Electronic Supplementary Material (ESI) for Environmental Science: Atmospheres.

Supplementary information

Single-particle measurements and estimations of activity coefficients for semi-volatile organic compounds in organic aerosol of known chemical speciation

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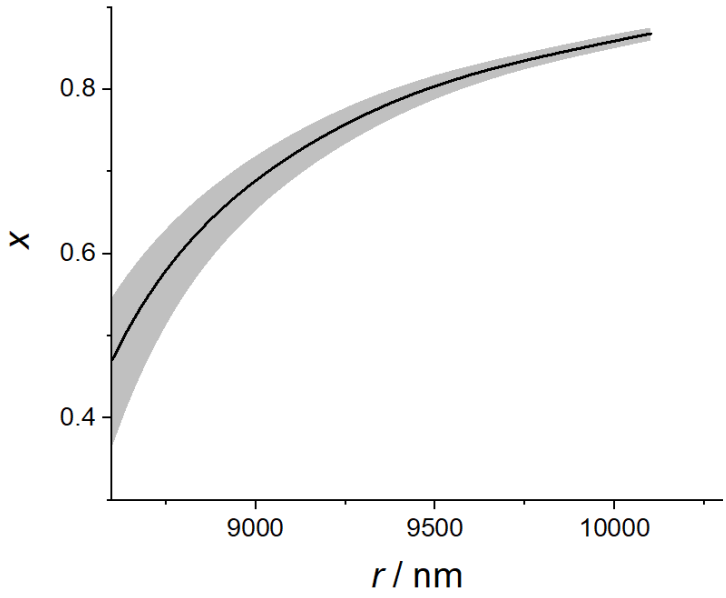

Figure S1 - Radius (*r*) vs mole fraction (*x*) for an evaporating droplet of T20/DEG described in the main text. The black line represents the simulated data from the model and grey shading represents the impact of a ±100 nm uncertainty in the fitted optical *r* on the simulated *x*.

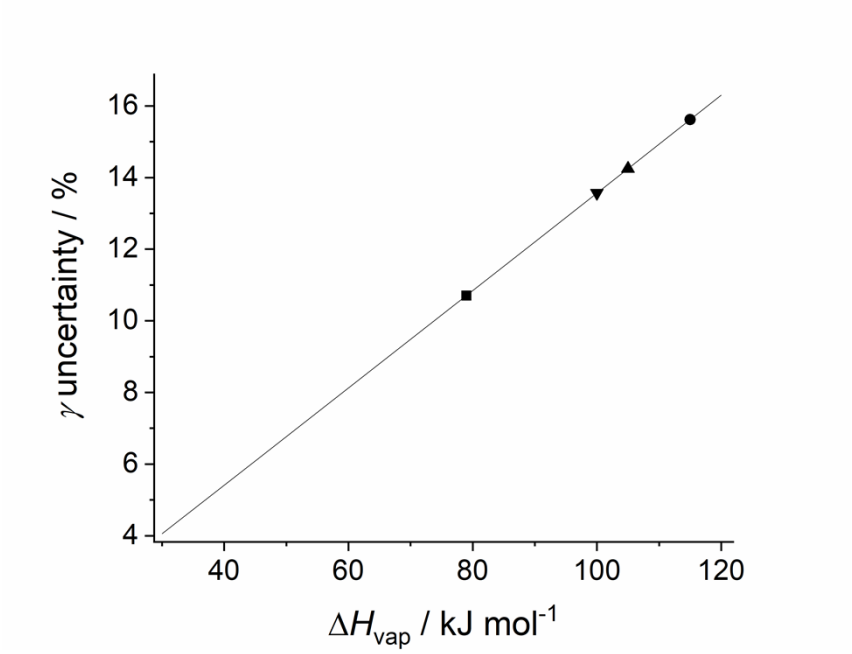

Figure S2 - Impact of a ±1 K temperature uncertainty on the uncertainty of γ for a selection of DCAs of different ΔH_{vap}, using literature values for ΔH_{vap}. The DCAs are oxalic acid, square; malonic acid, circle; succinic acid, triangle and glutaric acid, inverted triangle. A straight line is drawn through the points to highlight the linear relationship.

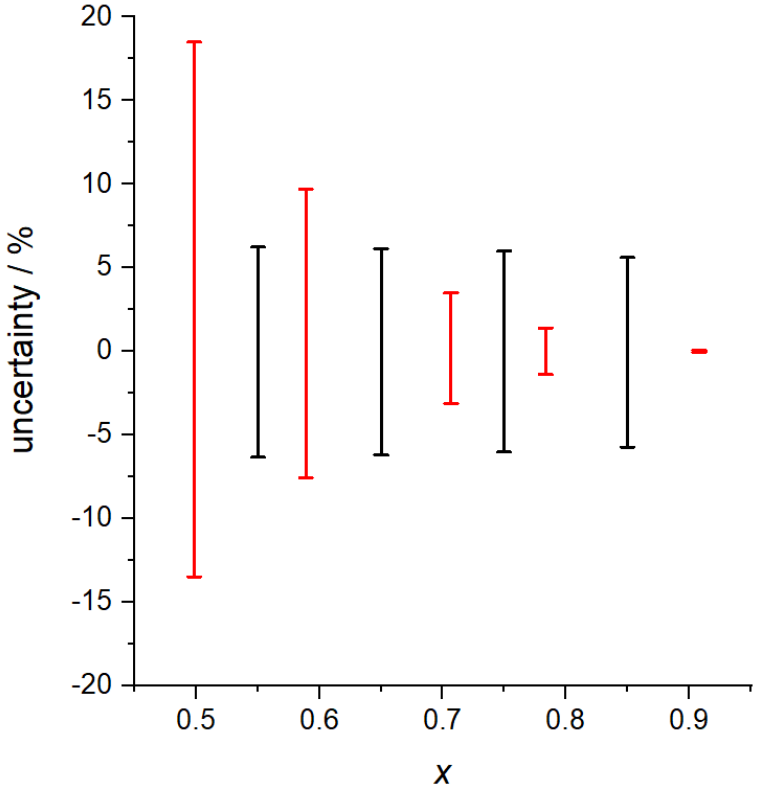

Figure S3- Modelled uncertainties of *x* (red) and *γ* (black) for a range of *x* for a droplet of T20/DEG, assuming a ±5 % uncertainty in melt ρ_{DEG}