

Interactive comment on “A globally calibrated scheme for generating daily meteorology from monthly statistics: Global-WGEN (GWGEN) v1.0” by Philipp S. Sommer and Jed O. Kaplan

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We thank the editor Mr. van Heerwarden for his helpful comments to our manuscript. The manuscript for GWGEN, a weather generator for precipitation, temperature, cloud fraction and wind speed using a hybrid Gamma-GP distribution, a hybrid-order Markov Chain and a cross correlation approach) has been revised and improved.

In summary, a bug has been fixed that now makes the quantile-based bias correction for the minimum temperature redundant and instead another quantile-based bias correction for the wind speeds intercept has been implemented to further improve the results. Furthermore we made several attempts to improve the manuscript text for clar-

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ity and style. This includes a schematic representation of the workflow, changes in the structure of the paper, more explanations to the figures and a fix of the notation in the equations.

The spatial autocorrelation, however, that has also been addressed by other reviewers, is to our believe, beyond the scope of this manuscript. Although we think that it is possible, we agree with the reviewers that it is not that simple and subject to further research. Already for the technical aspect we would need a few months to fix this issue. Nevertheless we think that this does not affect the utility of the weather generator for a wide range of applications and it will come in the future development of the model.

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