Atmos. Chem. Phys. Discuss., 6, S6813–S6814, 2007
www.atmos-chem-phys-discuss.net/6/S6813/2007/

Atmospheric Chemistry and Physics Discussions

Interactive comment on "SAWA experiment – properties of mineral dust aerosol as seen by synergic lidar and sun-photometer measurements" *by* A. E. Kardas et al.

A. E. Kardas et al.

Received and published: 14 February 2007

The SAWA experiment was organised in the emerging aerosol/radiative transfer laboratory of Warsaw University. The gathered instruments did not allow chemical analysis of aerosols.

Indeed, the combination of lidar and photometer measurements has been used before, as mentioned in our manuscipt. We modify the standard method by dividing the atmoshpere into several layers and performing separate calculations for each of them. Our proposition concerns also the specific combination of measured parameters, the chosen aerosol model and the procedure of determining the size and shape representative for the observed particles. We can state it more clearly in the revised version of

the paper, accounting for more references to similar studies.

The SAWA observations are consistent with the measurements taken in Belsk AERONET station (about 50 km south from Warsaw). Appropriate graphs can be added to the revised version of the article. The dust plum source attribution can be supported with the HYSPLIT back trajectories calculated for the measurement days.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 12155, 2006.