Interactive comment on “Floods and climate: emerging perspectives for flood risk assessment and management” by B. Merz et al.

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We like to thank referee #1 for his/her comments. Especially the remarks on the different time scales and on the transfer in practice will help to improve the paper. Further, remarks such as “How can one justify the consideration of the global dimension for flood risk assessment at the local scale?” show that we need to be more explicit to properly convey our message.

Referee #1 argues that there are 2 ways to read our article: either as a summary of the Potsdam workshop or as a full review article. This paper is the central outcome of an EGU Topical Meeting (in Potsdam in October 2012). This meeting was dedicated to discuss innovative approaches and to develop new perspectives in the broad field
of how floods are embedded in the climate context. The manuscript is the attempt to organize the different aspects in this field within one paper, putting emphasis on how different ideas are emerging during the last years and how they are linked. Hence, this paper is not meant as a full review of the aspects on floods and climate. It touches so many aspects that it would not be possible to have a comprehensive review on all the aspects in one paper. We would have to dramatically reduce the scope of topics in order to come to a decent review paper. So our proposal is that we stick with our original intention, but better explain the background and aim of the paper, stating more explicitly that this is the outcome of the Potsdam EGU Topical Meeting and that we offer a perspective to connect different threads (e.g. non-stationarity, global context of floods) on the links between floods and climate.

Referee #1 proposes to extend the discussion on the applicability of the ideas in practice, under the consideration of the different time scales. Indeed, in section 3.3 ‘Flood risk management’ we have not explicitly addressed the different time scales. In the revised manuscript we will put more emphasis on the use of the ideas in practice and more clearly differentiate between the management time scales.

Referee #1 misses a framework that helps classifying the different statements and case studies and asks what is really new and emerging. We feel that the added value of the paper is that we have taken a broad view and have bound together the different developments in this broad and active research field. The paper integrates recent developments in different disciplines (meteorology, hydrology, paleoclimatology etc.) and for different time and space scales.

Referee #1 feels that “… the manuscript suggests a solution for the different challenges by establishing a common data-platform for floods. … it seems that this flood-platform is the only synthesis one can draw…”. We are very surprised by this statement. The conclusions section contains 5 subsections, each subsection proposing a way forward. We do not understand why referee #1 seems to ignore the conclusions in 4.1-4.4 (and partly in 4.5) and reduces our conclusions to a common data-platform. But we are
open to proposals how we could frame our conclusions more explicitly.

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