

## **EUCLEIA: EUropean CLimate and weather Events: Interpretation and Attribution**

### **Description**

Climate change is expected to impact extreme weather in Europe. There is therefore a clear need to adapt effectively to climate change, particularly in Europe, where recent heatwaves, floods and droughts have demonstrated the vulnerability of European citizens to extreme weather. However, scientifically robust information about the extent to which recent extreme weather can be linked to climate variability and change is often lacking. There is therefore a clear need to develop better information on weather and climate risks as part of the operational capacities in the climate change context of GMES.

EUCLEIA will develop the means to provide reliable information about weather and climate risks by developing a quasi-operational event attribution system for Europe. This system will be used to investigate heat waves, cold spells, floods, droughts and storm surges by means of developing a comprehensive set of diagnostics of the processes under study. It will provide well verified assessments of the extent to which such weather-related risks have changed due to human influences on climate. It will also identify those types of weather events where the science is still too uncertain to make a robust assessment of attributable risk.

EUCLEIA will work closely with targeted stakeholder groups, including the insurance industry, regional managers and policy makers, general public and the legal field, to establish user requirements for event attribution products and to facilitate the development of climate attribution strategies. The attribution system developed by EUCLEIA will deliver reliable and user-relevant attribution assessments on a range of timescales; on a fast track basis in the immediate aftermath of extreme events, on a seasonal basis to stakeholder groups and annually to the scientifically prestigious annual attribution supplement of the Bulletin of the American Meteorological Society.

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

---

**Source URL (retrieved on 13 ago 2024 - 00:16):** <https://www.bsc.es/ca/research-and-development/projects/eucleia-european-climate-and-weather-events-interpretation-and>