

Exceptional wildfire smoke over Greece in summer 2023: a synergistic study of aerosol optical-microphysical and UVB radiative impacts

Supplementary Material

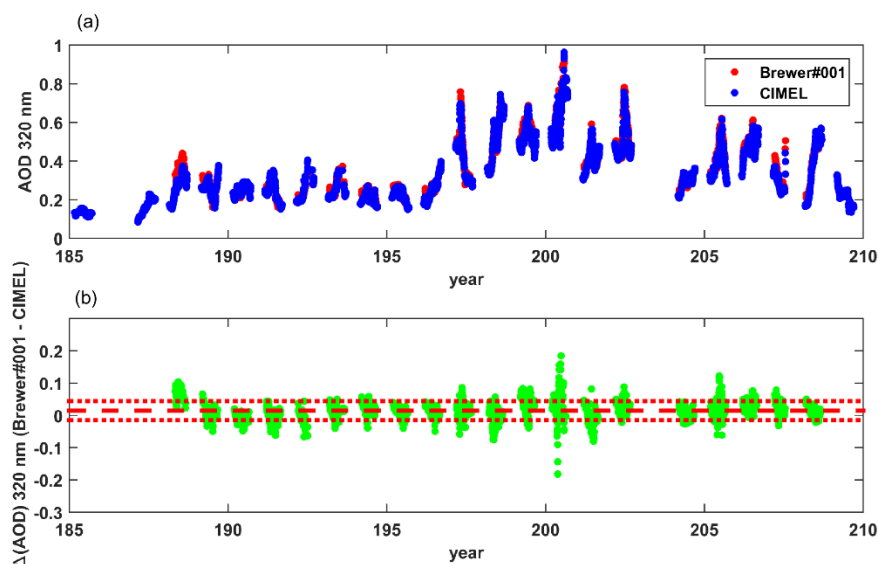


Figure S1. a) Time series of AOD from Brewer (red) and CIMEL (blue) for the period 2023–2025. (b) Difference $\Delta(\text{AOD})$ between Brewer and CIMEL AOD, for July - August 2023.

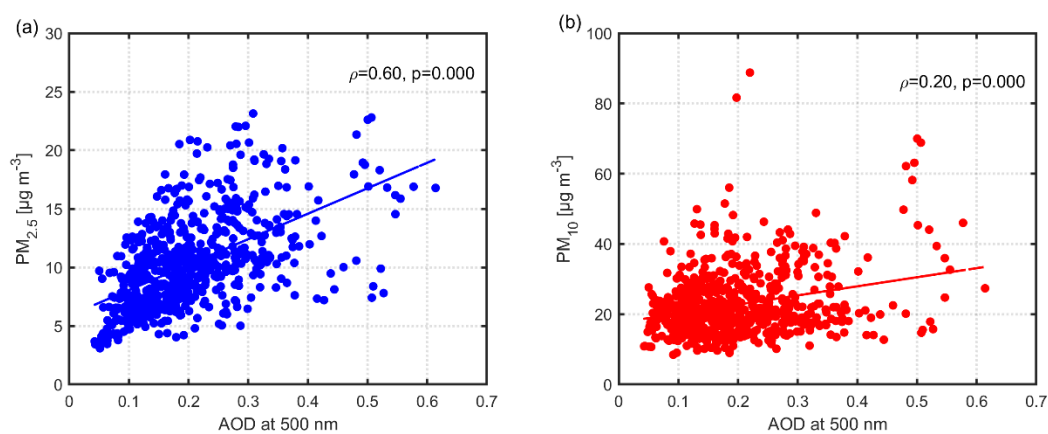


Figure S2. Spearman correlation between hourly (a) PM_{2.5} and (b) PM₁₀ concentrations and AOD at 500 nm during July and August 2023.

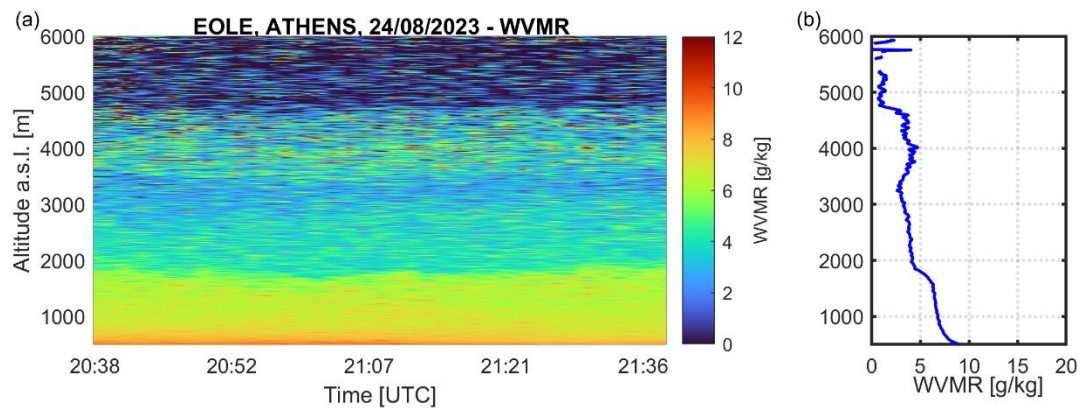


Figure S3. (a) Spatio-temporal evolution of the Water Vapor Mixing Ratio (WVMR) and (b) vertical profile of the WVMR obtained by EOLE lidar on 24 August 2023.

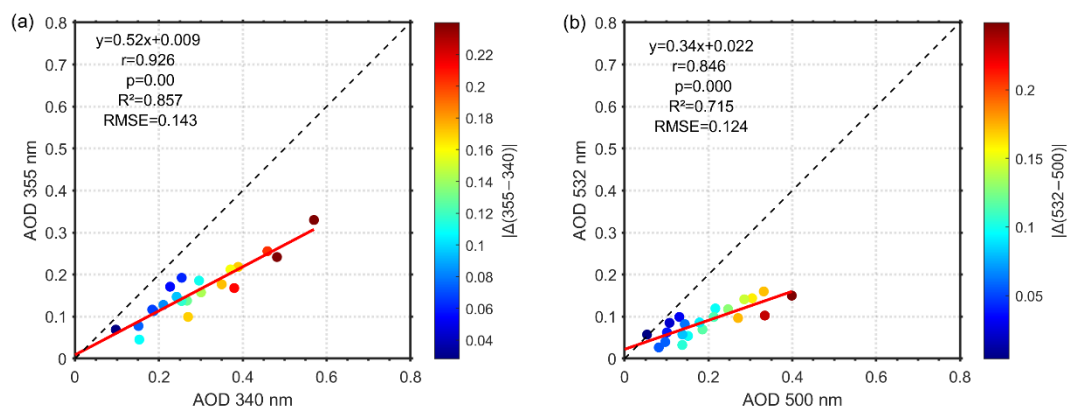


Figure S4. Comparison of layer-integrated AOD retrieved from the lidar with CIMEL sun-photometer measurements. (a) 355 nm (Lidar) vs. 340 nm (CIMEL) and (b) 532 nm (Lidar) vs. 500 nm (CIMEL).