

WTIO30 FMEE 101857

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

0.A WARNING NUMBER: 30/4/20162017

1.A POST-TROPICAL DEPRESSION 4 (EX-CARLOS)

2.A POSITION 2017/02/10 AT 1800 UTC:

WITHIN 30 NM RADIUS OF POINT 28.5 S / 61.0 E

(TWENTY EIGHT DECIMAL FIVE DEGREES SOUTH AND SIXTY ONE DECIMAL ZERO DEGREES EAST)

MOVEMENT : EAST-SOUTH-EAST 15 KT

3.A DVORAK ANALYSIS: NIL

4.A CENTRAL PRESSURE: 988 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :NIL

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

28 KT NE: 330 SE: 300 SW: 100 NW: 170

34 KT NE: 160 SE: 140 SW: 60 NW: 130

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 800 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : MEDIUM

1.B FORECASTS:

12H: 2017/02/11 06 UTC: 29.9 S / 63.8 E, MAX WIND=050 KT, POST-TROPICAL DEPRESSION

24H: 2017/02/11 18 UTC: 30.9 S / 66.0 E, MAX WIND=045 KT, POST-TROPICAL DEPRESSION

36H: 2017/02/12 06 UTC: 31.5 S / 66.3 E, MAX WIND=045 KT, POST-TROPICAL DEPRESSION

48H: 2017/02/12 18 UTC: 31.7 S / 65.9 E, MAX WIND=045 KT, POST-TROPICAL DEPRESSION

60H: 2017/02/13 06 UTC: 32.2 S / 65.2 E, MAX WIND=040 KT, POST-TROPICAL DEPRESSION

72H: 2017/02/13 18 UTC: 33.1 S / 64.7 E, MAX WIND=035 KT, POST-TROPICAL DEPRESSION

2.B LONGER-RANGE OUTLOOK :

96H: 2017/02/14 18 UTC: 34.0 S / 64.4 E, MAX WIND=035 KT, POST-TROPICAL DEPRESSION

120H: 2017/02/15 18 UTC: 34.7 S / 65.7 E, MAX WIND=030 KT, LOW

## 2.C ADDITIONAL INFORMATION:

THE SYSTEM INTERACTS NOW WITH AN APPROACHING UPPER LEVEL TROUGH LOCATED TO ITS NEAR SOUTH-WEST. IT APPEARS THAT BAROCLINE PROCESSES ARE GRADUALLY TAKING OVER DIABATIC PROCESSES TO MAINTAIN THE LOW LEVEL DEPRESSION. THE STRONG CONVECTIVE BURST THAT OCCURRED EARLIER TODAY HAS MOSTLY DISSIPATED. ANALYSIS OF SURFACE WINDS FROM THE FEW LAST ASCAT ORBIT REVEALS A GRADUAL ASYMMETRICAL SURFACE CIRCULATION. BASED ON ALL ABOVE, THE SYSTEM IS NOW CLASSIFIED AS A POST-TROPICAL DEPRESSION.

EX-CARLOS KEEPS ON GOING SOUTH-EAST STEERED BY A MID-TROPOSPHERIC RIDGE IN THE NORTH-EAST AND A TROUGH COMING FROM THE MID-LATITUDES. A SLIGHTLY SLOWER MOTION IS SUGGESTED BY THE LAST FIX. FROM SUNDAY, CARLOS IS FORECASTED TO SLOW DOWN WITH THE ARRIVAL OF A LOW TO MID LEVEL RIDGE WHICH SHOULD MOVE SOUTH OF THE SYSTEM AND BLOCK CARLOS'S MOTION TOWARD THE MID-LATITUDES. SO THE SYSTEM SHOULD CURVE SLOWLY SOUTHWESTWARD THEN MOVE SOUTHWARD FROM MONDAY

EX-CARLOS MAY BENEFIT FROM THE DYNAMIC FORCING OF THE UPPER LEVEL TROUGH AND ITS ASSOCIATED JETSTREAK TO MAINTAIN ITS INTENSITY. SUNDAY, MODEL GUIDANCE SUGGESTS THAT CARLOS MAY SHIFT UNDER A CUT-OFF LOW. PROTECTED FROM THE ENVIRONMENTAL SHEAR, DEEP CONVECTION COULD DEVELOP AGAIN NEAR THE CENTER WITHIN THE LOW LEVEL WARM ANOMALY BUT WITH A CIRCULATION WHICH SHOULD BEGIN TO FILL UP.