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# *Interactive comment on* "Aerosol light absorption in the North Atlantic: trends and seasonal characteristics during the period 1989 to 2003" *by* C. Junker et al.

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This paper presents a thorough statistical analysis of a long time series of light absorption in the North Atlantic. Regarding the comparison with the trends at an Arctic site reported by Sharma et al. (2004), it is worthwhile to note that the North Atlantic Oscillation has opposite effects on the pollution transport to the Canadian Arctic and to Mace Head, as shown by Eckhardt et al. (2004) using model calculations and station data (including BC data from Mace Head). Thus, I think the fact that opposite trends have been reported for the two stations can partly be explained by the tendency (I am

avoiding the word "trend" here, as the time period is perhaps too short to speak of a true trend) of the North Atlantic Oscillation during this period.

Reference: Eckhardt, S., A. Stohl, S. Beirle, N. Spichtinger, P. James, C. Forster, C. Junker, T. Wagner, U. Platt, and S. G. Jennings (2003): The North Atlantic Oscillation controls air pollution transport to the Arctic. Atmos. Chem. Phys. 3, 1769-1778.

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