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Heterogeneous OH oxidation of secondary brown carbon aerosol

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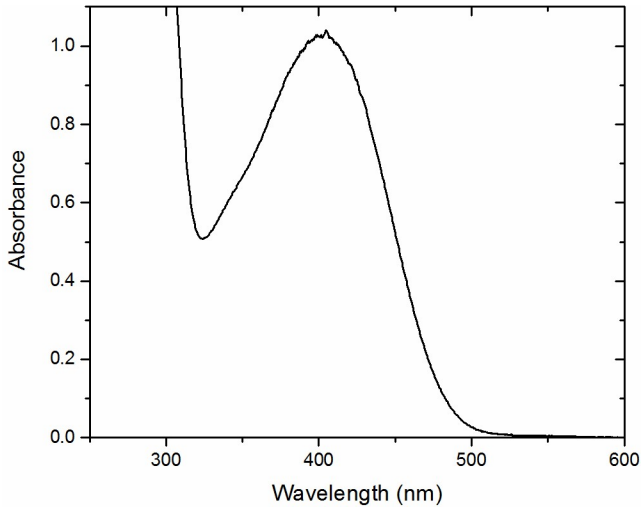

Figure S1. Absorption spectrum of Cibacron Brilliant Yellow 3G-P dye solution.

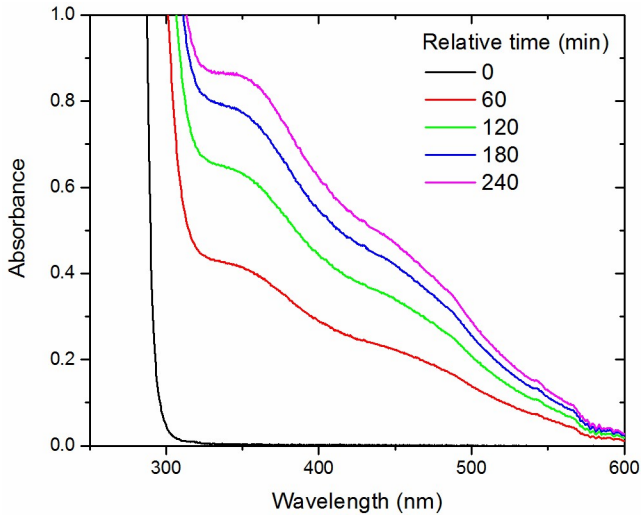

Figure S2. Absorption spectra of the resorcinol product mixture at different irradiation times.

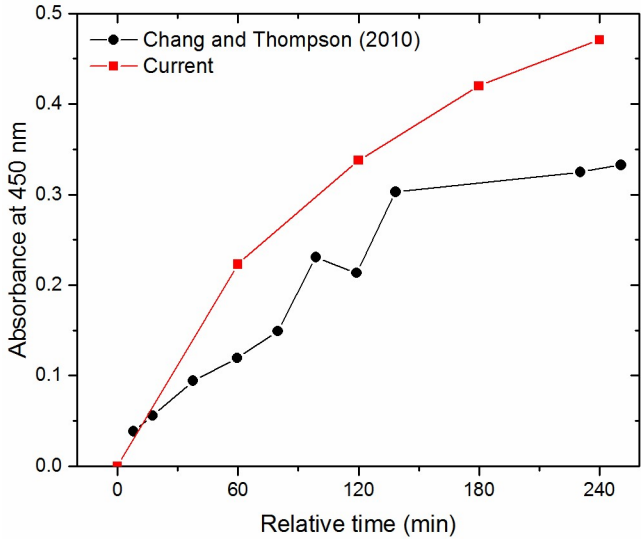

Figure S3. Absorbance at 450 nm of resorcinol product mixture as a function of irradiation time.

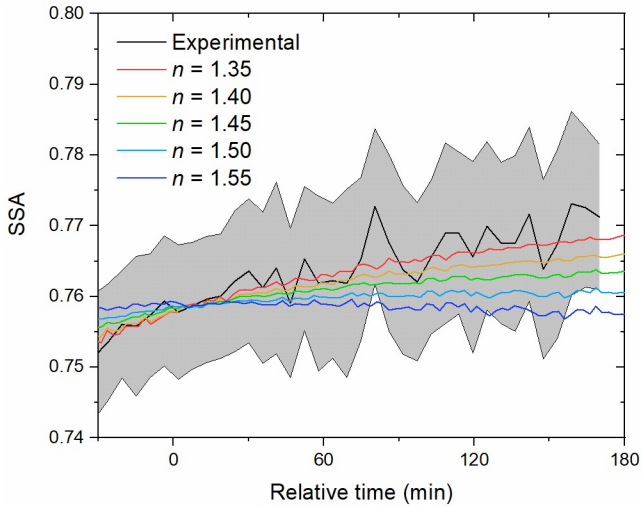

Figure S4. Time series of observed and predicted (based on the size distributions) SSA during a deposition experiment.

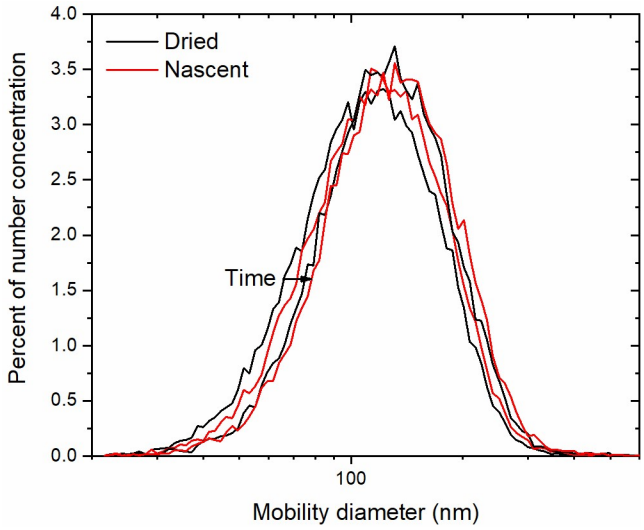

Figure S5. Size distributions of dried and nascent particles, collected alternately in 15 min intervals.

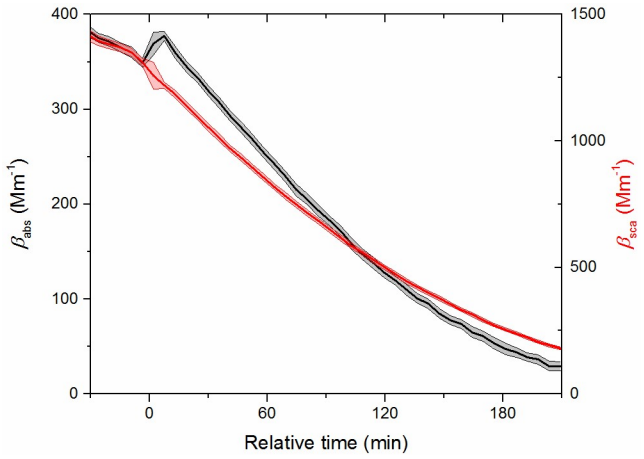

Figure S6. Time series of absorption and scattering coefficients of the secondary BrC surrogate during a heterogeneous OH oxidation experiment at high RH.

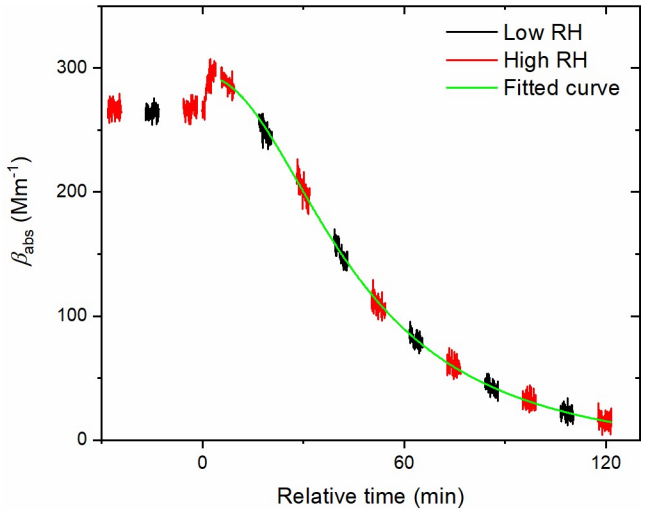

Figure S7. Time series of the absorption coefficient at 405 nm for dried and nascent particles.

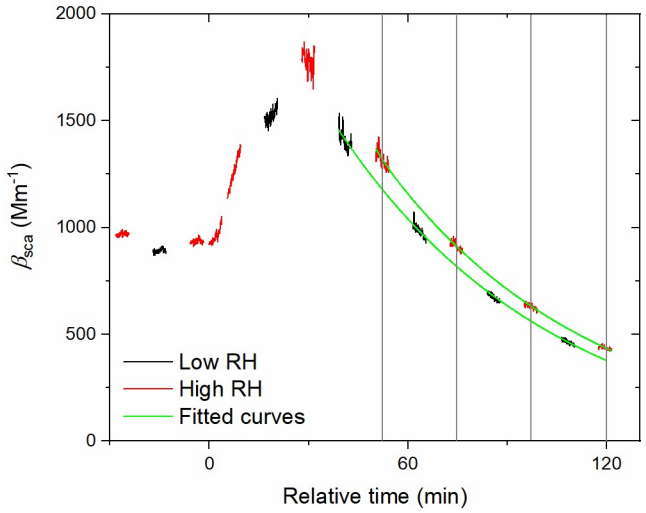

Figure S8. Time series of the scattering coefficient at 405 nm for dried and nascent particles. (The particle growth observed early in this experiment, leading to an increase in the scattering coefficient, did not occur for any other experiments.)

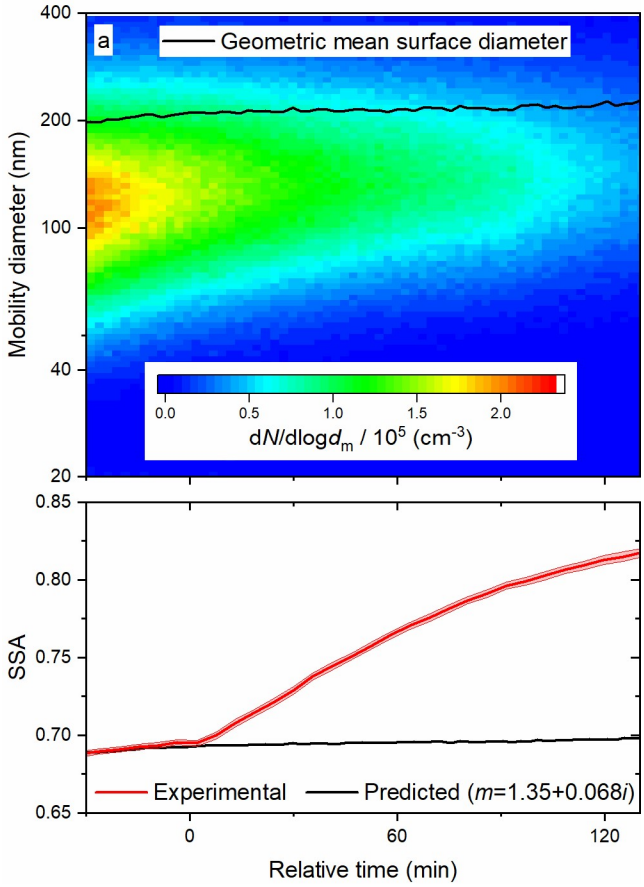

Figure S9. Time series of (a) size distribution and geometric mean surface diameter and (b) predicted (based on size distributions) and observed SSA of the yellow dye aerosol during heterogeneous OH oxidation at high RH. In (b), the upper and lower bounds illustrate one standard deviation about the 5-minute averages.