## **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, 1. 2: Has rBC been defined before?
- p. 9, l. 8: Has MAAP been defined before?
- p. 10, 1. 23: concentrations
- p. 11, 1. 13: out-of-fog (check also remainder of manuscript)
- p. 12, 1. 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, 1. 27: during days
- p. 16, l. 28: 'fog scavenging' should be reworded do you mean the sum of nucleation and impaction scavenging?
- p. 17, 1. 24: particles
- p. 18, l. 1: no or very small...
- p. 18, 1. 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, 1. 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