Interactive comment on “In situ measurements of angular dependent light scattering by aerosols over the contiguous United States” by W. Reed Espinosa et al.

Anonymous Referee #1

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Review of In situ measurements of angular dependent light scattering by aerosols over the contiguous United States, ACP-2017-941.

General Comments

This paper is very well written and contains very unique data sets. Polar nephelometer measurements of the Aerosol Phase Function (APF) are very rare and in my opinion very lacking in atmospheric science. Various types of aerosols were measured in two aircraft campaigns with several other complimentary aerosol instruments operating simultaneously. The paper demonstrates that classifying aerosols strictly by the polar nephelometer measurements works remarkably well. This paper is appropriate for ACP and can be posted in its discussion forum.

Specific comments Most of my comments were contained in the quick review and were addressed in this version. There are a few typos in this version.

Abstract: . . . and it is found that in most case(s) the results . . .

Page 1: Line 22: . . . the assumptions and validations of the techniques require . . .

Page 2: Line 8: The limited number (of) angles . . . Line 12: . . . the results from a wide range (of) studies . . .

Page 3: Line 8: . . . required for a compressive aerosol model. Do you mean comprehensive? Line 9: . . . used to measure the angular . . .