

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.

Anonymous Referee #1

Received and published: 20 August 2013

General Comments: The paper describes a method to compare ozone profile data from balloon soundings at Payerne and aircraft measurements by the use of a matching technique. The emphasis is on the UTLS region, where the balloon sensors operate in their lower limit of concentrations. The manuscript gives good credibility to the method which will be applied to evaluate ozone observations at other stations to in an announced companion paper. Overall the manuscript adds credibility to the long term data sets. The subject is suitable for AMT.

Specific comments: The comparison BM-MOZAIC (especially for the period 1998–2002) shows that the BM underestimate before, and an overestimate after normali-

C2145

sation to total ozone. It should be good to note that this overestimation is consistent with the findings of De Backer et al (1998), who proposed an alternative normalisation procedure, which was validated by Lemoine and De Backer [JGR, Vol106, p14515–14523,2001) by comparison with SAGE-II data.

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

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