= Hurricane Olaf (2003) =

Hurricane Olaf was a minimal hurricane that impacted Mexico in October 2003 . A tropical wave became better organized on October 2 to the south @-@ southeast of Acapulco and developed into a depression the next day . It strengthened into Tropical Storm Olaf six hours after forming . Continued intensification occurred , and Olaf reached its peak strength as a Category 1 hurricane with 75 mph (120 km / h) winds on October 5 and developed a partial eyewall . The storm soon became disorganized and was only a hurricane for six hours , before re @-@ curving towards the Mexican coast . The cyclone made landfall near Manzanillo , Colima , on October 7 and soon dissipated overland . The storm caused severe flooding in the states of Jalisco and Guanajuato . However , no fatalities were reported .

= = Meteorological history = =

Olaf formed from a tropical wave that left the coast of Africa on September 17 . Over the next two weeks it moved westbound into the East Pacific Ocean . Initially , the wave was not in an environment conductive for further development . However , on October 2 , a low @-@ level circulation was noted on satellite imagery . This circulation quickly became better defined over the next several hours while located 400 miles ($645~\rm km$) south of Acapulco , Mexico . The next day , Dvorak Classifications , a tool that estimates a tropical cyclone intensity , were placed at 1 @.@ 5 . This is equivalent to winds of around 30 mph ($50~\rm km$ / h) . In addition , a ship nearby reported winds of 35 mph ($45~\rm km$ / h) . Microwave imagery also indicated that the center was near the associated convection . Based on this , the system was upgraded into a tropical depression .

Initially , wind shear from nearby Tropical Storm Nora was expect to weaken the system . However , the depression was soon upgraded into a tropical storm . Moving northwest , it steadily intensified into a moderate tropical storm late on October 3 . The next day , Olaf weakened slightly ; it soon intensified into a strong tropical storm roughly 24 hours later . At that time , it was noted that additional intensification was likely . On October 5 , radar imagery indicated a partial eyewall . Based on this , Olaf was upgraded into a minimal Category 1 hurricane . It reached it peak intensity at 75 mph (120 km / h) and a barometric pressure of 987 millibars . Olaf was hurricane for only six hours , but operationally it was believed had been a hurricane for much longer . This is because that the center was initially believed to be further north , closer to the deep convection .

Shortly after reaching its peak , Olaf became disorganized . Olaf weakened steadily while the storms motion slowed down . By early October 6 , Olaf was only a minimal tropical storm as the system recurved northwest . However , Olaf rapidly reorganized that afternoon and the National Hurricane Center re @-@ assessed the intensity at 50 mph ($80\ km\ /\ h$) . Continued restrengthening occurred , and by October 8 Olaf made landfall wind winds of 60 mph ($97\ km\ /\ h$) near Manzanillo , Mexico . Shortly thereafter , Olaf weakened rapidly over the high terrain of the coast . Within 24 hours , Olaf had dissipated inland .

= = Preparations and impact = =

While Olaf was at peak strength , a tropical storm warning issued for Punta San Telmo to Lazaro Cardenas and a hurricane warning was issued from Punta San Telmo to San Blas , including the Islas Marias . The next day , the tropical storm warning was extended to include Manzanillo . At that same time , a hurricane watch was issued from San Blas to Mazatlán . In addition , hurricane warning was extended to include areas from Manzanillo to San Blas including the Islas Marias . Thee hours later , when Olaf was revealed to be much weaker , the hurricane warnings and hurricane watches were canceled . However , the tropical storm warnings remained in effect until October 7 . A yellow alert was declared in the Mexican states of Michoacán , Colima , and Jalisco , and a green alert was declared in Baja California Sur , Sinaloa , Nayarit , and Guerrero . Local authorities also opened shelters .

Olaf was a part of a rainy year in Mexico, producing more rain than Hurricane Nora. Although no

deaths were reported , flooding caused serve damage to roadways and crops in the Mexican state of Jalisco . In the same state , more than 12 @,@ 000 homes were damaged . In the state of Guanajuato , an estimated total of 15 @,@ 000 people were impacted from the floods . In addition , two communities were isolated . After the hurricane , a program wanted donation from food to basic home supplies . Moisture from the remnants of Nora and Olaf interacted with an upper @-@ level low to produce heavy rainfall across Texas , producing flooding near Waco that forced a family to evacuate in McGregor . The floodwaters closed portions of Interstate 35 , U.S. Route 84 , and Texas State Highway 36 . It also spawned a tornado in Sugar Land that damaged four buildings , including a school .