

# 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.

The manuscript addresses the crucial need for regional climate pattern studies, particularly in regions like Xinjiang facing the impacts of global climate change. The evaluation of four spatial interpolation methods is a valuable contribution. However, the authors need to consider the following comments to enhance their manuscript.

**Limited Introduction:** The manuscript provides a very brief introduction, offering minimal context and background. The study must expand the importance of studying Xinjiang's climate patterns and the chosen research approach.

**Insufficient Citations:** The manuscript lacks an adequate number of citations, raising concerns about the depth of the literature review. The authors need to include relevant studies on climate patterns, precipitation trends, and spatial interpolation methods.

**Non-English Figures:** It is noted that the figures in the manuscript are not in English, which poses a significant barrier for readers. Translating labels, legends, and other textual information within the figures into English is essential for the broader accessibility of the content.

**Limitations of Methodology:** The methodological section lacks detailed information on the specific steps taken in data processing, validation of ground observations, and potential limitations of the chosen interpolation methods. The study must provide more thorough methodological description.

**Ground Observations:** The manuscript mentions the integration of ground-based observations, but there is limited discussion on how these observations were selected, calibrated, or validated.