

CALL FOR SESSIONS

STATUS AND CHALLENGES OF GEO-HYDROLOGICAL NATURAL HAZARD MODELING AT THE REGIONAL SCALE AND BEYOND.

Alvioli Massimiliano⁽¹⁾, Marchesini Ivan⁽¹⁾ and Moscatelli Massimiliano⁽²⁾

- (1) Consiglio Nazionale delle Ricerche, Istituto di Ricerca per la Protezione Idrogeologica, Perugia, Italia
- (2) Consiglio Nazionale delle Ricerche, Istituto di Geologia Ambientale e Geoingegneria, Monterotondo, Italia

ABSTRACT SESSION

Modeling and understanding natural hazards and related risks is crucial in light of the challenges posed by global population growth, land consumption and climate change. To face these challenges, we need to analyze, on the spatial and temporal domain, the processes causing hazards and assess their impacts, to provide decision-makers with the tools to govern ongoing changes.

In this session, we would like to gather scientific contributions addressing the study, analysis and/or modeling of geo-hydrological natural hazards at regional, national and/or global scales. We welcome contributions concerning: (i) the development of procedures, tools and products in which geo-hydrological processes are analyzed over vast areas, either in the domain of statistical/machine learning and physically based models; (ii) implementation strategies for methods at different spatial and/or temporal resolutions, with illustration of their application for civil protection and for planning adaptation activities, to cope with climate and societal change; (iii) existing datasets and data catalogs aimed at modeling phenomena on regional scales and above, as well as contributions describing methods and approaches to be used to quickly and efficiently manage, analyze and model the vast spatial/temporal datasets made available by space agencies, research bodies and public institutions.