



Studies of aerosol optical depth with use of Microtops sun photometers and MODIS detectors

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We would like to describe the results of a research campaign aimed at the studies of aerosol optical properties in the regions of the open Baltic Sea as well as coastal areas. During the campaign we carried out simultaneous measurements of aerosol optical depth at 4 stations with use of the hand-held Microtops II sunphotometers. The studies were complemented with the MODIS aerosol data. In order to obtain the full picture of the aerosol situation over the study area we added air mass back-trajectories at various altitudes and wind fields. Such complex information facilitated the proper conclusions regarding aerosol optical depth and Angstrom exponent for the four locations and discussion of the changes of aerosol properties with distance and meteorological factors. We show that Microtops II sunphotometers are reliable instruments for field campaigns. They are easy to operate and provide good quality results.

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