

Hurricane Charley Preliminary Storm Survey II

Disclaimer: Hurricane Charley track and intensity information from our surveys are preliminary.
Final official intensity and track will be determined by the National Hurricane Center.

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National Weather Service Meteorologists surveyed the extensive damage caused by Hurricane Charley. The hurricane affected a large part of Southwest and West Central Florida. The most significant damage occurred in Lee, Charlotte, DeSoto, Hardee, and Polk counties. The hurricane affected parts of Sarasota and Highlands counties to a lesser degree. Preliminary damage was estimated in the tens of billions of dollars. The hurricane damage path was similar to the path taken by Hurricane Donna on September 11, 1960.

A strong feeder band associated with Hurricane Charley moved across West Central and Southwest Florida during the early afternoon hours of 13 August 2004. This band produced at least 5 weak tornadoes. Unfortunately, most of these tornadoes occurred in the same areas that sustained maximum damage from the hurricane's eyewall region. Therefore, the survey team was unable to distinguish individual paths and will rely on the time of the damage reports at this time. Future evaluation may make these paths more defined.

Hurricane Charley made landfall at 345 PM EDT at Cayo Costa, just north of the barrier island of Captiva in Lee County. Hurricane Charley was a Category 4 hurricane with winds around 140 miles an hour at landfall. The survey team found the most intense damage was coincident with the eyewall region. The eyewall region moved across northern Captiva, Pine Island, and Gasparilla Island, then continued into Punta Gorda, Port Charlotte, and Cleveland. The center of the hurricane continued northeast around 25 miles an hour and moved through Fort Ogden, Arcadia, Zolfo Springs, and Wauchula. The eye then moved past Lake Wales around 745 PM EDT. The most intense damage occurred in a band approximately 10 miles wide centered on the path of the eyewall. Additional damage was seen in a band approximately 35 miles wide centered on the path of the eyewall.

- Boca Grande...North of 29th Street, tree damage was relatively minor and isolated. Significant damage occurred south of 29th Street and continued

southward all the way to the end of Gasparilla Island. Numerous homes suffered extensive roof damage and a few homes had roofs and walls removed. A few more substantially built structures in the same area survived with only minor roof and window damage. Thousands of trees and power lines were either snapped off or uprooted. Storm debris was piled in the streets at least 10 feet deep in places. Toward the end of the island, the damage was consistent with the low end of a Category 4 storm (Winds just over 130 mph). Boca Grande was close enough to the center of Hurricane Charley that damaging winds occurred from a few different directions. Hurricane Charley moved quickly for a tropical system. Therefore, flash flooding and storm surge were held to a minimum. There was no evidence of flash flooding and the storm surge was estimated at 7 to 8 feet above normal tide at the tip of the island.

- Port Charlotte and Charlotte Harbor... Significant structural damage occurred to a large majority of this area. The damage was most severe south of Toledo Blade Blvd. all the way to Charlotte Harbor and the Peace River and extended northeastward past Interstate 75. Numerous structures were totally destroyed. Most structures suffered some degree of roof damage and numerous buildings, condominiums, and homes had their roofs torn off. Thousands of trees and power lines were blown down. Many manufactured homes, RV's, and mobile homes were destroyed. These areas were close enough to the center of Hurricane Charley that damaging winds occurred from a few different directions.
- Punta Gorda... Punta Gorda suffered similar damage to Port Charlotte. Numerous structures were totally destroyed. Most structures suffered some degree of roof damage and numerous buildings, condominiums, and homes had their roofs torn off. Thousands of trees and power lines were blown down. Many manufactured homes, RV's, and mobile homes were destroyed. Many structures in Punta Gorda Isles, Charlotte Park, and Aqui Esta were destroyed. These areas were close enough to the center of Hurricane Charley that damaging winds occurred from a few different directions.
- Arcadia... Hurricane Charley's eye moved just west of Arcadia. Most of the town suffered some degree of damage as the hurricane moved through. The civic center, which was acting as a shelter for over 1200 people, sustained major damage and only a few people suffered minor injuries. One fire tower was blown down, one water tower was blown down, one radio tower was damaged, numerous structures were destroyed, and numerous structures had significant roof damage. Several manufactured home communities suffered severe damage. Several RV parks and mobile home communities also were heavily damaged or destroyed. Numerous trees and power lines were blown down around the area. The heaviest damage occurred just west of US 17. Better built structures survived in many cases with only minor roof damage. Winds appeared to have decreased slightly in Arcadia but were still indicative of Category 3 from 110 to 120 miles an hour. The most significant damage appeared to be from the northern portion of the eyewall region

because the damage indicated an easterly wind direction.

- Wauchula... The hurricane remained on its course right up US 17 to Wauchula. Several manufactured home, mobile home, and RV communities were heavily damaged or destroyed between Arcadia and Wauchula. Numerous structures were damaged or destroyed and many more sustained varying degrees of roof damage. Numerous trees and power lines were blown down. The hurricane still appeared strong and damage was indicative of winds around 110 mph. The most significant damage appeared to be from the northern and eastern portion of the eyewall region because the damage was from an easterly wind direction.
- Lake Wales... The citrus orchards between Wauchula and Lake Wales suffered damage. Many of the citrus trees had broken limbs and several were uprooted. Numerous structures near Lake Wales sustained varying degrees of roof damage. Numerous high wattage power lines were knocked down. The most significant damage appeared to be from the northern and eastern portion of the eyewall region because the damage indicated an easterly wind direction. Hurricane Charley's eye exited the Tampa Bay Area County Warning Area around 830 PM EDT. This tropical system held together enough to cause additional damage in the Orlando area. Sustained winds around 75 miles an hour with gusts to around 100 miles an hour were measured at the Orlando McCoy Airport.