Supplement of Atmos. Meas. Tech., 11, 4361–4372, 2018 https://doi.org/10.5194/amt-11-4361-2018-supplement © Author(s) 2018. This work is distributed under the Creative Commons Attribution 4.0 License.





© Û

Supplement of

Determining the link between hygroscopicity and composition for semi-volatile aerosol species

Joel Alroe et al.

Correspondence to: Zoran D. Ristovski (z.ristovski@qut.edu.au)

The copyright of individual parts of the supplement might differ from the CC BY 4.0 License.

Timeseries for α-pinene SOA formation on AS seeds in a smog chamber

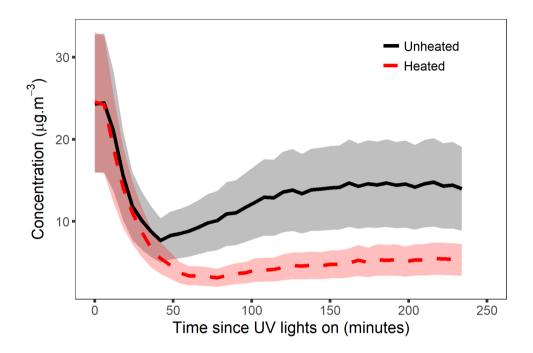


Figure S1: Total non-refractory mass concentrations observed during seeded SOA formation, at both ambient temperature and after heating the sample to 120°C. The shaded area represents the cumulative uncertainties in each major AMS species.

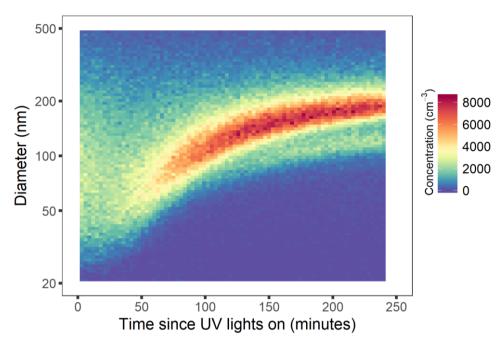


Figure S2: Size distributions of particle number concentration observed during four hours of α -pinene SOA formation on polydisperse AS seed particles.

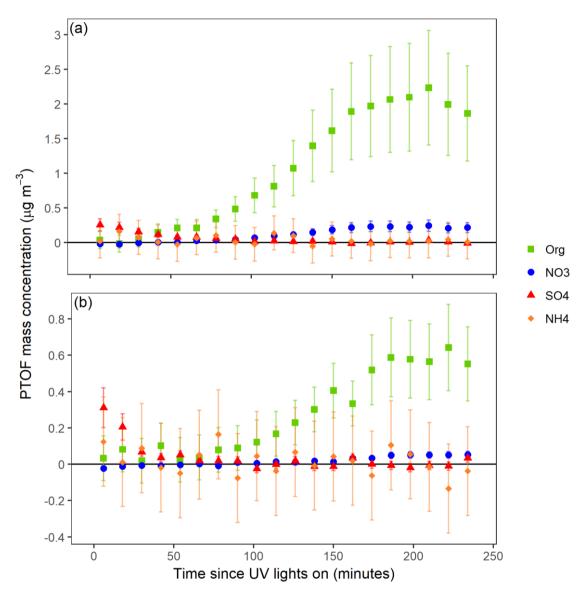


Figure S3: Size-resolved mass concentrations of major AMS species (excluding Chl) observed during seeded SOA formation, when sampling through (a) an unheated line and (b) a thermodenuder heated to 120° C. Concentrations have been restricted to aerosol with $130 < d_{va} < 180$ nm. The error bars represent the larger value of either their respective detection limits or estimated uncertainties of 37% for organics, 35% for SO₄ and Chl, and 33% for NO₃ and NH₄.