**Atmospheric
Measurement
Techniques
Discussions**

Interactive comment on "Characterization of Odin-OSIRIS ozone profiles with the SAGE II dataset" *by* C. Adams et al.

Anonymous Referee #2

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The paper is dedicated to inter-comparison of OSIRIS and SAGE II ozone profiles. The paper is well-thought and well-written. My comments are below.

COMMENTS

P.1036, lines 8-9 " We ... demonstrate that OSIRIS ozone data are suitable for analysis of ozone trends..." For trend analysis, the stability of the data is needed. However, OSIRIS stability is not demonstrated in the paper.

P.1040, l. 1-2: "It was found that the smoothing width had minor effects on the comparison results, unless it was set to values that were much larger than the OSIRIS vertical resolution". Two comments here: (1) it is unclear why the experiment of smoothing much exceeding OSIRIS vertical resolution has been performed. (2) Indeed, smooth-

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ing should not have a significant effect on bias; smoothing affects mainly standard deviations. Please clarify what you mean.

P.1040, Figure 2: Please discuss a larger local variability (on short time scales $\sim$ 1 month) in OSIRIS data compared to SAGE-II data.

P. 1042, l.14: "The addition of dynamical coincidence criteria to match similar air masses did not significantly improve correlation coefficients or standard deviations." Please quantify the effect.

P.1042. I suggest changing the subsection title "Latitude" into "Dependence on latitude" or similar.

Fig.6 What are m, y? (seem to be regression coefficients). I suggest also writing directly regression equation instead of the coefficients.

In section 5, the last paragraph presents a discussion of further using the obtained results, future data merging. Therefore I suggest to rename this section into "Summary and discussion" or similar.

P.1048, l. 7: comparisons WITH other datasets

P.1048, l. 13-14: "This document describes..." Please rephrase the first sentence.

P.1049: l. 25: "Scans with ozone or aerosol values that deviate from the ozone or aerosol values well beyond the variance are rejected" . Please quantify this "well beyond".

TECHNICAL CORRECTIONS

p.1034, l.13, "was"–> "is"

Figures 3 and 4: Please enlarge font size and use the full width of the page.

Interactive comment on Atmos. Meas. Tech. Discuss., 6, 1033, 2013.