Contribution ID: **35**   Type: **Invited Speaker**

Invited Speaker - Non-limiting spatial extremes

Tuesday, 15 August 2017 09:00 (1 hour)

Many questions concerning environmental risk can be phrased as spatial extreme value problems. Classical extreme value theory provides limiting models for maxima or threshold exceedances of a wide class of underlying spatial processes. These models can then be fitted to suitably defined extremes of spatial datasets and used, for example, to estimate the probability of events more extreme than we have observed to date. However, a major practical problem is that frequently the data do not appear to follow these limiting models at observable levels, and assuming otherwise leads to bias in estimation of rare event probabilities. To deal with this we require models that allow flexibility in both what the limit should be, and in the mode of convergence towards it. I will present a construction for such a model and discuss its application to some wave height data from the North Sea.

Presenter: WADSWORTH, Jenny (Lancaster University)