

WTIO30 FMEE 160726

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

0.A WARNING NUMBER: 14/3/20172018

1.A TROPICAL CYCLONE 3 (BERGUITTA)

2.A POSITION 2018/01/16 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 18.1 S / 61.5 E

(EIGHTEEN DECIMAL ONE DEGREES SOUTH AND SIXTY ONE DECIMAL FIVE  
DEGREES EAST)

MOVEMENT : WEST 6 KT

3.A DVORAK ANALYSIS: 4.5/5.0/W 1.0/24 H

4.A CENTRAL PRESSURE: 955 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 80 KT

RADIUS OF MAXIMUM WINDS (RMW) :28 KM

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

28 KT NE: 130 SE: 560 SW: 560 NW: 190

34 KT NE: 90 SE: 240 SW: 240 NW: 130

48 KT NE: 60 SE: 70 SW: 90 NW: 60

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/16 18 UTC: 18.5 S / 60.5 E, MAX WIND=080 KT, TROPICAL CYCLONE

24H: 2018/01/17 06 UTC: 19.0 S / 59.4 E, MAX WIND=075 KT, TROPICAL CYCLONE

36H: 2018/01/17 18 UTC: 20.0 S / 58.1 E, MAX WIND=075 KT, TROPICAL CYCLONE

48H: 2018/01/18 06 UTC: 21.2 S / 56.1 E, MAX WIND=070 KT, TROPICAL CYCLONE

60H: 2018/01/18 18 UTC: 22.4 S / 53.9 E, MAX WIND=070 KT, TROPICAL CYCLONE

72H: 2018/01/19 06 UTC: 23.6 S / 52.2 E, MAX WIND=065 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/20 06 UTC: 28.1 S / 50.0 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

120H: 2018/01/21 06 UTC: 34.2 S / 50.1 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

2.C ADDITIONAL INFORMATION:

T=4.5+ CI=5.0

OVER THE PAST SIX HOURS , DEEP CONVECTION STRUCTURE OF BERGUITTA  
HAS DEGRADED, WITH THE TEMPORARY LOST OF EYE STRUCTURE; THE EYE SEEMS

TO REBUILD ON THE LAST SATELLITE IMAGERY. THIS WEAKENING IS CORROBORATED BY LAST SSMIS DATA OF 01H46Z WHICH SHOWS A WEAKNESS IN THE EASTERN SEMI-CIRCLE OF DEEP OF THE EYE. THE CHANGE IS DUE TO THE STRENGTHENING OF THE EASTERN UPPER LEVEL CONSTRAINT ASSOCIATED WITH DRY AIR IN THE NORTH-WESTERN QUADRANT.

THE MID-TROPOSPHERE HIGH GEOPOTENTIAL CELL LOCATED SOUTH GENERATE A WESTERWARD STEERING FLOW. FROM WEDNESDAY, WITH THE WEAKENING OF THE RIDGE, THE SYSTEM SHOULD BEND PROGRESSIVELY SOUTHWESTWARD. IT IS EXPECTED THEN, TO MOVE NEARBY THE MAIN MASCARENES ISLANDS (REUNION AND MAURICE). TIMING IS STILL UNCLEAR WITH SIGNIFICANT DIFFERENCES (AROUND SIX HOURS) BETWEEN MAJOR NUMERICAL MODELS. THIS TRACK FORECAST IS MAINLY BASED ON A CONSENSUS OF THE LAST RUNS OF GFS AND IFS.

THE OCEANIC POTENTIAL REMAINS GOOD, BUT ENVIRONMENTAL CONDITIONS ARE BECOMING MITIGATED BETWEEN MODERATE NORTHEASTERLY VERTICAL WINDSHEAR FORECAST TO INCREASE END OF THE PERIOD AND A GOOD POLAR OUTFLOW CHANNEL. THEREFORE, THE SYSTEM IS EXPECTED TO WEAKEN VERY SLOWLY UNTIL FRIDAY THEN MORE FRANKLY, AS THE OCEANIC POTENTIAL WOULD BE BY THAT TIME, THE LIMITING FACTOR, ESPECIALLY SOUTH OF 25S.

HOWEVER THE WEAKENING OF THE LAST HOURS BERGUITTA REMAIN A VERY DANGEROUS SYSTEM WHICH IS FORECAST TO MOVE CLOSER MAURICE AND REUNION ISLANDS AT A SIGNIFICANT INTENSITY. INHABITANTS ARE INVITED TO MONITOR CLOSELY THE EVOLUTION OF THIS SYSTEM IN THE NEXT DAYS.