PMF of SP-AMS data combining BC and ORG

Paola Massoli et al., Aerodyne Research
AMS Users Meeting, October 2012

- Move familyCx from the HRBC frag to HROrg (PMF matrix is created on HROrg)
- Because HROrg RIE = 1.4, the mass loadings of the BC fraction in each PMF factor will need to be adjusted later to account for BC RIE = 0.2. Might be better to use RIE =1 for both ORG and BC

\[ BC\text{-fact}1 = \frac{\text{(% of BC in fact 1 } \times \text{ RIE of BC)}}{\text{total mass of factor 1}} \]
Massoli et al., AST, 2012, NYC Queens campaign

**HOA**

- H/C: 1.05; O/C: 0.12; N/C: 0.002
- OM/OC: 1.3

**OOA**

- H/C: 1.45; O/C: 0.56; N/C: 0.006
- OM/OC: 1.88

**HOA - dominated**

**OOA - dominated**
SP-AMS vs HRToF

HOA comparison has a slope of 0.8 (same as CalNex)

SP-AMS BC coating vs HRToF NR-PM