

WTIO30 FMEE 191302
RSMC / TROPICAL CYCLONE CENTER / LA REUNION
TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 3/6/20182019

1.A ZONE PERTURBEE 6

2.A POSITION 2019/01/19 AT 1200 UTC:

WITHIN 40 NM RADIUS OF POINT 24.4 S / 37.5 E

(TWENTY FOUR DECIMAL FOUR DEGREES SOUTH AND
THIRTY SEVEN DECIMAL FIVE DEGREES EAST)

MOVEMENT: NORTH 6 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 1001 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

NIL

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 1100 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS:

12H: 2019/01/20 00 UTC: 23.2 S / 37.9 E, VENT MAX= 030 KT, ZONE OF DISTURBED
WEATHER

24H: 2019/01/20 12 UTC: 21.6 S / 38.2 E, VENT MAX= 035 KT, ZONE OF DISTURBED
WEATHER

36H: 2019/01/21 00 UTC: 20.2 S / 37.8 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

48H: 2019/01/21 12 UTC: 19.0 S / 36.7 E, VENT MAX= 035 KT, MODERATE TROPICAL
STORM

60H: 2019/01/22 00 UTC: 18.2 S / 35.6 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

SHORTLY AFTER 10 UTC, A RATHER WELL DEFINED LOW LEVEL CENTER HAS
APPEARED MORE TO THE SOUTH-EAST OF THE PREVIOUS POSITION. IT HAS MOVED
GENERALLY NORTHWARDS AFTER THAT TIME AND LOOSE SOME DEFINITION.
THOSE FLUCTUATIONS STILL SUPPORT TO QUALIFY THE SYSTEM AS A ZONE OF
DISTURBED WEATHER. THE CENTRAL AREA STILL LIES JUST TO THE WEST AND
NORTH-WEST OF THE DEEP CONVECTION.

AS A MID-LAT TROUGH IS CURRENTLY PASSING TO THE SOUTH OF THE SYSTEM, IT IS EXPECTED TO MOVE LITTLE WITHIN A WEAK STEERING FLOW AREA. TOMORROW, BUILDING LOW TO MID LEVELS HIGHS FROM THE SOUTH-WEST ARE EXPECTED TO PUSH THE SYSTEM NORTHWARDS TOWARDS THE MOZAMBIQUE COASTS. ALTHOUGH MOST OF THE NUMERICAL GUIDANCE AGREE WITH THIS GENERAL FORECAST, SOME SIGNIFICANT SPREAD STILL EXIST. GFS 06Z IS NOW IN BETTER AGREEMENT WITH IFS/00Z AND THE CURRENT FORECAST IS BASED ON AN AVERAGE OF GFS AND IFS.

THE INITIAL WEAK STRUCTURE SEEMS DUE TO ABUNDANT MID LEVEL DRY AIR PRESENT NEAR THE CENTER WITHIN THE WESTERN SEMI-CIRCLE (CF PREPITABLE WATER MIMIC ON CIMSS WEBSITE). THIS ADVERSE THERMODYNAMICS CONDITIONS MAY STILL AFFECT THE SYSTEM FOR THE TOMORROW DESPITE LOW TO MODERATE SHEAR AND FAVORABLE OCEANIC CONTAINS. FROM MONDAY, THE SYSTEM MAY MOVE THROUGH A MORE MOIST ENVIRONMENT THAT COULD ALLOW THE STARTING OF A DEEPENING TREND. HOWEVER, INCREASING EASTERLY SHEAR AND LOWER OCEANIC HEAT CONTAINS ARE EXPECTED NEAR THE MOZAMBIQUE COASTS. GFS 06Z IS ALSO LESS AGGRESSIVE REGARDING INTENSIFICATION AND COMES IN BETTER AGREEMENT WITH THE IFS/00Z SOLUTION.

OVERALL THIS IS STILL A LOW CONFIDENCE FORECAST.

AS STRONG HIGH PRESSURE BUILDS FROM THE SOUTH-WEST FROM SUNDAY, NEAR GALE TO GALE FORCE WINDS ACCOMPANIED WITH HEAVY RAINFALLS ARE EXPECTED WITHIN THE WESTERN SEMI-CIRCLE OF THE SYSTEM REGARDLESS OF SIGNIFICANT CENTRAL PRESSURE FALLS. THIS WEATHER SHOULD SPREAD TOMORROW BETWEEN INHAMBANE AND BEIRA ALONG THE MOZAMBIQUE COASTS AND ALONG THE COASTS NORTH OF BEIRA ON MONDAY.