

= Hurricane Sandra ( 2015 ) =

Hurricane Sandra in 2015 was the latest @-@ forming major hurricane in the Northeastern Pacific basin on record . Originating from a tropical wave , Sandra was first classified as a tropical depression on November 23 well south of Mexico . Environmental conditions , including high sea surface temperatures and low wind shear , were highly conducive to intensification and the storm quickly organized . A small central dense overcast developed atop the storm and Sandra reached hurricane status early on November 25 after the consolidation of an eye . The hurricane achieved its peak as a Category 4 on the Saffir ? Simpson hurricane wind scale with winds of 150 mph ( 240 km / h ) and a pressure of 934 mbar ( hPa ; 27 @.@ 58 inHg ) early on November 26 . This made Sandra the strongest November hurricane on record in the Northeastern Pacific . Thereafter , increasing shear degraded the hurricane 's structure and weakening ensued . Rapid weakening took place on November 27 and Sandra 's circulation became devoid of convection as it diminished to a tropical storm that evening . The cyclone degenerated into a remnant low soon thereafter and ultimately dissipated just off the coast of Sinaloa , Mexico , on November 29 .

As the precursor to Sandra traversed Central America , it produced unseasonably heavy rainfall that triggered flooding and landslides . Four people died in various incidents related to the system : three in El Salvador and one in Honduras . Initially expecting a landfalling storm , officials in Northwestern Mexico prepared equipment for power outages , closed schools , and evacuated 180 residents . Sandra 's effects largely consisted of light to moderate rainfall ; some traffic accidents and landslides resulted from this , though the overall impacts were limited .

= = Meteorological history = =

On November 6 , 2015 , a tropical wave emerged off the west coast of Africa over the Atlantic Ocean . Only sporadic convection ? shower and thunderstorm activity ? accompanied the system as it traveled west for the next ten days . As it reached the southwestern Caribbean Sea on November 17 , westerly winds associated with the Intertropical Convergence Zone spurred the development of an area of low pressure and extensive convection . Forecasters at the National Hurricane Center ( NHC ) noted potential for the system to develop into a tropical cyclone ; however , persistent wind shear inhibited this system from consolidating before it reached Central America . The system emerged over the Pacific Ocean near Nicaragua on November 21 ; once back over water , convection blossomed near the low 's center . Convection remained largely disorganized over the following two days as the system progressed westward in response to a subtropical ridge to the north .

A Tehuantepec gap wind event in conjunction with horizontal wind shear spurred development of a vortex within the disturbance and a well @-@ defined low formed by 12 : 00 UTC on November 23 . Six hours later the low acquired sufficient convective organization , including elongated banding features of the north , to be classified Tropical Depression Twenty @-@ Two @-@ E. At this time , the depression was situated 435 mi ( 705 km ) south @-@ southwest of Acapulco , Mexico . Aided by high sea surface temperatures of 86 ° F ( 30 ° C ) , ample ocean heat content and low wind shear , the small system quickly intensified into a tropical storm ? at which time the NHC assigned it the name Sandra ? and developed a central dense overcast . A prominent banding feature with cloud tops below ? 112 ° F ( ? 80 ° C ) and frequent lightning formed north of the circulation on November 24 . By 18 : 00 UTC , a 23 to 29 mi ( 37 to 47 km ) wide eye became apparent , signaling the onset of rapid intensification .

Throughout November 25 , Sandra dramatically strengthened as deep convection blossomed around a tightening and clearing eye . The system achieved hurricane status by 06 : 00 UTC and major hurricane status ? Category 3 or higher on the Saffir ? Simpson hurricane wind scale ? by 00 : 00 UTC on November 26 . Prominent outflow became established atop the cyclone and further aided the intensification . Throughout the strengthening phase , a mid- to upper @-@ level trough near the west coast of North America created a weakness in the subtropical ridge , prompting Sandra to turn north around the western edge of the high . Sandra reached its peak intensity as a

high @-@ end Category 4 hurricane around 06 : 00 UTC on November 26 with maximum sustained winds of 150 mph ( 240 km / h ) and a barometric pressure of 934 mbar ( hPa ; 27 @.@ 58 inHg ) . By this time , the hurricane 's eye shrunk to less than 6 mi ( 10 km ) in diameter . Within hours , however , increasing wind shear began to impact the circulation and caused convection to become asymmetric . Concurrently , the system started a turn northeast toward mainland Mexico as it rounded the ridge .

Steadily increasing wind shear gradually unraveled Sandra during the latter part of November 26 and into November 27 . The storm 's outflow , though prominent to the north , became restricted on the southern side . Sandra briefly regained organization around 00 : 00 UTC on November 27 , with its eye becoming redefined ; however , persistent shear prevailed and the system weakened below major hurricane status by 06 : 00 UTC . The hurricane rapidly deteriorated throughout November 27 as convection became displaced to the northeast of the circulation . The low @-@ level circulation soon decoupled from the mid- to upper @-@ level circulations and Sandra degraded to a tropical storm by 00 : 00 UTC on November 28 . The convectively devoid low @-@ level circulation abruptly turned northwest in response to a shallow ridge . Failing to redevelop convection atop its center , Sandra degenerated into a remnant low by 06 : 00 UTC . Sustained winds dropped below gale @-@ force by 18 : 00 UTC . Intense thunderstorm activity did blossom to the northeast of the center late on November 28 , prompting the storm to resume a northeasterly course . The cyclone eventually succumbed to strong shear and opened up into a trough roughly 60 mi ( 95 km ) southwest of Culiacán , Mexico , late on November 29 .

= = = Records = = =

Reaching tropical storm status on November 24 , Sandra was the fourth @-@ latest forming tropical storm in the Northeastern Pacific basin since reliable records began . Upon becoming a hurricane at 06 : 00 UTC on November 25 , Sandra was the second @-@ latest such storm on record in the Northeastern Pacific ; only Hurricane Winnie of 1983 ? the only December hurricane on record in the basin ? formed later . This also marked the record @-@ tying 16th hurricane to form in the Pacific north of the equator and east of the International Dateline ; this record is shared with 1990 , 1992 , and 2014 . When it further became a major hurricane at 00 : 00 UTC on November 26 , Sandra was the latest @-@ forming such storm in the Northeastern Pacific basin on record . It surpassed the previous record set by Hurricane Kenneth in 2011 by nearly four days . Sandra was also the ninth major hurricane in the Northeastern Pacific proper and the eleventh east of the dateline , both setting a record for the most in a single season . Sandra 's peak intensity with winds of 150 mph ( 240 km / h ) and pressure of 934 mbar ( hPa ; 27 @.@ 58 inHg ) ranked it as the strongest November hurricane on record in the Northeastern Pacific , surpassing Hurricane Kenneth 's 145 mph ( 230 km / h ) and 940 mbar ( hPa ; 27 @.@ 76 inHg ) . On a global scale , Sandra was the 30th major hurricane and " record @-@ shattering " 25th Category 4 or 5 storm of 2015 ; the previous records were 23 and 18 , respectively , occurring in both 1997 and 2004 .

= = Preparations and impact = =

The precursor to Sandra produced unseasonably heavy rains across parts of Central America , leading to flooding . In Nicaragua , flooding affected 55 homes and destroyed 1 , primarily in Managua . A total of 56 families required evacuation . Local officials blamed the flooding on trash @-@ clogged drains . Five people were injured in the Nueva Segovia Department when an ambulance crashed on a foggy , rain @-@ slicked road . A landslide in Cucuyagua , Honduras , destroyed a home killing a 25 @-@ day @-@ old baby and injuring four others . In Nueva Esparta , El Salvador , two people drowned after being swept away by the swollen El Amatal River . Flooding in Oztatlán killed one person and inundated homes in Jiquilisco , prompting the evacuation of 14 families .

Moisture from Sandra streamed northward into the Southern Plains and Lower Mississippi River Valley and contributed to widespread rainfall and flooding . Heavy rains affected portions of Texas ,

Oklahoma , Arkansas , Mississippi , and Tennessee . The Dallas ? Fort Worth metroplex received 3 @. @ 45 in ( 88 mm ) of rain on November 27 , their wettest November day on record ; this total contributed to breaking the city 's wettest @-@ year on record .

= = = Mexico = = =

On November 26 , the Government of Mexico issued a tropical storm watch for Baja California Sur between Todos los Santos and Los Barriles ; this was discontinued less than 24 hours later . The State Council of Civil Protection of Baja California Sur opened four shelters in both Cabo San Lucas and San José del Cabo ; school officials cancelled classes for November 27 . In La Paz , the Federal Electricity Commission deployed 96 trucks to handle potential power outages . On November 27 , a tropical storm warning was raised for mainland Mexico between Altata and San Blas as well as the Islas Marías ; the warning was discontinued the following day as Sandra rapidly dissipated . Alerts were raised across portions of Sinaloa and Nayarit in advance of the hurricane . The port of Mazatlán suspended operations on November 28 and public shelters were opened in the city . Water pumps , generators , and relief crews were mobilized at the port . About 180 people from the small community of Boca Camichin , Nayarit , evacuated inland . The storm also prompted delay of the annual Maratón Pacífico .

On November 27 , Sandra produced wind gusts up to 40 mph ( 65 km / h ) on Socorro Island as the storm moved 115 mi ( 185 km ) southeast of the island . Effects from Sandra were minor and limited due to its dissipation offshore ; rainfall was limited to 1 to 3 in ( 25 to 76 mm ) in most areas and largely considered beneficial . In contrast to predictions of 3 @. @ 0 to 5 @. @ 9 in ( 75 to 150 mm ) of rain across Baja California Sur , only 0 @. @ 71 in ( 18 mm ) fell in San José del Cabo while other areas of the Los Cabos Municipality received a trace to no accumulation . Wet roads in Cabo San Lucas resulted in two accidents that left three people injured . In Chihuahua , minor landslides damaged roads .