

Dear Reviewer,

Thank you for your effort on review of my submission. Your comments and suggestions are helpful for my current submission and future research. Now, I respond to your comments item-by-item. Your comments in blue and my response in black.

The manuscript has been improved, and in my opinion, it is close to a publishable version. However, there are some particular issues that the authors need to pay attention to.

In general, figure and table captions should be made much more informative. The authors should have a reader in mind who goes through the manuscript, maybe after some time of reading it, and should not need to read the main text again to understand what the tables and figures are showing.

For instance, the captions of Figures 4, 5 and of table 5 do not mention which variable is being plotted or to which variable the table values refer. The captions should explicitly state that the variable is heat flux or latent heat flux, state the units or show them explicitly along the axis. The caption of Table 5 is specially uninformative: 'Table 5 The interpolation results for some elements at the QOMS and SETORS sites'. Interpolation results of what? which units ? what do H and LE mean ?

Ideally, the caption should read something like Results of comparing the observed and interpolated daily mean values of heat flux and latent heat flux at the sites XXX XXX during the period xxx-xxx obtained with different interpolation methods. The goal should be for a reader to completely understand the tables and figures after reading only the manuscript's title.

Thank you for your insightful comments. I have carefully revised the figure and table captions to ensure they are more informative and self-explanatory. The updated captions now explicitly state the variables being plotted, including heat flux and latent heat flux, and their respective units. Additionally, I have clarified the interpolation results in Table 5, specifying the variables, units, and methods used. I appreciate your valuable feedback, which has significantly improved the clarity and readability of the manuscript.

Another similar point is the reference to software. The text includes a reference to 'fit_trasnform'. This is probably a Python or R method, but the reader has to guess and search for that routine to determine which uses the underlying mathematical method.

Thank you for your comments. I have made revisions to this section in this manuscript.

Best regards,

Sincerely

Quanzhe Hou
February 25, 2025