Macro Roundup Article

Headline: Observed Increases in North Atlantic Tropical Cyclone Peak Intensification Rates

Article Link: https://www.nature.com/articles/s41598-023-42669-y

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Tweet: According to new @Nature research, the rate at which tropical cyclones have grown into hurricanes within 36 hours has doubled in the modern era (2001-2020) relative to the 1971–1990 period.

Summary: An analysis of observed maximum changes in wind speed for Atlantic Tropical Cyclones (TCs) from 1971 to 2020 indicates that TC intensification rates have already changed as anthropogenic greenhouse gas emissions have warmed the planet and oceans. Mean maximum TC intensification rates are up to 28.7% greater in the modern era (2001–2020) compared to the historical era (1971–1990). In the modern era, it is about as likely for TCs to intensify by at least 50 kts in 24 h, and more likely for TCs to intensify by at least 20 kts within 24 h than it was for TCs to intensify by these amounts in 36 h in the historical era. Finally, the number of TCs that intensify from a Category 1 hurricane (or weaker) into a major hurricane within 36 h has more than doubled in the modern era relative to the historical era.

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Primary Topic: Science

Topics: Academic paper, Global Warming, Science

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