

Editor decision

Thanks for your uploaded manuscript and thanks for addressing the reviewers' comments which were very thorough. However, I would like to suggest some changes to the caption of some of your figures in the Appendix which I think will add clarity to your article, particularly that of Fig A2 and clarify a bit more the concept of the "share of the different distances".

Dear Editor:

The author's team would like to thank you for reviewing the paper and providing useful feedback and suggestions. We have carefully read and responded to your comment. Your comment is in black font, our explanatory response is in blue font, and the corresponding revision in the manuscript is in red font.

Problems with the title description of Figure A2.

Thank you for your valuable comments. The lack of clarity in the caption you pointed out does exist, which may cause inconvenience to readers in understanding the content of the Figure. I have therefore reworked the title of Figure A2 to more clearly convey the approach of the paper.

We calculated the distance (unit: $^{\circ}$) between the data along the track and the reference point and used the Inverse Distance Weighting (IDW) method to assign weights. Since the final results are presented as a $2^{\circ} \times 2^{\circ}$ grid, we segment the distance between the orbit and the reference point as follows:

- When the distance is less than or equal to 1° , it is uniformly calculated as 1° ;
- When the distance is greater than 1° and less than or equal to 2° , it is uniformly calculated as 2° ;
- When the distance is greater than 2° and less than or equal to 3° , it is uniformly calculated as 3° ;
- When the distance is greater than 3° and less than or equal to 4° , it is uniformly calculated as 4° ;
- When the distance is greater than 4° , it is uniformly calculated as 5° .

The manuscript was revised as follows:

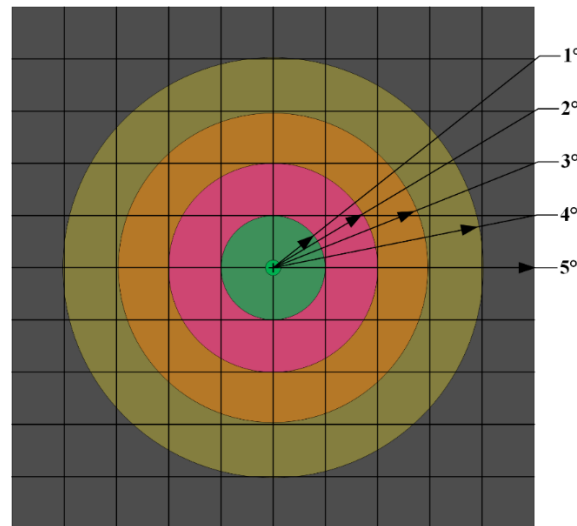


Figure A2 shows a schematic diagram illustrating the partitioning of distance between the data along the track and the reference point. (The green area indicates that the distance between the orbit and the reference point is less than or equal to 1° and is calculated uniformly as 1° , the pink area indicates uniformly as 2° , the orange area indicates uniformly as 3° , the brown area indicates uniformly as 4° , and the black area indicates uniformly as 5°)