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Supplement of

Estimating sources of elemental and organic carbon and their temporal emission patterns using a least squares inverse model and hourly measurements from the St. Louis–Midwest supersite

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3.2.1 Inverse model results: time series and impacts

This supplementary section shows plots of uncertainties of the inverse model for EC using Monte Carlo error propagation and for OC using block-bootstrapping and Monte Carlo error propagation. Please see the paper for data description, discussion and acknowledgments:

B. de Foy, Y. Y. Cui, J. J. Schauer, M. Janssen, J. R. Turner, C. Wiedinmyer, "Estimating sources of elemental and organic carbon and their temporal emission patterns using a least squares inverse model and hourly measurements from the St. Louis-Midwest Supersite." Atmospheric Chemistry and Physics, 2015.

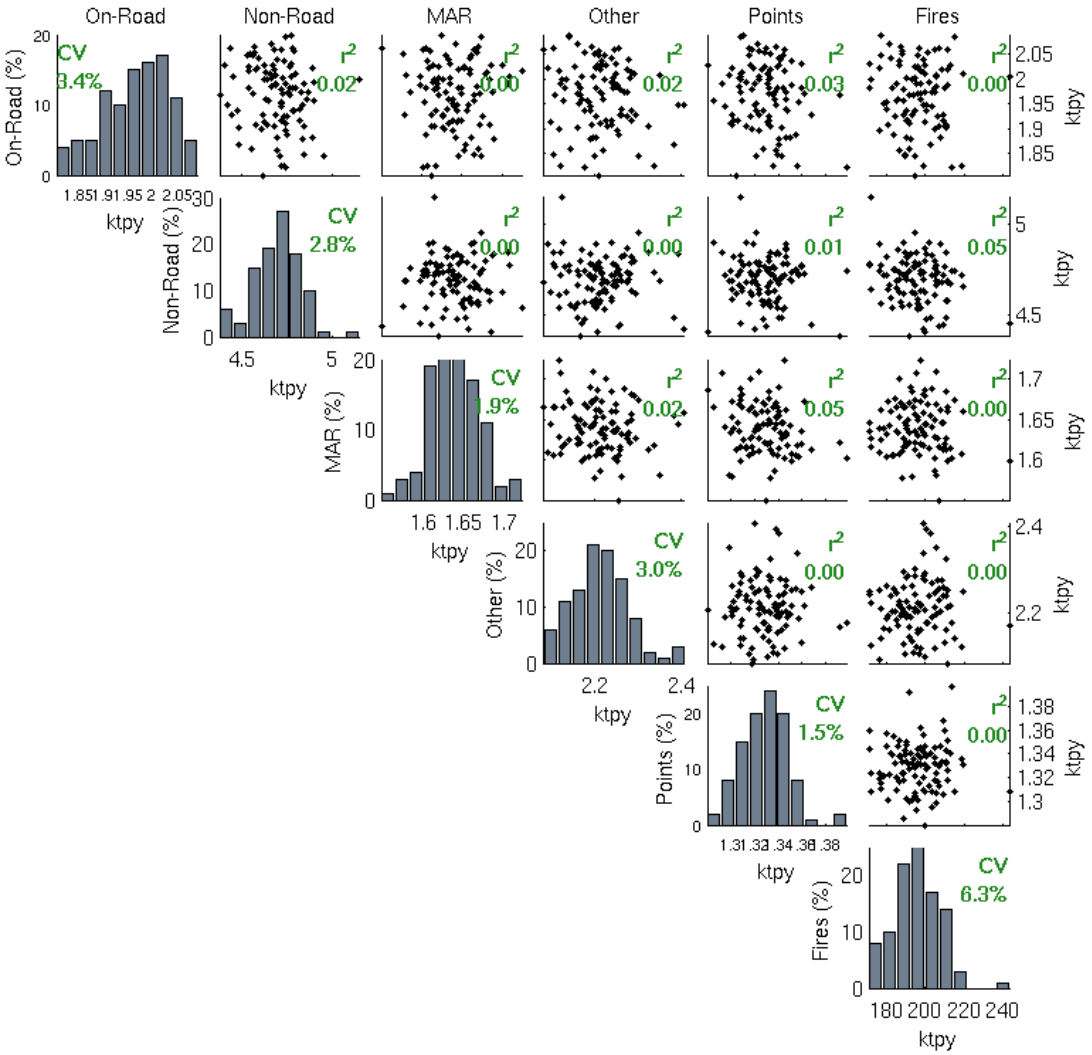

Figure S1: Monte Carlo error propagation estimates of uncertainties in EC emissions estimates: Histograms show the distribution of emission estimates, scatter plots show the cross-correlation of the estimates. $CV = \sigma/\mu$ is the Coefficient of Variation.

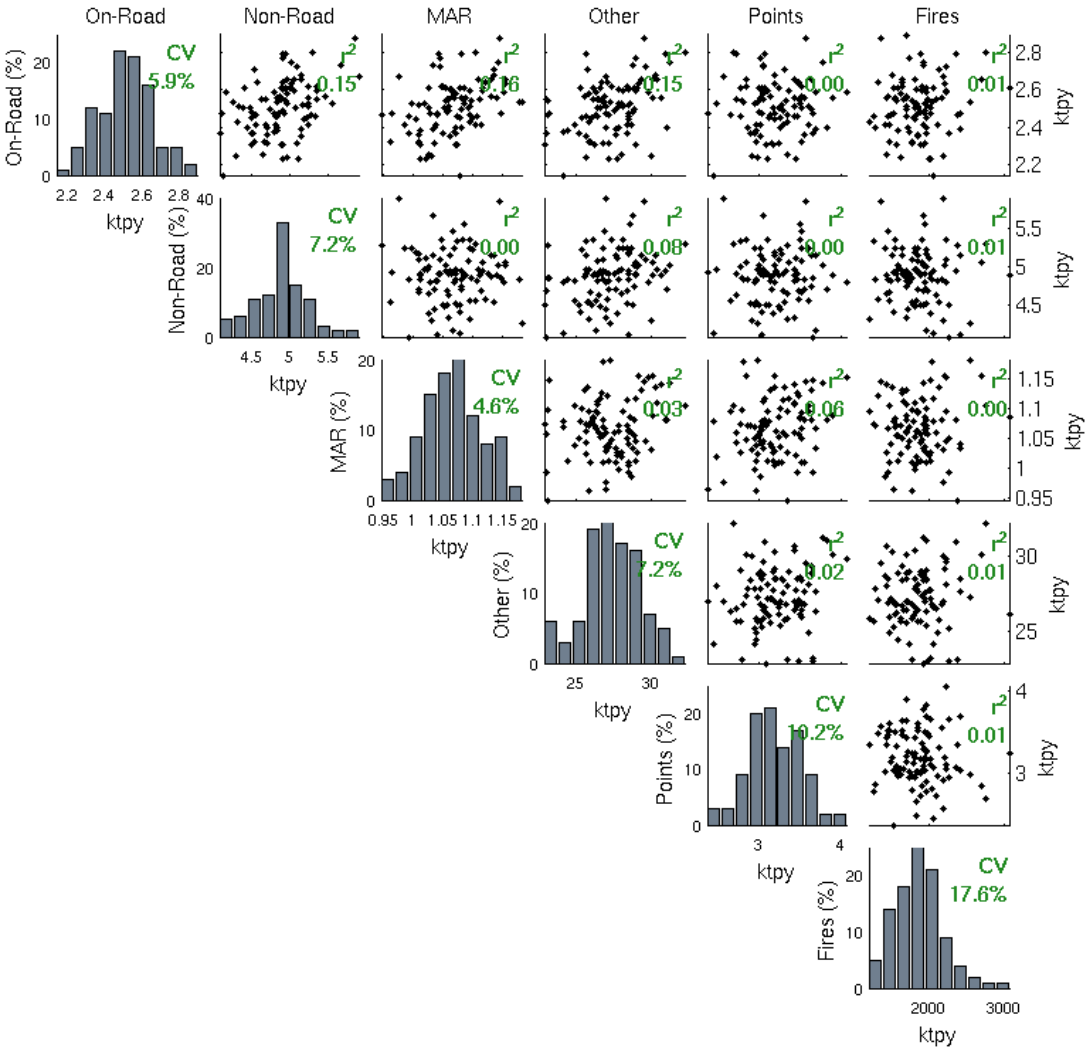

Figure S2: Bootstrapped estimates of uncertainties in OC emissions estimates: Histograms show the distribution of emission estimates, scatter plots show the cross-correlation of the estimates. $CV = \sigma/\mu$ is the Coefficient of Variation.

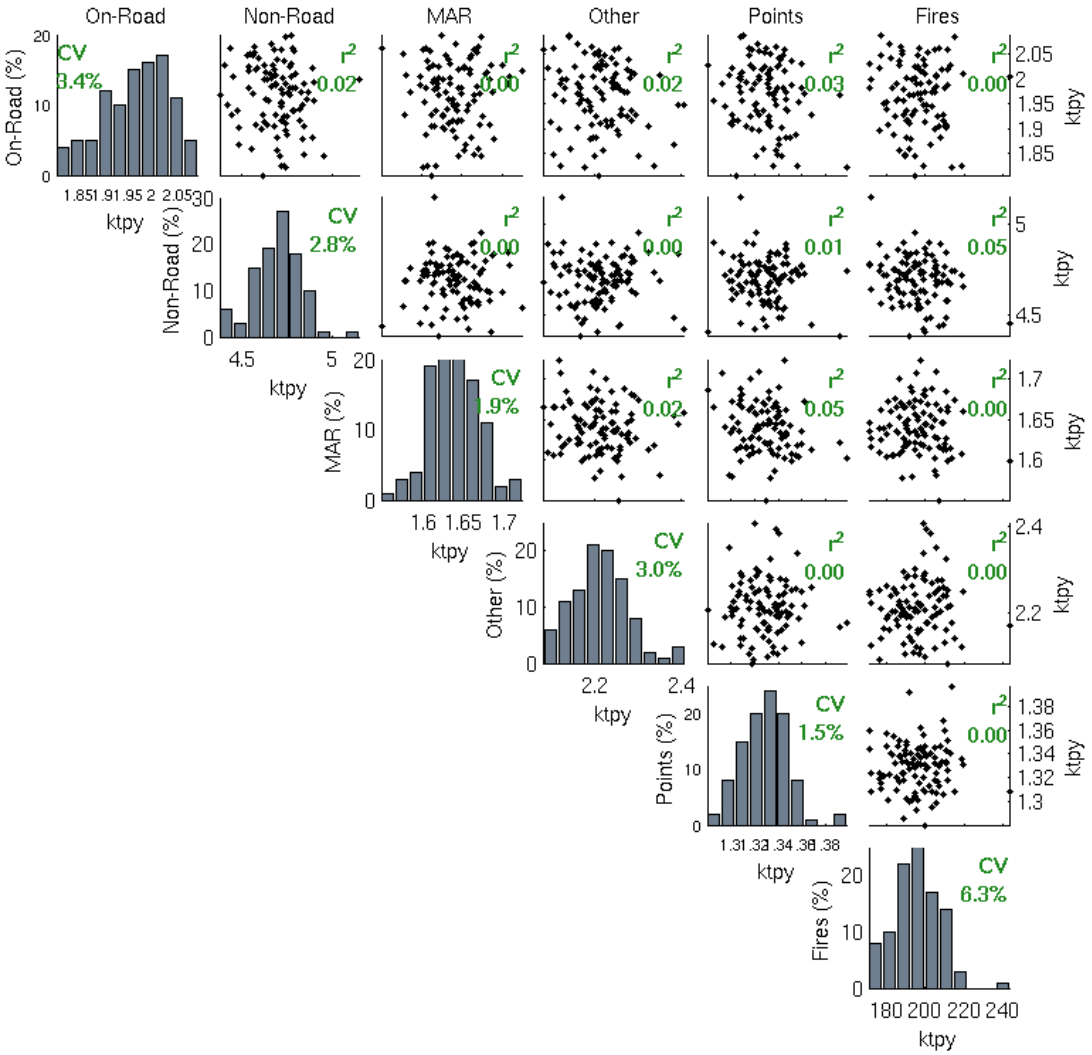

Figure S3: Monte Carlo error propagation estimates of uncertainties in OC emissions estimates: Histograms show the distribution of emission estimates, scatter plots show the cross-correlation of the estimates. $CV = \sigma/\mu$ is the Coefficient of Variation.