

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.

In my opinion, there are many objectives within this work that make it difficult for the reader to understand.

The number of stations is limited in relation to the km² of the region studied, most of them being located at the edges. In the southeastern part there are practically no stations (ground observations data).

Interpolations can be made from the meteorological stations with the aforementioned limitations.

If I understand correctly, the TRMM data are used as actual and interpolation models as forecastings obtained from ground observation data. I have no physical training, but if this were true, in Figure 2 "Comparison of site-measured precipitation data with TRMM precipitation data." we can see that there is a 15% difference.

If the objective of the work were to analyze the suitability of using an interpolation method, perhaps the work should be better contextualized and a bibliographic review of the interpolation methods used for the study of rainfall should be carried out.

The interpolation methods are known, so I believe that Table 1 could be dispensable if it is not interpreted within the text. On the other hand, the software used is not mentioned, bearing in mind that often each software uses different algorithms and may provide different results. For example, there is no mention of the type of model used in kriging.

Spatial maps are provided, but I believe they should be analyzed in greater depth. A detailed discussion section is also missing. A discussion section would also be welcome.

There are formal and graphic aspects that need to be reviewed. For example, the abbreviations provided in Table 1 should be the same as those used in the graphs and in the text, Chinese words in maps.

In my opinion, the manuscript needs major modifications and clearly select the objectives.