

Review of: "Spatio-Temporal Analysis of Precipitation Patterns in Xinjiang Using TRMM Data and Spatial Interpolation Methods: A Comparative Study"

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Potential competing interests: No potential competing interests to declare.

I have reviewed the following manuscript entitled "Spatio-Temporal Analysis of Precipitation Patterns in Xinjiang Using TRMM Data and Spatial Interpolation Methods: A Comparative Study" and I think that the article is interesting and has the potential to make a significant contribution to the field. However, unfortunately, this paper cannot be accepted for publication in this form, and a deep modification is recommended.

1. The first recommendation is to translate all figures into the English language so they can be readable by all the world and understandable in relation to the manuscript (also, the authors mention figure 3 two times on pages 8 and 9, so you should correct the figures' numbering).
2. In the overview of the study area section (section 2.1.1.), you describe the study area without mentioning the climatic conditions. I suggest indicating the annual average of precipitation, the wettest season or month, and in which region there is the most variation. Also, the authors should define the annual, seasonal, and monthly temperature averages.
3. In general, the manuscript is poorly referenced and lacks many of them, but the authors should add those of the methods and analysis used (e.g., Mann-Kendall) and of the statistical indices. Some references can be added in a new column in tables 1 and 2, and the rest should be mentioned in the manuscript.
4. In section 3.1., the authors describe the results of correlation using the R^2 , but they don't indicate the significance of the RMSE despite it being mentioned in fig 2. Also, some references could be added in this section when they explain the R^2 value.
5. In the results section, the authors compare the results of the MLFMSSD-Net model with the Chirplet decomposition, which is not defined in the manuscript.
6. The discussion section is lost.
7. The conclusion is very vague and should be improved.

In conclusion, despite the importance of the study, it is a very technical work that dismisses scientific soundness and has a lot of shortcomings. So, I think that the work should be improved and well corrected before being resubmitted, and I encourage the authors to correct the work as soon as possible to be published.

My final decision is that the manuscript needs a major revision.