

Special Session

Multi-Hazard Risk Assessment for Resilient and Sustainable Urban Areas

Over the past years, a considerable volume of work has been conducted to assess urban risks resulting from individual natural hazards. However, assessing the probable cumulative impacts of multiple hazards has not yet entered the mainstream of research and urban management practice. Given that urban risk is a multi-dimensional matrix that includes multiple elements at risk (people, buildings, and infrastructures), multiple hazards (geophysical, meteorological, and hydrological), multiple temporal scales (the present and future points in time) and multiple types of vulnerabilities, it is of utmost importance to deepen current knowledge regarding their direct and indirect interrelations. Understanding multi-hazard risk can also help to prioritise resilience actions and form the basis for exploring institutional adjustments aimed at improving buildings and populations' ability to cope with the impact of natural and anthropogenic hazards.

In this framework, the present Special Session intends to create a platform for a constructive and mutually enriching dialogue based on the perspectives and contributions from different disciplines and approaches — from researchers to policymakers, city planners and emergency authorities. Contributions addressing theoretical developments, practical applications and case studies on (but not restricted to) the following topics are welcome:

- Compound hazards and multi-risk assessment
- Multi-hazard disaster scenarios
- Adaptive Capacity
- Urban sustainability and resilience
- Monitoring, screening, and evaluation of multi-risk management

Conveners:

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