

= Hurricane Edith (1971) =

Hurricane Edith was the strongest hurricane to form during the 1971 Atlantic hurricane season . It developed from a tropical wave on September 5 and quickly strengthened into a hurricane in the Caribbean Sea . Edith rapidly intensified on September 9 and made landfall on Cape Gracias a Dios as a Category 5 hurricane on the Saffir @-@ Simpson Hurricane Scale . It quickly lost intensity over Central America and after briefly entering the Gulf of Honduras it crossed the Yucatán Peninsula in Mexico . After moving across the Gulf of Mexico a trough turned the storm to the northeast and Edith , after having restrengthened while accelerating towards the coast , made landfall on Louisiana with winds of 105 mph (170 km / h) on September 16 . Edith steadily weakened over land and dissipated over Georgia on September 18 .

The hurricane killed two people when it passed near Aruba . Striking northeastern Central America as a Category 5 hurricane , Edith destroyed hundreds of homes and killed at least 35 people . In Texas high tides caused coastal flooding but little damage . Edith caused moderate to heavy damage in portions of Louisiana due to flooding and a tornado outbreak from the storm . One tornado , rated F3 on the Fujita Scale , damaged several homes and injured multiple people in Baton Rouge . The tornado outbreak extended eastward into Florida , of which a few destroyed entire buildings . Damage in the United States totaled US \$ 25 million (1971 dollars , \$ 146 million in 2016 dollars) . Hurricane Edith , along with hurricanes Cleo (1958) , Ethel (1960) , and Emily (2005) are the only Category 5 storms not to have their names retired .

= = Meteorological history = =

A tropical wave moved off the coast of Africa near Dakar on August 31 . It moved westward into the Intertropical Convergence Zone , and organized into a tropical disturbance on September 2 with a small , circular area of convection . The system moved to the west , and on September 3 , the convection diminished after moving west of 40 ° W. By the next day , the tropical disturbance was barely discernible from the clouds of the Intertropical Convergence Zone . The wave gradually became detached from the ITCZ , and based on a reconnaissance flight that confirmed the existence of a low @-@ level circulation , it is estimated the system developed into a tropical depression on September 5 while located 255 miles (415 km) east of Grenada .

The depression moved westward quickly , and moved through the southern Lesser Antilles early on September 6 . The southern portion of the circulation passed over northeastern Venezuela , though after entering the Caribbean Sea , another reconnaissance flight was unable to confirm the existence of a low @-@ level circulation . Shortly thereafter , while moving into an area of light wind shear , it was able to organize and strengthen further , and on September 7 the depression strengthened into Tropical Storm Edith near the island of Curaçao . While initially , a cold @-@ core upper @-@ level low persisted about 750 miles (1200 km) northwest of the storm , Edith moved west @-@ northwestward due to the influence of a narrow and persistent ridge of high pressure , which extended from the southwestern Atlantic Ocean to the Gulf of Mexico . As the storm continued into open waters of the Caribbean , the upper @-@ level low gradually weakened and was replaced with an anticyclone . This allowed the storm to strengthen further , and on September 8 , Edith became a hurricane in the south @-@ central Caribbean Sea .

On September 9 , the storm rapidly intensified , and within 24 hours , Edith strengthened from a minimal hurricane to a powerful 160 mph (260 km / h) Category 5 hurricane just off the coast of Nicaragua . The cause for the explosive deepening is unknown , though it is speculated that the transformation in the upper troposphere from an upper @-@ level low to an anticyclone led to a release of baroclinic energy . Reconnaissance aircraft crews in the peak of the storm reported extreme turbulence , causing concern for the safety of the crews . At its peak intensity , the very well @-@ defined " pinhole " eye was only 5 miles (8 km) in diameter . Late on September 9 , Hurricane Edith made landfall on northeastern Nicaragua at Cabo Gracias a Dios .

Hurricane Edith rapidly weakened over the mountainous terrain of northeastern Central America , and 18 hours after it made landfall , it emerged into the Gulf of Honduras as an 80 mph (130 km / h

) Category 1 hurricane . It continued to weaken as it moved northwestward , and made landfall near Belize City with tropical storm winds of 70 mph (115 km / h) . Edith weakened further while crossing the Yucatán Peninsula , and emerged into the Gulf of Mexico near Campeche , Mexico late on September 11 as a minimal tropical storm . Edith initially failed to re-intensify as it moved northwestward , despite low amounts of wind shear and warm waters . This was because an anticyclone over the Gulf was closely connected with Hurricane Fern , which developed and moved over the northwestern portion of the Gulf of Mexico . The anticyclone resulted in an easterly upper-level flow across Edith , creating conditions not conducive for intensification . As Fern moved inland over Texas , the flow became more favorable around Edith , and 36 hours after entering the Gulf of Mexico , the storm began to reintensify slightly .

Edith continued moving to the west-northwest , heading towards the coast of Mexico , but early on September 14 , the storm stalled while located just off the coast of Tamaulipas . A mid-latitude trough of low pressure approached the storm , and caused Edith to turn to slowly drift towards the northeast . Located only miles from the Mexican coast , Edith again failed to strengthen until September 15 , when it accelerated northeastward and regained hurricane status . The hurricane turned to the east-northeast as it approached the coast of Louisiana , and made landfall on September 16 in a sparsely populated area 30 miles (48 km) east of Cameron with winds of 105 mph (170 km / h) , equivalent to a Category 2 hurricane in the Saffir-Simpson Hurricane Scale . Edith rapidly weakened over land , degenerating into a tropical storm over Louisiana , and into a tropical depression over Mississippi . It continued to the east-northeast , and dissipated over northwestern Georgia on September 18 .

== Preparations ==

Fourteen hours prior to Edith making landfall in Central America , the National Hurricane Center warned citizens about the extreme danger of the approaching hurricane , and asked them to prepare for hurricane conditions . While the storm was located in the Gulf of Mexico , the National Hurricane Center issued a Hurricane Warning from Cameron to Morgan City , Louisiana eighteen hours before the hurricane made landfall . Edith later struck land in the middle portion of the warning area .

In Belize , officials ordered the mandatory evacuation of low-lying areas , resulting in hundreds of residents leaving to the United States through the international airport . Officials sent police troops to maintain order and prevent looting .

In the Gulf of Mexico , several oil facilities were closed or placed on automatic controls . Drilling rigs as far east as the coastal waters off of Mississippi were prepared to evacuate in the event Edith moved further east than anticipated . Additionally , thousands evacuated coastal areas of Louisiana prior to the arrival of the hurricane . Several shelters opened in coastal cities , and many people prepared for the hurricane by purchasing emergency supplies . Officials closed schools throughout much of southern Louisiana .

== Impact ==

=== Caribbean ===

While passing through the southern Lesser Antilles , the tropical depression produced heavy rainfall and winds of around 35 mph (55 km / h) . Edith produced tropical storm force winds in Aruba , and gusts reached 60 mph (95 km / h) . Two fishermen were reported lost at sea and presumed dead as a result of Edith .

Edith produced strong winds across northeastern Nicaragua and eastern Honduras , with Puerto Lempira reporting an unofficial sustained wind of 140 mph (225 km / h) . Press reports indicated every house in the Cape Gracias area was destroyed or heavily damaged , leaving 7,000 homeless . The meteorological service in British Honduras stated there were 100 fatalities near

Cape Gracias , though a later report indicated 35 people died in Nicaragua . There , damage was estimated at over US \$ 380 @, @ 000 (1971 dollars , \$ 2 @. @ 22 million in 2016 dollars) . Three United States Air Force aircraft delivered food , medical supplies , and fuel to the hurricane victims of Nicaragua . In Honduras , the hurricane produced 15 foot (4 @. @ 5 m) tides and strong winds , while strong waves destroyed 40 fishing boats as well . While the hurricane reportedly destroyed entire villages , no deaths occurred in Honduras .

Offshore islands in Belize reported winds of up to 60 mph (95 km / h) . Edith produced flooding in a few towns in the southern portion of the country , with some buildings damaged . Heavy damage was reported near Monkey River Town . Impact in Mexico , if any , is unknown .

= = = United States = = =

Two stations in Texas recorded sustained tropical force winds , and Galveston reported a peak wind gust of 53 mph (85 km / h) . While moving past the state , Edith produced above normal tides of over 4 feet (1 @. @ 2 m) in locations , which flooded a portion of Highway 87 . The storm dropped light to moderate amounts of rainfall peaking at 3 @. @ 5 inches (89 mm) in Sabine Pass . The passage of Hurricane Edith resulted in downed trees and power lines , and damage totaling US \$ 180 @, @ 000 (1971 dollars , \$ 900 @, @ 000 in 2006 dollars) .

Off the coast of Louisiana , the hurricane wrecked three boats , but all the occupants were safely rescued . While making landfall in Louisiana , Edith resulted in above normal tides of up to 9 @. @ 7 feet (2 @. @ 9 m) above normal at Cypremont Point near Morgan City . The highest winds reported by a land station were 69 mph (111 km / h) at Cameron , where a wind gust of 96 mph (155 km / h) was also reported . However , due to the lack of recording instruments near the hurricane 's landing point , whether higher winds occurred there is not known , although likely . Rainfall was moderate across Louisiana , including amounts of over 8 inches (200 mm) in the southwestern portion of the state . A strong rainband well ahead of the hurricane , combined with the intrusion of dry air into the hurricane 's circulation , produced 16 tornadoes from Louisiana to Alabama . An F3 tornado touched down in the eastern residential suburbs of Baton Rouge , causing heavy property damage totaling \$ 2 @. @ 5 million (1971 dollars , \$ 14 @. @ 6 million in 2016 dollars) along its intermittent 7 mile (11 km) path . The tornado also injured three people . An F2 tornado in Tangipahoa Parish caused \$ 250 @, @ 000 in damage (1971 dollars , \$ 1 @. @ 46 million in 2016 dollars) along its 4 mile (6 km) path , while an F1 tornado in St. Martin Parish injured 6 people on its 3 mile (5 km) path . The hurricane caused extensive damage to the sugar cane crop in southwestern Louisiana . About a month after Edith struck the United States , President Richard Nixon declared portions of Louisiana as a disaster area , which allocated relief funds to aid the affected citizens .

In Mississippi , wind gusts peaked at 70 mph (112 km / h) in Hattiesburg , with multiple locations reporting tropical @-@ storm @-@ force winds . Additionally , Edith produced moderate rainfall peaking at 6 @. @ 15 inches (156 mm) in Liberty . In Alabama , the storm caused light rains , moderate wind gusts , and a storm tide of 2 @. @ 7 feet (0 @. @ 8 m) in Mobile . Edith spawned four tornadoes in Alabama , three of which were F2 tornadoes . Two touched down in Baldwin County ; one destroyed two homes and damaged several others , and the other destroyed two mobile homes , a few barns , and damaged ten houses . Two tornadoes also touched down in Washington County , one of which destroyed several small buildings and downed a few trees . In Florida , Edith produced slightly above @-@ normal tides and light rain . It spawned a tornado in Pensacola , Florida , injuring one person and inflicting \$ 25 @, @ 000 in damage (1971 dollars , \$ 125 @, @ 000 in 2006 dollars) . Damage throughout the United States totaled \$ 25 million (1971 dollars , \$ 146 million in 2016 dollars) , primarily from crop damage in southwest Louisiana . No deaths were reported in the United States .