Laboratory and field evaluation of the Aerosol Dynamics Inc. concentrator (ADIc) for aerosol mass spectrometry

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Supplemental Information

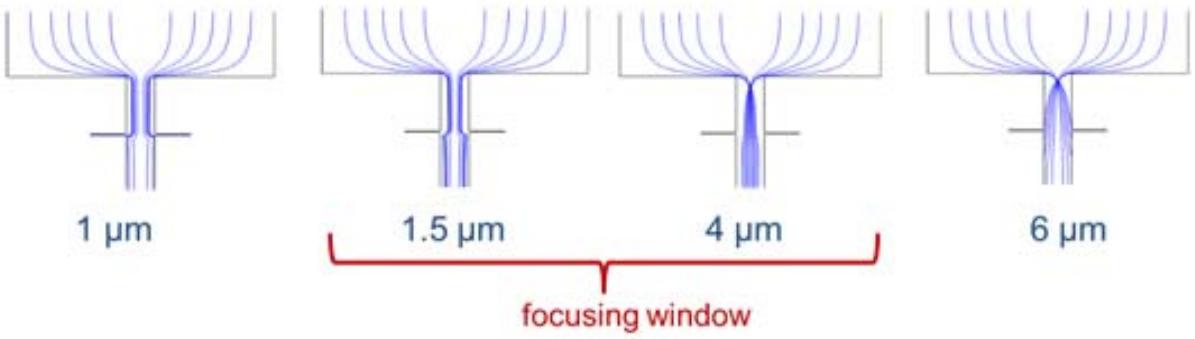

Figure S1. Calculated particle trajectories for different particle sizes entering the focusing nozzle of the ADIc. Scale is expanded radially for better visualization.

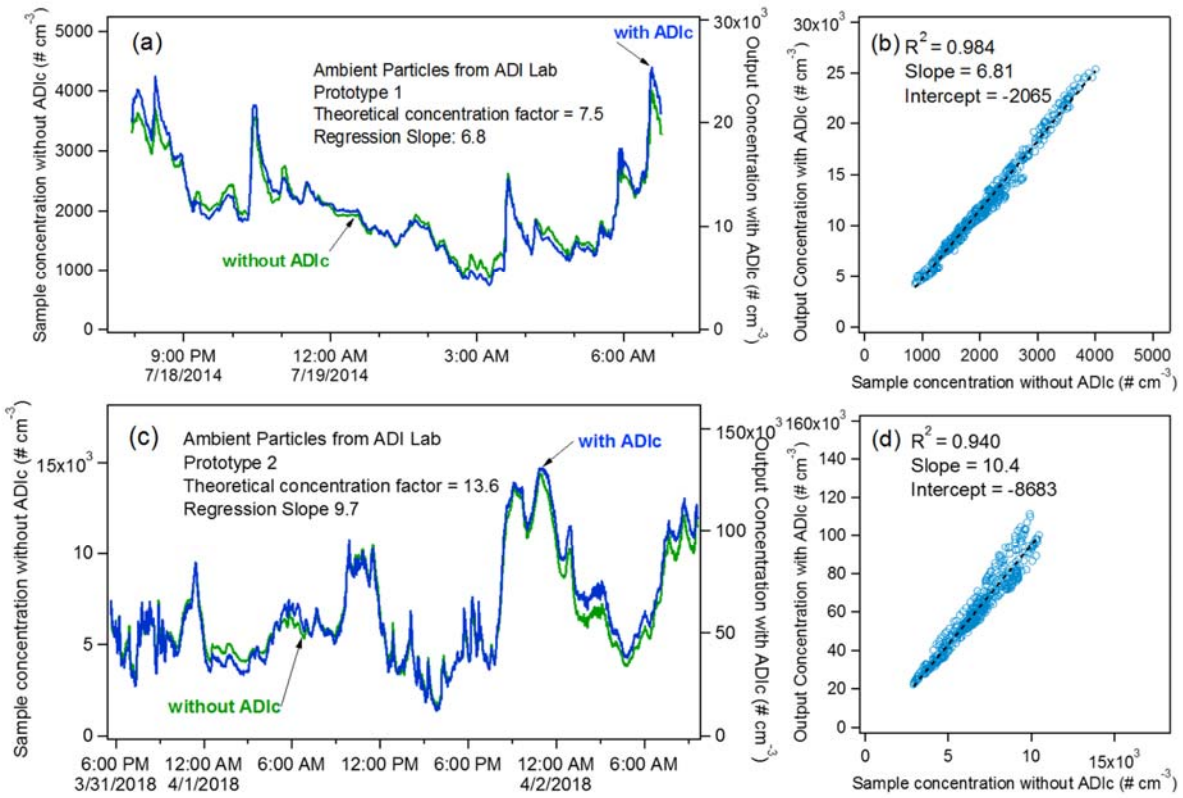

Figure S2. Particle number concentrations in the ADIc sample and output flows while sampling laboratory air shown as time series (a, c) and as correlation plots (b, d). Prototype 1 was operating at low flow (a–b) and prototype 2 at high flow (c–d).

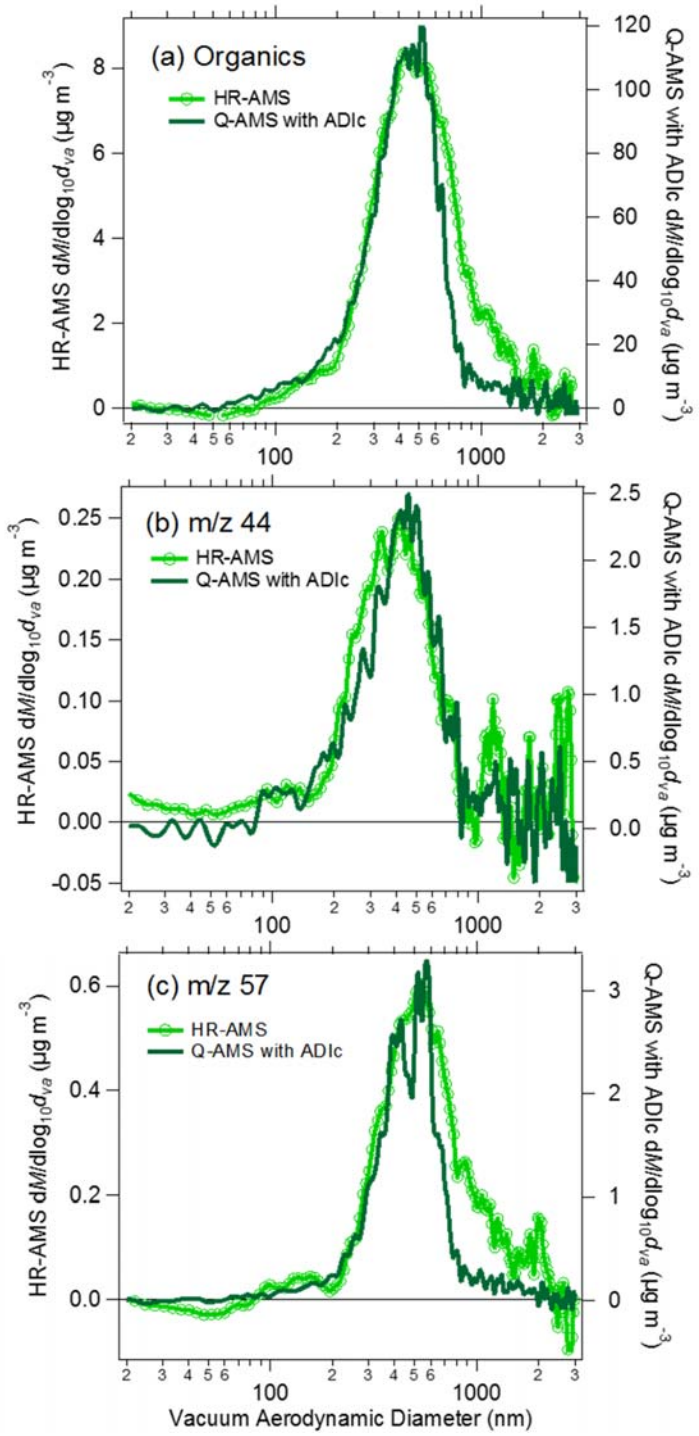

Figure S3. Size distributions for organics (a), m/z 44 (b) and m/z 57 (c) from the HR-AMS in bypass (without the ADIc) and the Q-AMS behind the ADIc demonstrating different size cutoffs in the aerodynamic lenses >700 nm in the two instruments.