Interactive comment on “Future hot-spots for hydro-hazards in Great Britain: a probabilistic assessment” by Lila Collet et al.

Anonymous Referee #3

Received and published: 12 September 2018

The manuscript “Future hot-spots for hydro-hazards in Great Britain: a probabilistic assessment” provides an innovative approach to identify possible changes in frequency, magnitude, duration as well as the time of both floods and droughts. The paper is in good structure and clear information on results. While I feel some major revisions are required in terms of methodology and discussions before it can be considered further for publication.

1. Introduction: An interpretation on existing approach for projecting future hydro-hazards, not only for UK, but also for other places worldwide, should be included. It will help readers to identify clearly the improvements from the existing knowledge and the innovation of the study.

2. Line 11 Page 4: What is exactly the methodology or indexes of drought characteristics? It is not sufficient to just tell where can find the R package.

3. Result: It would be much better to show how the climate will change in the scenarios? And for each Figures shown, how the reasons for such changes? Please just be more clear on how these hydro-hazards respond to what kind of changes in which climate parameters? 4. Line 1 Page 17: Using climate change projections of only one GCM model is only can be acceptable if you show how these characteristics of floods and droughts quantitatively to each unit change in key climate characters. Such information can be also valid for other GCM model outputs.