Elemental Composition and Oxidation of Chamber Organic Aerosol

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now in ACP
Objectives

• Explore the variability of chamber SOA spectra on the Triangle Plot and Van Krevelen diagram.
• Compare elemental composition as measured by the HR-ToF-AMS, speciation techniques, and FTIR
• Compare AMS acid and nitrate marker ions to acid content measured by speciation and FTIR
A-pinene SOA
All of them
Conclusions

• AMS elemental measurements agree best with other measurements for systems with a high degree of mass closure
  – A-pinene
  – Naphthalene

• We can “re-map” the triangle plot with chamber systems (glyoxal uptake is a big exception)