

= Hurricane Isaac (2006) =

Hurricane Isaac was the final tropical cyclone of the 2006 Atlantic hurricane season . Isaac originated in a tropical wave that entered the Atlantic Ocean on September 18 . An associated area of disturbed weather eventually organized sufficiently to be declared a tropical depression on September 27 , while located 930 mi (1 @, @ 500 km) southeast of Bermuda . The depression was upgraded to a tropical storm just 12 hours later , though unfavorable atmospheric conditions , including high wind shear and cool water temperatures , initially inhibited further intensification . Isaac ultimately peaked as a Category 1 hurricane on the Saffir @-@ Simpson Hurricane Scale , and brushed Newfoundland as a tropical storm . Effects from the storm were minimal and limited to gusty winds , rough surf , and sporadic rainfall .

= = Meteorological history = =

A tropical wave emerged from the western coast of Africa and entered the Atlantic Ocean on September 18 , 2006 . On September 23 , an associated area of disturbed weather began to exhibit indications of organization ; in response , Dvorak classifications were initiated . Influenced by moderate to strong wind shear , the system moved west @-@ northwestward for several days . Once environmental conditions became more favorable for tropical cyclone development , the storm had sufficiently organized to be designated a tropical depression on September 27 . At this time , the depression was located about 930 mi (1 @, @ 500 km) southeast of Bermuda . Despite being upgraded , deep convection had not wrapped around the entire center of circulation . Although the depression was approaching tropical storm status by later on September 27 , wind shear continued to affect the cyclone . On September 28 ? about 12 hours after the storm 's formation ? it became the tenth tropical storm of the 2006 Atlantic hurricane season , and received the name Isaac .

Initially , the storm was tracking towards the northwest , between another low pressure system to its west and a low- to mid @-@ level ridge to its east . Throughout the day , thunderstorm activity remained unstable , possibly as a result of cooler waters churned up by previous storms . In addition , mid- to upper @-@ level dry air had become entrained into the circulation , and the storm contained some subtropical characteristics with a baroclinic @-@ type cloud pattern . By early September 29 , Isaac had slowed and turned towards the west . Convection began to intensify and consolidate later that day ; outflow had also improved , and became more symmetric in nature . Moving into warmer waters , Isaac continued to strengthen , and attained hurricane status on September 30 . However , this period of intensification was short @-@ lived , and the cyclone reached its peak intensity with winds of 85 mph (140 km / h) at around 0000 UTC on October 1 . Around that time , a ragged eye feature appeared on satellite imagery .

" A fairly well @-@ defined hurricane " , Isaac began to recurve around the periphery of a subtropical ridge while accelerating in forward speed . While tracking towards the north @-@ northeast , the storm began to gradually weaken as a result of increasing southwesterly wind shear and colder sea surface temperatures . At about 1200 UTC on September 2 , Isaac was downgraded to a tropical storm . The storm passed about 40 mi (64 km) to the southeast of the Avalon Peninsula on October 2 , spawning tropical storm @-@ force winds on land . After passing Newfoundland Isaac transitioned into an extratropical storm , and subsequently merged with a larger storm on October 3 .

= = Preparations and impact = =

A tropical storm watch was issued in response to Isaac on October 1 for the Avalon Peninsula . The watch was upgraded to a tropical storm warning the next day , while a separate watch was posted for the Burin and Bonavista peninsulas , though it was quickly discontinued . By 2100 UTC on October 2 , all tropical cyclone watches and warnings were lifted . Heavy rainfall and gusty winds were expected , prompting the issuance of rainfall warnings for parts of southeastern Newfoundland , while wind and gale advisories were declared offshore .

On October 2 , the Elektra (call sign SIWB) reported winds of 52 mph (84 km / h) while located about 170 mi (270 km) to the east of the storm 's center . Two other ships , several buoys , and several oil platforms also recorded tropical storm @-@ force winds . Waves offshore reached 16 ft (4 @. @ 9 m) in height .

Impacts on land were generally insignificant ; no damages or fatalities were reported . However , parts of the Avalon Peninsula experienced tropical storm conditions . At Cape Race , sustained winds peaked at 46 mph (74 km / h) , with gusts of up to 60 mph (97 km / h) . The most intense winds remained offshore . Due to the storm 's rapid passage , rainfall was primarily light and amounted to less than 1 in (25 mm) .