

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

C.f.a. van Wesenbeeck<sup>1</sup>

<sup>1</sup> Free University Amsterdam

Potential competing interests: No potential competing interests to declare.

This is a very interesting article since as is indicated in the paper, the use of spatially explicit datasets on climate variables is increasing, and there is a need to downscale the data that are available at relatively low spatial resolution. The paper compares four methods for doing this and does this in a rigorous way, after which it also discusses the resulting outcomes.

I have two questions/remarks:

(1) it would be good to add to the indicators a hit ratio test, taking out sub sets of the available data and assessing how well the methods predict the data at these points. This should then be repeated a number of times, every time taking out another random set of points to see how stable the results are. This could give another picture of suitability of the various methods

(2) Although the discussion of the trends is interesting, strictly speaking we do not need interpolation for the conclusions that are presented here, as 0.5 degrees is fine enough as a resolution to reach the same broad conclusions that are discussed now. So I would advise the authors to rewrite this part and zoom in on specific areas where there may be specific hazards, as this zooming in would require the interpolation