

Mediterranean heat wave 'virtually impossible' without climate change: Scientists

July 31 2024



Scientists from the World Weather Attribution group say the heat wave that hit countries around the Mediterranean in July would have been up to 3.3 degrees Celsius cooler in a world without climate change.



The punishing heat experienced around the Mediterranean in July would have been "virtually impossible" in a world without global warming, a group of climate scientists said Wednesday.

A deadly heat wave brought temperatures well above 40 degrees Celsius (104 Fahrenheit) to southern Europe and North Africa, where such extreme summer spells are becoming more frequent.

Scorching heat claimed more than 20 lives in a single day in Morocco, fanned wildfires in Greece and the Balkans, and strained athletes competing across France in the Summer Olympic Games.

World Weather Attribution, a network of scientists who have pioneered peer-reviewed methods for assessing the possible role of climate change in specific extreme events, said this case was clear.

"The extreme temperatures reached in July would have been virtually impossible if humans had not warmed the planet by burning fossil fuels," according to the WWA report by five researchers.

The analysis looked at the average July temperature and focused on a region that included Morocco, Portugal, Spain, France, Italy and Greece.

Scientists used this and other climate data to assess how the heat in July compared to similar periods in a world before humanity began rapidly burning oil, coal and gas.

They concluded the heat recorded in Europe was up to 3.3C hotter because of climate change.

Beyond the Mediterranean, intense heat reached Paris this week where athletes competing in the Olympic Games withered as temperatures hit the mid-30s this week.



"Extremely hot July months are no longer rare events," said Friederike Otto, a climate scientist at Imperial College London, a co-author of the study.

"In today's climate... Julys with extreme heat can be expected about once a decade," she said.

Scientists have long established that climate change is driving extreme weather and making heat waves longer, hotter and more frequent.

This latest episode came in a month when global temperatures soared to their highest levels on record, with the four hottest days ever observed by scientists etched into the history books in July.

The past 13 months have been the warmest such period on record, exceeding a 1.5C limit that scientists say must be kept intact over the long term to avoid catastrophic climate change.

© 2024 AFP

Citation: Mediterranean heat wave 'virtually impossible' without climate change: Scientists (2024, July 31) retrieved 31 July 2024 from https://phys.org/news/2024-07-mediterranean-virtually-impossible-climate-scientists.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.