

= Tropical Storm Odile (2008) =

Tropical Storm Odile was a late season tropical storm that formed during the 2008 Pacific hurricane season and affected parts of southern Mexico . A tropical depression formed on October 8 , and became Tropical Storm Odile 18 hours later . The storm paralleled the south coast of Mexico , with the center located only several miles offshore . After peaking in intensity , increasing southeasterly vertical wind shear induced a trend of rapid weakening on the storm . Correspondingly , Odile was downgraded to a tropical depression early on 12 October , subsequently degenerating into a remnant low about 55 mi (85 km) south of Manzanillo , Colima . From thereon , the low proceeded slowly south @-@ southwestward before dissipating on October 13 . Since Odile stayed at sea , its effects along coastlines were limited . The most notable damages were caused by flooding along the southern coast of Mexico , mostly in Chiapas , Oaxaca , Guerrero and Michoacán . The exact amount of damage , however , remains unknown , and no fatalities were reported as a result of the storm .

= = Meteorological history = =

A tropical wave emerged off the west coast of Africa on September 23 , and merged with the southern end of a decaying frontal system over the Caribbean Sea . The combined disturbance gradually split , with the northernmost section eventually becoming Tropical Storm Marco . The southernmost end moved into the eastern Pacific , which then immediately showed signs of organization . The system stalled just south of El Salvador throughout October 5 , where it came under the influence of strong vertical wind shear . The circulation slowly drifted east @-@ northeastward and became absorbed by a neighboring tropical wave , with the broad resultant low re @-@ curving to the west @-@ northwest . In response to relaxing shear aloft , convection redeveloped around the newly formed center of circulation . It subsequently acquired a sufficiently organized structure and post @-@ analysis found that a tropical depression formed at around 1200 UTC on October 8 . Upon developing , the depression was designated as Sixteen @-@ E about 120 mi (195 km) south @-@ southwest of San Salvador , El Salvador , and operationally , advisories were initiated at 2100 UTC ? 9 hours after post @-@ analytic estimates of formation .

Despite being in an area with favorable conditions , lack of inner core organization proved difficult for rapid deepening to occur , and initially , model guidance did not forecast any significant strengthening . Contrary to expectations , satellite imagery showed a gradual increase in organization later that evening . Bands of convection deepened in the southern quadrant , indicating that the storm was steadily strengthening . Located just to the south of a large mid @-@ level ridge over Mexico , the system was steered toward the west @-@ northwest , proceeding within a favorable environment . Based on the improved appearance on satellite imagery , it is estimated the depression intensified into Tropical Storm Odile at 0600 UTC on October 9 about 330 mi (530 km) southeast of Puerto Ángel , Mexico . Shortly after attaining tropical storm status , Odile began to develop a small area of central dense overcast , and upper @-@ level cirrus outflow became well @-@ defined within the western semicircle of the storm . Convective banding organized to the south and southwest of the circulation , leading Dvorak T @-@ numbers to estimate an intensity of at least 50 mph (80 km / h) . Based on this estimate , the NHC noted a high chance of further intensification into a minimal hurricane . Odile maintained its intensity , as upper @-@ level outflow of the circulation was reduced to the northeast . Although wind shear initially dislocated the circulation from the main convection , a large burst of convection allowed Odile to intensify slightly further to peak winds of 60 mph (95 km / h) at around 0600 UTC on October 10 .

Odile closely paralleled the Mexican coastline . The intensification did not last long , in fact , the convection associated with Odile diminished in the afternoon and its rainbands became rather distorted . Another cluster of convection sprung up that evening , this time with cloud tops colder than ? 80 ° C (? 112 ° F) . The circulation center was well embedded within the convection . As a consequence of the slightly improved organization , Odile had a stronger interaction with the easterlies aloft , therefore increasing forward movement speed . Later that day , an reconnaissance

aircraft passed through Odile and observed a rather weak and disorganized tropical cyclone , resulting in meteorologists at the NHC to change its forecasts . Early on October 12 , Odile made its closest approach to coastline of Mexico , only about 50 mi (80 km) offshore of Guerrero , Mexico . Increasing southeasterly vertical wind shear took toll on the system . Furthermore , around 0600 UTC , NHC confirmed that Odile weakened into a tropical depression . The last advisory regarding Odile was issued later that day stating that it has subsequently degenerated into a remnant low @-@ pressure area , a swirl of low @-@ level clouds . The remnants of Odile meandered slowly south @-@ southwestward before completely dissipating on October 13 .

= = Preparations and impact = =

Throughout Odile 's existence , the National Weather Service of Mexico declared several tropical storm watches and warnings for the Pacific coast of Mexico spanning from Jalisco to Oaxaca . They were extended and discontinued as Odile progressed westward . On October 11 at around 2 AM PDT , a hurricane watch was declared for the Pacific coast of Mexico from Tecpán de Galeana to Punta San Telmo . Six hours later , the hurricane watch was adjusted and in effect for the coast from Zihuatanejo to Manzanillo . They were all discontinued later that day as the chance of Odile becoming a hurricane diminished .

On October 8 , blue alerts were declared for 118 municipalities in Chiapas following the minimal threat of tropical storm @-@ force impact . The civil defense system in the state of Chiapas warned that the storm could leave up to 5 @.@ 9 in (150 mm) of rainfall . Shippings were closed in the Port of Chiapas , leaving over 3 @,@ 000 boats stranded ashore on October 9 . Flooding in Acapulco forced officials to close schools on October 10 . Meanwhile , the state government reported that 232 police were ready to provide assistance to citizens in advance of Odile . Civil defense officials in the state of Guerrero ordered about 10 @,@ 000 people to evacuate their homes . On October 11 , a yellow alert were declared for the state of Michoacán , where the civil defense committee also announced that the shelters were opened for schools in the municipality of Lázaro Cárdenas and the towns of Playa Azul and Guacamayas . Ports in Lázaro Cárdenas were also closed later that day .

On October 10 , about 4 @.@ 8 in (120 mm) of rainfall were accumulated in the city of Acapulco . The torrential rainfall caused flooding which damaged more than 100 houses , with two of them completely destroyed . Excess floodwater collapsed walls and covered roads with mud that reached as much as 2 @.@ 3 ft (0 @.@ 70 m) . Nearly 150 homes were inundated with 13 ft (4 @.@ 0 m) of water . The flooding is also responsible for causing strong current that had swept away parked vehicles , downing of at least 16 trees and carrying debris to the main streets of the port . Odile also managed to cause damage toward the plumbing and sewage supplies of Acapulco , resulting no clean water access in about fifty communities of the suburban areas of Acapulco for several days . The water levels of Papagayo River reached its maximum capacity , damaging electrical supplies . In Michoacán , strong winds resulted 30 downed trees and the collapse of 5 power poles , leaving 10 minutes without electricity for a large part of the city .