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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Organosulfates and organic acids in Arctic aerosols: speciation, annual variation and concentration levels" *by* A. M. K. Hansen et al.

Anonymous Referee #2

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This paper reports organosulfates and organic acids in Arctic aerosols. The results are interesting to be published in ACP. However, there are several mistakes in spelling, misidentification of compound peak and unclear description. Those problems should be clarified before the consideration of acceptance.

1. Page 4746, line 4, and 2010, respectively. Add a comma.

2. Page 4751, line 16. Does the 90% acetonitrile solution contain 10% water or other solvent? Please clarify.

3. Page 4756, line 2. Pimelic acid may be of biogenic origin, which is derived from

the oxidation of unsaturated fatty acids together with azelaic acid (Kawamura and Gagosian, Nature 325, 330-332, 1987).

4. Page 4757, lines 19-20. Glycolaldehyde, hydroxyacetone, etc. are also produced by field burning of agriculture wastes such as wheat straws (Kawamura et al., Atmos. Chem. Phys., 13, 5369-5380, 2013). This point can be added in the text.

5. Page 4761, line13. Add a period at the end of the sentence.

6. Page 4761, line 19. "emissiond" should be "emission".

7. Page 4761, line 21. Artic → Arctic

8. Page 4764, line13. Please add the reference for Tokyo.

9. Table 2. Give information for the abbreviations of DTAA and MBTCA as a footnote of the table, although they are given in the text.

10. Fig. 1. The phrase "7 and 8. Phthalic acid" sounds strange. A single compound never shows two peaks. If peak 7 is phthalic acid, then peak 8 should be iso- or tere-phthalic acid. The authors need to identify the two peaks using authentic standards. If you do not have standards, the authors should at least describe that the peaks 7 and 8 are phthalic acid and its isomer (iso- or tere-phthalic acid).

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 4745, 2014.