

# Is Climate Change Worsening Hurricanes? The Evidence Says No

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In addition to physical and economic damage, hurricanes Henri and Ida have brought a flood of news stories claiming human-caused climate change is causing more frequent and severe hurricanes.

[BBC News](#), [CNN](#), [The New York Times](#), [The Washington Post](#), and almost every other major newspaper or national broadcast news outlet has carried stories, sometimes multiple ones in the same outlet, implying that had humans not caused climate change, people would not be suffering to the degree they are from recent hurricanes. These claims are false. Evidence for human greenhouse gas emissions making hurricane seasons worse is lacking. Almost every credible scientific body in the world, including the U.N. Intergovernmental Panel on Climate Change (IPCC), says so.

The mainstream media's rabid attempt to tie supposed human-caused climate change to individual hurricanes, despite the evidence to the contrary, demonstrates their fanatical adherence to former White House Chief of Staff Rahm Emanuel's admonishment to Democratic Party leaders: "never let a crisis go to waste."

From July 9 to August 11, during the middle of the annual hurricane season, there was a more than month-long lull of tropical storms, when not a single tropical storm formed in the Atlantic Basin. Where were the news stories discussing this unusual tropical storm drought and attributing it and similar hurricane droughts in recent years to climate change? Search as one might, I doubt you will find a single such story.

What's interesting about the media's recent hurricane horror stories is they almost uniformly fail to mention what the IPCC's Sixth Assessment Report (AR6) had to say about tropical storms and

hurricanes. When it was released, just three weeks ago, these same media outlets proclaimed AR6 the most authoritative single document on the causes and consequences of climate change. Yet their stories on hurricanes do not quote from AR6 or cite it. Instead, they interview various individual scientists making alarming claims linking hurricanes to climate change.

A story in *The Washington Post*, titled [“How climate change helped make Hurricane Ida one of Louisiana’s worst,”](#) was typical. Instead of relaying what IPCC AR6 said about climate change and hurricanes—it didn’t refer to AR6 at all—the *Post* asks longtime alarmist scientist Kerry Emanuel for his views.

*“People there are going to get blasted,” said Kerry Emanuel, an atmospheric scientist at the Massachusetts Institute of Technology who studies the physics of hurricanes and their connection to the climate. “This is exactly the kind of thing we’re going to have to get used to as the planet warms.”*

Let’s go back to the quickly forgotten Henri, for a moment.

“In the same week that Tropical Storm Fred caused catastrophic flooding in North Carolina, and Hurricane Grace made its second landfall in Mexico, Hurricane Henri is barreling toward New England, where it’s expected to be the first to make landfall there in 30 years,” wrote CNN.

Wrong!!! Henri briefly attained Hurricane 1 level strength over the Atlantic Ocean, for less than 24 hours, and by the time it made landfall in New England it was a quickly diminishing tropical storm. The last hurricane to strike New England remains Bob in 1991, 30 years ago. At present, New England is experiencing the second-longest period in recorded history without a hurricane making landfall in the region, despite modest warming.

Ida may rival the most powerful hurricanes ever to strike Louisiana or the nation, but it is hardly unique. [Research shows, since 1957](#), in Louisiana alone five hurricanes have made landfall with wind speeds exceeding 150 mph. The most powerful of those five hurricanes, 1969’s Category 5 Camille, had wind speeds exceeding 190 mph. Three of the five Category 4 or higher hurricanes Louisiana experienced during the past 70 years occurred in the late 1950s and 1960s, when the Earth was undergoing a period of modest cooling and [many scientists were warning of a coming ice age](#).

This brings us to the real-world data mainstream media outlets seem desperate to ignore. Data from the U.S. Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration’s National Hurricane Center (NHC) show hurricanes have not become more numerous or more powerful during the past half-century of modest warming.

The EPA’s May 2021 report on [“Climate Change Indicators: Tropical Cyclone Activity”](#) reported,

Since 1878, about six to seven hurricanes have formed in the North Atlantic every year. Roughly two per year make landfall in the United States. The total number of hurricanes (particularly after being adjusted for improvements in observation methods) and the number reaching the United States do not indicate a clear overall trend since 1878.

The IPCC's 2018 interim report came to essentially the same conclusion. As illustrated in Figure 1 below, the IPCC data demonstrate no increasing trend in tropical cyclone or hurricane numbers.

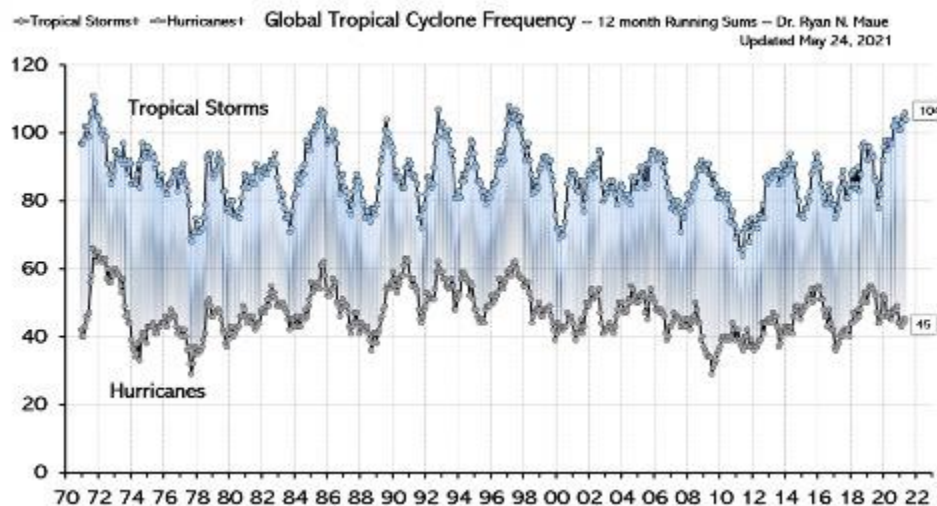


Figure 1. Tropical cyclone frequency through August 2021, Dr. Ryan Maue

NHC data indicate hurricane impacts on the United States are at an all-time low. The United States recently went more than a decade, 2005 through 2017, without experiencing a major hurricane measuring Category 3 or higher making landfall—the longest such period in recorded history (see Fig. 2).

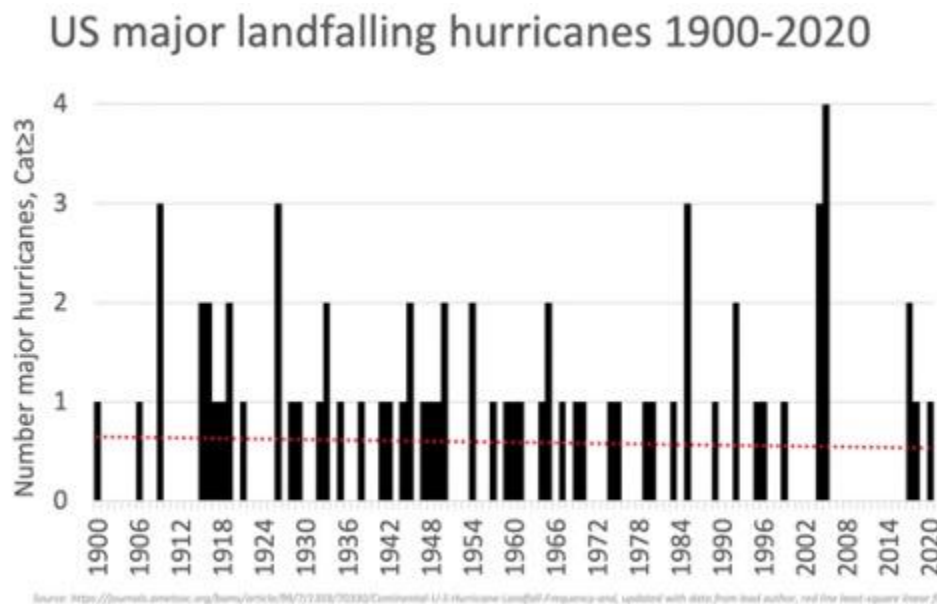


Figure 2. Landfalling hurricanes of category 3 or greater 1900-2020, Dr. Roger Pielke Jr.

From 2009 through 2017, the United States experienced the lowest number of hurricane strikes over any eight-year period since records have been kept.

The IPCC's AR6 devotes just a few paragraphs of its more than 3,000-page report to hurricanes, concluding there is limited evidence human-caused climate change is causing more frequent or stronger hurricanes.

"There is low confidence in most reported long-term (multidecadal to centennial) trends in TC frequency- or intensity-based metrics," says AR6. Hardly material for eye-catching, fear-inspiring headlines.

"Climate at a Glance: Hurricanes" explains warm ocean water is just one factor driving the formation and intensification of hurricanes. Wind shear inhibits strong storms from forming and rips apart storms that have already formed. Science indicates global warming is [likely to cause more wind shear](#) in places where hurricanes form and intensify. This is precisely [what happened to Henri](#) in mid-August, with wind shear shredding its top and reducing it from a minor hurricane to a tropical depression in a relatively short period of time.

Evidence that tropical cyclones are unlikely to become more severe in the future also comes from a recent study published in [Geophysical Research Letters](#). Its authors report that after accounting for the combined size and maximum wind speeds of hurricanes—storms' "kinetic energy"—climate models project no measurable worsening of future hurricanes if the Earth continues to warm.

"Comparing cyclone integrated kinetic energy between present conditions and a projected future climate scenario did not suggest notable changes between the two periods," the researchers write.

The human toll and economic costs of Hurricane Ida, yet to be totaled up, are likely to be great. This is true for almost every tropical storm or hurricane that makes landfall. Each year more and more people are moving to within fifty miles of the coasts, developing areas historically prone to hurricanes. Coastal development, moreover, is increasingly high-end, with high-rise condos, hotels, and mega-mansions replacing bait shops and smaller beachfront single-family homes. These factors, not greater numbers of hurricanes or hurricanes having higher wind speeds, account for the increasing economic and human costs of hurricane strikes.

Plain and simple, the data show recent hurricane numbers and wind speeds are well within historical norms. Such unalarming facts may not sell newspapers or ad time on broadcast news channels, but it's the truth, and the media should do its job and report it.

— H. Sterling Burnett.

SOURCES: [Climate Change Dispatch](#); [Phys.org](#); [Climate Realism](#); [IPCC AR6](#); [The National Center for Policy Analysis](#); [Climate at a Glance: Hurricanes](#)