Supporting Information to "Using collision-induced dissociation to constrain sensitivity of ammonia chemical ionization mass spectrometry (NH_4^+-CIMS) to oxygenated volatile organic compounds"

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1 Additional Figures

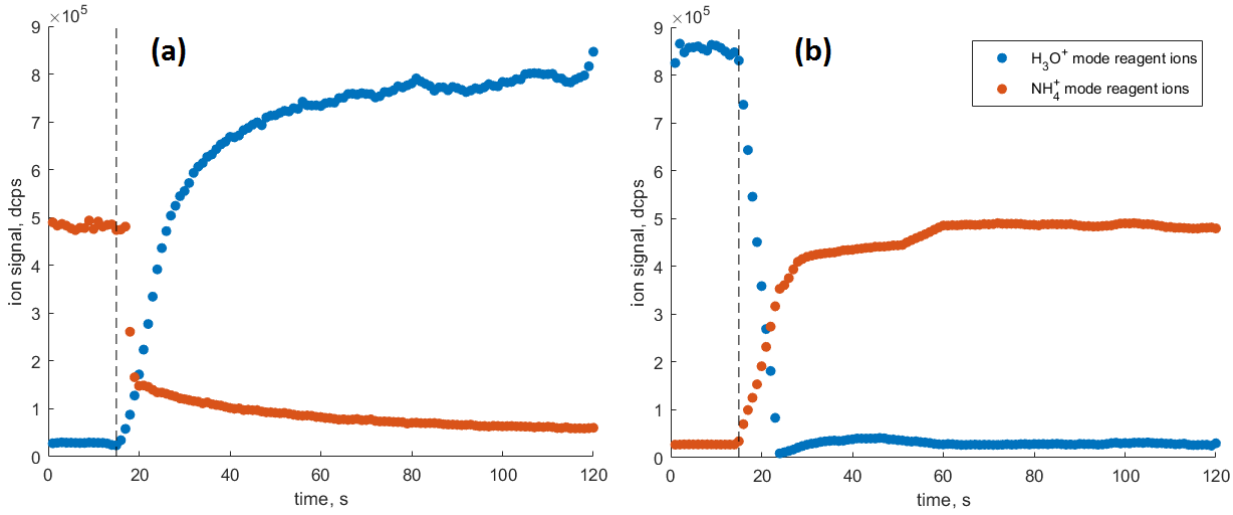

Figure S1: Signals of reagent ions during switching between the two modes. H_3O^+ mode reagent ions comprise $H_3O^+\cdot(H_2O)_n$, n=0,1; NH_4^+ mode reagent ions comprise $NH_4^+\cdot(H_2O)_n$, n=0,1,2. (a) Switching from the NH_4^+ mode to the H_3O^+ mode. Switching effectively occurs within two minutes. (b) Switching from the H_3O^+ mode to the NH_4^+ mode. Switching effectively occurs within one minute.

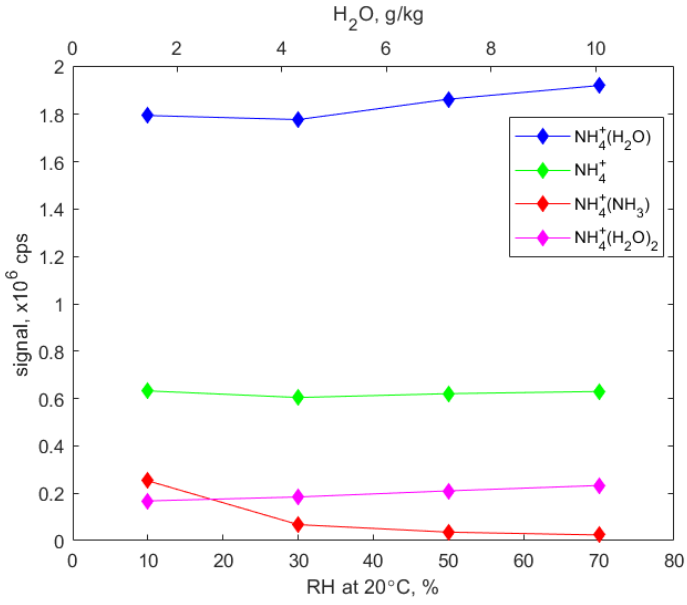

Figure S2: Reagent ion signals as a function of water vapour mixing ratios of the sampled air.

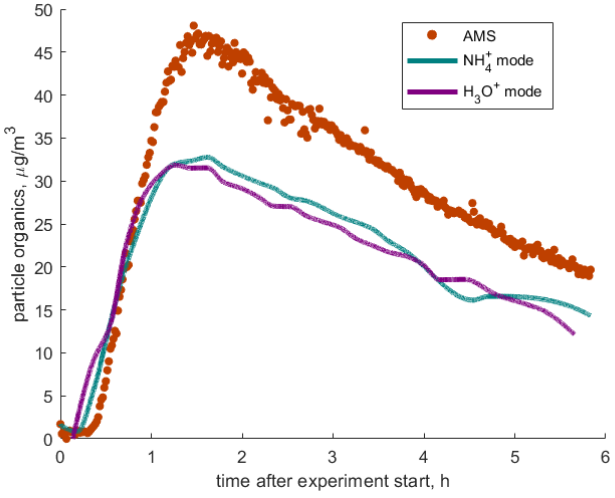

Figure S3: SOA produced during photooxidation of 3-methylcatechol in a laboratory experiment. The total organic mass measured by AMS and the two modes of the CIMS instrument is presented.