

WTIO30 FMEE 121819

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 17/11/20182019

1.A TROPICAL CYCLONE 11 (IDAI)

2.A POSITION 2019/03/12 AT 1800 UTC:

WITHIN 15 NM RADIUS OF POINT 19.1 S / 40.7 E
(NINETEEN DECIMAL ONE DEGREES SOUTH AND
FORTY DECIMAL SEVEN DEGREES EAST)
MOVEMENT: SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 5.0/5.0/S 0.0/6 H

4.A CENTRAL PRESSURE: 965 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 80 KT
RADIUS OF MAXIMUM WINDS (RMW): 11 KM

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

28 KT NE: 230 SE: 260 SW: 260 NW: 250
34 KT NE: 170 SE: 190 SW: 160 NW: 180
48 KT NE: 70 SE: 80 SW: 60 NW: 60
64 KT NE: 40 SE: 40 SW: 40 NW: 40

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 1000 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: NIL

1.B FORECASTS:

12H: 2019/03/13 06 UTC: 19.5 S / 39.7 E, VENT MAX= 090 KT, INTENSE TROPICAL
CYCLONE

24H: 2019/03/13 18 UTC: 19.8 S / 38.4 E, VENT MAX= 100 KT, INTENSE TROPICAL
CYCLONE

36H: 2019/03/14 06 UTC: 19.9 S / 37.0 E, VENT MAX= 110 KT, INTENSE TROPICAL
CYCLONE

48H: 2019/03/14 18 UTC: 19.8 S / 35.7 E, VENT MAX= 115 KT, INTENSE TROPICAL
CYCLONE

60H: 2019/03/15 06 UTC: 19.4 S / 34.2 E, VENT MAX= 050 KT, OVERLAND DEPRESSION

72H: 2019/03/15 18 UTC: 18.5 S / 33.8 E, VENT MAX= 030 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=5.0+

THE LAST MW IMAGES AVAILABLE (1309Z AND 1522Z SSMIS, 1515Z WINDSAT) ALLOW THE MONITORING OF THE LENGTHY EVOLUTION OF THE EYEWALL REPLACEMENT CYCLE (ERC). AS THE INNER EYEWALL REMAINS SOLID AND SEEMS TO BE THE MAIN MOTOR OF THE IMPROVEMENTS IN THE IR SAT PRESENTATION OVER THE LAST 12H, THE OUTER EYEWALL FINALLY CLOSED ITS WESTERN SEMI-CIRCLE AND BEGAN TO CONTRACT. THE INNER EYEWALL SHOULD THUS DISAPPEAR OVERNIGHT AND THIS ERC COULD BE COMPLETED BY TOMORROW MORNING.

IDAI MAINTAINS A SOUTHWESTWARDS TRACK THAT IS EXPECTED TO BEND GRADUALLY WESTWARDS FROM TOMORROW WITH THE STRENGTHENING INFLUENCE OF A SUBTROPICAL RIDGE LOCATED TO THE SOUTH-WEST OF THE SYSTEM. CONFIDENCE IN THE TRACK FORECAST REMAINS GOOD, AS THE MODEL DISPERSION IS LOW. THERE ARE APPROXIMATELY 3 CHANCES OUT OF 4 FOR THE LANDFALL POINT ON THE MOZAMBIKAN COAST TO BE BETWEEN CHINDE IN THE NORTH AND CHILOANE IN THE SOUTH, INCLUDING BEIRA'S AREA. THE LANDFALL SHOULD OCCUR BETWEEN THURSDAY NIGHT AND EARLY FRIDAY MORNING.

ALTHOUGH ENVIRONMENTAL CONDITIONS ARE EXPECTED TO REMAIN CONDUCIVE AND ABLE TO SUPPORT AN INTENSE SYSTEM UNTIL LANDFALL, THE INTENSITY FORECAST REMAINS CHALLENGING DUE TO THE ONGOING INNER CORE PROCESSES. MIMIC PRECIPITABLE WATER IMAGERY FROM CIMSS SHOWS SOME DRY AIR WRAPPING AROUND THE EASTERN OUTER CIRCULATION BUT WITH VERY LOW SHEAR OR MID-SHEAR EXPECTED, THIS DRY AIR SHOULD REMAIN OUTSIDE THE INNER CORE.

IDAI IS EXPECTED TO REGAIN ITS INTENSE TROPICAL CYCLONE STATUS AS IT NEARS THE MOZAMBIQUE COAST IN THE NEXT 24-48 HOURS. MAXIMUM INTENSITY HAS BEEN INCREASED AT 115 KT TAKING INTO ACCOUNT THE LAST INTENSITY GUIDANCE RUNS, THIS REPRESENTS A COMPROMISE BETWEEN THE ICNW DATA AT 95-100 KT AND THE FRENCH FINESCALE MODEL AROME THAT BRINGS THE SYSTEM TO 120-130 KT TOMORROW.

IDAI SHOULD BE A VERY DANGEROUS STORM AT THE TIME OF ITS LANDFALL AND THE INHABITANTS OF THE EXPECTED LANDFALL AREA ARE URGED TO FOLLOW OFFICIAL RECOMMENDATIONS AND MONITOR THE INFORMATION ISSUED BY THE MOZAMBIKAN NATIONAL WEATHER SERVICE. DANGEROUS STORM SURGE, EXCEEDING 3 METERS ARE LIKELY AT THE POINT OF LANDFALL AND TO ITS SOUTH. ON THE CURRENT FORECAST TRACK, STORM SURGE IN THE BEIRA AREA MAY REACH 2M (CAUTION: THIS VALUE DOES NOT TAKE INTO ACCOUNT THE TIDE AND THE SEA LEVEL RISE DUE TO THE CYCLONIC SWELL)