

WTIO30 FMEE 220106

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

0.A WARNING NUMBER: 23/4/20182019

1.A SEVERE TROPICAL STORM 4 (KENANGA)

2.A POSITION 2018/12/22 AT 0000 UTC:

WITHIN 30 NM RADIUS OF POINT 16.5 S / 78.6 E

(SIXTEEN DECIMAL FIVE DEGREES SOUTH AND SEVENTY EIGHT DECIMAL SIX DEGREES EAST)

MOVEMENT : WEST-SOUTH-WEST 4 KT

3.A DVORAK ANALYSIS: 3.0/3.5/W 1.0/24 H

4.A CENTRAL PRESSURE: 988 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 50 KT

RADIUS OF MAXIMUM WINDS (RMW) :46 KM

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

28 KT NE: 230 SE: 460 SW: 320 NW: 230

34 KT NE: 150 SE: 220 SW: 220 NW: 150

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

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/22 12 UTC: 17.3 S / 77.4 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

24H: 2018/12/23 00 UTC: 18.0 S / 76.6 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

36H: 2018/12/23 12 UTC: 18.7 S / 75.6 E, MAX WIND=030 KT, FILLING UP

48H: 2018/12/24 00 UTC: 19.5 S / 74.8 E, MAX WIND=030 KT, FILLING UP

60H: 2018/12/24 12 UTC: 20.7 S / 74.1 E, MAX WIND=025 KT, FILLING UP

72H: 2018/12/25 00 UTC: 22.0 S / 74.0 E, MAX WIND=020 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK :

2.C ADDITIONAL INFORMATION:

T=3.0-;CI=3.5

CLOUD TOPS CONTINUED TO SIGNIFICANTLY WARM UP AND THE LOW LEVEL

CLOUD VORTEX IS VISIBLE IN THE NORTHEASTERN QUADRANT. GIVEN THESE CONDITIONS, THE DVORAK ESTIMATES ARE BECOMING LESS RELIABLE AS THE CONVECTIVE BURSTS DO NOT SHOW ANY RECOGNIZABLE PATTERN. THE 2012Z AMSR2 MW IMAGES THUS SHOW A FRAGMENTED CURVED BAND WRAPING AROUND AN INNER-CORE THAT REMAINS RATHER WELL-ORGANIZED FOR NOW IN THE LOWER LEVELS (37GHZ CANAL).

HIGH SUBTROPICAL GEOPOTENTIALS MAINTAIN KENANGA'S WESTWARD MOTION OVER THE NEXT FEW HOURS. FROM TODAY, WITH THE GRADUAL EASTWARD SHIFT OF THE RIDGE, THE TRACK SHOULD BEGIN TO CURVE SOUTHWESTWARD. ALL AVAILABLE MODELS ARE IN GOOD AGREEMENT ON THIS PHILOSOPHY UNTIL MONDAY. THEN, THE DISPERSION OF THE AVAILABLE GUIDANCES INCREASES AS CERTAIN MODELS SUGGEST A SOUTHWARD MOTION OF THE RESIDUAL LOW WHILE OTHERS KEEP ON GOING SOUTHWESTWARDS.

ENVIRONMENTAL CONDITIONS DETERIORATE WITH A MODERATE SOUTHWESTERLY TO SOUTHERLY WINDSHEAR IN THE MID-LEVELS. DRY AIR WRAPPING AROUND THE SYSTEM ALSO CONTRIBUTES SIGNIFICANTLY TO THE WEAKENING OF KENANGA. IN LATER TAUS, THE PRESENCE OF COLD WATER SOUTH OF 18S SHOULD LIMIT ANY RISK OF REINTENSIFICATION. KENANGA IS EXPECTED TO SLOWLY FILL-UP DURING THE BEGINNING OF NEXT WEEK.