

I had asked you to seek help for language editing and that particular attention should be paid to the correct use of tenses and singular/plural. Here are some examples from the abstract where this was not taken care of. – Please note that I did not list all other instances in the remainder of the manuscript. Please also refer to the journal guidelines [https://www.atmospheric-chemistry-and-physics.net/policies/guidelines\\_for\\_authors.html](https://www.atmospheric-chemistry-and-physics.net/policies/guidelines_for_authors.html) and use the example of the conclusions there to use consistent tenses. Conclusions (also throughout the result/discussion section) should be in present tense (it is shown, we suggest, we conclude, it is demonstrated, the relationship reflects ... etc)

I. 22: Aqueous-phase oxidation serve... should be 'serves' (singular)

I. 24: Here, we reported ... should be 'report' (present tense)

I. 30: "These findings highlighted ..." should be 'highlight' (present tense)

I. 32: "The mean aerosol absorption Ångström exponents [...] was..." – should be were (plural)

I. 26/27: "The results show that aqSOA mainly originated from aged biomass-burning emissions via aqueous-phase reactions rather than from photochemical reactions, ..."  
and

I. 519/520: "...less oxidized SOA were predominantly formed via aqueous-phase reactions instead of photochemical pathways"

See my comment in the previous round: The distinction between aqueous vs photochemical reactions does not make sense. Many aqueous phase reactions are photochemical.

I. 59: 'also' can be removed

I. 66: 'components' misspelled

I. 68 'would' seems redundant

I. 78: 'derives' seems a wrong word here

I. 82: 'with' should be 'which'

I. 152: remove 'the'

I. 160ff: "The scattering effects of quartz filters were modified automatically by a fixed multiple scattering parameter (2.14)" – It is not clear what was done.

I. 169: Please adhere to the journal standards regarding the citation of websites that demands that the last access date is added:

<https://www.atmospheric-chemistry-and-physics.net/submission.html>

I. 186 and 189 (and maybe other instances): add 'the' before ToF-ACSM

I., 190ff: "As shown in Fig. S2, the average ratio of the measured NH<sub>4</sub> to the predicted NH<sub>4</sub> needed to fully neutralize the SO<sub>4</sub>, NO<sub>3</sub> and Chl was approximately 1." I do not understand this sentence. Structure and/or grammar seem wrong.

I. 241, 244 and 257: Please adhere to the standards of the journal: Equations should be numbered sequentially with Arabic numerals in parentheses on the right-hand side, e.g. (1), (2).

<https://www.atmospheric-chemistry-and-physics.net/submission.html>

I. 257: should 'as' be 'is'?

I. 311: It should be 'AqSOA' because it is at the beginning of a sentence.

I. 311: "AqSOA correlated with..." seems to be inconsistent in tense with that in I. 317 (was [...] correlated)

I. 325: "These results demonstrated BBOA as the dominant component of OA in autumn in the SCB" – demonstrated doesn't seem the right word here. 'Identified' might fit better or rephrase 'We demonstrated...'

I. 361: 'increasing' should be 'increase'

I. 390: remove the duplicate 'ratio'

- I. 490: "The f60 value of OOA was 0.002, lower than the typical background level (0.003) observed in the atmospheric unaffected by biomass burning." – This sentence seems grammatically wrong.
- I. 508: 'cam' should be 'can'
- I. 533: 'the' missing before overall dataset
- I. 557: 'regional' should be 'regionally'
- I. 570: 'was also shown' should be 'is also shown'
- I. 617: 'were' should be 'are'
- I. 624: 'were' should be 'are'
- I. 658: What is the mass concentration of NO<sub>2</sub>? Do you really mean the gas here or nitrite?
- I. 664: Two glyoxal molecules are not sufficient to make an oligomer but only a dimer