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Interactive comment on "Trajectory matching of ozonesondes and MOZAIC measurements in the UTLS – Part 1: Method description and application at Payerne, Switzerland" *by* J. Staufer et al.

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Reply to comments by Anonymous Referee #1:

Thank you for the positive comments on our article. We will first respond to the specific comments, then we will discuss the technical issues. We have taken your suggestions into account.

Specific comment: The comparison BM-MOZAIC (especially for the period 1998- 2002) shows that the BM under-estimate before, and a overestimate after normalization to total ozone. It should be good to note that this overestimation is consistent with the find-

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ings of De Backer et al (1998), who proposed an alternative normalization procedure, which was validated by Lemoine and De Backer (JGR, Vol106, p14515-14523,2001) by comparison with SAGE-II data.

Response: We are pleased that comparisons between Uccle BM and SAGE-II data confirm our findings for Payerne/MOZAIC. In the revised manuscript, we plan to add on page 7080, "The fact, that scaling of BM sondes changes the sign of the bias has also been noted by De Backer et al. (1998) and Stübi et al. (2008). De Backer et al (1998) also proposed an alternative normalization procedure, which was evaluated by Lemoine and De Backer (2001) against SAGE-II data".

Technical issues: some of the figures (eg. 4 and 5) are very small in the current print version.

Response: We agree that some figures are very small in the current version. We tried to make the figures as large as possible, but we had to keep some figures small so as to show the caption on the same page. We will discuss this issue with the typesetters.

Interactive comment on Atmos. Meas. Tech. Discuss., 6, 7063, 2013.

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