= 1996 Pacific hurricane season =

The 1996 Pacific hurricane season was one of least active Pacific hurricane seasons that most of the storms strike Mexico . It officially began May 15 , 1996 in the eastern north Pacific and on June 1 , 1996 in the central north Pacific . It ended on November 30 , 1996 . These dates conventionally delimit the period of each year when most tropical cyclones form in the northeastern Pacific Ocean . The season slightly exceeded these bounds when tropical storm One @-@ E formed on May 13 .

Few storms formed this season , but it was very eventful . Twelve tropical cyclones formed during this season , of which five made landfall and two other impacted land areas . Two tropical cyclones that formed in other basins entered the eastern north Pacific Ocean . Early in the season three tropical cyclones impacted Mexico in a ten @-@ day span , while the first cyclone of the season formed before it officially began . Hurricane Douglas was the strongest storm , reaching Category 4 intensity on the Saffir @-@ Simpson Hurricane Scale and had its beginnings in the Atlantic as Hurricane Cesar .

= = Season summary = =

This hurricane season officially started on May 15 , 1996 in the eastern Pacific , and on June 1 , 1996 in the central Pacific , and lasted until November 30 , 1996 . These dates limit the time period when most tropical cyclones form in the northeastern Pacific Ocean . In actuality the season exceeded these limits slightly with the formation of Tropical Depression One @-@ E on May 13 and ended on November 11 with the dissipation of Tropical Depression Twelve @-@ E.

This season was below average in activity . In the eastern north Pacific , eleven tropical cyclones formed . Of these , four became hurricanes , one of which were major hurricanes because they reached Category 3 or higher on the Saffir @-@ Simpson Hurricane Scale . The remainder were tropical storms . In addition , one Atlantic hurricane , Hurricane Cesar , crossed into this zone from the Atlantic Ocean and was renamed Douglas . None of the systems in the eastern north Pacific crossed 140 ° W and entered the central Pacific . The last time that happened was in the 1979 season .

In the central north Pacific , one tropical depression formed . In addition , a depression crossed the dateline from the western Pacific before dissipating in this basin . None of these two systems reached tropical storm strength .

In terms of the number of storms , the season was below average . Despite this , there were a large number of landfalls . Of note is the fact that three tropical cyclones approached close to , or made landfall on , Mexico during a ten @-@ day span from June 23 to July 3 .

= = Storms = =

= = = Tropical Storm One @-@ E = = =

The season had an early start on May 13 when a tropical wave in the open ocean organized into Tropical Depression One @-@ E. The depression moved west @-@ northwest and strengthened into a tropical storm on May 14 . On that day , the tropical storm reached its peak intensity , with maximum sustained winds at 50 mph (80 km / h) and a minimum central pressure of 1 @,@ 000 hPa (29 @.@ 53 inHg) . Wind shear steadily weakened the cyclone until it dissipated early on May 17 . This system was the only tropical storm to form in May during the period from 1992 @-@ 99 .

Tropical Storm One @-@ E was not assigned a name because it was determined to be a tropical storm after the season was over . The storm was initially forecast to become a tropical storm , but information available at the time did not warrant the upgrade . Subsequently , wind reports relayed from the US Coast Guard to the National Hurricane Center suggested that this cyclone was a tropical storm .

This tropical cyclone impacted two ships . The first ? called the True Blue - was near the fringes of

the storm and escaped . The other ? the trimaran Solar Wind - provided wind observations until communications with the vessel were lost after 0600 UTC on May 14 . Despite a search by the US Coast Guard , the ship and its two @-@ person crew were never found .

= = = Tropical Depression Two @-@ E = = =

On May 15 an area of disturbed weather in the Intertropical Convergence Zone developed into a tropical depression . The disturbance was not readily traceable back to a tropical wave from the Atlantic . On its first day of its existence , Tropical Depression Two @-@ E was a well @-@ organized system with maximum sustained winds of 35 mph (56 km / h) and a minimum central pressure of 1 @,@ 006 mbar (29 @.@ 7 inHg) . As it slowly moved west , Two @-@ E experienced a few intermittent bursts of convection . However , the depression gradually became less organized during the remainder of its life . On May 18 , the cyclone 's organization deteriorated markedly until it dissipated the next morning .

Tropical Depression Two @-@ E never threatened land . Consequently , there were no reports of deaths or damage .

= = = Hurricane Alma = = =

On June 20 , the southern part of the same tropical wave that spawned Tropical Storm Arthur in the Atlantic overcame shear to strengthen into Tropical Depression Three @-@ E. It reached tropical storm intensity that same day . When the shear relaxed , Alma strengthened into a hurricane . Weak steering currents sent Alma towards the Mexican coast . It made landfall near Lázaro Cárdenas , Michoacán on June 23 and almost immediately went back out to sea . Alma slowly paralleled the coast as the topography disrupted the cyclone 's circulation . Alma weakened to tropical storm intensity on June 24 and to tropical depression intensity on June 26 . It dissipated the next day . Alma 's maximum winds were 105 mph (165 km / h) and Alma 's minimum pressure was 969 mbar (28 @.@ 6 inHg) .

Hurricane Alma was the first of three consecutive storms to come close to , or make landfall on , the Pacific coast of Mexico during a ten @-@ day span . At least three , and possibly twenty , people were killed . Three were killed when a house near Lázaro Cárdenas collapsed . There were unconfirmed reports that 17 people were killed by floods in the state of Puebla caused by Alma 's rains . Trees were downed and power was knocked out to many places . Roads were flooded and covered with debris throughout the affected area .

= = = Hurricane Boris = = =

On June 27 , a tropical wave developed convection and became Tropical Depression Four . It moved north and slowly intensified . The rate of intensification increased and the depression became a tropical storm on June 28 . Boris reached hurricane intensity on June 28 and peaked with winds of 90 mph (150 km / h) and a central pressure of 979 mbar (28 @.@ 9 inHg) . Boris then made landfall on June 29 about midway between Lázaro Cárdenas and Acapulco . Boris then moved offshore after turning to the southwest and dissipated on July 1 while south of Puerto Vallarta .

Hurricane Boris was , in general , a well @-@ forecast storm . Due to the short time when the system was at or above tropical storm intensity , long @-@ range forecasts were not verified . The average errors were 116 mi (187 km) at one and a half days in the future . Boris caused at least five deaths . One person was killed in Tecpan . Nearby , three other people drowned and five fishers were missing . In Acapulco , a child was killed when a roof collapsed . Rain was heavy throughout the impacted region , with the highest totals in Guerrero . The highest total was 14 @.@ 98 in (380 mm) at Paso de San Antonio , to the east of the point of landfall .

= = = Tropical Storm Cristina = = =

On July 1 , a tropical wave organized into Tropical Depression Five @-@ E. The location of the depression was the easternmost since the depression that eventually became Hurricane Paul in the 1982 season . Five @-@ E strengthened into Tropical Storm Cristina on July 2 as it continued its west @-@ northwest track . Cristina was almost a hurricane at the time of its landfall near Puerto Angel on July 3 . It peak strength , which occurred at landfall , was 70 mph (110 km / h) and 991 mbar (29 @.@ 3 inHg) . Cristina dissipated over the mountains of Mexico on July 3 .

As a whole , both Cristina 's intensity and track were well @-@ forecast . However , the tropical cyclone 's short life made verification of a small number of forecasts limited . When Cristina was approaching , the Mexican government issued a tropical storm warning for the coast between Tapachula and Punta Maldonado on July 2 .

Tropical Storm Cristina killed one person , a fisherman , who was aboard a boat caught at sea . Another person from that boat was missing , and a third individual was rescued . Eleven other fishing boats , with a total of twenty @-@ two people aboard , were missing . Their fate is unknown . The National Hurricane Center received no reports of damage due to Tropical Storm Cristina ; however , there was flooding due to storm surge and damage from wind . It also produced rain .

= = = Tropical Depression Six @-@ E = = =

On July 4 , a persistent area of thunderstorms organized into a tropical depression . Weak steering currents slowly moved it northwest . Easterly wind shear inhibited the development of the system . Despite the wind shear , Six @-@ E was forecast to strengthen into a tropical storm , but it instead weakened to a swirl of clouds and advisories were ended on July 5 . Tropical Depression Six @-@ E dissipated on July 6 . At its peak strength , Six @-@ E had winds of 35 mph (56 km / h) and a central pressure of 1 @,@ 003 mbar (29 @.@ 6 inHg) .

This cyclone never came ashore . Consequently , no reports of damage or deaths were received by the National Hurricane Center .

= = = Hurricane Douglas = = =

Hurricane Douglas was a continuation of Atlantic Hurricane Cesar , which crossed Central America . Continuing Cesar 's nearly due @-@ west heading , it was still a tropical storm when it entered the Pacific on July 29 , and quickly regained hurricane status .

Douglas strengthened over the next two days as it turned west @-@ northwest , paralleling the coast of Mexico . It reached its peak intensity on August 1 , with winds of 130 mph (215 km / h) and a central pressure of 946 mbar (27 @.@ 9 inHg) , making it the strongest hurricane of the season at a Category 4 strength . It slow weakening began on August 2 as it entered cooler waters , and it officially dissipated on August 6 , though like many Pacific hurricanes , a remnant circulation could be tracked westward for several days afterward .

Compared with the long @-@ tern average , Hurricane Douglas was a well @-@ forecast storm . The cyclone passed close enough to Mexico to necessitate a tropical storm warning starting on July 29 for the coast from Salina Cruz to Acapulco , with a watch along a further section of coast . The watches and warnings were discontinued on July 30 .

Hurricane Douglas brought up to 6 in (150 mm) of rain on the south coast of Mexico and resulted in a 4 @-@ ft (1 @.@ 2 @-@ m) storm surge . No deaths or damages were attributed to the Douglas portion of Hurricane Cesar @-@ Douglas .

= = = Tropical Depression Seventeen @-@ W = = =

A tropical depression , which formed August 13 from a cutoff area of low pressure area , crossed the dateline on August 14 . It continued to head east , passing close to Midway Island . It dissipated on August 14 , although the remnants of the system hung around the area for a few more days . At its strongest in the central north Pacific , Tropical Depression Seventeen @-@ W had winds of 35

mph (56 km / h) and a pressure of 1 @,@ 000 mbar (30 inHg) .

Seventeen @-@ W brought light winds , with gusts reaching gale @-@ force , to Midway Island . It also brought about 2 @.@ 5 in (63 @.@ 5 mm) of rain . After the cyclone dissipated , showers and gusty winds continued to occur on Midway and Kure for a few more days .

Seventeen @-@ W was the first tropical cyclone to cross the international dateline in either direction since Typhoon John in the 1994 season .

= = = Tropical Storm Elida = = =

A tropical wave organized into Tropical Depression Eight @-@ E on August 30 . The cyclone paralleled the coast of Mexico and also gradually decelerated . Despite some wind shear , Eight @-@ E strengthened into a tropical storm on September 2 and was named Elida . On September 3 and 4 , Elida came close to the southern tip of the Baja California Peninsula at its peak intensity of 994 mbar (29 @.@ 4 inHg) and winds of 65 mph (100 km / h) . The cyclone then drifted into cooler waters , was devoid of deep convection on September 5 , and dissipated the next day .

The storm was forecast slightly better than the long @-@ term averages for the eastern North Pacific . Elida posed enough of a threat to the Baja California Peninsula to require a tropical storm warning for the Baja California Peninsula south of Cabo San Lázaro on September 3 . The warning was lifted on September 5 after the threat ended . Moderate to heavy rains fell in association with the tropical cyclone across southwest Mexico and the Baja California Peninsula , with the maxima falling at San Marcos / Compostela in southwest mainland Mexico , which measured 6 @.@ 60 in (168 mm) , and a maximum for Baja California of 3 @.@ 88 in (99 mm) at La Poza Honda / Comondu . While passing offshore , the tropical storm killed six people and affected 1 @,@ 200 others , but Elida caused no known damage .

= = = Hurricane Fausto = = =

The precursor disturbance to Fausto was first noticed over Venezuela as early as August 31 , and may have been related to the tropical wave that spawned Hurricane Fran . By September 4 the wave had crossed Central America into the Pacific ; it steadily organized until it was upgraded to Tropical Storm Fausto on September 10 .

Fausto intensified rapidly after it reached hurricane intensity on the September 12 , peaking with sustained winds of 105 knots (194 km / h) and a minimum central pressure of 955 mb . The hurricane weakened as an approaching trough increased shear over the storm ; this same trough also turned the storm north on the September 13 , where it made landfall as a minimal hurricane on Baja California that day . On September 14 , the storm turned northeastward across the Gulf of California , and dissipated inland over the Sierra Madre range after its second landfall as a hurricane . Its extratropical remnants flared up briefly over northern Mexico and the U.S. state of Texas , but otherwise soon lost their identity .

Heavy rainfall was accompanied with the passage of this cyclone , with a storm total of 18 @.@ 50 inches (470 mm) reported at San Vicente de la Sierra . Damage in Mexico was relatively minor , with only a single casualty caused by a downed power line . Damage totaled to around $ 800 @,@ 000 (1996 USD) .

= = = Tropical Depression One @-@ C = = =

A tropical disturbance organized into a tropical depression on September 15 . It headed west until September 17 . That day , it turned to the west for two days before heading back west @-@ northwest on September 19 . It soon began to weaken and dissipated the next day . At its most intense , Tropical Depression One @-@ C had winds of 35 mph (55 km / h) and unknown pressure .

The tropical cyclone caused no known impact and never came near land .

= = = Tropical Storm Genevieve = = =

In the Gulf of Tehuantepec , an area of disturbed weather containing convection formed on September 23 . It moved westward without incident until September 27 , when it developed stronger convection and became Tropical Depression Ten @-@ E. Immediately thereafter , it strengthened into a tropical storm and was named Genevieve while it continued its westward track .

Genevieve slowly got better organized , and reached its peak intensity of 999 mbar (29 @.@ 5 inHg) and 50 mph (85 km / h) on September 29 . The tropical storm then turned to the west @-@ southwest as steering currents collapsed . The cyclone began a time of erratic motion , which included two loops . The erratic motion also exposed Genevieve to wind shear , and the tropical storm weakened to a tropical depression on October 1 . On October 6 , the shear temporarily weakened , and Tropical Depression Genevieve restrengthened into a tropical storm . The cyclone 's wandering continued , and it entrained dry air . This dry air weakened the system to a depression for a second time on October 8 , and Genevieve dissipated the next day . Brief flare @-@ ups of convection could still be seen for a few days thereafter .

Tropical Storm Genevieve was a rather poorly forecast storm . Most tropical cyclone prediction models indicated a northwesterly track that never happened , and also over @-@ intensified the system . In addition , advisories on Tropical Depression Genevieve were discontinued on October 3 , and only resumed three days later . Later analysis determined that Genevieve had been a tropical depression for this whole time .

Tropical Storm Genevieve never came near land , and consequently no watches or warnings were required for any location . The tropical cyclone had no impact on any land .

= = = Hurricane Hernan = = =

On September 30 , a tropical wave organized into Tropical Depression Eleven @-@ E. Gradual strengthening ensued , and the depression strengthened into a tropical storm twelve hours later and was named Hernan . Hernan 's initial track was to the west , but the system gradually started to recurve . Its center of circulation reformed , and Hernan briefly turned to the northwest again . By October 2 , and Hernan was close to the coast . It strengthened into a hurricane that day . Late on October 2 and early on October 3 Hernan closely paralleled the coast . Interaction with land weakened the cyclone , and when Hernan made landfall on October 3 near Barra de Navidad , Jalisco , it was only a minimal hurricane . Land weakened the cyclone , and by the time it emerged into the ocean north of Puerto Vallarta , it was so disorganized that it dissipated on October 5 . At its strongest , Hurricane Hernan had winds of 85 mph (140 km / h) and a central pressure of 980 mbar (29 inHg) .

The National Hurricane Center forecasts on the Hurricane were generally forecast slightly worse than the " average " system . Errors by tropical cyclone prediction models were attributed mainly to Hernan 's recurvature . In terms of intensity , this system was correctly predicted to become a hurricane although advisories underforecast its eventual intensity .

For the coast from Acapulco to Manzanillo , a tropical storm warning was issued on October 1 . A hurricane watch was issued from Zihuatanejo to Manzanillo on October 2 . It was upgraded to a warning later that day . Also on October 2 , the coast from Manzanillo to San Blas was placed under a tropical storm warning . Meanwhile , the hurricane warning was extended to Cabo Corrientes . On October 3 , the hurricane warning was extended to San Blas and the tropical storm warning was extended to Mazatlán .

Because it made landfall in a sparsely populated area , Hernan killed no one . Around 1 @,@ 000 homes were damaged or destroyed and 100 people were injured . Flooding occurred in Melaque , Jalisco . Flooding also caused washed @-@ out roads along Mexico Route 200 and 80 . In many areas , telephone service was interrupted and power outages occurred . Along the coasts of Colima and Jalisco , waves caused by Hernan reached 13 ft (3 @.@ 9 m) in height .

= = = Tropical Depression Twelve @-@ E = = =

A system acquired enough convection and became organized enough to be considered a tropical depression on November 7 . Although the environment was initially favourable and the system was almost upgraded into a tropical storm as was forecast , wind shear kept the cyclone weak . Its convection was eventually destroyed and advisories were ended on November 10 . Twelve @-@ E dissipated on November 11 and no deaths or damages were reported .

= = Other storms = =

= = = Tropical Depression Rick = = =

According to the Joint Typhoon Warning Center , on September 1 Tropical Depression Rick crossed the International Dateline , entering into CPHC 's area of responsibility ; however , this storm wasn 't included into CPHC database . The storm eventually became extratropical on September 3 over open waters .

= = Season effects = =

= = Accumulated Cyclone Energy (ACE) = =

Accumulated Cyclone Energy (ACE) is a measure of how active a season is . It is found by taking a tropical storm or hurricane 's windspeed in knots every six hours , squaring it , adding up the results , and dividing the total by 104 . The ACE of this season makes it a below @-@ normal season . It is one of the lowest totals ever recorded , indeed only the 2007 , 1977 and 2010 seasons had lower totals .

= = Storm names = =

The following names were used for named storms that formed in the eastern Pacific in 1996 . Names that were not assigned are marked in gray . No names were retired , so it was used again in the 2002 season . This is the same list used for the 1990 season , except for Winnie , which had interchanged with Wallis .

For storms that form in the Central Pacific Hurricane Center 's area of responsibility , encompassing the area between 140 degrees west and the International Date Line , all names are used in a series of four rotating lists . The next four names that were slated for use in 1996 are shown below ; however , none of them were used .