

= 1969 Atlantic hurricane season =

The 1969 Atlantic hurricane season was the busiest Atlantic hurricane season since 1933 . The hurricane season officially began on June 1 , and lasted until November 30 . The season had the highest number of systems reach hurricane status ? twelve ? in a single season , until that record was surpassed in 2005 . Activity began with a series of five tropical depressions , the first of which developed on May 29 . The third system in that series , Tropical Depression Seven , caused extensive flooding in Cuba and Jamaica in early June . The final in the series formed on July 25 , the same day that Tropical Storm Anna developed . Neither the former nor latter caused significant impact on land . Later in the season , Tropical Depression Twenty @-@ Nine caused severe local flooding in the Florida Panhandle and southwestern Georgia in September . Hurricane Blanche was a small and short @-@ lived tropical cyclone in mid @-@ August that resulted in minimal effects .

The most significant storm of the season was Hurricane Camille , which peaked as a Category 5 hurricane on August 17 and devastated the Gulf Coast of the United States upon striking Mississippi the next day . Strong winds and storm surge heights especially impacted Mississippi and Louisiana . Later in its duration , the storm caused severe flooding Virginia and West Virginia . Camille alone was responsible for 259 deaths and \$ 1 @. @ 4 billion . All damage figures are in 1969 USD , unless otherwise noted . It was the costliest United States hurricane at the time , until Hurricane Agnes in 1972 . In early September , Hurricane Francelia caused deadly floods in Central America , with 271 people killed in Central America . Hurricane Inga had the third longest duration of an Atlantic tropical cyclone . The last storm , Hurricane Martha , was the only known tropical cyclone to make landfall in Panama . Martha caused minor flooding in the former and Costa Rica . Overall , the systems of the season collectively caused 535 deaths and over \$ 1 @. @ 49 billion in losses .

= = Season summary = =

The 1969 Atlantic hurricane season officially began on June 1 . Of the twenty @-@ four tropical cyclones that developed in the North Atlantic Ocean in 1969 , eighteen of them intensified into tropical storms ; this was above the 1950 ? 2000 average of 9 @. @ 6 named storms . In terms of tropical storms , it was the busiest season since 1933 . Twelve of the eighteen named storms reached hurricane status , a record that stood until there were fifteen named storms in 2005 . Five of the hurricanes deepened into major hurricanes , which are Category 3 or higher on the Saffir ? Simpson hurricane wind scale . Between 1950 and 2000 , there was an average of 2 @. @ 3 major hurricanes per season . Throughout the season , the U.S. Weather Bureau issued more advisories than in any previous season . Additionally , reconnaissance aircraft were utilized for more flight hours than in any year in the Atlantic basin until that point . The season officially ended on November 30 .

Hurricane Camille made landfall in Mississippi on August 18 as a Category 5 hurricane , becoming one of only three tropical cyclones to strike the United States as a Category 5 , other than the Labor Day hurricane in 1935 and Hurricane Andrew in 1992 . Project Stormfury had some of its most successful seeding experiments on Hurricane Debbie , which declined in wind speed by 31 % on the first day and by 18 % of the following day . With a duration of almost 25 days from September 20 to October 15 , Hurricane Inga is the third longest @-@ lasting tropical cyclone in the Atlantic , behind only the San Ciriaco hurricane of 1899 and Hurricane Ginger in 1971 . On November 24 , Hurricane Martha became the first tropical cyclone on record to strike Panama .

The season was above average despite an El Niño , which typically suppresses tropical cyclogenesis in the Atlantic Ocean while increasing activity in the eastern Pacific Ocean . The Atlantic upper tropospheric shear line , a semi @-@ permanent feature that extended southeastward into the Caribbean Sea , which enhances outflow from disturbances , remained persistent throughout the season . However , the opposite periphery of the shear line inhibits the divergent outflow of a disturbance . This may have increased the number of tropical cyclones developing , while causing other storms to remain weak or dissipating over the deep tropics . Additionally , an abnormally strong mid @-@ tropospheric ridge replaced the further south than

normal westerlies that deterred tropical cyclone formation in 1968 . Five hurricanes and two tropical storms made landfall , causing 535 deaths and \$ 1 @. @ 49 billion in damage ; Tropical Depression Twenty @- @ Nine also resulted in damage .

Tropical cyclogenesis began early , with two tropical depressions forming on May 29 . Neither intensified into a named storm . In June , two additional tropical depressions developed , both of which failed to reach tropical storm intensity . Activity briefly went dormant between June 15 and July 25 , when the next depression originated . That same day , the season 's first named storm , Anna , developed over the eastern Atlantic . There were five tropical cyclones that formed in the month of August ? Blanche , Camille , Debbie , Eve , and Francelia . Camille was the most intense tropical cyclone of the season , peaking as a Category 5 hurricane with maximum sustained winds of 175 mph (280 km / h) and a minimum barometric pressure of 900 mbar (27 inHg) .

September was the most active month of the season , with six tropical cyclones , five of which intensified into a tropical storm ? Gerda , Holly , Inga , and an unnamed hurricane . Of the five named storms that originated in October , three intensified into hurricanes , including Kara , Laurie , and an unnamed storm . This was well above the currently used 1981 ? 2010 average of two tropical storms in one hurricane in the month of October . Although an unnamed hurricane existed into November , Martha was the only tropical cyclone to originate in that month . Martha , the last storm of the season , dissipated over Panama on November 25 .

The season 's activity was reflected with an accumulated cyclone energy (ACE) rating of 166 . 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 Depression Seven = = =

Tropical Depression Seven developed near the Yucatan Peninsula on June 7 . It moved north , reaching western Cuba by the following day . As the depression moved towards Florida , small @- @ craft warnings were issued for the southern coast . The depression made landfall in Florida on June 9 and dissipated shortly thereafter . As a result of 2 to 3 in (51 to 76 mm) rain in Cuba , Radio Havana warned of a flash flood and later reported that three rivers were overflowing in Camagüey . Flooding also forced 1 @, @ 801 people from their homes . Sustained winds of 15 to 25 mph (24 to 40 km / h) and gusts up to 40 mph (64 km / h) were observed on the island . Impact from the depression in Florida is unknown .

Damage was catastrophic in Jamaica with landslides , flooding , broken communication lines , cancellation of its railway service and evacuation of hundreds of people from their homes . The Jamaica Railway Corporation 's trains were disrupted by landslides blocking the tracks from Spanish Town to Port Antonio and floodwaters inundating a bridge in Gregory Park . A train bound for Kingston was disrupted by the flooded bridge , as was a diesel tram , isolating both trains at Richmond . Furthermore , the former train did not reach its destination due to landslides . The Jamaica Telephone Company reported troubles due to waterlogged telephone lines . Schools and colleges in Kingston suspended classes and motorists in the area had difficulty traveling due to flooded roads . Correspondents from The Gleaner reported heavy rains , which inundated roads , washed away livestock and destroyed crops . On June 9 , the Church Welfare Organization of the West Indies Junior Seventh Day Adventists set out food , money and blankets the victims .

= = = Tropical Storm Anna = = =

On July 23 , a tropical wave emerged into the Atlantic from the west coast of Africa . By 0600 UTC on July 25 , the system developed into Tropical Depression Twelve . Initially , the depression

strengthened slowly while moving west @-@ northwestward . Eventually , it was upgraded to Tropical Storm Anna on July 27 . Intensification continued during the next 66 hours . On July 29 , Anna peaked with maximum sustained winds of 70 mph (110 km / h) and a minimum barometric pressure of 1 @,@ 002 mbar (29 @.@ 6 inHg) . Thereafter , the storm began to weaken and moved in a more northwesterly direction . Late on July 31 , Anna was downgraded to a tropical depression , while situated north of the Lesser Antilles .

Anna briefly re @-@ strengthened into a tropical storm late on August 1 . The storm re @-@ curved northeastward on July 2 and remained offshore of the East Coast of the United States . Ana once again reached tropical storm status by early on July 3 . Further intensification occurred , with the storm reaching winds of 65 mph (100 km / h) later that day . However , Anna transitioned into an extratropical cyclone after merging with an extratropical low pressure area at 0000 UTC on August 4 , while centered near Sable Island . The remnants continued rapidly east @-@ northeastward across the Atlantic until becoming unidentifiable on August 5 .

= = = Hurricane Blanche = = =

A tropical wave was initially tracked about 1 @,@ 300 mi (2 @,@ 100 km) east of the Lesser Antilles on August 6 . The system curved west @-@ northward on August 6 and eventually moved around the western periphery of the Bermuda high . Late on August 10 , a circulation developed and by 0000 UTC on August 11 , the system became a tropical depression while located about 530 mi (850 km) east of Wabasso Beach , Florida . Under the influence of a trough , it headed rapidly north to north @-@ northeastward . After ships reported winds up to 46 mph (74 km / h) , the depression was upgraded to Tropical Storm Blanche later on August 11 .

Significant intensification then occurred . Later on August 11 , Navy reconnaissance reports indicated that Blanche reached hurricane intensity . After winds peaked at 85 mph (140 km / h) , the strong southwesterly current which Blanche was embedded in caused the storm to accelerate northeastward . On August 12 , the storm began losing tropical characteristics near Sable Island ; namely , the wind field was becoming asymmetrical . At Sable Island , a weather station reported sustained winds of 51 mph (82 km / h) and gusts up to 69 mph (111 km / h) . While passing to the south of Newfoundland , Blanche was absorbed by a frontal zone at 0000 UTC on August 13 .

= = = Hurricane Camille = = =

A tropical disturbance moved off the west coast of Africa on August 5 , and developed into Tropical Storm Camille near Grand Cayman on August 14 . The storm strengthened quickly and was a Category 3 hurricane when it struck near the western tip of Cuba on August 15 . The storm damaged 100 homes on Isla de la Juventud , while 20 @,@ 000 residents were left homeless on the mainland ; Five fatalities were also reported . Early on August 16 , Camille emerged into the Gulf of Mexico . Between August 16 and August 17 , the storm rapidly deepened , with a minimum barometric pressure of 905 mbar (26 @.@ 7 inHg) . Later on August 17 , Camille peaked as a 175 mph (280 km / h) Category 5 . It likely maintained this intensity until landfall near Bay St. Louis , Mississippi early on August 18 ; Camille was one of only three tropical cyclones to strike the United States as a Category 5 , the others were the 1935 Labor Day hurricane and Hurricane Andrew in 1992 . Mississippi bore the brunt of Hurricane Camille . A combination of strong winds and large storm surges caused adverse impact in the state . In Mississippi alone , 3 @,@ 881 dwellings were destroyed and 41 @,@ 848 were damaged . About 406 trailers were destroyed and an additional 325 suffered major losses . An estimated 645 farm buildings were destroyed and another 2 @,@ 002 received major damage . In addition , 569 small businesses were impacted .

In Mississippi 's neighboring states of Alabama and Louisiana , 1 @,@ 781 homes were destroyed and 6 @,@ 000 others were inflicted losses . About 676 trailers were demolished and 296 were severely impacted . Additionally , 124 small businesses were either destroyed or incurred major damage . Camille rapidly weakened after landfall on August 18 and was only a tropical depression about 24 hours later . However , the storm maintained intensity as it recurved to the east over the

Ohio River Valley . It dropped heavy rainfall while approaching the Atlantic Ocean , especially in Virginia . Up to 27 in (690 mm) fell in west central Nelson County . In Nelson County alone , 133 bridges washed out , while in some places entire communities were under water . Rivers crested at record heights , causing severe flooding . In the state of Virginia and West Virginia combined , an estimated 349 homes were destroyed and 2 @, @ 587 received damage to some degree . Eighty @-@ three trailers were demolished and 71 others received major losses . Reportedly , 730 farm buildings were destroyed and 535 were inflicted minor damage . Ninety @-@ six small businesses were also severely damage or destroyed . Along its path , rainfall was recorded in several other states , including Arkansas , Delaware , Florida , Georgia , Illinois , Indiana , Maryland , New Jersey , North Carolina , Ohio , Pennsylvania , South Carolina , and Tennessee . After reaching the Atlantic , Camille re @-@ strengthened into a 70 mph (115 km / h) tropical storm , but was absorbed by a cold front south of Newfoundland on August 22 . With losses estimated at \$ 1 @. @ 4 billion , Camille was considered the costliest hurricane in United States history at the time . Additionally , there were 256 deaths in the United States .

= = = Hurricane Debbie = = =

On August 14 , a tropical wave developed into a tropical depression while located about midway between the Lesser Antilles and the coast of Africa . The following day , the depression strengthened into Tropical Storm Debbie . By late on August 16 , Debbie became a Category 1 hurricane . Moving northwestward , it intensified further to a Category 3 hurricane with winds of 115 mph (185 km / h) on August 18 . However , the storm then began oscillating between a Category 1 and a Category 3 hurricane for the next few days , possibly due to being seeded by silver iodide as part of Project Stormfury . On August 20 , Debbie attained its peak intensity with maximum sustained winds of 120 mph (195 km / h) and a minimum barometric pressure of 951 mbar (28 @. @ 1 inHg) .

The storm curved northeastward as Hurricane Camille moved offshore the East Coast of the United States and briefly weakened to a Category 2 hurricane on August 21 , before re @-@ strengthened into a Category 3 hurricane hours later . Debbie accelerated and fell to Category 2 intensity by midday on August 23 . The storm curved northward and weakened to a Category 1 hurricane on the following day , shortly before passing just offshore Newfoundland . Debbie turned northeastward and deteriorated to a tropical storm on August 25 . Several hours later , the hurricane dissipated about 225 mi (360 km) east @-@ northeast of Cape Farewell , Greenland . In Newfoundland , wind gusts up to 85 mph (140 km / h) were observed in St. John 's , while rainfall up to 0 @. @ 98 in (25 mm) was recorded along the Avalon and Bonavista peninsulas .

= = = Tropical Storm Eve = = =

In the wake of Hurricane Camille , a quasi @-@ stationary front moved across the Southern United States and became situated over North Florida . A cut @-@ off low pressure area developed along the system and acquired a low @-@ level circulation . By 0000 UTC on August 25 , the system was classified as a tropical depression while located about 100 mi (160 km) east of Jacksonville , Florida . Due to cold air in the region , the depression strengthened slowly while tracking nearly due east . Late on August 25 , it was upgraded to Tropical Storm Eve .

On August 26 , the National Hurricane Center noted although conditions would prevent rapid deepening , further intensification was possible . The storm threatened the Mid @-@ Atlantic states and Bermuda , but remained offshore and caused no impacts in either region . Eve strengthened slightly on August 26 , reaching maximum sustained winds of 60 mph (95 km / h) . Although the storm weakened later that day , Eve reached its minimum barometric pressure of 996 mbar (29 @. @ 4 inHg) . Early on August 2 , Eve was downgraded to a tropical depression . It began to succumb to the effects of cold air , which entrained the circulation of the storm . At 0000 UTC on August 28 , Eve degenerated into a trough of low pressure while located about 70 mi (110 km) west @-@ northwest of Bermuda .

== Hurricane Francelia ==

A tropical wave developed into a tropical depression near the Windward Islands on August 29 . Initially , the depression slowly strengthened while moving west @-@ northwestward and was upgraded to Tropical Storm Francelia until more than 24 hours later . While located north of Honduras , it curved west @-@ southwestward and was upgraded to a hurricane on September 1 . The storm briefly became a Category 3 hurricane on September 2 , peaking with winds of 115 mph (185 km / h) . Late on September 3 , Francelia made landfall near Punta Gorda , Belize with winds of 100 mph (155 km / h) . The storm quickly weakened inland , and less than 24 hours later , it dissipated over northern Guatemala . However , the remnants of Francelia later contributed to the development of Hurricane Glenda in the eastern Pacific Ocean .

During its early stages , Francelia brought gusty winds and light rainfall to several islands in the Caribbean Sea . While remaining nearly stationary offshore Central America , heavy precipitation fell in some countries , especially Guatemala where severe flooding killed 269 people and caused \$ 15 million in damage . Throughout the country , approximately 10 @, @ 200 people were left homeless . In neighboring Honduras , the hurricane caused damage in the northern portions of the country , with the offshore Bay Islands Department being particularly hard hit . There , the storm damaged or destroyed the majority of two towns . In El Salvador , flooding isolated towns for several days and caused crop damage . Coastal areas of Belize lost electricity and telephone service , and high winds resulted in extensive damage to banana crops . A number of rivers in the region flooded , including the Belize River , which reached 36 ft (11 m) above normal . Francelia ranked as the deadliest tropical cyclone in Guatemala , until Hurricane Mitch in 1998 . Overall damage was estimated at \$ 35 @. @ 6 million , and there were 271 deaths .

== Hurricane Gerda ==

A tropical wave located over the central Bahamas developed into a tropical depression on September 6 . The depression moved northwestward and initially remained disorganized . By early on September 7 , the depression made landfall near West Palm Beach , Florida . Impact in the state was minimal , limited mostly to light rainfall . Later on September 7 , the depression reemerged into the Atlantic Ocean just south of Cape Canaveral . It began to strengthen on the following day and was upgraded to Tropical Storm Gerda at 0600 UTC . By late on September 8 , Gerda intensified into a hurricane . The storm deepened significantly further , peaking with winds of 125 mph (205 km / h) on September 9 . Early on September 10 , Gerda weakened slightly while approaching New England and Atlantic Canada .

It made landfall near Eastport , Maine on September 10 and was one of the strongest tropical cyclones to strike the state . Despite landfall as a Category 2 hurricane , the strongest sustained wind speed recorded was 60 mph (95 km / h) in Washington County , Maine . Twenty @-@ four @-@ hour rainfall amounts exceeding 4 in (100 mm) were observed in some areas of New England , with a precipitation peak of 5 @. @ 67 in (144 mm) in Wellfleet , Massachusetts . Due to the winds and rainfall , portions of Maine , Massachusetts , and New Hampshire reported power outages and localized flooding . By 0600 UTC on September 10 , Gerda became extratropical over southeastern Quebec . In Atlantic Canada , winds left many without electricity in New Brunswick and Nova Scotia , and left about \$ 3 @. @ 5 million in losses to apple crops .

== Hurricane Holly ==

A tropical wave emerged into the Atlantic Ocean from the west coast of Africa on September 8 . Moving westward to west @-@ northwestward , it developed into a tropical depression at 1200 UTC on September 14 , while located about 1 @, @ 250 mi (2 @, @ 315 km) southeast of Puerto Rico , based on Hurricane Hunter observations of an organized circulation . It quickly organized and was soon upgraded to Tropical Storm Holly . Continuing northwestward , it steadily intensified , and the

Hurricane Hunters reported that Holly attained hurricane status on September 16 , with peak winds of 85 mph (140 km / h) and a minimum barometric pressure of 984 mbar (29 @. @ 1 inHg) .

On September 16 , Holly weakened slightly while turning westward toward the Lesser Antilles . Due to the lack of good upper @-@ level outflow , as well as unfavorable water , Holly quickly weakened to tropical storm status on September 18 , as confirmed by the Hurricane Hunters . By the next day , it weakened to tropical depression status and later moved through the Lesser Antilles . Holly dissipated on September 21 in the Caribbean Sea , while situated between the Los Roques archipelago of Venezuela and Puerto Rico .

= = = Tropical Depression Twenty @-@ Nine = = =

Ship reports on September 19 indicated the presence of low pressure area in the Gulf of Mexico , centered about 300 mi (480 km) west @-@ northwest of Key West , Florida . It is estimated that a tropical depression developed at 1200 UTC on that day . The depression headed north @-@ northwestward and did not strengthen . By early on September 21 , the depression made landfall between Panama City and Port St. Joe , Florida . It degenerated into a remnant low pressure area only a few hours later . A high @-@ pressure ridge blocked the system 's movement , moving it to the east . By September 23 , the system became a low pressure trough . Upper @-@ level wind shear moved the circulation to the east @-@ northeast and moved into the Atlantic Ocean the next day .

Rainfall in peaked at 23 @. @ 4 in (590 mm) in Havana , with and exceeding 15 in (380 mm) in most of the central Panhandle . Many bridges and roads were washed out or inundated by water , including portions of U.S. Route 98 and State Road 20 between Tallahassee and Panama City . In addition , a tornado spawned by the depression destroyed a trailer , damaged 30 homes , and toppled ballpark bleachers , fences , lights , and electrical poles . Damage in Florida reached almost \$ 3 @. @ 78 million , including \$ 1 @. @ 65 million to crops and \$ 2 @. @ 135 million to property . In southwest Georgia , precipitation totals exceeding 5 in (130 mm) were common , while rainfall peaked at 14 in (360 mm) in southern Decatur County . Severe local flooding ensued , causing damage to property and crops , mostly to peanuts that were not threshed . Up to 7 in (180 mm) of rainfall fell in Alabama , while precipitation totals reached 3 in (76 mm) in Tennessee , South Carolina , North Carolina , and Virginia .

= = = Hurricane Inga = = =

A tropical disturbance developed into a tropical depression on September 20 . By the following day , it strengthened into Tropical Storm Inga while centered about 930 mi (1 @, @ 500 km) east @-@ southeast of San Juan , Puerto Rico . At the time , the storm was moving westward at 14 mph (23 km / h) . However , by September 23 , the storm weakened to a tropical depression . The depression continued west @-@ northwestward , passing north of the Leeward Islands , before drifting northwestward . Inga became a tropical storm again on September 29 . It continued to intensify , and achieved hurricane status on September 30 , while curving northeastward . The storm then turned towards the south , and ultimately completed a cyclonic loop as it bent back westward . Late on October 3 , Inga turned to the northwest .

Early on October 5 , the hurricane produced wind gusts up to 80 mph (130 km / h) on Bermuda , though minimal impact occurred other than power outages . Thereafter , Inga curved northeastward and continued deepen . Later on October 5 , it peaked as a Category 3 with maximum sustained winds of 115 mph (185 km / h) and a minimum barometric pressure of 964 mbar (28 @. @ 5 inHg) . While moving into an environment of colder sea surface temperatures , the storm began to weaken . As cold air became entrained into its circulation , the storm began to lose tropical characteristics . Inga briefly re @-@ strengthened while beginning to drift generally eastward . However , storm turned southward and began to weaken , deteriorating to a tropical storm on October 10 . Heading westward , Inga was downgraded to a tropical depression , before dissipating fully on October 15 , while located about 290 mi (470 km) from where it initially attained hurricane status .

== Subtropical Storm One ==

An upper @-@ level low pressure area in the southeastern Gulf of Mexico spawned a subtropical depression at 1200 UTC on September 29 . Operationally , it was classified as Tropical Depression Thirty @-@ Two . Six hours later , the strengthened into a subtropical storm . Early on the following day , the storm peaked with maximum sustained winds of 60 mph (95 km / h) . It maintained that intensity for about 24 hours , before cool air and wind shear began weakening the storm early on October 1 . Shortly thereafter , the storm weakened back to a subtropical depression , a few hours prior to landfall near Fort Walton Beach , Florida . The subtropical depression rapidly dissipated inland .

Rainfall was relatively light and the heaviest amounts were displaced far east of the track , with precipitation peaking at 6 @.@ 74 inches (171 mm) in Saint Augustine , Florida . Closer to the location of landfall , rainfall reached nearly 4 inches (100 mm) in Pensacola . Several waterspouts were reported in the Panama City area , while a tornado in Carabelle and unroofed a home in the St. James community . United States Coast Guard planes searched for three people in a light aircraft that went missing as it traveled from DeFuniak Springs to Sebring . The storm brought rainfall to several others states , reaching as far north as Maine .

== Tropical Storm Jenny ==

On October 1 , a tropical depression developed over the northwestern Caribbean Sea from the same cut @-@ off low pressure that spawned the previous subtropical storm on September 29 . The depression moved quickly north @-@ northeastward and struck Cuba early on October 2 . While approaching the southwest coast of Florida later that day , the system intensified into Tropical Storm Jenny . Simultaneously , Jenny attained its peak intensity with winds of 45 mph (75 km / h) and a minimum pressure of 1 @, @ 000 mbar (30 inHg) . Around 0000 UTC on October 2 , the storm made landfall between Fort Myers and Naples , Florida , with winds of 40 mph (60 km / h) . Jenny emerged into the western Atlantic as a tropical depression , but increased ridging forced the storm to track west @-@ southwestward back over Florida . The cyclone was unable to re @-@ strengthen and dissipated on October 6 south of Louisiana .

The storm crossed Cuba as a tropical depression . Minimal impact was reported . The storm produced moderate to heavy rainfall over parts of the Florida Peninsula , peaking at 6 @.@ 61 in (168 mm) near Deland . Minor road washouts were reported in Lee County . Rainfall along the lower Kissimmee River and the Lake Okeechobee basin caused some pastures and flood plain areas to be inundated by water . Lake Kissimmee rose 1 @.@ 5 ft (0 @.@ 46 m) in height due to precipitation . Jenny 's remnants later contributed to the development of heavy rains in southern Louisiana .

== Hurricane Kara ==

A cold core trough of low pressure over the western Atlantic Ocean warmed on the eastern end , becoming a tropical depression on October 7 about 135 mi (215 km) north of Punta Cana , Dominican Republic . The depression passed south of Turks and Caicos Islands and later to the west of Mayaguana . Early on October 9 , the system turned northward and intensified into Tropical Storm Kara after several hours . Southwesterly flow associated with an upper @-@ level trough then caused the storm to curve northeastward . On October 10 , an upper @-@ level low pressure formed offshore North Carolina . Initially , Kara moved rapidly north @-@ northwest around the low . However , by October 11 , Kara and the low merged , resulting in the former moving erratically . While tracking southwestward into warmer ocean temperatures , the storm continued to strengthen .

After executing a small cyclonic loop , Kara developed an eye feature on October 14 , before strengthening into a hurricane on October 15 . While moving offshore North Carolina , the storm

brought tides of 1 to 3 ft (0 @. @ 30 to 0 @. @ 91 m) above normal between October 10 and October 15 , causing coastal flooding in very low @- @ lying areas . By October 15 , an upper @- @ level westerlies forced the storm to move northeastward and accelerate . Kara then became to strengthen further and became a Category 2 hurricane at 1800 UTC on October 17 . Six hours later , the storm peaked with sustained winds of 105 mph (165 km / h) and a minimum pressure of 978 mbar (28 @. @ 9 inHg) . Kara began losing tropical characteristics and weakening after encountering a cold trough over the northeast Atlantic , falling to tropical storm intensity late on October 18 . The storm soon became extratropical about 435 mi (700 km) north @- @ northeast of Corvo Island in the Azores .

== = Hurricane Laurie == =

A low pressure area developed into a tropical depression while located about 75 mi (120 km) northeast of Guanaja in the Bay Islands Department of Honduras . Although conditions were favorable for rapid deepening , the depression failed to do so because it was not vertically stacked and struck the Yucatan Peninsula late on October 18 . After emerging into the Gulf of Mexico on the following day , the system strengthened into Tropical Storm Laurie . Later on October 19 , Laurie curved northward and continued intensifying . At 12 : 00 UTC on October 20 , the storm became a hurricane . It then curved eastward over the central Gulf of Mexico and continued to deepen , peaking as a Category 2 hurricane with sustained winds of 105 mph (165 km / h) and a minimum barometric pressure of 973 mbar (28 @. @ 7 inHg) . Thereafter , drier air began weakening Laurie on October 22 . Laurie curved southeastward and then southward , allowing it to remain well offshore the Gulf Coast of the United States .

Early on October 23 , the cyclone weakened to a tropical storm while curving west @- @ southwestward . Late the following day , Laurie deteriorated into a tropical depression . After moving southwestward and then southward , the storm made landfall near Paraíso , Tabasco , Mexico , early on October 27 . Laurie promptly dissipated . Offshore , oil rig personnel were evacuated as the storm approached . A hurricane watch was issued from Galveston , Texas , to Pensacola , Florida ; the watch was extended eastward to Apalachicola , Florida , on October 21 . Voluntary evacuations occurred in southern Louisiana out of fear of a storm similar to Hurricane Betsy in 1965 or Camille early that year . Impact on land was primarily limited to minor beach erosion . It caused minor damage in the Yucatan Peninsula , and in Tabasco .

== = Hurricane Martha == =

Tropical Storm Martha developed in the southwestern Caribbean Sea on November 21 . Initially , the storm developed with sustained winds of 50 mph (85 km / h) , skipping tropical depression status . It remained stationary and quickly intensified into a hurricane . Martha attained maximum sustained winds of 90 mph (150 km / h) on November 22 . Subsequently , Martha weakened and drifted southward . On November 24 , Martha made landfall in Veraguas Province , Panama , as a strong tropical storm . Martha was the only tropical cyclone on record to make landfall in Panama . The system weakened to a tropical depression and dissipated over land on November 25 .

Because the storm weakened prior to landfall , strong winds were not expected or reported in the impacted countries . In Panama , more than 13 inches (330 mm) of precipitation may have fallen in some areas . Agricultural land was flooded in Almirante , Bocas del Toro and streets became inundated in low @- @ lying areas of Puerto Armuelles , Chiriquí . The storm also brought significant rains to Costa Rica . Flooding and mudslides isolated most of the capital city of San José . Numerous streets were inundated in Golfito . Damage in Costa Rica reached \$ 30 million and 5 deaths were reported .

== = Other storms == =

In addition to the 20 other tropical cyclones of the season , there were three minor tropical

depressions . The first tropical depression (numbered five) , developed on May 29 about 85 mi (135 km) southeast of Cutler Bay , Florida . The depression tracked northeastward , and passed through the Bahamas on the Abaco Islands later that day . After crossing the Bahamas , the depression continued northeastward , and eventually dissipated 430 mi (690 km) southwest of Bermuda on May 30 . No impact was reported in the Bahamas . Also on May 29 , Tropical Depression Six developed while centered 40 mi (60 km) south @-@ southwest of San Andrés Island , Colombia . The depression headed west @-@ northwestward toward the coast of Nicaragua , however , it quickly veered away to the northeast . For the rest of its duration , the depression mainly headed north or north @-@ northeastward across the Caribbean Sea . On June 1 , the day that the 1969 Atlantic hurricane season officially began , Tropical Depression Six made landfall on the Zapata Peninsula in Cuba . The depression dissipated early on June 2 . No impact was reported in Cuba or Nicaragua .

Between June 7 and June 9 , the notable Tropical Depression Seven existed . At 0000 UTC on June 12 , Tropical Depression Eight formed about 55 mi (90 km) east of Cozumel , Quintana Roo . It moved west @-@ northwestward without strengthening and made landfall between Playa del Carmen and Puerto Morelos , Quintana Roo , later that day with winds of 30 mph (45 km / h) . The depression moved slowly across the Yucatán Peninsula until emerging into the Gulf of Mexico along the north coast of the Yucatán Peninsula on June 14 . No intensification occurred in the Gulf of Mexico occurred , and by 0000 UTC on June 15 , the depression dissipated while located about 50 mi (80 km) north @-@ northeast of Progreso , Yucatán . A tropical wave situated about 400 mi (640 km) east of Trinidad developed into Tropical Depression Thirteen on July 25 . The depression moved northwestward toward the Lesser Antilles and later that day crossed Barbados with winds of 35 mph (55 km / h) . It continued to the northwest and may have struck Martinique on June 26 . At 0000 UTC on the following day , the depression dissipated about 30 mi (50 km) west @-@ southwest of Basseterre , Guadeloupe .

In addition to the tropical depressions , four additional unnamed storms existed during the season . A subtropical depression formed offshore North Carolina on September 21 . It reached subtropical storm strength that day . A few days later , it reached hurricane strength while moving to the northeast . The storm dissipated on September 26 while located about 200 mi (320 km) south of Newfoundland . Another storm developed from a subtropical depression southwest of the Azores on September 24 . After drifting west @-@ southwest , it moved westward and strengthened into a subtropical storm on September 25 , and later a tropical storm . The cyclone reached its 70 mph (110 km / h) peak on September 27 while moving northward . On September 29 , it dissipated east of Newfoundland . A subtropical depression formed west @-@ southwest of the Azores on October 28 . Moving northwestward , it reached tropical storm status on October 29 and soon peaked with winds of 70 mph (110 km / h) . The storm became extratropical to the west of the Azores on October 31 . A large extratropical storm over the North Atlantic formed a subtropical storm on October 31 south of Newfoundland . It moved southeast , gaining tropical characteristics and strength on the way . It reached hurricane strength on November 4 , peaking as a minimal Category 1 storm while approaching the Azores , but weakened prior to passing through the islands . The system dissipated on November 7 .

= = Storm names = =

The following names were used for named storms that formed in the Atlantic basin in 1969 . Storms were named Blanche , Camille , Eve , Francelia , Holly , Kara , Laurie and Martha for the first time in 1969 . Names that were not assigned are marked in gray . At some point after the season began , the name Carol (originally the C name on this year 's list) was replaced with Camille . After the season , the name Camille was retired .