

Record breaking Hurricane Beryl is a warning of the consequences of unchecked climate change

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Record breaking Hurricane Beryl left a path of destruction this week as it swept over several Caribbean islands and continued its way towards Jamaica and Mexico. Communities struck by the hurricane have been devastated. At least six people have been killed by the storm. Three were killed in Carriacou, Grenada, two in northern Venezuela and another in St. Vincent and the Grenadines, where officials say 90 percent of homes were either destroyed or severely damaged on Union Island.

In preparation for the storm, Andrew Holmes, prime minister of Jamaica, declared the entire island a disaster area as experts anticipated Beryl bringing 130 mph winds and a storm surge up to 9 feet tall.

Developing rapidly over the weekend, Beryl has broken multiple records.

Beginning as a tropical depression over the Atlantic last Friday, the storm quickly developed into a Category 3 hurricane in just 42 hours, a speed that has only been matched six other times in recorded history. Not only was this only the third Category 3 hurricane to develop in June, it was the furthest east ever recorded, 2,000 miles further east than the previous June record set by Hurricane Alma in 1966.

Over the next 48 hours it developed into the earliest Category 4 hurricane ever recorded on Sunday June 30, beating the previous record set in 2005 by Hurricane Dennis by two weeks and becoming the first Category 4 hurricane ever recorded in June.

The next day it reached wind speeds of 150 mph, becoming the earliest hurricane to reach those speeds and the furthest south a hurricane of that size has formed. The islands hit by Beryl rarely see storms of this size and were not prepared to handle such a devastating hurricane.

According to Brian McNoldy, senior researcher on hurricanes, climatology and sea level rise at the

University of Miami, in a post on X/Twitter: “The only other major hurricane to pass within 100 miles of where #Beryl is on Monday morning was Ivan in September 2004, and that was at Category 3 intensity. These islands have no experience with a Category 4 hurricane in recorded history.”

Later that night the storm strengthened further, to become the earliest Category 5 hurricane ever recorded, beating the previous record held by Hurricane Emily on July 16, 2005. It reached wind speeds up to 165 mph, also beating Emily’s July record of 160 mph and matching the August record set by Hurricane Allen in 1980.

Beryl has since been downgraded back to a Category 4 as it continues across the Caribbean Sea.

The storm is not just the strongest to form this early, it has also formed incredibly fast. Shuyi Chen, professor of atmospheric science at the University of Washington, told the BBC that “What makes Beryl particularly notable is that it [...] intensified the fastest from a tropical depression to a hurricane [of any Atlantic hurricane in June or early July].”

The strength and intensification of Beryl, following patterns more akin to August and September, is largely due to the unseasonable ocean temperatures in the Atlantic, which is far warmer than usual for this time of year and is seeing temperatures closer to August and September norms.

Hurricanes feed off of warm ocean waters. In order for hurricanes to develop, ocean waters must be at least 80 degrees Fahrenheit (27 Celsius). Current Atlantic ocean temperatures are far warmer than normal, already around 86 degrees (30 Celsius) in the waters where Beryl formed.

Partially fueled by a strong El Niño warming cycle in the Pacific between May 2023 and May of this year, the

Atlantic Ocean has been experiencing a “marine heatwave,” according to the National Oceanic and Atmospheric Administration (NOAA). For the past year the Atlantic has been “running a fever” as average temperatures extend two to five degrees Fahrenheit (one to three Celsius) warmer than usual, compared to the 30-year average of 1971-2000.

These seemingly small increases in average temperatures reflect a significant increase in energy stored in the ocean—energy that creates warmer and wetter conditions ripe for hurricane formation. Scientists are not sure if this warming will increase the number of named storms every year, but they see clear evidence that it is causing larger storms.

This year is expected to be one of the most active hurricane seasons in history, with Colorado State University publishing its highest-ever prediction for the number of hurricanes. Last year’s El Niño helped create record temperatures on land and in the sea over the past 12 months. This warming cycle in the Pacific is expected to give way to a La Niña later this year, the cooling cycle in the Pacific that is associated with more active hurricane seasons in the Atlantic. With feverish ocean temperatures and global weather patterns ready to fuel hurricanes, this year could see several storms like Beryl.

However, the broader cause of record breaking storms like Beryl is climate change, which is being fueled by the capitalist pursuit of profit. As greenhouse gas emissions continue to rise globally, more energy is trapped in the Earth’s atmosphere, raising temperatures and fueling larger storms.

The science of climate change is now 200 years old, beginning with the experiments of French scientist Joseph Fourier in 1824, who theorized that the Earth’s atmosphere provided a warming effect on the planet and that changes in the atmosphere could alter the world’s climate. In 1896 Swedish scientists Svante Arrhenius and Arvid Högbom estimated that a doubling of CO2 could cause 5-6 degrees Celsius of warming, and identified the release of CO2 from coal as a potential cause.

By the 1950s scientists were starting to warn that continued greenhouse gas emissions would have extensive effects on the world’s climate. Theoretical science was quickly becoming a social reality. Over the next several decades the threat of climate change to the Earth’s environment became scientific consensus.

But all of these warnings have been ignored by bourgeois governments. The global capitalist system and governments around the world have refused to take any

meaningful action to halt climate change. Emissions and temperatures continue to rise, setting the stage for greater natural disasters. At the same time as Beryl, 13,000 people were forced to evacuate by a raging wildfire in Butte County, California.

Even as the effects of climate change are being directly felt by millions around the world, governments and corporations are dropping their climate pledges, abandoning any pretense that they had any commitment to fighting climate change.

Capitalism, based on the private accumulation of wealth, cannot reorganize itself to stop global warming. Far too much profit is dependent upon fossil fuels. The global oil industry generates \$5.3 trillion in revenue each year. Trillions of dollars in infrastructure and trade are based on the burning of fossil fuels for energy.

One estimate by Stanford professor Mark Jacobson places the cost of a global energy transition at \$62 trillion, nearly 2.5 times the GDP of the United States.

The claim that this cost is too high is false. According to the World Inequality Database, global income totaled \$86 trillion in 2021, with the top one percent of earners taking 19 percent of all annual income, or nearly \$16.34 trillion a year. This sum alone could easily be put to use towards fighting climate change over a matter of years. But the capitalist class will not tolerate any reduction in its profits, even as the world is consumed in fires and floods.

What is required to fight climate change is the abolition of the capitalist system, the expropriation of the banks and the wealth of the ruling elite, and the transformation of global society by a united movement of the international working class into a socialist system based on providing for social need and not private profit. Such a society will utilize all the stolen wealth of the ruling class to halt climate change and alleviate the damage felt by billions of people around the world.



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