Supplement of

Measurement Report: Rapid decline of aerosol absorption coefficient and aerosol optical properties effects on radiative forcing in urban areas of Beijing from 2018 to 2021

Xinyao Hu^{1,2}, Junying Sun^{1,3*}, Can Xia^{1,4}, Xiaojing Shen¹, Yangmei Zhang¹, Quan Liu¹, Zhaodong Liu^{1,4}, Sinan Zhang¹, Jialing Wang¹, Aoyuan Yu^{1,2}, Jiayuan Lu¹, Shuo Liu¹, and Xiaoye Zhang¹

¹State Key Laboratory of Severe Weather & Key Laboratory of Atmospheric Chemistry of CMA, Chinese Academy of Meteorological Sciences, Beijing 100081, China

²University of Chinese Academy of Sciences, Beijing 100049, China

³State Key Laboratory of Cryospheric Science, Northwest Institute of Eco-Environment and Resources,

Chinese Academy of Sciences, Lanzhou 730000, China

⁴Nanjing University of Information Science & Technology, Nanjing 210044, China

*Correspondence to: Junying Sun (jysun@cma.gov.cn)

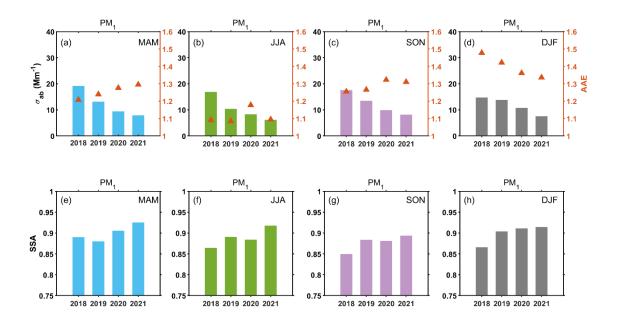


Figure S1. (a-d) Seasonal mean σ_{ab} (bar) for PM₁ at 550 nm, seasonal mean AAE_{450/700} (triangle) for PM₁, and (e-f) seasonal mean SSA (bar) for PM₁ at 550 nm from 2018-2021.

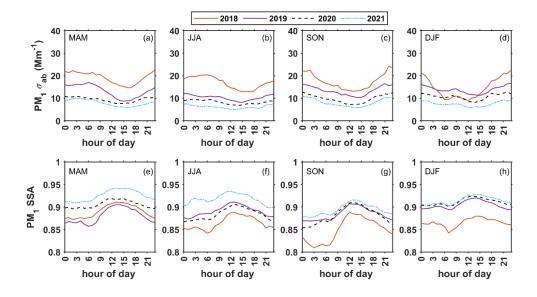


Figure S2. Diurnal variations of σ_{ab} (a-d) and SSA (e-h) at 550 nm for PM₁ from 2018 to 2021.

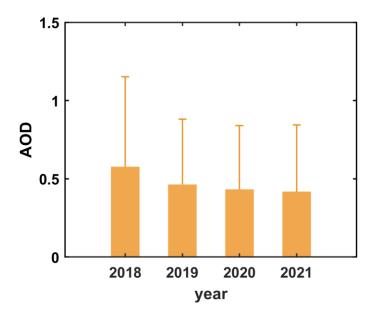


Figure S3. The annual variation of AOD from 2018 to 2021. Errorbar represents the standard deviation. (Available from the Aerosol Robotic Network)