

EGU22-8460

<https://doi.org/10.5194/egusphere-egu22-8460>

EGU General Assembly 2022

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Climate X: an interdisciplinary approach to projecting multiple climate-related risks and impacts

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With ever increasing risks and impacts from climate change, there is an urgent need for adaptation information which is relevant and useful to policy makers, businesses and the general public. At Climate X we use an interdisciplinary, impacts-motivated approach to adaptation; combining multiple climate and hazard models to give a holistic view of risk, and engaging end-users at every stage. Our first version product can project the risks and impacts of climate change-related pluvial and fluvial flooding, extreme heat, landslides, subsidence, and sea level rise, all at street level UK-wide. We quantify these risks and the financial costs they could incur under low (RCP 2.6) and high (RCP 8.5) emissions scenarios out to 2080. We deliver risk and impact assessments via an easy-to-use interface, along with relevant and decision-able risk summaries. Aligning robust science at scale with user requirements and expectations is not without its challenges. I will outline our approach to multi-hazard climate risk modelling, and discuss some of the successes and challenges we have had in developing a tool which is aligned with the needs of stakeholders, businesses and other end users.