



The ERATOSTHENES Centre of Excellence in the POLLY^{NET}

First observations of the POLLY^{XT}-CYP at Limassol, Cyprus



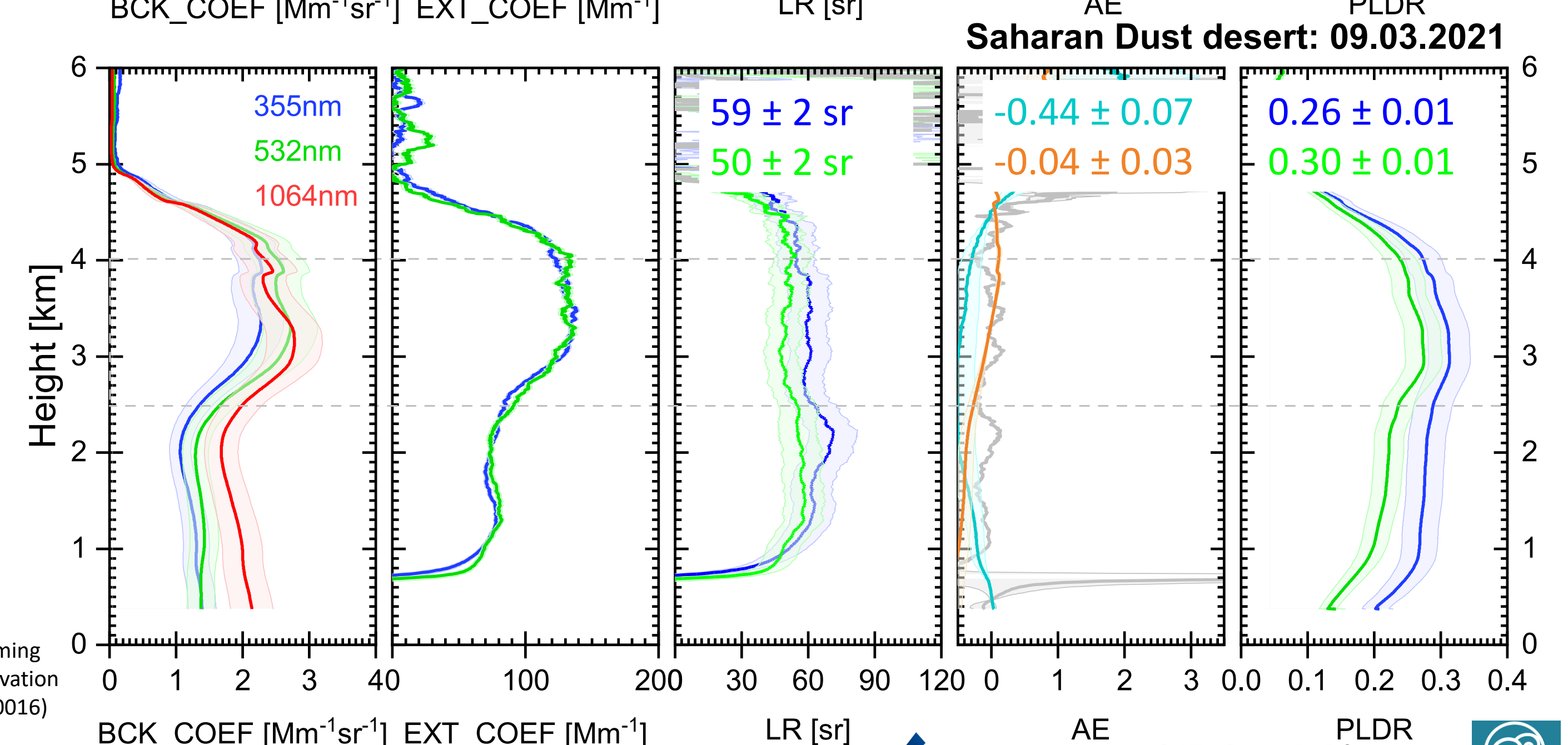
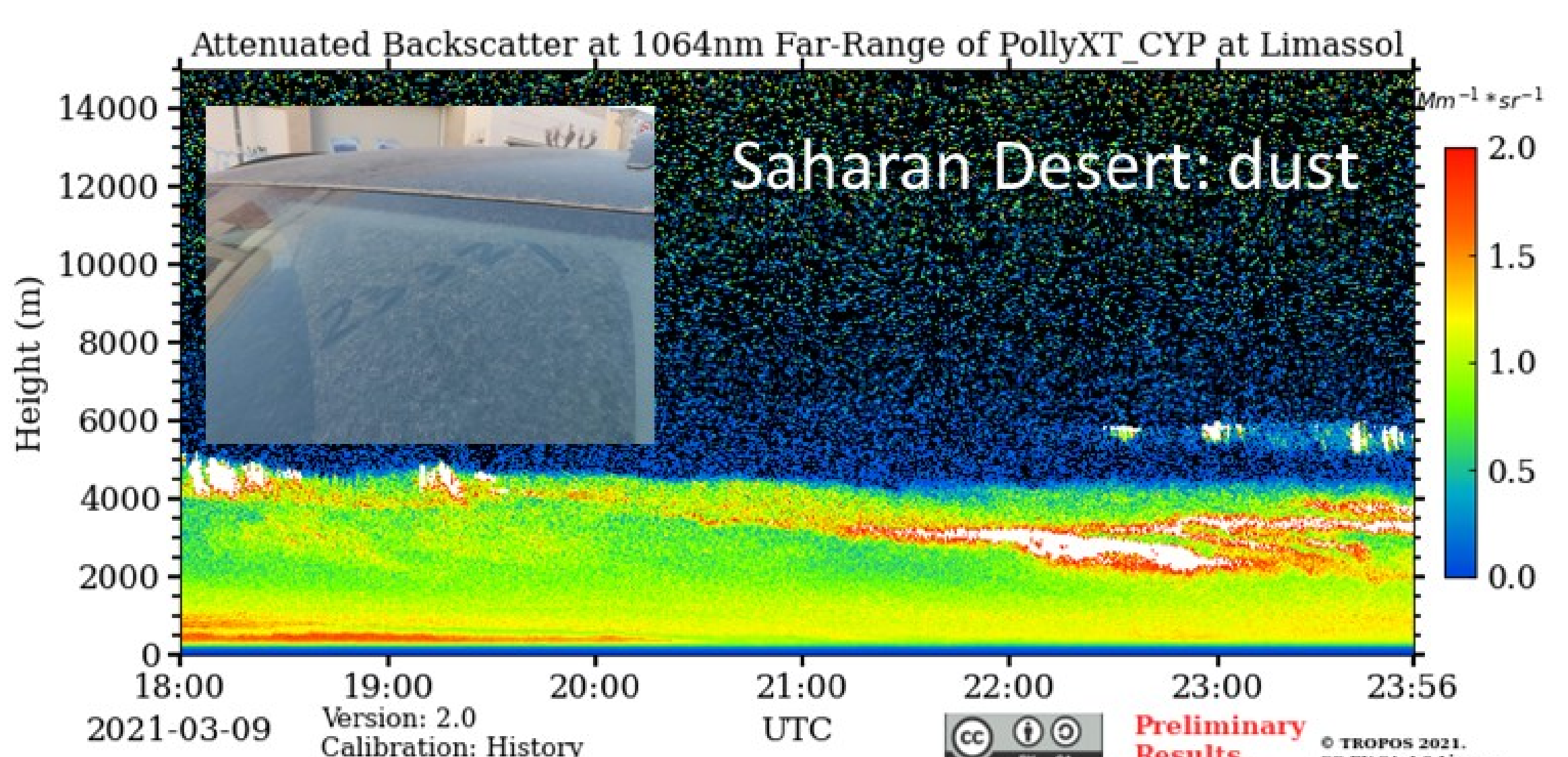
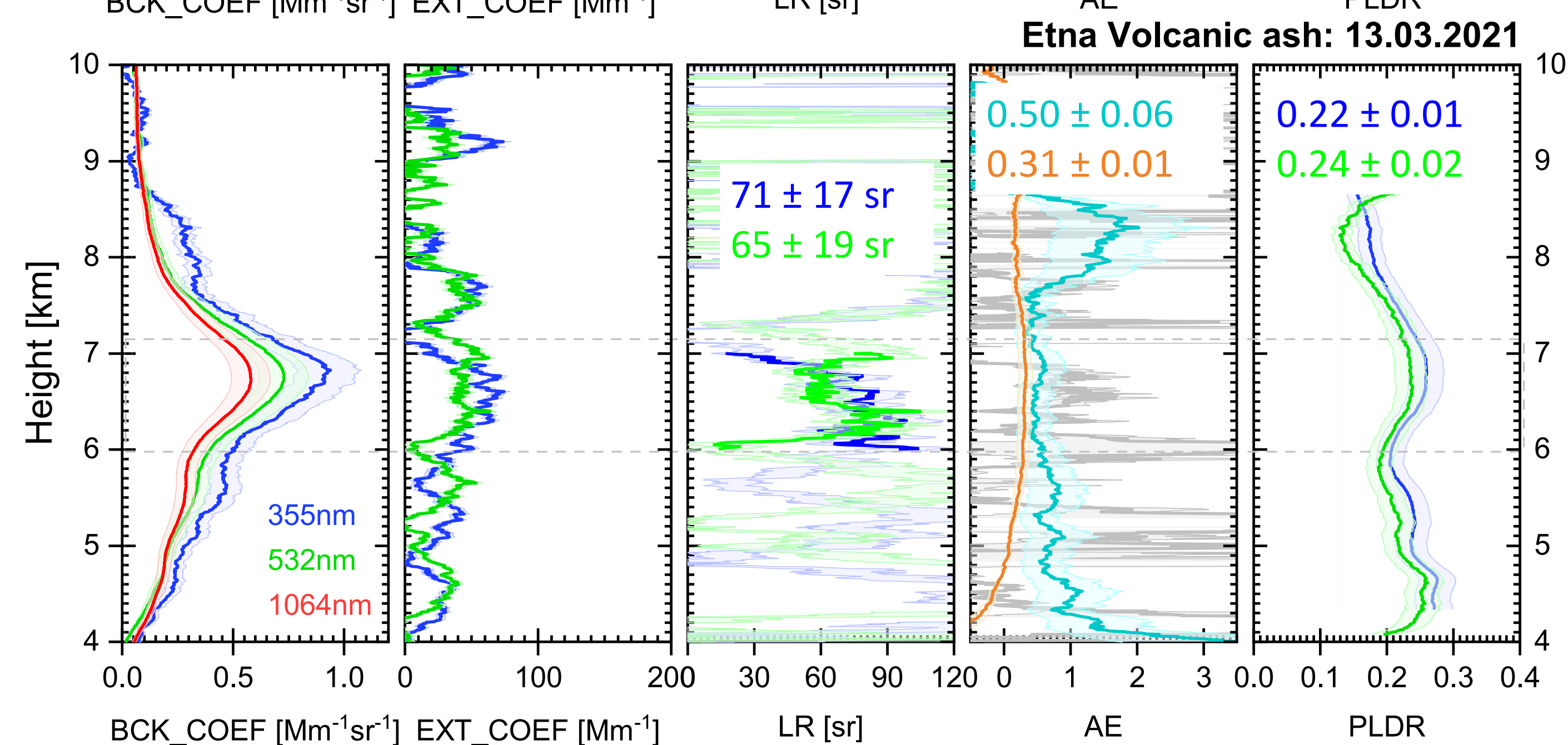
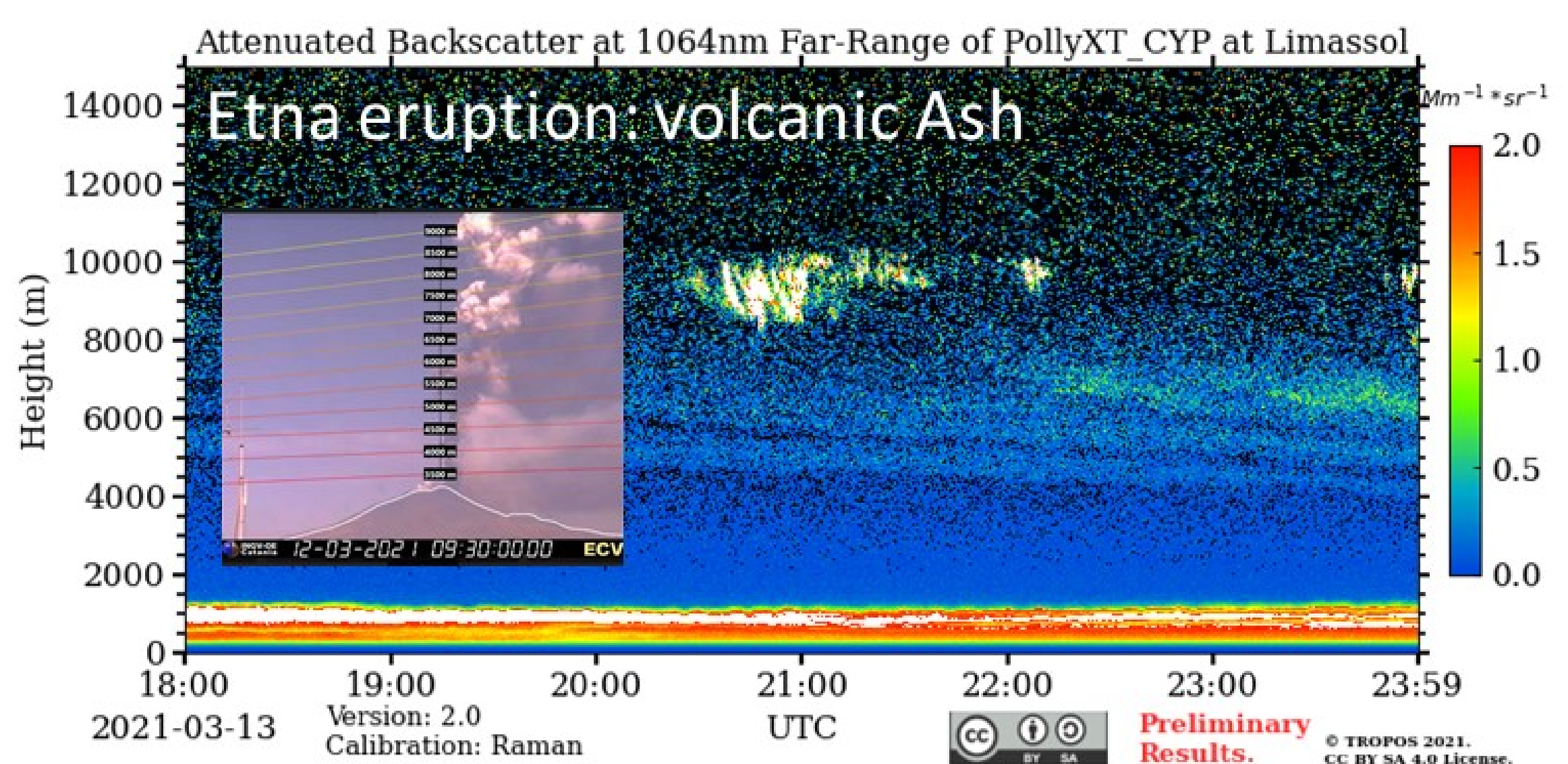
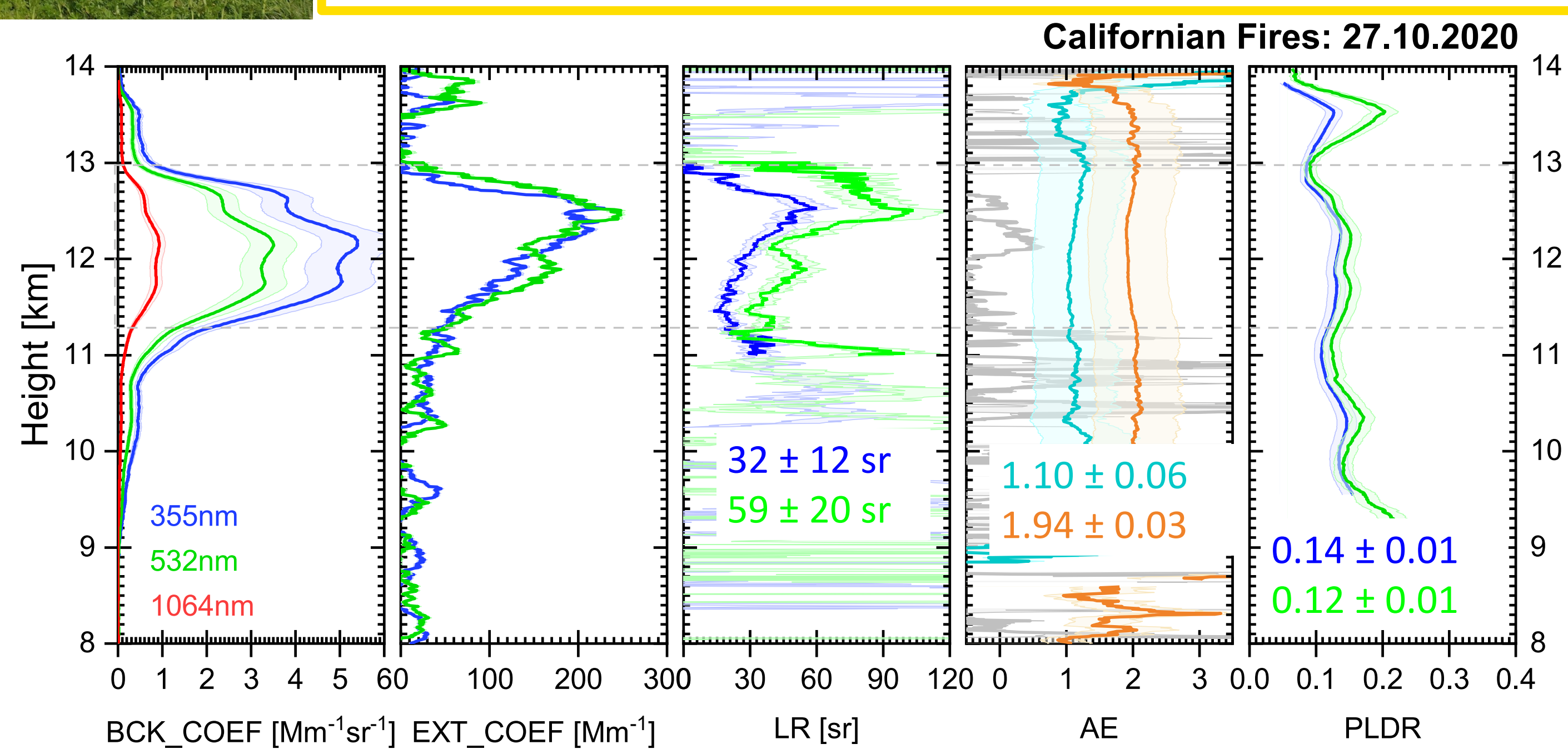
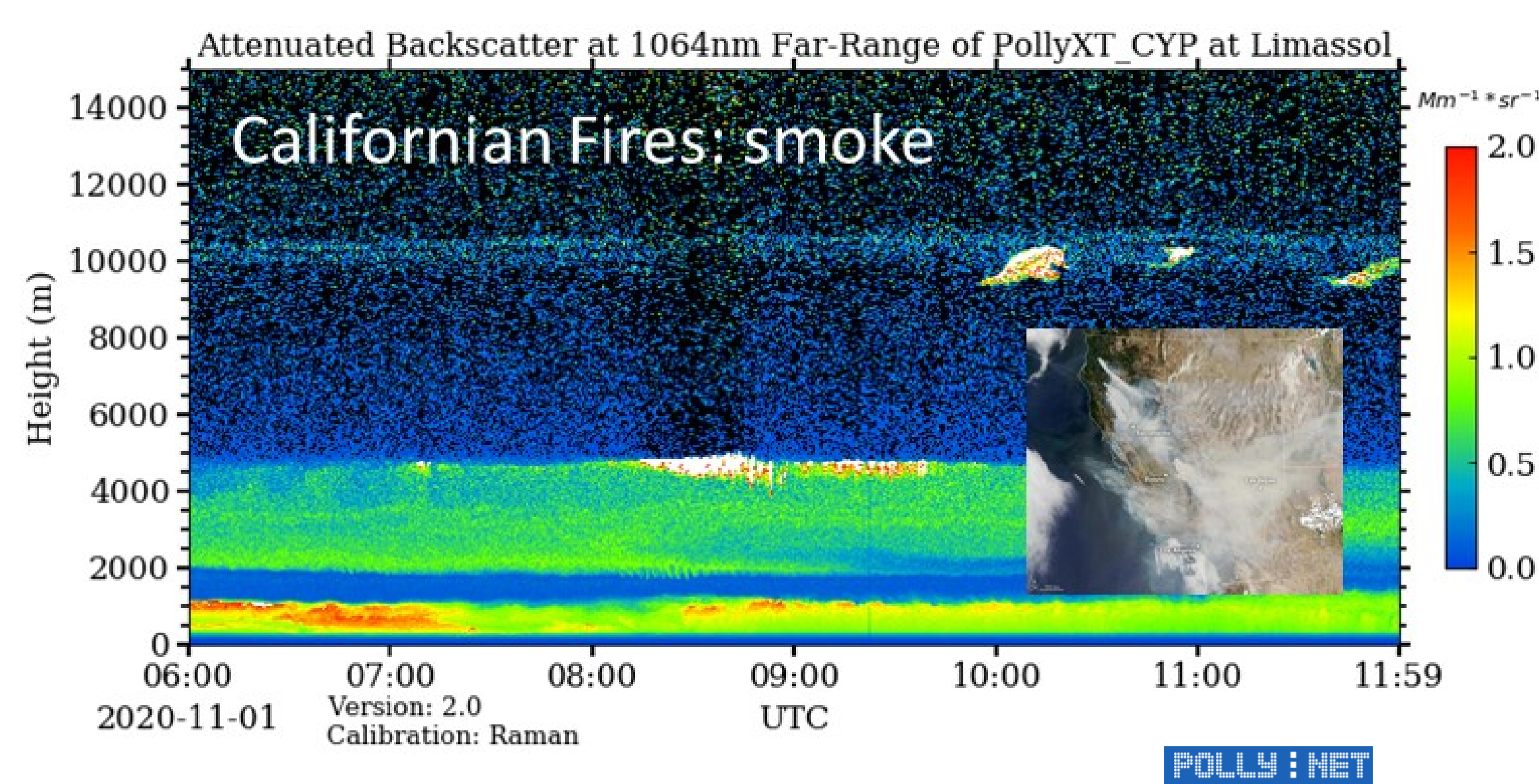
Rodanthi-Elisavet Mamouri, Argyro Nisantzi, and Diofantos G. Hadjimitsis Cyprus University of Technology & ERATOSTHENES Centre of Excellence, Limassol, Cyprus

Ronny Engelman, Johannes Bühl, Patric Seifert, Holger Baars, Zhenping Yin and Albert Ansmann Leibniz Institute für Troposphärenforschung, Leipzig, Germany



Limassol, Cyprus [34.7°N, 33°E]
ideal natural laboratory
for advanced and comprehensive field
studies of climate change,
aerosol-cloud-dynamics-precipitation interaction,
weather-precipitation-dryness complex,
representative for typical Mediterranean and
even Middle East meteorological conditions and
for coastal areas in the EMMENA region

- ⊙ A new generation POLLY^{XT} lidar system start on 27th of October 2020, continuous operation, at Limassol, Cyprus.
- ⊙ The POLLY^{XT}-CYP build by TROPOS, will be hosted by the ERATOSTHENES Centre of Excellence [ECoE] for its permanent operation aiming to link the ECoE to ACTRIS and POLLY^{Net}.
- ⊙ Its task will be to document the complex mixture of the different aerosol species and clouds over the Eastern Mediterranean.
- ⊙ The POLLY^{XT}-CYP will be a key research infrastructure of the Cyprus Atmospheric Remote Sensing Observatory [CARO].
- ⊙ The CARO of the ECoE is planned to become National Facility of the Republic of Cyprus for Aerosol and Cloud Remote Sensing Observations.



Acknowledgements

The authors acknowledge the EXCELSIOR project that received funding from the European Union [H2020-WIDESPREAD-04-2017:Teaming Phase2] project under grant agreement no. 857510, and from the Republic of Cyprus. CUT team acknowledge the Research and Innovation Foundation of Cyprus for the financial support through the SIROCCO (EXCELLENCE/1216/0217) and AQ-SERVE (INTERGRATED/0916/0016) projects. The PollyXT-CYP was funded by the German Federal Ministry of Education and Research (BMBF) via the PoLiCyTa project.