Supplement for “Comparison of secondary organic aerosol formation from toluene on initially wet and dry ammonium sulfate particles”

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Fig. S1. Size distribution of particle surface of initially wet and dry AS seeds.
Fig. S2. Losses of SOA due to drying process for initially wet and dry AS seeds.
OH exposure = 4.66 x 10^{10} molecules cm^{-3} s

OH exposure = 1.66 x 10^{11} molecules cm^{-3} s

OH exposure = 5.28 x 10^{11} molecules cm^{-3} s
**Fig. S3.** Difference of organic mass fraction of toluene-derived SOA on dry and wet AS at an OH exposure of (a) $4.66 \times 10^{10}$ molecules cm$^{-3}$ s, (b) $1.66 \times 10^{11}$ molecules cm$^{-3}$ s and (c) $5.28 \times 10^{11}$ molecules cm$^{-3}$ s. Positive red peaks display a larger fraction of organic aerosols on wet AS, and negative blue peaks show a larger fraction of organic aerosols on dry AS.
Fig. S4. Fractions of $C_2H_5O^+$ in toluene-derived SOA as a function of OH exposure.