

Interactive comment on “Properties of biomass burning aerosol mixtures derived at fine temporal and spatial scales from Raman lidar measurements: Part I optical properties” by Lucja Janicka and Iwona S. Stachlewska

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Received and published: 29 April 2019

We are thankful for your comment. We truly appreciate that you and both Anonymous Reviewers value the dataset presented in our paper, the dataset that is derived manually using the Raman lidar data evaluation in combination with lidar water vapour profiling.

Aerosol interpretation (not typing) that is currently presented in the paper was based on the trajectory simulations, the inspection of the MODIS fire data and the literature

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review. In this sense it is the first step of complex analysis and, indeed, the 'part two' will focus on the microphysical inversion of presented dataset. We regret, that this information was not clearly stated in our paper.

We agree that it would be beneficial to use the derived dataset as an input for automated aerosol typing algorithms, such as the NATALI code (Nicolae et al. ACP, 2018). We are open to cooperation in this matter.

Finally, the multi-year analysis is not in a scope of the current paper. However, such analysis, based on the standard EARLINET data from Warsaw site as available via the ACTRIS Database is currently under preparation.

Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2019-207>, 2019.

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