

WTIO30 FMEE 151249

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

0.A WARNING NUMBER: 11/5/20162017

1.A TROPICAL CYCLONE 5 (DINEO)

2.A POSITION 2017/02/15 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 23.4 S / 36.3 E

(TWENTY THREE DECIMAL FOUR DEGREES SOUTH AND THIRTY SIX DECIMAL  
THREE DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 10 KT

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

4.A CENTRAL PRESSURE: 974 HPA

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

RADIUS OF MAXIMUM WINDS (RMW) :28 KM

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

28 KT NE: 280 SE: 280 SW: 330 NW: 190

34 KT NE: 170 SE: 220 SW: 150 NW: 90

48 KT NE: 90 SE: 100 SW: 80 NW: 60

64 KT NE: 40 SE: 40 SW: 40 NW: 40

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1008 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2017/02/16 00 UTC: 23.7 S / 34.5 E, MAX WIND=045 KT, INLAND

24H: 2017/02/16 12 UTC: 23.6 S / 32.8 E, MAX WIND=030 KT, INLAND

36H: 2017/02/17 00 UTC: 23.2 S / 30.7 E, MAX WIND=015 KT, INLAND

2.B LONGER-RANGE OUTLOOK :

2.C ADDITIONAL INFORMATION:

T=CI=4.5-

ON THE VISIBLE IMAGES OF THE LAST 3 HOURS, CONVECTION PRESENTS A NICE  
CURVED BANDING. DINEO HAS NOW REACHED THE TROPICAL CYCLONE STAGE.  
1000Z AMSR2 MW IMAGES CONFIRM THIS PATTERN AND ANALYSIS.

DINEO IS STILL HEADING WEST-SOUTH-WESTWARD ON THE NORTH-WESTERN EDGE OF A MID-LEVEL SUBTROPICAL RIDGE. THE CURRENT FORECAST TRACK PRESENTS A WESTWARD UPTURN LATER THAN EXPECTED BEFORE. THE LANDFALL ON THE MOZAMBIQUE COASTS IS STILL FORECAST AT AROUND 18UTC NORTH OF INHAMBANE, A BIT MORE SOUTH THAN INITIALLY ANTICIPATED.

THE GRADUALLY INTENSIFICATION SHOULD CONTINUE DURING THE NEXT HOURS BEFORE THE LANDFALL, GIVEN THE STILL CONDUCIVE UPPER ENVIRONMENT. ACCORDING TO THIS SCENARIO, DINEO IS A VERY DANGEROUS TROPICAL SYSTEM FOR THE INHAMBANE REGION. THE MOST INTENSE RAINFALLS ARE AWAITED IN THE EASTERN HALF OF THE SYSTEM, ONSHORE AS WELL AS INLAND.

THE STORM SURGE IS ESTIMATED AT 1M FOR THE MOZAMBIQUE COASTS. THIS SURGE COULD REACH 2M IN THE BAY OF INHAMBANE, AND EVEN LOCALLY 3M AT THE BOTTOM OF THE BAY. BEWARE THAT THIS VALUE DO NOT TAKE INTO ACCOUNT THE TIDE EFFECT NOR THE SET-UP OF THE SWELL. THE TOTAL STORM SURGE AMPLITUDE COULD THUS BE HIGHER AS THE HIGH TIDE (3M20) IS ALSO OCCURRING AT 1744Z.