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 #1

Received and published: 10 August 2020

The authors conducted a comprehensive analysis of the size distributions of different chemical species in Tianjin. Size distributions of chemical compositions based on cascade impactor have been widely reported for over 20 years already, and there are many such studies in mega cities in China. The paper is a report of the results and it is difficult to see new contributions to the science of air pollution. I tried to identify something new in science and technology in the paper. The tools of the chemical analysis and the data analysis of the size distribution results are both very conventional. In the abstract, the authors said “These results reveal that the size distributions of inorganic and
organic aerosol components are dependent on the seasons and pollution levels as a result of the differing sources and physicochemical processes." While this is true, it is hardly exciting.

One possible way to upgrade the paper is to include modeling of the size distribution results. If this cannot be done, I suggest that the authors go to a lower tier journal to report the data. Not suitable for ACP at the moment.