

Interactive comment on "Rainfall and temperature estimation for a data sparse region" by R. L. Wilby and D. Yu

Anonymous Referee #2

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Referee 2 Review comments HESSD 10,1-44,2013. Rainfall and temperature estimation for a data sparse region. R. L. Wilby and D. Yu

Overall This is an interesting paper that deals with practical challenges of estimating rainfall and temperature statistics and time series for Yemen. It uses satellite data to predict the parameters for a simple weather generator that can then produce rainfall and temperature times series for impacts assessment. It is a welcome contribution to this technical area at a time when many projects ask for 'downscaled data' from Global Climate Models before even assessing the limitations of national climate data sets and developing adequate baselines for impacts, adaptation and vulnerability studies.

Major comments I do not have major technical comments but suggest the following:

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P3,23 I would expect some reference to global gridded climate data sets, e.g. developed by CRU P8,10 The split between a calibration data set and validation data set is very welcome but is a single year 2007 sufficient? Figure 3 shows that it was much drier. Please comment. âĂć I would expect some comments on difference between point and grid estimates and also the use of these tools for the estimation of catchment scale rainfall. âĂć I would be interested to know if the there was any analysis of TRMM or NDVI on a seasonal basis? âĂć Finally, although the data from Taiz was used because it was good quality are there any comments of its performance at other sites?

Minor comments P2,1 "Agencies" is a bit loose that this be a bit more specific about who is making adaptation decisions P3,3 "Appraisal for these kind of option" – grammar P3,17 Style?? "Former generations" Atkins is a company and some of the authors may still be around! P4,26 A reference is needed for the background socio-economic data P5,2 Are all these grey literature references reliable? P11,4 The different WG types are important . . .In Table 4 please be clear what WGALL and WGWH are by writing in full as there are so many acronyms it is difficult to follow if the acronym is only previously mentioned once.

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