

= Hurricane Ismael (1983) =

Hurricane Ismael was responsible for significant flooding throughout the Inland Empire of the United States in August 1983 . The origins of Hurricane Ismael were from a northward bulge of the Intertropical Convergence Zone (ITCZ) in early August , which resulted in the formation of a tropical depression on August 8 . Six hours later , it was upgraded into Tropical storm Ismael . Continuing to intensify , Ismael was upgraded into a hurricane late on August 10 and subsequently developed an eye . After bypassing the Revillagigedo Islands , the storm reached its peak wind speed of 100 mph (160 km / h) . Late on August 11 , Hurricane Ismael began to weaken as it encountered cooler waters . The following day , Ismael was downgraded into a tropical storm . On August 14 , the storm was downgraded into a tropical depression approximately 250 mi (400 km) west of Point Ensenada . After turning north , Ismael dissipated later that day near Guadalupe Island .

While still out at sea , Ismael brought 6 ? 9 ft (1 @. @ 8 ? 2 @. @ 7 m) waves to Southern California , though waves from the storm were less than expected . One person was swept away at a beach . The remnants of the storm later moved over the region , resulting in moderate rainfall . The Yucca Valley was the worst hit by the storm , where nearly every road was washed out . Almost 50 @, @ 000 residents were isolated due to rains . A tornado was spotted near Los Angeles , causing minor damage . In San Bernardino , many buildings were destroyed . Around 80 @, @ 000 homes were left without power across the Inland Empire . Moreover , three interstates were closed . In all , minor injuries were reported , three people died in San Bernardino when their car swept into a channel , and an engineer was killed returning to China Lake when her car was swept into a wash . Damage in the region totaled \$ 19 million (1983 USD) . After affecting California , the remnants of the hurricane moved into Nevada . Many parking lots in Laughlin were flooded ; two small towns in Clark County were also isolated . Furthermore , several major streets along the outskirts of Las Vegas were closed because of flooding .

= = Meteorological history = =

Hurricane Ismael originated from a northward bulge of the ITCZ in early August . On August 7 , the Eastern Pacific Hurricane Center (EPHC) reported that this bulge had resulted in the formation of a tropical disturbance centered 500 mi (800 km) south of Acapulco . Late on August 8 , the system was upgraded into a tropical depression . Initially , the storm was expected to turn west and remain at sea ; however , the depression turned northwest instead . Six hours after becoming a tropical cyclone , the low was upgraded into Tropical storm Ismael .

After remaining a marginal tropical storm for 18 hours , Ismael began to deepen and by August 10 , it was approaching hurricane intensity . By this time , the storm was forecast to accelerate and approach Guadalupe Island in three days . At 1800 UTC on August 10 , Ismael was upgraded into a hurricane . At 0245 UTC the next day , an eye began to form as the system passed east of the outer Revillagigedo Islands . Nine hours later , the EPHC upgraded the storm into a Category 2 hurricane on the Saffir @- @ Simpson Hurricane Wind Scale (SSHWS) ; simultaneously , the storm reached its peak of 100 mph (160 km / h) . At the time of its peak , Hurricane Ismael was located about 400 mi (640 km) west of Cabo San Lucas . Sandwiched between a ridge to the west of the hurricane and a trough off the coast of California , Ismael turned west north @- @ west and accelerated .

Late on August 11 , Hurricane Ismael began to weaken as it encountered cooler waters . According to the EPHC , the storm was downgraded to a Category 1 on the SSHWS late on August 11 . The following day , Ismael was downgraded into a tropical storm about 380 mi (610 km) west of the Baja California Peninsula . On August 13 , Hurricane Hunters flew through the storm , penetrating the center of circulation twice . During its first penetration , the aircraft reported winds of 40 mph (65 km / h) just east of the center and also noted that the weakening system had a poorly defined eye . Two hours later , the aircraft made its second pass through Tropical Storm Ismael , with the aircraft reporting winds of 35 mph (55 km / h) . Based on this , the storm was downgraded into a tropical depression while centered about 250 mi (400 km) west of Point Ensenada . After turning north and

entering even cooler waters , the storm made landfall on Guadalupe . The depression dissipated later on August 14 about 20 mi (30 km) southwest of Guadalupe Island which is not normally affected by tropical cyclones .

= = Impact = =

= = = California = = =

While still out at sea , Ismael brought rough seas that lead to one home on the Capistrano Beach being ruled unsafe . Although waves from the storm were less than expected , swells of 6 ? 9 ft (1 @. @ 8 ? 2 @. @ 7 m) were estimated along south @-@ facing beaches near Santa Barbara . In Malibu , one home was damaged due to the increased surf . In Laguna Beach , in southern Orange County , a 20 @-@ year @-@ old woman was swept off rocks and later died . Overall , Hurricane Ismael was one of six tropical cyclones to bring high waves to the state within a span of a month .

On August 11 , the outer rainband 's of Hurricane Ismael brought unseasonably high humidity and thunderstorms to Southern California . Subsequently , flash flood watches were posted for much of Southern California . The remnants of the storm eventually moved over the area , resulting in significant flooding . Some areas sustained 2 in (50 mm) of rain , leading to water depths of 2 to 4 ft (61 to 122 cm) on roadways . The towns of Joshua Tree , Yucca Valley , Twentynine Palms , California , and Landers were the hardest hit . Nearly every road was washed out in the Yucca Valley .

Almost 50 @, @ 000 residents in Palm Springs were isolated due to brief , but heavy rains . In addition , a tornado damaged two homes and over seven chimneys near Los Angeles . Heavy rains also drenched the cities of Riverside and San Bernardino while flooding several homes . In the latter , many buildings were destroyed , forcing widespread evacuations . In Rancho Mirage , 24 homes were damaged . One woman had to be rescued after she was swept 3 mi (4 @. @ 8 km) downstream a river in Los Angeles . Around 80 @, @ 000 homes were left without power across the Inland Empire , though within 24 hours after the outage , power was restored to all but 4 @, @ 000 residents . Moreover , portions of Interstate 10 , 14 , and 215 were closed . The highway the lead into Palm Springs was closed as well , resulting in major traffic jams . In all , minor injuries were reported . However , three people died in San Bernardino when their car swept into a channel . Damage from the storm totaled \$ 19 million (1983 USD) .

= = = Nevada = = =

Heavy rains that preceded the storm forced thousands of gamblers along the Las Vegas Strip to be evacuated and left two people missing . The remnants of the storm later moved into the region , bringing additional flooding . Many parking lots in the resort town of Laughlin were flooded . Furthermore , the villages of Searchlight and Blue Diamond were isolated due to flooding . Several major streets in Paradise were closed because of flooding and sandbag barriers were erected alongside Caesars Palace to prevent further flood damage . In addition , record river levels were measured along the Amargosa River near Death Valley .

= = = Elsewhere = = =

In the Mexican states of Baja California and Baja California Sur , the storm brought high clouds over the region for several days . In Ensenada , minor flooding was recorded . Along the peninsula , waves up to 8 ft (2 @. @ 4 m) were measured .

Residents of Davis County , Utah that were in close proximity of streams were put on alert due to the threat of flooding . The remnants of Hurricane Ismael ultimately brought thunderstorms to Arizona and Utah . In Mohave County , up to 3 in (76 mm) of rain was recorded . Further south and west , in Phoenix , a thunderstorm flooded streets and brought down power lines .

