

WTIO30 FMEE 140628

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

0.A WARNING NUMBER: 6/3/20172018

1.A MODERATE TROPICAL STORM 3 (BERGUITTA)

2.A POSITION 2018/01/14 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 18.0 S / 63.1 E

(EIGHTEEN DECIMAL ZERO DEGREES SOUTH AND SIXTY THREE DECIMAL ONE
DEGREES EAST)

MOVEMENT : NORTH-WEST 2 KT

3.A DVORAK ANALYSIS: 3.5/3.5/D 1.0/24 H

4.A CENTRAL PRESSURE: 991 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :28 KM

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

28 KT NE: 160 SE: 190 SW: 230 NW: 100

34 KT NE: 110 SE: 120 SW: 140 NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/14 18 UTC: 17.9 S / 63.0 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

24H: 2018/01/15 06 UTC: 17.6 S / 62.4 E, MAX WIND=065 KT, TROPICAL CYCLONE

36H: 2018/01/15 18 UTC: 17.4 S / 61.5 E, MAX WIND=070 KT, TROPICAL CYCLONE

48H: 2018/01/16 06 UTC: 17.1 S / 60.3 E, MAX WIND=080 KT, TROPICAL CYCLONE

60H: 2018/01/16 18 UTC: 17.2 S / 59.7 E, MAX WIND=100 KT, INTENSE TROPICAL
CYCLONE

72H: 2018/01/17 06 UTC: 17.6 S / 59.1 E, MAX WIND=110 KT, INTENSE TROPICAL
CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/18 06 UTC: 19.8 S / 56.2 E, MAX WIND=090 KT, INTENSE TROPICAL
CYCLONE

120H: 2018/01/19 06 UTC: 22.2 S / 53.2 E, MAX WIND=080 KT, TROPICAL CYCLONE

2.C ADDITIONAL INFORMATION:

T=CI=3.5-

DURING THE LAST 6 HOURS, THE CONVECTIVE BURSTS WERE MOSTLY FOCUSED NEAR THE CENTER. THE VORTICITY IS QUITE CLEAR ON THE LAST VISIBLE IMAGERY. LAST MICROWAVE SSMIS DATA ESPECIALLY 0212Z F17, CONFIRM THE CONSOLIDATION OF THE INNER CORE. INTENSITY IS THUS UPGRADED TO 45KT IN AGREEMENT WITH DVORAK ESTIMATES.

THE SYSTEM SEEMS TO HAVE SLIGHTLY TURNED NORTHWESTWARD AFTER SLOWING DOWN, AS IT BUMPS INTO A STRONG RIDGE BUILDING UP FROM THE SOUTH OF MADAGASCAR. MODEL GUIDANCE IS IN A GOOD AGREEMENT TO SUGGEST THAT BERGUITTA SHOULD KEEP THIS DIRECTION ON THE NORTHEASTERN SIDE OF THE RIDGE. FROM TUESDAY, IT IS EXPECTED THEN TO BEND PROGRESSIVELY TOWARDS THE SOUTHWEST WITH THE WEAKENING OF THE RIDGE. A GLOBAL CONSENSUS IS BEGINNING TO APPEAR IN THE GUIDANCE, BUT THERE IS STILL UNCERTAINTY ON THE TRACK CHANGE TIMING. LOW PREDICTABILITY DURING THE FIRST RANGES INDUCES AN UNCERTAINTY OVER THE TIMING AND THE INTENSITY OF THE POTENTIAL THREAT OVER MASCARENES ISLANDS. THIS ADVISORY IS BASED ON A MEAN SCENARIO BETWEEN MAIN AMERICAN AND EUROPEAN MODELS AVAILABLE.

THE SYSTEM IS EXPECTED TO GRADUALLY INTENSIFY WITHIN VERY GOOD ENVIRONMENTAL CONDITIONS, UNDER THE UPPER LEVEL RIDGE, THUS WITH LOW VERTICAL WIND WINDSHEAR. AT SHORT RANGE, UPPER LEVEL DIVERGENCE SHOULD IMPROVE WITH BOTH POLAR AND EQUATORIAL OUTFLOW CHANNELS, PARTICULARLY ON TUESDAY. OCEANIC POTENTIAL IS ALSO CONDUCTIVE, THEREFORE BERGUITTA IS EXPECTED TO REACH INTENSE TROPICAL CYCLONE STATUS. FROM WEDNESDAY, WHILE TRACKING SOUTHWESTWARDS, IT MAY UNDERGO A SLIGHT TO MODERATE UPPER CONSTRAINT, ON THE WESTERN EDGE OF THE BUILDING UPPER RIDGE. IT MAY THEN WEAKEN.

NEXT WEEK, A MATURE SYSTEM SHOULD TRACK IN THE VICINITY OF MASCARENES ISLANDS. INHABITANTS ARE INVITED TO MONITOR THE EVOLUTION OF THIS SYSTEM IN THE NEXT DAYS.