

WTIO30 FMEE 171236

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 26/2/20232024

1.A MODERATE TROPICAL STORM 2 (BELAL)

2.A POSITION 2024/01/17 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 24.0 S / 63.8 E

(TWENTY FOUR DECIMAL ZERO DEGREES SOUTH AND
SIXTY THREE DECIMAL EIGHT DEGREES EAST)

MOVEMENT: EAST 6 KT

3.A DVORAK ANALYSIS: 3.0/3.5/W 0.0/6 H

4.A CENTRAL PRESSURE: 987 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 45 KT

RADIUS OF MAXIMUM WINDS (RMW): 44 KM

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

28 KT NE: 285 SE: 285 SW: 305 NW: 220

34 KT NE: 155 SE: 205 SW: 185 NW: 130

48 KT NE: 0 SE: 0 SW: 0 NW: 0

64 KT NE: 0 SE: 0 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/01/18 00 UTC: 24.1 S / 64.6 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 285 SE: 400 SW: 315 NW: 205

34 KT NE: 155 SE: 250 SW: 205 NW: 120

24H: 2024/01/18 12 UTC: 24.2 S / 64.8 E, VENT MAX= 040 KT, MODERATE TROPICAL
STORM

28 KT NE: 195 SE: 305 SW: 280 NW: 100

34 KT NE: 95 SE: 195 SW: 140 NW: 0

36H: 2024/01/19 00 UTC: 24.2 S / 63.7 E, VENT MAX= 030 KT, FILLING UP

28 KT NE: 130 SE: 165 SW: 140 NW: 85

48H: 2024/01/19 12 UTC: 24.5 S / 62.0 E, VENT MAX= 025 KT, FILLING UP

60H: 2024/01/20 00 UTC: 25.2 S / 60.6 E, VENT MAX= 020 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

OVER THE PAST 6 HOURS, BELAL HAS CONTINUED TO WEAKEN. CONVECTIVE ACTIVITY IS LIMITED TO THE SOUTHWEST SEMICIRCLE, AND THE SYSTEM IS UNDERGOING AN INTRUSION OF DRY MID-TROPOSPHERIC AIR. BASED ON AVAILABLE OBJECTIVE AND SUBJECTIVE ANALYSES, MAXIMUM WINDS ARE ESTIMATED AT 45KT.

IN TERMS OF TRACK, THERE IS LITTLE CHANGE FROM THE PREVIOUS FORECAST. BELAL IS DRIVEN BY THE RIDGE OF HIGH PRESSURE, FORCING IT TO MOVE EASTWARDS FOR ANOTHER 12 HOURS. THEN DURING THE NIGHT, THE SYSTEM FINDS ITSELF IN AN ENVIRONMENT WHOSE CENTERS OF ACTION ARE LITTLE MARKED AND QUITE DISTANT FROM BELAL. ITS MOVEMENT SPEED THEN DECREASES. AS BELAL'S INTENSITY WEAKENS, THE STEERING FLOW GRADUALLY MIGRATES TOWARDS THE LOWER TROPOSPHERE AND REVERSES. THE TRACK TURNS BACK TOWARDS THE WEST AND THEN THE SOUTH-WEST. THE DISPERSION OF THE MODELS REMAINS FAIRLY WIDE, LEAVING SIGNIFICANT UNCERTAINTY AS TO THE TIMING OF THE REVERSAL.

BELAL'S INTENSITY IS GRADUALLY WEAKENING WITH THE INTRUSION OF DRY AIR TOWARDS THE HEART OF THE SYSTEM, WHICH HAS BEEN DOWNGRADED TO A MODERATE TROPICAL STORM. THIS WEAKENING WILL CONTINUE INTO THURSDAY, WHEN THE SYSTEM WILL ENCOUNTER COLDER WATERS. ON FRIDAY, CONVECTION WILL BE ALMOST NON-EXISTENT, TAKING BELAL FROM A FILLING LOW TO A REMNANT LOW.

THE SYSTEM NO LONGER THREATENS INHABITED LAND.