## = Hurricane Kristy (2006) =

Hurricane Kristy in 2006 was a relatively long @-@ lived tropical cyclone in the 2006 Pacific hurricane season . It developed on August 30 from a tropical wave off the southwest coast of Mexico , and quickly intensified to attain hurricane status , reaching peak winds of 80 mph (  $130\ km\ /$  h ) . Subsequently , Kristy weakened from cooler waters and increased wind shear from Hurricane John to its northeast . Steering currents weakened , and turning to a southerly drift , it weakened to a tropical depression by September 2 . The next day it briefly regained tropical storm status , only to again deteriorate to depression status . After turning to the west , Kristy encountered marginally favorable conditions and attained tropical storm status for a third time , though unfavorable conditions caused it to dissipate on September 9 . The storm never affected land , although initially there was a slight threat to Clarion Island . Within the National Hurricane Center area of warning responsibility east of 140 ° W , Hurricane Kristy was the longest @-@ lasting tropical cyclone of the season .

## = = Genesis = =

A tropical wave moved off the west coast of Africa on August 13 . With a large swirl of low clouds and little convection , the system tracked westward for two weeks across the Atlantic Ocean and Caribbean Sea , before crossing Central America on August 22 . On August 29 , the system became better organized , consisting of a broad low pressure area and thunderstorm activity . The convection persisted and organized further , and at 0000 UTC on August 30 it developed into Tropical Depression Twelve @-@ E about 600 mi ( 970 km ) southwest of the southern tip of the Baja California peninsula .

Upon becoming a tropical cyclone , the depression was experiencing slight easterly wind shear , which distorted the convection to the west of the circulation . However , favorable conditions for strengthening were expected , and the depression was forecast to reach peak winds of 50 mph (  $85\,$  km / h ) before weakening . It tracked slowly northwestward along the southern periphery of a ridge , and quickly intensified into Tropical Storm Kristy after convection increased over its circulation center . By that time , wind shear had decreased to very low levels , and with very warm waters , the storm was expected to quickly intensify to reach hurricane status . By late on August 30 , the convection was wrapping into the center while an eye feature became intermittent . Organization continued , and Kristy attained hurricane status early on August 31 , about 30 hours after forming . Six hours after attaining hurricane status , an eye @-@ like featured was evident on satellite imagery , and it is estimated Kristy attained peak winds of 80 mph (  $130\,$  km / h ) about 550 mi (  $880\,$  km ) southwest of the southern tip of the Baja California . However , satellite @-@ derived intensity estimates suggested the hurricane could have been as strong as  $105\,$  mph (  $170\,$  km / h ) , or as weak as a tropical storm .

## = = Weakening and demise = =

Subsequently , wind shear increased , caused by the outflow of powerful Hurricane John to its east . Additionally , the hurricane moved into an area of cooler water temperatures , and as a result its appearance became ragged and amorphous . At the same time , steering currents weakened , and the future of Kristy was uncertain ; the NHC forecast the hurricane to continue slowly westward , dissipating within four days . However , other hurricane models suggested a motion to the southwest , and two models predicted a Fujiwhara effect , or an orbiting of two tropical cyclones , which would eventually result in Kristy being absorbed by Hurricane John . On September 1 , Kristy weakened to tropical storm status , and it weakened faster as dry air encroached the storm . It turned southeastward as the ridge to its north strengthened . On September 2 , the circulation became exposed from the convection , and it was forecast to degenerate into a remnant low within 24 hours . Later that day , Kristy weakened to tropical depression status .

By September 3, Tropical Depression Kristy was without persistent deep convection for about 18

hours . However , thunderstorms increased around the center later that day , developing a shallow eye @-@ like feature . The convection persisted along the western periphery of the circulation , and it is estimated Kristy re @-@ attained tropical storm status about 24 hours after it was first downgraded to depression status . Around the same time , the cyclone began a steady motion to the southwest . Its re @-@ intensification was short @-@ lived , as continued wind shear weakened the convection and left the center devoid of any thunderstorms . On September 4 , Kristy weakened to tropical depression status , and though quick dissipation was predicted , officials noted that intermittent convection flares could develop . One such convection flare occurred on September 5 , which persisted around the center and warranted Kristy being upgraded to tropical storm status . By that time , wind shear had decreased somewhat and the storm had turned westward , and with a track through warm water temperatures , Kristy was forecast to maintain tropical storm status for five days .

At one point as a tropical storm , the thunderstorm activity around Kristy appeared to be organizing into hooking bands , and further intensification was considered likely , potentially as strong as 60 mph (  $95\ km\ /$  h ) . However , the thunderstorm activity decreased markedly on September 6 , primarily from dry air entrainment , and it weakened to tropical depression status for the last time . In one forecast , Kristy was predicted to move into the area of warning responsibility of the Central Pacific Hurricane Center , or west of 140 ° W. However , the depression was unable to maintain organized convection around its center for a few days , and Kristy degenerated into a remnant low on September 8 . The low turned to the southwest , degenerating into a tropical wave on September 9 about 1500 miles (  $2400\ km$  ) southeast of the island of Hawaii , or about 1600 miles (  $2600\ km$  ) southwest of the southern tip of the Baja California peninsula . The remnant disturbance continued westward , and initially Kristy was believed to have developed into Tropical Depression Two @-@ C in the central Pacific Ocean ; however , post @-@ season analysis concluded the systems were separate .