Interactive comment on “Seasonal variations in aerosol optical properties over China” by Y. Wang et al.

Anonymous Referee #2

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General Comments

The authors describe the “The seasonal variations in aerosol optical properties over China”. The paper is well-presented and contains data which will be of wide-spread use.

Specific Comments

1) While the quality of presentation is good, the discussion could have "evolved" further from the forerunner JGR paper (Xin et al, 2007). The present paper extends the reported data from 2 years in the JGR paper (2004 - 2005) to only 4 years (2004 - 2007).

2) A brief discussion of the hazemeters and calibration techniques should be men-
tioned in the Methods section, although this already appears in the JGR paper. A discussion of the errors should also be made considering the known difficulties/problems associated with hand-held instruments.

3) A large part of the discussion is based on describing the angstrom coefficient as a function of the temperature and relative humidity. This is at best very difficult to do for several reasons. The first is due to the inherent error in the angstrom coefficient when based on only 3 wavelengths. The second concerns the interpretation of data in the Figures. For instance, the comment on Page 8436, Line 19 - 22 needs to be re-thought as the quoted conclusions do not follow from Figure 1.

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 8431, 2008.