Minor comments

p. 20, l. 16: should that read '.by mixing with more hydroPHILIC species’?

p. 22, l. 9: Following up on Reviewer#2's comment, it might be helpful to add 'carbon chain length' after 'molecular weight'

p. 23, Equation (5): Where do these numerical expressions come from? Are these fits or were they derived previously in another study? If the latter, please, add reference.

Technical comments

Throughout the manuscript: 'size-segregated' should be hyphenated

p. 3, l. 14: aerosol particles

p. 5, l. 2: was available

p. 5, l. 5: ARPA should be spelled out when it's used the first time

p. 9, l. 2: Has rBC been defined before?

p. 9, l. 8: Has MAAP been defined before?

p. 10, l. 23: concentrations

p. 11, l. 13: out-of-fog (check also remainder of manuscript)

p. 12, l. 7: an 8 h event

p. 13, l. 3: oxygenation of this HOA

p. 16, l. 8: light-scattering

p. 16, l. 14: add to or reduce the pre-existing aerosol

p. 16, l. 27: during days

p. 16, l. 28: 'fog scavenging' should be reworded – do you mean the sum of nucleation and impaction scavenging?

p. 17, l. 24: particles

p. 18, l. 1: no or very small…

p. 18, l. 7: apparently

p. 19, l. 1: hydrophilic

p. 19, l. 11: indicate

p. 20, l. 11: resulted to be internally mixed

p. 20, l. 12: 150-700 nm (?)

p. 21, l. 5: Make sure that organonitrates is separated correctly (organo-nitrates)

p. 21, l. 8: For example, when organonitrates comprised 6%...

p. 22, l. 17 and 18: Use Greek symbol for kappa to be consistent with previous text
p. 24, l. 11: take up water
p. 24, l. 20: made it impossible

References:
Levin et al. – replace reference by ACP citation