ADDITIONAL MATERIALS AVAILABLE ON THE HEI WEB SITE

Research Report 179

Development and Application of an Aerosol Screening Model for Size-Resolved Urban Aerosols

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Additional Materials 1 through 4: Colorplots of Number Size Distributions

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Additional Materials 1. Colorplot of measured diurnally averaged number size distributions at the LB4 site for September 2007. Intensity of the size distribution function is shown as the color, plotted versus local time of day (x axis) and particle diameter (y axis). Warm (cool) colors indicate high (low) values of the distribution function. Data are identical in both panels, but the color scaling is adjusted. Both linear (top) and log (bottom) scales are used to map concentrations to color, as indicated by the color scales. In both panels, the dark red color of the top panel corresponds to the maximum value of the size distribution function measured (30,010/cm$^3$ as the dN/dlog($D_p$) size distribution function, which occurs at a size of 24 nm and a time of 2:00 PM).
Additional Materials 2. Colorplots of measured and simulated diurnally averaged number size distributions at the LB4 site for September 2007, showing the (top) average measured distribution, (middle) modeled distribution after accounting for particle losses, and (bottom) modeled distribution before accounting for particle losses. Intensity of the size distribution function is shown as the color, plotted versus local time of day (x axis) and particle diameter (y axis). Warm (cool) colors indicate high (low) values of the distribution function. In all three panels, the dark red color of the top panel corresponds to the maximum value of the size distribution function measured (30,010/cm³ as the dN/dlog(Dₚ) size distribution function, which occurs at a size of 24 nm and a time of 2:00 PM).
Additional Materials 3. Colorplot of measured diurnally averaged number size distributions at the LB5 site for September 2007. Intensity of the size distribution function is shown as the color, plotted versus local time of day (x axis) and particle diameter (y axis). Warm (cool) colors indicate high (low) values of the distribution function. Data is identical in both panels, but the color scaling is adjusted. Both linear (top) and log (bottom) scales are used to map concentrations to color, as indicated by the color scales. In both panels, the dark red color of the top panel corresponds to the maximum value of the size distribution function measured (77,090/cm$^3$ as the dN/dlog(D$_p$) size distribution function, which occurs at a size of 20 nm and a time of 9:00 AM).
Additional Materials 4. Colorplots of measured and simulated diurnally averaged number size distributions at the LB5 site for September 2007, showing the (top) average measured distribution, (middle) modeled distribution after accounting for particle losses, and (bottom) modeled distribution before accounting for particle losses. Intensity of the size distribution function is shown as the color, plotted versus local time of day (x axis) and particle diameter (y axis). Warm (cool) colors indicate high (low) values of the distribution function. In all three panels, the dark red color of the top panel corresponds to the maximum value of the size distribution function measured (77,090/cm$^3$ as the dN/dlog(D$_p$) size distribution function, which occurs at a size of 20 nm and a time of 9:00 AM).