

Abstract

This thesis' objective is basic data processing of light scattering, which was measured using three-wavelength Integrating Nephelometer. Measurements were carried out at observatory in Košetice, where the nephelometer has been placed since mid-2012. The data collection was carried out during two calendar years (2013 and 2014) and the measurement still continues there. Data is processed in a manner to be suitable for using in future research in the field of meteorology and climatology. Basic parameters such as Angstrom exponent, average value, median and annual and daily cycles are calculated. All dependencies and cycles are graphically represented and commented. Besides other things, it was found out during the data processing that e.g. average coefficient of light scattering was very similar in both years or that the scattering coefficient was higher in winter months. In addition, the thesis discusses another options for future measurements.

Key words: atmospheric aerosol, light scattering, nephelometer, Angstrom exponent