

WTIO30 FMEE 161356

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

0.A WARNING NUMBER: 1/4/20182019

1.A MODERATE TROPICAL STORM 4 (KENANGA)

2.A POSITION 2018/12/16 AT 1200 UTC:

WITHIN 25 NM RADIUS OF POINT 10.5 S / 90.4 E

(TEN DECIMAL FIVE DEGREES SOUTH AND NINETY DECIMAL FOUR DEGREES EAST)

MOVEMENT : SOUTH-WEST 8 KT

3.A DVORAK ANALYSIS: 3.0/3.0/D 1.0/24 H

4.A CENTRAL PRESSURE: 996 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 40 KT

RADIUS OF MAXIMUM WINDS (RMW) :37 KM

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

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

34 KT NE: 60 SE: 60 SW: 60 NW: 60

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 900 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/17 00 UTC: 11.7 S / 88.9 E, MAX WIND=050 KT, SEVERE TROPICAL STORM

24H: 2018/12/17 12 UTC: 12.9 S / 87.1 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

36H: 2018/12/18 00 UTC: 13.9 S / 85.6 E, MAX WIND=065 KT, TROPICAL CYCLONE

48H: 2018/12/18 12 UTC: 15.0 S / 84.1 E, MAX WIND=070 KT, TROPICAL CYCLONE

60H: 2018/12/19 00 UTC: 15.8 S / 83.0 E, MAX WIND=065 KT, TROPICAL CYCLONE

72H: 2018/12/19 12 UTC: 16.3 S / 82.0 E, MAX WIND=055 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :

96H: 2018/12/20 12 UTC: 16.5 S / 80.2 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

120H: 2018/12/21 12 UTC: 16.8 S / 78.1 E, MAX WIND=030 KT, TROPICAL DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=3.0+

OVER THE PAST HOURS, DESPITE THE PERSISTENCE OF THE STRONG EASTERLY WIND SHEAR, THE CIRCULATION FORMED SEVERAL DAYS AGO, HAS SLOWLY INTENSIFIED AND WAS NAMED KENANGA AT 12Z YESTERDAY, BY JAKARTA TCWC.

SINCE, KENANGA HAS STARTED TO ACCELERATE SOUTH-WESTWARD, ALLOWING A DIMINUITION OF THE SHEAR DETRIMENTAL EFFECTS. LAST MICROWAVE CONFIRM THAT THE CENTER IS RELOCATING UNDER THE CONVECTION. THEREFORE, CURRENT INTENSITY (40KT) MAY BE TOO CONSERVATIVE. 12Z POSITION IS ALSO UNCERTAIN DUE TO THE LACK OF RELIABLE DATA, AND COULD BE IN REALITY CLOSER TO 90E.

KENANGA STARTED ITS ACCELERATION SOUTHWESTWARD DUE TO THE ABSENCE OF A STRONG RIDGE, AT SOUTH. BY WEDNESDAY, IN RELATION WITH A WEAKENING PHASE, THE TRACK IS FORECAST TO SLOW DOWN, AND BEND MORE WESTWARD.

FOR ITS INTENSITY, GIVEN THE RECENT TREND AND THE EXPECTED ENVIRONMENT IMPROVEMENT, KENANGA IS LIKELY TO CONTINUE TO INTENSIFY. A RAPID INTENSIFICATION (+30KT IN 24H) IS POSSIBLE. OCEANIC POTENTIAL AND GOOD UPPER DIVERGENCE ON THE FORECAST TRACK SHOULD BE SUFFICIENT TO ALLOW THE SYSTEM TO REACH TROPICAL CYCLONE STAGE. ON TUESDAY AND MOSTLY WEDNESDAY, THE WEST-NORTH-WESTERLY VWS IS FORECAST TO INCREASE SIGNIFICANTLY, NEAR THE SUBTROPICAL WESTERLY JET. WITH A VERY DRY AIR MASS SURROUNDING THE MINIMUM, THE CONSTRAINT IS EXPECTED THUS TO LEAD TO A STRONG WEAKENING.