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Atmospheric Chemistry and Physics Discussions

Interactive comment on "The Finokalia Aerosol Measurement Experiment – 2008 (FAME-08): an overview" *by* M. Pikridas et al.

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1. *The authors state as objective number 3 "improved understanding of the mechanisms of in-situ formation of particles in the area". The instrumentation at the site included an AIS to monitor particles from 0.8-40 nm. Yet the authors fall short in discussing the results from this instrument. At least the campaign overview should be shown as is the case for other data such as the SMPS data in Figure 12.*

Some of this information has been already published in a paper describing ultrafine particle measurements in Europe (Manninen et al., 2010). The rest is included in Pikridas et al. (2010, to be submitted to ACPD). A brief summary of these results and the corresponding references have been added to the paper.

2. *The use of ANOVA as statistical method for deriving correlations of time series should be motivated and the underlying implicit and explicit assumptions that are made when applying ANOVA must be described.*

We have added a brief description of the motivation and the corresponding assumptions when applying ANOVA.

3. *The authors state at a number of places in the manuscript that together with other species water was measured with the AMS. Since there are a number of issues associated with the measurement of water in an AMS (evaporation in the lens inlet system, interference from other species such as sulphate and organics) the authors should detail how the water concentration was derived and which assumptions were made with respect to the above mentioned potential artifacts. Also the authors should show how the AMS measured water compares to water derived by DAASS measurements.*

A detailed discussion of the water measurements by the AMS, the corresponding artifacts and issues are described in Engelhart et al. (2010, to be submitted to ACPD). This analysis is outside the scope of this paper. So we have deleted the corresponding sentence and just mention that the AMS was used without a dryer.

4. *While table 1 states that SO_2, HNO_3 and HCl were measured from impregnated glass fibre filters and NH_3 from impregnated paper filters, the text (p. 6650) states the opposite. Please clarify.*

We have corrected the typo and clarified this point.

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