



## **Reanalysis of 1956 to 1960 Atlantic hurricane seasons completed** *10 new tropical storms discovered*

The 1956 to 1960 Atlantic hurricane seasons have been reanalyzed. Revisions to the hurricane database (HURDAT2) were accomplished by obtaining the original observations collected - mainly by ships, weather stations, and the Hurricane Hunter Navy, Air Force, and Environmental Science Services Administration (ESSA) aircraft reconnaissance planes - and assessing the storms based upon our understanding of hurricanes today. The reanalysis also allowed "discovering" of tropical storms and hurricanes that occurred but were not yet officially recognized as such in the official records.

Ten new tropical storms during these five years were discovered and added to the database. Eight hurricanes were identified as having impacted the United States, the same number as was originally identified.

Some of the highlights include:

- Hurricane Audrey in 1957, which killed around 550 people in Louisiana and Texas, is the worst hurricane in this five year period. Audrey was downgraded in the reanalysis from a Category 4 to a Category 3 hurricane on the Saffir-Simpson Hurricane Wind Scale at landfall, as it is reassessed that it had maximum sustained surface winds of 110 kt (125 mph) and a central pressure of 946 mb.
- Hurricane Donna in 1960 was responsible for the deaths of at least 364 people in the Lesser Antilles, the Bahamas, and the United States. Donna was reanalyzed as a Category 4 in Florida (same as that originally), a Category 2 in North Carolina (downgraded from a Category 3 originally), and a Category 2 in New York (downgraded from a Category 3 originally). At landfall in the Florida Keys, Donna is reassessed to have maximum surface winds of 125 kt (145 mph) and a central pressure of 930 mb.
- Hurricane Gracie in 1959 was the only other landfalling major hurricane for the United States in these five seasons. Gracie was upgraded from a Category 3 to a Category 4 at landfall in South Carolina with 115 kt (130 mph) maximum sustained winds and a central pressure of 951 mb.

Sandy Delgado, Brenden Moses, Chris Landsea, and the Best Track Change Committee all made substantial contributions toward the reanalysis of these hurricane seasons. This research is supported in part by the NOAA Climate Program Office.

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**NOAA Hurricane Re-analysis Project:** [http://www.aoml.noaa.gov/hrd/data\\_sub/re\\_anal.html](http://www.aoml.noaa.gov/hrd/data_sub/re_anal.html)  
**HURDAT2 file:** <http://www.nhc.noaa.gov/data/hurdat/hurdat2-1851-2015-070616.txt>

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