

= Tropical Depression Two (2010) =

Tropical Depression Two was a short @-@ lived tropical cyclone that impacted portions of Texas and Mexico during the highly active 2010 Atlantic hurricane season . It formed from a tropical wave that emerged off the western coast of Africa and crossed the Atlantic Ocean without any development . Upon entering the western Gulf of Mexico , the depression encountered a conducive environment for tropical cyclone development , and was designated Tropical Depression Two at 0600 UTC on July 8 . Intensification into a tropical storm was initially anticipated by the National Hurricane Center (NHC) , but due to its proximity to land , the depression failed to attain the status . It made landfall on South Padre Island , Texas before degenerating into a remnant low on July 9 , and dissipating the following day . Due to the system 's weak intensity , there were no reports of damage inflicted by winds across Texas or Mexico , although the cyclone did bring minimal rainfall totals to northern Mexico , an area severely affected by Hurricane Alex just one week previous .

= Meteorological history =

The origins of Tropical Depression Two can be traced back to a disorganized tropical wave that was first noted by the NHC on June 24 as it moved off the western coast of Africa , and into the Atlantic Ocean . Moving towards the west , the wave showed no signs of organization until July 3 as it entered the western Caribbean Sea . During the 24 hours that followed , it continued to coalesce , and the NHC subsequently increased the disturbance 's chance of developing into a tropical cyclone . A defined surface circulation did not form as a result of the wave 's movement over the Yucatan Peninsula , and the system lost organization . The system remained disorganized as it traversed the peninsula and eventually emerged into the Gulf of Mexico on July 7 . Situated over water once more , the wave was able to gradually develop as it moved in a northwesterly direction . Following a reconnaissance mission , the NHC noted in their Tropical Weather Outlook that there was a high chance of the system developing into a tropical cyclone within the next 48 hours .

Early on July 8 , additional data from the Hurricane Hunters indicated that the system developed a closed circulation and the NHC classified it as a tropical depression at 0000 UTC , making it the second of the hurricane season . At this time , the system was situated roughly 250 mi (400 km) southeast of Brownsville , Texas . At this time , the depression also attained its peak intensity with maximum sustained winds of 35 mph (55 km / h) and a minimum barometric pressure of 1005 mbar (hPa ; 29 @.@ 68 inHg) . Tropical Depression Two was anticipated to intensify into a tropical storm before making landfall in Mexico ; however , the depression failed to gain strength before moving inland . Following a reconnaissance mission at 1200 UTC , Hurricane Hunters found winds near tropical storm intensity ; however , land @-@ based observations did not support this and the depression was not classified as a tropical storm . Later that day , the depression made landfall in South Padre Island , Texas at 1515 UTC with winds of 35 mph (55 km / h) . The tropical depression weakened slightly while moving near the Texas @-@ Mexico border , when the NHC discontinued advisories on the system . Although the NHC ceased monitoring Tropical Depression Two , the Hydrometeorological Prediction Center (HPC) issued advisories until it dissipated early on July 10 , over northern Mexico .

= Preparations and impact =

Immediately after Tropical Depression Two was classified , a tropical storm warning was issued for the state of Texas , covering the coastline from Baffin Bay to the northern mouth of the Rio Grande . In addition , a tropical storm warning was also issued by the government of Mexico , stretching from Rio San Fernando northward also to the mouth of the Rio Grande . Subsequent coastal flooding and flash flood warnings were issued by local National Weather Service offices in southern and eastern Texas as the NHC predicted 4 to 8 in (100 to 200 mm) of rain , with 10 in (250 mm) locally . Alerts were also issued for the Mexican states of Tamaulipas , Nuevo León and Coahuila , where officials warned people of the potential for heavy rains , flooding , and landslides . The Sistema Nacional de

Protección Civil (National Civil Protection System) raised a red alert , the highest level on the scale , for portions of Tamaulipas and noted that extreme caution was necessary in areas between Rio San Fernando and the Texas @-@ Mexico border . After Tropical Depression Two made landfall in Texas , all of the tropical storm warnings associated with the storm were discontinued .

Upon making landfall along the Texas @-@ Mexico border , the depression produced a storm surge between 2 and 4 ft (0 @.@ 61 and 1 @.@ 22 m) . Portions of Mustang and Padre Island were flooded by the storm ; however , damage was minimal . Two funnel clouds were reported in relation to the depression ? one near Rockport and the other near Victoria . After the NHC issued their final advisory on Tropical Depression Two , the HPC began to monitor the system , recording minimal rainfall across southern and eastern Texas . As Tropical Depression Two dissipated , it moved inland and the HPC 's advisories indicated that much of eastern and southern Texas experienced rainfall of at least 1 in (25 mm) , with the exception of Corpus Christi and Laredo . Rainfall associated with Tropical Depression Two in Texas peaked at 5 @.@ 16 in (131 mm) along the Guadalupe River adjacent to the city of Victoria . Rainfall inside the city of Victoria itself was measured at 4 @.@ 25 in (108 mm) , while the Victoria Regional Airport reported precipitation at Victoria Regional Airport . Tropical Depression Two contributed to localized flooding in southern Texas and northeastern Mexico , adding to the 24 in (610 mm) of rain caused by Hurricane Alex just south of the Rio Grande . Throughout Tamaulipas , Mexico , relatively little rain fell in relation to the depression . Matamoros recorded rainfall for roughly two hours before the system passed through the region . The resulting floods from Alex and the depression caused nearly \$ 80 million in losses throughout the region .