## = Tropical Depression Nine (2001) =

Tropical Depression Nine caused minor flooding in Central America in September 2001 . The ninth tropical cyclone of the 2001 Atlantic hurricane season , the depression developed from a tropical wave in the southwestern Caribbean Sea on September 19 . Without significant intensification , the depression made landfall in Puerto Cabezas , Nicaragua early on September 20 , which was about six hours after becoming a tropical cyclone . Once inland over Central America , the depression significant deteriorated and dissipated later that day , after lasting for less than 24 hours . The remnants emerged into the Pacific Ocean and later developed into Hurricane Juliette . Impact from the depression was rather minor . Although sustained winds on land did not exceed 30 mph (  $55~\rm km$  / h ) , a fallen tree injured three children in El Salvador . In addition , heavy rainfall flooded at least 200 homes in San Salvador and inundated 15 farms . The depression did not result in fatalities and damage caused by it is unknown .

## = = Meteorological history = =

A tropical wave exited the west coast of Africa and emerged into the Atlantic Ocean on September 11 . After tracking westward for five days , the wave entered the Caribbean Sea on September 16 . Convection steadily increased in both coverage and intensity , and by September 19 , the system reached the southwestern Caribbean Sea . Satellite imagery and surface observations indicated that Tropical Depression Nine formed at 1800 UTC on September 19 , while located 50 miles ( 80 km ) north @-@ northwest of San Andres Island .

Initially , the depression had two centers of circulation , one east of Costa Rica and one east of Puerto Cabezas , Nicaragua . Because the thunderstorm activity was more intense and persistent at the northern circulation , advisories were initiated using the latter . Computer forecast models predicted that the depression would make landfall in Nicaragua and then enter the eastern Pacific Ocean within 36 hours . Other computer forecast models separated it into two systems , with the northern center going into the Bay of Campeche and the southern center going westward through Costa Rica and into the Pacific while strengthening into a " significant tropical cyclone " . Although only a tropical depression , upper level outflow was circular and was indicative of a more " mature " tropical cyclone .

At 0000 UTC on September 20 , the depression made landfall near Punta Cabezas , Nicaragua with winds of 35 mph ( 55 km / h ) and weakening was immediately forecast . Three hours later , the National Hurricane Center issued its final advisory , as the lower level center became poorly defined because of interaction with the mountains of Central America and deep thunderstorm activity had significantly diminished . The National Hurricane Center noted the possibility of regeneration , if the circulation entered into the Pacific Ocean within a few days . Although the depression never redeveloped , the remnant tropical wave emerged into the Pacific Ocean and contributed to the development of Hurricane Juliette on September 21 .

## = = Preparations and Impact = =

Upon development of the tropical depression , a tropical storm watch was issued from Bluefields , Nicaragua to Dangriga , Belize . When the depression made landfall , this warning was discontinued . Residents in El Salvador were advised to avoid rivers due to possible flooding but no mandatory evacuations were put in place . A green alert was issued in Nicaragua due to the threat of heavy rains and high winds . This alert remained in effect until September 21 . Three children were injured by a fallen tree in the country . The highest sustained winds on land from the depression were reported at Punta Cabezas , Nicaragua with winds of 30 mph (  $50~{\rm km}$  / h ) and a minimum pressure of 1 @,@ 006 mbar (  $29~{\rm @.@}$  7 inHg ) . A total of 1 @.@ 8 inches (  $46~{\rm mm}$  ) of rain was recorded in Bluefields while up to 5 @.@ 9 inches (  $150~{\rm mm}$  ) was estimated to have fallen in mountainous areas .

In El Salvador, heavy rains from the depression helped alleviate drought conditions; however,

flooding also inundated 200 homes in San Salvador along the Acelhuate River . Fifteen farms were inundated by flooding , five of which were destroyed . Seventy people evacuated to shelters set up after the storm by the local Red Cross and armed forces . Military crews were quickly deployed to help clean up the damages on September 22 . Although it passed over Central America , there are no reports of damage or deaths in the region due to the tropical depression .