

WTIO30 FMEE 131243

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

0.A WARNING NUMBER: 3/3/20172018

1.A MODERATE TROPICAL STORM 3 (BERGUITTA)

2.A POSITION 2018/01/13 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 17.8 S / 64.5 E

(SEVENTEEN DECIMAL EIGHT DEGREES SOUTH AND SIXTY FOUR DECIMAL FIVE DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/24 H

4.A CENTRAL PRESSURE: 997 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW) :56 KM

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

28 KT NE: 170 SE: 190 SW: 110 NW: 170

34 KT NE: 70 SE: 70 SW: NW: 70

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 1500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/01/14 00 UTC: 18.1 S / 63.2 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

24H: 2018/01/14 12 UTC: 18.1 S / 62.1 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

36H: 2018/01/15 00 UTC: 17.8 S / 61.1 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

48H: 2018/01/15 12 UTC: 17.5 S / 60.2 E, MAX WIND=065 KT, TROPICAL CYCLONE

60H: 2018/01/16 00 UTC: 17.1 S / 59.3 E, MAX WIND=080 KT, TROPICAL CYCLONE

72H: 2018/01/16 12 UTC: 16.9 S / 58.7 E, MAX WIND=090 KT, INTENSE TROPICAL CYCLONE

2.B LONGER-RANGE OUTLOOK :

96H: 2018/01/17 12 UTC: 17.3 S / 57.9 E, MAX WIND=100 KT, INTENSE TROPICAL CYCLONE

120H: 2018/01/18 12 UTC: 18.6 S / 56.4 E, MAX WIND=110 KT, INTENSE TROPICAL CYCLONE

2.C ADDITIONAL INFORMATION:

T=CI=2.5+

DURING THE LAST 6 HOURS, CLOUD PATTERN HAS IMPROVED. VISIBLE IMAGERY HAS SHOWN THE FORMATION A CURVED BAND THAT IS EVOLVING IN A CDO PATTERN. AS A CONSEQUENCE, THE SYSTEM HAS NAMED BERGUITTA AT 1130Z BY THE MAURITIUS METEOROLOGICAL SERVICES.

THE SYSTEM IS FORECASTED TO KEEP ON ITS WESTSOUTHWESTWARD TRACK. FROM SUNDAY, IT SHOULD BUMP INTO A STRONG RIDGE BUILDING UP IN THE SOUTH OF MADAGASCAR. AVAILABLE MODEL GUIDANCE SUGGEST 2 SCENARIOS. US MODELS SHOW A WESTWARD SLOWING DOWN TRACK WHILE ECMWF MODEL FORECASTS A NORTHWESTWARD TRACK ON THE NORTHEASTERN SIDE OF THIS RIDGE. BY CONTRAST, MODELS ARE IN GOOD AGREEMENT TO FORECAST A BEND TOWARD THE SOUTHWEST LINKED TO THE SHIFT OF THE RIDGE AND THE ARRIVAL OF A MID/UPPER LEVEL TROUGH SOUTH OF MADAGASCAR FROM WEDNESDAY. BUT THE UNCERTAINTY DURING THE FIRST DAYS INDUCES A SHIFT OF THE FORECASTED TRACK THAT INFLUENCES THE POTENTIAL THREAT OVER MASCARENES ISLANDS. THIS ADVISORY FAVORS THE ECMWF FORECAST WITH A SYSTEM THAT TRACKS LONGER NORTHWESTWARD.

THE SYSTEM IS EXPECTED TO ENCOUNTER VERY GOOD ENVIRONMENTAL CONDITIONS TO INTENSIFY. IT EVOLVES UNDER THE UPPER LEVEL RIDGE WITH A LOW VERTICAL WIND WINSHEAR. FROM SUNDAY, UPPER LEVEL DIVERGENCE IS FORECASTED TO IMPROVE WITH BOTH POLERWARD AND EQUATORWARD OUTFLOWS.

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