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Session 4: Climate Hazards and Risk forecasts

Title: Compound heat events – extreme, impactful, and unknown

Extreme heat events are highly-researched in the scientific literature, providing a solid understanding of how individual extremes have changed in the past, and how they are likely to change in the future. Understanding these events allows us to prepare for them, potentially saving lives and preventing substantial financial losses. However, given the increasing frequency of extreme weather events, changes in circulation regimes, and certain impacts of climate change, we must prepare for a future with interacting and/or co-occurring climate hazards – known as compound events. Without a thorough understanding of the impacts of compound events we risk being underprepared for highly impactful and unprecedented future extremes. This talk will cover my recent and current research on compound heat events, and some of the issues that this research field is facing.