

= 1949 Atlantic hurricane season =

The 1949 Atlantic hurricane season was the last season that tropical cyclones were not publicly named by the United States Weather Bureau . It officially began on June 15 , and lasted until November 15 . These dates conventionally delimit the period of each year when most tropical cyclones form in the Atlantic basin . The first storm , Hurricane One , developed north of the Lesser Antilles on August 21 . The final system , Tropical Storm Sixteen , dissipated in the southwestern Caribbean Sea on November 5 . It was a fairly active season , featuring 16 tropical storms and seven hurricanes . Two of these strengthened into major hurricanes , which are Category 3 or higher on the Saffir ? Simpson hurricane wind scale .

The most significant storm of the season was Hurricane Two . It caused up to \$ 52 million (1949 USD) and two deaths after making landfall in Florida as a Category 4 hurricane . Another storm inflicting severe impact was Hurricane Ten . Striking Texas as a Category 2 hurricane , this storm brought heavy rainfall , strong winds , and storm surge to the state , with damage reaching about \$ 6 @. @ 7 million . In late September , Hurricane Nine caused 15 deaths and over \$ 1 million in damage in Puerto Rico and Dominican Republic . The third tropical storm caused seven fatalities from drowning on Barbados . Several other systems brought minor impacts to land . Overall , storms during this season caused about \$ 59 @. @ 8 million in damage and 26 fatalities .

= = Season summary = =

The Atlantic hurricane season officially began on June 15 , 1949 . However , tropical cyclogenesis did not begin until August 21 , over two months after the start of the season . Overall , there were 16 tropical storms , seven of which strengthened into hurricanes . Three of these intensified into major hurricanes , which are Category 3 or higher on the modern day Saffir ? Simpson hurricane wind scale (SSHWS) . Four hurricanes and three tropical storms made landfall during the season , causing 26 deaths and \$ 59 @. @ 8 million in damage . The last storm of the season , Tropical Storm Sixteen , dissipated on November 5 , about 10 days before the official end of the season on November 15 .

No activity was observed until the first system was located north of the Lesser Antilles on August 21 . The hurricane later threatened the Outer Banks of North Carolina , where it caused two deaths and about \$ 50 @, @ 000 in damage . By August 23 , the Florida hurricane developed near the Lesser Antilles . It later peaked as a low @- @ end Category 4 hurricane on the modern day Saffir ? Simpson hurricane wind scale and struck South Florida at that intensity . The storm severely impacted the Florida peninsula and left two deaths and approximately \$ 52 million in losses . On August 30 , the third system of the season struck the Leeward Islands , causing some impact and seven deaths by drowning on Barbados . A fourth system was first observed near Puerto Rico on September 3 . It peaked as a Category 3 hurricane while passing east on Bermuda . After becoming extratropical , the remnants of this storm struck Newfoundland . Tropical Storm Five also developed on September 3 , in the southern Gulf of Mexico and struck Louisiana on September 4 . It caused minor damage in Mississippi and Louisiana , totaling less than \$ 50 @, @ 000 .

Neither the sixth or seventh tropical systems impacted land . The eighth hurricane was initially observed in the Gulf of Mexico on September 20 . It meandered erratically for several days , until eventually making landfall in Veracruz . The system produced above normal tides and locally heavy rains in Texas and Louisiana . Hurricane Nine was initially spotted near the Leeward Islands on September 20 . It struck Dominican Republic on September 22 , shortly before dissipating . The storm left over \$ 1 million in damage and 15 deaths in Dominican Republic and Puerto Rico . On September 27 , the tenth hurricane developed in the Pacific Ocean offshore Guatemala . The system eventually reached the Gulf of Mexico and struck Texas as a Category 2 hurricane on October 4 . The adverse effects of this storm resulted in two deaths and \$ 6 @. @ 7 million in damage . No impact was reported from the final three storms , the last of which dissipated on November 5 .

The season 's activity was reflected with an accumulated cyclone energy (ACE) rating of 98 . ACE

is , broadly speaking , a measure of the power of the hurricane multiplied by the length of time it existed , so storms that last a long time , as well as particularly strong hurricanes , have high ACEs . ACE is only calculated for full advisories on tropical systems at or exceeding 39 mph (63 km / h) or tropical storm strength .

= = Storms = =

= = = Hurricane One = = =

A tropical storm was first observed about a few hundred miles north of the Lesser Antilles on August 21 . The storm moved west @-@ northwestward and was upgraded to a hurricane 12 hours later , after various surface vessels reported winds of 80 mph (130 km / h) . It paralleled The Bahamas and turned northward on August 23 . Further intensification continued until August 24 , with the storm approaching major hurricane status . At 00 : 00 UTC it peaked with maximum sustained winds of 110 mph (175 km / h) . The eye of the cyclone later passed over the Diamond Shoals Lightship , which recorded a minimum central barometric pressure of 977 mbar (28 @.@ 9 inHg) while located offshore of Cape Hatteras , North Carolina . The cyclone became extratropical on August 25 and dissipated near Iceland on August 30 .

In the Hatteras area , sustained winds reached 73 mph (117 km / h) , while rainfall up to 4 in (100 mm) was observed . Thousands of trees were destroyed in Buxton . Damage was estimated at \$ 50 @,@ 000 , mostly in the Buxton area . Additionally , the storm was attributed to two fatalities . Later on August 24 , the storm curved east @-@ northeastward and began to slowly weaken . By 00 : 00 UTC on August 26 , it transitioned into an extratropical cyclone while located well south of Newfoundland . It was known as Hurricane Harry in newspapers .

= = = Hurricane Two = = =

A tropical storm developed east of the northernmost Lesser Antilles on August 23 . It moved west @-@ northwestward and strengthened , becoming a hurricane on August 24 . Moving through the Bahamas , the storm rapidly strengthened over the warm sea surface temperatures of the Gulf Stream . It became a major hurricane on August 26 and then passed just north of Nassau . At 18 : 00 UTC on that day , it peaked as a Category 4 hurricane with maximum sustained winds of 130 mph (210 km / h) . Five hours later , the storm made landfall in Lake Worth , Florida , at the same intensity . On August 27 , the hurricane weakened quickly after moving inland over Lake Okeechobee , but otherwise maintained hurricane intensity as it curved northward into southern Georgia . At 00 : 00 UTC on August 28 , it degenerated into a tropical storm . It later ejected northeastward and tracked rapidly across the Southeastern United States , Mid @-@ Atlantic , and New England . On August 29 , the storm became extratropical over New Hampshire .

In Florida , the storm produced strong winds , with highest official observations being sustained winds of 110 mph (180 km / h) at the Palm Beach International Airport and gusts of 155 mph (250 km / h) in Palm Beach . The most severe damage in South Florida occurred in Palm Beach , Jupiter , and Stuart ; hundreds of homes , apartment buildings , stores , and warehouse buildings lost roofs and windows . Interior furnishings were blown through broken glass into the streets . Approximately 90 % of homes and buildings were damaged in Stuart , leaving about 500 people homeless . Additionally , heavy rainfall caused water to enter numerous homes in Martin and Palm Beach Counties . Significant damage to crops also occurred , particularly to citrus . In Florida alone , the hurricane caused two deaths and at least \$ 52 million in damage , \$ 20 million of which was to agriculture . Minor impact was reported in other states , with local flooding and light wind damage in Georgia , The Carolinas , and Maryland .

= = = Tropical Storm Three = = =

A tropical depression formed to the east of the Lesser Antilles on August 30 . It moved steadily west @-@ northwestward , passing over Barbados as a weak tropical storm . Seven people drowned on the island and 27 houses were destroyed in Bridgetown . After entering the Caribbean Sea on September 1 , hostile conditions weakened the storm , and the third tropical cyclone of the season degenerated into a tropical wave on September 3 to the south of the eastern tip of the Dominican Republic .

= = = Hurricane Four = = =

A tropical wave developed into a tropical storm east of Puerto Rico on September 3 . It moved northward and strengthened to a hurricane later that day , but then weakened to a strong tropical storm the next day . At the same time , the system halted its forward motion and began to drift eastward . Early on September 5 , it re @-@ intensified into a hurricane , and it became a major hurricane on September 6 . The storm turned to the north on September 7 and passed about 65 mi (105 km) east of Bermuda on September 8 . The hurricane weakened as it accelerated northeastward over cooler waters , and became extratropical on September 10 near Atlantic Canada . Shortly after becoming extratropical , it passed over Newfoundland , and ultimately dissipated on September 11 near southwestern Greenland .

The hurricane produced gale force winds on Bermuda , though overall , no damage was reported . In Newfoundland , the storm brought rainfall up to 2 inches (51 mm) in many areas . The Bayfield was smashed into pieces along the rocky shores , though the all of the crewmen swam to safety .

= = = Tropical Storm Five = = =

Early on September 3 , a tropical storm developed in the south @-@ central Gulf of Mexico . Throughout much of its duration , the storm headed north @-@ northwestward , gradually intensifying into a moderate tropical storm . At around 12 : 00 UTC on September 4 , the storm made landfall near Cocodrie , Louisiana , while at its peak intensity . While moving inland , it passed west of New Orleans and east of Vicksburg , Mississippi . The storm curved northeastward and slowly weakened across the Southern United States . Late on September 5 , it dissipated over Tennessee . Damage was minimal in Louisiana and Mississippi , likely amounting to less than \$ 50 @, @ 000 .

= = = Tropical Storm Six = = =

The sixth tropical storm of the season was first observed on September 5 , while located about half @-@ way between the northern Lesser Antilles and the Azores . The storm moved to the northwest and reached its peak intensity early on September 12 . It then became extratropical , turning to the northeast before curving southeastward . It dissipated on September 16 .

= = = Tropical Storm Seven = = =

An extratropical system developed into a tropical storm offshore The Carolinas on September 11 . The storm moved west @-@ northwestward and strengthened slightly , peaking with winds of 50 mph (85 km / h) and a minimum barometric pressure of 1 @, @ 006 mbar (29 @. @ 7 inHg) . It then weakened somewhat before making landfall near Wrightsville Beach , North Carolina on September 13 with winds of 40 mph (65 km / h) . The storm soon weakened to a tropical depression and curved northeastward . It dissipated over southeastern Virginia on September 14 .

= = = Tropical Storm Eight = = =

A tropical storm developed early on September 13 , while located about 595 miles (960 km) west of the southernmost islands of Cape Verde . The storm slowly strengthened while moving north

@-@ northeastward across the eastern Atlantic Ocean for much of its duration . Late on September 14 , the system attained its peak intensity . Thereafter , it began to weakened and fell to tropical depression intensity on September 17 . Later that day , the storm dissipated about 475 miles (765 km) south of the central Azores .

= = = Hurricane Nine = = =

A tropical wave entered the Gulf of Mexico on September 18 . It moved northwestward and developed into a tropical storm on September 20 , while offshore Louisiana . The storm continued northwestward , then turned to the southwest , and erratically looped to the south on September 22 . Steadily strengthening as it tracked south @-@ southwestward , the storm intensified into a hurricane on September 24 . After turning to the southwest , it reached its peak intensity on September 25 . The hurricane weakened as it turned to the south @-@ southeast then south and fell to tropical storm intensity shortly before making landfall between Veracruz and Nautla . The system dissipated by September 26 . Operationally , the storm was treated as two separate storms , due to reconnaissance aircraft being unable to report a center of circulation on September 23 . The storm produced 2 to 3 ft (0 @.@ 61 to 0 @.@ 91 m) higher than normal tides along the coast of Texas and Louisiana , while its outer rainbands produced locally heavy rainfall .

= = = Hurricane Ten = = =

A strong tropical wave approached the Lesser Antilles on September 20 . Reconnaissance aircraft reports indicated the system initially lacked a circulation . However , based on a ship report of westerly winds , it is estimated the system developed into a tropical storm late on September 20 , while located about 100 miles (160 km) south @-@ southeast of Saint Croix . A small storm , it quickly strengthened as it traversed west @-@ northwestward , and became a hurricane by 12 : 00 UTC on September 21 . After reaching peak winds of 80 mph (130 km / h) the hurricane weakened , and it made landfall on September 22 on the southeastern Dominican Republic as a tropical storm . The storm rapidly dissipated after moving inland .

Strong winds resulted in heavy damage in Saint Croix . In Puerto Rico , where it was known as the San Mateo Hurricane , wind gusts from the hurricane peaked at 64 mph (103 km / h) in Ramey . Gusty winds disrupted electrical and telephone services between Ponce and Mayagüez . In the latter , residents were evacuated inland to Red Cross shelters . The hurricane dropped heavy rainfall of up to 13 @.@ 56 in (344 mm) in San Lorenzo , which caused flooding in several rivers in the northern portion of the island . Damage in Puerto Rico totaled to over \$ 1 million , mainly to coffee crops and buildings . In the Dominican Republic , the hurricane killed 15 people , while damage amounted to \$ 12 @,@ 000 .

= = = Hurricane Eleven = = =

A tropical depression formed in the eastern Pacific Ocean just offshore Guatemala on September 27 . The depression drifted northwestward and made landfall in Guatemala on September 28 . It crossed southeastern Mexico and entered the Gulf of Mexico near Ciudad del Carmen on October 1 . Shortly after entering the Gulf of Mexico , the system strengthened into a tropical storm and became a hurricane on October 2 . It turned more to the north and intensified to a strong Category 2 hurricane on October 3 . Subsequently , the storm made landfall near Freeport , Texas , on October 4 at the same intensity . The hurricane rapidly weakened to a tropical storm as it turned northeastward over land . On October 6 , it weakened to a tropical depression over Missouri and later became extratropical . The storm accelerated northeastward and dissipated near Chicago .

The hurricane produced high tides along the Texas coast , peaking at 11 feet (3 @.@ 4 m) in Velasco . Galveston was temporarily cut off from the mainland when water surpassed the city 's seawall . Several streets were flooded in Galveston and the city pier was damaged . Another pier in Port Aransas was nearly destroyed . Freeport sustained the most damage , totaling about \$ 150

@, @ 000 . The hurricane dropped heavy rainfall in Texas , peaking at 14 @. @ 5 inches (370 mm) in Goodrich . A tornado was also spawned in Riceville , which injured two children . Damage totaled approximately \$ 6 @. @ 7 million , primarily to crops . The hurricane also caused two deaths , one from electrocution in Port Neches and another due to drowning in Matagorda Bay . Outside of Texas , impact was mainly limited to minor damage to cars in five other states .

= = = Tropical Storm Twelve = = =

Another tropical storm developed northeast of Puerto Rico on October 2 . The system initially moved northward , before curving to the east @-@ northeast on the following day . It slowly strengthened and later peaked with maximum sustained winds of 60 mph (95 km / h) and a minimum barometric pressure of 1 @, @ 007 mbar (29 @. @ 7 inHg) . By early on October 6 , the storm began to weaken and became extratropical the next day . Its remnants continued east @-@ northeastward for about 12 hours , before dissipating on October 7 .

= = = Hurricane Thirteen = = =

Beginning on October 11 , an area of disturbed weather moved through the western Caribbean Sea . Early on October 13 , a tropical depression made landfall in Guantánamo Province , Cuba . Continuing northeastward , the storm emerged into the Atlantic over the Bahamas . While located over the southeastern Bahamas , the system intensified into a tropical storm . Further intensification occurred and it became a hurricane on October 14 , after exiting the Bahamas . Late on the following day , the hurricane reached its peak intensity . Thereafter , the storm began to deteriorate , weakening to a tropical storm on October 17 . It became transitioned into an extratropical cyclone on October 19 .

= = = Tropical Storm Fourteen = = =

A tropical storm was first observed about 865 miles (1 @, @ 400 km) east @-@ northeast of Barbuda . The storm initially moved west @-@ northwestward , until re @-@ curving northwestward on October 14 . It strengthened slowly and peaked with maximum sustained winds of 60 mph (95 km / h) . Thereafter , the storm began to weaken and fell to tropical depression intensity on October 17 . Several hours later , it dissipated while located about 620 miles (1 @, @ 000 km) south of Cape Race , Newfoundland .

= = = Tropical Storm Fifteen = = =

A tropical storm developed over the central Atlantic Ocean on November 1 . The system moved southwestward and then west @-@ southwestward , strengthening slowly during this time . On November 2 , it peaked with maximum sustained winds of 50 mph (85 km / h) and a minimum barometric pressure of 1 @, @ 001 mbar (29 @. @ 6 inHg) . The storm began to weaken while appearing to threaten the Lesser Antilles , but later curved northwestward . On November 4 , the system turned northward and weakened to a tropical depression . Early the next day , it became extratropical . The remnants continued northward before dissipating on November 6 .

= = = Tropical Storm Sixteen = = =

The final storm developed from a persistent low pressure area in the northwestern Caribbean Sea near Swan Island on November 3 . A reconnaissance aircraft reported a well @-@ defined eye feature as the storm reached its peak intensity . The storm drifted south @-@ southwestward and began weakening on November 4 . Later that day , it made landfall over northeastern Honduras as a tropical depression . Shortly after moving inland , the system dissipated .