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Discussions

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Interactive comment on "Airborne pollen observations using a multi-wavelength Raman polarization lidar in Finland: characterization of pure pollen types" *by* Xiaoxia Shang et al.

Anonymous Referee #2

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This paper studied the optical properties of pollen using multi-wavelength Raman Lidar. Like dust particles, it was the first to suggest a method of classifying pollen from atmospheric aerosols and calculating the optical depth, lidar ratio, and depolarization polarization of pure pollen only. This method can be applied only under conditions where there are no dust particles in the atmosphere, but it is considered to be a very important study because it is a method that can calculate information on the distribution and concentration of pollen with a spatial distribution using remote sensing technology. It is judged that the thesis is well structured and explained in detail the new method and process. It is considered acceptable to publish the paper as it is. However, as a suggestion, in this paper, the study results were calculated by applying the method

proposed in this study only for the two observation periods (IPP-1 and IPP-3) among four periods of Birch and Pine pollen. How about showing the results by applying this method for the period of IPP-2 and IPP-4? In this case, not only Birth and Pine, but also other types of pollen or a mixture of various types, couldn't we derive meaningful research results?

Interactive comment on Atmos. Chem. Phys. Discuss., https://doi.org/10.5194/acp-2020-794, 2020.