

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

B. Schaepli (Editor)

bettina.schaepli@epfl.ch

Received and published: 23 August 2013

I agree with both reviewers that this well-written manuscript requires only minor revisions to be acceptable for publication in HESS and would like to thank the authors for having submitted their manuscript to HESSD. The value of the presented method for precipitation and temperature generation lies in its potential transferability to other data scarce regions. I would like to invite the authors to give detailed answers to the reviewers' comments and prepare a revised manuscript addressing these comments.

A have a few additional detail comments:

- Throughout the paper, the term "indices" and "parameters" are used more or less
C4360

interchangeably; sticking to one or the other would make it clearer that the indices are directly used as weather generator parameters.

- A short comment on the climate in the region could be useful.
- Any comment / reference on the quality of TRMM data for this region?
- I do not fully understand the temperature generator, especially the stochastic adjustment of the warmest day; does this mean that the sine-curve is shifted to the randomly generated warmest day or is the entire generated temperature series (including anomalies) shifted to the warmest day?
- And what do you mean by "determine the local unconditional mean temperature (T_{BAR}) given the Julian day using regression equations (Table 3) and assuming that the annual temperature regime follows a sine wave (...)": how does the Julian day enter the mean (add "daily") temperature?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 7575, 2013.