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Discussions

Interactive comment on "Accuracy, precision, and temperature dependence of Pandora total ozone measurements estimated from a comparison with the Brewer triad in Toronto" *by* Xiaoyi Zhao et al.

Anonymous Referee #3

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The paper presents a very detailed analysis on the accuracy, precision and temperature dependence of Pandora total ozone measurements using the Brewer triads at Toronto. The paper is well structured and written and the information provided is very useful for the total ozone monitoring community. The authors improve earlier methods for the quantifying the uncertainties and the temperature and stray light effects and make use of all available data and information. The paper should be accepted for publication in AMT considering few comments listed below.

The paper in some sections follows a report-like approach by providing too many details rather than trying to summarize the results. For instance the authors tried type I and type II residuals but mostly base their conclusions on type II. They should consider

showing only type II, which will make the discussion and plots clearer.

Page 14 line 13: Was the double Brewer introduced earlier than 1996? Please check.

How do the OMI comparisons fit to the concept of the paper? Is it to demonstrate the use of Pandora as reference for the validation of satellite data?

In the conclusions eventually the authors should recommend some improvement to the operational Pandora algorithm (e.g. to minimize the temperature dependence).

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-252, 2016.