

Hurricane Beryl bears down on Jamaica

July 3 2024, by Ivan SHAW



People stand outside their flooded homes after a river swelled due to heavy rains following the passage of Hurricane Beryl on the road from Cumana to Cumanacoa, Sucre State, Venezuela, on July 2, 2024.

Powerful Hurricane Beryl churned toward Jamaica on Wednesday with dangerous winds and sea surge, as residents braced for a storm that killed seven people and caused destruction in the Caribbean.

The hurricane—unusually strong so early in the Atlantic season—was

expected to pass near or over Jamaica in the next hours as a life-threatening Category 4 storm on a five-level scale, meteorologists said around midday.

Beryl is the first storm since US National Hurricane Center (NHC) records began to reach the Category 4 level in June and the earliest to reach Category 5 in July.

Across Jamaica, people removed boats from the water and tied them to fences for safety and rushed to buy food, water, gasoline and other essentials.

As of midday Wednesday the storm was packing maximum sustained winds 145 mph (230 kph), said the NHC. Tropical storm conditions are spreading through the island, it said.

Prime Minister Andrew Holness has declared an island-wide 6 am to 6 pm curfew and urged Jamaicans to comply with evacuation orders.

"If you live in a low lying area, an area historically prone to flooding and landslide or if you live on the banks of a river," he said in a video posted on social media, "I implore you to evacuate to a shelter, or to safer ground."



This satellite image obtained from the National Oceanic and Atmospheric Administration shows Hurricane Beryl on July 2, 2024, at 1220 GMT, east of Jamaica.

Desmon Brown, manager of the National Stadium in Kingston, said his staff has scrambled to be ready.

"We've taped up our windows, covered our equipment—including computers, printers and that sort of thing. Apart from that, it's mainly concrete so there's not much we can do," Brown said told the Jamaica Observer newspaper.

Hurricane warnings were also issued in the Cayman Islands further west,

which Beryl was expected to pass near or over on Wednesday night or early Thursday, according to the NHC.

Then it is forecast to head in a more weakened state toward Mexico's Yucatan Peninsula.

'No communication'

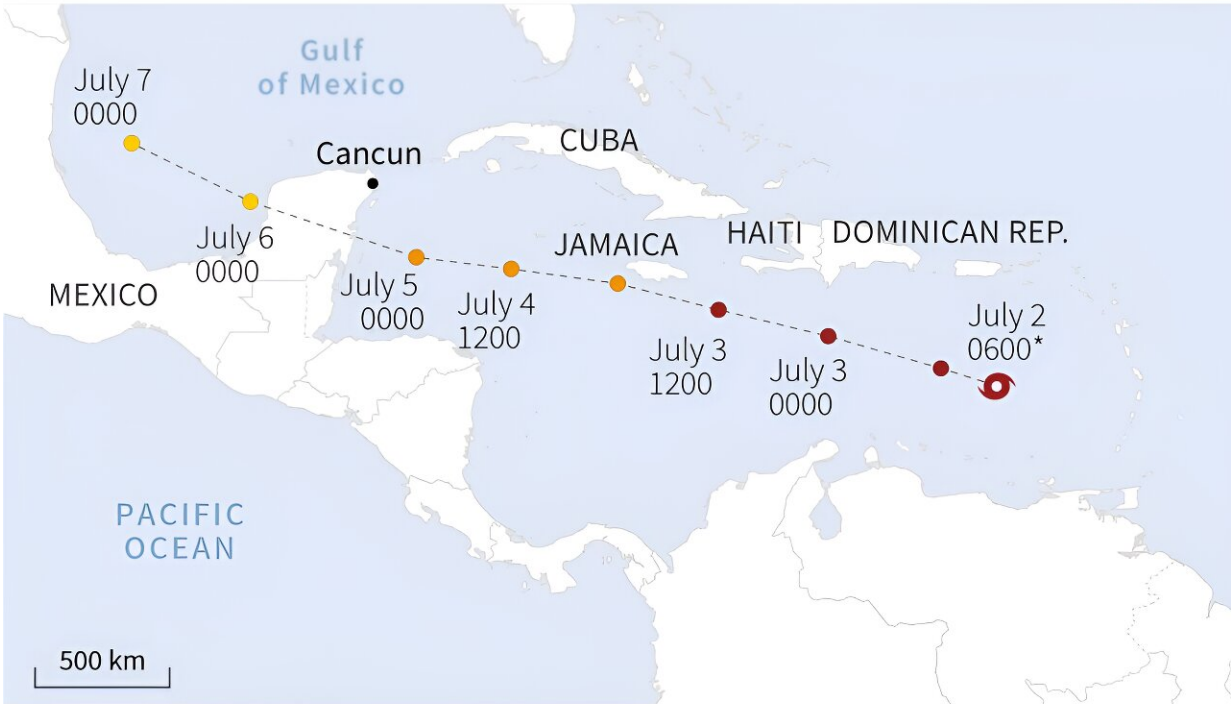
Beryl has already left a trail of death with at least three people killed in Grenada, where the storm made landfall Monday, as well as one in St Vincent and the Grenadines and three in Venezuela.

Grenada's Prime Minister Dickon Mitchell said the island of Carriacou, which was struck by the eye of the storm, has been all but cut off, with houses, telecommunications and fuel facilities there flattened.

Hurricane Beryl



Wind speed (km/h) ● 63-118 ● 119-177 ● Over 178



Source: NHC, forecast at 0600 GMT on Tuesday, July 2 *GMT



Map showing the path forecast of Hurricane Beryl, according to the US National Hurricane Center (NHC) at 0600 GMT on July 2.

"We've had virtually no communication with Carriacou in the last 12 hours except briefly this morning by satellite phone," Mitchell told a news conference.

The 13.5-square mile (35-square kilometer) island is home to around 9,000 people. At least two people there died, Mitchell said, with a third killed on the country's main island of Grenada when a tree fell on a house.

In St. Vincent and the Grenadines, one person on the island of Bequia was reported dead from the storm, and a man died in Venezuela's northeastern coastal state of Sucre when he was swept away by a flooded river, officials there said.

Climate change

It is extremely rare for such a powerful storm to form this early in the Atlantic hurricane season, which runs from early June to late November.

Warm ocean temperatures are key for hurricanes, and North Atlantic waters are currently between two and five degrees Fahrenheit (1-3 degrees Celsius) warmer than normal, according to the US National Oceanic and Atmospheric Administration (NOAA).



A boat ended up in a tree after the passage of Hurricane Beryl in Oistins gardens, Christ Church, Barbados on July 1, 2024.



What makes a hurricane?

CHARACTERISTICS

- Height: 8 - 10 km (5 - 6 miles)
- Diameter: avg. 500 - 650 km (310 - 400 miles)
- Movement: 15 - 25 km/h (9 - 15 m/h)
- Can reach speed of 65 km/h (40 m/h)



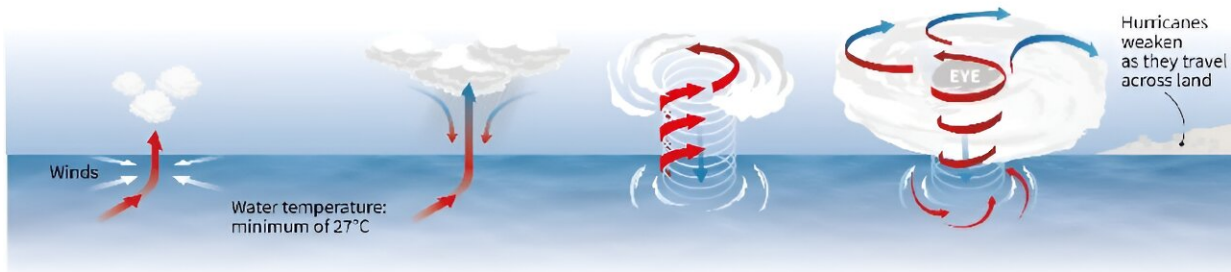
Different names by region

- ||| Cyclone: Indian and Southern Pacific Oceans
- ||| Hurricane: North Atlantic and North-East Pacific Oceans
- ||| Typhoon: North-West Pacific Ocean

In the southern hemisphere, the rotation is clockwise
In the northern hemisphere, the reverse



FORMATION OF A HURRICANE A tropical storm becomes a hurricane when winds exceed 118 km/h (74 miles/h)



Converging winds push warm, moist air, rapidly upwards, creating clouds above the ocean surface

1 Sea water evaporates, the warm moist air continues to ascend

2 Storm clouds (cumulonimbus) form around a central depression (low-air pressure)

3 The Coriolis force, linked to the Earth's rotation, produces a column of rising air. The hurricane takes the form of a cylinder of clouds around a central eye of subsiding air, often dry with little wind

4 The spiralling winds accelerate inwards and upwards. By releasing heat and moisture, they continue to fuel the storm system

WHAT ARE THE LINKS WITH CLIMATE CHANGE?

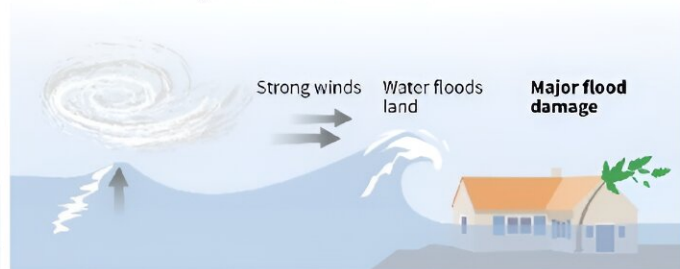
Warming oceans, increase humidity, fuelling hurricanes

If average global temperature rose by 2°C, this could increase the:

- average **intensity** of hurricanes
- **proportion** of powerful hurricanes
- average level of **rainfall**



Rising sea levels amplify the consequences of storm surges associated with hurricanes



Changes in the frequency of hurricanes associated with climate change still remain uncertain

Graphic explaining the formation of hurricanes.

UN climate chief Simon Stiell, who has family on the island of Carriacou, said climate change was "pushing disasters to record-breaking new levels of destruction."

"Disasters on a scale that used to be the stuff of science fiction are becoming meteorological facts, and the climate crisis is the chief culprit," he said Monday, reporting that his parents' property was damaged.

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