= Hurricane Dora (2011) =

Hurricane Dora was the strongest tropical cyclone in the northeastern Pacific in 2011 . Dora developed from a tropical wave south of Honduras on July 18 . Moving northwestward in favorable conditions , the system quickly intensified to tropical storm status and attained hurricane intensity the next day . Rapid intensification ensued shortly thereafter , bringing the storm to its peak intensity on July 21 as a Category 4 hurricane , with a minimum barometric pressure of 929 mbar (hPa ; 27 @.@ 43 inHg) and maximum sustained winds of 155 mph (250 km / h) . However , the storm 's path into an area with cool sea surface temperatures and wind shear caused Dora to quickly deteriorate and weaken . By July 24 , Dora had degenerated into a remnant low @-@ pressure area west of the Baja California Peninsula . Dora brought stormy conditions to the southwestern Mexico coast and the Baja California Peninsula throughout its existence . Remaining off the coast from its formation to dissipation , Dora 's effects on land were slight . However , the outer rainbands of the hurricane caused flooding and mudslides in southern Mexico and Guatemala , while rough surf toppled a lighthouse and damaged 60 restaurants along the coast . The hurricane 's remnants contributed to heightened shower and thunderstorm activity across New Mexico and Arizona in late July .

= = Meteorological history = =

The origins of Hurricane Dora can be traced back to a tropical wave that emerged off the western African coast on July 7 . The disturbance tracked into the Caribbean Sea seven days later without any signs of development . However , the system encountered an enhanced flow of moisture in the southwestern Caribbean , allowing for organization and the formation of a broad low @-@ pressure area on July 15 . Upon tracking into the eastern Pacific , the National Hurricane Center (NHC) judged the storm to have had a low chance developing into a tropical cyclone . The next day , thunderstorm activity erupted around the system , and at 1500 UTC on July 18 , the NHC declared the vigorous disturbance to have reached tropical depression status ; in post @-@ season analysis , the NHC found that Dora was already a tropical storm by this point after developing six hours earlier .

After development , Dora was steered towards the northwest by a ridge over the Southwestern United States . Situated in an area of favorable atmospheric conditions and warm sea surface temperatures , the tropical cyclone quickly strengthened , developing an intermittent eye before being classified as a hurricane at 1800 UTC on July 19 . At the time , the storm was roughly 245 mi (400 km) south @-@ southwest of Puerto Escondido , Oaxaca . Upon reaching hurricane status , Dora began an episode of rapid intensification as its inner structure became more well @-@ defined and its eye more permanent . At the same time , mesovorticies within the eye ? often indicators of intense tropical cyclones ? were noted on satellite imagery . By 1800 UTC on July 20 , Dora had attained the threshold for major hurricane status . After acquiring some characteristics of an annular hurricane early on July 21 , Dora reached its peak intensity at 1200 UTC that day with a minimum barometric pressure of 929 mbar (hPa ; 27 @.@ 43 inHg) and maximum sustained winds of 155 mph (250 km / h) , making it a high @-@ end Category 4 on the Saffir ? Simpson hurricane wind scale .

Dora held its peak strength for just six hours before it began to weaken due to cooler waters and the presence of wind shear . Although the hurricane 's initial weakening phase was gradual , the overall structure of Dora quickly deteriorated in response to increasingly hostile wind shear around the storm . The storm 's eye abruptly dissipated less than 12 hours after Dora 's peak intensity , By 1800 UTC on July 22 , the tropical cyclone had weakened to tropical storm intensity , undergoing an 80 mph (130 km / h) decrease in winds in just 24 hours . Continued weakening prompted the NHC to downgrade Dora to a tropical depression two days later at 1200 UTC as the system curved west of the Baja California Peninsula . Twelve hours later , the system degenerated into a remnant low pressure area devoid of any thunderstorm activity . The low persisted for a day as it tracked north @-@ northwestward , eventually dissipating 70 mi (110 km) south @-@ southwest of Bahía

Asunción on July 26 .

= = Preparations and impact = =

On July 20 , the Government of Mexico issued a tropical storm watch for a portion of the southwestern Mexico coast from Lázaro Cárdenas , Michoacán to Cabo Corrientes ; this watch remained posted until the early hours of July 21 . Several hours later , another tropical storm watch was issued for coastal areas of the Baja California Peninsula from Agua Blanca to Buenavista , and was later upgraded to a tropical storm warning as Dora neared the coast . However , the warning was lifted after the hurricane weakened and moved away from land . In Guerrero , the threat of flooding prompted the state government to prepare 900 shelters , while boaters were ordered to exercise caution due to rough seas generated by the nearby tropical cyclone .

The outer rainbands of the tropical cyclone caused flooding in the states of Chiapas , Guerrero , and Chiapas , resulting in some damage . Several mudslides in southern Mexico and Guatemala were attributed to these rains . Off the Mexican coast , waves from Dora peaked at 13 ft (4 @.@ 0 m) . These high waves toppled a lighthouse roughly 35 mi (56 km) east of Acapulco and also damaged or swept away 60 thatch @-@ roofed restaurants around La Penitas and La Bocana . After passing southwestern Mexico , Dora was expected to track near the Baja California Peninsula , forcing port authorities in Los Cabos Municipality to suspend boat tours and other tourist services . Four elementary schools were converted into emergency shelters in preparation for potential flooding . Residual moisture from Dora enhanced the monsoonal flow over Arizona and New Mexico , producing showers across the region .