

WTIO30 FMEE 211219

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

0.A WARNING NUMBER: 21/4/20182019

1.A SEVERE TROPICAL STORM 4 (KENANGA)

2.A POSITION 2018/12/21 AT 1200 UTC:

WITHIN 21 NM RADIUS OF POINT 16.2 S / 79.2 E

(SIXTEEN DECIMAL TWO DEGREES SOUTH AND SEVENTY NINE DECIMAL TWO DEGREES EAST)

MOVEMENT : WEST 6 KT

3.A DVORAK ANALYSIS: 3.5/4.0/W 1.0/12 H

4.A CENTRAL PRESSURE: 982 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 60 KT

RADIUS OF MAXIMUM WINDS (RMW) :56 KM

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

28 KT NE: 220 SE: 430 SW: 330 NW: 220

34 KT NE: 150 SE: 220 SW: 240 NW: 150

48 KT NE: 90 SE: 110 SW: 110 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1006 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:

12H: 2018/12/22 00 UTC: 16.6 S / 77.9 E, MAX WIND=045 KT, MODERATE TROPICAL STORM

24H: 2018/12/22 12 UTC: 17.2 S / 76.9 E, MAX WIND=040 KT, MODERATE TROPICAL STORM

36H: 2018/12/23 00 UTC: 17.8 S / 75.9 E, MAX WIND=035 KT, MODERATE TROPICAL STORM

48H: 2018/12/23 12 UTC: 18.3 S / 75.2 E, MAX WIND=030 KT, REMNANT LOW

60H: 2018/12/24 00 UTC: 19.1 S / 74.4 E, MAX WIND=030 KT, REMNANT LOW

72H: 2018/12/24 12 UTC: 20.3 S / 73.7 E, MAX WIND=025 KT, REMNANT LOW

2.B LONGER-RANGE OUTLOOK :

2.C ADDITIONAL INFORMATION:

T=3.5+ CI=4.0+

THE CLOUD PATTERN IS STILL AN EMBEDDED CENTER WITH A VERY FLUCTUATING CONVECTIVE ACTIVITY OVER THE LAST 6 HOURS. A SHEAR CONFIGURATION INITIATION MAY APPEAR IN THE LAST MOMENTS DUE TO MODERATE WEST-SOUTHWEST VERTICAL WINDSHEAR ACCORDING TO CIMMS DATA. THE MIMIC-TPW DATA ALLOW US TO NOTE THE PRESENCE OF DRY AIR IN THE NORTHWESTERN SECTOR WHICH IS WRAPPED AROUND THE SYSTEM AND SHOULD ALLOW IT TO ENTER IT SOON. DUE THE DVORAK ANALYSIS, KENANGA BECOME A STRONG TROPICAL STORM WITH ESTIMATED WINDS OF 60 KT.

NO CHANGE IN FORECASTING: HIGH SUBTROPICAL GEOPOTENTIALS MAINTAIN THE KENANGA'S TRACK A WESTWARD OVER THE NEXT FEW HOURS. HOWEVER, WITH THE GRADUAL EASTWARD SHIFT OF THE RIDGE, THE SYSTEM IS MOVING MORE CLEARLY TO THE SOUTHWEST FROM SATURDAY. ALL THE MODELS ARE IN GOOD AGREEMENT ON THE TRACK'S APPEARANCE BUT DIFFER A LITTLE BIT ON THE SPEED. THE TRACK FORECAST IS BASED ON A CONSENSUS OF THE MAIN MODELS, TAKING INTO ACCOUNT THE MAINTENANCE OF THE MORE WESTERLY TRAJECTORY PROPOSED BY IFS MODEL.

ALTITUDE CONDITIONS DEGRADE WITH A WEAK TO MODERATE WEST-SOUTHWEST THEN SOUTHWEST WINDSHEAR IN AVERAGE TROPOSPHERE. THE DRY AIR SUPPLY FROM THE NORTHWESTERN SECTOR, WHICH WRAPS AROUND THE SYSTEM, CONTRIBUTES TO SIGNIFICANTLY WEAKENING KENANGA TODAY AND TOMORROW. IN THE LONGER TERM, THE PRESENCE OF COLD WATER SOUTH OF 18S SHOULD LIMIT ANY RISK OF REINTENSIFICATION. KENANGA IS EXPECTED TO DISAPPEAR SLOWLY FROM SUNDAY.