

WTIO30 FMEE 060629

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

0.A WARNING NUMBER: 1/2/20182019

1.A TROPICAL DISTURBANCE 2

2.A POSITION 2018/11/06 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 9.0 S / 60.5 E

(NINE DECIMAL ZERO DEGREES SOUTH AND SIXTY DECIMAL FIVE DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 2.0/2.0/D 0.5/24 H

4.A CENTRAL PRESSURE: 1004 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW) :74 KM

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1011 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : UNKNOWN

1.B FORECASTS:

12H: 2018/11/06 18 UTC: 9.7 S / 59.1 E, MAX WIND=030 KT, TROPICAL DEPRESSION

24H: 2018/11/07 06 UTC: 10.4 S / 57.7 E, MAX WIND=040 KT, MODERATE TROPICAL  
STORM

36H: 2018/11/07 18 UTC: 11.3 S / 56.4 E, MAX WIND=045 KT, MODERATE TROPICAL  
STORM

48H: 2018/11/08 06 UTC: 12.0 S / 55.4 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

60H: 2018/11/08 18 UTC: 12.9 S / 54.9 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

72H: 2018/11/09 06 UTC: 13.5 S / 54.8 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/11/10 06 UTC: 14.2 S / 54.6 E, MAX WIND=045 KT, MODERATE TROPICAL  
STORM

120H: 2018/11/11 06 UTC: 13.5 S / 53.5 E, MAX WIND=035 KT, MODERATE TROPICAL  
STORM

2.C ADDITIONAL INFORMATION:

T=CI=2.0+

OVER THE LAST 24 HOURS, CONVECTION BECAME PROGRESSIVELY MORE ORGANIZED AROUND A LOW-LEVEL SURFACE CIRCULATION. YESTERDAY EVENING AT 16Z, A SCATSAT SWATH SHOWED MAX WINDS REACHING 25KT IN THE SOUTHERN SEMI-CIRCLE AND 15/20KT IN THE NORTHERN SEMI-CIRCLE. THE LAST MW IMAGES, 0204Z SSMIS AND 0436Z GPM, ALSO SUGGEST A RATHER WELL-DEFINED CIRCULATION AT MID-LEVELS, ALTHOUGH SLIGHTLY TILTED WESTWARD COMPARED TO THE SURFACE VORTEX. MODEL AND CIMSS ANALYSIS SUGGEST A LIGHT EASTERLY CONSTRAINT IN THE UPPER LEVELS.

THE STEERING FLOW IS CURRENTLY LOCATED IN THE LOW LEVELS, WHICH DRIVE A RATHER QUICK SOUTH-WESTWARD MOTION. WITH AN INTENSIFYING SYSTEM, THE MID-LEVELS PATTERNS WILL TAKE OVER AND THE PROGRESSION OF THE STORM SHOULD BE EVENTUALLY BLOCKED BY A HIGH GEOPOTENTIAL AREA LOCATED IN THE SOUTH-WEST. THE TRACK WILL THUS BEGIN TO BEND SOUTHWARD THURSDAY BEFORE A SIGNIFICANT SLOWING FRIDAY EVENING. AT LATE TAUS, A MUCH WEAKER SYSTEM COULD BE TAKEN AWAY BY THE TRADE WINDS FLOW.

THE UPPER-LEVEL CONDITIONS WILL IMPROVE THIS EVENING, WITH THE DISAPPEARANCE OF THE VERTICAL WIND SHEAR AND THE GRADUAL STRENGTHENING OF A POLEWARD OUTFLOW CHANNEL. THEREFORE, THE SYSTEM IS FORECAST TO INTENSIFY FURTHER, AT A QUICKER PACE FROM TOMORROW. FROM FRIDAY, DRY AIR LOCATED IN THE WEST COULD BE BROUGHT CLOSER TO THE SYSTEM'S CORE BY A STRENGTHENING SOUTH-WESTERN WIND-SHEAR IN THE MID AND UPPER LEVELS. THE STORM SHOULD THEN BEGIN TO WEAKEN. WITH THE QUASI-COMPLETE STOP FORECAST FRIDAY EVENING, THE UNDERLYING WATERS WILL BE COOLED QUICKLY AND PARTICIPATE TO THE WEAKENING.