Posting type Advisory

Subject Suspect light-absorption data from three months in 2000

Module/Species A/ f_{abs}

Sites Entire network

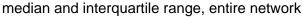
Period 1 September 2000 - 30 November 2000

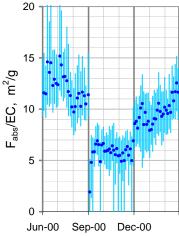
Recommendation Exclude from analysis

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Supporting information

Reported light-absorption values dropped sharply across the entire network at the start of September 2000, and remained low for three months. The drop was implausibly abrupt relative to other aerosol indices (Figure 1), and was evident only in f_{abs} . The fact that the anomalous three months coincide with a meteorological quarter, by which laboratory operations were at that time organized, suggests the divergence reflects an unidentified problem in the HIPS analysis for f_{abs} . Absorption was below HIPS detection limits in many of the fall quarter samples (Figure 2).





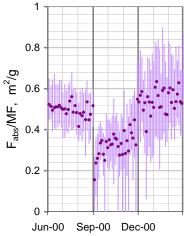


Figure 1. Time series of absorption relative to species concentrations. The September discontinuities in absorption/mass ratios are similar for elemental carbon and PM_{2.5}, which are measured independently of each other on different filters.

Figure 2. Comparison of two months' parameter distributions. Each percentile from 0% to 75% for September is plotted against the same percentile for August. Median (squares) and quartile (diamonds) values are highlighted. Values for each parameter are normalized by the August-September median.

