



## **Optical and microphysical properties of mineral dust and biomass burning aerosol observed over Warsaw on 10th July 2013**

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Biomass burning aerosol originating from Canadian forest fires was widely observed over Europe in July 2013. Favorable weather conditions caused long-term westward flow of smoke from Canada to Western and Central Europe. During this period, PollyXT lidar of the University of Warsaw took wavelength dependent measurements in Warsaw. On July 10th short event of simultaneous advection of Canadian smoke and Saharan dust was observed at different altitudes over Warsaw. Different origination of both air masses was indicated by backward trajectories from HYSPLIT model. Lidar measurements performed with various wavelength (1064, 532, 355 nm), using also Raman and depolarization channels for VIS and UV allowed for distinguishing physical differences of this two types of aerosols. Optical properties acted as input for retrieval of microphysical properties. Comparisons of microphysical and optical properties of biomass burning aerosols and mineral dust observed will be presented.