Atmospheric
Measurement
Techniques
Discussions

Interactive comment on "Examination on total ozone column retrievals by Brewer spectrophotometry using different processing software" *by* Anna Maria Siani et al.

Anonymous Referee #2

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General comments

The article provides a comparative study of the main public software packages for Brewer data processing. The paper is well structured, but the the language is probably too much technical for readers outside the Brewer spectrophotometer users community. A very nice set of Brewer data is used, with an impressive calibration history. The methodology is well explained, but the results needs a better analysis in order to explain the main differences found in each software. The results are very useful for the evaluation of ozone trends, once most part of the Brewer data available is processed by one of these software packages, allowing significant differences for the same mea-

surements.

Specific comments

Line 117: It should be mentioned that each single count rate is set after a number of scan cycles (nominaly 20) for slits 1 to 6.

Line 123: "Fi" must be defined as the instrumental count rate (counts per second) measured during the direct sun spectral irradiance observation for the slit number "i". The meaning of "i" is the slit number corresponding to each one of the 4 wavelengths referred on lines 117 and 118.

Line 125: The weighting coefficients wi were chosen in order to minimize not only the effect of the aerosol scattering but also its absorption. So the best sentence should be "in order to minimize the effect of aerosol attenuation" or "in order to minimize the effect of the aerosol optical depth".

Line 190: The HG test "ensures the correct wavelength alignment of the Brewer", could be completed with ", due to the internal temperature changes"

Line 471: The "excellent" agreement with OMI is mainly due to the seasonality of TOC. A more interesting analysis could be if seasonality and trend were removed from the series.

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