

= Tropical Storm Delta (2005) =

Tropical Storm Delta was a late @-@ forming tropical storm of the 2005 Atlantic hurricane season which struck the Canary Islands as a strong extratropical storm , causing significant damage and then crossed over Morocco before dissipating . It was the twenty @-@ sixth tropical or subtropical storm of the season , making the 2005 season the first to record so many storms .

Tropical Storm Delta , like most late @-@ season storms , developed out of an extratropical low . The storm gradually gained tropical characteristics and was briefly a subtropical storm on November 22 . Delta moved erratically for a few days before moving towards the Canary Islands . It became extratropical just before it passed to the north of the archipelago .

= = Meteorological history = =

On November 19 , a broad area of eastward @-@ moving low pressure formed in the central Atlantic Ocean about 1400 miles (2200 km) southwest of the Azores . It moved steadily eastward through November 20 , but on November 21 , under the influence of a cold front to its north , the low turned northeastward and started to develop central convection . On November 22 , the non @-@ tropical low pressure system began to gain some tropical characteristics , and its northward motion slowed to a stop . Late that afternoon , the low transitioned into a subtropical storm while stalled about 800 mi (1 @, @ 300 km) west @-@ southwest of the Azores . Operationally , the National Hurricane Center considered that the storm had already gained enough tropical characteristics to be classified as a tropical storm , but in post @-@ storm analysis , this was reconsidered .

The storm 's convection organized around a central core , and the system became a tropical storm on November 23 and received the name Delta . An eye @-@ like feature appeared near the storm 's circulatory center several times that day . The larger @-@ scale deep @-@ layered cyclonic circulation within which it was embedded steered it on a slow southward and then south @-@ southwesterly track . Strong wind shear prevented immediate development and the system added an eastward component to its drift . Moving out of the high @-@ shear environment on November 24 , Delta gained organization . Outflow and convective banding increased and an eye feature became well defined . This eye signaled the storm 's peak strength of 70 mph (110 km / h) , just below hurricane status . However , the official forecast at the time predicted Delta to strengthen further and become a minimal hurricane . Delta 's motion stalled as it reached the southern base of a large cyclonic trough over the northern Atlantic within which it was embedded . Maintaining its intensity , Delta remained motionless for half a day until , that evening when it began a slow southward drift at 6 mph (9 km / h) . Maintaining its intensity , Delta remained motionless for half a day Convection broke down in the storm 's western semicircle early on November 25 ; the decreased organization caused slight weakening . Maintaining its intensity , Delta remained motionless for half a day The southward motion slowed and the weakening trend continued into the evening . Cooling cold tops were counteracted by wind shear which exposed most of the low @-@ level center . The storm 's southward motion stopped and it began moving east at 6 mph (9 km / h) . Some of the computer models suggested the weakening tropical storm could be absorbed by a developing low to the west , which a few days later became Hurricane Epsilon . This did not occur , and Tropical Storm Delta began to move to the northeast .

As Delta accelerated to the northeast towards the Canary Islands , it intensified again , reaching a second peak of just under hurricane strength on November 27 . In post @-@ storm analysis , the NHC noted that there was a possibility that Delta had briefly reached hurricane strength that day ; however , the data was not conclusive enough to justify an upgrade to hurricane status . On November 28 , as it neared the Canary Islands Tropical Storm Delta lost its tropical characteristics . The extratropical storm , which maintained winds of near @-@ hurricane strength , passed about 105 mi (165 km) north of the islands that night . The storm moved over Morocco early on November 29 and rapidly weakened overland , dissipating late that day over northwestern Algeria .

= = Preparations and impact = =

Tropical Storm Delta 's arrival in the Canary Islands was described as a " historic " event . Tropical cyclones there are extremely rare and the islands had no tropical warning systems in place . The government issued a general emergency advisory and advised citizens to stay indoors . Tenerife North Airport was closed , stranding hundreds of passengers for the duration of the storm . The Education Board of the Canary Islands Government suspended Tuesday classes for all non @-@ university schools for 320 @,@ 000 students . The shipping company Fred Olsen suspended services linking the islands of Tenerife and La Palma and La Gomera . On the island of El Hierro the exposed road to Sabinosa Health Center was closed as a precaution .

Delta caused considerable damage in the Canary Islands . The storm claimed nineteen lives and caused a total of ? 312 million (\$ 364 million 2005 US dollars) damage throughout the archipelago . Eighteen died when a boat sank off the Canary Islands ; twelve of the bodies were never found . The nineteenth man was killed when while trying to repair his roof during the storm ; winds threw him from his ladder . The islands of Tenerife and La Palma were hardest hit , with many uprooted trees and landslides reported . The peak gust recorded at La Palma was 95 mph (152 km / h) , and at Tenerife the maximum gust was 90 mph (147 km / h) . Some patients at Tenerife 's University Hospital were evacuated to a safer part of the building when paneling from the hospital 's heliport was torn free and smashed some of the building 's windows . Off Santa Cruz 's southern quay a tug boat broke its ties , collided with another vessel , and sank . Passengers at Tenerife North Airport , who were stranded when their flights canceled , witnessed parts of the new international terminal 's roof tear off in the wind . In La Palma a falling palm tree , trunk snapped by the wind , injured the leg of a German tourist . Many palm trees along the Avenida Marítima were also blown down . The storms winds blew out windows and collapsed cornices , although other structural damage was minimal . Metal plates that had been used to board up buildings were strewn all over the island .

Over 225 @,@ 000 residents lost electricity and 12 @,@ 000 lost telephone service . Some vandalism and looting was reported during the loss of power , and the police made several arrests during the night . For over 24 hours roads were closed on the islands of El Hierro , Tenerife and La Palma : the first two due to landslides and the third by the collapse of an old house and a massive tree . One of the most famous geological features of the island of Gran Canaria , El Dedo de Dios (or God 's finger) , which had been pointing towards the sky for over a millennium , was destroyed by Delta 's wind and wave action along Gran Canaria 's shore . Upon hearing of the destruction of the natural monument one man , later found to be clinically insane , unsuccessfully tried to kill himself and then stabbed three members of his own family .

When the remnants of Delta arrived in Morocco they were described as a " normal atmospheric disturbance " . No damage was reported there and in fact the system was welcomed by farmers who needed the rain to complete the sowing of cereal crops .

= = Aftermath = =

With the Canary Islands ' power grid substantially disrupted , the Unelco @-@ Endesa power company was forced to use temporary generators to boost power at sub @-@ stations far from the main grid . In La Corujera in Santa Úrsula , these generators were poorly received and over 1 @,@ 000 local residents claimed to be affected by the noise and pollution . Children , the elderly and people with respiratory problems suffered most acutely . Roughly ? 25 million (US \$ 37 @.@ 25 million) was allocated by the government of the Canary Islands in relief and reconstruction funds . Of this total , ? 22 @.@ 5 million (US \$ 33 @.@ 5 million) was used to repair infrastructure and utilities ; ? 1 @.@ 5 million (US \$ 2 @.@ 2 million) was used for agricultural relief ; and ? 1 million (US \$ 1 @.@ 5 million) was used in home repairs . Due to the severity of crop losses , farmers would be given a grant from the government that would cover 50 % of their losses , including infrastructural . A tax break was also given to most residents who suffered damage from Delta .

Fishermen of the Canary Islands had to return to and remain in port for several days while weathering the storm , and this disruption was blamed for a 10 ? 15 % reduction of the islands ' tuna catch . Tropical Storm Delta also had some further @-@ reaching effects . The political opposition

Popular Party challenged that the impact of Tropical Storm Delta proved the need for the island to prepare an emergency plan to deal with natural and man @-@ made disasters . Only five of the island 's many municipalities had an emergency plan , and there was no coordination across the entire island chain . Delta also served to highlight the islands ' aging power grid , prompting the regional director general of industry and energy to consider building another power plant on the archipelago . The storm sparked a vigorous debate on the island about the effects of global climate change , how they will affect the islands , and how these effects can be avoided .