



Special Session (SS05) on:

Variability and Change on Hydro-Meteorological Extremes and Hazards

Organizer:

Margarida Lopes Rodrigues Liberato, Universidade de Trás-os-Montes e Alto Douro, Vila Real & Instituto Dom Luiz, Universidade de Lisboa, Lisboa, Portugal. E-mail: mlr@utad.pt

The aim and scope:

Weather and climate extremes have recently gained greater relevance to the general public and policy makers, partly as a consequence of the large number of weather-driven hazardous events and associated human, environmental and property losses that have occurred worldwide in the last decade. Rising sea-levels and increased frequency and severity of extreme cyclones pose new threats to coastal communities. Understanding extreme events is even more relevant in a framework of changing climate since coastal and transitional areas are strongly impacted by these events.

This session is designed to share information on new research to better understand the variability and change in frequency and severity of extreme events at both the regional and global scales and the reasons behind this variability. This is a fundamental step towards improved disaster risk assessment, reduced uncertainty, better decision making and sustainable regional development.

For this session we welcome authors to submit research on, but not strictly limited to:

- Extreme weather or climate events: case studies or climatological analysis;
- Compound, concurrent, and cascading events analysis;
- Variability at different temporal and spatial scales;
- Climate change assessment, impacts, and/or attribution;
- Dynamical mechanisms associated with extremes;
- New approaches and methods for observational and numerical analysis;
- Risk and uncertainty assessments;
- Applications: big data management and data visualization for scientific research, Artificial Intelligence methods and tools applied to extreme events assessment.

SUBMIT AN ABSTRACT