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

0.A WARNING NUMBER: 12/4/20182019
1.A INTENSE TROPICAL CYCLONE 4 (KENANGA)

2.A POSITION 2018/12/19 AT 0600 UTC:
WITHIN 15 NM RADIUS OF POINT 16.2 S / 82.5 E
(SIXTEEN DECIMAL TWO DEGREES SOUTH AND EIGHTY TWO DECIMAL FIVE DEGREES EAST)
MOVEMENT : SOUTH-WEST 5 KT

3.A DVORAK ANALYSIS: 6.0/6.0/D 1.0/6 H

4.A CENTRAL PRESSURE: 942 HPA
5.A MAX AVERAGE WIND SPEED (10 MN): 100 KT
RADIUS OF MAXIMUM WINDS (RMW) :37 KM

6.A EXTENSION OF WIND BY QUADRANTS (KM):
28 KT NE: 220 SE: 460 SW: 560 NW: 220
34 KT NE: 150 SE: 310 SW: 310 NW: 150
48 KT NE: 120 SE: 140 SW: 140 NW: 120
64 KT NE: 90 SE: 90 SW: 90 NW: 90

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 400 KM
8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION : DEEP

1.B FORECASTS:
12H: 2018/12/19 18 UTC: 16.6 S / 81.9 E, MAX WIND=100 KT, INTENSE TROPICAL CYCLONE
24H: 2018/12/20 06 UTC: 16.8 S / 81.2 E, MAX WIND=090 KT, INTENSE TROPICAL CYCLONE
36H: 2018/12/20 18 UTC: 16.8 S / 80.5 E, MAX WIND=085 KT, TROPICAL CYCLONE
48H: 2018/12/21 06 UTC: 16.8 S / 79.6 E, MAX WIND=080 KT, TROPICAL CYCLONE
60H: 2018/12/21 18 UTC: 17.0 S / 78.8 E, MAX WIND=070 KT, TROPICAL CYCLONE
72H: 2018/12/22 06 UTC: 17.4 S / 78.5 E, MAX WIND=060 KT, SEVERE TROPICAL STORM

2.B LONGER-RANGE OUTLOOK :
96H: 2018/12/23 06 UTC: 18.3 S / 78.0 E, MAX WIND=040 KT, MODERATE TROPICAL STORM
120H: 2018/12/24 06 UTC: 19.7 S / 77.1 E, MAX WIND=030 KT, FILLING UP

2.C ADDITIONAL INFORMATION:
T=CI=6.0

IN TERM OF DVORAK ANALYSIS, KENANGA'S EYE HAS NOW CONTRACTED ENOUGH TO ALLOW FOR POSITIVE EYE ADJUSTMENTS. CONSEQUENTLY, THE CURRENT INTENSITY HAS BEEN INCREASED. THE DVORAK ESTIMATION IS IN GOOD AGREEMENT WITH THE OBJECTIVE AND SUBJECTIVE ESTIMATES AVAILABLE. THE 0057Z SSMIS MW IMAGES STILL SHOW A SOLID ANNULAR INNER CORE. OVER THE LAST HOUR, DRY AIR BEGAN TO WEAKEN THE CONVECTION IN THE SOUTH-EASTERN QUADRANT.

KENANGA SHOULD BUMP INTO SUBTROPICAL HIGH GEOPOTENTIALS BY TONIGHT AND ITS TRACK SHOULD BEGIN TO BEND WESTWARD. WITH THE EASTWARD SHIFT OF THE HIGH OVER THE PERIOD, THE SYSTEM SHOULD THEN TURN SOUTH-WESTWARD FROM FRIDAY. THE MAIN NWP GUIDANCES ARE MAINLY IN GOOD AGREEMENT WITH THIS SCENARIO, BUT UNCERTAINTY REMAINS CONCERNING THE TIMING OF THE SOUTHWESTWARD TURN. THIS TRACK FORECAST IS BASED ON THE MAIN GUIDANCES CONSENSUS, WITH LITTLE IMPORTANCE GIVEN TO IFS AND ITS WESTWARD TRACK.

ALBEIT DRY AIR IS WRAPPING AROUND THE SYSTEM, CONDITIONS SHOULD ALLOW KENANGA TO MAINTAIN ITS INTENSITY OVER THE NEXT 18 HOURS. AN EYEWALL REPLACEMENT CYCLE IS POSSIBLE OVER THE NEXT HOURS, BUT THIS RISK REMAINS MODERATE ACCORDING TO CIMSS DEDICATED MODEL (.40 PROBABILITY). THE, THE UPPER CONDITIONS SHOULD DETERIORATE WITH A WEAK TO MODERATE WESTERLY SHEAR ESTABLISHING IN THE SOUTH OF THE SYSTEM, ACCOMPANIED BY DRY AIR INTRUSION AND A DECREASE IN OCEAN HEAT POTENTIAL. THE MODELS WITH THE BEST INTENSITY ANALYSIS FORECAST A RELATIVELY WEAK AND GRADUAL WEAKENING. THE ICNW INTENSITY CONSENSUS IS WELL REPRESENTING THIS SCENARIO. THE RSMC FORECAST IS BASED ON THIS CONSENSUS.