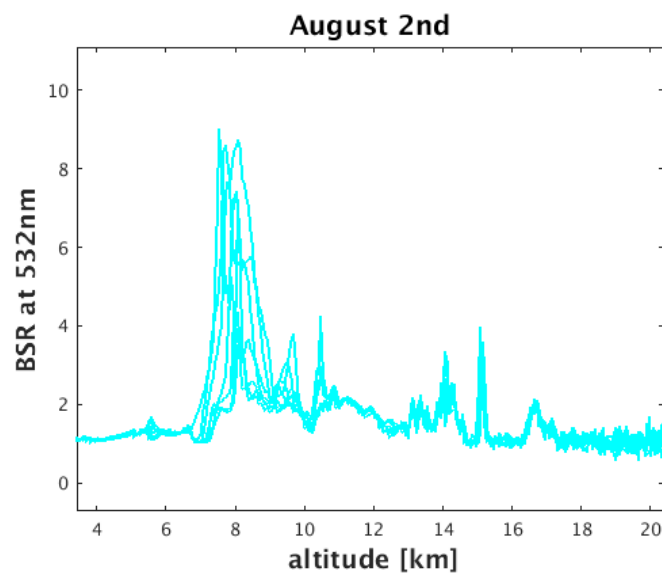


Dear Editor Hinrich Grothe,

Thank you for your supervision. The technical corrections indicated by Anonymous referee #2 have been addressed in the final version of the manuscript.

Regarding the comment about the quality of the lidar backscatter profiles, we already indicated the uncertainty of the aerosol backscatter profiles in lines 164-165 of the manuscript: “An uncertainty of 10 sr for the lidar ratio has been estimated, giving rise to about 10% uncertainty in the derived aerosol backscatter.”

Despite multiple aerosol layers, the uncertainty in 18 km altitude is about 10%, which is a satisfactory result. As it can be seen in the following figure, our derivation of the layer properties is not affected by noise; instead, the seven profiles shown in blue (10 min each) exhibit some temporal variability.



We hope this addresses your comment. If any issues remain unresolved or if you have further comments, please let us know.

Best regards,

Sara Herrero-Anta et al.