# Unprecedented Early Hurricane Beryl Sets Category 5 Records



### Unprecedented Early Hurricane Beryl Smashes Records

**Hurricane Beryl**, the first hurricane of the 2023 season, has set several unprecedented records and intensified rapidly due to extraordinarily warm waters in the Atlantic and Caribbean regions.

#### Record-breaking Formation:

* Early Category 4 Hurricane: Beryl became the earliest Category 4 hurricane, achieving wind speeds of at least 130 mph (209 km/h) in June, a feat typically seen in peak hurricane season.
* Rapid Intensification: The storm saw a remarkable intensification, with wind speeds increasing by 63 mph (102 km/h) in just 24 hours, transforming from an unnamed depression to a Category 4 hurricane in 48 hours.
* Category 5 Hurricane: Late Monday, Beryl achieved Category 5 status, with winds exceeding 157 mph (252 km/h), making it the earliest Category 5 hurricane recorded in the Atlantic basin.

#### Impacted Regions:

* Landfall: Beryl made landfall on Monday on Carriacou Island in Grenada with winds up to 150 mph (241 km/h).
* Damage: The storm swept through the southeastern Caribbean islands. In St. Vincent and the Grenadines, Prime Minister Ralph Gonsalves reported severe damage or destruction to hundreds of homes, especially on the main island of St. Vincent.

#### Contributing Factors:

* Sea Surface Temperature: Water temperatures around Beryl were 2 to 3.6 F (1 to 2 C) above normal at 84 F (29 C), contributing to its rapid intensification.
* Ocean Heat Content: The deeper water's heat, essential for sustaining storms, reached record levels for this time of year, usually expected in September.
* Atmospheric Conditions: The difference between water surface temperature and upper air temperature across the tropics facilitated the development and intensification of Beryl.

#### Expert Analysis:

* Climatology: Experts, including University at Albany’s Kristen Corbosiero and Weather Underground’s Jeff Masters, expressed bewilderment at Beryl’s off-season strength. They cite warm ocean waters and altered atmospheric conditions as primary causes.
* Future Predictions: Researchers, like Phil Klotzbach from Colorado State University, anticipate more such intense storms this season, drawing parallels with historically busy seasons like 1933 and 2005.

#### Climate Change Considerations:

Atmospheric scientists suggest that climate change may be contributing to this trend by making hurricanes more prone to rapid intensification and increasing their overall strength.

The rapid development of Hurricane Beryl and its unprecedented early season intensity underscore significant changes in the climatic patterns affecting hurricane formation and behavior. As the season progresses, additional monitoring and preparedness are crucial for potentially severe weather events.