

= 1964 Atlantic hurricane season =

The 1964 Atlantic hurricane season featured the highest number of U.S.-landfalling hurricanes since 1933 . The season officially began on June 15 , and lasted until November 30 . These dates conventionally delimit the period of each year when most tropical cyclones form in the Atlantic basin . The season was slightly above average , with twelve total storms and six hurricanes . All of the hurricanes strengthened into major hurricanes , an event that had not occurred since 1930 . The first system , an unnamed tropical storm , developed on June 2 , almost two weeks before the official start of the season . Striking Florida on June 6 , the storm brought localized flooding to portions of Cuba and the Southeastern United States , leaving about \$ 1 million in damage . The next storm , also unnamed , developed near the end of July ; it did not impact land .

The effects of Hurricanes Cleo , Dora , and Isbell combined were devastating to Florida . Cleo also brought destruction to portions of the Caribbean , especially Guadeloupe and Haiti . After moving inland , Cleo brought flooding to states such as Virginia . Overall , the storm caused 219 deaths and about \$ 187 @. @ 5 million in damage . Dora lashed much of North Florida and southeastern Georgia with hurricane @-@ force winds , leaving five fatalities and around \$ 280 million in damage . In October , Isbell brought strong winds and several tornadoes to Florida , as well as flooding to Cuba and The Carolinas . Isbell killed seven people and left approximately \$ 30 million in damage .

The strongest tropical cyclone of the season was Hurricane Hilda , a powerful Category 4 hurricane that devastated portions of the Gulf Coast of the United States , especially Mississippi and Louisiana . Upon striking the latter as a Category 3 , Hilda brought heavy rainfall , strong winds , tornadoes , and coastal flooding . Many other areas of the Southern United States experienced flooding from Hilda and its remnants . Overall , Hilda caused 38 deaths and about \$ 126 million in damage . The names Cleo , Dora , and Hilda were retired following the season . Collectively , the tropical cyclones resulted in 270 fatalities and approximately \$ 609 @. @ 5 million in damage .

= = Season summary = =

The Atlantic hurricane season officially began on June 15 , 1964 . It was a slightly above average season in which twelve tropical storms formed , compared with the 1950 ? 2000 average of 9 @. @ 6 named storms . Six of these reached hurricane status , which is near the 1950 ? 2000 average of 5 @. @ 9 . All six of the hurricanes reached major hurricane status ? well above the 1950 ? 2000 mean of 2 @. @ 3 per season . Prior to the season , National Hurricane Center Director Gordon Dunn noted that the probability of a hurricane striking the United States was " astronomical . " Four hurricanes and three tropical storms made landfall during the season , causing at least 270 deaths and \$ 609 @. @ 5 million in damage . Tropical Storm Brenda and Hurricane Gladys also caused damage and fatalities , but neither struck land . The season officially ended on November 30 , 1964 .

The first system , an unnamed tropical storm , developed on June 2 , 13 days before the start of the season . It struck Florida as a tropical depression and then strengthened into a tropical storm while out at sea . The storm ceased to exist on June 11 . Thereafter , the season went dormant for nearly seven weeks , as the next cyclone , another unnamed storm , did not form until July 28 . Tropical cyclogenesis increased in August , which had four tropical cyclones , Abby , Brenda , Cleo , and Dora . Four additional storms originated in September , including Ethel , Florence , Gladys , and Hilda . The strongest storm of the season , Hilda , peaked with maximum sustained winds of 150 mph ( 240 km / h ) and a minimum barometric pressure of 941 mbar ( 27 @. @ 8 inHg ) . Hurricane Isbell was the sole tropical cyclone to form in the month of October . The final system , another unnamed storm , existed developed on November 5 and dissipated on November 10 , about 20 days before the end of the season .

The season 's activity was reflected with an accumulated cyclone energy ( ACE ) rating of 170 . 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 . It is only calculated for full advisories on tropical systems at or exceeding 39 mph ( 63 km / h ) ,

which is tropical storm strength .

= = Storms = =

= = = Tropical Storm One = = =

A disturbance that moved out of the Intertropical Convergence Zone ( ITCZ ) developed into a tropical depression to the east of British Honduras ( modern day Belize ) on June 2 . Moving slowly northward to north @-@ northeastward across the Caribbean Sea and Gulf of Mexico , the depression failed to intensify significantly . Between 12 : 00 UTC and 18 : 00 UTC on June 6 , it made landfall near Cedar Key , Florida , with winds of 35 mph ( 55 km / h ) . Early the following day , the depression emerged into the Atlantic Ocean near Jacksonville and began to strengthen and move northeastward . While located offshore South Carolina on June 7 , the system became a tropical storm . Further deepening occurred slowly , with the storm peaking with winds of 60 mph ( 95 km / h ) on June 9 . By June 11 , it was absorbed by an extratropical low while located about 365 mi ( 585 km ) south @-@ southeast of Sable Island in Nova Scotia .

The storm brought local flooding to portions of western Cuba and the Southeastern United States . Some areas in North Florida experienced considerable damage from strong winds and hail associated with thunderstorm , particularly in Cross City . Damage in the Jacksonville area alone was over \$ 300 @, @ 000 . A few gale warnings were issued between Myrtle Beach , South Carolina , and Nags Head , North Carolina . More than 8 in ( 200 mm ) of rain in the former resulted in inundated streets and overflowing streams . Additionally , about 20 in ( 510 mm ) of water covered streets in downtown Conway , South Carolina . Overall , the storm caused about \$ 1 million in damage .

= = = Tropical Storm Two = = =

Television Infrared Observation Satellite ( TIROS ) indicated an area of disturbed weather with a weak surface circulation in the vicinity of Cape Verde on July 25 . Reports from a reconnaissance aircraft indicate that a tropical depression developed at 06 : 00 UTC on July 28 , while located about halfway between the Leeward Islands and the northernmost islands of Cape Verde . Initially the depression moved rapidly west @-@ northwestward , which likely caused the minimal intensification . By July 30 , a north @-@ northwest to south @-@ southeast oriented trough forced the depression to re @-@ curve north @-@ northwestward .

While situated about 300 mi ( 480 km ) east of Bermuda on July 31 , it began heading northeastward . Later that day , the depression finally organized further and developed a well @-@ defined rainband . The Atlantic hurricane database indicates that the depression strengthened into a tropical storm at 18 : 00 UTC on July 31 , due to ships reports of winds reaching 46 mph ( 74 km / h ) . Around that time , maximum sustained winds peaked at 50 mph ( 85 km / h ) . The storm continued moving rapidly northeastward and began to interact with a cold front . It transitioned into an extratropical cyclone on August 2 , while located about 525 mi ( 845 km ) east of Cape Race , Newfoundland .

= = = Tropical Storm Abby = = =

A weak trough developed into a tropical depression on August 5 while located about 225 mi ( 360 km ) south of Dauphin Island , Alabama . The depression moved westward and initially remained disorganized . At 12 : 00 UTC on August 7 , the depression strengthened into Tropical Storm Abby . It was a small tropical cyclone , spanning a diameter of less than 100 mi ( 160 km ) . The storm quickly intensified further to peak with winds of 65 mph ( 100 km / h ) late on August 7 . A few hours later , Abby made landfall near Matagorda , Texas at the same intensity . It weakened to a tropical depression early on August 8 , before dissipating later that day .

Overall , impact from this system was minor . In Texas , precipitation peaked at 6 @. @ 14 in ( 156 mm ) at the Victoria Regional Airport . However , only localized flooding occurred and rainfall was mostly beneficial . In the city of Victoria , several streets were temporarily inundated with water . A fishing company in Matagorda lost a portion of its roof . Abby resulted in an estimated \$ 750 @, @ 000 in losses , with \$ 150 @, @ 000 in damage to property and \$ 600 @, @ 000 to crops . The impacts from the storm were most severe in Jackson and Victoria counties , where damage to crops were estimated at \$ 275 @, @ 000 and \$ 250 @, @ 000 , respectively .

= = = Tropical Storm Brenda = = =

A minor trough of low pressure was situated west of Bermuda in early August . An airline crew member observed a low @-@ level circular cloud forming at 32 @. @ 0 ° N , 69 @. @ 0 ° W at 18 : 00 UTC on August 7 . Around that time , a tropical depression developed about 245 mi ( 395 km ) west of Bermuda . It moved just north of due east and strengthened into Tropical Storm Brenda on August 8 . Shortly thereafter , the storm struck Bermuda . Sustained winds on the island reached 45 mph ( 75 km / h ) , while gusts up to 65 mph ( 100 km / h ) were reported . A tornado damaged several aircraft , most of which were privately owned . Losses reached approximately \$ 275 @, @ 000 .

Shortly after moving across Bermuda on August 8 , spiral bands appeared on the island 's radar . Advisories on Brenda were not initiated until 18 : 00 UTC on August 8 , due to sparsity of data , making it difficult to confirm a tropical cyclone . A cold front caused the storm to re @-@ curve northeastward on August 9 . Later that day , Brenda attained its peak intensity with maximum sustained winds of 50 mph ( 85 km / h ) and a minimum barometric pressure of 1 @, @ 006 mbar ( 29 @. @ 7 inHg ) . Brenda then began weakening and dissipated late on the following day , while located about 585 mi ( 940 km ) east @-@ northeast of Bermuda .

= = = Hurricane Cleo = = =

A tropical wave developed into a tropical depression while located about 890 mi ( 1 @, @ 430 km ) east of Barbados late on August 20 . Early the following day , the depression strengthened into Tropical Storm Cleo . It continued west @-@ northwestward , quickly deepening into a hurricane later on August 21 . Cleo rapidly deepened and reached Category 3 early on August 22 . Several hours later , Cleo struck Guadeloupe with winds of 115 mph ( 185 km / h ) . The storm then intensified into a Category 4 hurricane and entered the Caribbean Sea . While located south of Dominican Republic around 18 : 00 UTC on August 23 , Cleo attained its peak intensity with of 155 mph ( 250 km / h ) . Cleo weakened slightly before making landfall near Les Cayes , Haiti , on August 25 , with winds of 150 mph ( 240 km / h ) . The storm re @-@ emerged into the Caribbean hours later , but rapidly weakened , falling to Category 3 hurricane at 12 : 00 UTC and to Category 1 hurricane only six hours later . Around 12 : 00 UTC on August 25 , the hurricane briefly moved ashore near Cape Cruz , Cuba , while winds were at 80 mph ( 130 km / h ) .

Cleo emerged into the Gulf of Guacanayabo , before striking Sancti Spíritus Province as a minimal hurricane early on August 26 . Several hours later , the hurricane emerged into the Atlantic Ocean and began re @-@ strengthening while moving northward , becoming a Category 2 hurricane early the next day . Around 06 : 00 UTC on August 27 , Cleo made landfall on Key Biscayne , Florida , with winds of 105 mph ( 165 km / h ) . The system quickly weakened inland , falling to tropical storm intensity early the following day . However , Cleo did not deteriorate to a tropical depression until on August 29 . Thereafter , the cyclone meandered slowly across The Carolinas and Virginia , but did not dissipate . Cleo instead re @-@ intensified into a tropical storm while re @-@ entering the Atlantic near Norfolk , Virginia , on September 1 . It moved east @-@ northeastward and became a hurricane again about 24 hours later . By early on September 4 , the cyclone accelerated and curved north @-@ northeastward . Cleo weakened to a tropical storm on September 5 and soon became extratropical while located about 370 mi ( 600 km ) east @-@ northeast of Cartwright , Newfoundland and Labrador .

In Guadeloupe , the storm destroyed 1 @, @ 000 homes and caused extensive damage to roofs , roads , and power lines . Additionally , the banana crop was ruined . Overall , there were 14 deaths and about \$ 50 million in damage . Cleo caused seven fatalities and at least \$ 2 million in damage in Dominican Republic . Strong winds in Haiti caused severe damage . On Île @-@ à @-@ Vache , 50 houses either had the roof caved in or the walls knocked over . In Les Cayes , 70 % of houses were destroyed , as was the sugar mill . In rural areas outside of the city , 90 % to 95 % of dwellings were demolished . About half of the houses in Camp @-@ Perrin were leveled . Near Saint @-@ Louis @-@ du @-@ Sud , many sugarcane crops , particularly on the west side of the city , were ruined . The storm left 192 fatalities and \$ 5 million in damage in Haiti . Impact in Cuba was minor , with one death and \$ 2 million in damage . In Florida , Cleo left damage along much of the east coast . Winds left about 620 @, @ 000 people without electricity in South Florida alone . Throughout the state , the storm damaged almost 19 @, @ 000 homes and destroyed 4 others , while 2 @, @ 187 mobile homes were flattened or suffered severe impact . Additionally , 605 small businesses were damaged or destroyed . There were three deaths and about \$ 125 million in damage , including agriculture . Cleo brought flooding to a few other states , especially Virginia . In the Hampton Roads area , many streets were inundated and blocked . Hundreds of dwellings were flooded , forcing several areas to evacuate . Two deaths and about \$ 3 million in damage occurred in Virginia . Overall , the storm caused 219 fatalities and about \$ 187 @. @ 5 million in damage .

= = = Hurricane Dora = = =

A tropical depression developed from a low pressure on August 28 , shortly after moving offshore the west coast of Africa near Dakar , Senegal . The depression was upgraded to Tropical Storm Dora on September 1 . It then curved northeastward and continued to strengthen , reaching hurricane status by early on September 3 . Intensification slowed somewhat , though Dora became a Category 3 major hurricane on September 5 . Deepening further , the peaked as a Category 4 with maximum sustained winds of 130 mph ( 215 km / h ) and a minimum barometric pressure of 942 mbar ( 27 @. @ 8 inHg ) early the following day . At 18 : 00 UTC on September 16 , Dora weakened to a Category 3 hurricane , then a Category 2 hurricane while curving westward early the following day . However , later on September 17 , the system re @-@ strengthened into a Category 3 hurricane .

Approaching the east coast of Florida , Dora 's motion became erratic , making a few cyclonic loops . Around 04 : 00 UTC on September 10 , the hurricane made landfall near St. Augustine , Florida , with winds of 115 mph ( 185 km / h ) . Two hours later , Dora weakened to a Category 2 hurricane . However , deterioration then slowed , with the hurricane falling to tropical storm intensity on September 11 . Dora then briefly drifted over southwestern Georgia , until turned east @-@ northeastward late the next day . Early on September 14 , the storm re @-@ emerged into the Atlantic Ocean near Cape Hatteras , North Carolina , and became extratropical several hours later . The remnants of Dora moved rapidly northeastward and dissipated offshore Newfoundland early on September 16 .

Hurricane Dora was the only hurricane in the twentieth century to make landfall in the First Coast region of Florida . Along the coast , tides reached up to 10 ft ( 3 @. @ 0 m ) above mean sea level . Strong winds lashed North Florida , with sustained wind of 125 mph ( 205 km / h ) observed in St. Augustine . In Jacksonville , approximately 156 @, @ 000 customers were left without electricity , while about 19 % of phones in Duval County were out of service . Much of the damage in the Jacksonville area occurred to older buildings and those located in coastal areas . Additionally , sections of the city experienced wind @-@ induced river flooding in the vicinity of the St. Johns River . Three homes were destroyed and 3 @, @ 992 suffered damage , while 5 mobile homes were demolished and 25 experienced impact , overall in Duval County . Heavy rainfall damaged many unharvested crops and inundated numerous of roads and bridges , isolated some communities for several days . Throughout Florida , 74 dwellings were flattened and 9 @, @ 374 received damage , while 14 mobile homes were destroyed and 218 others suffered severe impact . About 50 farm buildings and 423 small businesses were severely damaged or demolished . Three deaths and at

least \$ 230 million in damage occurred . In Georgia , the storm damaged about 1 @, @ 135 homes and obliterated five others . Additionally , 18 trailers suffered major impact , while 43 small businesses were destroyed or experienced severe damage . There was one death in the state and at least \$ 9 million in damage . A few other states were affected by the storm , though impact there was much lesser . One death occurred in Virginia . Overall , Dora caused \$ 280 million in damage and five deaths .

= = = Hurricane Ethel = = =

TIROS observed a large cloud mass near 18 ° N , 37 ° W on September 4 . Later that day , it developed into a tropical depression while located about 665 mi ( 1 @, @ 070 km ) east of Cape Verde . The depression moved west @-@ northwestward and intensified into Tropical Storm Ethel at 12 : 00 UTC on September 4 . Initially , it was suggested that Hurricane Dora could absorb Ethel , as the storms were located 690 mi ( 1 @, @ 110 km ) apart . On September 7 , Ethel strengthened into a hurricane . By early on the following day , it curved westward and continued to slowly deepen . Late on September 9 , the storm peaked as a Category 3 hurricane with maximum sustained winds of 115 mph ( 185 km / h ) .

Thereafter , the storm weakened back to a Category 2 hurricane early on September 10 . It further deteriorated to a Category 1 on the following day . Early on September 12 , Ethel re @-@ strengthened to a Category 2 hurricane . Later that day , the storm passed to the northwest of Bermuda on September 12 , bringing 4 @. @ 05 in ( 103 mm ) of and wind gusts up to 70 mph ( 110 km / h ) . Throughout the island , low @-@ lying areas were flooded and trees were felled . At St. George 's Island , residents were briefly left without electricity and telephones and the causeway linking St. George 's Island to the main island was inundated . Next , it resumed weakened and was downgraded to a Category 1 late on September 13 . Ethel accelerated northeastward and became extratropical late on September 15 , while located about 540 mi ( 870 km ) northwest of Corvo Island in the Azores .

= = = Tropical Storm Florence = = =

A tropical wave emerged into the Atlantic Ocean from the west coast of Africa on September 5 . The wave quickly developed into a tropical depression at 1800 UTC on September 5 , while located about 180 mi ( 290 km ) northwest of Dakar , Senegal . Shortly later , the depression produced squally weather in Cape Verde . Despite having sustained winds of only 25 mph ( 35 km / h ) , the system 's minimum barometric pressure of 1 @, @ 002 mbar ( 29 @. @ 6 inHg ) was recorded early on September 6 . The depression then re @-@ curved northwestward and began to intensify . Early on September 8 , it was upgraded to Tropical Storm Florence . Six hours later , the storm attained its maximum sustained wind speed of 45 mph ( 75 km / h ) . Florence curved north @-@ northeastward on September 8 and slowly weakened . A reconnaissance aircraft reported that Florence degenerated into an area of squalls to the south of the Azores at 0600 UTC on September 10 .

= = = Hurricane Gladys = = =

A emerged into the Atlantic from the west coast of Africa on September 8 . Tracking westward , it developed into a tropical depression while centered about midway between the Lesser Antilles and Cape Verde on September 13 . Shortly thereafter , it strengthened Tropical Storm Gladys . On September 14 , Gladys abruptly strengthened into a Category 2 hurricane , with winds increasing from 70 mph ( 110 km / h ) to 100 mph ( 155 km / h ) in just six hours . However , early on the following day , Gladys weakened slightly to a Category 1 hurricane . Between late on September 16 and late on September 17 , the storm rapidly intensified and peaked as a 145 mph ( 230 km / h ) Category 4 hurricane later that day . Gladys began weakening on the following day and re @-@ curved northward on September 19 .

The storm turned northwestward on September 22 and briefly threatened the East Coast of the

United States . However , it veered northeastward on September 23 and moved rapidly toward Atlantic Canada . By 00 : 00 UTC on September 25 , Gladys became extratropical while centered between Sable Island and the Nova Scotia mainland . Along the East Coast of the United States , Gladys produced light rainfall , gusty winds , and storm surge . Coastal flooding was reported in North Carolina and Virginia . In the former , high tides inundated homes and buildings with 2 ft ( 0 @. @ 61 m ) of water in two small villages on the Outer Banks and flooded a highway to Manteo . In the state of Virginia , one death occurred when a man was fatally struck in the throat by debris . Abnormally high tides also affected the Mid @- @ Atlantic , New England , and Atlantic Canada , with tides ranging from 2 @. @ 2 ? 6 @. @ 1 ft ( 0 @. @ 6 ? 1 @. @ 8 m ) higher than average in Virginia .

= = = Hurricane Hilda = = =

A tropical wave developed into a tropical depression at 12 : 00 UTC on September 28 , while located about 40 mi ( 65 km ) south of Trinidad , Cuba . The depression tracked west @- @ northwestward and struck Isla de la Juventud , Cuba early on September 29 . After briefly re @- @ emerging into the northwestern Caribbean Sea later that day , the depression strengthened into Tropical Storm Hilda at 1200 UTC on September 29 . Around that time , Hilda made landfall near Sandino , Cuba with winds of 40 mph ( 65 km / h ) . By late on September 29 , it emerged into the Gulf of Mexico near Cape San Antonio . The storm continued to intensify , reaching hurricane status on September 30 . During the following 30 hours , Hilda strengthened significantly and peaked as a Category 4 hurricane with winds of 150 mph ( 240 km / h ) late on October 1 . It re @- @ curved northward and began weakening due to unfavorable conditions . Around 00 : 00 UTC on October 4 , the storm made landfall near Franklin , Louisiana with winds of 110 mph ( 175 km / h ) . It rapidly weakened inland and became extratropical over southern Mississippi by 1200 UTC that day .

In Cuba , the storm caused minor impact , with damage totaling about \$ 1 million . Offshore the United States in the Gulf of Mexico , 13 oil platforms were destroyed and 5 others were damaged beyond repair . Losses to the oil industry reached \$ 100 million . In Louisiana , sustained winds of 100 to 120 mph to ( 155 to 195 km / h ) lashed the Abbeville @- @ Morgan City @- @ New Iberia area . Additionally , several tornadoes in the New Orleans area resulted in significant damage . There were 37 fatalities and an estimated 5 @, @ 000 injuries . Approximately 19 @, @ 000 homes were damaged in the state , 2 @, @ 600 of which were severely impacted . Outside of Louisiana , damage was primarily caused by flooding in the Southeastern United States . Impacted worst by flooding was North Carolina , where 2000 homes and buildings suffered water damage and one death was reported . Throughout the United States , the storm caused 38 fatalities and \$ 125 million in losses .

= = = Hurricane Isbell = = =

A diffused frontal trough developed into a tropical depression in the southwestern Caribbean on October 8 . The depression initially remained disorganized as it track northwestward , but strengthened into Tropical Storm Isbell on October 13 . Re @- @ curving northeastward , Isbell quickly strengthened further and reached hurricane status by later that day . Late on October 13 , Isbell made landfall in the Pinar del Río Province of Cuba . Despite land interaction , the storm continued strengthening and peaked as a Category 3 hurricane winds of 125 mph ( 205 km / h ) on the following day . Isbell moved northeastward and made landfall near Everglades , Florida , at the same intensity late on October 14 . After reaching the Atlantic on the following day , the storm began to weaken and fell Category 1 hurricane . Isbell turned northward and continued weakening , before transitioning to an extratropical cyclone while located just offshore of eastern North Carolina on October 16 .

The storm produced strong winds throughout western Cuba . Hundreds of homes were destroyed , as were several tobacco warehouses . There were four deaths in Cuba , three of them caused by collapsing houses in the Guane area . Several tornadoes in Florida caused significant damage

overall . Throughout the state , 1 house was destroyed , 33 severely damage , and 631 suffered minor impact . Additionally , 66 trailers were destroyed and 88 were inflicted with major damage . Three deaths occurred in the state , one due to a heart attack and two from drowning in Florida Keys when their shrimp boat sank . Because the storm weakened considerably , impact in North Carolina was generally minor . The storm also spawned at least six tornadoes in the state , which demolished trailers and unroofed homes and other buildings in several communities . Damage throughout the United States totaled \$ 10 million .

= = = Tropical Storm Twelve = = =

An area of disturbed weather within the ITCZ developed into a tropical depression early on November 5 , while located about 135 mi ( 220 km ) north @-@ northwest of Colón , Panama . The depression strengthened slowly , reaching tropical storm status on November 6 . Thereafter , it curved westward and headed for Central America . Early on November 7 , the storm made landfall near Puerto Cabezas , Nicaragua , with winds of 40 mph ( 65 km / h ) . Several hours later , it weakened to a tropical depression , shortly before re @-@ emerging into the Caribbean Sea . The storm failed to re @-@ intensify and made landfall in Belize on November 9 . It dissipated early on the following day .

In Nicaragua , winds and heavy rainfall caused significant crop damage , especially to bananas . Many residents living near the Caratasca Lagoon evacuated . The entire town of Caukira was flooded , with five small houses completely destroyed . Tides were as high as 18 ft ( 5 @.@ 5 m ) above @-@ normal . In Puerto Castilla , large amounts of precipitation caused flooding and destroyed a bridge , leaving part of the population out of communication . Another bridge collapsed in the town of Rus @-@ Rus . Strong winds and heavy rainfall also resulted in " considerable damage " on the Bay Islands . Overall , the storm resulted in about \$ 5 million in damage .

= = = Other storms = = =

In addition to the twelve tropical storms , there were three depressions monitored throughout the season . On July 25 , a tropical depression developed east of Cape Hatteras , North Carolina . Winds of 35 ? 45 mph ( 55 ? 75 km / h ) occurred in squalls associated with the system as it moved northeast . It was last noted on July 27 as it moved over Nova Scotia . TIROS VII depicted two tropical depressions , one on July 15 and the other on September 19 at 20 ° N 25 ° W ? / 20 ; -25 and 15 ° N 27 ° W ? / 15 ; -27 , respectively . Due to the sparsity of data in the region and lack of complete satellite coverage , no further information on these systems is available .

= = Storm names = =

The following names were used for named storms that formed in the North Atlantic in 1964 . This is the same list used in the 1960 season with the exception of Dora , which replaced Donna . A storm was named Isbell for the first time in 1964 . The names Cleo , Dora , and Hilda were later retired and replaced with Candy , Dolly , and Hannah , respectively , in the 1968 season . Names that were not assigned are marked in gray .