

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

Erum Aamir¹

¹ National University of Science and Technology

Potential competing interests: No potential competing interests to declare.

Spatio-Temporal Analysis of Precipitation Patterns in Xinjiang Using TRMM Data and Spatial Interpolation Methods: A Comparative Study	
Abstract	
1.	The study examines the efficacy of four spatial interpolation methods by analyzing TRMM 3B43 V7 satellite precipitation data from 1998 to 2019, which is 21 years. This is not enough; the author is requested to use a longer data span for accurate results, words. Like study [6], mentioned in the literature review, has used 50 years of data.
1.	The author is requested to be very specific in the abstract and mention the novelty of the study clearly in limited words. The author can add "This study is divided into four parts: 1) Validation of TRMM data accuracy; 2) Assessment of interpolation method accuracy; 3) Analysis of spatial and temporal precipitation distribution in Xinjiang; and 4) Examination of spatial variation in annual precipitation." From the Result and Analysis section
Introduction	
1.	The introduction needs major improvement. Kindly include 10-15 recent journal articles from the current year 2023-24 as well.
1.	2023 has almost ended, and the articles of 2024 have already been published. Still, there is no article from the year 2023 in the introduction. Journals start publishing 2024 articles online from late November and December. The author is requested to update the introduction.
1.	Mann-Kendall trend analysis was developed in 1945 and later updated too. The author is requested to add references from 2023 showing that Mann Kendall is still being used for trend analysis, especially for precipitation.
1.	The author is further requested to add references in the introduction to build the base for calculating R^2 , and RMSE, MBE, and BIAS.
Methodology	
5.	The methodology needs a little revision considering recent journal papers published in 2023.
6.	How the author has developed the indicators for assessing precipitation interpolation.
7.	The author is requested to calculate R2 squared as well.
8.	The author is requested to add recent studies/research papers using the same indicators for assessing precipitation interpolation.
Results and Analysis	

1. Kindly convert figure 7 into English so that the result of Theil-Sen median trend analysis combined with the Mann-Kendall test could be studied and reviewed

Conclusion

3. Update it accordingly after the above recommendations and review.

References

3. Reference revision is required; add 5 updated journal articles from 2023.
8. The author can do the revision and resubmit the article. Good luck!