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8, S11188–S11189, 2009

Interactive Comment

Interactive comment on "Concentrations of higher dicarboxylic acids C_5 - C_{13} in fresh snow samples collected at the High Alpine Research Station Jungfraujoch during CLACE 5 and 6" by R. Winterhalter et al.

R. Winterhalter et al.

Received and published: 13 February 2009

Reply to Referee 1

We appreciate the suggestions from Referee 1 and will include all his corrections in the revised version of this manuscript.

Responses to specific remarks:

1. Page 18692, line 9: The sentence will be changed to "the quantification of higher organic acids".

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2. Page 18695, line 4: The sentence will be changed to "after separation of the organic phase".

3. We are especially grateful for pointing at the missing citation of Kawamura and Gagosian (1987), which will be cited appropriately in the revised version of the manuscript.

4. The referee criticises that the original paper of the Los Angeles data (Kawamura and Kaplan, 1987) was not cited. In the publication of Ho et al. (2006) the ratios of adipic acid (C6) to azelaic acid (C9) and of phthalic acid to azelaic acid (C9) are given without explicit citation of the reference of these values. The original concentration data is presented in Kawamura and Kaplan (1987), but the ratios have been presented in another paper (Kawamura and Ikushima, 1993). In the revised version these references will be included.

5. The referee raises the question concerning the possible contamination of the samples with adipic acid from the polypropylene shovel. Therefore we performed additional blank tests with the used shovel. The shovel was filled with 400 mL ultra-pure water. After four hours the water was extracted as described in the manuscript and compared with a blank sample of ultra-pure water treated in the same manner but without contact to the polypropylene shovel. The measured concentrations of adipic acid were for both water samples equal within the range of uncertainty, indicating that the polypropylene shovel is not a source of contamination with adipic acid. This additional blank test will be included in the revised version of the manuscript.

References: Kawamura and Gagosian, Nature, 1987, 325, 330-332. Kawamura and Kaplan, Environ. Sci. Technol. 1987, 21, 105-110. Kawamura and Ikushima, Environ. Sci. Technol. 1993, 27, 2227-2235.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 18689, 2008.

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