

Addendum made to the referees' comments:

The authors would like to nuance the statement "The accuracy of AERONET upward/download flux retrievals is actually not known" in their answer to Referee #2's comments.

In fact, on the one hand, to our understanding the various works from Garcia et al. and Derimian et al. serve as validation of AERONET fluxes at the surface as the statistical differences they give between AERONET and measured fluxes can be considered as the accuracy of AERONET fluxes at the surface.

On the other hand, at the TOA, as far as the paper is concerned, the solar upward fluxes estimated by AERONET have never been compared to satellite measurements (to the best of our knowledge) and their accuracy is not known. However, the comparison we are performing in the paper with CERES retrievals which have a known accuracy gives us an idea on the quality of AERONET fluxes at the TOA (which is good with the criteria indicated in the paper) and "validates", to our understanding, AERONET fluxes at the TOA, at least for the measurements considered in the paper, not in a general way. As our comparison is not extensive/general, we can not offer a general retrieval of the accuracy of AERONET fluxes at the TOA, and thus the comparison can not yield to a validation.

We are working on a more extensive "comparison/validation" of AERONET fluxes at the TOA with CERES measurements the same way Garcia et al. (2012) did at the surface for a potential future paper.