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September 14, 2016

Dear Editor:

Thank you for addition guidance concerning this minor revision. Below is a discussion of the changes we have made to address the AE's comments (and by association those provided by the reviewer).

AE's Comments

I agree with the reviewer that the new manuscript addresses most of the issues raised in the previous reports. I also agree that it will be very useful to readers to add to the conclusions section an overview of the main limitations, i.e. linked to the general applicability of the proposed methodology, and a clear statement of the main underlying assumptions. These are just minor revisions that will further improve the paper.

Reviewer Comment

I believe that the authors have correctly addressed most issues raised during the review. However, a general theme raised during the review was about explanations on methodological aspects that were obviously not intuitive or straightforward. A number of relatively gross simplifications were made to model different processes, some of them for convenience and some of them due to lack of specific data. The authors claim at the end of the conclusions that the method can be used in principle in any region in the world with radar based information available. I think that this is an overstatement, as it is likely to be situations in which the assumptions and simplifications would not hold. The limitations on the applicability of the methodology as used in the paper should be clearly stated at the end, indicating that it is potentially applicable to other basins under certain conditions. Also, a clear statement with the main assumptions should be included in the conclusions.

We agree that the limitations to the method were not made clear in the conclusions section. The last paragraph of the section has been expanded to mention the assumptions made when applying the method to our study area, as well as including what variables/conditions were not included in the method. These points are now identified as limitations to the applicability of the method in other locations. The paragraph now reads:

" Here this method is applied to the UCRB and LCRB in the southwestern U.S., but could be applied to other regions of the U.S. and the world with variable climate and storm types where radar-derived precipitation estimates are available. In this study we

used set values for contributing area, drainage basin shape, time intervals of measurement, and recurrence intervals that can be changed based on the focus of future studies. However, it is also important to note that a number of assumptions were made in this study that simplified our analysis, most importantly: (1) space for time substitution, or regionalization, was used to increase the number of samples and assumed that observations were independent and sampled from the same distribution; (2) it was assumed that the time period length and the spatial and temporal sampling scales were sufficient to create a representative sample from the observations; (3) it was assumed that similar flood-generating and flow-routing mechanisms (and related variables such as runoff coefficients) were present in each basin regardless of size or location. These assumptions allowed us to form and apply the methods described here to our study area but may not apply to all areas. Other variables such as snowpack, elevation, land use, and climate change that were not included in this study should be explored in conjunction with this methodology to better understand controls on precipitation and flooding. The absence of these elements from the method here may limit the application of this method to other locations."

Thank you,

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