

Authors Response to the Review of the ESSDD Manuscript “SARAH-3 – satellite-based climate data records of surface solar radiation”

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Handling topic editor: Di Tian, tiandi@auburn.edu

Dear Ladies and Gentlemen,
Dear Referees,
Dear Editor,

Thanks a lot for the handling of the manuscript “ESSD-2024-91”; we have now updated the manuscript and uploaded the relevant documents. The revised manuscript has been carefully compiled by addressing all the referee comments from the public discussion.

Thanks to the reviewer comments, the manuscript was adjusted and improved. Additionally, we partly extended the manuscript, e.g. the list of references has been updated to include more recent relevant peer-reviewed articles. As, in the meantime, updates of the BSRN reference data were available, we have also updated the comparison of the satellite data with the BSRN data to cover the latest periods. The methods, and the overall results and conclusions of the original manuscript have not been altered.

Our comments and responses to the public discussion have been considered and integrated accordingly into the revised version of the manuscript. In the track-change version of the revised manuscript we refer to the corresponding referee comment for the revised part of the manuscript.

We would like thank again the two anonymous reviewers and Seiji Kato for their constructive review which strongly improved the manuscript.

Best regards,
Uwe Pfeifroth and coauthors