= Hurricane Cosme (2007) =

Hurricane Cosme was a minimal hurricane that threatened Hawaii in mid @-@ July 2007 . The sixth tropical cyclone , third named storm and first hurricane of the 2007 Pacific hurricane season , Cosme originated from a tropical wave that emerged off the coast of Africa on June 27 and tracked westward before emerging in the eastern Pacific . A system along the wave organized , and it was classified as a tropical depression on July 14 , a tropical storm on July 15 , and a hurricane on July 16 . Cosme reached peak intensity as a Category 1 hurricane on the Saffir @-@ Simpson Hurricane Scale , but quickly weakened due to cooler waters . Steadily decreasing in strength , the storm was downgraded to a tropical depression before passing to the south of the Hawaiian Islands . The depression crossed into the Central Pacific and degenerated into a remnant low by July 23 .

Because Cosme stayed far from land , effects were mostly minor . Swells up to 9 ft (2 @.@ 7 m) and up to 6 @.@ 94 in (176 mm) of rainfall were reported , in addition to wind gusts of 40 mph (65 km / h) . No fatalities or injuries were reported , and only minimal damage occurred .

= = Meteorological history = =

The origins of Cosme can be traced back to a tropical wave that left the coast of Africa on June 27 , 2007 . Due to a lack of associated convection , the wave was difficult to track across the Atlantic Ocean and Caribbean Sea . The National Hurricane Center (NHC) estimated that the wave emerged into the Pacific Ocean on July 8 . Because the system was embedded within the Intertropical Convergence Zone (ITCZ) , development was initially slow . However , when it separated from the ITCZ on July 13 , the disturbance increased in convective organization , and was classified as Tropical Depression Six @-@ E about midway between Mexico and Hawaii . It tracked westward at 12 mph (19 km / h) due to steering currents of a tropical easterly flow . Although wind shear was generally light , ocean temperatures were only marginal for tropical cyclone intensification . Forecasters experienced difficulty in locating the exact center of circulation . By July 14 , convection had steadily decreased , although the storm 's movement was initially uncertain due to its location within a broad low pressure area . Early on July 15 the depression 's appearance on satellite imagery improved , and at 1800 UTC the NHC upgraded the depression to tropical storm status , and gave it the name " Cosme " .

Shortly after attaining tropical storm status , the previously @-@ broad circulation consolidated as banding features developed . The inner core gradually condensed and tightened , as indicated by an AMSR @-@ E overpass . On July 16 an eye began to form and Cosme intensified to attain winds of 65 mph (105 km / h) . Tracking northwest towards a weakness in the mid @-@ level ridge , the cyclone continued to intensify and was upgraded to Hurricane Cosme late on July 16 , about 1 @,@ 600 mi (2 @,@ 600 km) east of Hilo . The hurricane reached peak intensity with winds of 75 mph (120 km / h) , although due to cooler waters it quickly weakened to a tropical storm , as the eye became ragged and cloud @-@ filled .

By July 17 , the cloud pattern had deteriorated , and its winds decreased to 45 mph (75 km / h) . The center subsequently became exposed , with just a few thunderstorms confined to the southwest portion of the storm as it began to accelerate to the west . As easterly vertical wind shear increased , convection temporarily reformed in a concentrated area southwest of the center . As Cosme reached steadily cooler water temperatures , it was downgraded to a tropical depression late on July 18 about 900 mi (1 @,@ 400 km) southeast of Hilo , Hawaii ; at around the same time , the storm entered the forecast responsibility of the Central Pacific Hurricane Center . Tracking westward at 14 mph (23 km / h) , maximum sustained winds were 35 mph (56 km / h) with localized higher gusts . Gradually weakening , Tropical Depression Cosme passed south of the Hawaiian Islands on July 20 with a minimum central pressure of 1010 mbar . On July 22 , the depression came within 180 mi (290 km) of Johnston Island , and later that day , it degenerated into a remnant low .

= = Preparations and impact = =

Initially , Cosme was predicted to make landfall on Hawaii as a tropical storm . In anticipation of the storm , the National Weather Service issued a flash flood watch for the island of Hawaii on July 20 . Also , small craft advisories were in effect for Maui and Hawaii ; wind advisories were issued for summits in those regions . High surf advisories were also put into effect for coastal areas . The Hawaii County Civil Defense prepared for the storm by planning for increases in emergency response personnel and opening of evacuation centers . County crews worked to clean out drains and culverts to prevent flooding .

Because the depression stayed far from land , the effects were mostly minor and little damage was reported . A strong trade wind swell north of Cosme generated waves up to 9 ft (2 @.@ 7 m) high . Rain bands produced up to 6 @.@ 94 in (176 mm) of rainfall , causing small stream and drainage ditch flooding , as well as ponding on roadways in portions of Hilo , Puna , and Kau . The rainfall helped to relieve a persistent drought which had existed for several months . Wind gusts reached 40 mph (65 km / h) in southern portions of Hawaii , causing no known damage .