



Interactive
Comment

Interactive comment on “Comparison of OH concentration measurements by DOAS and LIF during SAPHIR chamber experiments at high OH reactivity and low NO concentration” by H. Fuchs et al.

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We thank the reviewer for his/her comments. Here are our responses to the specific comments:

Comment: The authors state that the NO concentrations were determined by the photostationary state between O_3 and NO_2 . Did the authors assume that deviations from the photostationary state by peroxy radicals were zero? Did the measurements

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of peroxy radicals confirm the assumption? This should be clarified.

Response: NO concentrations were measured by a chemiluminescence detector (see response to referee 2). We will cancel the statement “NO concentrations were determined by the photostationary state 15 between NO₂ and O₃ (Fig. 1).” on p2086 l14 to avoid confusion about this point.

Comment: Although the authors state that peroxy radicals were measured during the experiment, there is no discussion of the measurements. Were the measured concentrations similar to what was measured during PRIDE-PRD2006? If not, what implications do the measurements have on the applicability of these chamber experiments to the campaign conditions?

Response: HO₂ concentrations were within the same range as found during the PRIDE-PRD2006 campaign. We will add a statement on p2086 l15: “HO₂ concentrations were between 1×10^8 and 2×10^9 cm⁻³, similar to peroxy radical concentration during PRIDE-PRD2006.”

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 2077, 2012.

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