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Interactive comment on "On the benefit of high-resolution climate simulations in impact studies of hydrological extremes" *by* R. Dankers et al.

L. Pfister (Editor)

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Dear authors, both reviewers agree upon the fact that your paper is well written and formulated. However, with respect to both the reviews received, as well as your comments sent back to the reviewers, it appears that certain issues still need to be addressed in a revised version that you are invited to submit. Concerning the comments made by reviewer 1: please consider the issue of the potential impact of not including the influence of regulation/lakes in your hydrological model (how this might affect or not your results). Clearly state why the current model structure (not considering regulation or

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lakes) is able to reproduce discharge in a satisfactory manner (e.g. influence of scale effect, etc). In the current version it looks as if the paper too strongly relies on the assumption that it is the climate input that causes the most important bias, rather than river regulation or lakes. The authors need to clearly show that this point is not only a strong assumption. Concerning the comments made by reviewer 2: several important issues need to be addressed or at least discussed by the authors in their revised paper (especially the sensitivity of the LISFLOOD model to the resolution of climatic input ; identification and discussion of sources of uncertainty ; etc.). In a review process, it is obvious that the authors are not supposed to automatically share the reviewers viewpoints. Nonetheless, I am convinced that taking into account in a revised version the issues that have been brought forward by both reviewers will certainly contribute to further clarify and improve the manuscript. Best regards, Laurent Pfister

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 2573, 2009.