

WTIO30 FMEE 171227

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

0.A WARNING NUMBER: 16/4/20212022

1.A TROPICAL DISTURBANCE 4 (DUMAKO)

2.A POSITION 2022/02/17 AT 1200 UTC:

WITHIN 30 NM RADIUS OF POINT 17.3 S / 39.6 E

(SEVENTEEN DECIMAL THREE DEGREES SOUTH AND  
THIRTY NINE DECIMAL SIX DEGREES EAST)

MOVEMENT: WEST 9 KT

3.A DVORAK ANALYSIS: 1.5/1.5/S 0.0/0 H

4.A CENTRAL PRESSURE: 1004 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 25 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

NIL

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1009 HPA / 400 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2022/02/18 00 UTC: 17.2 S / 37.8 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

24H: 2022/02/18 12 UTC: 17.0 S / 35.9 E, VENT MAX= 015 KT, OVERLAND DEPRESSION

36H: 2022/02/19 00 UTC: 16.4 S / 34.3 E, VENT MAX= 015 KT, OVERLAND DEPRESSION

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=1.5

SINCE THE STOP OF THE MONITORING OF DUMAKO ON 16/02 AT 00UTC, THE SYSTEM FIRST TRANSITED OVER MADAGASCAR THEN WENT OUT AT SEA TO TRANSIT IN GENERAL DIRECTION OF THE WEST ON THE CHANNEL TOWARDS THE LATITUDE 17S. EVOLVING IN THE FORM OF A DISTURBED ZONE WITH A STILL RATHER STRONG CONVECTIVE ACTIVITY DURING ITS ARRIVAL ON SEA, THE CLOUDY

CONFIGURATION OF DUMAKO DEGRADED NOTICEABLY DURING THE NIGHT OF WEDNESDAY TO THURSDAY. DURING THE DAY OF THIS THURSDAY, THE CONVECTIVE ACTIVITY RESUMED A CURVED BAND PATTERN WEAKENING AGAIN DURING THE LAST MOMENTS. THE ASCAT SWATH OF 0603UTC ALLOWED TO LOCATE THE CENTER OF DUMAKO RATHER IN THE NORTHERN PERIPHERY OF THE CONVECTIVE ACTIVITY AND THUS SHOWED WINDS OF 25KT IN THE SOUTHERN PART OF THE SYSTEM, LOCALLY 30KT UNDER THE STRONGEST CONVECTION. UNDER THE EFFECT OF THE SHEAR, THE CONVECTION IS CURRENTLY DEPORTED IN THE SOUTHERN SECTOR OF THE SYSTEM, LEAVING A DVORAK ANALYSIS HARDLY REACHING 1.5

IN TERMS OF TRACK, DUMAKO IS BEING DRIVEN BY THE RIDGE OVER SOUTHERN AFRICA LEADING TO A LANDING IN THE NEXT 12 HOURS ON THE COAST OF MOZAMBIQUE, NORTH OF QUELIMANE. ONCE ON LAND, DUMAKO WILL CONTINUE ITS TRACK TOWARDS THE WEST.

BENEFITING FROM A WELL-DEFINED LOW LEVEL SUPPLY, DUMAKO IS HOWEVER AFFECTED BY A MODERATE WIND SHEAR WHICH IS INCREASING AS IT APPROACHES THE MOZAMBICAN COAST. THE POTENTIAL OF INTENSIFICATION IS THEN LIMITED AND CAN REACH 30KT. THIS JUSTIFIES THE RESUMPTION OF THE MONITORING JUST BEFORE ITS LANDING. THEREAFTER, THE INTENSITY WILL QUICKLY WEAKEN ON LAND, THE VORTEX OF LOW LAYERS NOT BEING STRONG ENOUGH TO MAINTAIN ITSELF.

EXPECTED IMPACTS ON MOZAMBIQUE :

- THE DETERIORATION OF THE METEOROLOGICAL CONDITIONS IS ESSENTIALLY RAINY ON THE MOZAMBICAN COAST. HEAVY RAINS ARE EXPECTED DURING THE LANDING OF DUMAKO IN THE NORTH OF QUELIMANE AREA. CUMULATIVE RAINFALL OF ABOUT 150MM OVER 12 HOURS IS LIKELY AND WILL PERSIST UNTIL SATURDAY OVER QUELIMANE AREA AND WILL REACH BEIRA AREA DURING THE NIGHT FROM FRIDAY TO SATURDAY.
- THE THRESHOLD OF THE GALE FORCE SHOULD BE FELT ALONG THE COASTS.
- THE POPULATION OF THESE REGIONS IS ASKED TO KEEP INFORMED OF THE SITUATION.

THIS SYSTEM DOES NOT WARRANT REGULAR ADVISORY. NEXT ADVISORY AT 00UTC UNLESS FURTHER INTENSIFICATION IS NOTED.