



Storylines as a way of characterizing compound events

Ted Shepherd

University of Reading, Meteorology, United Kingdom (theodore.shepherd@reading.ac.uk)

High-impact climate events are generally compound events. This property severely challenges statistical approaches to extreme event characterization, as well as bias correction methods. An alternative approach to characterizing extreme events is through the use of storylines (or narratives, or tales), which are physically-based unfoldings of past events or of plausible future events. No probability of the storyline is assessed. Rather, emphasis is placed on the understanding of the factors involved, and the plausibility of those factors (or of changes in those factors). Storylines are thus ideally suited for the understanding and characterization of compound events, and the construction of counter-factual events. Storylines are analogous to pathways in causal networks and, as with causal networks, stand in contrast to a purely statistical description of a system. This talk will outline the rationale for a storyline approach to compound events and illustrate how it can be used.