Earth System

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Discussions

Interactive comment on "Climate benchmarks and input parameters representing locations in 68 countries for a stochastic weather generator, CLIGEN" *by* Andrew T. Fullhart et al.

Anonymous Referee #2

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In reviewing "Climate benchmarks and input parameters representing locations in 68 countries for a stochastic weather generator, CLIGEN" I found an usefull dataset for calibration of CLIGEN parameters. The proposed results may support further applications not focused on climate data but that use them, as the authors state.

Data are available at the exposed link and easily accessible and usable, the manuscript is readable.

In lines 83-84 and 115-118 slightly mismatching statement are proposed. Using complete months in non continuous series could drive to incompatibilities in temporal comparison of the proposed parameters?

Overplotting occurs in figure 1, maybe a thematic raster "distance from nearest location" can enhance the information provided? Furthermore details on spatial coverage of the proposed parameters could be provided.

The collection and harmonization of international climate data encounters notorious obstacles, their once for all overcome falls in the goals of this work. The methods used are soundly reported, but -I miss an explicit criterion for gridded model temperature values: radiation is in ERA5 dataset. Why use gridded temperature and not radiation? -About SD RAD, the 2.6 closes on GLDAS-Ameriflux comparison, the proposed global parameters rely on the continue model of GLDAS 3h values?

I would expect 30y points to be fulfilling the requirements of 10y ones, it doesn't look so in figure 1. May the definition of time-series at line 11 be improved using "maximum" or "available" rather than "minimum"?

Somewhere in the text CLIGEN parameters are referred with no introduction (ie. lines 92, 236), their presentation would get the text easier to read.

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2020-135, 2020.