

WTIO30 FMEE 051840

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 6/8/20182019

1.A MODERATE TROPICAL STORM 8 (FUNANI)

2.A POSITION 2019/02/05 AT 1800 UTC:

WITHIN 20 NM RADIUS OF POINT 16.2 S / 64.4 E

(SIXTEEN DECIMAL TWO DEGREES SOUTH AND  
SIXTY FOUR DECIMAL FOUR DEGREES EAST)

MOVEMENT: SOUTH-WEST 6 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 0.5/6 H

4.A CENTRAL PRESSURE: 998 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW): 56 KM

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

28 KT NE: 150 SE: 190 SW: 110 NW: 90

34 KT NE: 70 SE: 110 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS:

12H: 2019/02/06 06 UTC: 17.1 S / 64.0 E, VENT MAX= 045 KT, MODERATE TROPICAL  
STORM

24H: 2019/02/06 18 UTC: 18.1 S / 64.6 E, VENT MAX= 050 KT, MODERATE TROPICAL  
STORM

36H: 2019/02/07 06 UTC: 19.4 S / 65.5 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

48H: 2019/02/07 18 UTC: 21.4 S / 67.2 E, VENT MAX= 065 KT, TROPICAL CYCLONE

60H: 2019/02/08 06 UTC: 23.5 S / 69.0 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

72H: 2019/02/08 18 UTC: 26.8 S / 72.0 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK:

96H: 2019/02/09 18 UTC: 34.7 S / 75.8 E, VENT MAX= 050 KT, POST-TROPICAL  
DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=3.0

OVER THE LAST 6 HOURS, CONVECTION HAS INCREASED SIGNIFICANTLY AROUND  
THE CENTRE, LEAVING A CURVED BAND PATTERN. AT 16UTC, THE MAURITIAN  
METEOROLOGICAL SERVICE NAMED THE MODERATE TROPICAL STORM FUNANI. IN

THE ABSENCE OF AN ASCAT SWATH OVER THE SYSTEM, IT IS NOT POSSIBLE TO ESTIMATE EXACTLY THE MAXIMUM WINDS BUT THE DVORAK ANALYSIS OF 3.0 ALLOWS TO VALIDATE WINDS OF ABOUT 35KT OR EVEN MORE, IN VIEW OF THE 1700UTC AMSU-B SWATH.

THE NUMERICAL MODELS ARE ALWAYS IN GOOD AGREEMENT ON TRACK PREDICTION, CORRECTLY REPRESENTING THE SYNOPTIC CONFIGURATION. THE MODERATE TROPICAL STORM FUNANI THEREFORE MAINTAINS A SOUTHWESTERLY TRACK FOR ANOTHER 6 HOURS BEFORE STARTING A SOUTH-EASTERLY TURN FOLLOWING THE SHIFTING OF THE LOW/MID LEVEL RIDGE TO THE EAST. THE DEEP MID-LATITUDES TROUGH THUS OPENS AN EVACUATION CHANNEL TO THE SOUTH-EAST FROM THURSDAY BY ENCOURAGING THE ACCELERATION OF FUNANI WHICH HEADING TOWARDS THE MID-LATITUDES.

ON THIS TRACK, ATMOSPHERIC AND OCEANIC ENVIRONMENTAL CONDITIONS ARE RATHER GOOD UNTIL THURSDAY. LOW LEVEL EQUATORWARD FEEDING REMAINS VERY GOOD AND VERTICAL WINDSHEAR IS WEAK. HOWEVER, WITH FAIRLY LARGE MAXIMUM WIND EXTENSIONS AND A FAIRLY MARKED ASYMMETRY BETWEEN THE EASTERN AND WESTERN SEMI-CIRCLE, THE INTENSIFICATION CAN ONLY BE GRADUAL. FROM THURSDAY 18UTC PASSING SOUTH OF 20°S, THE WESTERN VERTICAL WINDSHEAR AHEAD THE UPPER LEVEL TROUGH SHOULD BECOME MODERATE TO STRONG AND WEAKEN THE SYSTEM. FROM THE END OF THE WEEK, THE SYSTEM SHOULD LOOSE ITS PURELY TROPICAL CHARACTERISTICS AS IT INTERACTS WITH THE SUBTROPICAL JET.