= Tropical Storm Debby (2006) =

Tropical Storm Debby was the fifth tropical storm of the 2006 Atlantic hurricane season . Debby formed just off the coast of Africa on August 21 from a tropical wave . After passing near the Cape Verde islands , Debby moved generally northwestward for much of its life , reaching a peak intensity of 50 mph (85 km / h) . Strong wind shear weakened the storm , and Debby dissipated on August 27 over the northern Atlantic Ocean .

Early in its life , Debby was forecast to pass through the southern Cape Verde islands as a tropical storm , potentially causing life @-@ threatening flooding . Most computer models consistently predicted Debby to track to the northwest throughout its lifetime , though intensity was more problematic for forecasters . The National Hurricane Center continually predicted Debby to intensify to hurricane status , though strong vertical shear ultimately prevented the storm from becoming a hurricane .

= = Meteorological history = =

A vigorous tropical wave moved off the coast of Africa late on August 20 , and almost immediately developed convective banding and a broad circulation . A broad area of low pressure formed within the wave the next day while located 260 mi (420 km) southeast of the Cape Verde islands . Though convection decreased early on August 21 , the area of low pressure remained well @-@ organized and the system developed into Tropical Depression Four late on August 21 . Water temperatures remained warm enough for development , while upper level shear was minimal as the depression moved west @-@ northwestward due to a ridge of high pressure to its north . Initial predictions by the National Hurricane Center also forecast a motion to the northwest based on consistent model predictions , though , as quoted by forecaster James Franklin , " The models have also been excellently wrong thus far " .

Despite a decrease in convection shortly after forming , the large depression remained well organized , with a wind field 575 mi (930 km) in diameter . On August 22 , as it passed 140 mi (225 km) to south of the Cape Verde islands , deep convection developed over the center of circulation , and early on August 23 the depression intensified into Tropical Storm Debby about 300 mi (485 km) southwest of Cape Verde . Banding features continued to organize as the system slowly strengthened , and on August 23 Debby attained a peak intensity of 50 mph (85 km / h) over the open waters of the Atlantic Ocean . Forecasters predicted Debby to continue to intensify to attain hurricane status , while its projected path placed the storm in an area of warm water temperatures and moderate upper level shear .

Shortly after reaching its peak intensity , Debby encountered an area of dry air , and subsequently weakened . The low level circulation detached itself from the diminishing convection while the system as a whole continued west @-@ northwestward . Convection redeveloped over a portion of the center , while banding features redeveloped as well . Organization continued , and Debby again reached its peak intensity of 50 mph (85 km / h) on August 24 . Southerly wind shear displaced the convection to the north of the center , and Debby weakened to a minimal tropical storm on August 25 . The center of the storm became asymmetric and elongated , and on August 26 Debby weakened to a tropical depression . Convection remained minimal and it quickly degenerated into a remnant area of low pressure . The low turned to the north and north @-@ northeast ahead of an approaching trough , and on August 28 the low dissipated .

= = Preparation and Impact = =

The government of the Cape Verde islands issued a tropical storm warning coinciding with the issuance of the first advisory on Tropical Depression Four , meaning tropical storm conditions were expected in the area within 24 hours . The National Hurricane Center stated that heavy rainfall , potentially as high as 10 in (250 mm) in mountainous areas , would be possible in the territory , possibly causing life @-@ threatening flash floods and mudslides . However , due to a reformation

further to the south , tropical storm warnings were discontinued as the depression moved from the area . While passing around 115 mi (185 km) to the southwest of the southwestern most islands , the depression produced a 35 mph (55 km / h) wind gust at Fogo and some rainfall , though no damage was reported .

Long range forecasts brought the storm near Bermuda . However Debby remained over 900 mi (1 @,@ 450 km) from the island at its closest approach . Though the storm was forecast to remain far away from the Gulf of Mexico , investors tracking the storm caused the price of crude oil to rise 60 cents a barrel due to the potential impact to oil installations .