

WTIO30 FMEE 201821

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 21/7/20202021

1.A MODERATE TROPICAL STORM 7 (ELOISE)

2.A POSITION 2021/01/20 AT 1800 UTC:

WITHIN 30 NM RADIUS OF POINT 15.7 S / 45.1 E

(FIFTEEN DECIMAL SEVEN DEGREES SOUTH AND
FORTY FIVE DECIMAL ONE DEGREES EAST)

MOVEMENT: WEST 12 KT

3.A DVORAK ANALYSIS: 2.5/2.5/S 0.0/0 H

4.A CENTRAL PRESSURE: 996 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 35 KT

RADIUS OF MAXIMUM WINDS (RMW): NIL

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

28 KT NE: 280 SE: 0 SW: 0 NW: 315

34 KT NE: 150 SE: 0 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1005 HPA / 500 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2021/01/21 06 UTC: 16.8 S / 42.9 E, VENT MAX= 045 KT, MODERATE TROPICAL
STORM

28 KT NE: 280 SE: 65 SW: 85 NW: 280

34 KT NE: 120 SE: 35 SW: 75 NW: 55

24H: 2021/01/21 18 UTC: 17.6 S / 40.9 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 280 SE: 270 SW: 195 NW: 220

34 KT NE: 110 SE: 165 SW: 150 NW: 85

48 KT NE: 65 SE: 95 SW: 95 NW: 35

36H: 2021/01/22 06 UTC: 18.5 S / 38.8 E, VENT MAX= 070 KT, TROPICAL CYCLONE

28 KT NE: 325 SE: 285 SW: 220 NW: 185

34 KT NE: 175 SE: 185 SW: 165 NW: 175

48 KT NE: 65 SE: 95 SW: 100 NW: 45

64 KT NE: 35 SE: 35 SW: 30 NW: 35

48H: 2021/01/22 18 UTC: 19.5 S / 36.8 E, VENT MAX= 085 KT, TROPICAL CYCLONE

28 KT NE: 335 SE: 285 SW: 240 NW: 150

34 KT NE: 175 SE: 195 SW: 195 NW: 140

48 KT NE: 100 SE: 100 SW: 100 NW: 75

64 KT NE: 55 SE: 65 SW: 45 NW: 65

60H: 2021/01/23 06 UTC: 20.4 S / 34.9 E, VENT MAX= 095 KT, INTENSE TROPICAL CYCLONE

28 KT NE: 325 SE: 295 SW: 165 NW: 150

34 KT NE: 175 SE: 205 SW: 140 NW: 140

48 KT NE: 110 SE: 100 SW: 75 NW: 95

64 KT NE: 65 SE: 65 SW: 55 NW: 75

72H: 2021/01/23 18 UTC: 21.5 S / 33.5 E, VENT MAX= 035 KT, OVERLAND DEPRESSION

28 KT NE: 260 SE: 155 SW: 55 NW: 95

34 KT NE: 140 SE: 120 SW: 45 NW: 35

2.B LONGER-RANGE OUTLOOK:

96H: 2021/01/24 18 UTC: 23.0 S / 30.9 E, VENT MAX= 025 KT, OVERLAND DEPRESSION

120H: 2021/01/25 18 UTC: 22.5 S / 27.8 E, VENT MAX= 020 KT, OVERLAND DEPRESSION

2.C ADDITIONAL INFORMATION:

T=CI=205+.

SATELLITE IMAGERY AND SURFACE OBSERVATIONS (METAR DE MAJUNGA) SHOW THAT THE CENTER OF ELOISE IS NOW OVER SEAS NEAR THE NORTHWESTERN COAST OF MADAGASCAR. MOREOVER THE CURVATURE OF THE CONVECTIVE BANDS HAS BEEN CLEARLY INCREASED, WITH VERY COLD TEMPERATURES (-85/-88) REFLECTING A PROBABLE STRENGTHENING OF THE CIRCULATION. THE INTENSITY IS INCREASED TO 35 KT WITH GALE FORCE WINDS IN THE NORTHEASTERN QUADRANT IN THE 17UTC ASACT DATA.

THE SYSTEM SHOULD RESUME A WEST-SOUTHWEST TRACK WHICH WILL MAKE IT SKIRT THE MALAGASY COAST UNTIL THE END OF THE NIGHT AND THEN BEGIN TO CROSS THE CHANEL.

THEN, ELOISE IS EXPECTED TO KEEPS A WEST-SOUTHWEST TO SOUTHWEST TRACK WHICH SHOULD BRING IT ON THE MOZAMBICAN COASTS BY SATURDAY, WHILE THE SUBTROPICAL RIDGE RENEWS ITSELF SOUTH-EAST OF THE SYSTEM. CONFIDENCE IN THE TRACK PREDICTION IS INCREASING WITH A FAIRLY TIGHT GUIDANCE BEAM AROUND A CONSENSUS THAT HAS SHIFTED ONCE AGAIN SIGNIFICANTLY NORTHWARD DURING THE LAST FEW RUNS.

ON THURSDAY, ONCE OUT TO SEA IN THE MOZAMBIQUE CHANNEL, ENVIRONMENTAL CONDITIONS WILL BE FAVORABLE FOR A FRANK AND POTENTIALLY RAPID REINTENSIFICATION (WARM WATERS, MOIST ENVIRONMENT, LITTLE SHEAR AND GOOD EQUATORWARDS DIVERGENCE). IT IS ADVISABLE TO REMAIN CAUTIOUS ON THE INTENSITY PREDICTION AFTER AN OVERLAND TRACK THAT COULD DELAY REINTENSIFICATION. HOWEVER, THE GUIDANCES ARE GENERALLY VERY REACTIVE AND SUGGEST THAT ELOISE SHOULD REACH THE THRESHOLD OF A TROPICAL CYCLONE, OR EVEN AN INTENSE TROPICAL CYCLONE, BEFORE LANDFALL. THERE IS ALSO CONSENSUS AMONG GUIDANCE THAT ELOISE SHOULD BECOME A LARGE ENOUGH SYSTEM FOR THE MOZAMBIQUE CHANNEL, WHICH WOULD MAKE IT A PARTICULARLY DANGEROUS SYSTEM.

ELOISE IS CURRENTLY GENERATING HAZARDOUS WEATHER CONDITIONS IN NORTHERN MADAGASCAR. ACCUMULATIONS OF 100 TO 150 MM IN 24 HOURS,

LOCALLY MORE, ARE POSSIBLE ON THE NORTH-WESTERN REGIONS OF MADAGASCAR. STRONG WINDS, REACHING NEAR GALE OR GALE FORCE WINDS (30/35 KT) ARE SPREADING FROM NORTH TO SOUTH ALONG THE NORTHWESTERN COAST OF MADAGASCAR. THESE WINDS, ORIENTED FROM THE SEA TO THE LAND, MAY CAUSE SOME LOCAL COASTAL SUBMERSION. THE INHABITANTS OF THE AREAS CONCERNED (NORTH-WEST OF MADAGASCAR BETWEEN NOSY-BE AND MAINTIRANO) ARE INVITED TO KEEP THEMSELVES INFORMED OF THE FOLLOWING EVENTS THROUGH THE INFORMATION AND RECOMMENDATIONS OF THE MALAGASY METEOROLOGICAL SERVICES.

FOR MOZAMBIQUE, THE THREAT OF A SIGNIFICANT IMPACT IS INCREASING FOR THE AREA NEAR BEIRA, FROM QUELIMANE IN THE NORTH AND INHAMBANE IN THE SOUTH AND IT IS IMPORTANT THAT ALL THE INHABITANTS OF THE POTENTIAL IMPACT ZONE FOLLOW THE INSTRUCTIONS OF THE LOCAL AUTHORITIES. FROM FRIDAY, HEAVY RAINS AND STRONG WINDS WILL START TO IMPACT SOME AREAS, A LARGE COASTAL ZONE BETWEEN ANGOCHE AND QUELIMANE AT THE APPROACH OF THE METEORE, THEN MORE INTO LANDS FROM QUELIMANE IN THE NORTH AND INHAMBANE IN THE SOUTH. THE WEATHER IS EXPECTED TO DETERIORATE WITHIN THE POTENTIAL IMPACT ZONE AS SOON AS FRIDAY AFTERNOON. THE INHABITANTS OF THE CENTRAL AND SOUTHERN REGIONS OF MOZAMBIQUE ARE INVITED TO FOLLOW THE INSTRUCTIONS OF THE LOCAL AUTHORITIES.