

= Hurricane Carlotta ( 2000 ) =

Hurricane Carlotta was the most powerful hurricane of the 2000 Pacific hurricane season . The third tropical cyclone of the season , Carlotta developed from a tropical wave on June 18 about 270 miles ( 470 km ) southeast off the coast of Mexico . With favorable conditions for development , it strengthened steadily at first , followed by a period of rapid deepening to peak winds of 155 mph ( 250 km / h ) on June 22 . Cooler waters caused Carlotta to gradually weaken , and on June 25 it degenerated into a remnant area of low pressure while located about 260 miles ( 420 km ) west @-@ southwest of Cabo San Lucas .

The hurricane produced heavy rainfall and rough surf along the southwest coast of Mexico , though no serious damage was reported . A Lithuanian freighter traversing through the peak of the hurricane was lost after experiencing an engine failure ; its crew of 18 was presumed killed .

= = Meteorological history = =

A tropical wave moved off the coast of Africa on June 3 . It tracked westward across the unfavorable Atlantic Ocean , and on June 15 it crossed Central America into the eastern Pacific Ocean . The system continued westward , and late on June 16 a low pressure area developed about 300 miles ( 480 km ) southwest of San José , Costa Rica . At around 1200 UTC on June 17 , Dvorak classifications began on the disturbance , though initially its convection was broadly distributed and disorganized . The next day , however , an area of concentrated convection developed just south of the Gulf of Tehuantepec . Ships in the vicinity confirmed the development of a surface circulation within the system , while satellite imagery showed the development of a central dense overcast . Based on its organization , it is estimated the system developed into Tropical Depression Three @-@ E late on June 18 while located about 270 miles ( 470 km ) southeast of Puerto Angel , Oaxaca in Mexico .

Initially , the convection of the depression was displaced to the west of the circulation due to some easterly wind shear , though as it tracked west @-@ northwestward parallel to the coast of Mexico , it maintained and developed deep convection near and over the center . With favorable conditions , the cyclone strengthened and became Tropical Storm Carlotta early on June 19 . The storm initially maintained a track toward the Mexican coastline , though a mid @-@ level ridge turned it to the west ; its closest point of approach was about 140 miles ( 225 km ) at 1200 UTC on June 19 . Late that day , a ragged banding @-@ eye feature developed on satellite imagery , while at the same time it maintained an area of strong convection and well @-@ defined outflow to its south . The storm continued to intensify , and at 0600 UTC on June 20 Carlotta attained hurricane status while located about 155 miles ( 250 km ) south of Acapulco . Operationally , it was upgraded to hurricane status six hours earlier .

With a large anticyclone centered near Mazatlán , Sinaloa , Carlotta turned more to the west . Deep convection increased in coverage and intensity as the system maintained impressive upper @-@ level outflow over its southern semicircle . Late on June 20 , Hurricane Carlotta began a period of rapid deepening , with warm waters and a very favorable upper @-@ level environment , and in a twelve @-@ hour period the pressure dropped 49 mbar to an estimated minimum central pressure of 932 mbar at 0600 UTC on June 21 ; at the same time , Carlotta attained peak winds of 155 mph ( 250 km / h ) while located about 285 miles ( 455 km ) southwest of Acapulco . At the time of its peak intensity , Carlotta maintained a well @-@ defined central dense overcast around an eye of 20 miles ( 36 km ) in diameter . Satellite intensity estimates indicated winds of 160 mph ( 260 km / h ) , though through much of its duration there was a sizable discrepancy between the estimated winds and that of winds reported by Hurricane Hunters .

Hurricane Carlotta maintained peak winds for about twelve hours before weakening as it curved around the periphery of the mid @-@ level ridge over Mexico . Late on June 21 , the eye had become less distinct while its surrounding ring of convection eroded and warmed . Early on June 22 , northeasterly wind shear increased , and shortly thereafter the weakening trend was temporarily halted with some oscillations in the convective intensity and eye definition . Weakening continued on

June 23 as the hurricane tracked over increasingly cooler waters , and shortly after 0000 UTC on June 24 Carlotta weakened to a tropical storm about 260 miles ( 420 km ) west @-@ southwest of Cabo San Lucas . Overall convection continued to diminish , and early on June 25 the winds dropped to tropical depression status . Deep convection ceased to exist by 0600 UTC on June 25 , and Carlotta degenerated into a remnant low pressure area . The low @-@ level circulation of Carlotta persisted for several days as it continued northwestward .

= = Impact = =

Shortly after first developing , the government of Mexico issued a tropical storm warning from Salina Cruz to Acapulco , and later was extended to Zihuatanejo . Though the National Hurricane Center never forecast it to make landfall , one computer model predicted Carlotta to move ashore ; due to the threat , the Mexican government also issued a hurricane watch from Puerto Angel to Zihuatanejo . Outer rainbands and rough surf affected the southwestern coast of Mexico for an extended duration ; officials evacuated about 100 families in potentially flooded areas of Acapulco as a precaution . Precipitation and clouds were reported in every Mexican state along the Pacific Ocean , resulting in flooding in some areas . No stations in Mexico reported sustained tropical storm force winds ; however , Bahías de Huatulco International Airport in Oaxaca reported a wind gust of 44 mph ( 71 km / h ) . Heavy rainfall and rough seas were also reported on Socorro Island .

Seven ships reported tropical storm force winds in association with Carlotta , peaking at 46 mph ( 74 km / h ) ; the lowest pressure recorded by ship was 1 @, @ 008 mbar . Offshore , waves reached 40 feet ( 12 m ) in height . The Lithuanian freighter Linkuva , en route to Long Beach , California , encountered the waves and strong winds as the hurricane was undergoing its period of rapid intensification . After an engine failure , the freighter was lost about 220 miles ( 355 km ) southwest of Acapulco . A naval vessel from both the United States Navy and the Mexican Navy searched for the freighter for three days , though the crew was lost and presumed killed .