

= Hurricane Joyce (2000) =

Hurricane Joyce caused minor impact in the ABC and Windward islands during late September and early October 2000 . The fourteenth tropical cyclone , tenth named storm , and sixth hurricane of the season , Joyce developed from a tropical wave located southwest of Cape Verde on September 25 . Only twelve hours after becoming a cyclone , the depression was upgraded to Tropical Storm Joyce early on September 26 . Joyce continued to strengthen and became a hurricane by September 27 . On the following day , Joyce peaked with winds of 90 mph (150 km / h) on September 28 . After peak intensity on September 28 , unfavorable conditions caused Joyce to become disorganized and weaken .

Late on September 29 , Joyce was downgraded to a tropical storm while centered well east of the Lesser Antilles . In contrast with predictions , Joyce continued to weaken and became a tropical depression on October 1 while crossing through the southern Windward Islands . Early on the following day , Joyce degenerated into a tropical wave over the southeast Caribbean Sea . The remnants were monitored for regeneration , but never developed back into a tropical cyclone . Overall , impact from Joyce was minimal , limited to mainly rainfall and near @-@ tropical storm force winds in Trinidad and Tobago and Barbados . The remnants of Joyce also caused similar effects on the ABC islands and Dominican Republic , which resulted in minor damage .

= Meteorological history =

Hurricane Joyce originated from a tropical wave that emerged from the coast of Africa on September 22 . Influenced by a powerful ridge that had developed in the wake of Hurricane Isaac , the wave traveled a brisk and slightly undulating westward path at 14 to 18 mph (23 to 29 km / h) . It would never change from that general path . While in the deep tropics of the open Atlantic , the wave began to show indications of a closed circulation . Satellite data was ambiguous , but the evidence favored the existence of a tropical cyclone , and the system was designated Tropical Depression Fourteen . At the next advisory , the cyclone was upgraded and named " Joyce " , although satellite data was still ambiguous about whether Joyce even had a circulation .

Joyce headed westward and steadily intensified . Deep convection and outflow improved , and Joyce gradually developed an eye . On September 27 , it was upgraded to a hurricane with cold cloud tops . Early on September 28 , Joyce peaked in intensity with winds of 90 mph (150 km / h) , a central pressure of 975 mbar (28 @.@ 8 inHg) , and a fleeting " pinhole " eye . At the time , it was located about midway between Africa and the Lesser Antilles .

Wind shear then increased , partially exposing Joyce 's center of circulation , although bursts of convection remained . Convection and organization slowly deteriorated , and became , early on September 29 , " pretty crummy " and without a well @-@ defined center of circulation . Joyce did manage to remain at hurricane intensity through this time . Due to the disorganization , it was downgraded to a tropical storm later that day . Despite occasional bursts of convection , Joyce weakened into a tropical depression as it crossed the Windward Islands on October 1 . The weakening was confirmed by Hurricane Hunter reconnaissance flights . After crossing the Windward Islands , and entering the southeastern Caribbean Sea , Joyce unexpectedly degenerated into an open wave . Although Joyce 's remnants were monitored for regeneration , any possible redevelopment never materialized .

Joyce dissipated in an area of low wind shear and warm sea surface temperatures . The National Hurricane Center attributed the weakening to dry air from the Sahara . The dry air may have been caused by a lack of southwesterlies bring moisture from equatorial areas , and continental influence from South America .

= Forecasting , impact , and naming =

Joyce 's track was well forecast , with errors ten to twenty percent smaller than the ten @-@ year average . In general , Joyce persistently stayed south of where it was forecast to be . By contrast ,

intensity forecasts had large errors . Indeed , at 0900 UTC on October 2 Joyce was forecast to be a 70 mph (110 km / h) tropical storm three days out , when in reality the storm dissipated six hours later . These forecast errors were blamed on Joyce 's surprise dissipation . Regarding potential impacts , Joyce 's storm surge of 1 m (3 @. @ 3 ft) on Trinidad was accurately forecast .

On September 30 , a tropical storm watch was issued for the Windward Islands from St. Vincent and the Grenadines south to Trinidad and Tobago . One hour later , the watch was extended to Saint Lucia . Later that day , the watches were upgraded to warnings in Trinidad and Tobago and Grenada . On October 1 , Trinidad 's warning was downgraded to a watch . After that , the watches and warnings were gradually discontinued , first in Barbados and St. Vincent and the Grenadines , then Trinidad and Saint Lucia , then Tobago , and finally Grenada . In response to the approaching hurricane , emergency operations centers in Grenada and both main islands of Trinidad and Tobago were placed on alert .

While weakening , Tropical Depression Joyce passed close to Tobago , causing sustained winds of 30 mph (50 km / h) . Barbados experienced the highest sustained winds Joyce brought to any land area . There , the winds were 35 mph (60 km / h) , gusting to 45 mph (70 km / h) . Neither Barbados , Trinidad and Tobago , nor Grenada reported serious effects from Joyce . Joyce caused storm surge of 3 feet (0 @. @ 91 m) on southeast Trinidadian shores . After degenerating into an open wave , Joyce 's remnants passed over the ABC Islands , where locally heavy thunderstorms and light winds were reported on October 2 . A tropical wave related to Joyce 's decay was blamed for flooding in the Dominican Republic , where rain caused the Mao , Amina , and Yaque del Norte Rivers to burst their banks , flooding thousands of hectares of banana and rice crops . Damage was reported in communities in the northeastern part of the country . No other impact was reported , and no deaths were blamed on Joyce .

Officials from Trinidad and Tobago reported that Joyce made landfall in that country . The National Hurricane Center differs , not attributing any landfall to Joyce . If Joyce really made landfall on Tobago , it would have been the first tropical storm to do so since 1990 's Arthur . In addition , Joyce moved south of west for a time at a location where it is rare for tropical cyclones to do so .