

Interactive comment on “Comparison of hourly surface downwelling solar radiation estimated from MSG/SEVIRI and forecast by RAMS model with pyranometers over Italy” by Stefano Federico et al.

Anonymous Referee #1

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This study uses ground-based measurements in Italy as to evaluate the GHI estimations from MSG and RAMS in hourly basis. Then, a correction technique was performed in order to improve the comparison results.

The scientific quality and presentation of the paper is very good and with some minor technical corrections and revisions, it could be a valuable publication in the AMT journal.

First of all the MOS correction needs to be briefly described in the “Data and Methods” section in order to provide a connection with the application results in sub-section 3.3.

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The authors could provide some references for the uncertainties in cloud-properties and MACC outputs, and discuss the sensitivity of these parameters to the MSG-GHI evaluated values.

The same literature-based uncertainty and sensitivity analysis need to be discussed for the RAMS, as to directly connect with the evaluation results presented, by providing comparable specific ranges and values as well.

Finally, the conclusions section need to be merged into some additional general findings, highlighting the innovation and value of this study.

Overall, the presented techniques are scientifically sufficient, the results are well determined and falls into the scope of AMT, so I believe that after the above minor corrections, the paper can be published.

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