

Review of egusphere-2025-379 version 2

Extension of AVHRR-based climate data records: Exploring ways to simulate AVHRR radiances from Suomi-NPP VIIRS data

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Overall Recommendation

The authors did an excellent job in revising version 1 of their paper, they clearly replied to all my points of criticism and modified the manuscript accordingly. The revised version improved a lot, both in terms of information content and clarity, as well as in the presentation of the information.

I have found a few minor points of concern, which I mention below. Apart from these points, the manuscript is suitable for publication as far as I am concerned.

Minor Criticisms

Table 7, 8, 9: The authors give a very extensive reply to my question on the differences seen in validation results of the CFC results for $COT > 0.0$ and $COT > 0.2$ and the CTH results for $COT > 0.0$ and $COT > 0.4$. The basic message of my comment was: Why do the authors keep in the results of the $COT > 0.0$, and not only present the CFC results for $COT > 0.2$ and CTH results for $COT > 0.4$?

I am happy with the reply of the authors, and it is fine to keep both. However, the differences between the results of $COT > 0.0$ and $COT > 0.2$ or 0.4 may raise many questions among readers. Thus, some additional explanation in the text would be helpful, can the authors add the main message of their reply, in a condensed form, as explanatory text to the results of Table 7, 8, 9?

Table 6: A % sign is missing

Table B1: The updates made to the tables in Appendix B are great, they make the picture complete. I noticed that the text of caption does not yet match with the updated content of the table (eg it mentions RMSE and does not mention CORRELATION). Please check and adjust