



The international symposium **Climate change & Water 2022 under the theme of extremes** will be held on May 31 and June 1 and 2, 2022, in Tours in the Centre-Val de Loire region of France. This international conference is open to the academic world and to socio-economic partners concerned by the variability of the water cycle and adaptation to extreme events.

The purpose of this call for papers is to orient the reflection and exchanges not only on the **observation** of the acceleration of the physical, chemical, biological and ecological effects of climate change but also on the proposed adaptation strategies at the local level. **Adaptations** in response to observed or anticipated changes may be related to specific disciplinary fields (ecology, biology, technological innovation, hydrology and social sciences) or may be transversal (environmental management, resource management). Feedback on concrete case studies and specific **success stories** will be particularly welcome during this conference. In addition, as **water, energy, food and ecosystems form an interconnected nexus** that plays a central role in the provision of resources and services necessary to sustain human activity, studies proposing **how this nexus is affected by climate change**, precipitation and land cover as well as by economic development, agriculture and urban growth will be highly valued.

By illustrating the diversity of impacts of climate extremes on the water cycle, the objective of the conference is to understand how water issues are understood, from the ecosystem to the large region, through the different functional and institutional or socio-political scales (Region, Department, Communities of communes, Water Agency, but also city, neighborhood, consumer associations ...). The objective will be to share the state of knowledge, the obstacles and the drivers of adaptation between the different actors.

In this 2022 edition of the conference, extreme drought will be highlighted. In addition, as this culture is particularly important in the Loire Valley, a focus on wine production is proposed. These choices do not exclude communications on other extremes or other environments.

Climate change will be addressed according to **4 thematic axes**. Paper proposals should address at least one of these themes, or deal with case studies that can address the themes in a transversal manner. Papers may address climate projections, hydrological modeling, environmental impacts of change, and environmental and societal response and adaptation.

Evolution and acceleration of the effects of climate change on the water cycle

What are the observed effects of climate change? What are the signs of a possible acceleration? How is the impact of climate change on water resources assessed? Are extreme events more of a concern than the effects of the average warming trend?

Understanding extreme weather events and forecasting

What about the detection and attribution of extreme events (session co-hosted by ECRA). What are the environmental effects of extreme weather events such as droughts, floods, flash rains and heat waves? Based on our understanding of the mechanisms, what predictions can we make to help manage water in environments during climate extremes? At what scales of space and time?



Management, public policies, governance and strategy

In the face of climate extremes, what strategies are developed or implemented? What are the levels of actors involved, the spatial scales of decision-making and implementation, the tools and regulations? Are there case studies that would show what works and what does not? What strategies should be further developed? Is effective governance still central to building resilience?

Adaptation to water variability and extremes

What forms of adaptation are implemented in the face of climate extremes? Do societies have to adapt faster than living organisms? What about the perceived link between water, energy, food and ecosystems?

Papers can be from disciplines such as: life and earth sciences, humanities and social sciences, and policy and decision sciences, or case studies (cross-cutting approaches). Two-way papers involving researchers and managers will be particularly welcome.

- Two presentation formats are possible: oral or poster communications.
- Proposals to be submitted before **November 1, 2021** on the conference website: [Abstract Submission](#)
- Contact : ccw2022@sciencesconf.org

All speakers will be invited to publish their papers in a special issue of an international peer-reviewed journal with an impact factor.