Literature comment on acp-2021-376
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Community comment on "Spatiotemporal Variability in the Oxidative Potential of Ambient Fine Particulate Matter in Midwestern United States" by Haoran Yu et al., Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2021-376-CC1, 2021

The present study reports the intercomparison of oxidative potential (OP) of PM using different metrics of OP and different extraction protocols. As no consensus has emerged towards which OP method to use, this study is of great interest for documenting various approaches.

However, it should be clarified that it is not the first study of its sort. Namely, Calas et al (2017) have investigated the role of solvent and extraction method and Calas et al (2018) already investigated 5 different OP end-points in Chamonix, France.

Moreover, there is an effort in this manuscript to refer to previous campaign all over the world. We would like to mention to the authors that numerous recent studies in Europe have also reported oxidative potential measurement with multiple assays and have investigated site specificity (Weber et al (2018), Cesari et al (2019), Paraskevopoulou et al (2019), Peronne et al (2019), Pietrogrande et al (2018)), including large-scale variability (Calas et al (2019), Weber et al (2021)) and small-scale variability of OP (Borlaza et al (2021)).

Even if some of the cited studies sampled PM10 and not PM2.5, the discussion of the different OP tests and drivers of OP have been discussed in these papers. These studies should be included in the literature of this manuscript.


