

The Lidar Ratio Derived from Sun-Photometer Measurements at Belsk Geophysical Observatory

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A b s t r a c t

The lidar ratios at 500 and 1020 nm were derived from POM 01L sun-sky scanning photometer measurements taken at Belsk Geophysical Observatory (long. 20°47', lat. 51°50') in the period from 2002 to 2006. The most frequently occurring lidar ratio values for the study period are 50 sr and 30 sr at 500 nm and 1020 nm, respectively. Calculations of lidar ratios for summer and winter seasons have been made as well. Back trajectory analysis was also performed to find aerosol source of origin.

Key words: aerosol, lidar, sun-photometer, lidar ratio, back trajectory, backscatter aerosol lidar.