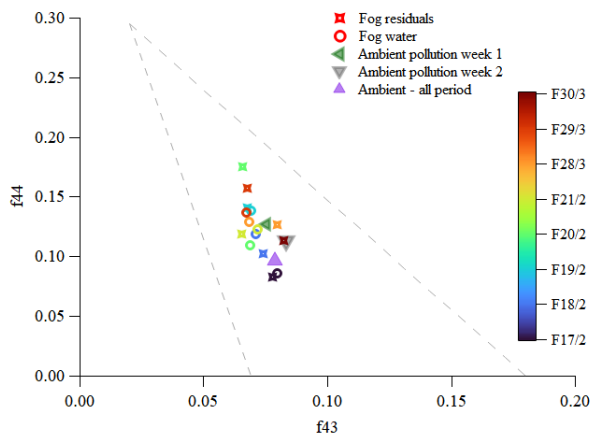
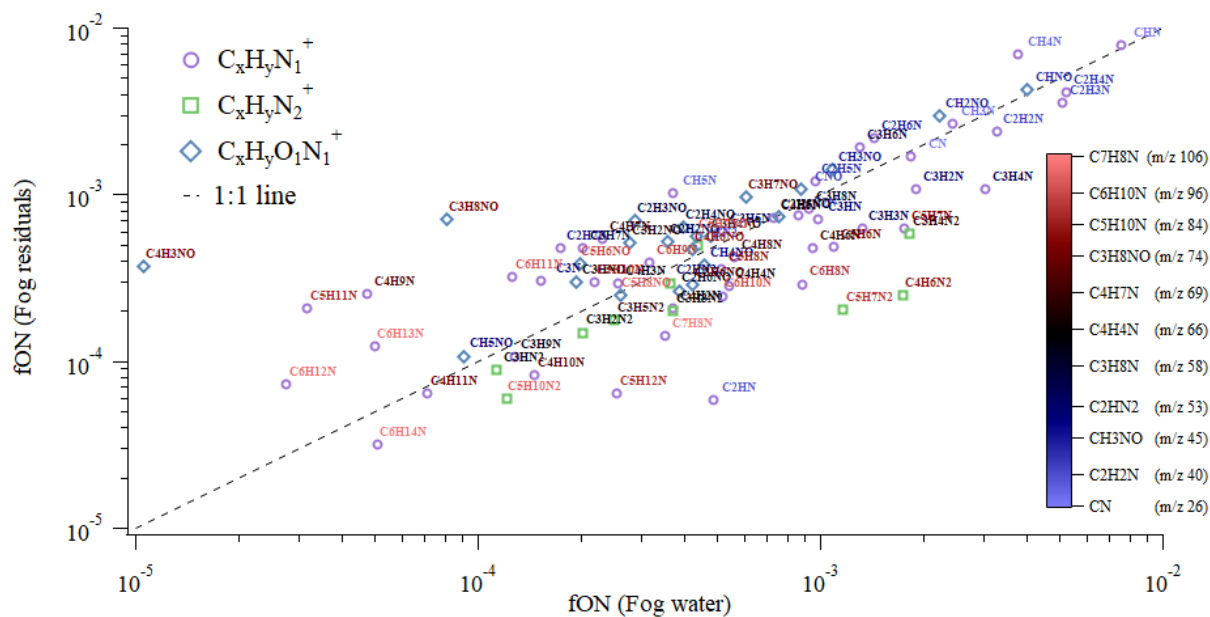


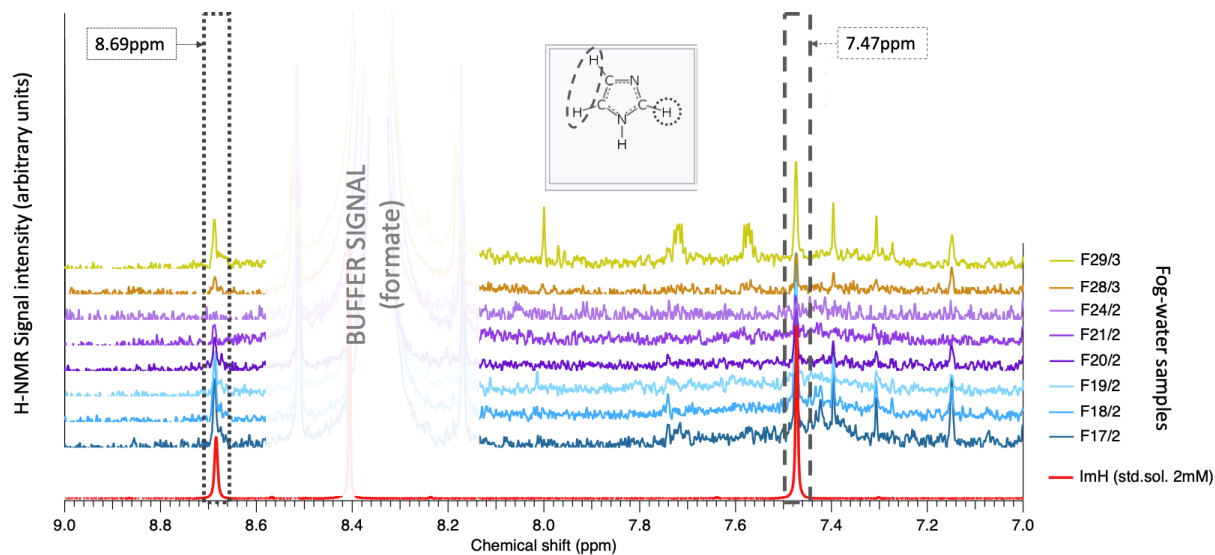
**Figure S1.** Comparison of the NR-PM<sub>1</sub> mass concentration between the SP-AMS and the interstitial AMS, before correction (red) was applied and after applying the correction (black).



**Figure S2.** Fraction of m/z 44 to total OA (f<sub>44</sub>) vs. fraction of m/z 43 to total OA (f<sub>43</sub>) scatter plot averaged for each fog event (color scale). Fog residuals (diamonds), fog water (circles), and ambient aerosol (triangles). The two dotted lines indicate the space for typical oxygenated OA.



**Figure S3.** Scatter plot showing the organic fraction of each individual ON ion measured with the SP-AMS in the fog residuals vs. fog water. The color bar shows smaller (blue) to larger (red) ions.



**Figure S4.** Aromatic region of the  $^1\text{H-NMR}$  spectra of a standard solution of 1H-Imidazole (ImH, 2mM solution, 2mL evaporated and re-dissolved in  $\text{D}_2\text{O}$ ) and of the fog water samples analyzed.