The probabilistic UK projections have been expanded to include how selected extreme weather events are likely to change during the 21st Century.

Alternatively, if greenhouse emissions continue to grow unmitigated, under RCP8.5 - a high emission scenario, all seasons show increases in median estimates of future values for daily maximum temperature, 1 day and 5 day rainfall.*

What does this mean?
By 2090, a once in 50 year temperature event in London is more likely than not to exceed 38 °C if moderate mitigation measures are applied to reduce total emissions between now and the end of the century.

* Results available for temperature and rainfall accumulations associated with events occurring once every 20, 50 or 100 years.

WHAT’S AN EXTREME WEATHER EVENT?
Extreme weather events often have a large impact on society and the environment. They are defined using thresholds that identify the highest or lowest values resulting from climate variability.

The UKCP probabilistic projections enable us to look at how extreme weather events are likely to change for locations around the UK.

What are the impacts of extreme weather events?
- **Flooded buildings**: Extreme rainfall events that last from 1 to 5 days can lead to damaging impacts such as flooding, loss of life, damage to the natural environment and disruption to services and travel.
- **Risen in illness**: Extreme daily maximum temperatures lead to impacts on public health and disruption to travel. When they occur during extended heatwaves, they also contribute to drought conditions that lead to water shortages and affect food production.
- **Wilted crops**: Extreme daily maximum temperatures lead to impacts on public health and disruption to travel. When they occur during extended heatwaves, they also contribute to drought conditions that lead to water shortages and affect food production.

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