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Atmospheric Measurement Techniques Discussions

Interactive comment on "Morphology and Raman spectra of aerodynamically-classified soot samples" *by* Alberto Baldelli and Steven Nicholas Rogak

Anonymous Referee #1

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The authors study of the properties of size- filtered soot particles performed by means of electron microscopy and Raman spectroscopy. The authors are able to show that the overall aerodynamic size of the soot aggregates is correlated to the size of the spherical primary particles that are the building blocks of the aggregates. Raman spectroscopy reveals that larger soot aggregates exhibit more crystalline graphitic domains as compared to smaller aggregates. The authors convincingly attribute this finding to the larger primary particle size found in the larger aggregates. This is probably the most important result of the study. The study usesand appropriate technology and is carefully performed and analyzed according to the established methodological standards. Recommendation: As stated by the authors, many similar studies have been

performed earlier. It is important to compile the results of comparable studies more extensively and to clarify explicitly, where the study goes beyond previous work. Apart from that, the manuscript is comprehensive and well written and I do not have further comments.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2019-86, 2019.