

WATER, DROUGHT AND FOOD SECURITY SESSION

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As the impacts of climate change intensify, meteorological, agricultural and hydrological drought, together with hydrogeological drought and the resulting decline in groundwater levels, aquifer contamination and salinization, and land subsidence and sinkhole formation caused by over-abstraction, have become today's realities and turned into a "Water Security" problem. On the other hand, water security is the guarantee of food security. The depletion of surface water and groundwater resources, which must be managed as a "single source", the deterioration of water quality and the growing demand for irrigation water have become a problem that directly threatens food security as much as water security.

This session will provide a platform to discuss how earth sciences can contribute to achieving the targets of UN Sustainable Development Goal 6 (SDG 6 – Clean Water and Sanitation), and aims to address the water–drought–food relationship from an earth sciences perspective.

We welcome contributions on topics including, but not limited to:

- Drought impacts on groundwater and surface water, monitoring and early warning
- Conjunctive management of surface water and groundwater, over-abstraction and aquifer recharge
- Water security for food security: irrigation efficiency and sustainable agriculture
- The water–energy–food nexus in practice
- Water quality, contamination and salinization
- Sinkholes, land subsidence and water-related geohazards
- Remote sensing, modelling and decision support systems
- Water governance and the science–policy interface

The session invites researchers from different disciplines to share their work on transferring scientific knowledge into society's decision-making processes on water and food security. We look forward to your valuable contributions.