

WTIO30 FMEE 090705

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

0.A WARNING NUMBER: 24/4/20162017

1.A TROPICAL CYCLONE 4 (CARLOS)

2.A POSITION 2017/02/09 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 23.7 S / 53.7 E

(TWENTY THREE DECIMAL SEVEN DEGREES SOUTH AND FIFTY THREE DECIMAL SEVEN DEGREES EAST)

MOVEMENT : EAST-SOUTH-EAST 6 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 975 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT

RADIUS OF MAXIMUM WINDS (RMW) :17 KM

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

28 KT NE: 260 SE: 220 SW: 130 NW: 110

34 KT NE: 170 SE: 160 SW: 60 NW: 60

48 KT NE: 60 SE: 60 SW: 40 NW: 40

64 KT NE: 20 SE: 20 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 600 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2017/02/09 18 UTC: 25.5 S / 55.2 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

24H: 2017/02/10 06 UTC: 27.4 S / 57.1 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

36H: 2017/02/10 18 UTC: 28.9 S / 59.5 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

48H: 2017/02/11 06 UTC: 29.9 S / 62.5 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

60H: 2017/02/11 18 UTC: 30.4 S / 64.3 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

72H: 2017/02/12 06 UTC: 30.4 S / 63.8 E, MAX WIND=040 KT, SUBTROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2017/02/13 06 UTC: 30.3 S / 61.7 E, MAX WIND=045 KT, SUBTROPICAL DEPRESSION

120H: 2017/02/14 06 UTC: 30.4 S / 59.9 E, MAX WIND=050 KT, SUBTROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=4.5-

THE CLOUD PATTERN HAS IMPROVED EARLY IN THE MORNING WITH A WARM SPOT THAT TEMPORARILY BECAME A PRETTY WELL DEFINED (ALTHOUGH SOMEWHAT RAGGED) EYE PATTERN WITH AN OFF WHITE EYE SEEN ON MET-8 AND MET-7 IMAGERY BETWEEN 04Z AND 05Z. ACCORDINGLY, CARLOS IS UPGRADE AS A TROPICAL CYCLONE IN LINE WITH ADT ANALYSIS AT 4.4 (75 KT 1 MIN) SINCE 04Z. VERY RECENTLY, THE CLOUD PATTERN HAS DETERIORATED ... SUGGESTING THAT A WEAKENING TREND IS STARTING.

CARLOS HAS MOVED A LITTLE MORE EAST-SOUTH-EASTWARDS THIS MORNING BUT SHOULD RESUME A SOUTH-EASTWARDS TRACK LATER STEERED BY A MID-TROPOSPHERIC RIDGE IN THE NORTH-EAST AND A TROUGH COMING FROM THE MID-LATITUDES. FROM SUNDAY, CARLOS SHOULD BE BLOCKED BY A HIGH CELL CIRCULATING EASTWARDS IN ITS SOUTH. THE MODEL GUIDANCE IS IN RATHER GOOD AGREEMENT. AT THE END OF THE TAUS, AS CARLOS SHOULD MAKE A U-TURN, THE UNCERTAINTY BECOMES GREATER.

THE INFLUENCE OF AN UPPER TROUGH COMING FROM THE SOUTH-WEST SHOULD GRADUALLY BECOME SIGNIFICANT TODAY. FRIDAY, THE SHARP INCREASE IN VWS AND A SUGGESTED BAROCLINE INTERACTION WITH THE UPPER LEVEL TROUGH SHOULD GIVE POST-TROPICAL CHARACTERISTICS TO THE SYSTEM. DURING THE WEEK-END, CARLOS COULD SHIFT UNDER THE UPPER TROUGH WHICH THEN ISOLATE ITSELF AS A CUT-OFF LOW ABOVE THE CIRCULATION, SHIELDING IT FROM THE SHEAR. IN THIS CONTEXT, CARLOS MAY BECOME A SUBTROPICAL SYSTEM AT THE END OF THE TAUS, AND EVEN POTENTIALLY REGAIN TROPICAL CHARACTERISTICS OVER HOWEVER LOW OHC WATERS.