

WTIO30 FMEE 121321 RSMC / TROPICAL CYCLONE CENTER / LA REUNION TROPICAL CYCLONE FORECAST WARNING (SOUTH-WEST INDIAN OCEAN)

0.A WARNING NUMBER: 1/9/20242025 1.A TROPICAL CYCLONE 9 (TALIAH)

2.A POSITION 2025/02/12 AT 1200 UTC:

WITHIN 20 NM RADIUS OF POINT 19.0 S / 90.5 E (NINETEEN DECIMAL ZERO DEGREES SOUTH AND

NINETY DECIMAL FIVE DEGREES EAST) MOVEMENT: SOUTH-SOUTH-WEST 14 KT

3.A DVORAK ANALYSIS: 4.5/4.5/D 0.5/6 H

4.A CENTRAL PRESSURE: 970 HPA

5.A MAX AVERAGE WIND SPEED (10 MN): 65 KT RADIUS OF MAXIMUM WINDS (RMW): 102 KM

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

28 KT NE: 415 SE: 650 SW: 530 NW: 305 34 KT NE: 305 SE: 425 SW: 400 NW: 220 48 KT NE: 150 SE: 220 SW: 210 NW: 140 64 KT NE: 110 SE: 120 SW: 120 NW: 110

7.A FIRST CLOSED ISOBAR (PRESSURE / AVERAGE DIAM): 1007 HPA / 1000 KM 8.A VERTICAL EXTENSION OF CYCLONE CIRCULATION: DEEP

1.B FORECASTS (WINDS RADII IN KM):

12H: 2025/02/13 00 UTC: 21.1 S / 88.8 E, VENT MAX= 065 KT, TROPICAL CYCLONE

28 KT NE: 380 SE: 675 SW: 520 NW: 260 34 KT NE: 215 SE: 405 SW: 345 NW: 165 48 KT NE: 110 SE: 175 SW: 130 NW: 75 64 KT NE: 75 SE: 65 SW: 75 NW: 65

24H: 2025/02/13 12 UTC: 22.6 S / 86.7 E, VENT MAX= 060 KT, SEVERE TROPICAL STORM

28 KT NE: 370 SE: 595 SW: 445 NW: 260 34 KT NE: 205 SE: 360 SW: 295 NW: 155 48 KT NE: 100 SE: 150 SW: 130 NW: 45

36H: 2025/02/14 00 UTC: 23.3 S / 85.1 E, VENT MAX= 055 KT, SEVERE TROPICAL STORM

28 KT NE: 325 SE: 480 SW: 415 NW: 270 34 KT NE: 185 SE: 285 SW: 270 NW: 150 48 KT NE: 95 SE: 150 SW: 85 NW: 45

48H: 2025/02/14 12 UTC: 23.8 S / 83.8 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 305 SE: 470 SW: 415 NW: 260

34 KT NE: 165 SE: 285 SW: 260 NW: 140 48 KT NE: 95 SE: 150 SW: 85 NW: 45

60H: 2025/02/15 00 UTC: 24.1 S / 83.0 E, VENT MAX= 045 KT, MODERATE TROPICAL

STORM

28 KT NE: 305 SE: 445 SW: 390 NW: 215 34 KT NE: 165 SE: 280 SW: 250 NW: 120

72H: 2025/02/15 12 UTC: 24.6 S / 81.7 E, VENT MAX= 045 KT, MODERATE TROPICAL

STORM

28 KT NE: 335 SE: 585 SW: 510 NW: 220 34 KT NE: 185 SE: 370 SW: 325 NW: 130

2.B LONGER-RANGE OUTLOOK:

96H: 2025/02/16 12 UTC: 26.8 S / 79.2 E, VENT MAX= 050 KT, SEVERE TROPICAL STORM

28 KT NE: 465 SE: 545 SW: 380 NW: 250 34 KT NE: 270 SE: 350 SW: 270 NW: 165 48 KT NE: 120 SE: 155 SW: 120 NW: 65

120H: 2025/02/17 12 UTC: 29.7 S / 77.1 E, VENT MAX= 040 KT, MODERATE TROPICAL

STORM

28 KT NE: 360 SE: 480 SW: 400 NW: 240 34 KT NE: 205 SE: 315 SW: 270 NW: 130

2.C ADDITIONAL INFORMATION:

T=CI=4.5

THE TALIAH TROPICAL SYSTEM HAS BEEN PICKED UP AT 12UTC BY THE REUNION RSMC. OVER THE LAST 6 HOURS, CONVECTIVE ACTIVITY HAS CONSOLIDATED NEAR THE CENTER, WITH THE APPEARANCE OF AN EYE. MICROWAVE IMAGES FROM GPM GMI AT 0706Z, GCOM AMSR2 AT 0802Z AND SSMIS F18 AT 1028Z SHOW THAT THE EYE IS VERY LARGE, WITH A RADIUS APPROACHING 55NQ, PROMPTING US TO LIMIT POSITIVE ADJUSTMENTS TO THE DT DURING DVORAK EYE ANALYSIS. THE FINAL T RETAINED IS 4.5, CORRESPONDING TO A WIND INTENSITY OF 70KT. BUT THE OBJECTIVE ANALYSES ARE MUCH LOWER, AND THE 2332Z SAR PASS MEASURED 60KT. A MAXIMUM WIND INTENSITY OF 65KT WAS THEREFORE CHOSEN, CLASSIFYING TALIAH AS A TROPICAL CYCLONE.

TALIAH IS CAUGHT IN THE MAIN FLOW OF A RIDGE OF MID- AND UPPER-TROPOSPHERE AIR, WHICH IS STEERING ITS COURSE TOWARDS THE SOUTH-SOUTH-WEST. EVEN THOUGH HE'S STILL JUST EAST OF 90°, HE SHOULD CROSS IT IN THE NEXT FEW HOURS. THE STRENGTHENING OF THIS RIDGE SHOULD FORCE IT TO MOVE MORE RAPIDLY SOUTH-WESTWARDS IN THE COMING HOURS. FROM FRIDAY, THE EMERGENCE OF A NEW RIDGE OVER THE MASCAREIGNES SHOULD IMPOSE A COUNTER-DIRECTIONAL FLOW AND SLOW THE SYSTEM'S COURSE. BY THE END OF THE WEEK, AS TALIAH IS ON THE NOD-WEST SIDE OF THIS RIDGE, THE SYSTEM IS LIKELY TO HEAD BACK SOUTH-SOUTHEAST, ACCELERATING ITS COURSE.

TALIAH IS STILL BENEFITING FROM GOOD ENVIRONMENTAL CONDITIONS, WITH A SEA SURFACE TEMPERATURE OF 26-27°C, LOW WIND SHEAR, A GOOD SUPPLY OF MOIST AIR AND GOOD LOW-LEVEL CONVERGENCE. THESE FACTORS WILL ENABLE

IT TO MAINTAIN ITS TROPICAL CYCLONE INTENSITY FOR AROUND ANOTHER 24 HOURS. HOWEVER, TOMORROW IT SHOULD BE CIRCULATING OVER COOLER WATERS WITH LOWER OCEAN POTENTIAL. THE DEEP SHEAR IS ALSO STRENGTHENING FROM TOMORROW EVENING, AS AN UPPER-LEVEL TROUGH ARRIVES FROM THE WEST. TALIAH INTENSITY SHOULD THEREFORE GRADUALLY DIMINISH FROM TOMORROW AFTERNOON OR EVENING.

NO SIGNIFICANT IMPACT IS EXPECTED ON INHABITED LAND OVER THE NEXT 72 HOURS.