

Interactive comment on “Floods in the Niger basin – analysis and attribution” by V. Aich et al.

Anonymous Referee #1

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This paper presents an informative and authoritative analysis of the flooding dynamics in the Niger River basin for the past century. It systematically approaches a variety of hypotheses in order to test the explanatory power of possible causes. Moreover, it provides a good introduction to related publications. It is generally a well written paper which deserves publication in NHESS. I suggest the paper should undergo minor revisions before publication. In general I think the paper is lacking in the following:

1. I think the selection of the “Sudanian” region is questionable. A large part of it contains areas classically considered as “Sahelian”, it contains different geology (right-bank & left-bank), and many of the results are very similar to the “Sahelian” region (e.g. Fig 4,6,7,8). Hence, it does not add much information. Therefore I suggest to remove this region altogether.

2. The discussion section is mostly a synthesis of the results and lacks a broader anal-
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ysis of the implications of the results, and how this relates to hydrological and water management theory. Also, it would be interesting to discuss the generality of the method for other areas. The conclusion makes a small note on policy, which is good and could possibly be expanded in the discussion section. I suggest to rewrite it with a much broader perspective. In some parts the discussion is repetitive (relative to previous sections), which is boring to read.

In addition, I provide a number of specific comments in the attached pdf of the main text and the supplement.

Please also note the supplement to this comment:
<http://www.nat-hazards-earth-syst-sci-discuss.net/2/C2109/2014/nhessd-2-C2109-2014-supplement.zip>

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