

Interactive comment on “Measurements of photo-oxidation products from the reaction of a series of alkyl-benzenes with hydroxyl radicals during EXACT using comprehensive gas chromatography” by J. F. Hamilton et al.

J. F. Hamilton et al.

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We would like to thank William Carter for his constructive comments.

SPECIFIC COMMENTS:

The abstract has been amended to include the findings that the yields of the ring-opened compounds are considerably lower than predicted by the model. This is of course one of the most important results of this work.

The limitation of the sampling method has been stated in the experimental section, in addition to the results section. The suspected intermediates which could not be measured using this technique have also been inserted. The only other compounds cali-

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brated in the chamber repeatedly were E and Z-butendial. The instability of butendial, with isomerisation and degradation occurring during sample introduction, meant the chamber calibrations are inconsistent. Time constraints meant that only a few analytes could be calibrated in the chamber. The analytes chosen were available commercially and considered to be relatively stable.

An appendix has been added which includes structures of all analytes investigated. We feel that this is appropriate and that it is not required in the body of the article.

Benzene data has been added to the corrected manuscript. The benzene degradation and the evolution of the unidentified analytes have been plotted, alongside model simulations of benzene and phenol.

TECHNICAL CORRECTIONS:

The references for the footnote were submitted separately in error and have now been inserted into the literature list.

The problems with the parenthesis and table headers has occurred in the transfer from the word document to the .pdf. We will however ensure that this does not occur again in the final document.

Interactive comment on Atmos. Chem. Phys. Discuss., 3, 4359, 2003.

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