



*Supplement of*

## **Retention during freezing of raindrops – Part 2: Investigation of ambient organics from Beijing urban aerosol samples**

**Jackson Seymore et al.**

*Correspondence to:* Jackson Seymore ([seymorej@uni-mainz.de](mailto:seymorej@uni-mainz.de))

The copyright of individual parts of the supplement might differ from the article licence.

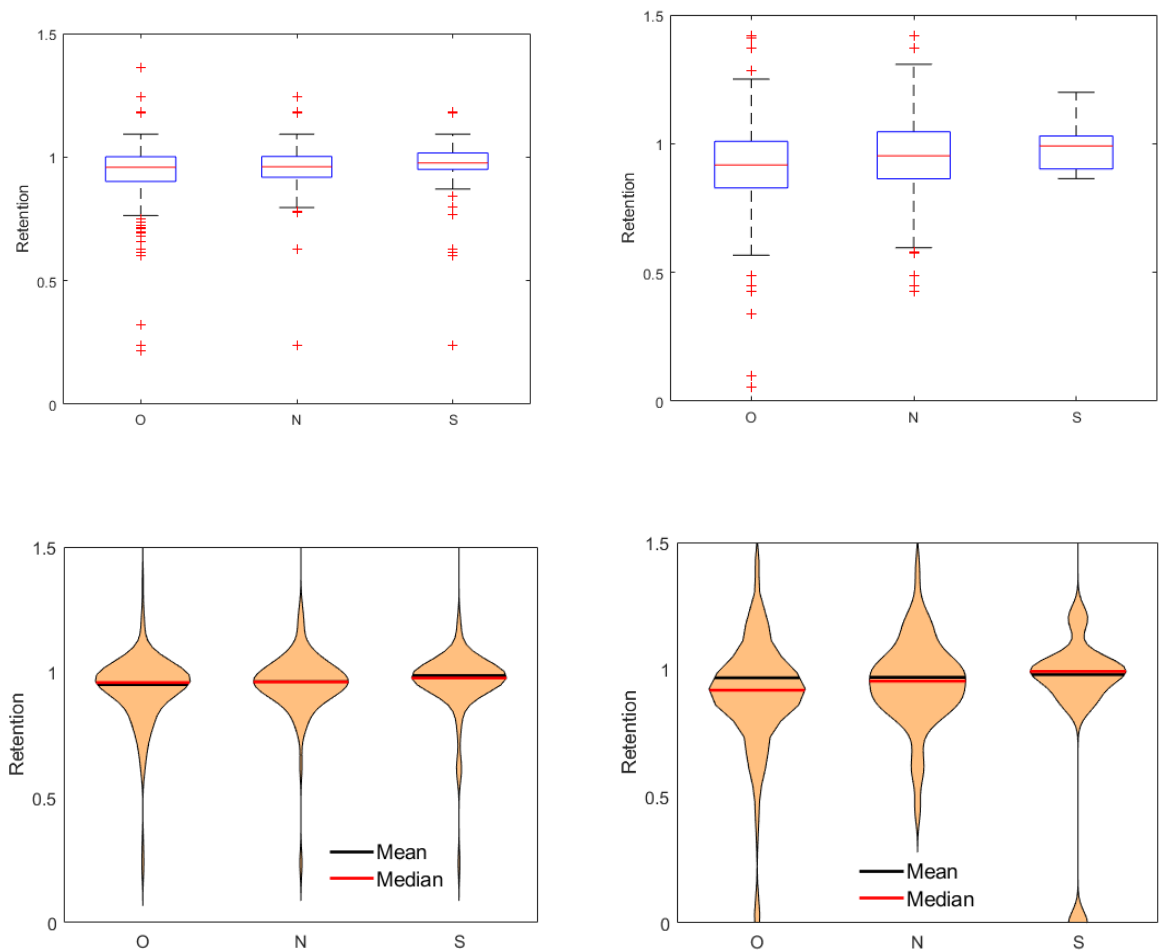


Figure S1. Boxplots and Violin plots of the Retention Coefficients of species observed grouped by heteroatom; Left (-)HESI, Right (+)HESI

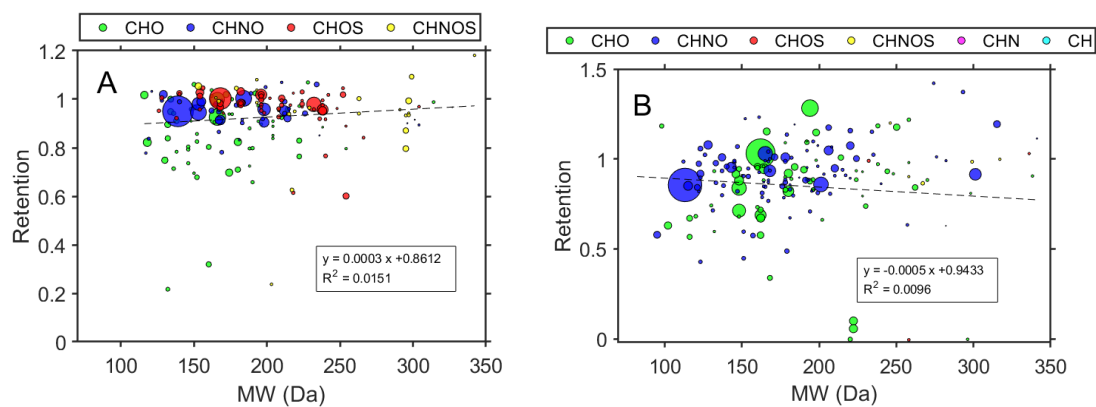


Figure S2. Retention Coefficient as a function of Molecular Weight (MW); (A) (-)HESI, (B) (+)HESI; Color denotes compositional class of the assigned compound as used in Fig. 1: Green for CHO, blue for CHNO, red for CHOS, yellow for CHNOS, magenta for CHN, cyan for CH. Dashed line shows linear fit.

Table S1. Parameters for Stable Distribution Fit presented in Figure 3

<b>Mean</b>	0.8894	
<b>Log Likelihood</b>	224.657	
<b>Parameter</b>	<b>Value</b>	<b>Std. Error</b>
<b>Alpha (<math>\alpha</math>)</b>	1.38642	0.06988
<b>Beta (<math>\beta</math>)</b>	-0.61652	0.10241
<b>Gamma (<math>\gamma</math>)</b>	0.07289	0.00383
<b>Delta (<math>\delta</math>)</b>	0.95409	0.00608

Table S2. Parameters for t Location-Scale Distribution Fit presented in Figure 3

<b>Mean</b>	0.9442	
<b>Log Likelihood</b>	210.775	
<b>Parameter</b>	<b>Value</b>	<b>Std. Error</b>
<b>Mu (<math>\mu</math>)</b>	0.94415	0.00566
<b>Sigma (<math>\sigma</math>)</b>	0.08665	0.00630
<b>Nu (<math>\nu</math>)</b>	2.02867	0.26969

Two separate csv files are provided as summaries of the MS data with the calculated retention coefficient; one for (-)HESI and (+)HESI are published through Zenodo at the following DOI:

<https://doi.org/10.5281/zenodo.15166745>