New analysis says global warming boosts hurricanes

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- Fred Pearce

Renewed claims that global warming is driving the increased number of high-intensity hurricanes across the world were published on Thursday.

The new study comes from researchers at the Georgia Institute of Technology in Atlanta, US. In September 2005 – days after Hurricane Katrina devastated New Orleans – Peter Webster and Judy Curry claimed that the number of intense hurricanes across the world had almost doubled over the past 35 years, and that this was due to rising sea temperatures.

The study was attacked for ignoring other variables known to influence hurricane intensity. These include humidity, the strength of horizontal winds that can disrupt hurricane formation, and atmospheric circulation. William Gray of Colorado State University, US, who compiles annual hurricane forecasts for the North Atlantic, said the findings were “not physically plausible”.

But the Georgia duo recruited in-house statisticians to subject their original findings to detailed analysis, comparing the role of sea temperatures with the competing factors – humidity, wind strength and atmospheric circulation.

Statistician Carlos Hoyos and colleagues conclude that all four factors have been working to increase the strength of hurricanes. But, reinforcing the original study's conclusion, they say that “the contribution from sea surface temperature dominates” in every ocean. Gray has yet to respond.

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