

= Cyclone Amara =

Cyclone Amara brought stormy conditions to Rodrigues in December 2013 . Amara was the first named storm in the southwest Indian Ocean during the later half of 2013 , and developed from a disturbance within the monsoon trough on December 14 . The following day , the system attained tropical depression status . Despite its ill defined organization , the depression was able to continue strengthening , reaching moderate tropical storm status on December 16 as it tracked southwest . Situated in a favorable atmospheric environment , a period of rapid intensification ensued after Amara reached tropical cyclone status on December 18 . After fluctuating in strength , the cyclone peaked with maximum sustained winds of 205 km / h ( 125 mph ) and a minimum barometric pressure of 933 mbar ( hPa ; 27 . 55 inHg ) on December 21 , making it an intense tropical cyclone based on the intensity scale utilized by Météo France . Shortly after , wind shear strengthened as Amara tracked southeast , resulting in a weakening phase . The shearing effects caused the cyclone to rapidly decay , and by December 23 , Amara degenerated into a remnant low .

Amara was initially expected to track directly over the island of Rodrigues , prompting widespread precautionary measures and resulting in the issuance of a Class 4 warning denoting a warning of highest urgency by the Mauritius Meteorological Services . Though the tropical cyclone eventually passed to the east of the island , Amara was close enough to Rodrigues to severely effect the island . Strong winds , peaking at a measured 152 km / h ( 94 mph ) in Pointe Canon , resulted in widespread infrastructural damage , including the tearing of metal sheeting and uprooting of trees . Widespread power outage cut power to 12 000 homes and shut off communications to and from the island . Heavy rains produced by Amara also triggered flooding in some locations and caused soil erosion .

= Meteorological history =

The origin of Amara can be traced back to an area of low pressure embedded within a monsoon trough southeast of Diego Garcia on December 13 , 2013 . Computer models suggested that surrounding atmospheric conditions would later become more conducive for tropical cyclogenesis . Over the course of the day , the localized area of circulation remained sheared , though convection remained persistent . Despite the hindering atmospheric environment , the system organized faster than anticipated , and was classified as a tropical disturbance by Météo France at 1200 UTC on December 14 . Shortly after development , the disturbance underwent a reformation phase and consequently a new center of circulation developed , allowing the system to reach tropical depression status early on December 15 . Nonetheless , the storm 's overall structure remained ill defined due to the presence of wind shear and multiple mesovortices .

At 1330 UTC on December 16 , the Mauritius Meteorological Services designated the system as a moderate tropical storm , thus assigning it the name Amara . At the time the storm had a minimum barometric pressure estimated at 995 mbar ( hPa ; 29 . 39 inHg ) . During the subsequent hours , the storm began to slowly track west southwest under the periphery of a nearby subtropical ridge . Amara 's circulation center consolidated and rainbands became more tightly wrapped around the center , at which time the Joint Typhoon Warning Center ( JTWC ) began to monitor the system . Late on December 17 , Amara began to develop an eye , observable via microwave imagery . Based on the antecedent developments , Météo France upgraded the system to severe tropical storm intensity at 0000 UTC the following day . Nine hours later , the JTWC upgraded Amara to tropical cyclone intensity , with Météo France following suit three hours later . Situated in a location with low vertical wind shear and outspread outflow , Amara was forecast to continue strengthening , though at the same time the cyclone was expected to move very slowly due to its interaction with weak steering currents in between two subtropical ridges . Rapid intensification ensued throughout the latter hours of December 18 , coinciding with the development of a ragged eye feature within the tropical cyclone on infrared imagery . Météo France upgraded Amara to intense tropical cyclone status at 0000 UTC on December 19 . By this time the storm 's central

pressure had fallen to 944 mbar ( hPa ; 27 @. @ 88 inHg ) . Shortly after , however , Amara 's once well @-@ defined outflow pattern became suppressed , resulting in a slight weakening and a downgrade from intense tropical cyclone status just twelve hours later .

This weakening phase was brief , and shortly thereafter Amara was reclassified as an intense tropical cyclone on December 21 . At 0600 UTC that day , Amara reached its peak intensity as an intense tropical cyclone with maximum sustained winds of 205 km / h ( 125 mph ) and a minimum pressure of 933 mbar ( hPa ; 27 @. @ 55 inHg ) . Following peak intensity , an approaching upper @-@ level , mid @-@ latitude trough increased wind shear and forced the storm towards the southeast , resulting in the cyclone weakening . By 0600 UTC the next day , Météo @-@ France determined that Amara had weakened below intense tropical cyclone status . The strong wind shear continued to take its toll on the cyclone , stripping away and exposing Amara 's low @-@ level circulation center away from the rest of its associated convection . At 1200 UTC on December 22 , Amara weakened to severe tropical storm intensity , and was later downgraded further to tropical depression intensity the following day . Amara 's downgrade to such an intensity marked the cessation of Météo @-@ France 's tropical cyclone bulletins . The remnant vortex associated with Amara continued to persist over the next few days and curved westward , though it lacked persistent convection . The remnant circulation gradually became increasingly diffused and was last noted by Météo @-@ France at 1200 UTC on December 28 .

= = Preparations and impact = =

Due to Amara 's projected path near Rodrigues , the Mauritius Meteorological Services issued a " Class 1 " warning for the island early on December 19 , following the cyclone 's upgrade to intense tropical cyclone intensity . Hours later , the meteorological service upgraded their warning to a " Class 2 . " Based on forecasts that continued to indicate that Amara would track directly over Rodrigues , the Mauritius Meteorological Services issued a " Class 3 warning " in the morning hours of December 20 , describing Amara as a " real threat for Rodrigues . " This resulted in a complete suspension of flights to and from the island . These cancellations were attributable to Air Mauritius , which was the only air carrier for Rodrigues . Fishing boats were rerouted back to the island and refugee centers readied their resources in preparation for the tropical cyclone . Large scale precautionary measures took place in Port Mathurin . On December 21 , Mauritius Meteorological Services issued their highest applicable cyclone warning , a " Class 4 warning , " for Rodrigues .

Rodrigues began to experience the effects of Amara on December 20 , when strong gusts caused by the tropical cyclone swept across the island . These initial winds uprooted trees and toppled utility poles , resulting in power outage . At the height of power outages , over 12 @, @ 000 households were without power , primarily in Port Sud @-@ Est , Mount Lubin , and Rivière @-@ Cocos . By the afternoon of December 22 , only 20 % of homes had access to electricity . Some of the fallen trees rendered roads impassable . Heavy rains caused some creeks to overflow their banks , and riffles became impassable . The rainfall also caused extensive soil erosion . Amara also triggered a strong storm surge , resulting in coastal flooding . Despite the heavy rainfall , total precipitation amounts remained relatively low , peaking at 78 mm ( 3 @. @ 07 in ) in Citronelle . On December 21 , a wind gust of 152 km / h ( 94 mph ) was reported in the locality of Pointe Canon , which was the highest wind measurement recorded in association with Amara . Another station at Sir Gaëtan Duval Airport reported a similarly strong wind gust clocked at 135 km / h ( 84 mph ) . The strong winds tore metal sheets off of buildings and cut telecommunications between Rodrigues and the rest of the world . Despite the widespread precautionary measures taken beforehand , Port Mathurin suffered marginal impacts . Following the storm , local police groups and the Special Mobile Force were mobilized in order to assist in relief efforts . Technicians from the Mauritius Central Electricity Board were dispatched to resolve power issues .