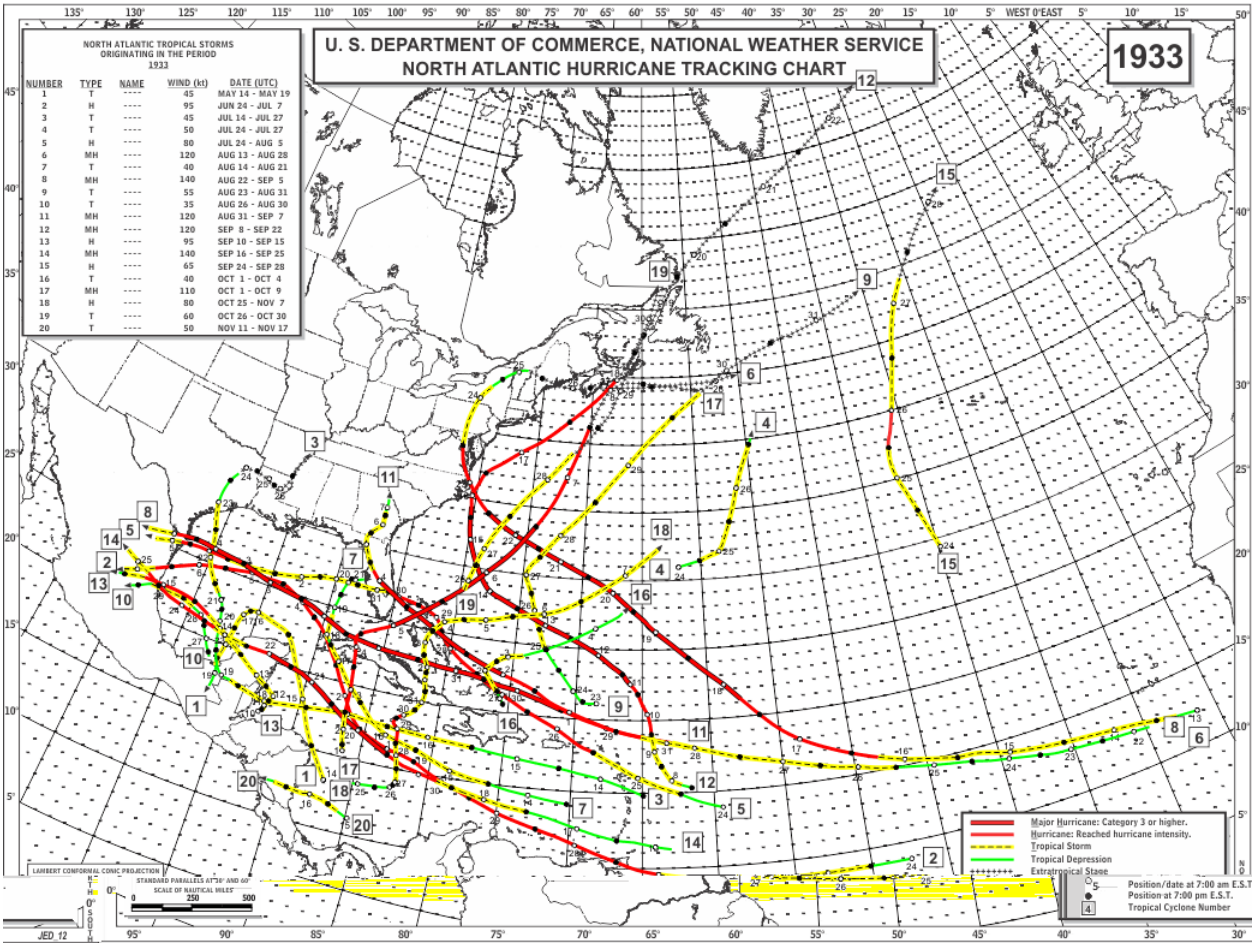
RE-ANALYSIS OF 1931 TO 1935 ATLANTIC HURRICANE SEASONS COMPLETED

A complete re-analysis of the Atlantic hurricane database (HURDAT) was conducted for the 1931 to 1935 seasons. All 58 existing tropical storms and hurricanes were revised in their tracks and maximum winds.

15 new tropical storms were discovered and added into HURDAT, while four existing systems were removed. This era also recorded one of the busiest hurricane seasons (1933) on record with 20 tropical storms observed, 11 of which became hurricanes. Originally, HURDAT listed 21 tropical storms for that year, 10 of which were hurricanes. In the reanalysis of 1933, two new tropical storms were discovered, two existing cyclones were removed from the database as they did not reach tropical storm intensity, and two existing storms were found to be one continuous system.



The 1933 Atlantic basin hurricane season, revised.

The years of 1931 to 1935 recorded four of the 25 most deadly hurricanes in the historical record for the Atlantic basin. A Category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale struck Belize (then British Honduras) in 1931 and killed around 2,500 people. In November 1932, the "Huracán de Santa Cruz del Sur" struck Cuba as a Category 4 hurricane and killed about 3,500 people primarily in a storm surge that reached about 20 feet. In June 1934, a tropical storm (which later became a hurricane) caused torrential rainfall, flashfloods and mudslides, killing about 3,000 people in Honduras and El Salvador. In October 1935, a Category 1 hurricane killed around 2,150 people in Haiti and Honduras due to extreme rains and flashfloods.

The 1931 to 1935 hurricane seasons were part of an active period for the continental United States, as it was struck by twelve hurricanes (eleven previously listed in HURDAT). Of these twelve, four were major hurricanes (five previously listed in HURDAT): a Category 4 hurricane in Texas in 1932, a Category 3 hurricane in Texas in 1933, a Category 3 hurricane in Florida also in 1933, and a Category 5 hurricane in Florida in 1935. This last hurricane, known as the "Labor Day Hurricane" because of its landfall on that date in September, was the strongest hurricane to ever make landfall in the United States, based upon its central pressure of 892 mb. The maximum sustained wind at landfall in the Florida Keys is estimated to have been around 185 mph. This is second only to the 190 mph sustained wind currently listed for 1969's Hurricane Camille at landfall. 408 people were killed by the "Labor Day Hurricane", which is the eighth most deadly in continental United States history.

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NOAA Hurricane Re-analysis Project: http://www.aoml.noaa.gov/hrd/data_sub/re_anal.html

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