

Additional comments on acp-2022-321

Based on the comments of the expert in the field and myself, and after my consideration, the manuscript is of adequate atmospheric interest to merit publication in Atmospheric Chemistry and Physics as a Measurement report. The authors have thoroughly responded all the questions/comments raised by the reviewer and me, and modified the manuscript according to the suggestions and important changes have been done, so that some confusions have been clarified.

However, I have still some additional comments, which are needed to be solved before publication.

Comments/ errors: (lines in the revised version of MS)

Line 53: ...wood burning was the most important...

Line 55: Correct as: ..."that HULIS in smaller particles was likely derived from local sources, while in larger particles from secondary organic aerosols (SOA)...«

Line 101: Still not clear. "For each particle size, a quarter of each filter of all the collected samples in summer or winter season were mixed together« Do you mean that all quarters of filters of each size (summer/winter) were combined in one sample?

Lines 190/191: "The average MAE365 values of particles in the size range of <0.26 μm , 0.44–0.77 μm , 1.40–2.50 μm , and 2.50–10.0 μm were 0.6937, 0.4656, 0.4610, 0.2426 $\text{m}^2 \text{g}^{-1}$, respectively«
As I can see, these are the average values for summer and winter. Please, correct the sentence appropriately.

Line 194: ...the average AAE values were the highest in...

Line 193: ...nitrogen chromophores

Line 255 (line 394): ...was the highest in smaller particles (< 0.77 μm) and the lowest in larger particles...

Line 258: »...nitrophenols and their derivatives have been found to be possibly associated with the gas-phase oxidation of anthropogenic VOCs« Not only gas-phase, but may be also the result of aqueous-phase oxidation reactions.

Line 286: This sentence should be changed as: »The pH-dependent MAE365 suggests that under different pH conditions WSOC may have different impact on climate (i.e., climate impact would be enhanced as pH increases)."

Line 290: ... that the variations of the light absorption properties of BrC with pH were the result...

Lines 292/293: "...to the greater content of aromatic species (e.g., nitrogenous aromatic species) in their WSOC.

Better as: ...to the higher content... (e.g. nitro-aromatic species) in WSOC.

Lines 322/323 (and elsewhere): Please round the %! (e.g. 3.79%=3.8%)

Line 404: "as pH increases« can be deleted (as you already say »with increasing pH)