



1. Hurricane Dorian has been listed as category 5 hurricane: Donald Trump says Florida faces ‘absolute monster’ hurricane

- What do the categories of hurricanes mean? How are hurricanes categorised?
- What are some recent examples of Category 3, 4 and 5 storms?
- What are the key drawbacks in the assessment of hurricane categories?

GS paper 1 (Important Geophysical phenomena such as Tsunami ,earthquakes, Volcanic activity, cyclone etc.,)

In this video, you can find detailed answers for all the above questions.



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NY Times. (2019, September , 3. Explained: What is a Category 5 hurricane?. Indian Express. Retrieved from <https://indianexpress.com/article/explained/hurricane-category-wind-speed-saffir-simpson-scale-dorian-5949910/>



What is the context about?



Over the horizon, out in the summer-warm Atlantic, Dorian has been gaining energy since it blew through the Virgin Islands on Wednesday, and is winding up to deliver a devastating punch.



The National Hurricane Center said Thursday that Dorian was expected to hit the east coast of Florida over the weekend as a “major” hurricane, in Category 3 or possibly Category 4.

What do the categories of hurricanes mean? How are hurricanes categorised?



Powerful winds are what define a hurricane, so they are named and classified based on how hard their winds are blowing. To qualify as a hurricane, a storm must have sustained winds of 74 mph or more.



All hurricanes are dangerous, but some pack more punch than others. So meteorologists try to quantify each storm's destructive power by using the Saffir-Simpson scale, placing it in one of five categories based on sustained wind speed:



Category 1, 74 to 95 mph: These storms' winds may knock down some trees and power lines and do a bit of damage to buildings.



Category 2, 96 to 110 mph: These storms are likely to uproot many trees, disrupt electric power over wide areas and do significant roof and siding damage.



Category 3, 111 to 129 mph: These are major storms that can take roofs off even well-constructed houses and knock out electric and water systems for days or weeks.



Category 4, 130 to 156 mph: These major storms do catastrophic damage, felling most trees and power poles and wrecking some buildings. Affected areas may be uninhabitable for days or weeks afterward.

Category 5, 157 mph or more: Storms this powerful are rare, and when they strike, they are immensely destructive. Few structures will come through a direct hit unscathed, and a large percentage of frame buildings will be destroyed.

What are some recent examples of Category 3, 4 and 5 storms?

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Hurricane Katrina was in Category 3 when it slammed into the Louisiana coast on Aug. 29, 2005, devastating New Orleans and other communities. But it had weakened a bit by then; at its peak over the Gulf of Mexico, Katrina was a Category 5 monster.



Hurricane Maria was a Category 4 storm when it hit Puerto Rico in 2017, ultimately leading to thousands of deaths and blacking out the island for months, with effects that linger today. Tens of thousands of homes on the island still have blue tarpaulins for roofs.



Just four Atlantic hurricanes since 1924 have been this powerful when they made landfall in the United States. The most recent, Hurricane Michael, struck the Florida Panhandle last year, causing at least 59 deaths in the United States and about \$25 billion in damage.



What are the key drawbacks in the assessment of hurricane categories?



There is a key problem with how hurricane categories are measured: The Saffir-Simpson scale only takes into account a storm's maximum sustained windspeed, and disregards other threats, like expected rainfall or storm surge.



Even a category 1 hurricane or a tropical storm can bring serious damage and risk to life and limb, but people in their path may underestimate the danger they pose because of how they're categorized.



An alternative to the Saffir-Simpson Scale is AccuWeather's "RealImpact Scale," which takes other metrics besides wind speed into account.