= Hurricane Hernan (2008) =

Hurricane Hernan was the ninth tropical depression , eighth named storm , fifth hurricane , and first major hurricane of the 2008 Pacific hurricane season . Hernan developed out of a tropical wave that formed off the east coast of Africa on July 24 . Over the next week , the wave traversed the Atlantic without development and entered the Eastern Pacific basin on August 2 . The wave became better organized over the next several days and was declared Tropical Depression Nine @-@ E on August 6 . The depression quickly became Tropical Storm Hernan later that day . Hernan steadily intensified over the next two days and was upgraded to a hurricane on the morning of August 8 .

Hernan continued to intensify and became the first major hurricane ? a storm with winds of 111 mph (178 km / h) or higher ? of the season on August 9 . After reaching major hurricane status , Hernan steadily weakened to a minimal hurricane . The weakening continued , and Hernan was further downgraded to a tropical storm on August 11 . As Hernan moved over cold waters , the convection associated with the storm dissipated , leaving only a swirl of clouds . By the morning of August 12 , almost all of the convection associated with Hernan had dissipated and the system was declared a remnant low @-@ pressure area . The remnants of the hurricane caused light rain to Hawaii .

= = Origins = =

On July 24 , a tropical wave emerged from the east coast of Africa , near the Cape Verde Islands . The wave was disorganized and failed to develop convection as it traversed the Atlantic Ocean | over the next several days . The wave eventually entered the Eastern Pacific basin on August 2 , and interacted with a broad area of cyclonic flow located a few hundred miles south of Mexico . The wave became better organized throughout the day , and an area of low pressure formed 660 mi (1060 km) south of Manzanillo , Mexico on August 5 . Strong convection began to develop . That day , a banding feature formed On the morning of August 6 , a Tropical Cyclone Formation Alert was issued . Later in the day , the National Hurricane Center determined that the system had developed sufficient convection to be declared Tropical Depression Nine @-@ E while located 775 mi (1230 km) to the south @-@ southwest of the southern tip of Baja California Sur . However , the storm was operationally believed to have become a depression several hours later .

Tropical Depression Nine @-@ E was influenced by a high pressure area located over Mexico , causing it to move 16 mph (26 km / h) to the north @-@ west . The depression was upgraded to Tropical Storm Hernan overnight as the storm became more organized . Although Hernan was located over warm waters , moderate wind shear prevented the storm from intensifying quickly , and the storm slowed . Hernan slowly became better organized throughout the night , but wind shear continued to impair Hernan through the morning ; as a result , most of the tropical cyclone forecast models did not predict Hernan to become a hurricane .

= = Intensification and peak strength = =

In the early afternoon , an eye feature began to form ; subsequently , Hernan was nearing hurricane status . However , by the nighttime hours , a microwave satellite found that the center of Hernan was located to the west @-@ southwest of the eye feature , and the intensification ceased for the rest of the day and into the morning of August 8 . Later in the morning , the center of Hernan was determined to be located underneath the eye and was determined to have become a hurricane , the fifth of the season , during the afternoon of August 8 . Throughout the day , the eye became better defined , indicating that moderate northeasterly wind shear had already begun to diminish . Despite a cloud @-@ filled eye , meteorologists showed Hernan peaking as a Category 2 hurricane overnight .

Early on August 9 , Hernan was upgraded to a Category 2 hurricane , with winds of 100 mph (155 km / h) . Convection around the eye continued become more symmetrical , though the National Hurricane Center had stated that Hernan had most likely reached its peak intensity or was very close to doing so . However , the eye suddenly became better defined . Based on this , Hernan was

upgraded to a major hurricane . The intensity of Hernan was uncertain , as there was some difference between intensity estimates . Hernan maintained its appearance through the evening and it was stated that the peak intensity of the storm may have been 125 mph (205 km / h) . Overnight , Hernan moved over cooler waters and started to weaken . Although the eye remained well defined , outflow to all the southwestern semicircle became poor .

= = Weakening and dissipation = =

Hernan rapidly weakened overnight and was barely a Category 2 in the afternoon hours of August 10 as it moved over cooler waters . The erosion of the eyewall was later found to be caused by an eyewall replacement cycle that rapidly completed itself during the afternoon . Continuing to slowly weaken , Hernan was soon downgraded to a strong Category 1 . The newly formed eye began to shrink and deteriorate through the early afternoon , but Hernan briefly stopped weakening . Initially , Hernan 's strong circulation allowed it to maintain hurricane status over 24 ° C waters .

Early on August 11 , Hernan was downgraded to a tropical storm . Deep convection diminished around the center of the storm and by August 12 , almost all of the deep convection dissipated as Hernan continued to weaken . Over 23 ° C water , only a swirl of clouds remained and the storm was barely a tropical system . Later that night , Hernan had degenerated into a remnant low , and the final advisory was issued by the National Hurricane Center . The remnant low still retained tropical storm @-@ force winds for a short while before weakening further by the next morning . The low moved towards the west @-@ southwest over the next several days before dissipating 460 mi (740 km) southeast of the Island of Hawaii on August 16 . The remnant low @-@ pressure area of Hernan later brought moisture to the island of Hawaii , causing cloud and shower activity . The associated rainfall was light and insignificant .