

WTIO30 FMEE 181226

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

0.A WARNING NUMBER: 9/4/20182019

1.A TROPICAL CYCLONE 4 (KENANGA)

2.A POSITION 2018/12/18 AT 1200 UTC:

WITHIN 25 NM RADIUS OF POINT 14.9 S / 83.7 E

(FOURTEEN DECIMAL NINE DEGREES SOUTH AND EIGHTY THREE DECIMAL SEVEN DEGREES EAST)

MOVEMENT : SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 5.0/5.0/D 1.0/12 H

4.A CENTRAL PRESSURE: 968 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 80 KT

RADIUS OF MAXIMUM WINDS (RMW) :50 KM

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

28 KT NE: 220 SE: 560 SW: 370 NW: 190

34 KT NE: 170 SE: 350 SW: 260 NW: 150

48 KT NE: 110 SE: 170 SW: 200 NW: 110

64 KT NE: 80 SE: 110 SW: 110 NW: 80

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/19 00 UTC: 16.1 S / 82.3 E, MAX WIND=085 KT, TROPICAL CYCLONE

24H: 2018/12/19 12 UTC: 16.6 S / 81.5 E, MAX WIND=080 KT, TROPICAL CYCLONE

36H: 2018/12/20 00 UTC: 16.7 S / 80.9 E, MAX WIND=070 KT, TROPICAL CYCLONE

48H: 2018/12/20 12 UTC: 16.7 S / 80.0 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

60H: 2018/12/21 00 UTC: 16.6 S / 79.1 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

72H: 2018/12/21 12 UTC: 16.9 S / 78.2 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/12/22 12 UTC: 17.8 S / 76.8 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

120H: 2018/12/23 12 UTC: 18.8 S / 75.1 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

2.C ADDITIONAL INFORMATION:

T=CI=5.0

OVER THE LAST SIX HOURS, KANANGA CLOUD PATTERN HAS EVOLVED PROGRESSIVELY TOWARD AN ANNULAR CYCLONE. VISIBLE IMAGERY SHOW A LARGE EYE MORE AND MORE WELL-DEFINED.

NO CHANGE IN TRACK FORECAST : KENANGA IS EXPECTED TO MAINTAIN ITS SOUTHWEST TRACK UNTIL TOMORROW. WEDNESDAY EVENING, THE SYSTEM SHOULD BEND WESTWARD STEERING BY A LOW/MID LEVEL MOBILE RIDGE THAT IS EXPECTED TO TRANSIT SOUTH OF KENANGA. FROM SATURDAY, WITH THE EASTWARD SHIFTING OF THE RIDGE, KENANGA SHOULD CURVE PROGRESSIVELY SOUTHWESTWARD. ENSEMBLE AND DETERMINISTIC MODELS ARE IN GOOD AGREEMENT WITH THIS SCENARIO BUT FROM SATURDAY UNCERTAINTY IS INCREASING DUE TO A LATITUDE GAP. CURRENTLY FORECAST IS BASED ON A CONSENSUS OF GFS AND ECMWF DETERMINISTIC MODELS

ON THIS TRACK, KENANGA MOVES TOWARD THE UPPER LEVEL RIDGE AXIS AND SHOULD BENEFIT FROM A WEAK VERTICAL WINDSHEAR. BUT WITHOUT STRONG UPPER LEVEL OUTFLOW, THE INTENSIFICATION IS LIMITED AT THE UPPER STAGE OF TROPICAL CYCLONE. FROM THURSDAY, UPPER LEVEL CONDITIONS ARE EXPECTED TO DETERIORATE WITH A MODERATE WESTERLY CONSTRAINT LEADING TO A WEAKENING OF THE SYSTEM. AT LONGER RANGE, IN CASE OF A TRACK SOUTH OF 18S, THE OCEANIC POTENTIAL COULD BECOME INSUFFICIENT AND LEAD TO A STRONGER WEAKENING.