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**ACPD** 13, C5945–C5946, 2013

> Interactive Comment

## Interactive comment on "Impacts of aerosols on the chemistry of atmospheric trace gases: a case study of peroxides and $HO_2$ radicals" by H. Liang et al.

## Anonymous Referee #1

Received and published: 16 August 2013

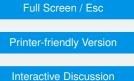
General: This is a sound study on peroxides, mainly studied in field measurements in Beijing, China which in a modelling part also deals with the impact of aerosol particles on gas phase HO2 and hence H2O2.

The field measurement part contains a number of interesting results. The modeling part much resembles recent work by Mao et al.

Overall, the paper can be published in ACP subject to a few revisions.

Details

Page 16557, line 7: The model mechanism which has been used should be fully docu-



**Discussion Paper** 



mented. It is not sufficient to state "it has been chiefly drawn"....The full documentation can be given in a supplement.

P 16562, I 24: Schuchmann and von Sonntag

P 166572, I 15ff: Please give evidence that really diffusion is important for the differences between aerosol and haze periodes. That might also be due to different aqueous phase chemical conversion as concentration change.

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Interactive Comment

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