

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

Ramgopal Sahu¹

¹ Sandip Foundation

Potential competing interests: No potential competing interests to declare.

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

I have reviewed the manuscript titled "Spatio-Temporal Analysis of Precipitation Patterns in Xinjiang Using TRMM Data and Spatial Interpolation Methods: A Comparative Study". I appreciate the author for his work and time spent towards analysing different category of data, which is normally a time-consuming task. The author has done a good job, and following are some review comments that may help to improve the quality of the manuscript.

Comments:

1. In INTRODUCTION: Historical/Theoretical background is missing and also third sentence in first paragraph suggesting the purpose of the work. Hence put in the last paragraph of the introduction.
2. In RESULT SECTION: you have used four evaluation coefficient techniques (R^2 , RMSE, MBE, and BIAS) to justify the optimal comparison b/w four interpolation methods. Now my question is how you have decided the best evaluation technique to justify the optimal interpolation techniques. I think you haven't used any scoring technique to decide based on the four-evaluation technique to pinpoint the optimal interpolation method. I suggest go for "Compromise programming technique"
3. The paper does not include a DISCUSSION SECTION, and although many results are presented, they are not analyzed or put into context for the reader. Adding interpretation of the results would clarify the contribution to the field this paper is providing and help convey information to stakeholders.
4. The interpretation of data should include a discussion of significant and insignificant results, and the differing conclusions that can or cannot be drawn based on the results of significance tests.
5. The paper has many flaws and grammar mistakes, which need a through revision before publication, below are some identified flaws and grammar mistakes
 - a. In RESULT SECTION: the description title of Section 3.1 "TRMM Data Accuracy Validation Analysis" need clarity. I suggest change to some different title.
 - b. In RESULT SECTION: the description title of Section 3.3.1 "Spatial Distribution haracteristics" in having spelling mistake. I think it would be "Spatial Distribution Characteristics".

