

Dear Editors and Reviewers,

Thank you very much for your detailed and constructive comments and suggestions for our manuscript. We found the comments very helpful for improving our manuscript and have revised the manuscript accordingly.

Below are the major revisions that we have made:

1. Following the suggestion of Reviewer 1, we have reordered the subsections of Section 3 by moving the subsection describing the comparison of model simulation with MODIS data to be the last subsection.
2. We have now added more details about the algorithm theory, parameterization, model assumptions, model configurations, and inputs to the model.
3. We have expanded the discussion about sources of uncertainties from both the ELM model and remote sensing data.
4. We have replaced some subjective expressions with more accurate statements.
5. Lastly, we have reduced the number figures as suggested by Reviewer 1.

The itemized responses to the comments and suggestions from the editors and reviewers are provided below in [blue](#) font. We hope our responses address the concerns raised in the last round of review and look forward to your decision on the publication of our manuscript.

Best regards,

Dalei Hao (on the behalf of all authors)