

WTIO30 FMEE 101811

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 9/11/20182019

1.A TROPICAL CYCLONE 11 (IDAI)

2.A POSITION 2019/03/10 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 17.2 S / 43.2 E

(SEVENTEEN DECIMAL TWO DEGREES SOUTH AND  
FORTY THREE DECIMAL TWO DEGREES EAST)

MOVEMENT: EAST 3 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 1.0/6 H

4.A CENTRAL PRESSURE: 978 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: 190 SE: 190 SW: 200 NW: 170

34 KT NE: 100 SE: 100 SW: 140 NW: 100

48 KT NE: 60 SE: 60 SW: 70 NW: 60

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/03/11 06 UTC: 17.4 S / 43.3 E, VENT MAX= 080 KT, TROPICAL CYCLONE

24H: 2019/03/11 18 UTC: 18.2 S / 42.7 E, VENT MAX= 090 KT, INTENSE TROPICAL  
CYCLONE

36H: 2019/03/12 06 UTC: 18.9 S / 41.8 E, VENT MAX= 095 KT, INTENSE TROPICAL  
CYCLONE

48H: 2019/03/12 18 UTC: 19.4 S / 40.8 E, VENT MAX= 100 KT, INTENSE TROPICAL  
CYCLONE

60H: 2019/03/13 06 UTC: 19.7 S / 39.7 E, VENT MAX= 110 KT, INTENSE TROPICAL  
CYCLONE

72H: 2019/03/13 18 UTC: 19.9 S / 38.5 E, VENT MAX= 105 KT, INTENSE TROPICAL  
CYCLONE

2.B LONGER-RANGE OUTLOOK:

96H: 2019/03/14 18 UTC: 19.5 S / 36.2 E, VENT MAX= 090 KT, INTENSE TROPICAL  
CYCLONE

120H: 2019/03/15 18 UTC: 17.9 S / 34.6 E, VENT MAX= 050 KT, OVERLAND DEPRESSION

## 2.C ADDITIONAL INFORMATION:

T=CI=4.5-

DURING THE LAST 6 HOURS, THE SYSTEM HAS INTENSIFIED. IN INFRARED IMAGERY, AN EYE FEATURE IS APPEARED AT 1400Z. THE LAST IMAGERIES SHOW T-NUMBERS BETWEEN 5.5 AND 6. TO RESPECT DVORAK CONSTRAINT, CI IS ESTIMATED AT 4.5-. ACCORDING WITH THE TRADITIONAL IMAGERY, 1544Z 91 GHZ MICROWAVE IMAGERY SHOWS AN IMPROVING INTERNAL STRUCTURE WITH A CENTRAL RING OF CONVECTION WELL FORMED.

WITH THE WEAKENING OF THE NEAR-EQUATORIAL RIDGE AND THE STRENGTHENING OF THE SUBTROPICAL RIDGE, IDAI REMAINS IN CONDITIONS OF ALMOST NO GUIDING FLOW. IT IS NECESSARY TO WAIT TOMORROW FOR THE SYSTEM TO RESUME A SOUTHWESTWARD TRACK ACCELERATING STEERED BY THE SUBTROPICAL RIDGE. FROM WEDNESDAY, IDAI SHOULD BEND WESTWARD BEFORE TO MAKE LANDFALL OVER MOZAMBIQUE COASTLINES THURSDAY NIGHT. MODELS ARE IN GOOD AGREEMENT WITH THIS TRACK PHILOSOPHY. BUT MODELS APPREHEND WITH DIFFICULTY THE CURVE SOUTHWESTWARD LINKED TO THE STEERING FLOW CHANGING. SO, THE UNCERTAINTY ABOUT THE TIMING AND THE LOCATION OF THE LANDFALL IS HIGH.

ON THIS TRACK, ENVIRONMENTAL CONDITIONS ARE FAVORABLE FOR GRADUAL INTENSIFICATION. THE SYSTEM, SHOULD EVOLVE BENEATH THE UPPER LEVEL RIDGE WITH A WEAK VERTICAL WINDSHEAR AND A GOOD POLERWARD DIVERGENCE. OCEAN HEAT CONTENT IS VERY GOOD. THE PERIOD OF LIMITED DISPLACEMENT OVER THE NEXT 24 HOURS WILL HOWEVER CONSUME THE OCEAN'S ENERGY POTENTIAL AND WILL TEMPORARILY LIMIT THE INTENSIFICATION BEFORE THE RESUMPTION OF THE IDAI'S DISPLACEMENT. IN THESE CONDITIONS, THE LIKELIHOOD THAT A MATURE SYSTEM WITH A HIGH INTENSITY MAKES LANDFALL OVER MOZAMBIQUE IS VERY HIGH.