

Active Atlantic hurricane era at its end?

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Annual Accumulated Cyclone Energy (ACE) values were calculated from the HURDAT2 database¹.

In order to make the calculations for the AMO proxy, sea surface temperature (SST) data were extracted from the NOAA ERSSTv4 dataset² and sea level pressure (SLP) data were extracted from the Hadley SLP v2³. Each of these indices were tabulated using the online resource available from the KNMI Climate Explorer website (<http://climexp.knmi.nl/>). Values in 2015 were calculated from the NCEP/NCAR Reanalysis⁴. Plotted SST data in Figure 2b were taken from the NOAA Optimum Interpolation SST v2 dataset⁵.

The number of hurricanes impacting the United States from 1878-2012 were extracted from the database maintained by the Atlantic Oceanographic and Meteorological Laboratory (http://www.aoml.noaa.gov/hrd/hurdat/All_U.S._Hurricanes.html). A tropical cyclone's maximum impact intensity was assigned to the US as a whole. Each tropical cyclone was only assigned one impact for the United States as a whole; however, it could impact both the Gulf and Florida Panhandle as well as the Florida Peninsula and East Coast region (e.g., Hurricane Andrew in 1992).

Monte Carlo resamplings were utilized to determine 5% significance levels for Atlantic TC activity. A total of 500 simulations were run for the tests outlined in the manuscript.

References

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