

Response to Referee #1:

Thanks very much for your comments, suggestions and recommendation with respect to improve this paper. The response to all your comments are listed below.

The authors have done a sufficient job of addressing my concerns. I appreciate the authors taking the time to consider my suggestions and implementing these changes. Overall, the manuscript has been greatly improved and any misunderstandings have been clarified. At this time, I only a couple of minor points that should be corrected/clarified before publication:

Response: Thanks very much for your comments, suggestions and recommendation with respect to improve this paper. All minor points you proposed in this version have been corrected/clarified. Please check the revised version for details.

First, in the description of the IASI data product on pg. 5, the authors should explicitly state the product version used. On a related, note the authors should ensure that the relevant information is included for the IASI data in the Data Availability and Acknowledgement sections. Similarly, this should be done for all models, measurements and datasets used.

Response: Done

On page 9, line 32, the authors state that the IASI footprint is 50x50 km². I believe that this should actually be a 12 km circular footprint at nadir. The authors should correct this value.

Response: Done

I have a number of minor comments and technical corrections in the attached PDF.

Response: All minor comments and technical corrections in the attached PDF have been address.

Please check the changes in the marked up file.