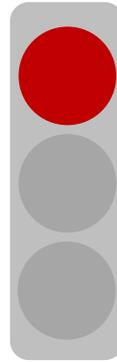


The extreme heatwave of June 2019 in France

Near real time analysis

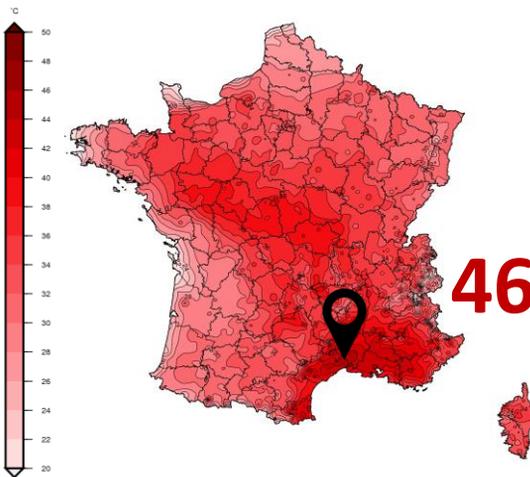
Area: France
Period: June 2019
Event: heatwave

Did climate change play a role ?



Very likely

Unlikely

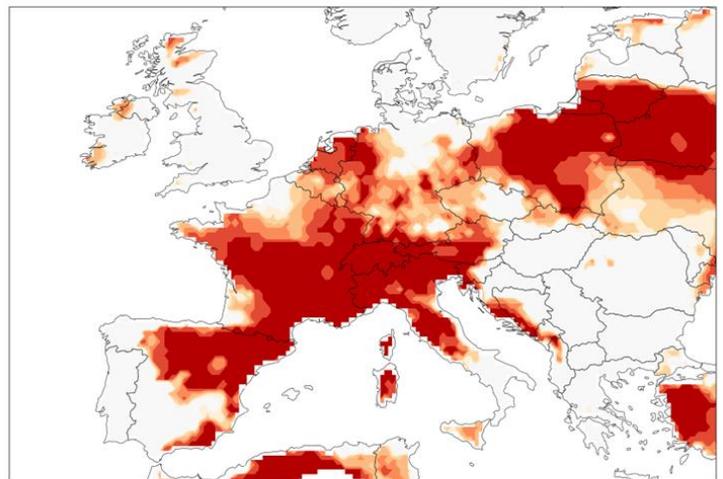


46.0°C New all time* French record
 at Vérargues on June 28th 2019
 (Météo France data)

*Since the beginning of regular measurements

The heatwave that struck large parts of Europe during the last week of June 2019, broke several historical records at single locations in France, Switzerland, Austria, Germany, the Czech Republic and Spain.

- The **French** government decided to postpone a national school exam.
- In the region of Catalonia in **Spain** wildfires destroyed several thousands of hectares.
- In **Switzerland**, train delays were induced by heat damage to the train tracks.

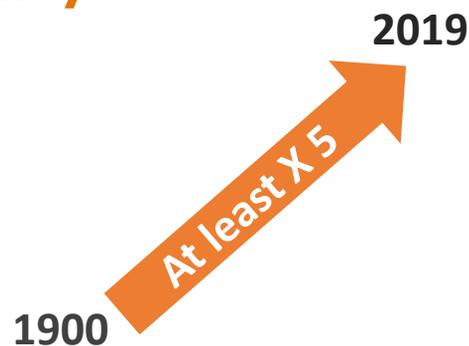


June **records** for the warmest three day average

The darkest red area ⇒ new records
Bright red ⇒ the second-highest etc...

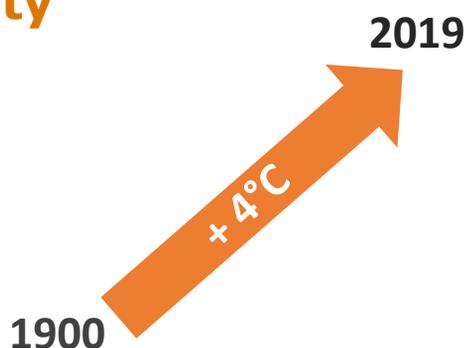
Change in frequency

- A heatwave that intense is estimated to be at least 5 times more likely due to human-induced climate change.
- Estimates from observations and models provide a wide range of increases in likelihood indicating the large degree of remaining uncertainty.



Change in intensity

- Observations show a very large increase in the temperature of the June heatwaves in France.
- Currently such an event is estimated to occur with a return period of 30 years, but based on observations similarly frequent June heatwaves in France would have likely been about 4 °C cooler a century ago.



More about the study

- The selected indicator, the three-day average of daily mean temperature, is relevant for health impacts. The observed three-day average over France, which was used as a threshold for this study, is 27.5°C
- The authors considered two spatial scales: the whole of France and one city, Toulouse (see the full study in the link below).
- Only June heatwaves were analyzed because they have more impact on school days and on professional activities. They also have a different trend from heatwaves in July and August.
- Climate models have systematic biases in representing heatwaves at these scales and show smaller trends, more year-on-year variation and fewer really severe heatwaves than the observations. They simulate a probability increase of such a heatwave by a factor of 2 to 20.

Several scientists from the [eupheme.eu](https://www.eupheme.eu) project have participated in this study.

The full study: <https://www.worldweatherattribution.org/human-contribution-to-record-breaking-june-2019-heatwave-in-france/>