

Hurricane frequency is up but not their strength, say researchers

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In a new study, Clemson University researchers have concluded that the number of hurricanes and tropical storms in the Atlantic Basin is increasing, but there is no evidence that their individual strengths are any greater than storms of the past or that the chances of a U.S. strike are up.

Robert Lund, professor of mathematical sciences at Clemson, along with colleagues Michael Robbins and Colin Gallagher of Clemson and QiQi Lu of Mississippi State University, studied changes in the tropical cycle record in the North Atlantic between 1851 and 2008.

"This is a hot button in the argument for global warming," said Lund. "Climatologists reporting to the U.S. Senate as recently as this summer testified to the exact opposite of what we find. Many researchers have

maintained that warming waters of the Atlantic are increasing the strengths of these storms. We do not see evidence for this at all, however we do find that the number of storms has recently increased."

The study represents one of the first rigorous statistical assessments of the issue with uncertainty margins calculated in. For example, Lund says "there is less than a one in 100,000 chance of seeing this many storms occur since 1965 if in truth changes are not taking place."

He adds, "Hopefully such a rigorous assessment will clear up the controversy and the misinformation about what is truly happening with these storms."

The study, submitted to the *Journal of the American Statistical Association*, also found changes in [storm](#) pattern records starting around 1935. This was expected at the onset of aircraft reconnaissance, which allowed record-keepers to identify and document storms occurring in the open ocean.

While the study did conclude that more storms are being documented, researchers found no evidence of recent increases in U.S. landfall strike probability of the strongest of hurricanes. Lund notes that "because these types of storms are so uncommon, it will take many more years of data to reliably assess this issue."

Source: Clemson University ([news](#) : [web](#))

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