## Climate Impact and Risk Assessment National Meeting



11<sup>th</sup> and 12<sup>th</sup> September 2019 University of Leeds

The meeting will be a platform for the UK climate impacts and resilience communities to come together and hear about the latest research for a wide range of global climate impacts, including for use in risk assessments. It builds on the success of the first meeting, in Bristol, by having themes that focus on key methodological issues and current assessments, notably the Intergovernmental Panel on Climate Change (IPCC) AR6 report, and the 3rd UK Climate Change Risk Assessment (CCRA3).

This year, we broaden our base by inviting the resilience community to join in sharing the wide range of science performed in the UK, and discuss synergies. The meeting scope is similar to that of the IPCC Working Group II, and includes (but is not limited to), the following sectors: agriculture, land use/change, hydrology, health, extreme weather, energy and economy. Research can be global in nature, or specific to a certain region, but does not have to be related to the UK.

Each session will be made up of one invited talk and submitted talks by members of the community. There will also be time for discussion on a) how the community can respond to the changing UK funding situation, b) how the community may contribute in a consolidated way to IPCC AR6 and CCRA3. Abstract submission has closed, and this event is open for registration to attend.

Registration is now open! Please register using the QR code, or this link to the registration form:

http://bit.ly/ClimateRiskUK

#### For updates:



Deadline for registration: 31st August 2019

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### Day 1: 11<sup>th</sup> September

#### Session 1: Answering impacts questions with climate models

Keynote Speaker: Dame Julia Slingo FRS - former Chief Scientist at the Met Office

Climate models contain a wealth of information that characterise the atmospheric states that lead to climate impacts and risk. Teasing out this information is not trivial and a range of methods are available:

- Climate model ensembles can be used with impacts indicators, such as flooding or heat stress and results analysed in order to determine the location of impacts and the associated rates of change;
- ii. Climate ensembles can be used with impacts models, as a part of a chain; and
- iii. An integrated assessment model may be used.

This session examines the questions that can be asked of climate and impacts models, and asks which combination of models is best suited to answering those questions.

#### Session 2: Interacting and transboundary risks

Keynote Speaker: Rear Admiral Neil Morisetti - University College London

Climate risk assessment is a field that seeks to frame climate impacts in a way that informs political and societal decisions, including both mitigation and adaptation. Methods to date, which have produced useful results, focus largely on single risks. However, the complex multiple causal pathways that act across space and time to determine risk present a challenge for risk assessment, especially when risks are transmitted across sectors and international boundaries. In these situations, understanding the interconnected nature of systemic risks — and their amplification or attenuation through social processes and responses — is critical.

This sessions examine progress in assessing interacting risks, including, but not limited to, use of expert judgement; interactive scenario building; global systems science and big data; innovative use of climate and integrated assessment models; and methods to understand societal responses to climate risk.

#### Day 2: 12<sup>th</sup> September

# Session 3: Assessing and managing climate-related risks to build resilience in the UK

Keynote Speaker: Jim Hall - University of Oxford

There is an urgent need to build resilience to climate variability and change in the UK. Informing the extensive preparations needed to manage climate-related risks, avoid damages, and realise emerging opportunities, is a grand challenge for climate change science. This session invites submissions on characterising and quantifying climate-related risks, which could include new methods, new sectoral knowledge and place-based assessment; and submissions on the management of climate-related risks to build resilience - which could include the examination of adaptation barriers and governance, the effectiveness of adaptation strategies and transformational change.

## Session 4: Researching climate impacts and resilience in the Global South

Keynote Speaker: Declan Conway – Grantham Research Institute, London School of Economics

This session will feature ODA-compliant research that:

- i. Addresses the impact of climate change on infrastructure, energy, health, agriculture and a range of other areas in the Global South;
- ii. Analyses the effectiveness of adaptation and mitigation responses to climate impacts including collaborations between academia and the private sector/civil society
- iii. Assesses resilience to climate change and recommends means to improve this through policy and practice, including analysis of (lack of) adoption by communities in the Global South of recommended responses

By mapping out ongoing research in this area across a range of disciplines including the social sciences, the session will foster debate on how multidisciplinary research through initiatives like the Global Challenges Research Fund complements and interacts with climate modelling and impact work; and the gaps that remain in the UK landscape for ODA-funded climate research.