

## ***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 #1**

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The paper presents a serious attempt to develop and share a database for parameter values for CLIGEN so that CLIGEN can be used more widely around the world.

While data sources for individual weather variables were described in reasonable details. What is missing is the table summarizing the spatial resolution for each.

Based on my limited knowledge of various data sets, some, like precipitation, are clearly site-specific, while others are grid-based, interpolated, like temperature. How were temperature parameter values prepared for individual sites? Were gridded temp data mapped to individual precipitation sites through spatial interpretation techniques? The same applies to solar radiation data.

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Recognition of the issue with record length is useful, but not critical. In CLIGEN parameter file, the number of years of data is recorded. I would leave at that, Caveat Emptor!

(PS, I have had a close look at the parameter files generated. For 20-year data set. The years used are still 30.

As an example, randomly,

```
" LATT= -26.27 LONG= 117.78 YEARS= 30. TYPE= 3"  
)
```

Fig.1 Why are there more sites with 30-year data than those with 10? Any station with 30 year would also have 10 years of data?

Presentation is good, manuscript readable. All the equations require close attention though:

(1) 'n days' 'MEAN P' should not be used as variables in the equation. Equations need to be readable, clear, precise.

(2) The equation is wrong, once the summation sign is used. there is no need for all other terms. That is what the summation is for.

(3) Again 'Time Pk(i)', any variables with a space ' ' in them can lead to confusion

One bracket is missing from the equation in the third row in Table A2.

If there is space in the variable name, use ' ' for the variable.

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