

1 **SUPPLEMENTARY INFORMATION FOR:**

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3 **Seasonal and diurnal variations of particulate nitrate and**
4 **organic matter at the IfT research station Melpitz**

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6 **L. Poulain¹, G. Spindler¹, W. Birmili¹, C. Plass-Dülmer², A. Wiedensohler¹, H.**
7 **Herrmann¹**

8 [1]{Leibniz-Institut für Troposphärenforschung (IfT), Leipzig, Germany}

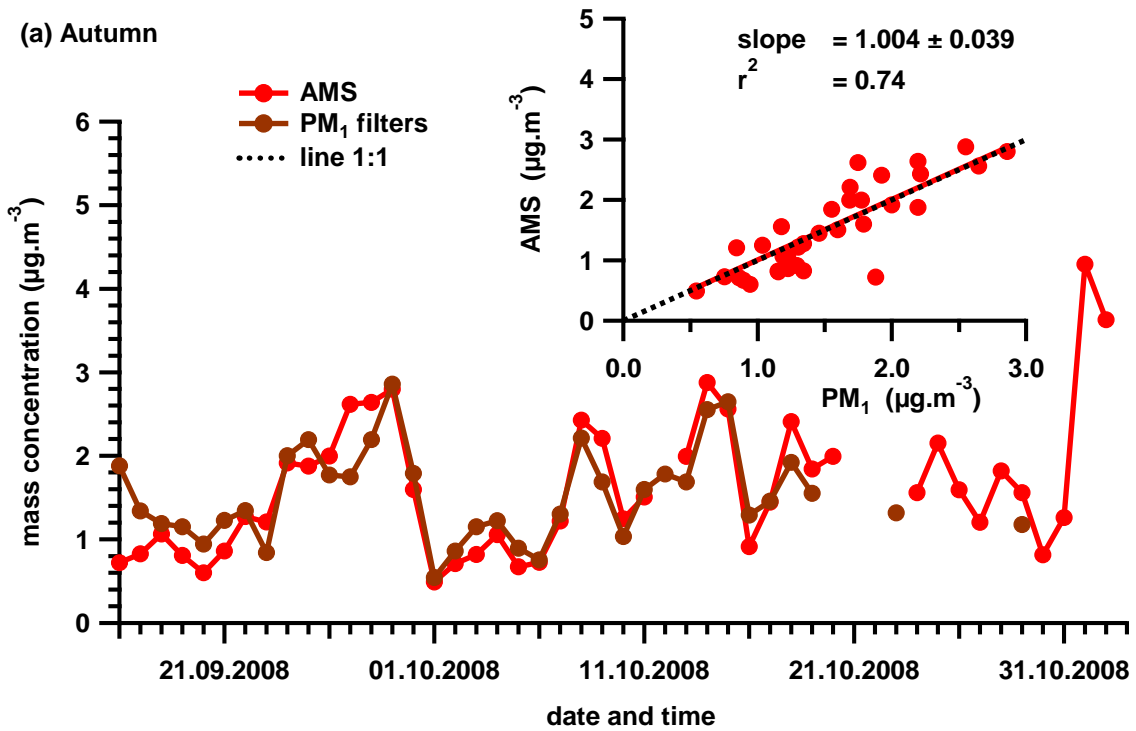
9 [2]{German Weather Service, Hohenpeissenberg, Germany}

10 Correspondence to: H. Herrmann (herrmann@tropos.de)

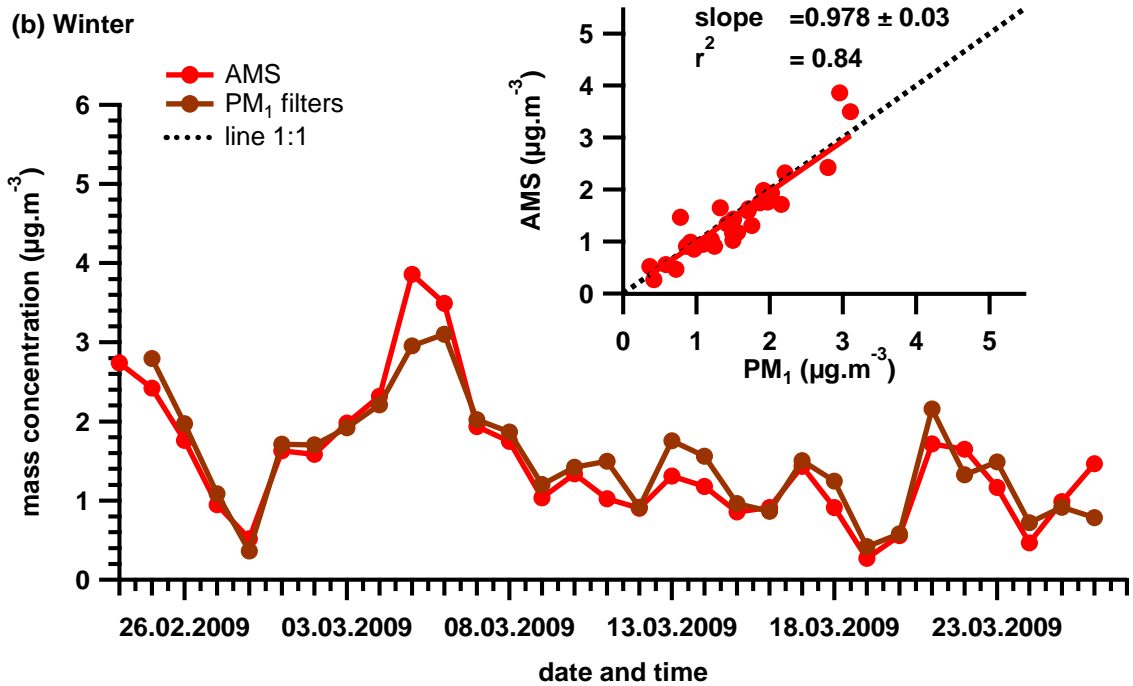
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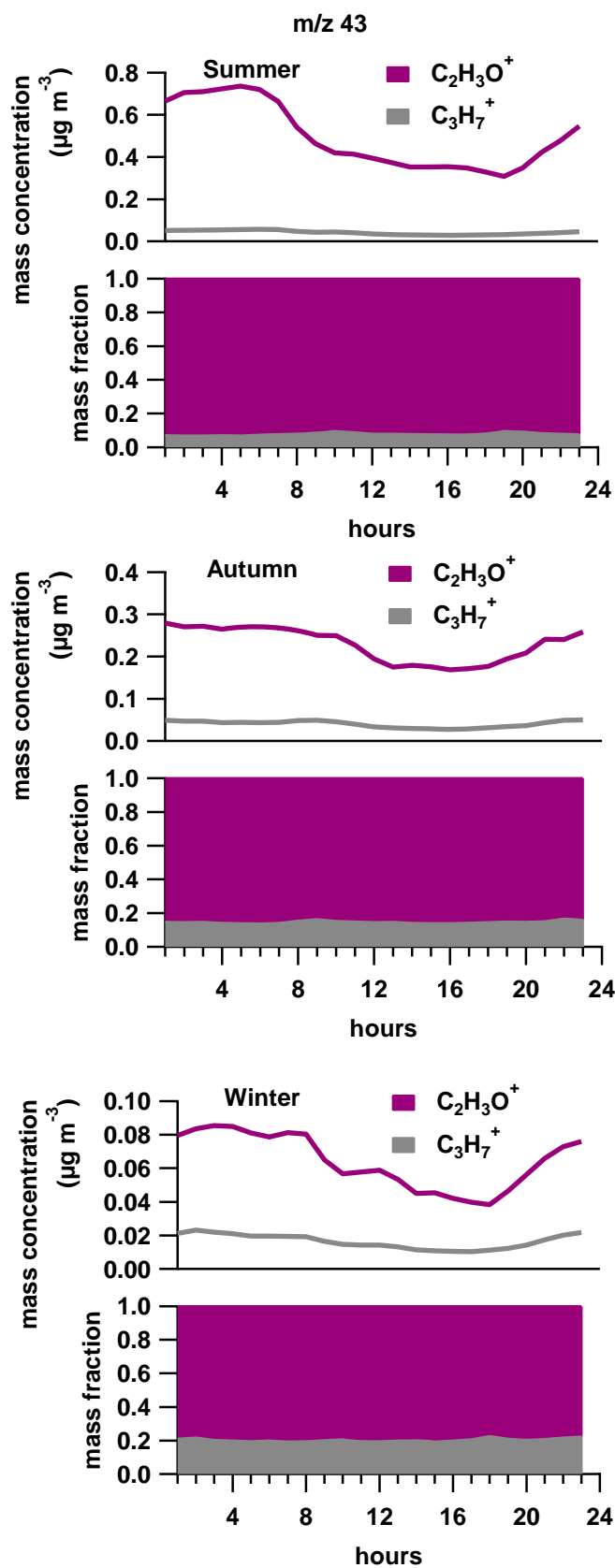
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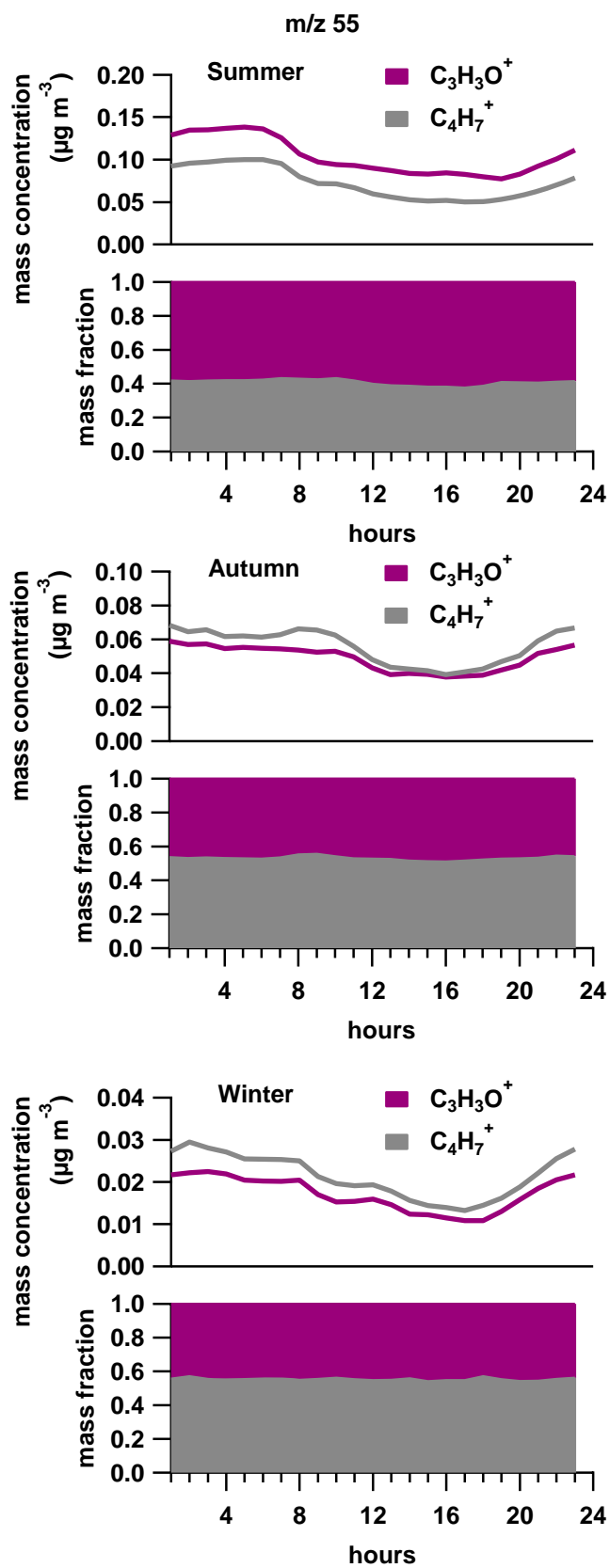
3 Figure SI 1. Comparison of the AMS sulfate concentration and daily PM_1 filters samples.

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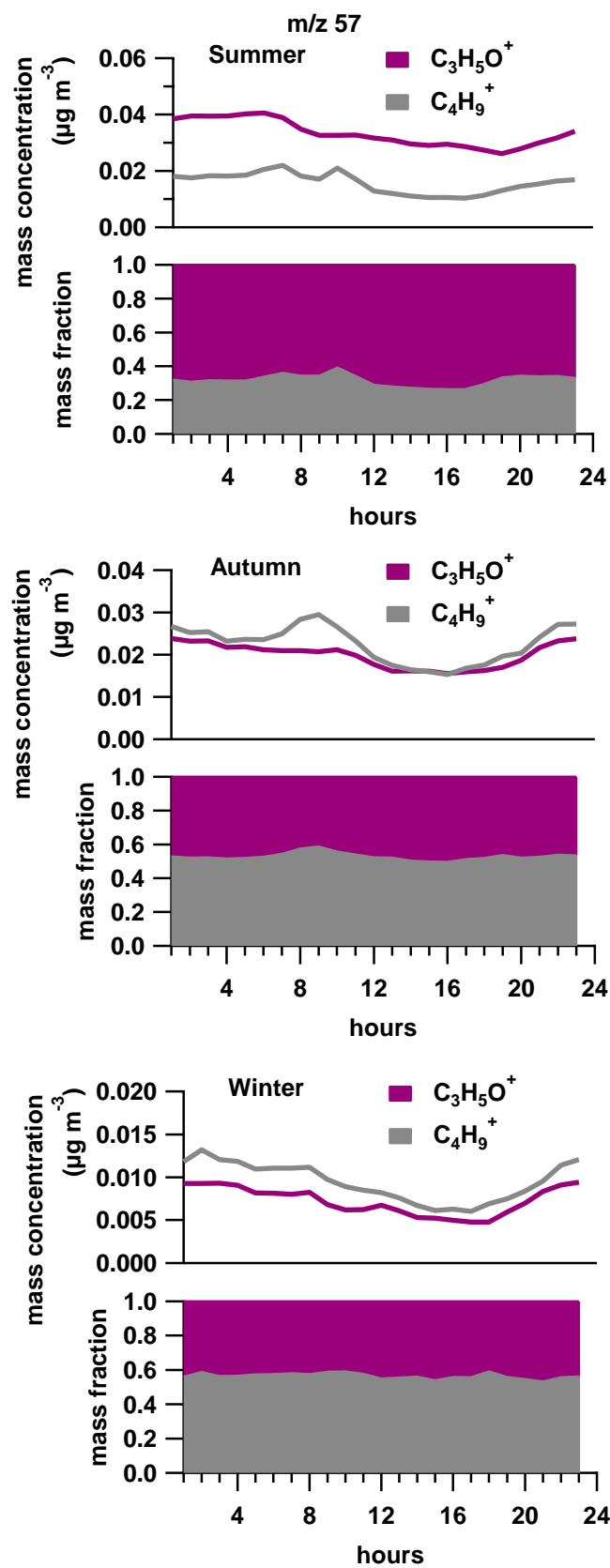
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2 Figure SI 2. Diurnal profiles and mass fractions of the high resolution organic fragments
 3 composing m/z 43, 55 and 57.



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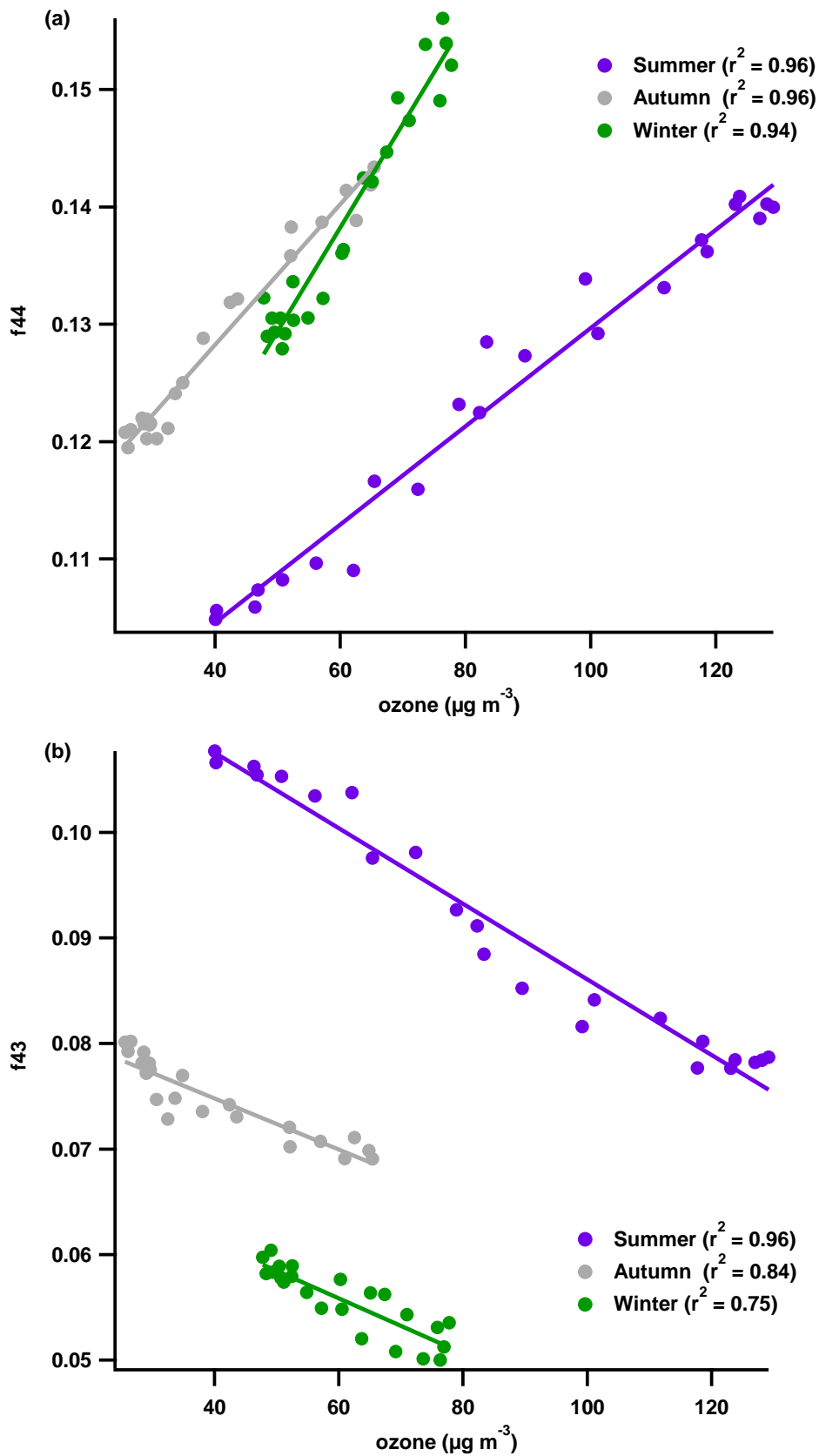
2 Figure SI 2. (continued)



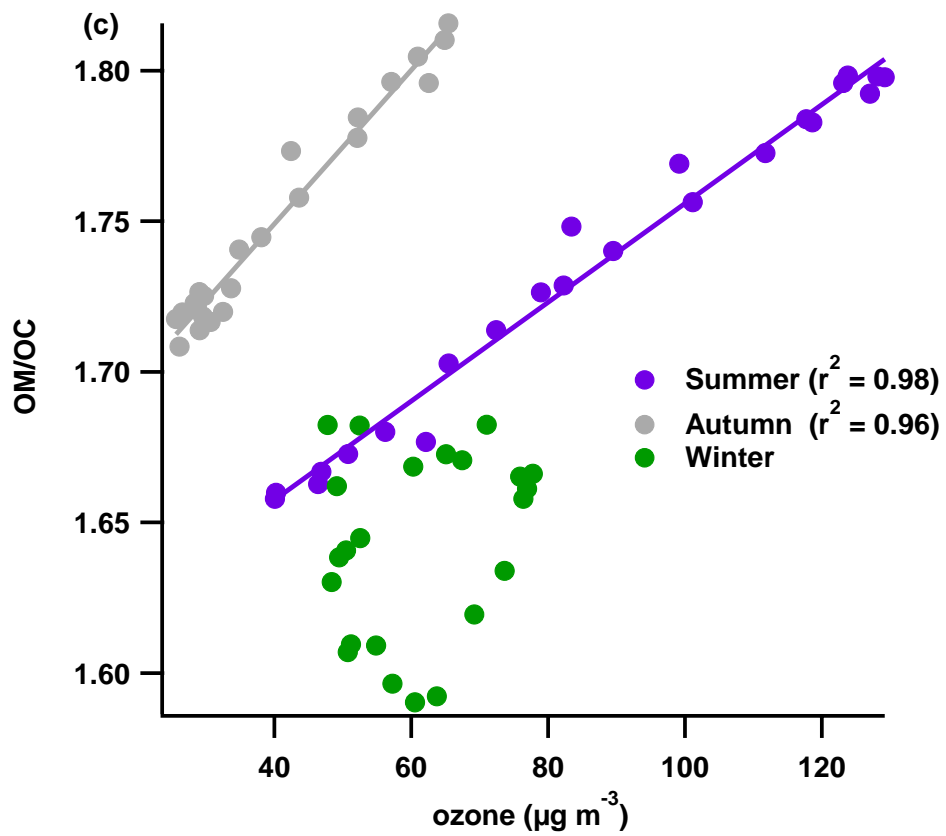
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2 Figure SI 2. (continued)

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 2 Figure SI 3. Correlation plots of the diurnal organic tracers (a: f44, b: f43 and c: OM/OC) and
 3 ozone for the different seasons.

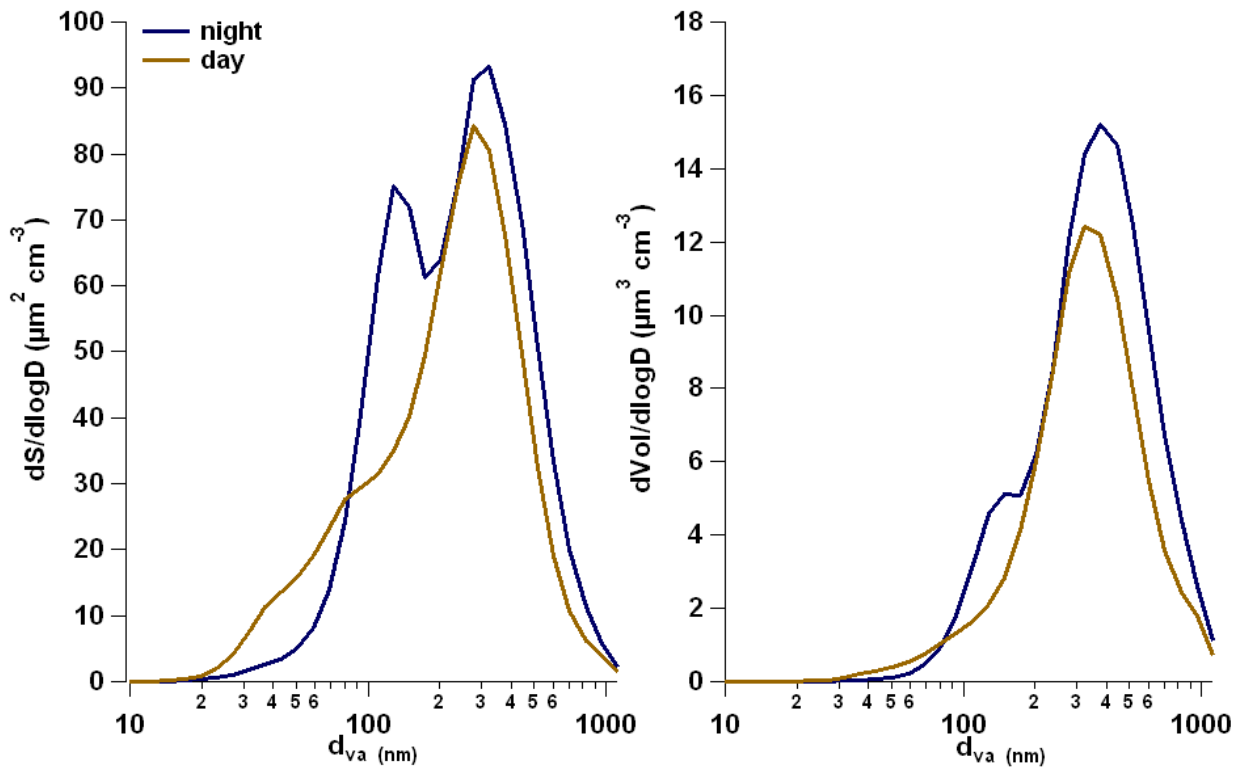


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2 Figure SI 3. (continued)

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2 Figure SI 4. An example of a typical summer night and day surface (right) and volume (left)
 3 particle size distribution as measured in 7 June 2008. Night referred from midnight to 04:00
 4 and day from noon to 18:00. The mobility diameter of the TDMPS data was converted in
 5 aerodynamic diameter assuming an effective density of 1.4.