Atmos. Chem. Phys. Discuss.,
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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Measurement Report: Size distributions of inorganic and organic components in particulate matter from a megacity in northern China: dependence upon seasons and pollution levels" *by* Yingze Tian et al.

Anonymous Referee #2

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The study by Tian et al. reports an analysis of size segregated chemical composition of particulate matter in a megacity environment in China. The quality of analysis is excellent and the report is well written, however, there is nothing new which would advance the scientific knowledge of megacity pollution. There are at least one hundred published papers about PAHs and many hundreds of papers about particulate matter sources in that same Tianjin city region. Clearly, the topic is over researched and there must be well identified knowledge gaps to even plan a similar study. A general statement "The factors that influence heavy pollution in different seasons remain unclear

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Discussion paper

due to their complexity" does not warrant publication in ACP. The study would stand a much better chance if combined with planned source apportionment study (so perhaps the effort suffers from fragmentation), but even then it would hardly be exiting due to numerous other studies of the same topic. The category of Measurement Report paper in ACP should be reserved in my opinion to studies which are not presenting new findings, but for which geographical coverage is lacking. That is not the case with this study as neither methods, nor findings are new, nor the geographical coverage in that particular region is lacking. Given the quality and presentation of the paper it definitely deserves to be published, but in lower tier journals perhaps or as Data paper to keep credit for well executed analysis. Based on the above I have to recommend a rejection.

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