



The generic danger and the idiosyncratic support

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This contribution argues two main points. First, that generic landscapes used in some modelling studies sometimes have properties or cause simulation results that are unrealistic. Such initially flat or straight-sloped landscapes, sometimes with minor random perturbations, e.g. form the backdrop for ecological simulations of vegetation growth and competition that predict catastrophic shifts. Exploratory results for semi-arid systems suggest that the results based on these generic landscapes are end-members from a distribution of results, rather than an unbiased, typical outcome. Apparently, the desire to avoid idiosyncrasy has unintended consequences.

Second, we argue and illustrate that in fact new insights often come from close inspection of idiosyncratic case studies. Our examples from landslide systems, connectivity and soil formation show how a central role for the case study – either in empirical work or to provide model targets – has advanced our understanding.

Both points contribute to the conclusion that it is dangerous to forget about annoying, small-scale, idiosyncratic and, indeed, perhaps bad-ass case studies in Earth Sciences.