

Direction Interrégionale à la Réunion  
50, Boulevard du Chaudron  
97490 Sainte-Clotilde  
Tél : 0262 92 11 00  
Fax Exploitation : 0262 92 11 48  
Fax Direction : 0262 92 11 47



WTIO30 FMEE 060616

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

0.A WARNING NUMBER: 12/4/20162017

1.A SEVERE TROPICAL STORM 4 (CARLOS)

2.A POSITION 2017/02/06 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 17.7 S / 57.5 E

(SEVENTEEN DECIMAL SEVEN DEGREES SOUTH AND FIFTY SEVEN DECIMAL FIVE DEGREES EAST)

MOVEMENT : QUASI-STATIONARY

3.A DVORAK ANALYSIS: 3.0/3.5/W 1.0/12 H

4.A CENTRAL PRESSURE: 989 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT

RADIUS OF MAXIMUM WINDS (RMW) :37 KM

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

28 KT NE: 100 SE: 200 SW: 220 NW: 110

34 KT NE: 60 SE: 120 SW: 120 NW: 80

48 KT NE: 0 SE: 40 SW: 50 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2017/02/06 18 UTC: 18.4 S / 57.4 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

24H: 2017/02/07 06 UTC: 19.7 S / 56.3 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

36H: 2017/02/07 18 UTC: 21.2 S / 54.9 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

48H: 2017/02/08 06 UTC: 22.0 S / 53.5 E, MAX WIND=030 KT, TROPICAL DEPRESSION

60H: 2017/02/08 18 UTC: 22.8 S / 53.0 E, MAX WIND=030 KT, TROPICAL DEPRESSION

72H: 2017/02/09 06 UTC: 23.7 S / 53.6 E, MAX WIND=030 KT, TROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2017/02/10 06 UTC: 25.5 S / 56.0 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

120H: 2017/02/11 06 UTC: 28.2 S / 59.9 E, MAX WIND=030 KT, TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=3.0 CI=3.5

SSMI PASS AT 0218Z AND WINDSAT PASS AT 0226Z WERE VERY USEFUL TO REVEAL THE IMPACT OF THE INCREASING NORTHERLY SHEAR.

THE CENTER APPEAR NOW NORTH OF THE CONVECTIVE CLOUD MASS ON CLASSICAL IMAGERY.

THE SYSTEM IS NOW QUASI-STATIONARY FOR A FEW HOURS, AND IS EXPECTED TO BEGIN SOON A SOUTHWARDS TRACK.

AFTER PASSING NEAR THE MASCAREIGNES ISLAND, THE SYSTEM SHOULD CURVED POLEWARDS ON WEDNESDAY OR TUESDAY, BUT STILL STRONG UNCERTAINTY REMAIN REGARDS TO THE LOCATION OF RECURVATURE.

A DEEP LAYERED UPPER TO MID LEVEL TROUGH, LOCATED JUST TO THE SOUTH-WEST OF THE MASCAREIGNES ISLANDS, IS CURRENTLY STRETCHING WITHIN THE TROPICAL DOMAIN TOWARDS THE NORTH-WEST AND THEREFORE INCREASE THE NORTHERLY CONSTRAINT OVER THE SYSTEM. AS THIS FEATURE EVOLVES TOWARDS A WEST NORTHWESTWARDS MOVING CUT-OFF, INCREASING UPPER LEVEL DIVERGENCE MAY START TO EASE THE DETRIMENTAL EFFECT OF THE SHEAR POTENTIALLY ON TUESDAY. FROM WEDNESDAY, ENVIRONMENTAL CONDITIONS SHOULD BECOME EVEN MORE FAVORABLE WITH A DECREASING WINDSHEAR. AN ANOTHER TEMPORARILY INTENSIFICATION TREND MAY OCCUR BEFORE EXTRATROPICAL TRANSITION.