

Interactive  
Comment

***Interactive comment on* “Technical Note: Simple analytical relationships between Ångström coefficients of aerosol extinction, scattering, absorption, and single scattering albedo” by H. Moosmüller and R. K. Chakrabarty**

**Anonymous Referee #1**

Received and published: 7 August 2011

**General Remark**

The technical note on analytical relationships between Ångström coefficients of aerosol extinction, scattering, absorption, and single scattering albedo contributes simple relationships between key aerosol properties to the research area of aerosol climate interaction. It contains straightforward mathematics and helps users to interpret their data on aerosol radiative properties. The technical note is in the focus of ACP and deserves publication after minor revisions which are discussed in the following section.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



Specific Comment: The authors derive Eq. (2h) which links the extinction Ångström coefficient to single-scattering albedo, single-scattering co-albedo and to the respective coefficients for absorption and scattering for single-wavelength data. In Section 2, the authors present a generalisation of Eq. (2h) for the case of two-wavelength data which is the more common case in atmospheric research. They derive an expression for a two-wavelength single-scattering albedo and co-albedo in Eqs. (3a, 3b) but do not fully develop the two-wavelength case. It appears useful to evaluate an expression compared to Eq. (2h) for the two-wavelength case instead of advising the reader on page 19218, lines 10 – 12 which equations to use. In order to assure full applicability of their relationships the authors may consider closing the technical note with a full development of the two-wavelength case.

---

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 19213, 2011.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

