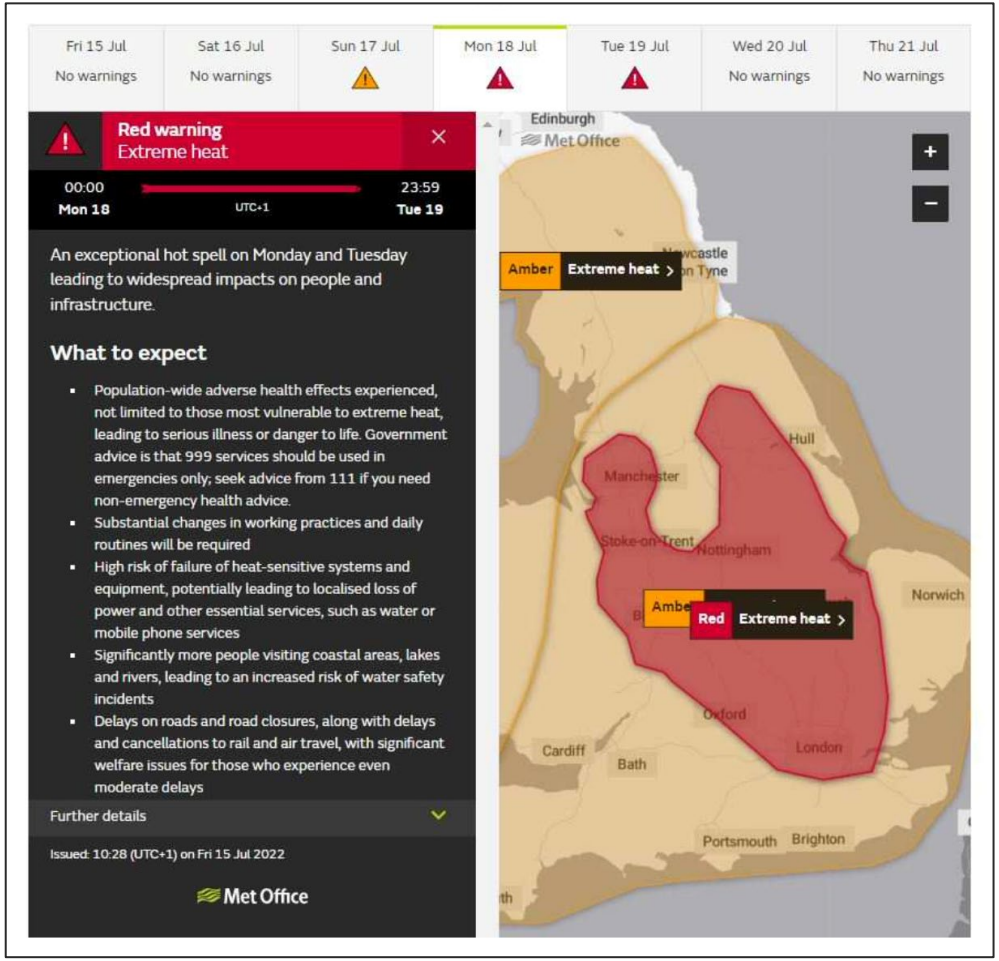
Peter Stott, Met Office and University of Exeter, UK

Who we are

We are the national meteorological service for the UK. And we provide critical weather services and world-leading climate science, helping everyone stay safe and thrive.



The first Red extreme heat warning issued in UK during European heatwave

Is this due to climate change?

“We hoped we wouldn’t get to this situation but for the first time ever we are forecasting greater than 40°C in the UK, climate attribution scientist at the Met Office, Dr Nikos Christidis, said. In a recent study we found that the likelihood of extremely hot days in the UK has been increasing and will continue to do so during the course of the century”.

Met Office Hadley Centre

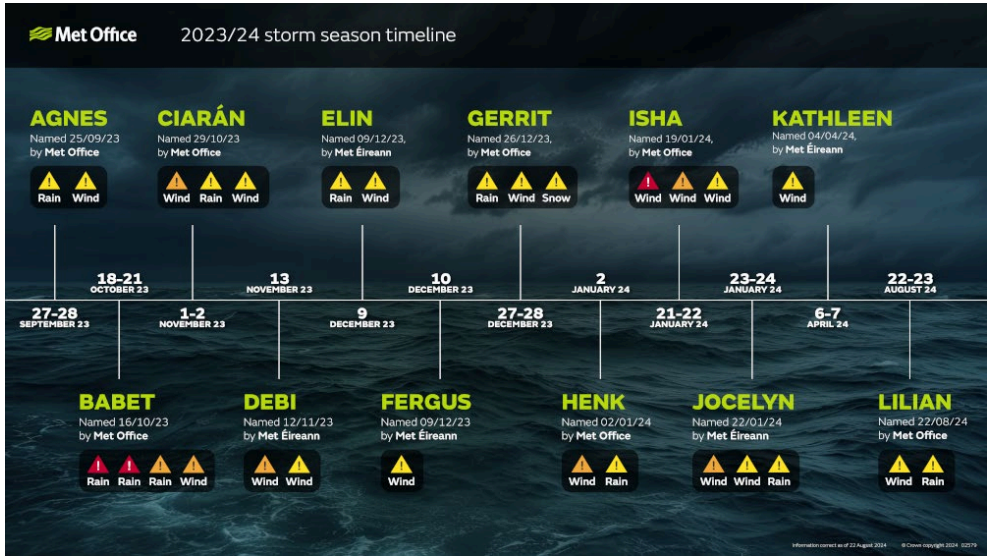
World Weather Attribution

NEWS

Climate change drives increase in storm rainfall

Author: Press Office
00:01 (UTC+1) on Wed 22 May 2024

A new study has found climate change has influenced how much rain falls during autumn and winter storms.



The scientists found that rainfall associated with storms is becoming both more intense and more likely. In a pre-industrial climate, rainfall from storms as intense as the 2023-24 season had an estimated return period of 1 in 50 years. However, in today's climate, with 1.2ºC of global warming, similarly intense storm rainfall is expected to occur more often, about once every five years. Climate change has also increased the amount of rainfall from these storms, making them about 20% more intense.

Met Office
Hadley Centre

Key considerations for Extreme Event Attribution Services at Met Office

- Understand user requirements and hence purpose of service.
- Ensure key stakeholders involved in study and dissemination (eg National Met Services affected).
- Define and follow a pre-determined protocol including process for event definition.
- Employ scientifically robust methodologies based on peer-reviewed research.
- Incorporate appropriate quality assurance procedures.
- Fulfill transparency by publishing details of methods, datasets etc on release of results.
- Deliver clear user-targeted communication of results.

Note a range of timescales may be relevant - from days prior to months or even years later.