Session Title

Data and AI for Disaster Risk Reduction

Integrating open science and its core values into disaster risk reduction (DRR) has become vital for uniting global efforts to address hazards during crises. With the rapid evolution of AI, decision-making processes in DRR are increasingly enhanced, thereby optimizing response mechanisms before, during, and after emergencies. As disasters become more complex in a globally connected world, the need for robust, interoperable, and innovative open science infrastructures is more critical than ever.

Session

Description

Proposed in 2019, the Global Open Science Cloud (GOSC) is entering a new era shaped by AI-driven open science models and next-generation digital ecosystems. In line with the UNESCO-led International Decade of Sciences for Sustainable Development (IDSSD), GOSC is dedicated to building a resilient, inclusive, and interoperable open science environment that supports global research and offers scalable solutions to challenges such as the UN SDGs.

Against this backdrop, GOSC IPO is organizing a session to explore AI-enhanced Open Science Clouds (OSCs) in advancing DRR. Discussions will highlight how AI and open science convergence can significantly improve disaster preparedness, response, and recovery. The session will also address technical, policy, and ethical challenges of AI deployment in DRR, fostering dialogue among scientists, policymakers, technologists, and global stakeholders to share best practices.