

WTIO30 FMEE 151843

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

0.A WARNING NUMBER: 12/3/20172018

1.A INTENSE TROPICAL CYCLONE 3 (BERGUITTA)

2.A POSITION 2018/01/15 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 18.2 S / 62.6 E

(EIGHTEEN DECIMAL TWO DEGREES SOUTH AND SIXTY TWO DECIMAL SIX
DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 4 KT

3.A DVORAK ANALYSIS: 5.5/5.5/D 2.0/24 H

4.A CENTRAL PRESSURE: 940 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 90 KT

RADIUS OF MAXIMUM WINDS (RMW) :19 KM

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

28 KT NE: 130 SE: 280 SW: 280 NW: 190

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

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

64 KT NE: 60 SE: 60 SW: 60 NW: 60

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 06 UTC: 18.6 S / 61.1 E, MAX WIND=100 KT, INTENSE TROPICAL
CYCLONE

24H: 2018/01/16 18 UTC: 18.7 S / 59.8 E, MAX WIND=110 KT, INTENSE TROPICAL
CYCLONE

36H: 2018/01/17 06 UTC: 19.2 S / 58.6 E, MAX WIND=090 KT, INTENSE TROPICAL
CYCLONE

48H: 2018/01/17 18 UTC: 20.0 S / 57.3 E, MAX WIND=080 KT, TROPICAL CYCLONE

60H: 2018/01/18 06 UTC: 21.2 S / 55.6 E, MAX WIND=070 KT, TROPICAL CYCLONE

72H: 2018/01/18 18 UTC: 22.6 S / 53.6 E, MAX WIND=065 KT, TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/19 18 UTC: 25.9 S / 50.6 E, MAX WIND=070 KT, TROPICAL CYCLONE

120H: 2018/01/20 18 UTC: 31.1 S / 50.2 E, MAX WIND=070 KT, TROPICAL CYCLONE

2.C ADDITIONAL INFORMATION:

T=CI=5.5

OVER THE PAST SIX HOURS , BERGUITTA CLOUD PATTERN DID NOT CHANGE A LOT. THE EYE IS CLEARER AND A BIT WARMER, BUT DVORAK ESTIMATES ARE STILL STABLE AT 5.5. AS FOR THE MOVEMENT, THE CYCLONE CONFIRMED THE RESUMPTION OF DISPLACEMENT, WITH A WEST-SOUTHWESTWARD TRACK.

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 TWELVE HOURS) BETWEEN MAJOR NUMERICAL MODELS. THIS TRACK FORECAST IS MAINLY BASED ON A CONSENSUS OF THE LAST RUNS OF GFS AND IFS.

WITH A GOOD OCEANIC POTENTIAL AND WEAK VERTICAL WIND SHEAR, BERGUITTA IS BENEFITING FROM VERY CONDUCIVE ENVIRONMENTAL CONDITIONS. TOMORROW, UPPER LEVEL DIVERGENCE IS FORECAST TO INCREASE WITH BOTH POLAR AND EQUATORIAL OUTFLOW CHANNELS. IT MAY SO DEEPEN A BIT MORE, IN THE FOLLOWING HOURS. EYEWALL REPLACEMENT CYCLES THAT COULD WEAKEN TEMPORARILY THE SYSTEM, ARE NOT TAKEN INTO ACCOUNT IN THIS FORECAST. FROM WEDNESDAY, NORTHEASTELY VERTICAL WINDSHEAR IS EXPECTED TO INCREASE OVER THE EASTERN EDGE OF THE MID-TROPOSPHERIC RIDGE. BERGUITTA INTENSITY IS LIKELY TO DECREASE ALL THE MORE, IT HAS A SMALL SIZE. AT LONG RANGE, WITH THE DECAY OF THE VERTICAL WIND SHEAR, THE SYSTEM MAY DEEPEN AGAIN. THE OCEANIC POTENTIAL WOULD BE BY THAT TIME, THE LIMITING FACTOR, ESPECIALLY SOUTH OF 25S.

BERGUITTA IS NOW 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.