

= Tropical Storm Alberto (2006) =

Tropical Storm Alberto was the first tropical storm of the 2006 Atlantic hurricane season . Forming on June 10 in the northwestern Caribbean , the storm moved generally to the north , reaching a maximum intensity of 70 mph (110 km / h) before weakening and moving ashore in the Big Bend area of Florida on June 13 . Alberto then moved through eastern Georgia , North Carolina , and Virginia as a tropical depression before becoming extratropical on June 14 .

Across the Western Caribbean , the storm produced heavy rainfall , causing some minor damage . In Florida , a moderate storm tide caused coastal damage and flooding , while Alberto 's outer rainbands produced several tornadoes . The storm was indirectly responsible for two drownings off the coast of Tampa Bay . In North Carolina , heavy rainfall caused locally severe flooding , and one child drowned in a flooded storm drain near Raleigh . The remnants of Alberto produced strong winds and left four people missing in Atlantic Canada . Overall , damage was minor along Alberto 's path .

= = Meteorological history = =

In early June 2006 , an area of convection persisted across Central America and the western Caribbean in association with a broad , nearly stationary trough of low pressure . Thunderstorms increased and became more concentrated on June 8 after a tropical wave moved into the western Caribbean , and an upper @-@ level low to its west increased outflow over the system . The disturbance moved slowly north @-@ northwestward , and development was initially inhibited by marginally favorable upper @-@ level winds and land interaction . The system gradually organized , and by June 10 a circulation formed with sufficiently organized convection for the National Hurricane Center to classify it Tropical Depression One . At this point the storm was located about 140 miles (225 km) south of the western tip of Cuba .

The depression tracked to the northwest through the Yucatán Channel into an area of increased wind shear , which left the center exposed and elongated . Despite its poor structure , the system maintained strong winds in its eastern semicircle . The depression intensified into Tropical Storm Alberto early on June 11 about 260 miles (420 km) southwest of the Dry Tortugas , based on Hurricane Hunters ' reports of flight level winds of 50 mph (80 km / h) in a few convective bands . Upon becoming a tropical storm , the low @-@ level circulation had become better defined , though forecasts predicted the wind shear would increase , preventing significant strengthening of the storm . One forecaster at the National Hurricane Center remarked the system resembled a subtropical cyclone . However , deep convection developed and built westward against the wind shear as the overall organization improved . At the same time Alberto turned northeastward under the influence of an approaching trough . On June 12 , the circulation abruptly reformed under the area of deepest convection , which coincided with the storm 's passage over the loop current ; consequentially , Alberto quickly strengthened to reach peak winds of 70 mph (115 km / h) about 220 miles (350 km) west @-@ northwest of Tampa , Florida .

Though it was projected to track over cooler waters and stay in an area of increased shear , forecasters at the National Hurricane Center predicted Alberto would attain hurricane status and make landfall at that intensity . The storm maintained peak intensity for about 18 hours , and while accelerating northeastward , Alberto 's convection diminished as the cloud pattern became elongated . On June 13 , dry air became entrained in the circulation , leaving the center exposed from the convection and the wind field greatly broadened . A partial eyewall developed in the western semicircle of the center ; however , winds were well below hurricane force . Alberto continued to weaken , and made landfall at about 1630 UTC on June 13 with 45 mph (75 km / h) winds in Taylor County , Florida , about 50 miles (80 km) southeast of Tallahassee .

The storm maintained a well @-@ organized structure and banding features over land , while continuing to produce winds of tropical storm force as it moved into Georgia . Early on June 14 , the storm weakened to tropical depression status while located near the city of Millen , Georgia . Alberto began to lose tropical characteristics soon thereafter , and about six hours after weakening to a

tropical depression it transitioned into an extratropical cyclone . Late on June 14 it accelerated northeastward to emerge into the Atlantic Ocean , and on June 15 , it entered the area of responsibility of the Canadian Hurricane Centre . While over open waters , Alberto 's remnants began to re @-@ intensify ; later that day , the extratropical remnant low attained winds of 65 mph (105 km / h) and a pressure of 969 mbar while a short distance south of Nova Scotia . At this time , the low presented a well @-@ defined comma structure . After passing near Sable Island , the remnants of Alberto crossed the Avalon Peninsula of Newfoundland on June 16 . The extratropical storm turned to the east @-@ northeast and later to the east as it continued its rapid forward motion , and on June 19 the remnants of Alberto merged with an approaching cold front near the British Isles .

= = Preparations = =

By June 12 , the Cuban government had evacuated over 25 @,@ 000 people in the western portion of the country due to the threat of flooding . The National Hurricane Center recommended tropical storm warnings for the Isle of Youth and the Pinar del Río Province early on June 10 , but they were not issued by the Cuban government .

In northwestern Florida , officials issued a mandatory evacuation order a day before the storm moved ashore for about 21 @,@ 000 citizens in Levy County , Citrus County , and Taylor County . Several schools were closed as well , and converted into shelters . In all , about 350 coastal residents took refuge in emergency shelters . Prior to the arrival of the storm , Florida governor Jeb Bush declared a state of emergency for the state . A tropical storm watch was first issued for portions of the Florida Panhandle about 43 hours prior to landfall . As Alberto was predicted to continue intensifying , the National Hurricane Center issued a hurricane warning from Longboat Key to the mouth of the Ochlockonee River approximately 25 hours before landfall . A tropical storm warning extended southward to Englewood and westward to Indian Pass . A tropical storm warning was also issued from Flagler Beach , Florida to the mouth of the Santee River in South Carolina . As the storm moved inland , local National Weather Service offices issued flood watches for portions of North Carolina , Virginia , and the Delmarva Peninsula . Additionally , flood and flash flood warnings were issued for some portions of the country from South Carolina through Virginia .

While Alberto was becoming extratropical over land , the Canadian Hurricane Centre issued gale warnings for offshore waters of Nova Scotia , and later for Newfoundland . In addition , the Atlantic Storm Prediction Center issued inland wind warnings for coastal regions of Nova Scotia . Due to the prediction for precipitation , the Atlantic Storm Prediction Center posted rainfall warnings for all Atlantic coastal regions of Nova Scotia .

= = Impact = =

= = Caribbean = =

In its early stages of development , the tropical depression which later became Alberto produced heavy rainfall across the western Caribbean . A station on Grand Cayman reported 22 @.@ 72 inches (577 mm) of rain in one 24 @-@ hour period . In Cuba , rainfall amounted to 17 @.@ 52 inches (445 mm) in Pinar del Río province , where one station recorded 4 @.@ 06 inches (103 mm) in one hour . On the Isle of Youth , precipitation accrued to 15 @.@ 67 inches (398 mm) in Sumidero . Air and marine travel was disrupted between the Cuban mainland and the Isle of Youth . In Havana Province rainfall totaled 8 @.@ 46 inches (215 mm) at Playa Baracoa . Much of the precipitation fell during a fairly short time , and was beneficial , as the area had been suffering from severe drought conditions . In Pinar del Río province , the precipitation flooded 50 sq mi (130 km²) of crop land . The storm damaged about 50 houses across the country , about half of which in Havana .

Alberto dropped light amounts of rainfall across Mexico , with a 24 @-@ hour total peaking at 4

inches (100 mm) in Peto , Yucatán . Light rain was also reported throughout Quintana Roo and in eastern Campeche .

= = = Florida = = =

The large area of convection associated with Alberto dropped rainfall across Florida for several days . The statewide precipitation maximum reached 7 @. @ 08 inches (180 mm) at a station 5 miles (8 km) east of Tarpon Springs . The highest sustained winds from the storm were officially clocked at 40 mph (65 km / h) in St. Petersburg , which also saw reports of wind gusts of up to 56 mph (90 km / h) . Upon making landfall on the Florida Panhandle , the storm produced a storm tide which unofficially peaked at 7 @. @ 3 feet (2 @. @ 2 m) at Crystal River Power Plant . The combination of high surf and the storm tide caused surge flooding along the Florida Panhandle . Six tornadoes were spawned in the state from the outer rainbands of Alberto , none of which caused serious damage .

Across coastal areas , the storm surge flooding caused minor damage to dozens of homes and closed several roads . Near Homosassa , two people who did not evacuate required water rescue . At Egmont Key State Park , a woman fell off of a boat when a band of showers and surging currents made navigation difficult ; her husband and a friend drowned after jumping in to save her without life jackets , though the woman returned safely to the boat . The rainfall caused some temporary road flooding , though precipitation was mostly beneficial in alleviating drought conditions . Moderate wind gusts caused scattered power outages and downed some trees across the northeast portion of the state . Overall , property damage in the state rose to about \$ 390 @, @ 000 (2006 USD) in total .

= = = Southeast United States = = =

While the storm moved through the state of Georgia , moderate winds of up to 45 mph (72 km / h) occurred along the coastline . Rainfall ranged from 3 ? 5 inches (75 ? 125 mm) across the southeast portion of the state , with isolated higher maxima of up to 7 @. @ 05 inches (179 mm) in Rincon . Alberto produced a storm tide of 8 @. @ 53 feet (2 @. @ 6 m) at Fort Pulaski National Monument , causing some beach erosion along the coastline .

Alberto produced winds of tropical storm force along the South Carolina coastline ; the highest official wind gust was 51 mph (82 km / h) at Edisto Beach . The storm dropped precipitation across much of the state , including a state maximum of 4 @. @ 42 inches (112 mm) at Pritchardville . Storm tides reached 7 @. @ 81 feet (2 @. @ 4 m) above the mean low @- @ level water mark along Fripp Island , leading to some beach erosion along portions of the coastline . While in the process of becoming extratropical , the rainbands of Alberto spawned seven confirmed tornadoes in the state , most of which rated F0 ; a National Weather Service report indicated additional tornadoes may have occurred in the state . The tornadoes caused some minor damage , though overall damage in the state was minimal .

The remnants of Alberto dropped heavy precipitation across North Carolina , including a nationwide high of 7 @. @ 16 inches (182 mm) at the Raleigh National Weather Service Office . Some totals broke previous rainfall records , including the station at Raleigh @- @ Durham International Airport which broke the all @- @ time daily precipitation record for that station . The rainfall led to flooding across the central portion of the state , with 45 flash flood warnings issued by the Raleigh National Weather Service . Police and firefighters in Wake County performed 47 water rescues . Additionally , the Raleigh @- @ Wake 9 @- @ 1 @- @ 1 center received more than 1 @, @ 076 calls for help . Flash flooding occurred throughout the area , which caused the Crabtree Creek in Raleigh to crest at 23 @. @ 77 feet (7 @. @ 2 m) ; this was the second highest flood stage on record for the creek . The overflown creek flooded a few cars to their rooftops , and resulted in the closure of the Crabtree Valley Mall . Major flooding was reported elsewhere throughout the region , which closed several roads and damaged some houses . In Franklin County , an eight @- @ year @- @ old boy drowned after getting sucked into a flooded drainage system ; the death is considered indirect because the boy was chasing a ball into the drainage system . Near the coast , the storm produced several

waterspouts , some of which moved ashore in Dare and Carteret counties . Isolated reports of 60 mph (95 km / h) wind gusts resulted in downed trees and minor damage .

Rainfall from the storm extended into Virginia , the Eastern Shore of Maryland , and extreme southeastern Delaware . Precipitation totaled 5 @. @ 8 inches (147 mm) in Virginia Beach , which caused flash flooding in the Hampton Roads area . The flooding closed several roads , though no major damage was reported .

= = = Canada = = =

The extratropical remnant of Alberto produced strong winds across the Canadian Maritimes , including gusts of 74 mph (119 km / h) in the Barrington district of Nova Scotia . Sustained winds reached 51 mph (83 km / h) . Rainfall from the storm was moderate , with some locations reporting 0 @. @ 4 inches (10 mm) per hour ; totals exceeded 2 inches (50 mm) in numerous areas . Due to wet grounds , the winds knocked down some trees and several tree limbs , and also downed some power lines , causing localized power outages . Moderate winds and rainfall affected Newfoundland , as well . According to a press report , the storm left four sailors missing about 230 miles (370 km) south of Nova Scotia .