

Sub-seasonal clustering of precipitation extremes - the statistics, the dynamics, and the impacts

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Abstract:

When several heavy precipitation events that happen in close succession within a couple of weeks – referred to here as sub-seasonal temporal clustering - the impacts on flooding can be substantial. I will first present example cases to introduce the concept. I will then discuss methodological approaches suited to identify clustering and to statistically model the association between large-scale atmospheric patterns and clustering. Finally, I will present climatological analyses and discuss changes in clustering in a warmer climate.