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Dear Editor,

We request your approval to make minor clarifications to our manuscript entitled “Organosulfates in Atlanta, Georgia: anthropogenic influences on biogenic secondary organic aerosol formation.” The suggested changes improve the clarity and accuracy of the language and do not influence the results or conclusions of this work. We provide a detailed list of the proposed changes.

Thank you for your consideration.

Should you have any questions, please do not hesitate to contact me.

Respectfully yours,

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Short explanation to editor of the additional changes made to galley proofs

TS1-TS3: Page 2, line 18-20. The Atlanta metropolitan area comprise of three cities, Atlanta, Sandy Springs, and Roswell, GA, and is the ninth most populous metro area in the US as of 2017 accounting for a population of 5.9 million. This is not clear in the original text. Therefore the original text has been revised as shown below.

The text at page 2, line 18-20 originally read: "Atlanta, Georgia (GA) is the ninth most populous metropolitan area in the US with a population in 2017 of 5.9 million (U.S. Census Bureau, 2018)."

This text has been revised to read "Atlanta, Georgia (GA) is the principle city of Atlanta metropolitan area (Atlanta-Sandy Springs-Roswell, GA), which is the ninth most populous metropolitan area in the US as of 2017 with a population of 5.9 million (U.S. Census Bureau, 2018)."

TS4 and TS5: Page 2, line 20-25. The first part of the following text is revised to indicate the OA% in both PM_1 and $PM_{2.5}$ separately and in the latter part "(55-65%)" is removed as it is the SOC% as predicted from WSOC and "isoprene SOA" is replaced with "biogenic VOC" to keep it more general, although isoprene is the highest.

The text at page 2, line 20-25 originally read: "Here, organic aerosols account for 68 %–70% of $PM_{2.5}$ mass during summer (Rattanavaraha et al., 2017; Al-Naiema et al., 2019), the majority of which is secondary in origin (50 %–65 %) and is strongly influenced by isoprene SOA (Weber et al., 2007)."

The text has been revised to read: "Here, OA account for 68 %–70% of PM_1 (fine particulate matter with aerodynamic diameter less than 1 μm) mass (Rattanavaraha et al., 2017) and 71% of $PM_{2.5}$ mass during summer (Al-Naiema et al., 2019), the majority of which is secondary in origin and is mainly derived from biogenic VOC (Weber et al., 2007)."

TS6: Page 2, line 25-29. In the following text "fine organic aerosols (OA)" is replaced with PM_1 (fine particulate matter with aerodynamic diameter less than 1 μm) OA to be more specific.

The text at page 2, line 25-29 originally read: "For example, isoprene dihydroxy epoxides (IEPOX) contributed 29 %–38% of fine organic aerosol (OA) (Rattanavaraha et al., 2017; Budisulistiorini et al., 2016; Xu et al., 2015a) and total isoprene-derived OA contributed to 27% of $PM_{2.5}$ organic carbon (OC) (Al-Naiema et al., 2019)."

This text has been revised to read: "For example, isoprene dihydroxy epoxides (IEPOX) contributed 29 %–38% of PM_1 OA (Rattanavaraha et al., 2017; Budisulistiorini et al., 2016; Xu et al., 2015a) and total isoprene-derived OA contributed to 27% of $PM_{2.5}$ organic carbon (OC) (Al-Naiema et al., 2019)."

TS7 and TS8: Page 2, line 29-34. "IEPOX-OA" in the following text is replaced with "isoprene-derived OA" to be consistent with the terminology used in the cited paper (Xu et al., 2015b).

The text at page 2, line 29-34 originally read: "The diurnal variation of IEPOX-OA in urban Atlanta, GA was temporally consistent with isoprene emissions from plants, suggesting that IEPOX-OA forms locally rather than being transported from surrounding forested sites (Xu et al., 2015b)."

The text has been revised to read: “The diurnal variation of isoprene-derived OA in urban Atlanta, GA was temporally consistent with isoprene emissions from plants, suggesting that isoprene-derived OA forms locally rather than being transported from surrounding forested sites (Xu et al., 2015b).”

TS9 and TS10: Page 2, line 29-34. The following text is revised to indicate the %sulfate in $PM_{2.5}$ and PM_1 separately.

Text at page 2, line 34-36 originally read: “In Atlanta, sulfate is the second largest component of $PM_{2.5}$ and accounts for up to 15%–21% of PM_1 mass (Rattanavaraha et al., 2017; Al-Naiema et al., 2019).”

This text has been revised to read: “In Atlanta, sulfate is the second largest component of fine PM and accounts for 15% of $PM_{2.5}$ (Al-Naiema et al., 2019) and 17%-21% of PM_1 mass (Rattanavaraha et al., 2017).”

TS11: Page 2, line 40. The suggested changes to the text at page 2, line 37-40 has been incorporated correctly. Therefore, we believe the TS11 is for the following sentence shown below. Here we have added the phrase “In addition, ….” to link the following sentence to the subject that is being discussed in this paragraph.

Text at page 2, line 40 originally read. “Previous studies have demonstrated that the biogenic SOA formation in the southeastern US is enhanced by …..”

The text has been revised to read: “In addition, previous studies have demonstrated that the biogenic SOA formation in the southeastern US is enhanced by …..”

TS12, TS14, TS16-TS18, and TS26. The authors have revised the name “2-methyltetrol sulfate/s” to “methylterol sulfate/s” to be consistent and accurate as both the synthesized standard and the ambient methyltetrol sulfate are mixtures of both 2- and 3-methyltetrol sulfates.

TS13: Page 3, line 45-51. In the following text the phrase “…,one of three surrogate standards were used: for…” is added for further clarification.

Text at page 3, line 45-51 originally read: “For semiquantitation of organosulfates that fragmented to the bisulfate anion (*m/z* 97, Fig. 1a), *m/z* 211, 213, and 260 the response factor of 2-methyltetrol sulfate was used; for other organosulfates eluting prior to 4 min hydroxyacetone sulfate was used, and for those retaining more than 4min glycolic acid sulfate was used.”

The text has been revised to read: “For semiquantitation of organosulfates that fragmented to the bisulfate anion (*m/z* 97, Fig. 1a), one of three surrogate standards were used: for m/z 211, 213, and 260 the response factor of methyltetrol sulfate was used; for other organosulfates eluting prior to 4 min hydroxyacetone sulfate was used, and for those retaining more than 4 min glycolic acid sulfate was used.”

TS15: Page 5, Table 1 title. The phrase “(at 0.01 Da)” is removed as the median and the maximum error in the observed *m/z* is given, which are below 10 mDa.

TS19 and TS20: Figure 3 title. "HR-" is replaced with "HILIC" to indicate the method of separation and "(at 0.01 Da error)" is removed as the median and the maximum errors of the observed *m/z* are given in Table 1.

Figure 3 title originally read: "Extracted chromatograms of 19 major organosulfate species obtained from a $PM_{2.5}$ sample collected in Atlanta using HR-ToF (at 0.01 Da error)…."

Figure 3 title has been revised to read: "Extracted chromatograms of 19 major organosulfate species obtained from a $PM_{2.5}$ sample collected in Atlanta using HILIC-ToF."

TS 21-TS24: Page 10, line 43-45 and line 60-63. "HILIC" is added to indicate the method of separation and "-MS" is removed for the consistency.

Text at page 10, line 43-45 originally read: "Aromatic sulfur-containing compounds were not detected among the major organosulfate species (Table 1), although some were observed by ToF-MS."

The text has been revised to read: "Aromatic sulfur-containing compounds were not detected among the major organosulfate species (Table 1), although some were observed by HILIC-ToF."

Text at page 10, line 60-63 originally read: "None of the aromatic organosulfates reported in Staudt et al. (2014) (phenyl sulfates and benzyl sulfates) were detected in ToF-MS."

The text has been revised to read: "None of the aromatic organosulfates reported in Staudt et al. (2014) (phenyl sulfates and benzyl sulfates) were detected in HILIC-ToF."

TS25: Page 12, Section 4, line 34-44. Jason Surratt's group recently synthesized the 2- and 3-methyltetrolsulfate standards (Cui et al., Environ. Sci.: Processes Impacts, 20, 1524-1536, 10.1039/C8EM00308D, 2018), so that it is no longer relevant to suggest that this be done as future work. We would like to remove the text at page 12, Section 4, line 34-44: "Six isomers of methyltetrol sulfates were baseline resolved in the $PM_{2.5}$ samples collected from Centreville and Atlanta. Based on their stability to acid hydrolysis, these were tentatively identified as diastereomer pairs of methyltetrol sulfates with the sulfate group attached to primary (highest stability), secondary (intermediate stability), and tertiary (lowest stability) carbons (Hettiyadura et al., 2017). Thus, development of authentic standards for quantification of the three methyltetrol diastereomer pairs will give insights to the atmospheric aging and lifetime of this compound".