

We would like to thank the editor and reviewers once more for the valuable comments and suggestions that greatly helped us to improve the manuscript. Thank you very much for your time and efforts.

Comment. *I can see that the authors have made a reasonable effort to address critical comments from Reviewer #2, and their revisions are satisfactory. However, please ensure that uncertainty statements are included in both the abstract and conclusion, emphasizing the need for caution when considering these uncertainties in the use of this dataset.*

Response: Thanks for the comment. We have now explicitly incorporated uncertainty statements in both the Abstract and the Conclusion, highlighting the need for caution of the uncertainties.

(1) Abstract:

“... We also release per-pixel, per-year uncertainty layers, and we recommend consulting these layers, especially for early decades and data-sparse regions.”

(2) Conclusion:

“... Additionally, we provide per-pixel, per-year uncertainty layers and advise cautious use, especially for early decades and data-sparse regions.”

(3) We also referenced the uncertainty layers in the Data Availability statement to ensure discoverability:

“... Matching per-pixel, per-year uncertainty layers (0–1) are also provided; we recommend consulting them, especially for early decades and data-sparse regions.”