

WTIO30 FMEE 130644

RSMC / TROPICAL CYCLONE CENTER / LA REUNION

TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 19/8/20232024

1.A MODERATE TROPICAL STORM 8 (FILIPO)

2.A POSITION 2024/03/13 AT 0600 UTC:

WITHIN 20 NM RADIUS OF POINT 26.0 S / 33.1 E

(TWENTY SIX DECIMAL ZERO DEGREES SOUTH AND

THIRTY THREE DECIMAL ONE DEGREES EAST)

MOVEMENT: SOUTH 9 KT

3.A DVORAK ANALYSIS: 2.0/2.0/S 0.0/0 H

4.A CENTRAL PRESSURE: 997 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: 270 SE: 270 SW: 0 NW: 0

34 KT NE: 140 SE: 175 SW: 0 NW: 0

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1010 HPA / 700 KM

8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: MEDIUM

1.B FORECASTS (WINDS RADII IN KM):

12H: 2024/03/13 18 UTC: 28.5 S / 35.3 E, VENT MAX= 045 KT, MODERATE TROPICAL STORM

28 KT NE: 360 SE: 250 SW: 155 NW: 205

34 KT NE: 185 SE: 150 SW: 100 NW: 130

24H: 2024/03/14 06 UTC: 31.3 S / 39.3 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 415 SE: 305 SW: 305 NW: 280

34 KT NE: 215 SE: 185 SW: 195 NW: 175

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

36H: 2024/03/14 18 UTC: 34.2 S / 44.7 E, VENT MAX= 060 KT, POST-TROPICAL DEPRESSION

28 KT NE: 500 SE: 350 SW: 295 NW: 315

34 KT NE: 260 SE: 220 SW: 195 NW: 195

48 KT NE: 85 SE: 55 SW: 75 NW: 55

48H: 2024/03/15 06 UTC: 36.7 S / 50.7 E, VENT MAX= 055 KT, POST-TROPICAL DEPRESSION

28 KT NE: 510 SE: 405 SW: 270 NW: 345

34 KT NE: 260 SE: 260 SW: 205 NW: 215

48 KT NE: 85 SE: 85 SW: 75 NW: 75

60H: 2024/03/15 18 UTC: 38.8 S / 57.0 E, VENT MAX= 045 KT, POST-TROPICAL DEPRESSION

28 KT NE: 520 SE: 370 SW: 240 NW: 415

34 KT NE: 260 SE: 230 SW: 205 NW: 270

72H: 2024/03/16 06 UTC: 40.2 S / 63.6 E, VENT MAX= 035 KT, EXTRATROPICAL DEPRESSION

28 KT NE: 465 SE: 335 SW: 215 NW: 345

34 KT NE: 220 SE: 205 SW: 185 NW: 185

2.B LONGER-RANGE OUTLOOK:

NIL

2.C ADDITIONAL INFORMATION:

T=CI=2.0

IN THE LAST FEW HOURS, FILIPO HAS RE-EMERGED OVER SEA JUST EAST OF MAPUTO. VISIBLE IMAGES SHOW A CENTER A FEW NAUTICAL MILES EAST OF THE ISLAND OF INHACA AT 06UTC. CONVECTION HAS GRADUALLY RESUMED, MAINLY IN THE SOUTHERN SEMICIRCLE, ALLOWING A DVORAK ESTIMATE WITH A CURVED BAND CONFIGURATION AT 2.0. FILIPO IS NOW A MODERATE TROPICAL STORM WITH WINDS OF 35KT.

LITTLE CHANGE IN TERMS OF TRACK. GUIDANCE IS STABLE AND LITTLE DIVERGENT. FILIPO IS MOVING SOUTHEAST ALONG THE WESTERN EDGE OF THE SUB-TROPICAL RIDGE, THEN ACCELERATING ALONG THE EASTERN EDGE OF A MID-LATITUDE TROUGH. IT SHOULD THUS EVACUATE DEFINITELY TOWARDS THE SOUTHERN LATITUDES IN THE SECOND HALF OF THE WEEK.

IN TERMS OF INTENSITY, NOW BACK OVER THE WARM WATERS OF THE MOZAMBIQUE CHANNEL, FILIPO SHOULD RAPIDLY INTENSIFY IN A CONTEXT OF STRONG UPPER-LEVEL DIVERGENCE ON THE BANGS OF A SUB-TROPICAL TROUGH. THERE IS STILL SOME UNCERTAINTY ABOUT THE INTENSIFICATION DEPENDING ON THE ORGANIZATION OF THE LOWER LAYERS OVER THE NEXT FEW HOURS, AS WELL AS ABOUT THE EFFECT OF WIND SHEAR ON THE SYSTEM. WIND SHEAR IS SET TO INCREASE PROGRESSIVELY, BUT FILIPO'S RAPID DISPLACEMENT MEANS IT COULD BE OVERTAKEN BY WIND SHEAR. IT SHOULD THEREFORE REACH THE STRONG TROPICAL STORM STAGE IN THE NEXT 24 HOURS, WITH A PEAK AROUND THURSDAY 12UTC, WHEN THE TROPICAL CYCLONE STAGE COULD BE REACHED. IFS SUGGESTS A MORE SIGNIFICANT DEEPENING, WHILE GFS IS A LITTLE SOFTER. THE RSMC FORECAST IS A COMPROMISE BETWEEN THE VARIOUS AVAILABLE GUIDELINES. THEN, FROM THURSDAY EVENING, FILIPO SHOULD BEGIN ITS POST-TROPICAL TRANSITION OVER COLDER WATERS IN A CISIAL CONTEXT, GRADUALLY LOSING ITS TROPICAL CHARACTERISTICS BY THE END OF THE WEEK.

IMPACTS EXPECTED ON INHABITED LAND OVER THE NEXT 72 HOURS:

MOZAMBIQUE (MAPUTO PROVINCE):

- RAIN: 50 TO 100MM TODAY, THEN IMPROVING.

- SEA: WAVES OF 4 TO 5M IN THE MORNING, THEN CLEARLY IMPROVING DURING THE DAY.

EAST ESWATINI :

- RAINS: 50 TO 100MM TODAY THEN IMPROVING.

NORTHEAST SOUTH AFRICA (NORTH OF KWAZULU-NATAL):

- RAINS: AROUND 100MM TODAY THEN IMPROVING.

- SEA: WAVES OF 4 TO 5M, THEN CLEARLY IMPROVING IN THE EVENING.