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## Supplement of

## Direct measurements of near-highway emissions in a high diesel environment

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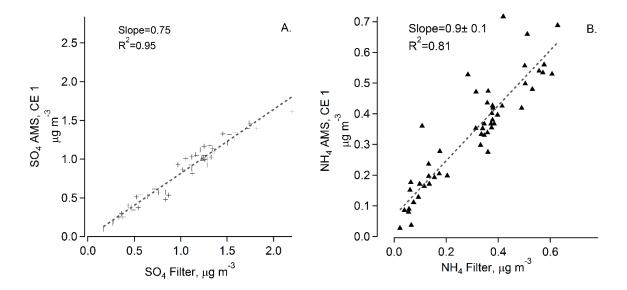


Figure S1: Comparison of filter data to AMS data

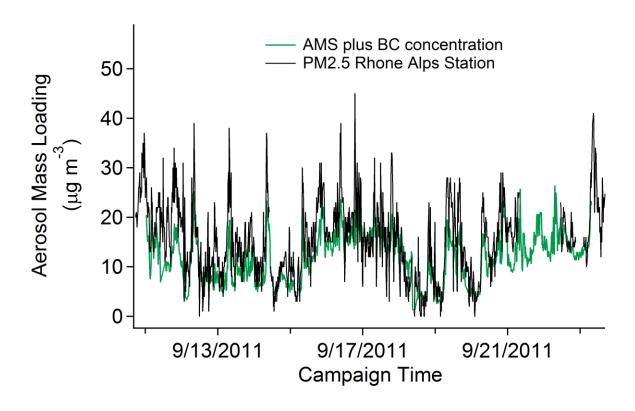


Figure S2: Rhone Alps PM2.5 data (black) time series compared to the AMS  $SO_4+NO_3+Org+NH_4$  (CE=0.75) and MAAP BC data.

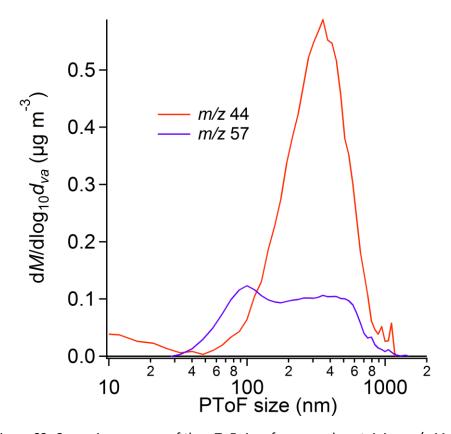


Figure S3: Campaign average of the pToF sizes for aerosol containing m/z 44 and m/z 57

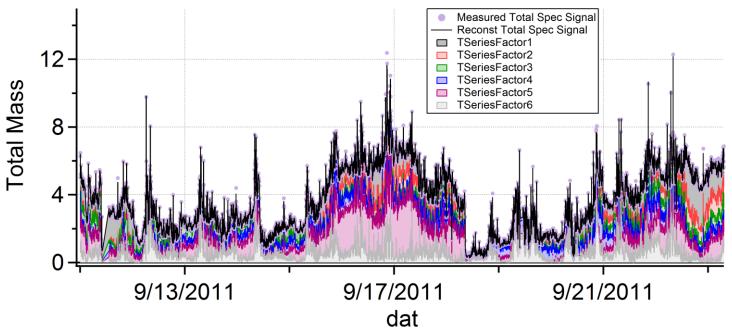


Figure S4:Tseries concentrations and total reconstructed signal for the six-factor PMF solution compared to the measured total signal (purple dots). Not CE corrected.

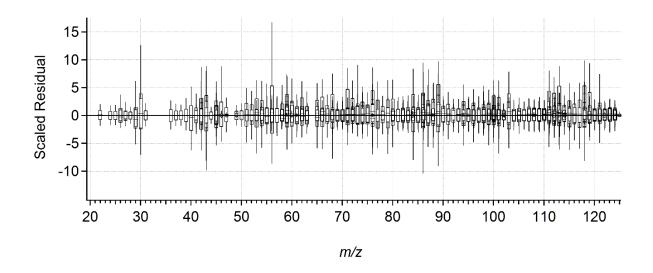


Figure S5: Scaled residuals for each high-resolution m/z input into the model for the six-factor PMF solution. Even distribution between positive and negative residuals.

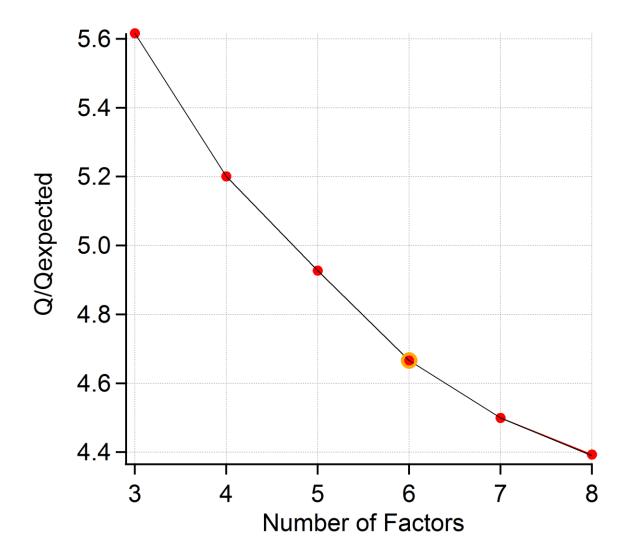


Figure S6: Q/Qexpected for 3-8 factor solutions.

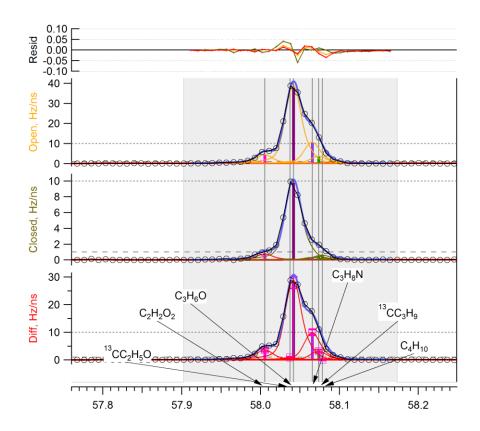


Figure S7: Nitrogen-containing organicpeak fitting.

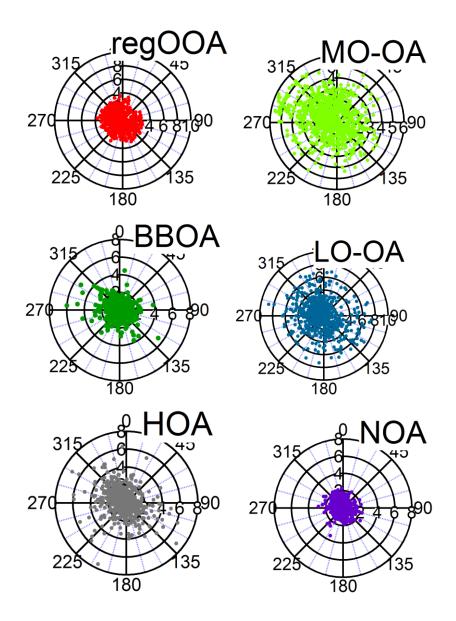


Figure S8: Polar graph plots of the six factor concentrations (radius,  $\mu g \ m^{-3}$ ) and wind direction (angle, degrees).

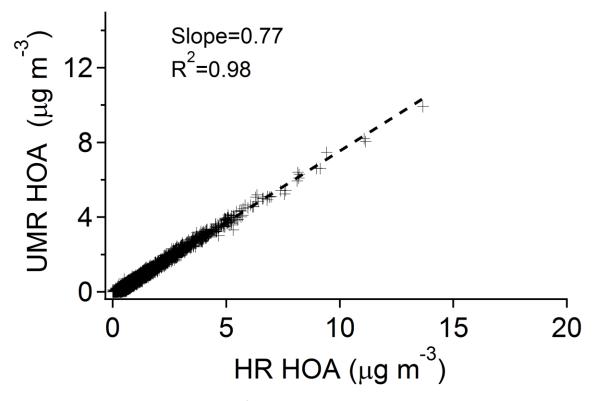


Figure S9: UMR HOA and HR HOA PMF factor time series concentration comparison. Not CE corrected.