

Interactive comment on “Millennial scale variability in high magnitude flooding across Britain” by N. Macdonald

Dr Macdonald

neil.macdonald@liverpool.ac.uk

Received and published: 19 November 2014

I would like to thank the reviewer for making the comments on the paper and for recognising the potential of such a paper to the evidence base for long term variability of flooding in the UK, providing an opportunity to move beyond the relatively short gauge series available.

Below are comments directly addressing the concerns of anonymous reviewer 2.

Agree. I accept the reviewers comment and reference to the UK will be removed particularly in the short running title and replaced with Britain.

Agree. The reviewer is correct it is the 90th percentile of the annual maximum series

C5216

Agree. Clarification on the series construction for the Thames (Oxford) will be added to the paper, explaining the linking of the dataset to the upstream site.

Accept. Whilst the intention of the paper was to provide limited catchment modification information a brief summary table for each of the different sites could be added explaining how catchment modification is accounted for.

Accept and agree. A greater discussion of flood seasonality as also suggested by reviewers 3 & 4, I propose to add this to the amended paper and have been working on this are with the intention of adding to the paper.

Agree. The inclusion of a discussion section addressing the northern England flood rich phases will be added to the amended paper. This is a good suggestion and am grateful to the reviewer for it.

Agree. The recent phase of flooding and its relation to the study is very interesting, unfortunately the acquisition of data for this period is challenging though I will attempt to acquire it for the revisions. The use of unprecedented rather than exceptional would be preferential I agree, and will be amended.

Agree. I will expand the discussion section further to explore the implications of the solar forcing further, though there is limited literature out there examining solar forcing and flooding explicitly, there is some potential for potential future implications as identified by the reviewer.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 10157, 2014.

C5217