= 1990 Pacific hurricane season =

The 1990 Pacific hurricane season is the fifth most active season on record and is the third most active season in terms of ACE Indices . The 1990 season officially started on May 15 in the eastern Pacific , and on June 1 in the central Pacific , and lasted until November 30 . These dates conventionally delimit the period of each year when most tropical cyclones form in the northeastern Pacific Ocean . However , these bounds were slightly exceeded when Hurricane Alma formed on May 12 .

Hurricane Alma became the third earliest tropical cyclone in the Eastern Pacific basin since the satellite era began in 1966 , while Trudy is the third strongest October eastern Pacific hurricane on record . Overall , the impact of this season was minimal . Tropical Storm Rachel made two landfalls in Mexico and brought rain to the United States . Hurricane Boris brought light showers to California .

= = Season summary = =

The 1990 eastern North Pacific hurricane season was active in terms of number of storms that attained at least tropical storm intensity and of Accumulated Cyclone Energy . All of the tropical cyclones of this year developed from westward @-@ moving African tropical waves . The season established several tropical storm records for this basin and was marked by several strong hurricanes . There were 21 named tropical cyclones , seven below the record established by the 1992 Pacific hurricane season two years later , but four more than the long @-@ term average . Sixteen of those named storms , twice the average and four more than the previous record , reached hurricane intensity . Only Cristina , Douglas , Aka , Rachel , and Simon did not reach hurricane strength . Six of those hurricanes reached Category 3 intensity or higher on the Saffir @-@ Simpson Hurricane Scale . Hurricanes Hernan and Trudy were among the strongest ever observed in this area . Alma became the earliest named tropical cyclone for the eastern Pacific ocean east of the 140th meridian west . The eastern Pacific produced four tropical depressions that did not reach tropical storm status .

With the exception of Marie and Polo , these systems developed between 5 ° and 15 ° N , east of the longitude of Baja California in the climatologically favored area for tropical cyclogenesis . After their development , most of the tropical cyclones moved on a west to northwest track and dissipated over cool waters without affecting land . Rachel was the only system to make landfall . In addition , one tropical storm formed in the Central Pacific and eventually crossed the International Dateline before dissipating .

= = Storms = =

= = = Hurricane Alma = = =

A tropical wave emerged from Africa on April 29 . It then moved across the Atlantic , crossed northern South America , and entered the Pacific Ocean on May 9 . Convection started to increase with the wave just to the south of Panama . The wave moved westward and continued to become better organized over the next few days . On May 12 , the wave had become organized enough and was designated Tropical Depression One @-@ E.

Tropical Depression One @-@ E moved slowly to the northwest while strengthening slowly due to easterly vertical wind shear . The depression was upgraded to Tropical Storm Alma on May 14 . The storm quickly strengthened once the vertical wind shear relaxed and was near hurricane force by the morning of May 15 . Hurricane Alma reached its peak intensity early on May 16 with maximum sustained winds of 85 mph (135 km / h) . The hurricane entered an area of southwesterly wind shear caused by an upper @-@ level ridge of high pressure . The increasing vertical wind shear and cooler water caused Alma to weaken to a tropical storm . On May 17 , the storm continued to

weaken and became a depression . The next day , the system dissipated as a tropical cyclone well west of mainland Mexico . Alma became the earliest named storm and hurricane in the satellite era in the east Pacific proper .

= = = Hurricane Boris = = =

A tropical wave came off the northwest coast of Africa on May 20 . The wave did not significantly develop as it moved west across the Atlantic Ocean and Caribbean Sea . Once it crossed Central America into the eastern Pacific Ocean , cloudiness increased considerably with the system on May 31 . It became well @-@ enough organized to be upgraded to Tropical Depression Two @-@ E on June 2 . After becoming a depression , the system moved to the west @-@ northwestward . Upper @-@ level easterly vertical wind shear limited the amount of the initial strengthening . However , an increase in convective banding led to its upgrade to Tropical Storm Boris on June 4 , 500 mi (800 km) southwest of Manzanillo . Further strengthening occurred due to an anticyclone aloft fostered additional development , and by June 5 , Boris became a hurricane . The hurricane began to move to the north @-@ northwest in response to a trough off of the West Coast of the United States . Strengthening continued , and the storm reached its peak strength with winds of 90 mph (140 km / h) and a minimum central pressure of 977 mb (28 @.@ 9 inHg) . The hurricane 's cloud pattern became elongated along a southwest @-@ northeast axis on June 6 due to an increased amount of vertical wind shear . Boris was downgraded to a tropical storm later in the day on June 6 . The deep convection of the tropical storm decreased , as Boris moved over cooler waters . It was downgraded to a tropical depression on June 7 due to these factors . The depression dissipated as a tropical cyclone on June 8 as the system quickly lost its tropical characteristics . A small circulation remained in the cloud field offshore the northwest coast of Baja California for a few more days .

The winds in the eyewall of Boris ripped off the sails of the Azure Dream sailboat . Outer rainbands from the storm produced moderate rain in several Mexican states . In Mexico , rainfall peaked at 8 @.@ 83 in (224 mm) near San Lucas , Michoacán . The remnants of Boris also brought sporadic rainfall over the western United States , with precipitation being reported in Arizona , California , Colorado , Nevada and Wyoming . The remnants of Boris were responsible for causing the wettest June in San Diego since records began in 1850 ; however , not even 1 in (25 mm) of rain fell at that location . Rainfall from the remnant system in the United States peaked at 3 @.@ 28 in (83 mm) over the Santa Rita Mountains . No other direct damages or casualties were reported from Boris .

= = = Tropical Storm Cristina = = =

A tropical wave emerged into the Atlantic Ocean off the coast of Africa on May 28 . The wave moved across Central America into the northeastern Pacific Ocean , where convection organized with the system on June 6 . The system became well @-@ enough organized to be upgraded to Tropical Depression Three @-@ E on June 8 , while 920 mi (1 @,@ 480 km) south of the southern tip of Baja California . The depression continued to strengthen , and was upgraded to Tropical Storm Cristina on June 9 .

Cristina initially had well @-@ established upper @-@ level outflow . It failed to reach hurricane status , peaking with maximum sustained winds of 65 mph (105 km / h) due to movement of its associated upper @-@ level anticyclone to the north over Mexico which caused Cristina to be exposed to easterly vertical wind shear . Cristina moved generally northwestward , which eventually placed the storm in cooler waters , and caused the deep convection of the system to dissipate . On June 14 , Cristina diminished to a tropical depression . Cristina moved west @-@ northwestward with the low @-@ level flow . The depression dissipated as a tropical cyclone on June 16 , after a lack of deep convection for 48 hours .

= = = Tropical Storm Douglas = = =

A tropical wave moved off the northwest coast of Africa on June 5 . It continued westward across

the tropical North Atlantic and Caribbean Sea without significant development . The wave entered the northeastern Pacific Ocean on June 16 , where it generated an area of increased cloudiness . Organization of thunderstorm activity increased late on June 18 and early on June 19 . Tropical Depression Four @-@ E formed on June 19 , when it was 230 mi (370 km) south of Acapulco , Mexico after evidence of low @-@ level circulation for the past 24 hours . The depression moved in a west @-@ northwest direction , due to a subtropical ridge north of the depression . Satellite analysis indicated that the depression had reached tropical storm force strength , and it was upgraded to Tropical Storm Douglas on June 19 , while 230 mi (370 km) southwest of Acapulco . Douglas reached peak strength of 65 mph (105 km / h) on June 21

A tropical storm warning was issued on June 21 , from Punta Tejupan to Cabo Corrientes before being discontinued on June 22 . Tropical Storm Douglas brushed the western coast of Mexico . The center of circulation approached within 17 mi (27 km) of the coast of Mexico on June 22 . Douglas then began to weaken because of interaction with the mountainous terrain of Mexico . The system continued to weaken despite warm water temperatures and favorable upper @-@ level conditions . Douglas dissipated early on June 24 , while 138 mi (222 km) south @-@ southeast off the southern tip of Baja California . The highest rainfall report from Mexico from Douglas totaled 11 @.@ 07 in (281 mm) at La Huerta . No deaths or damage were reported .

= = = Hurricane Elida = = =

A tropical wave came off the coast of Africa into the eastern Atlantic Ocean on June 10 and 11 . The system moved across the Atlantic and entered into the northeastern Pacific Ocean . The wave became a significant tropical system , with cyclonic turning in the lower and middle layers of the system 's cloudiness on June 25 . The center of circulation was located 345 mi (555 km) south of Acapulco , Mexico . The system exhibited sufficient organization to be considered Tropical Depression Five @-@ E on June 26 . The depression quickly strengthened and became Tropical Storm Elida later that day . The track of Elida was west @-@ northwestward to northwestward from June 27 through June 28 . Some rainbands moved over the mountainous region of southwestern Mexico , but no flooding , damage , or casualties were reported as a result . Elida continued strengthening and it was upgraded to a hurricane early on June 28 passing directly over Socorro Island later in the day , right as Elida reached peak strength of 80 mph (130 km / h) , dropping 3 @.@ 7 in (94 mm) of rain on the island . Some windows broke also as a result , and minor structural damage was reported as a result on the island .

A high @-@ pressure area to the north forced Elida to move more westward on June 29 . Convection began to decrease in the hurricane as it moved into cooler waters , and it weakened to a tropical storm later in the day . It then weakened to a tropical depression on July 1 , and dissipated on July 2 .

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

An area of disturbed weather south of Acapulco organized into Tropical Depression Six @-@ E on June 29 and the system began to move northwest . Originally the system was expected to reach tropical storm strength and near hurricane intensity by late on July 2 or early on July 3 , however persistent vertical wind shear over the system impeded its development . After convection began to merge into the Intertropical Convergence Zone (ITCZ) , the National Hurricane Center discontinued advisories on Tropical Depression Six @-@ E , stating that the depression dissipated , and regeneration seemed unlikely .

However , wind shear began to decrease , and convection associated with the remnants of Tropical Depression Six @-@ E quickly began to increase . Although the low @-@ level circulation was near the edge of the deep convection , the National Hurricane Center resumed advisories on Tropical Depression Six @-@ E by July 1 . Intensification into a tropical storm was again predicted , but Tropical Depression Six @-@ E remained poorly defined , and eventually dissipated on July 4 .

= = = Hurricane Fausto = = =

A tropical wave came off the northwest coast of Africa on June 19 . The wave crossed the Atlantic Ocean and Caribbean Sea , into the warm waters of the northeastern Pacific Ocean , on July 2 . An area of disturbed weather moved northwards towards the Gulf of Tehuantepec and became Tropical Depression Seven @-@ E early on July 6 . The depression moved northwest , and because of increased organization of deep convection , was designated Tropical Storm Fausto on July 7 , 265 mi (426 km) south of Manzanillo , Mexico . A weakly defined eye formed on July 8 , and the storm was upgraded to Hurricane Fausto , 310 mi (500 km) south of Cabo San Lucas .

Fausto peaked in strength with winds of 85 mph (140 km / h) and a central pressure of 979 mb (28 @.@ 9 inHg) on July 9 . Fausto passed 40 mi (60 km) north of Socorro Island causing a northwest wind of 40 mph (60 km / h) , and 4 @.@ 3 in (110 mm) of rain at that location . The hurricane fluctuated in intensity on July 10 , before weakening into a tropical storm later that day , 403 mi (649 km) west of Cabo San Lucas . The weakening Fausto moved over continuing cooler waters , and was downgraded to a tropical depression on June 11 , 690 mi (1 @,@ 110 km) west of Cabo San Lucas . The depression dissipated as a tropical cyclone on June 13 , and its low level circulation of clouds persisted for a few days .

= = = Hurricane Genevieve = = =

A tropical wave moved off the coast of Africa on June 25 and moved across the Atlantic Ocean and central Caribbean Sea with little development . Within the western Caribbean Sea , convection developed with the wave on July 7 . The system became better organized as it moved into the northeastern Pacific Ocean . The system was upgraded to Tropical Depression Eight @-@ E on July 11 . The depression moved west @-@ northwest , with a good outflow to the north , and gradually strengthened into Tropical Storm Genevieve later that day . Genevieve continued to strengthen , reaching hurricane strength on July 13 . The storm approached within 23 mi (37 km) of Socorro Island where a sustained wind of 44 mph (71 km / h) and gust of 50 mph (80 km / h) were reported , before the weather equipment on the island failed .

The hurricane began to turn west because of the strengthening and growing ridge to its north . Increasing outflow aloft began to form , and the hurricane reached its peak strength of 105 mph (170 km / h) with a well @-@ defined eye at its center of circulation . Genevieve turned northwest on July 16 into an area with strong vertical wind shear and low water temperatures . The hurricane quickly weakened into a tropical storm on July 17 and then into a tropical depression on July 18 . Genevieve dissipated as a tropical cyclone later in the day , reduced to a circulation in the stratocumulus cloud field .

= = = Hurricane Hernan = = =

A tropical wave that moved off the northwest coast of Africa on July 4 passed through the Atlantic Ocean and Caribbean Sea without significant development . The wave moved across Central America into the northeastern Pacific Ocean on July 15 . Thunderstorm activity increased in the system between July 16 and 18 before rainbands became present within the tropical disturbance on July 19 . Tropical Depression Nine @-@ E formed later that day while 565 mi (910 km) southwest of Acapulco , Mexico .

Tropical Depression Nine @-@ E strengthened into Tropical Storm Hernan on July 21 while 684 mi (1 @,@ 100 km) south of Cabo San Lucas . The tropical storm continued to strengthen and as it moved to the northwest , and became a hurricane late on July 21 . Hernan continued to strengthen and as it passed 145 mi (230 km) southwest of Clarion Island . On July 23 , Hernan reached its peak strength of 155 mph (250 km / h) and minimum pressure of 928 mb (27 @.@ 4 inHg) as the center of circulation was 207 mi (335 km) south @-@ southwest of Clarion Island . On July 24 , concentric eyewalls (one eyewall located inside another) formed around the center of Hernan , which was the first time this pattern had been observed with an eastern Pacific hurricane .

Hernan kept Category 4 hurricane intensity a few more days and hurricane strength for six days overall . The hurricane weakened into a tropical storm on July 28 as it moved over cooler waters . Hernan turned more to the west as its low level center became separated from its thunderstorm activity and was steering by a surface high @-@ pressure system to its north . Hernan moved over cooler waters , dissipating as a tropical cyclone early on July 31 .

= = = Hurricane Iselle = = =

A tropical wave moved off the coast of Africa on July 7 . The wave moved west , but it was not until it moved across the Caribbean Sea that the wave 's convection organized . The system entered into the northeastern Pacific Ocean with concentrated convection and a surface center of circulation while southeast of Acapulco . Moving west @-@ northwest , Tropical Depression Ten @-@ E formed on July 20 393 mi (632 km) south of Puerto Ángel , Mexico . Early on the following day , the depression strengthened into Tropical Storm Iselle . The storm continued strengthening while in the proximity of Hurricane Hernan , becoming a hurricane on July 22 .

The hurricane continued to move west @-@ northwest through its duration , and reached its peak strength of 120 mph (190 km / h) on July 25 . Iselle crossed Socorro Island , which recorded a 70 mph (110 km / h) sustained wind and heavy rain on July 25 . The hurricane weakened on following days after it moved over cooler waters , downgraded to a tropical storm on July 28 and subsequently into a tropical depression on July 30 . The depression dissipated later that day , after losing its low @-@ level circulation 588 mi (946 km) southwest of San Diego .

= = = Tropical Depression Eleven @-@ E = = =

On July 24 a tropical disturbance behind Hurricane Hernan strengthened into a tropical depression . Due to the close proximity of Hernan to its west , the development of the depression was hindered due to vertical wind shear from the outflow of Hernan . This wind shear dissipated the depression on July 26 , and its remnants were absorbed by the nearby cyclone . No damages or casualties were caused by the depression as it was well out to sea .

= = = Tropical Storm Aka = = =

Tropical Storm Aka was the only tropical storm to form in the Central North Pacific during 1990 . An area of disturbed weather began to organize on August 6 . By August 7 , the system became well @-@ enough organized to become designated Tropical depression One @-@ C. The depression intensified into a tropical storm while moving west , to the south of the Hawaiian Islands . On August 10 , Tropical Storm Aka peaked with maximum sustained winds of 60 mph (97 km / h) . The storm continued to move west and approached Johnston Island , though the island 's weather did not deteriorate . The tropical storm crossed the International Date Line on August 13 . Aka weakened back into a depression and dissipated two days later on August 15 .

= = = Tropical Depression Diana = = =

Hurricane Diana struck eastern Mexico and managed to hold together , remaining a tropical depression as it entered the eastern Pacific Ocean late on August 8 . Although Tropical Depression Diana entered the eastern Pacific , the National Hurricane Center did not re @-@ classify the system . No re @-@ intensification occurred after the system entered the eastern Pacific , and it had dissipated as a tropical cyclone by the following day . The remnant tropical disturbance recurved through the Gulf of California while developing significant convection before it moved into northwest Mexico , which brought rainfall amounts of over 10 in (250 mm) to local areas within the state of Sonora . The remnant disturbance moved into the American Southwest on August 11 .

= = = Tropical Depression Two @-@ C = = =

Tropical Depression Two @-@ C was the second and last tropical cyclone to develop within the north @-@ central Pacific Ocean in 1990 . The depression developed from a tropical disturbance well southeast of Hawaii , which became much better organized on the night of August 10 . The tropical depression moved in a west northwest direction for the next 18 hours and then changed to a west @-@ southwest track on August 11 . As it turned more to the southwest , the depression weakened until it dissipated on August 13 about 600 mi (970 km) south @-@ southeast of Hilo , Hawaii .

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

A persistent area of thunderstorm activity southwest of Puerto Vallarta became better organized and strengthened into Tropical Depression Twelve @-@ E on August 16 . Moving northwest , the system developed slowly as it was embedded within the Intertropical Convergence Zone . Easterly shear kept the system from reaching tropical storm strength and caused its ultimate dissipation on August 19 . No damages or fatalities were caused by this depression .

= = = Hurricane Julio = = =

A tropical wave moved off the western coast of Africa on August 5 , moving across the Atlantic Ocean and Caribbean Sea without significant development . The system entered the northeastern Pacific Ocean , and became well @-@ enough organized to be upgraded to Tropical Depression Thirteen @-@ E on August 17 while centered 404 mi (650 km) south of Acapulco , Mexico . The depression moved on a west @-@ northwestward track and strengthened , becoming Tropical Storm Julio on August 18 . Strengthening continued and Julio reached hurricane strength on August 19 . The cyclone peaked with maximum sustained winds of 115 mph (185 km / h) on August 21 . The storm turned westward and began weakening . Julio regained tropical storm status on August 23 and tropical depression status on August 24 before dissipating as a tropical cyclone later that day . No damage was reported from Julio .

= = = Hurricane Kenna = = =

A tropical wave moved off the coast of Africa on August 9 , and spawned Tropical Storm Fran four days later , before it moved through the southern Windward Islands on August 14 . While Fran dissipated shortly after that , the tropical wave progressed into the northeastern Pacific Ocean . The wave spawned Tropical Depression Fourteen @-@ E 808 mi (1 @,@ 300 km) east @-@ southeast of Hurricane Julio . The depression moved westward for the next several days . As Julio weakened , the depression began to increase in strength . It became Tropical Storm Kenna on August 22 and continued to strengthen into a hurricane on August 25 , peaking with winds of 85 mph (137 km / h) the next day . On August 26 , a strong frontal trough weakened the high pressure system to the storm 's north , causing a turn to the north during the next few days . The hurricane weakened in response to cooler water and increasing vertical wind shear , which removed convection from its center . Kenna weakened back to tropical storm strength on August 28 , then into a tropical depression on August 29 . The system dissipated as a tropical cyclone on August 30 .

= = = Hurricane Lowell = = =

A tropical wave moved off the northwestern coast of Africa into the Atlantic Ocean on August 11 . After moving across the Atlantic and Caribbean Sea without development , the system moved through the Intertropical Convergence Zone of the northeastern Pacific Ocean . The cloudiness moved northward toward the Gulf of Tehuantepec on August 22 . The thunderstorm activity organized sufficiently for the system to be upgraded to Tropical Depression Fifteen @-@ E on

August 23 while 298 mi (480 km) southeast of Acapulco , Mexico . The depression moved west @-@ northwestward and strengthened into a tropical storm 217 mi (350 km) south @-@ southwest of Puerto Vallarta on August 25 . The storm began to turn more westward due to a strengthening high pressure system to its north and was upgraded to a hurricane on August 27 while 286 mi (460 km) southwest of Cabo San Lucas . As the high to the north continued to strengthen , the hurricane turned west @-@ southwest .

Thunderstorm activity with the hurricane began to weaken and Lowell was downgraded back to tropical storm status on August 28 . The tropical storm then turned to a north @-@ northwestward with the storm passing over cooler waters . On August 31 , the storm was downgraded to a tropical depression , with only minimal amounts of deep convection remaining within its circulation . Lowell dissipated as a tropical cyclone on September 1 , though a low @-@ level circulation of clouds could be seen on satellite imagery for the next few days . No damage or casualties was reported as a result of Lowell .

= = = Hurricane Marie = = =

A tropical wave moved off the northwestern coast of Africa on August 16 . The wave moved west through the Atlantic Ocean and Caribbean Sea without significant development . The wave moved across Central America and into the northeastern Pacific Ocean , on August 29 . Isolated convection with the system increased while south of the Gulf of Tehuantepec as the system moved northwest parallel to the southwest coast of Mexico . Once convective activity increased , the system was upgraded to Tropical Depression Sixteen @-@ E on September 7 while centered 659 mi (1 @,@ 060 km) southwest of Clarion Island .

A weaker than normal high pressure system controlled the movement of the depression , and the system moved slowly to the west through its duration . The depression strengthened into Tropical Storm Marie on September 8 , and into a hurricane on September 9 , while 522 mi (840 km) south @-@ southwest of Clarion Island . Marie reached its peak intensity of 140 mph (230 km / h) on September 11 . The hurricane crossed into the central North Pacific on September 14 as a hurricane with maximum sustained winds of 110 mph (180 km / h) . The hurricane weakened thereafter and on September 17 Marie regained tropical storm status . The system weakened into a tropical depression on September 19 and dissipated as a tropical cyclone on September 21 near the Hawaiian coast . No casualties or damages were caused by Marie .

= = = Hurricane Norbert = = =

A tropical wave moved off the coast of Africa and across the Atlantic Ocean and Caribbean Sea without significant development . The wave entered the northeastern Pacific Ocean and began to show signs of organized thunderstorm development . Tropical Depression Seventeen @-@ E formed on September 10 while centered 758 mi (1 @,@ 220 km) south @-@ southwest of Cabo San Lucas , Mexico . The depression became better organized and strengthened into Tropical Storm Norbert later in the day .

On September 12 , Norbert absorbed Tropical Depression Eighteen @-@ E which was in close proximity . Norbert strengthened as it moved north @-@ northwestward . The tropical storm was upgraded to a hurricane on September 14 , and formed an eye on September 15 . The storm reached its peak strength of 80 mph (130 km / h) sustained winds that day . Turning north of due west , Norbert then weakened as it moved over cooler waters . It was downgraded to a tropical storm later on September 15 , and then to a tropical depression on September 18 . Norbert dissipated as a tropical cyclone on September 19 after losing all its deep convection .

= = = Tropical Depression Eighteen @-@ E = = =

On September 12 , satellite images indicated that the eighteenth tropical depression of the season formed southwest of Cabo San Lucas . Located in close proximity to Tropical Storm Norbert , the

depression would soon enter a region of colder sea surface temperatures , and the National Hurricane Center noted that only very little intensification was possible . As predicted , Norbert hindered further intensification of Tropical Depression Eighteen @-@ E. The National Hurricane Center noted six hours later that the depression would likely be absorbed into Norbert . The National Hurricane Center later believed that Tropical Depression Eighteen @-@ E was " dominating " the interaction between the two systems , and was forecast to absorb Norbert . Unlike the latter prediction , Norbert absorbed Tropical Depression Eighteen @-@ E later that day .

= = = Hurricane Odile = = =

A tropical wave move off the coast of Africa on September 5 , and crossed the Atlantic waters , the Caribbean Sea and eventually into the Pacific Ocean as a weak system . An area of convection entered into the northeastern Pacific Ocean a few hundred miles south of Acapulco , Mexico . On September 2 , Tropical Depression Nineteen @-@ E formed from this convection , while 746 mi (1 @,@ 201 km) south @-@ southeast from the southern tip of Baja California . The depression moved on a west @-@ northwestward track , rounding the southwest side of a strong high pressure system . The depression continued to strengthen and was upgraded to Tropical Storm Odile on September 24 and into a hurricane on September 25 . Its intensity peaked with maximum sustained winds of 145 mph (233 km / h) on September 26 .

The hurricane began to turn more northwestward in response to a high @-@ pressure system weakening to its north . Odile began to weaken as it moved over cooler waters on September 28 . The cyclone regained tropical storm status on September 29 while it slowly progressed northward . The system weakened into a tropical depression status on September 30 . Once it lost its deep convection , Odile was steered southwestward by the low @-@ level flow , before it dissipated as a tropical cyclone on October 2 . Its remaining low @-@ level circulation of clouds continued on a southwestward course thereafter .

= = = Tropical Storm Rachel = = =

In mid @-@ September , a weak tropical wave moved off the coast of Northwest Africa . It moved westward and entered the eastern Pacific Ocean early on September 23 . Cloudiness became concentrated with the system south of the Gulf of Tehuantepec . On September 27 , the organized thunderstorm area was upgraded to Tropical Depression Twenty One @-@ E while 230 mi (370 km) south of Acapulco . The depression developed slowly , and became a tropical storm on September 30 . As Rachel briefly moved northward , before re @-@ curving and accelerating towards the Mexican coast . The storm passed over the southern portion of Baja California Sur on October 2 . Rachel made its final landfall midway between Los Mochis and Culiacán , and became the only system to make landfall from the eastern north Pacific Ocean in 1990 . Rachel decayed rapidly over land , and the final public advisory on Rachel was issued early on October 3 @.@ its remnants continued accelerating over Texas until they lost their identity .

The highest rainfall total from the system in Mexico totaled 9 @.@ 85 in (250 mm) at Santa Anita near the tip of Baja California . Across northern Mexico , thousands were homeless , and 18 people died . In Texas , Rachel 's remnants caused heavy rain . Flooding occurred in the Big Bend area .

= = = Hurricane Polo = = =

Polo originated from a tropical wave that moved off the African coast on September 2 which spawned Hurricane Isidore in the Atlantic basin . On September 14 , the system increased in convection as it was moving to the west and approaching Central America . The southern extent of the wave crossed into the Pacific Ocean on September 18 .

The wave continued westward and related thunderstorm activity increased during the following week . The convective system organized into Tropical Depression Twenty @-@ E on September 28 nearly midway between Mexico and Hawaii . Initially , the depression drifted toward the northwest

due to a large upper @-@ level trough located to its west . Polo strengthened rapidly into a hurricane early on September 30 , with its winds peaking at 75 mph (121 km / h) . Since the storm was very small , vertical wind shear caused significant weakening thereafter . On October 1 , Polo regained tropical storm strength as it was crossing into the north Central Pacific basin . It dissipated as a tropical cyclone later that day . There were no casualties or damages caused by Polo .

= = = Tropical Storm Simon = = =

A weakly defined tropical wave moved off the northwest coast of Africa on September 20 , and crossed the northern portion of the tropical Atlantic and northern South America without significant organization . The wave moved into the northeastern Pacific waters , off the coast of Colombia on September 30 . As the wave passed over southern Central America , rainbands and cloudiness increased with the system between October 1 and October 3 , before the system merged with the ITCZ from October 4 to October 6 . Signs of convective organization reappeared on October 8 , and by October 9 , the system was upgraded to Tropical Depression Twenty Two @-@ E 578 mi (930 km) south of Cabo San Lucas , Mexico .

The depression continued to develop and was upgraded to Tropical Storm Simon on October 10 while 604 mi (972 km) south @-@ southwest of Cabo San Lucas . Due to a high @-@ pressure system to the north @-@ northwest , Simon continued on a west @-@ northwestward path . The tropical storm continued to strengthen to its peak intensity of 70 mph (110 km / h) by late on October 11 . Simon passed over cooler waters and weakened back into a tropical depression on October 13 . The depression moved on a westward course , and the low @-@ level circulation was displaced from its deep convection during the following day . Simon then dissipated as a tropical cyclone early on October 15 across the open waters of the northeast Pacific .

= = = Hurricane Trudy = = =

A tropical wave moved across the northeast Pacific Ocean and formed a tropical depression south of Mexico on October 16 . It strengthened at a moderate pace and reached hurricane intensity on October 18 . Trudy entered a favorable environment and explosively intensified , reaching its first peak in strength on October 20 . At that time , an upper @-@ level trough drifted Trudy north , which increased vertical shear , causing it to substantially weaken the system back to Category 1 hurricane status . The trough outran the storm and was replaced by a ridge which turned the storm back to the west and led to its re @-@ intensification to a Category 4 hurricane . Another upper level trough approached which pulled Trudy northward once again , and sheared the hurricane apart . The cyclone dissipated on November 1 . Eventually , some of its moisture spread over parts of Mexico and the United States .

Except for Socorro Island , Trudy had no impact on land . The island reported hurricane force winds for seven hours . Trudy also had an unusually large eye , which was as large as 58 mi (93 km) wide . Trudy is the fourth @-@ strongest Pacific hurricane in October , behind Kenna of the 2002 season , Rick of the 2009 season , and Patricia of the 2015 season . Trudy also spent 78 hours of its life as a Category 4 hurricane , longer than any other hurricane in the Eastern Pacific basin .

= = = Hurricane Vance = = =

An area of disturbed weather , possibly related to a tropical wave , organized into Tropical Depression Twenty Four @-@ E on October 21 . It strengthened into Tropical Storm Vance early on October 23 and then into a hurricane two days later . Vance moved parallel to the west coast of Mexico and approached the southern tip of the Baja California Peninsula . Before it could strike land , a high @-@ pressure area blocked Vance 's path and forced the storm to transcribe a small clockwise loop over a two @-@ day period . During the loop , Vance encountered wind shear and cool waters stirred up by Trudy as well as earlier in its duration . Vance weakened to a tropical storm on October 27 and a depression on October 30 . The cyclone dissipated late on October 31 .

= = Accumulated Cyclone Energy (ACE) Rating = =

The table on the right shows the ACE for each storm in the season . 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 34 knots (39 mph , 63 km / h) or tropical storm strength .

The figures in parentheses are for storms in the Central Pacific basin west of 140 ° W ; those not in parenthesis are for the Eastern Pacific basin .

The cumulative ACE for the Eastern Pacific this season fell within the official " Above Normal " grading , being one of the most active . This occurred because the season had many intense storms that lasted for a long period of time . Also it is important to note that this is the third highest ACE , only behind the 1992 and 2015 seasons respectively .

= = 1990 storm names = =

The following names were used for named storms that formed in the eastern Pacific in 1990 . No names were retired , so it was used again in the 1996 season . This is the same list used for the 1984 season . Storms were named Trudy and Vance for the first time in 1990 . Names that were not assigned are marked in gray .

One name from the Central Pacific list was used ? Aka . It was the first usage for that name .