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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Aqueous-phase ozonolysis of methacrolein and methyl vinyl ketone: a potentially important source of atmospheric aqueous oxidants" *by* Z. M. Chen et al.

Z. M. Chen et al.

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

(1) Compare the ozonolysis with typical aqueous phase ozone concentrations to the oxidation by radical such as OH and NO_3 in aqueous solution.

This is a valid point. The comparison is very useful to better access the aqueous-phase chemistry of isoprene and its oxidation products. However, there are no enough studies about the oxidation of isoprene and its oxidation products by OH and NO_3 in

aqueous solution. This is something we are also interested in and intend to study further. Unfortunately, we have not carried out such experiments so far.

(2) Abstract, line 18: The last sentence of the abstract is difficult to understand, please clarify.

This sentence is modified to: The formation of oxidants in the aqueous-phase ozonolysis of MAC and MVK can lead to substantial aerosol formation from the aqueous-phase acid-catalyzed reaction of H_2O_2 with isoprene and its oxidation products, even though there are no other sources of oxidants.

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 17599, 2007.

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Interactive Comment