



## **Extreme Events and Disaster Risk Reduction - a Future Earth KAN initiative**

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The topic of Extreme Events in the context of global environmental change is both a scientifically challenging and exciting topic, and of very high societal relevance. The Future Earth Cluster initiative E3S organized in 2016 a cross-community/co-design workshop on Extreme Events and Environments from Climate to Society (<http://www.e3s-future-earth.eu/index.php/ConferencesEvents/ConferencesAmpEvents>). Based on the results, co-design research strategies and established network of the workshop, and previous activities, E3S is thriving to establish the basis for a longer-term research effort under the umbrella of Future Earth. These led to an initiative for a Future Earth Knowledge Action Network on Extreme Events and Disaster Risk Reduction. Example initial key question in this context include: What are meaningful indices to describe and quantify impact-relevant (e.g. climate) extremes? Which system properties yield resistance and resilience to extreme conditions? What are the key interactions between global urbanization processes, extreme events, and social and infrastructure vulnerability and resilience?

The long-term goal of this KAN is to contribute to enhancing the resistance, resilience, and adaptive capacity of socio-ecological systems across spatial, temporal and institutional scales, in particular in the light of hazards affected by ongoing environmental change (e.g. climate change, global urbanization and land use/land cover change). This can be achieved by enhanced understanding, prediction, improved and open data and knowledge bases for detection and early warning decision making, and by new insights on natural and societal conditions and governance for resilience and adaptive capacity.