

## ***Interactive comment on “Hohenpeissenberg Photochemical Experiment (HOPE 2000): Measurements and photostationary state calculations of OH and peroxy radicals” by G. M. Handisides et al.***

**G. M. Handisides et al.**

Received and published: 18 July 2003

### **Specific Comments**

Authors response to points 22 - 27 raised by Referee#2, continued from Part 1.

22. Nett is a valid alternative spelling to net, common in British English, with the specific meaning required here [[Oxford\(1976\)](#)].

23. An additional paragraph has been added to the end of Section 4.4 to discuss this issue.

24. The time series for the mixing ratios of H<sub>2</sub>O<sub>2</sub> and organic hydroperoxides in Figure

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2 show more or less regular variation. No such variations were observed during concurrent calibration measurements. Thus, we have no evidence that would indicate that these fluctuations are caused by instrumental artifacts. However, the reason for these variations is not yet understood. The impact of these compounds on the OH and RO<sub>x</sub> radicals is rather small. A paragraph has been added to Section 3 to comment on this.

25. The Table has been corrected. It is not assumed that the yields of the reactions are unity, rather the effective reaction rates are used.

26. This has been corrected.

27. The OH concentration at night does not differ significantly from zero. Since OH is determined from the difference between signal and background measurements [Berresheim et al.(2000)], the OH concentration fluctuates around zero and may occasionally be negative. This results in the calculated RO<sub>x</sub> mixing ratio being indeterminate at certain times in Scenario 1. This is now explained in the text.

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**ACPD**

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