

Supplementary Material:

Long Term Black Carbon Measurements at Two Urban Locations in New York

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Fig. S1. Box and whisker plot of the annual BC to PM_{2.5} FRM mass ratio at (a) the Bronx and (b) Rochester. The boxes represent the 25th percentile (lower edge), median (solid line), mean (dashed line), and 75th percentile (upper edge). Whiskers represent the 10th and 90th percentiles and the solid circles are the 5th and 95th percentiles.

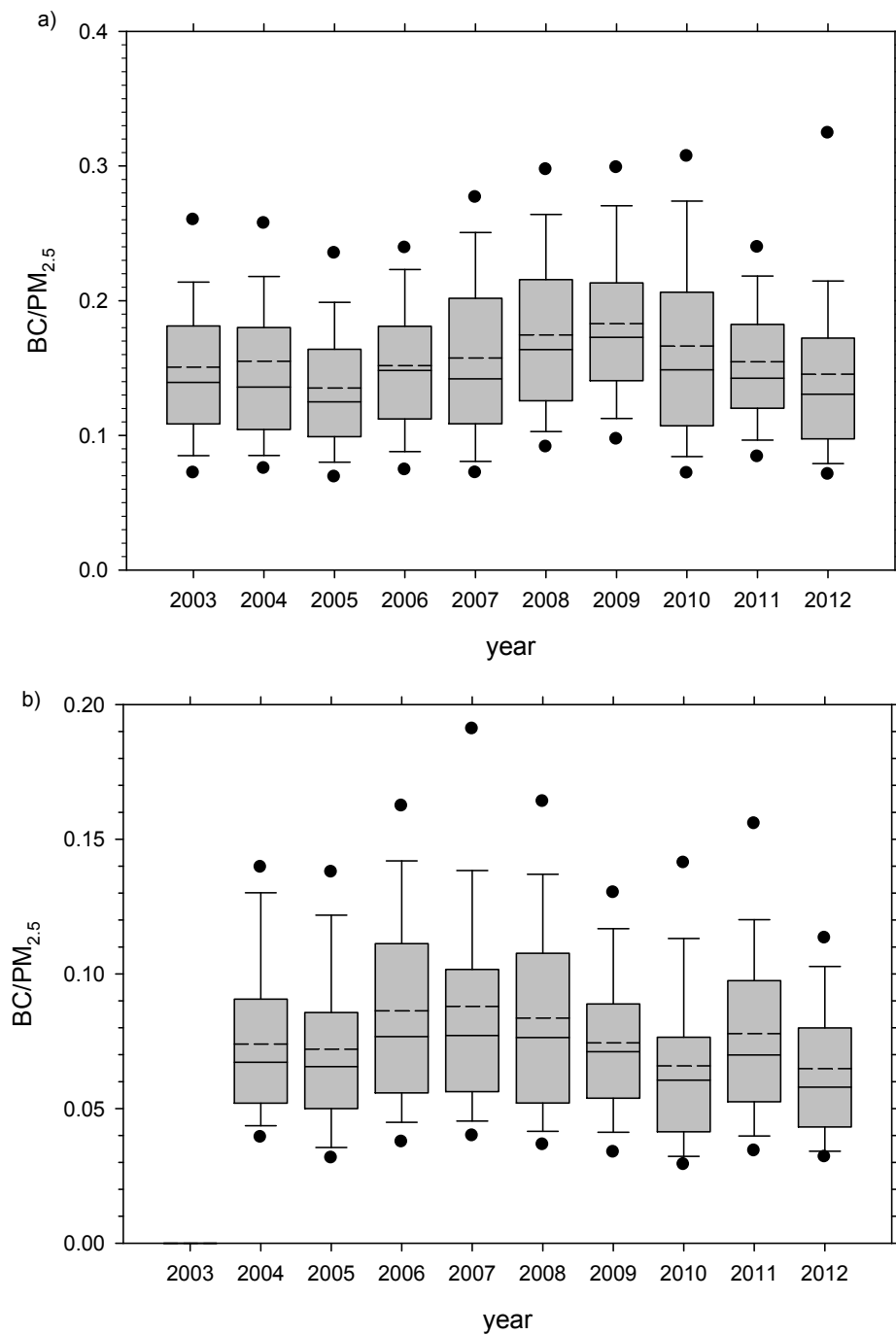


Fig. S2. Box and whisker plot of monthly BC_{880} to $PM_{2.5}$ FRM mass ratio at (a) the Bronx and (b) Rochester. Symbol key as for Fig. S1.

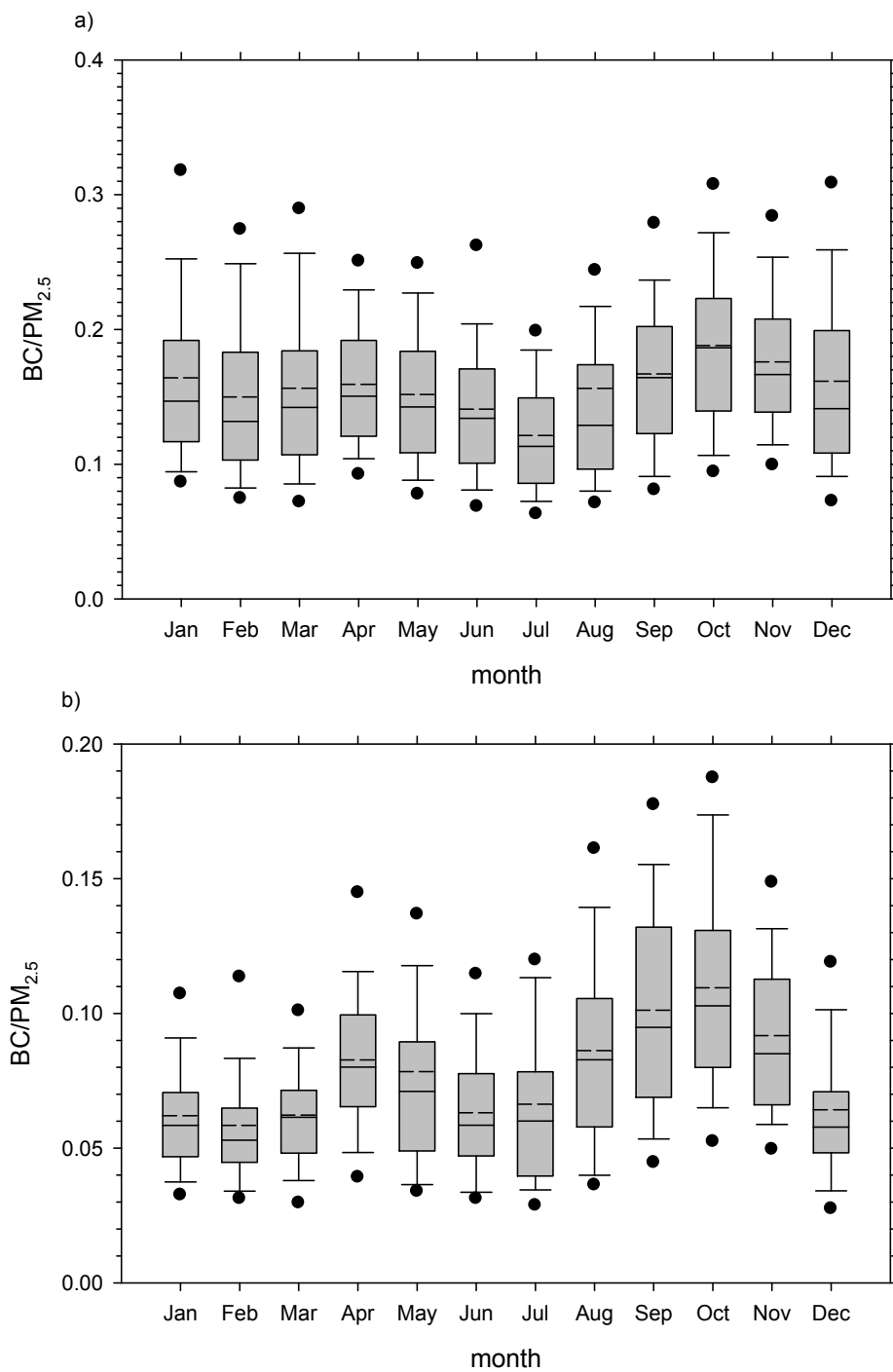


Fig. S3. Box and whisker plot showing day of week BC_{880} concentration versus season at Rochester. Symbol key as in Fig. S1.

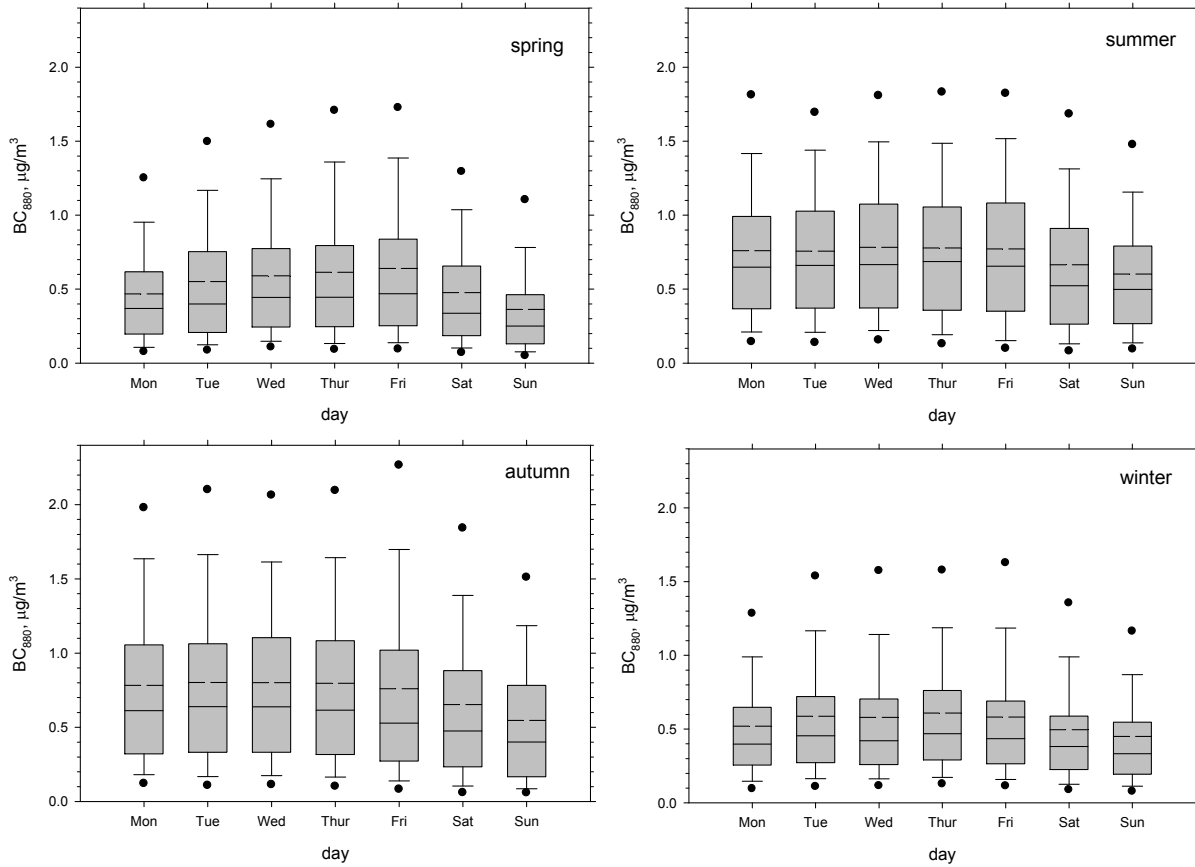


Fig. S4. Mean daily total vehicle count on I-590 at Rochester versus day of week and season.

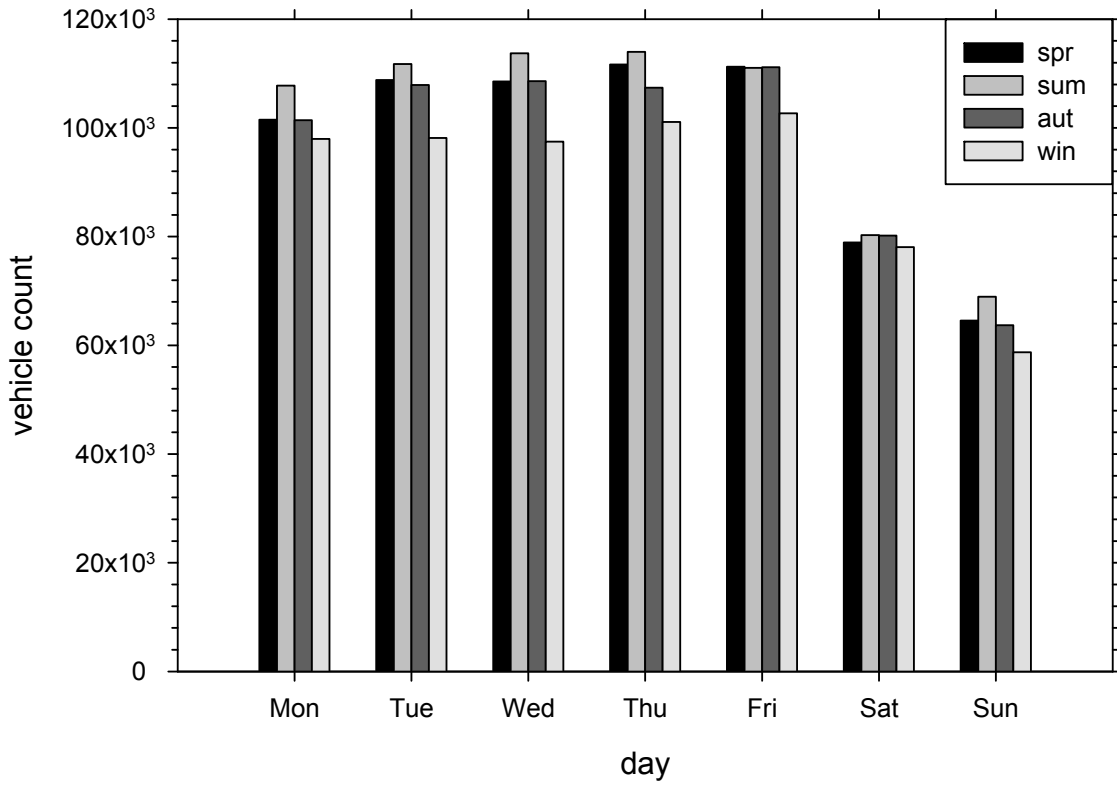


Fig. S5. Mean diurnal boundary layer height (m) profile versus season at (a) the Bronx and (b) Rochester.

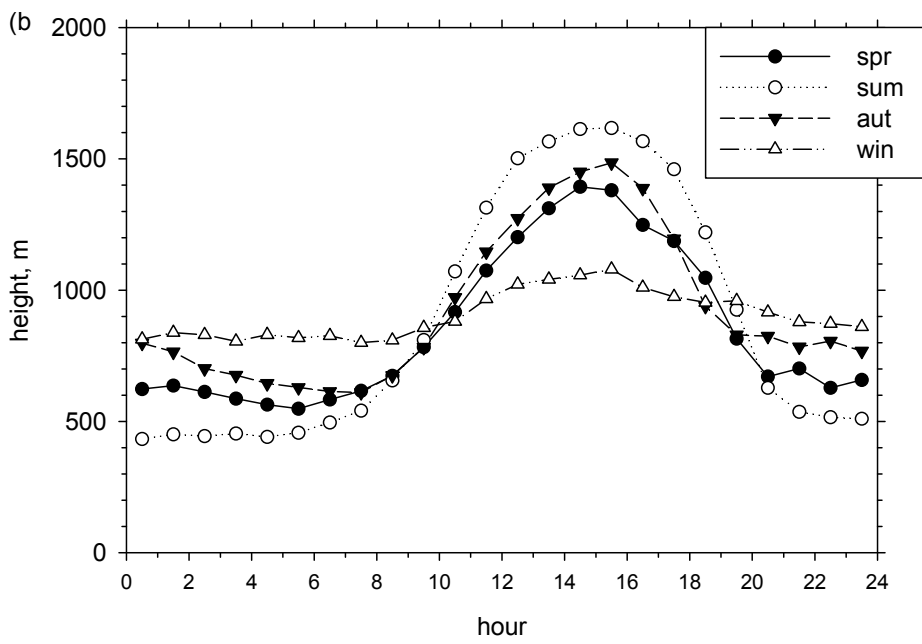
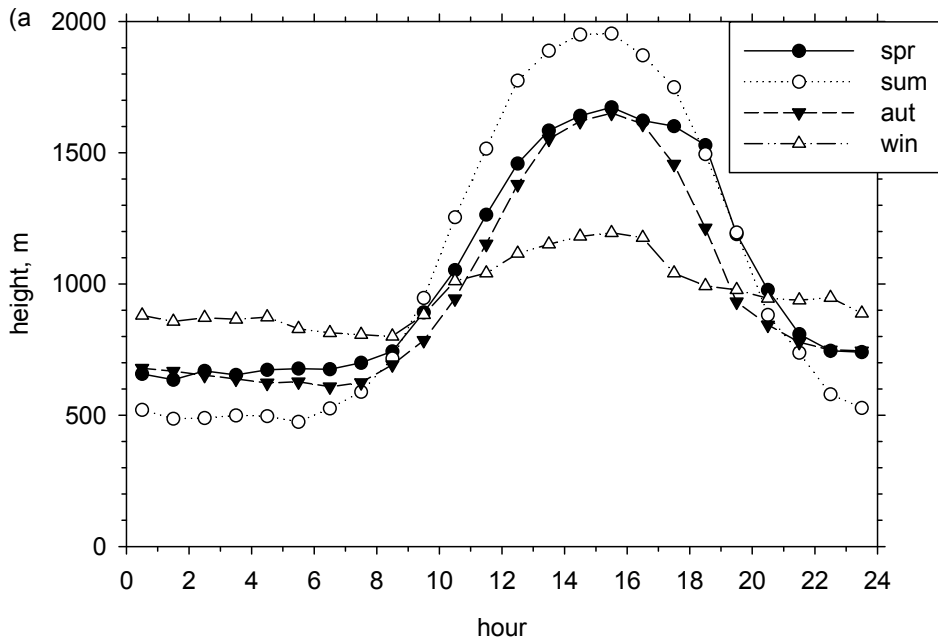


Fig. S6. Mean diurnal profile of BC₈₈₀, EC, OC, SO₄ (left axis) and NO_x (right axis) concentrations at the Bronx during summer.

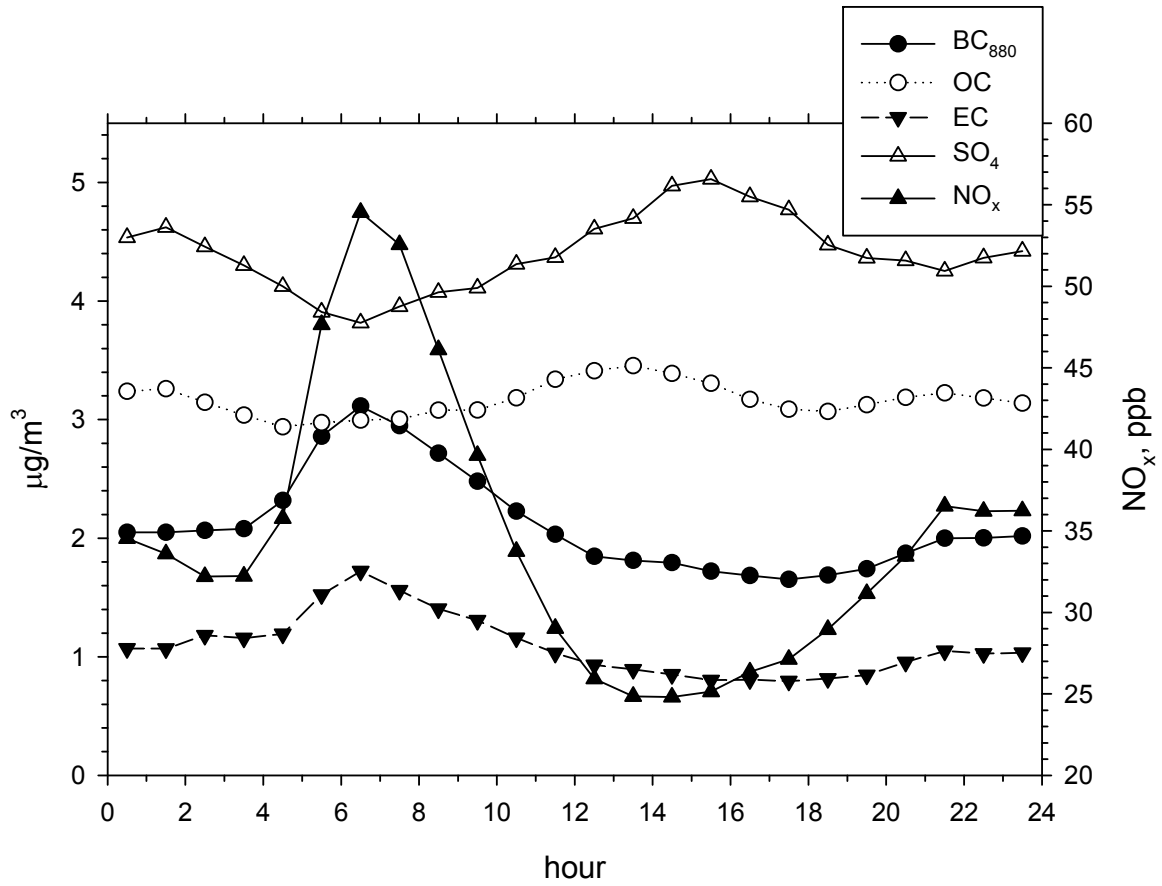


Fig. S7. Box and whisker plot showing the weekday diurnal BC_{880} concentration versus season at Rochester. Symbol key as for Fig. S1.

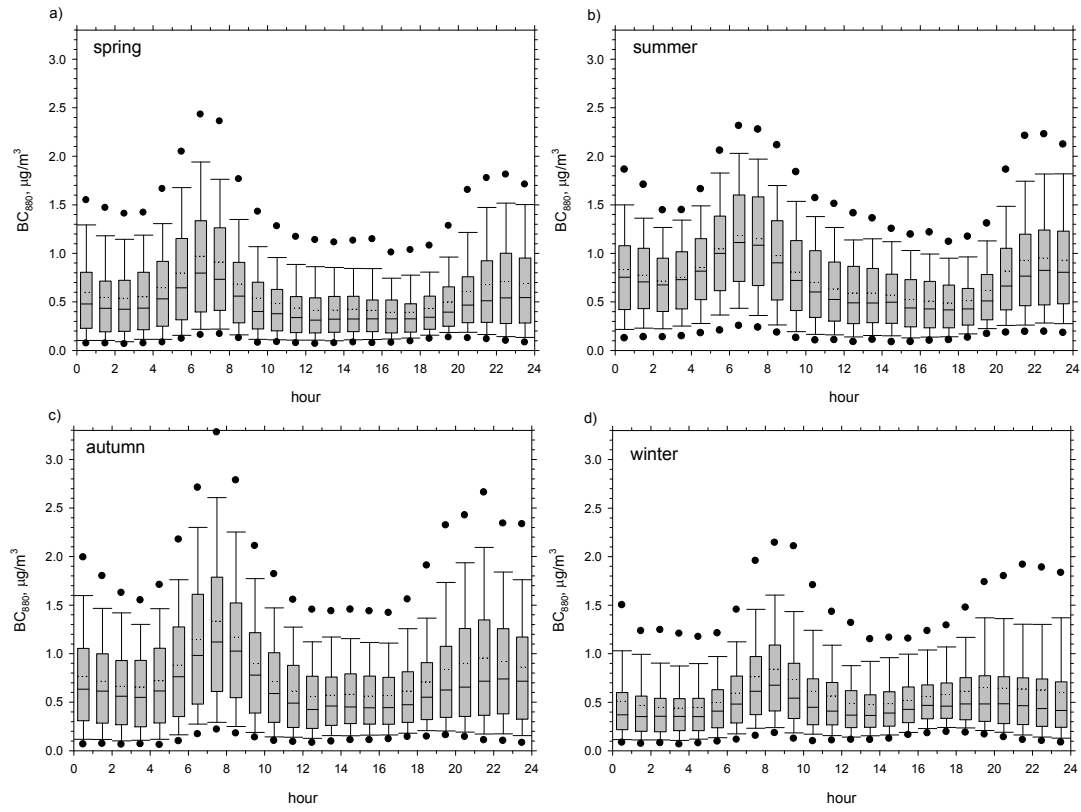


Fig. S8. Box and whisker plot of monthly Delta C at (a) the Bronx and (b) Rochester. Symbol key as for Fig. S1.

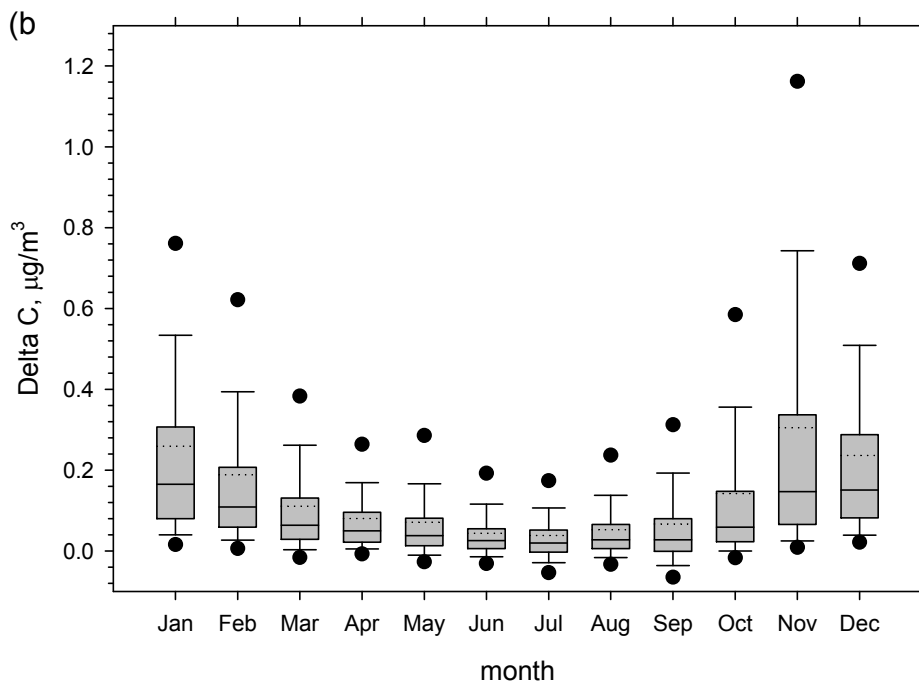
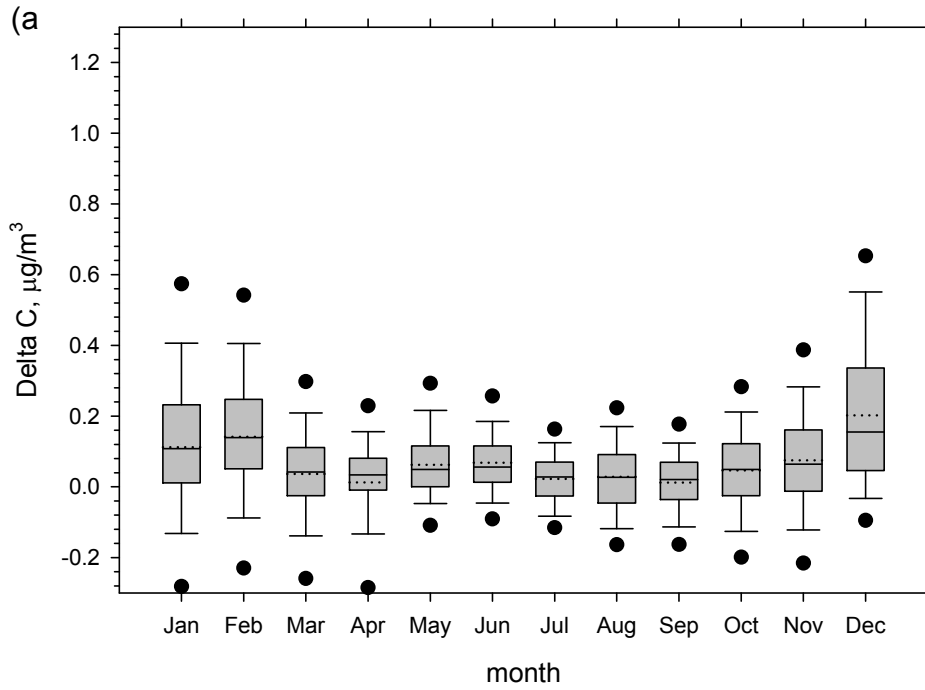


Fig. S9. Box and whisker plot of Delta C diurnal pattern during weekends from October to February at (a) the Bronx and (b) Rochester. Symbol key as for Fig. S1.

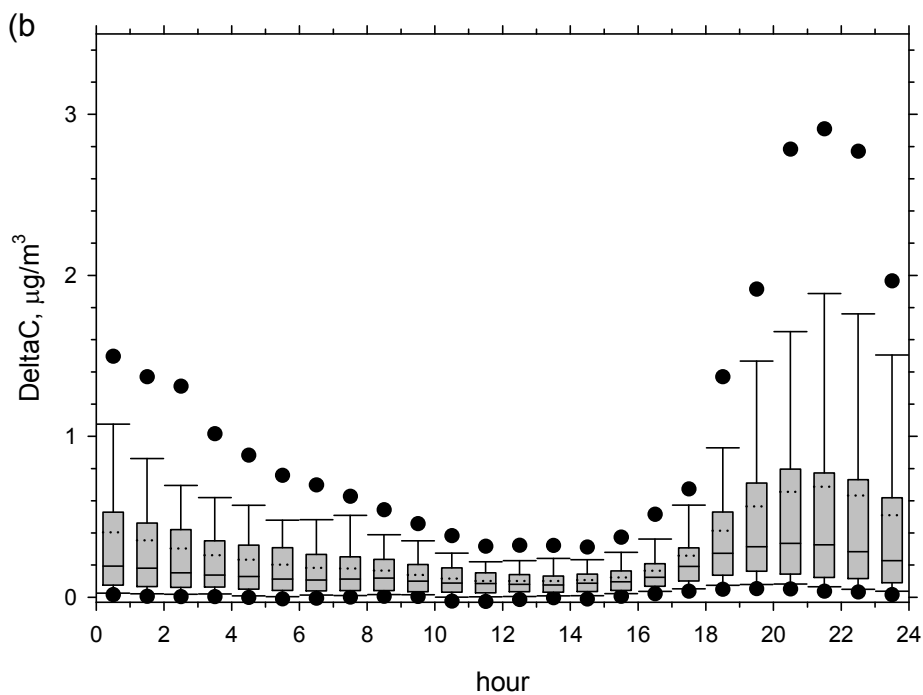
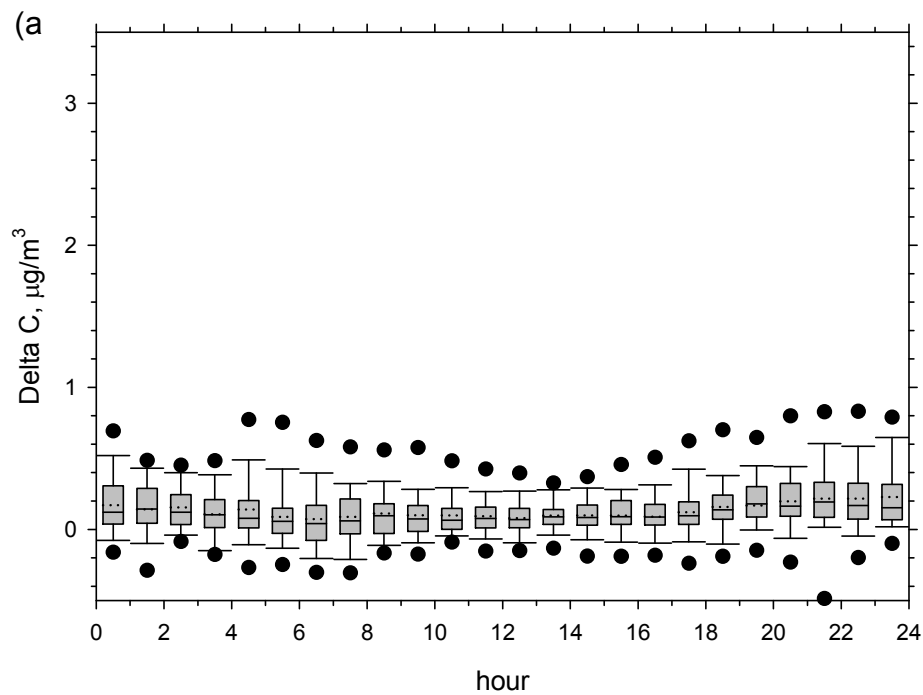


Fig. S10. Example of a woodsmoke event on November 1-2, 2008 showing elevated Delta C and co-pollutants at Rochester.

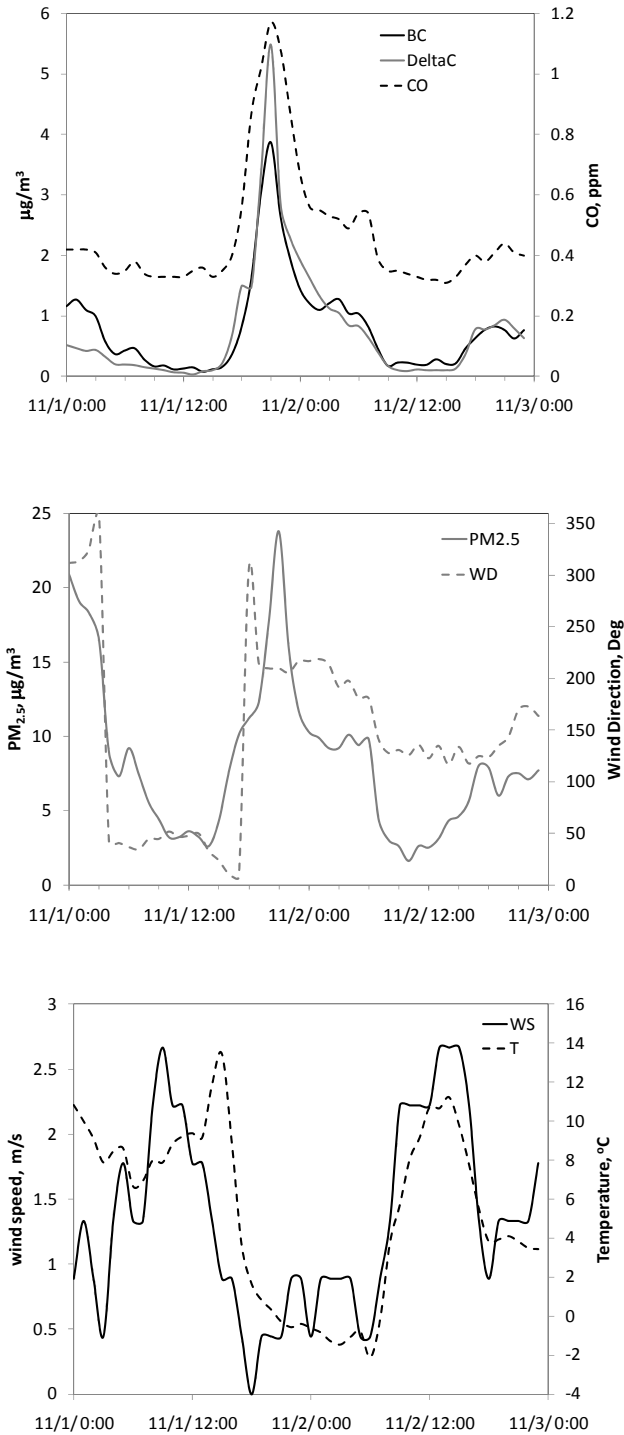


Fig. S11. Photograph showing emissions of BC from apartment building stack in the Bronx.

