# Supporting Information for

# The evolution of carbon oxidation state during secondary organic aerosol formation from individual and mixed organic precursors

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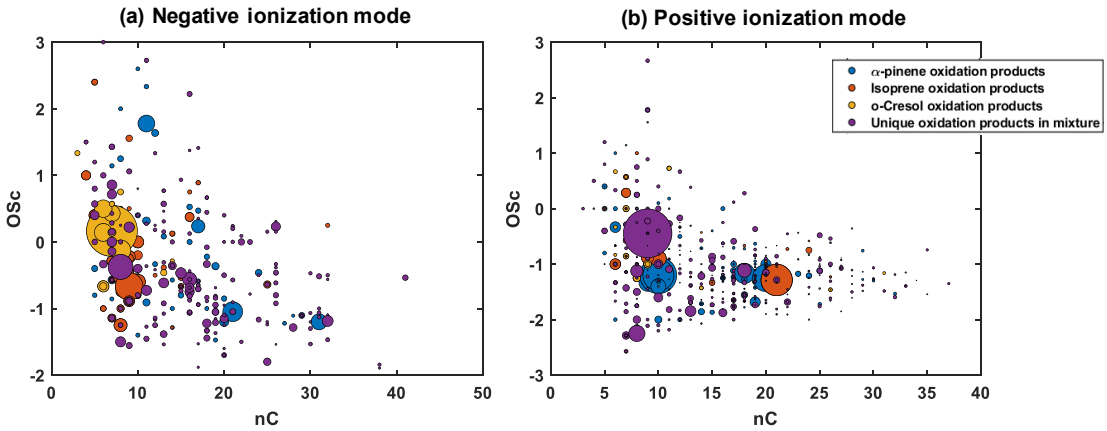


Figure S1: The average carbon oxidation state ($\overline{OSc}$) against number of carbons of secondary organic aerosol (SOA) from ternary mixture system obtain from -ve and +ve ionization modes UHPLC-HRMS. The detected compounds classified into four groups, blue: common products with $\alpha$ -pinene SOA, orange: common products with isoprene SOA, yellow: common products with *o*-cresol, SOA, purple: the unique-to-mixture products. The size of marker represents the normalized signal contribution in total of individual compound.