

General comments:

The article provides a complete characterization of thermal sensitivity of the Brewer spectrophotometers in total ozone measurements. Although the topic addressed in the paper is very important for Brewer users, the issue of the temperature correction and the experimental procedure to investigate the temperature effect on ozone measurements can be also used for other instruments.

The paper is well-structured, all sections are well interrelated, and the objectives are clearly identified.

Specific comments:

Pag 1 L15: The authors should specify which kind of environmental parameters the instruments are exposed outdoors.

Pag 1 L20: which kind of changes are produced in the measured spectrum?

Pag 2 L4: How the internal temperature is measured should be specified here.

Pag2 L12: typo "approxiamation"

Pag 2 L15: for readers not familiar with TOC measurements with Brewer it needs to specify what is the "routine operation" and what are "the original coefficients".

Pag2 L28: Include some references about that issue.

Pag2 L 30: the acronym "EMRP ENV59" should be explained.

Pag 2 L 34: Specify the places of PTB (Physikalisch-Technische Bundesanstalt) and at Kipp & Zonen facilities

Fig1: specify at least in the legend what is the line inside the box, the top and bottom of each box are the 25th and 75th percentiles of the samples, and which values are set the whiskers.

Pag 7 L17: Typo "EUBRENET", include brackets to "(Figure 3)"

Pag. 7 L 28: why did the authors use only MKIII and not also MKII or MKIV which have shown higher  $\tau_{6}$  than MKIII?

Pag 9 : typo in "this clearly observed behaviors"

Pag 9: Acknowledgements. As reported in Recommended guidelines for data use and publication of Eubrewnet data, the authors should write : " We thank the European Brewer Network (<http://rbce.aemet.es/eubrewnet/>) for providing access to the data and the PI investigators and their staff for establishing and maintaining the "#" sites used in this investigation."