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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Atmospheric hydrogen peroxide and organic hydroperoxides during PRIDE-PRD'06, China: their concentration, formation mechanism and contribution to secondary aerosols" *by* W. Hua et al.

W. Hua et al.

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Thanks for your constructive comments. Here are our responses to your comments:

(Q1): The in depth discussion of the SO2 interference on the measurements, as explained to referee#2, needs to make its way into the manuscript (Methods + section 3.5.1), since this issue is crucial to the interpretation of the observations.

(A1): We highly appreciate your suggestions and have done this in the revised manuscript.

(Q2): Please add more details on the isoprene measurements; analytical methods,

calibration, references.

(A2): We have added these in the revised version.

(Q3): Discussion on H2O2 and WSOC and Figure 8. The argument that the negative correlation observed between these two species is due to WSOC formation is very weak. The decrease in H2O2 in the evening is expected from a lack of photochemical formation, plus its deposition (and reaction with SO2). This section needs to be substantially modified and the claims regarding the links between H2O2 and WSOC should be played down.

(A3): We agree your suggestion, so this section has been modified and the claims regarding the links between H2O2 and WSOC have been played down in this section and in conclusion and abstract.

(Q4): Finally, the grammar of some of the additions/changes to the manuscript needs attention.

(A4): We have corrected the grammar of the additions/changes in the revised version.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 10481, 2008.

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Interactive Comment