

Interactive comment on “A new method of rainfall temporal downscaling: a case study on sanmenxia station in the Yellow River Basin” by G. F. Chen et al.

Anonymous Referee #1

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This paper introduces an improved method to obtain sub-daily precipitation, which is useful in PUB region, thereafter, can reduce the uncertainties in hydrological prediction. Other different methods, including random distribution method, sinusoidal distribution method and the normal distribution method are compared with the new method.. The results can be referenced in the similar research. However, this paper can be improved in the following aspects: 1. The abstract is not very informative; it should include all of the keynotes more quantitatively and clearly; 2. What is the temporal resolution of Sanmenxia station? 3. Only one station can not represent the Yellow River basin. More stations need to be used and tested; 4. In page 2327, from 15 to 20, the description

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is very confusing and hard to understand. No figures No. are mentioned; 5. For each method except for the self-improved one, references should be mentioned, which will be convenient for reader to seek the sources; 6. The comparison in Fig 8 and Fig 9 are meaningless, the observed and simulated values should occupy the same axis, or time series of difference between them can be acceptable; 7. The English writing need to be improved. In fact, grammar errors are very popular.

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