

= 1933 Cuba ? Brownsville hurricane =

The 1933 Cuba ? Brownsville hurricane was one of two storms in the 1933 Atlantic hurricane season to reach the intensity of a Category 5 strength on the Saffir @-@ Simpson Hurricane Scale . It formed on August 22 off the west coast of Africa , and for much of its duration it maintained a west @-@ northwest track . The system intensified into a tropical storm on August 26 and into a hurricane on August 28 . Passing north of the Lesser Antilles , the hurricane rapidly intensified as it approached the Turks and Caicos islands . It reached Category 5 status and its peak winds of 160 mph (260 km / h) on August 31 . Subsequently , it weakened before striking northern Cuba on September 1 with winds of 120 mph (190 km / h) . In the country , the hurricane left about 100 @, @ 000 people homeless and killed over 70 people . Damage was heaviest near the storm 's path , and the strong winds destroyed houses and left areas without power . Damage was estimated at \$ 11 million .

After exiting from Cuba , the hurricane entered the Gulf of Mexico and restrengthened . On September 2 , it re @-@ attained winds of 140 mph (230 km / h) . Initially the hurricane posed a threat to the area around Corpus Christi , Texas , and the local United States Weather Bureau forecaster advised people to stay away from the Texas coastline during the busy Labor Day Weekend . Officials declared martial law in the city and mandated evacuations . However , the hurricane turned more to the west and struck near Brownsville early on September 5 with winds estimated at 125 mph (205 km / h) . It quickly dissipated after causing heavy damage in the Rio Grande Valley . High winds caused heavy damage to the citrus crop . The hurricane left \$ 16 @. @ 9 million in damage and 40 deaths in southern Texas .

= = Meteorological history = =

The origins of the hurricane were from a tropical disturbance near the west coast of Africa on August 20 . Two days later , the system organized enough to be classified a tropical depression just southwest of Cape Verde . For the next few days , the system moved west @-@ northwestward with little change in intensity . It is estimated the depression strengthened into a tropical storm on August 26 , about halfway between the Lesser Antilles and Cape Verde . Initially , the storm was elongated , although beginning on August 28 it began to intensify more quickly . That night , the storm attained hurricane status , and many nearby ships reported gale force winds .

On August 29 , the hurricane passed north of the Lesser Antilles as it approached the southeastern Bahamas . It underwent rapid deepening : in a 24 ? hour period beginning late on August 29 , the winds increased from 105 mph (165 km / h) to 150 mph (240 km / h) . It also became a small storm , as Grand Turk Island reported winds of 56 mph (90 km / h) while the hurricane passed slightly to the north on August 30 . At 0130 UTC the next day , a ship near Mayaguana reported a barometric pressure of 930 mbar (27 inHg) and hurricane @-@ force winds . The pressure would ordinarily suggest winds of 152 mph (245 km / h) , but because it was not reported in the eye and the storm was smaller than normal , the winds were estimated at 160 mph (260 km / h) . The hurricane 's winds rank as a Category 5 on the Saffir @-@ Simpson Hurricane Scale , one of two such storms in the 1933 season .

After maintaining peak winds for about 12 hours , the hurricane began weakening as it passed through the southern Bahamas . At around 1200 UTC on September 1 , the hurricane made landfall on northern Cuba near Sagua La Grande , with winds of about 120 mph (190 km / h) . The eye moved along the northern coast of Cuba , crossing over Matanzas . Shortly thereafter the storm exited into the Straits of Florida , and late on September 1 the hurricane passed about 16 mi (26 km) north of Havana . After entering the Gulf of Mexico , the hurricane restrengthened , and a ship reported a pressure of 948 mbar (28 @. @ 0 inHg) late on September 2 ; this suggested winds of about 140 mph (230 km / h) . The hurricane turned more to the west on September 3 , and as it approached southern Texas it weakened slightly as it decelerated . At 0400 UTC on September 5 , the hurricane made its final landfall on South Padre Island in southern Texas , with winds estimated at 125 mph (205 km / h) . It quickly weakened over land as it crossed into northeastern Mexico ,

and the storm dissipated late on September 5 .

= = Impact = =

Throughout its path , the hurricane killed at least 179 people collectively in the Turks and Caicos Islands , Cuba , and south Texas . It first affected the Turks and Caicos , producing winds of 54 mph (87 km / h) on Grand Turk .

Before the hurricane struck Cuba , officials warned of the impending storm , and military workers warned people to remain indoors . About 4 @, @ 000 people evacuated the coastal town of Isabela on three trains specifically run for the residents . In Havana , business owners secured their properties in anticipation of the storm . Most of the deaths from the hurricane occurred in northern Cuba . Winds of over 115 mph (185 km / h) affected the coastline , and Havana reported maximum winds of 94 mph (151 km / h) . There , the winds downed power lines and uprooted trees . High waves flooded six blocks of the city with up to 4 ft (1 @. @ 2 m) of water , entering the cellars of some homes . East of Havana in Cárdenas , high waves destroyed the aqueduct , while high winds severely damaged the local sugar industry . A nearby coastal town 20 mi (32 km) east of Cárdenas was described as being " virtually leveled by the storm " in news reports . In Cienfuegos along the southern coast , the hurricane destroyed many ships and piers . High waves washed four ships ashore , one of which damaged another ship . High winds destroyed hundreds of houses and damaged many others along the storm 's path . About 100 @, @ 000 people were left homeless , many of whom lacking food or medical supplies . In the interior of the country , the hurricane dropped rainfall that flooded rivers and towns . Damage was estimated at \$ 11 million , and a report published in 2003 indicated that there were about 70 deaths in the country ; however , newspaper accounts from shortly after the hurricane indicated there were around 100 deaths . After the storm , police officers were deployed to maintain order . Officers shot and killed five people caught looting in Havana , although the deaths were not included in the overall death toll . Officials deployed trucks to pick up wounded citizens .

While the hurricane was over the Bahamas late on August 30 , the United States Weather Bureau issued storm warnings for southern Florida . Two days later , the storm struck Cuba and passed south of the state , producing peak winds of 42 mph (68 km / h) in Key West . The winds caused little damage ; however , high waves destroyed a sea wall and washed onto a coastal roadway . High waves also sank a boat , killing three people .

Three days before the hurricane made its final landfall , officials at the Weather Bureau in Brownsville issued a warning to all stations along the Texas coast , declaring that it was " uncertain where tropical storm in Gulf will reach coast line , but all persons should be warned to remain away from inaccessible places on Texas coast over week end . " The early warning was to prevent travelers from being on the Texas beaches on Labor Day Weekend . As a result , an official at the Corpus Christi Weather Bureau office estimated that the warning " probably saved thousands of lives . " Early on September 4 about a day before landfall , the Weather Bureau issued a hurricane warning from Corpus Christi to Freeport and storm warnings for other locations along the Texas coast . When the storm 's westward motion became more apparent , the hurricane warning was dropped north of Corpus Christi and extended southward to Brownsville . Officials in Corpus Christi declared martial law before the storm struck and ordered mandatory evacuations of low @- @ lying areas . Shelters opened in the city , and many businesses closed .

When the storm moved across the area , winds were estimated at 90 mph (140 km / h) in Brownsville , with gusts to 125 mph (201 km / h) . High tides were reported along the coast , and the storm surge reached 13 ft (4 @. @ 0 m) near Brownsville . The tides flooded portions of Corpus Christi about 3 ft (0 @. @ 91 m) deep , sinking boats and damaging piers . Storm @- @ generated waves destroyed 20 buildings in one settlement . The storm destroyed the causeway from Padre Island to Flour Bluff , and there were over 40 breaches in the island , some up to a mile wide . The storm dropped heavy rainfall from southern Texas through northeastern Mexico , peaking at over 15 @. @ 0 in (380 mm) at a station near Mercedes ; the total was one of four 24 ? hour precipitation records set by the storm . The rains from the storm and two previous hurricanes led to a large

increase in tropical butterfly species across the area . Throughout the Rio Grande Valley , the strong winds destroyed about 90 % of the citrus crop . Overall , the hurricane left \$ 16 @. @ 9 million in damage and 40 deaths , mostly in Cameron County . However , none of the deaths were in Brownsville or Corpus Christi , which was credited to the advance warning . Damage was less than expected in Corpus Christi , and many business owners who lost revenue sent letters of outcry to the Weather Bureau Headquarters ; however , the Bureau determined that the evacuations and warnings were warranted given the storm 's threat .