

Review

Title: Regime shifts in annual maxima rainfall across Australia-Implications for Intensity-Frequency-Duration (IFD) relationships

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Main topic of this manuscript is to provide the evidence of regime shifts in annual maximum rainfall time series of relevance to climate index in Australia. I think that the topic is relevant to hydrological communities. And I also think that the revised manuscript in current form has fairly well modified based on the first round reviewers' comments. The text is fairly well written and organized, but too long Introduction and Discussion & Conclusions. I recommend the authors to simplify wherever possible. I hope that the authors expand their research and consider the following suggestions to improve the manuscript.

Comments:

1. Line 233: I hope that the authors should clarify the version of 'Australian Rainfall and Runoff (AR&R)' because there was no mention of the AR&R 1999 in Introduction and AR&R 1999 suddenly appeared in line 233, I was really confused with other versions of AR&R. It should be explained the AR&R 1999 and the relation between different versions in Introduction.
2. Line 378: The authors considered a simple bootstrap procedure suggested by the referee #1. However, the authors did a repetition number of 100 times. I think that it is too small in the bootstrap resampling method. As the referee #1 said in the comments, I think that more repetition in resampling should be carried out since a small number of repetition causes large sampling error. If more repetition, the range of percent difference in rainfall intensity and the return period with zero crossing may be changed.
3. In Fig. 7, it would be better to provide the differences between rainfall intensities for two climate phases through resampling method for Melbourne and Brisbane. If the results of these two stations are provided in Fig. 7, the discussion and conclusions would be more reasonable.
4. In future research, it is needed to consider the non-stationary models and the return period definitions (the number of exceedance event and the waiting time in Salas and

Obeysekera (2013)) as suggested by referee

Minor comments:

1. Line 70: 'stationary climate assumption' n (i.e. -> 'stationary climate assumption'
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2. Line 201: potions -> portions
3. Line 225: 2.1 -> 2.3