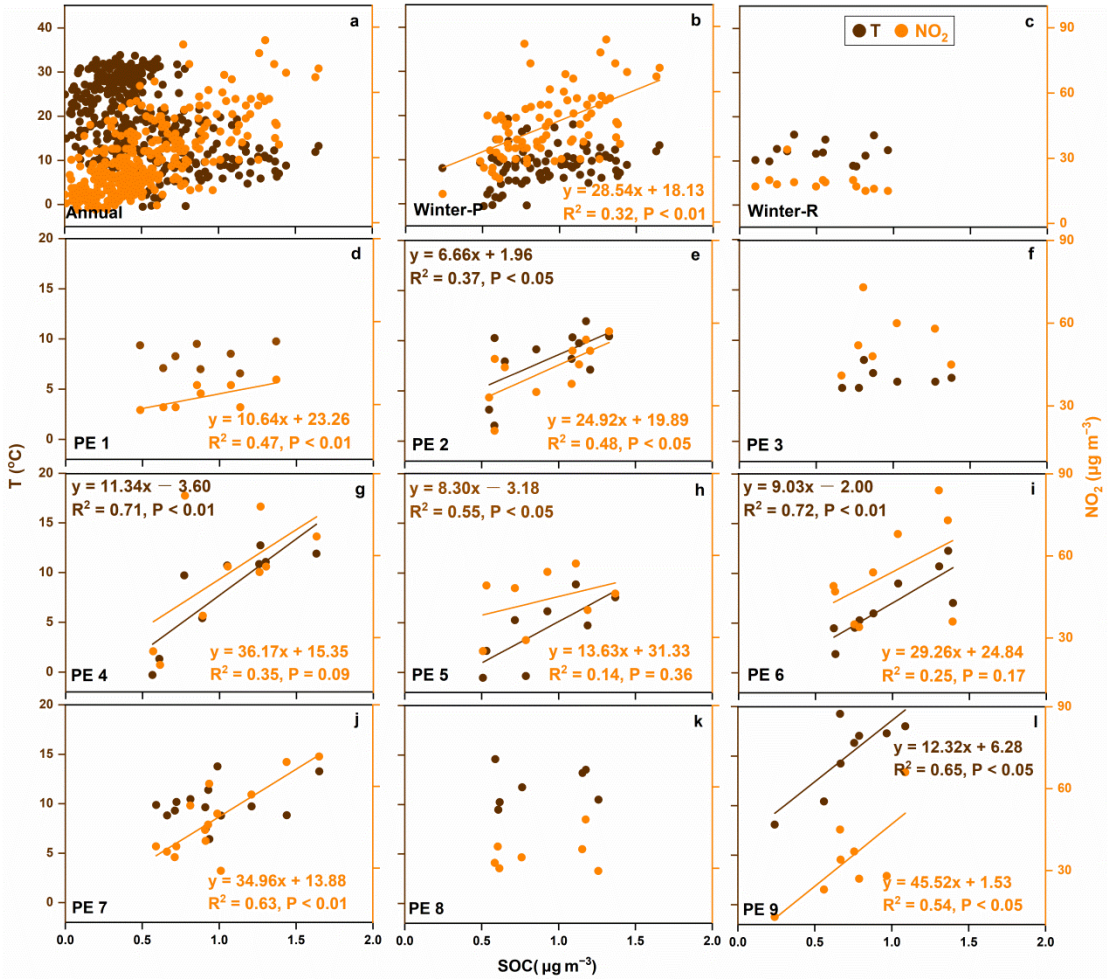
Response to the reviewer's recommendations point-by-point

Recommendation 1. The added text regarding the alkene triols is very useful, except that the last two sentences from lines 468-471 appear to be tangential to the discussion. I suggest that these two sentences be removed to maintain the focus on the potential overestimation of isoprene-derived SOA.

Response: Thank you very much for your suggestion; we fully agree with it. In the revised manuscript, we have removed these two sentences.

Recommendation 2. The selected colors in figure 7 may not reproduce well. The pink text, in particular, is a bit light and difficult to read. Could this be made a darker color to improve readability? A darker shade of orange would also be helpful.

Response: Thank you for this suggestion. In the revised manuscript we updated Figure 7 with a darker orange (#663300) to improve contrast and applied the same change to Figure 6 and Figure S12 in the supplementary materials. The updated Figure 7 is as follows:



Recommendation 3. Figure 6 was difficult to understand. I read the caption a few times, but did not understand that the data shown is correlation coefficients of all things on the x-axis with OC.

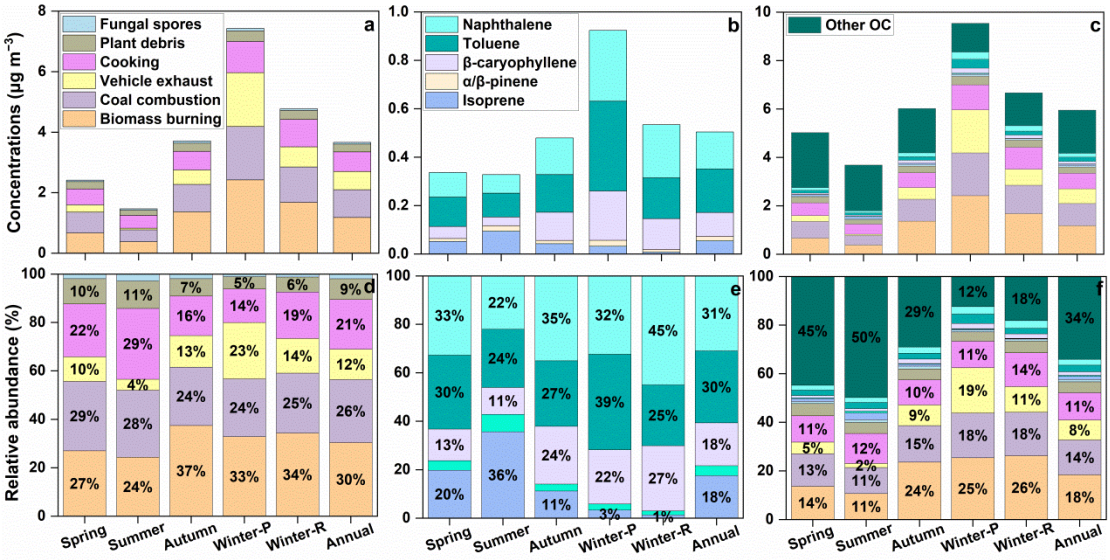
Please clarify the caption to indicate that these are correlation coefficients between total measured OC and each individual primary and secondary source considered.

Response: Thank you for the suggestion. We have revised the Figure 6 caption to make clear that it reports correlation coefficients between measured OC and each individual primary and secondary source. The revised caption is below:

"Figure 6. Pearson correlations between measured OC and each individual POC and SOC source for the annual sampling period (a), winter pollution periods (b), winter remainder (c), and individual pollution episodes in winter (d–l)."

Recommendation 4. The Figure 5 legends are somewhat improved, but remain difficult to interpret. Because the first column of graphs are all primary sources, I suggest dropping "POC" from the legend and instead replacing these with the name of the source, i.e. biomass burning, coal combustion, etc. This will help the reader interpret the figure without having to decipher the caption and abbreviations. I suggest the same comment be applied to the second column of SOC plots, indicating that these corresponding to SOC precursors of napthalene, toluene, etc. For the third column that highlights the role of other sources, please label the legend as "Other OC" rather than OOC. I think OOC is confusing because of the commonality of OOA (oxygenated organic aerosol, which erroneously implies that this would be oxygenated organic carbon).

Response: Thank you for your valuable suggestion. We have revised Figure 5 accordingly; the updated figure is provided below. The same corrections have also been applied to Figures S7 and S9 in supplementary materials, which exhibited the same issues.



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