

WTIO30 FMEE 281256

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 20/4/20202021

1.A TROPICAL DEPRESSION 4 (CHALANE)

2.A POSITION 2020/12/28 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 20.4 S / 42.7 E

(TWENTY DECIMAL FOUR DEGREES SOUTH AND  
FORTY TWO DECIMAL SEVEN DEGREES EAST)

MOVEMENT: WEST-SOUTH-WEST 10 KT

3.A DVORAK ANALYSIS: 2.5/2.5/D 0.5/12 H

4.A CENTRAL PRESSURE: 1001 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 30 KT

RADIUS OF MAXIMUM WINDS (RMW): 65 KM

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

28 KT NE: 280 SE: 130 SW: 0 NW: 220

34 KT NE: 0 SE: 0 SW: 0 NW: 0

48 KT NE: 0 SE: 0 SW: 0 NW: 0

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2020/12/29 00 UTC: 20.2 S / 41.6 E, VENT MAX= 035 KT, MODERATE TROPICAL  
STORM

28 KT NE: 315 SE: 280 SW: 165 NW: 250

34 KT NE: 100 SE: 140 SW: 130 NW: 110

24H: 2020/12/29 12 UTC: 20.0 S / 40.0 E, VENT MAX= 040 KT, MODERATE TROPICAL  
STORM

28 KT NE: 335 SE: 295 SW: 165 NW: 250

34 KT NE: 120 SE: 165 SW: 140 NW: 110

36H: 2020/12/30 00 UTC: 19.8 S / 37.1 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 360 SE: 315 SW: 165 NW: 250

34 KT NE: 140 SE: 185 SW: 155 NW: 110

48 KT NE: 65 SE: 75 SW: 65 NW: 55

48H: 2020/12/30 12 UTC: 19.8 S / 34.4 E, VENT MAX= 035 KT, OVERLAND DEPRESSION

28 KT NE: 390 SE: 335 SW: 175 NW: 240

34 KT NE: 155 SE: 215 SW: 165 NW: 110

60H: 2020/12/31 00 UTC: 19.9 S / 32.3 E, VENT MAX= 030 KT, OVERLAND DEPRESSION  
28 KT NE: 405 SE: 350 SW: 165 NW: 240

2.B LONGER-RANGE OUTLOOK:  
NIL

2.C ADDITIONAL INFORMATION:

REMNANT LOW OF CHALANE HAS LEFT MADAGASCAR AND MOVED OUT TO SEA IN THE MOZAMBIQUE CHANNEL.

THE LAST ASCAT DATA OF 05H45UTC CONFIRM THE STAGE OF DT WITH WINDS OF THE ORDER OF 30KT IN THE EASTERN SEMICIRCLE AS WELL AS IN THE NORTH OF THE CIRCULATION.

OVER THE ENVIRONMENTAL CONDITIONS ARE FAVORABLE FOR DEVELOPMENT. LOCATED UNDER THE HIGH ALTITUDE RIDGE, OVER SEAS WITH A VERY FAVORABLE OCEANIC POTENTIAL THE SYSTEM BENEFITS FROM A GOOD SUPPLY OF MONSOON FLOW THAT GOES DOWN TO THE MIDDLE OF THE CHANNEL.

IF THERE IS A GOOD AGREEMENT ON THE EXPECTED DIRECTION OF MOVEMENT OF THE SYSTEM, WESTWARD ON THE NORTHERN EDGE OF THE LOW AND MIDDLE TROPOSPHERE RIDGE INSTALLED ON THE SOUTH SIDE OF THE CANAL.

THERE IS A NOTICEABLE DIFFERENCE IN SPEED OF MOVEMENT BETWEEN THE MODELS. THE LOWER YAWS OF TODAY ACCELERATE THE SYSTEM UNDER THE PREDOMINANT INFLUENCE OF A MEDIUM LEVEL STEERING FLOW.

NWP STILL DO NOT FULLY ANALYSE THE CURRENT INTENSITY OF THE SYSTEM, AND DIFFER A LOT IN THE LANDING TIMING AND IN THEIR INTENSITY FORECAST. THE PRESENCE IN PARTICULAR OF AN EASTERLY CONSTRAINT AT THE END OF THE PERIOD COULD HAVE A VARIABLE INFLUENCE DEPENDING ON THE SPEED OF WESTWARD MOVEMENT OF THE SYSTEM.

DESPITE THE UNCERTAINTY ABOUT THE TIMING, AND THE THREAT REPRESENTED BY THIS SYSTEM, THE INHABITANTS OF THE REGION AROUND BEIRA, FROM THE CITY OF CHINDE IN THE NORTH TO THE INHASSORO IN THE SOUTH, ARE INVITED TO KEEP THEMSELVES INFORMED ABOUT THE EVOLUTION OF THE SITUATION.