

Side event at the GEWEX OSC 2018 for the Knowledge Action Network on Emergent Risks and Extreme Events (RISK KAN)

*The RISK KAN will provide an open **platform for scientific communities from across science disciplines and engineering working on extreme events, disaster risk reduction and governance**. Under the umbrella of Future Earth, Integrated Research on Disaster Risk (IRDR) and the World Climate Research Programme (WCRP) it is envisioned to exchange information, knowledge and data, and to co-define a collective scientific focus beyond any single partner. The aim is further to engage with societal actors from local/national/international legislation, administration, business sector, practitioners, civil society and UN frameworks **to co-design research agendas and co-create new knowledge for effectively reducing disaster risks through partnerships and joint outputs**. This collaboration will ideally stimulate groundbreaking and solution-oriented scientific research and synthesis with major impact on the development of effective strategies for transitioning development from a risk accumulation to a risk reduction process.*

*The **WCRP can provide the latest knowledge and expertise on state-of-the-art science, process understanding and model simulations of weather and climate extremes** and relevant observational weather and climate data. The exploitation and integration of these resources with data sources and knowledge on disasters and societal and biospheric interactions with climate in the RISK KAN offers opportunity to major scientific advances in future disaster risk reduction and management. This will also help WCRP with its development of actionable information and will directly benefit some of WCRP's activities, such as those related to understanding and modeling compound events or identification of impact-relevant environmental thresholds and tipping points.*

*The RISK KAN will follow the overarching principles of Future Earth KANs, which entail that the KAN activities are **Solution-oriented, Collaborative, Synthetic, Open, Inclusive, Cutting-edge and Innovative**. The RISK KAN has its roots in a Future Earth Initiative (Extreme Events and Environments – From Science to Society) and is currently being established as a formal Future Earth KAN. The founding organizations (Future Earth, the Integrated Research on Disaster Risk (IRDR) and WCRP) contribute with further input and support, initially through workshops and side-events to inform, engage and gather input for the development (including the vision document) of the RISK KAN. In that context, the IRDR community has organized a RISK KAN workshop in Tokyo, Japan (November 2017) and WCRP organizes this side-event during the GEWEX Open Science Conference in Canmore, AB, Canada (May 2018).*

Objectives of the WCRP side event:

- Introduce RISK KAN to the climate research community (Status, Vision, Events, Documents, Open Network, etc.)
- Generate support from and participation of the WCRP and larger climate research community to the RISK KAN; as a possible mechanism towards climate service on extremes and source of inspiration for climate research questions.
- Solicit input/comment for the RISK KAN vision document, particularly related to climate research on extremes.
- Gather how current GC-Extremes related research is already relevant to the scope of the RISK KAN and what decision-makers/users we are already collaborating with
- Brainstorm how GC-Extremes can benefit from being engaged in the RISK KAN, what decision-makers/users to involve, ways to initializing/stimulate collaborations

Organizers:

Jana Sillmann, Xuebin Zhang, Sonia Seneviratne, Lisa Alexander, Gabi Hegerl, Markus Reichstein in collaboration with IRDR and Future Earth

Format:

- Expected number of participants: max. 50
- Venue: Coast Canmore Hotel
- **Time: Friday afternoon, May 11th (2 x 1.5 hours)**

Content:

- 1 presentation on RISK KAN (Markus Reichstein)
- 1 presentation on related WCRP GC-Extremes work (Jana)
- 1 presentation from IRDR (TBA)
- Possibly 2 shorter presentations:
 - Copernicus Climate Change Service (Carlo Buontempo, remotely) to give general overview on the structure and the objectives of C3S with a specific emphasis on the data infrastructure (e.g. Climate Data Store and the toolbox) before making a few concrete example of how such an infrastructure could be used to address specific challenges in different sectors (e.g. water, agriculture, energy and insurance).
 - Compound events (Jakob Zscheischler/Bart van den Hurk)
- General discussion
- Focus group discussions and summary (in 2nd half of the event)

Please write an email to jana.sillmann@cicero.oslo.no if you are planning to attend the RISK KAN side event.