOROLOGICAL SERVICE. A COMPROMISE BETWEEN DVORAK SUBJECTIVE ANALYSIS (DT BETWEEN 2.5 AND 3.0 BASED ON A CURVED BAND PATTERN) AND ASCAT MEASUREMENTS ENABLES US TO ESTIMATE CLIFF'S MAXIMUM WINDS AT 40KT, LOCATED IN ITS SOUTHERN SEMICIRCLE.

CLIFF IS MOVING SLOWLY SOUTH-SOUTH-WESTWARD IN THE SHORT TERM, THEN WILL MOVE MORE FRANKLY TO THE SOUTH-WEST TO WEST-SOUTH-WEST WHILE ACCELERATING IN THE NEXT FEW DAYS, UNDER THE INFLUENCE OF STEERING FLOWS GENERATED BY SEVERAL RIDGES SURROUNDING THE SYSTEM ON ITS NORTH-EAST, SOUTH-EAST AND SOUTH SECTORS. ITS TRACK LEAVES IT FAR FROM INHABITED LANDS.

THE CURRENT WINDOW OF INTENSIFICATION ASSOCIATED AMONG OTHER THINGS WITH GOOD UPPER DIVERGENCE AHEAD OF AN APPROACHING JET, AND WHICH ALLOWED TROPICAL STORM CLIFF TO FORM, SHOULD CLOSE FAIRLY QUICKLY. FROM THIS SATURDAY ONWARDS, INCREASING NORTHWESTERLY SHEAR SHOULD FORCE INTRUSION OF DRY AIR FROM THE WESTERN SIDE OF THE SYSTEM AND SHOULD WEAKEN THE SYSTEM DURABLY.