

WTIO30 FMEE 171231

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

0.A WARNING NUMBER: 19/3/20172018

1.A SEVERE TROPICAL STORM 3 (BERGUITTA)

2.A POSITION 2018/01/17 AT 1200 UTC:

WITHIN 30 NM RADIUS OF POINT 18.5 S / 59.7 E

(EIGHTEEN DECIMAL FIVE DEGREES SOUTH AND FIFTY NINE DECIMAL SEVEN
DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 3.5/4.0/W 0.5/18 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 60 KT

RADIUS OF MAXIMUM WINDS (RMW) :46 KM

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

28 KT NE: 200 SE: 480 SW: 560 NW: 240

34 KT NE: 150 SE: 200 SW: 150 NW: 120

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/18 00 UTC: 20.1 S / 58.2 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

24H: 2018/01/18 12 UTC: 21.4 S / 55.9 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

36H: 2018/01/19 00 UTC: 22.6 S / 53.7 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

48H: 2018/01/19 12 UTC: 23.9 S / 52.0 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

60H: 2018/01/20 00 UTC: 25.8 S / 50.6 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

72H: 2018/01/20 12 UTC: 28.8 S / 50.2 E, MAX WIND=045 KT, MODERATE TROPICAL
STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/21 12 UTC: 33.3 S / 50.2 E, MAX WIND=040 KT, POST-TROPICAL
DEPRESSION

120H: 2018/01/22 12 UTC: 33.4 S / 53.6 E, MAX WIND=035 KT, POST-TROPICAL
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=3.5+ CI=4.0+

OVER THE PAST SIX HOURS, STRONG BURSTS OF CONVECTION HAVE OCCURRED NEAR THE CENTER BUT THE EASTERN SEMI-CIRCLE OF THE CIRCULATION REMAINS PARTIALLY EXPOSED. 0822Z AMSR2 MICROWAVE DATA CONFIRMS THAT DEEP CONVECTIVE ACTIVITY IS LOCATED OVER THE WESTERN SEMI-CIRCLE. ANIMATED IMAGERY SHOWS THAT BERGUITTA BEGINS TO EXPERIENCE A NORTHEASTERN VERTICAL WINDSHEAR.

LAST SATELLITE IMAGERIES SHOW THAT BERGUITTA HAS BEGAN TO BEND SOUTHWESTWARD UNDER THE STEERING FLOW OF A BUILDING MID-TROPOSPHERIC RIDGE LOCATED EAST. THIS NIGHT, BERGUITTA IS FORECASTED TO ACCELERATE TOWARD MAURITIUS AND THEN REUNION ISLAND. AFTER THE PASSAGE TO THE NEAREST OF THE ISLANDS, BERGUITTA WILL CONTINUE TRACKING SOUTHWESTWARD BEFORE TRACKING SOUTHWARDS. LATER, HIGH PRESSURE FURTHER SOUTH SHOULD SLOW DOWN THE MOVING OF BERGUITTA, AND NEXT THE SYSTEM BERGUITTA SHOULD FOLLOW THE MID-LATITUDE CIRCULATION.

THE SYSTEM IS EXPERIENCING A MODERATE NORTHEASTERN VERTICAL WINDSHEAR OVER THE NORTHEASTERN EDGE OF THE AFOREMENTIONED RIDGE. BUT THE EFFECTS OF THIS CONSTRAINT SHOULD BE ATTENUED AS THE SYSTEM ACCELERATES TOWARD THE SAME DIRECTION. MOREOVER, MODEL GUIDANCE SHOWS THAT THE DRY AIR LOCATED OVER THE SOUTHEASTERN WITH A STRATOSPHERIC ORIGIN SHOULD INTERFERE WITH THE SYSTEM. FOR ALL THAT, THE UPPER LEVEL DIVERGENCE IS FORECASTED TO REMAIN GOOD WITH AN EFFICIENT POLERWARD CHANNEL. SO THE SYSTEM SHOULD KEEP THE SEVERE TROPICAL STATUS WHEN IT WILL TRANSIT NEAR THE MAURITIUS AND REUNION ISLAND. FROM SATURDAY, NORTHWESTWARD VERTICAL WINDSHEAR IS FORECASTED TO INCREASE AHEAD AN UPPER LEVEL TROUGH AND WEAKEN SIGNIFICANTLY BERGUITTA.

HOWEVER THE WEAKENING OF THE LAST 24 HOURS BERGUITTA REMAINS 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.