Source identification of atmospheric organic vapors in two European pine forests: Results from Vocus PTR-TOF observations

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Figure S1. The distribution of scaled residuals as a function of m/z of the seven-factor solution for the low mass range in the Landes forest.



Figure S2. The six-factor solution for the low mass range in the Landes forest, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal cycles of different factors.



Figure S3. The eight-factor solution for the low mass range in the Landes forest, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal cycles of different factors.



Figure S4. The distribution of scaled residuals as a function of m/z of the eight-factor solution for the high mass range in the Landes forest.



Figure S5. The seven-factor solution for the high mass range in the Landes forest, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal trends of different factors.



Figure S6. The nine-factor solution for the high mass range in the Landes forest, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal trends of different factors.



Figure S7. The four-factor solution for the low mass range at SMEAR II station, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal trends of different factors.



Figure S8. The six-factor solution for the low mass range at SMEAR II station, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal trends of different factors.



Figure S9. The three-factor solution for the high mass range at SMEAR II station, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal cycles of different factors.



Figure S10. The five-factor solution for the high mass range at SMEAR II station, showing (a) factor mass profiles, (b) factor time series, and (c) diurnal cycles of different factors.



Figure S11. The correlations among various factors identified in the Landes forest, with the color representing the correlation coefficients (r^2) .



Figure S12. Bivariate polar plot of $C_4H_9^+$ signal measured at SMEAR II station as a function of wind speed and wind direction using the OpenAir software (Carslaw and Ropkins, 2012).



Figure S13. The correlations among various factors identified at SMEAR II station, with the color representing the correlation coefficients (r^2).

References

Carslaw, D. C. and Ropkins, K.: openair – An R package for air quality data analysis, Environ. Modell. Softw., 27–28, 52–61, 2012.