## = September 1948 Florida hurricane =

The September 1948 Florida hurricane was the most intense tropical cyclone to make landfall in the state since the 1935 Labor Day hurricane . The fourth hurricane and third major hurricane of the season , this storm developed from a tropical wave over the Caribbean Sea on September 18 . Early the next day , the system strengthened into a hurricane while moving westward . Thereafter , it curved northwestward and continued to deepen . By September 20 , the system turned northward and later that day made landfall in Zapata Peninsula , Cuba as a Category 3 hurricane on the modern day Saffir ? Simpson hurricane wind scale . Another landfall occurred in Cuba early the next day to the south of Güines . Severe destruction was reported on the island , with winds up to 90 mph (  $140\ km\ /\ h$  ) observed in Havana . Over 700 buildings were destroyed . Ten deaths occurred and damage totaled at least \$ 2 million (  $1948\ USD$  ) , while other sources estimate " several million dollars . "

After emerging into the Straits of Florida on September 21 , the storm resumed intensification , before striking near Boca Chica Key , Florida with winds of 120 mph (  $195\ km\ /\ h$  ) . By early on September 22 , the system peaked as a Category 4 hurricane with maximum sustained winds of 130 mph (  $215\ km\ /\ h$  ) . Shortly thereafter , another landfall occurred near Chokoloskee , Florida at the same intensity . Severe damage was reported in the state due to strong winds . The storm was considered the worst in Key West since the 1919 Florida Keys hurricane . Throughout the state , 1 @,@ 200 homes were severely damage or destroyed , while 40 businesses were demolished and 237 suffered impact . Throughout Florida , there were three fatalities and approximately \$ 12 million (  $1948\ USD$  ) in damage , over half of which was inflicted on crops . The storm rapidly weakened while crossing the state and emerged into the Atlantic Ocean as only a Category 1 hurricane later on September 22 . Slight fluctuations in intensity occurred before the hurricane became extratropical early on September 24 , while located northwest of Bermuda .

## = = Meteorological history = =

A tropical wave ? an elongated trough of low pressure ? was detected moving through the Leeward Islands on September 14 . The system acquired a circulation while situated between Grand Cayman and Jamaica on September 18 . Thus , a tropical storm developed at 06 : 00 UTC . With initial sustained winds of 45 mph (  $75\ km\ /\ h$  ) , the storm quickly intensified while heading westward , and became a Category 1 hurricane on the modern @-@ day Saffir ? Simpson hurricane wind scale early on September 19 . Later that day , the storm strengthened into a Category 2 hurricane and then a Category 3 hurricane only six hours after . The hurricane turned northward on September 20 and made landfall on the Zapata Peninsula of Cuba with winds of 125 mph (  $205\ km\ /\ h$  ) at 22 : 00 UTC . With the storm continuing to move northward , it made another landfall in Cuba at 01 : 00 UTC the following day near Güines , Mayabeque Province . Emerging into the Straits of Florida early on September 21 , the hurricane weakened somewhat to a minimal Category 3 hurricane while moving across Cuba .

The hurricane restrengthened slightly on September 21 , before making landfall near Boca Chica Key , Florida at 17 : 00 UTC , with sustained winds of 120 mph (  $195\ km\ /\ h$  ) . Around that time , the storm 's eye was only 10 mi (  $16\ km$  ) in diameter . However , it deepened further and became a Category 4 hurricane early on September 22 . At 05 : 00 UTC , the system attained its peak intensity with a maximum sustained wind speed of  $130\ mph$  (  $215\ km\ /\ h$  ) and a minimum barometric pressure of  $940\ mbar$  (  $28\ inHg$  ) . Simultaneously , it struck near Chokoloskee , Florida . Due to the storm 's barometric pressure at the time , it was the most intense tropical cyclone landfall in Florida since the  $1935\ Labor$  Day hurricane . Several locations reported an "eye" , leading some meteorologists at the time to suggest that the storm had multiple circulations , though others theorized that dry air pockets existed between the rainbands . The hurricane rapidly weakened while moving northeastward across the state and was only a Category 1 hurricane upon emerging into the Atlantic Ocean near Jensen Beach late on September 22 . Slight re @-@ intensification occurred the following day , with the storm becoming a moderate Category 2 hurricane by 12 : 00 UTC .

Nonetheless, it began losing tropical characteristics and transitioning into an extratropical cyclone early on September 24, while located about 330 miles (530 km) northwest of Bermuda. The remnants accelerated to the east @-@ northeastward and continued to weaken, before dissipating hundreds of miles east of Newfoundland on September 26.

## = = Preparations and impact = =

Offshore Grand Cayman, the British steamer Lochmonar, with 72 people aboard, encountered the hurricane on September 19. The ship ran aground in seas that were " as rough as hell ". They were safely rescued by a United States Coast Guard tugboat on September 20.

Strong winds were reported on Cuba , with sustained winds up to 90 mph ( 140 km / h ) observed in Havana . Damage was particularly severe in that city and Matanzas . Almost 700 buildings were destroyed . Damage on the island totaled " several million dollars " , with some sources reporting at least \$ 2 million . There were ten deaths and at least 200 injuries in Cuba .

In preparation for the storm , the American Red Cross opened 213 shelters , which were collectively occupied by 38 @,@ 323 people . Officials prepared two trains at Fort Pierce to evacuate residents living along Lake Okeechobee . Many residents in the area sought higher ground , but most refused to evacuate via the trains . Strong winds lashed Florida , with a sustained wind speed of 122 mph (  $196\ km\ /\ h$  ) observed at the Naval Air Station Key West , before the anemometer blew away . There , 30 commercial and private aircraft were destroyed . Winds de @-@ roofed some homes and businesses nearby . Tides reached about 6 ft ( 1 @.@ 8 m ) above mean low water . The hurricane was considered the worst in Key West since 1919 . About 3 ? 5 in ( 76 ? 127 mm ) of rain fell on the Florida Keys .

In Homestead , a tornado destroyed a farmhouse and overturned a 3 @,@ 000 lb ( 1 @,@ 400 kg ) truck . Two deaths occurred in Miami ; a woman was electrocuted by a broken wire , while a man was presumably blown off a 5 @-@ story building . Tides in the city reached 4 @.@ 5 ft ( 1 @.@ 4 m ) above mean low water , causing inundation of the bayfront and smashing large breakers and small crafts against the shore and piers . In the neighborhood of Coconut Grove , docking facilities , piers , and houseboats were severely damaged . Strong winds downed palm trees , which littered the streets of Lummus Park . The road to the Haulover Bridge in Miami Beach was washed away . Additionally , heavy rainfall caused flooding , with 10 to 11 in ( 250 to 280 mm ) of precipitation in some areas . Around Lake Okeechobee , an average of 8 in ( 200 mm ) of rainfall was observed . Clewiston was inundated with 2 to 3 ft ( 0 @.@ 61 to 0 @.@ 91 m ) of water , while LaBelle was submerged for several days . Pasture lands were flooded , drowning some cattle and prompting a massive evacuation of herds to higher ground . Widespread damage to crops , particularly citrus and tropical fruits , was also reported along east coast of Florida as far north as the Indian River .

Throughout Florida , a total of 39 homes were destroyed , while 1 @,@ 161 others were severely damaged . Further , 40 buildings were demolished and 237 suffered impact . Three deaths were reported in Florida . Additionally , there were 45 injuries requiring hospitalization . Overall , damage in the state totaled about \$ 12 million , with \$ 5 million inflicted to property , \$ 6 @.@ 5 million to crops , \$ 300 @,@ 000 million to electrical services , and \$ 200 @,@ 000 to roadway infrastructure , including bridges .