

Aerosol optical depth in the European Brewer Network: Reply to V. Savastiouk, RC5, 12 Dec 2017

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We thank the referee for his detailed comments on our manuscript. Below we include in italics a copy of his comments in RC5 and address his questions and suggestions.

There is no mentioning in the paper of the Sun-Earth distance in the AOD ETC transfer. It is implied that the AOD from the reference Brewer is corrected for this, but there is no word on which numbers are stored as ETC for the Brewer being calibrated. In other words, for this to work properly a common date has to be picked, say January 1 for convenience, and ETC are recalculated for that date for each Brewer. This is currently done by at least one calibration provider. It will be good if this paper also mention what is done at RBCC-E calibrations.

The raw counts measured by the Brewer being calibrated are corrected for the seasonal variation of the Earth-Sun distance as described in Sect. 2.2. Indeed all the corrections described in Sect. 2.2, as well as all the definitions of parameters introduced in that section, also apply to Sect. 2.3.

To make this clear, the text after Eq. 9 now includes the following sentence:

“Note that the counts per second I measured by the Brewer being calibrated include all the corrections described in Sect. 2.2.”

References