Damien Irving (CSIRO)

Session 8: Extreme event attribution, likelihoods and impacts

Title: Using large ensembles to quantify the likelihood of extreme

events

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In the aftermath of unprecedented climate extremes such as record-breaking heatwaves and flooding rains, large seasonal and decadal forecast ensembles are increasingly being used to assess the likelihood of these events. Our team at CSIRO (under the working title: "CSIRO Large Ensemble Assessment Project") has started applying the so-called UNprecedented Simulated Extremes using ENsembles (UNSEEN) approach in the Australian context (e.g., to the extreme east coast rain in February/March 2022). In this presentation we'll share our progress so far.