= Hurricane Florence (1994) =

Hurricane Florence was a strong , late season hurricane that remained out over the open waters of the Central Atlantic for nearly a week , before being absorbed into a large extratropical cyclone . With peak winds of 110 mph (175 km / h) and a minimum pressure of 972 mbar (hPa ; 28 @.@ 71 inHg) , Florence was the strongest storm of the 1994 Atlantic hurricane season . Florence developed out of an area of low pressure associated with a stalled frontal system located 1 @,@ 150 mi (1 @,@ 850 km) east @-@ southeast of Bermuda in late October . The system gradually became better organized and was classified a subtropical depression on November 2 . The storm intensified into a subtropical storm shortly thereafter before weakening to a depression the next day .

After gaining tropical characteristics throughout most of the day on November 3 , the storm was designated Tropical Depression Eleven . The depression quickly strengthened into Tropical Storm Florence , the sixth named storm of the season . The storm briefly underwent rapid intensification , strengthening into a hurricane , before leveling out as a Category 1 hurricane . Florence was subsequently upgraded to a Category 2 hurricane on November 7 . However , a large extratropical cyclone located to the north caused the hurricane to rapidly accelerate , with forward speeds reaching 58 mph (93 km / h) . By the next day , Florence lost its identity , while still producing hurricane @-@ force winds , as it was absorbed by the extratropical cyclone .

= = Meteorological history = =

The origins of Florence can be traced back to an area of low pressure which developed in late October along a stationary front located 1 @,@ 150 mi (1 @,@ 850 km) east @-@ southeast of Bermuda . The low gradually detached from the front and began developing convective banding features . The system was not fully tropical as the strongest winds were recorded a couple hundred miles from the center , leading to the system being classified a subtropical cyclone on the morning of November 2 . Minor intensification followed shortly after and the subtropical depression was upgraded to a subtropical storm . This was based on ship reports of 40 mph (65 km / h) sustained winds associated with the system . By November 3 , the storm became slightly disorganized and was downgraded to a subtropical depression . By the afternoon , the subtropical system began to undergo a transition from a subtropical system to tropical system . Later that day , the storm was classified Tropical Depression Eleven while located 875 mi (1 @,@ 400 km) east @-@ southeast of Bermuda . The depression was moving towards the northwest at 8 mph (13 km / h) and the same general motion was expected as a large upper @-@ level low situated over the system was forecast to move towards the northeast , leading to Eleven moving around the periphery of the low .
The depression was upgraded to Tropical Storm Florence the next morning . However , outflow from the storm remained poor as the upper @-@ level low was still interacting with the center of Florence and the storm was still not completely tropical but there was slight improvement . By the afternoon of November 4 , Florence completed its transition into a tropical cyclone and deep convection developed , causing the storm to quickly intensity ; with winds increasing by 20 mph (30 km / h) in a 6 hour time period . The trend in intensification was forecast to continue and Florence was forecast to become the second hurricane of the season within 12 hours . Late on November 4 , Florence was upgraded to a hurricane as a solid area of deep convection developed around the center of circulation . An eye feature also appeared on infrared satellite but was not associated with significant strengthening . Florence slowly intensified as the eye persisted and the structure slightly improved . By the morning of November 6 , the eye became less defined and the cloud tops around it warmed . The storm also shifted its foreword motion northward as the trough located to the southeast began to move towards the east , moving the steering currents with it . As the low moved further to the east , steering currents in the area of Florence weakened , leading to the storm stalling late on November 6 .
By the morning of November 7 , the eye began to reappear and the storm turned towards the northwest and the foreword motion began to rapidly increase . Later that morning , Florence had

developed a large , 35 to 40 mi (55 to 65 km / h) wide eye and the foreword motion continued to increase . The intensification continued and by the afternoon hours , Florence was upgraded to a Category 2 hurricane with winds of 100 mph (155 km / h) . A strong extratropical cyclone located to the north of Florence was causing the storm to move towards the northwest at a rapid pace of 30 mph (48 km / h) . Operationally , Florence was reported to have peaked at that intensity , but post season analysis determined that the storm reached its peak intensity just short of major hurricane ? a storm with winds of 111 mph (178 km / h) or higher ? status late on November 7 . By the morning of November 8 , Florence weakened slightly to Category 1 status . The large system to the north continued to cause Florence to move at 58 mph (93 km / h) . Since the storm was very close to a cold front , Florence was expected to rapidly transition into an extratropical cyclone . Later that morning , Florence was absorbed into the extratropical cyclone while still maintaining hurricane @-@ force winds .

= = Impact and naming = =

As Florence remained out over the open waters of the central Atlantic , no effects , damages , or fatalities were reported . No tropical storm watches or warnings were issued , and the storm was never forecast to strike land .