

Supplementary Information

Determination of PM₁ Sources at a Prague Background Site during the 2012–2013 Period Using PMF Analysis of Combined Aerosol Mass Spectra

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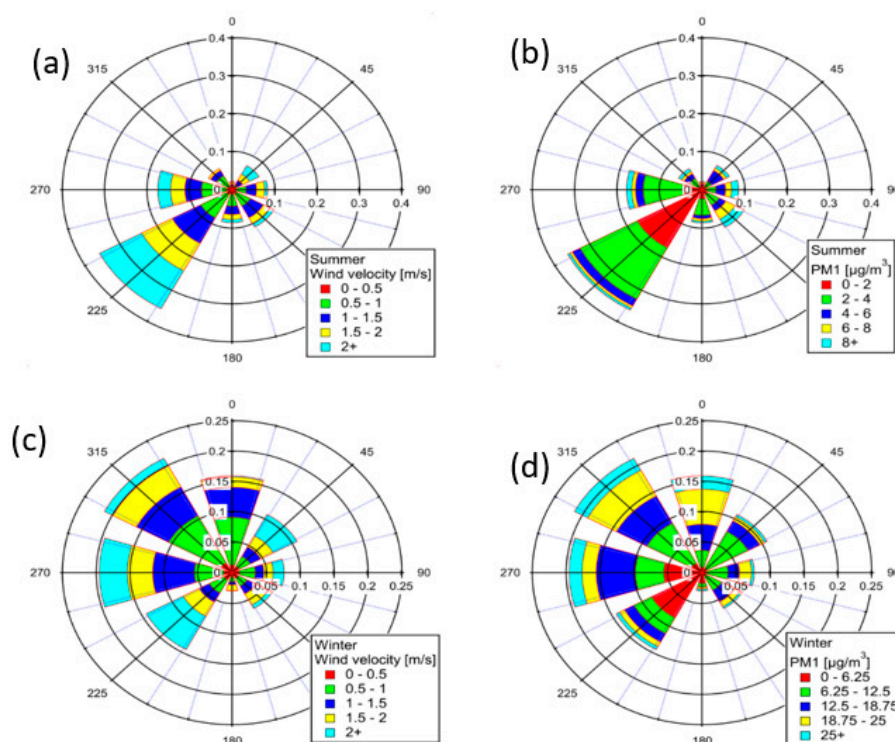


Figure S1. Wind roses: (a) wind velocity (top left) and (b) directionality of PM₁ aerosol (top right) in summer season; (c) wind velocity (bottom left) and (d) directionality of PM₁ aerosol (bottom right) in winter season.

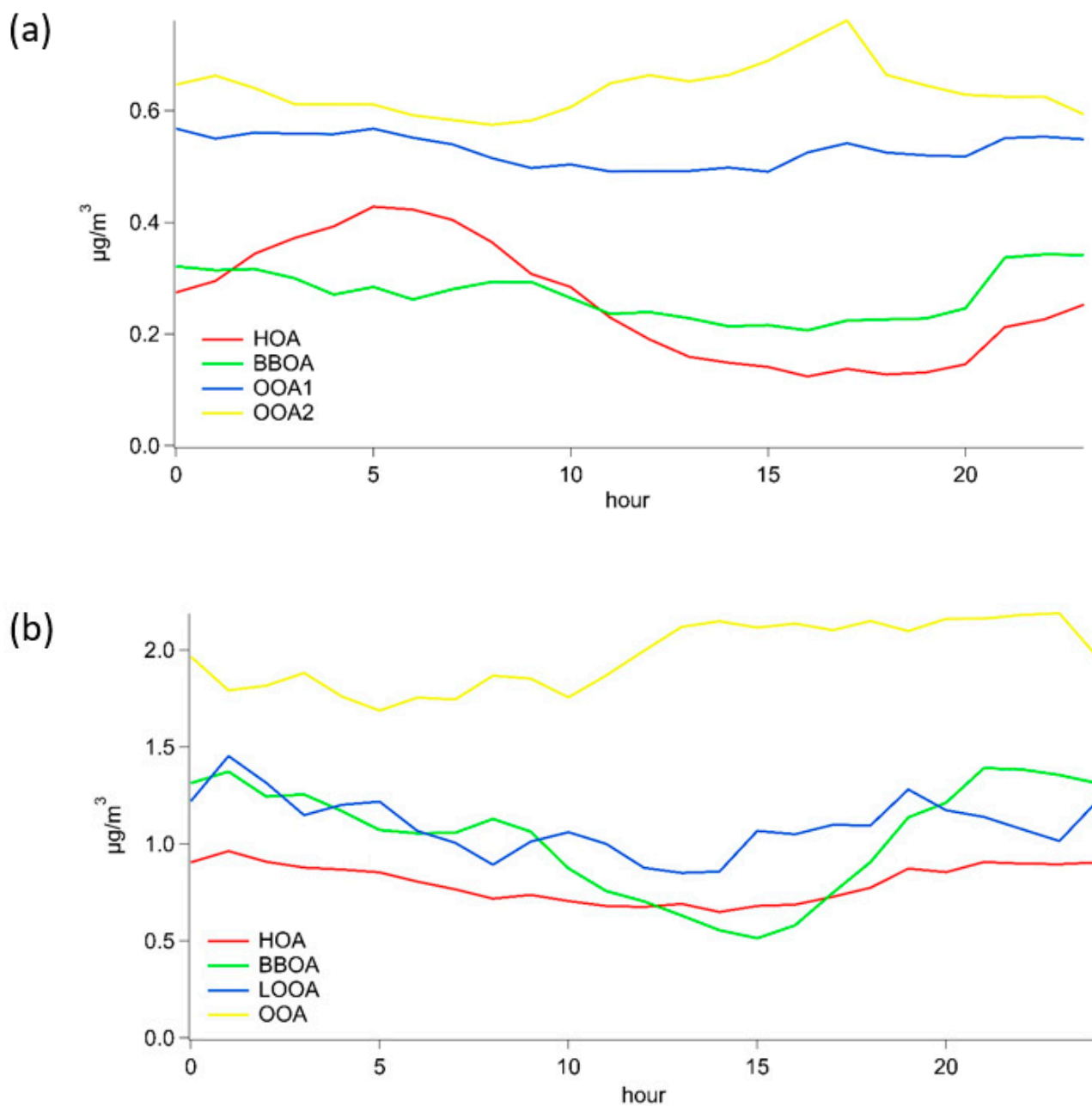


Figure S2. (a,b) Averaged daily cycles of individual factors in summer (top) and winter (bottom) obtained from the analysis of organic spectra.

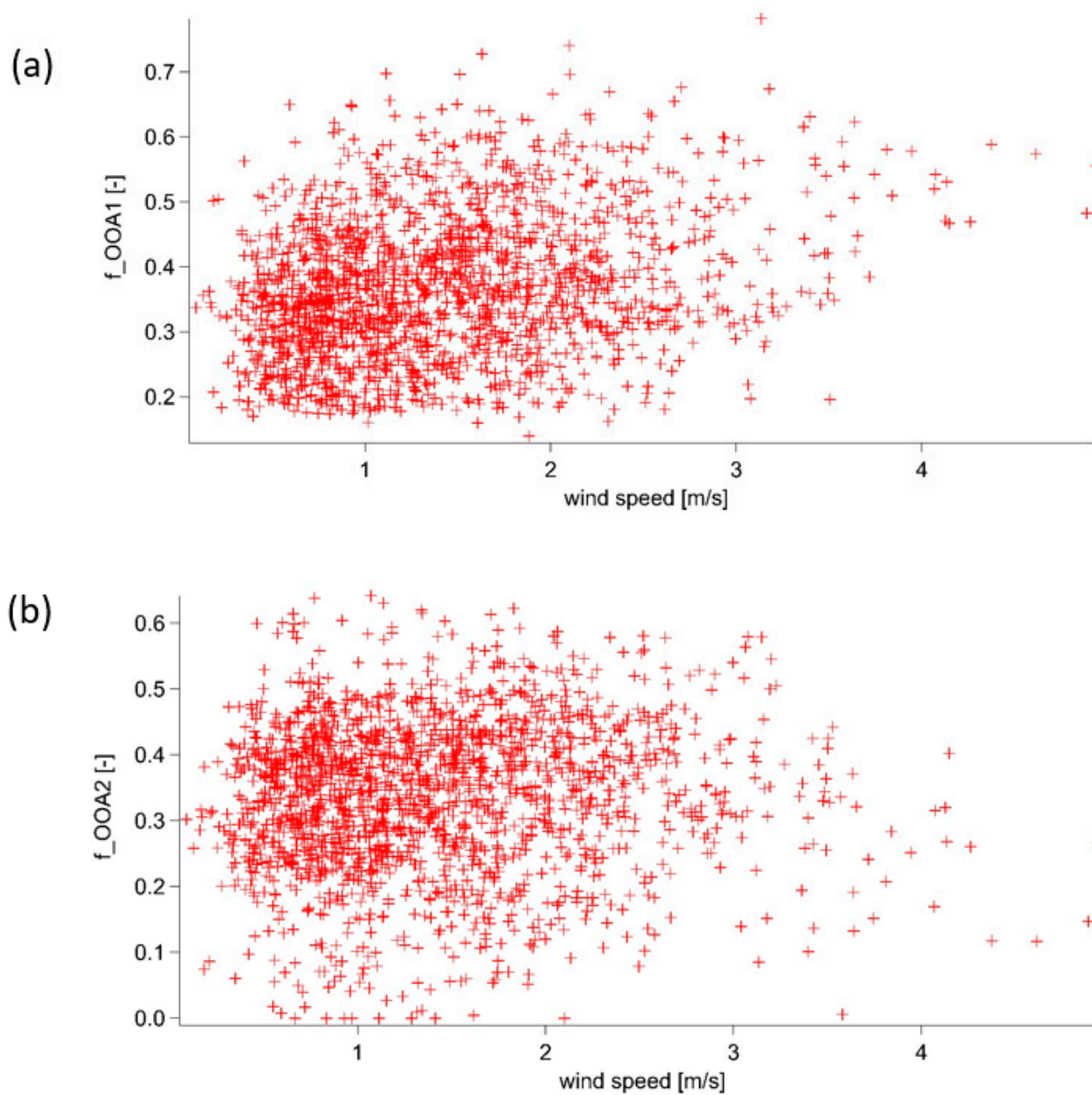
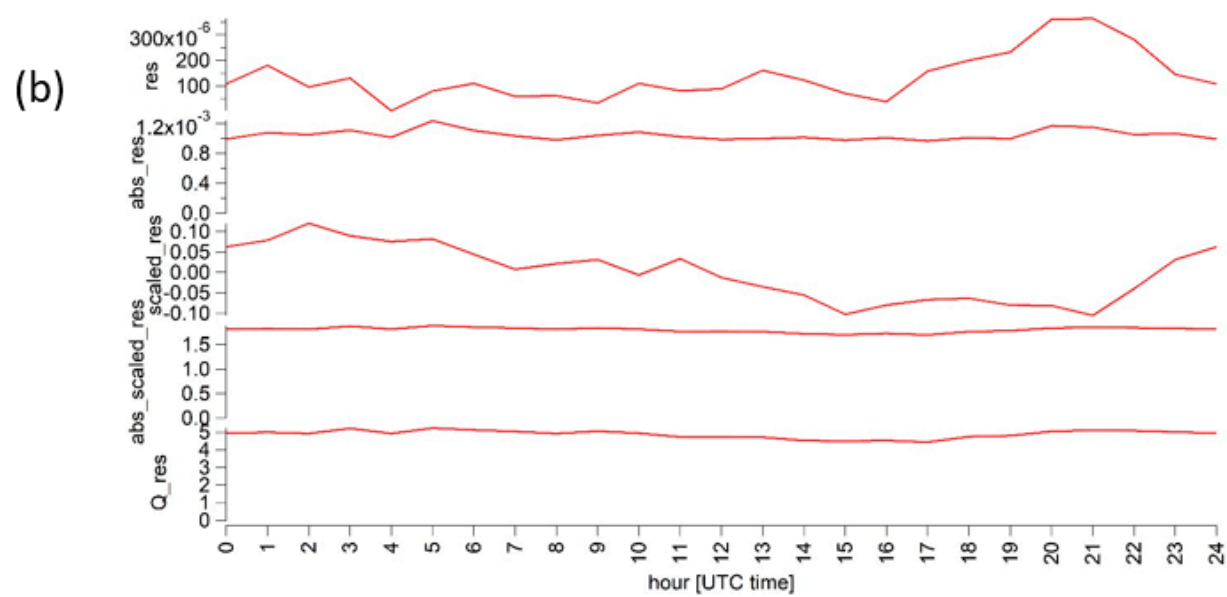
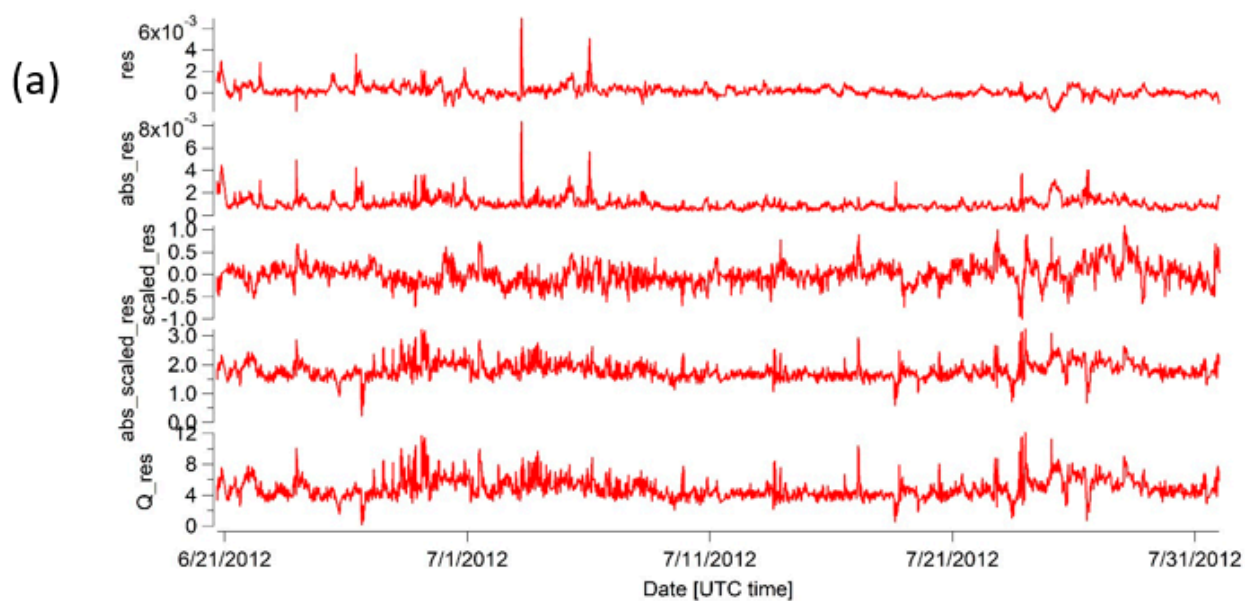


Figure S3. Dependence of the proportion of (a) OOA1 fraction and (b) OOA2 fractions on wind speed. Fractions are obtained as a proportion of a factor to the total mass of all factors.



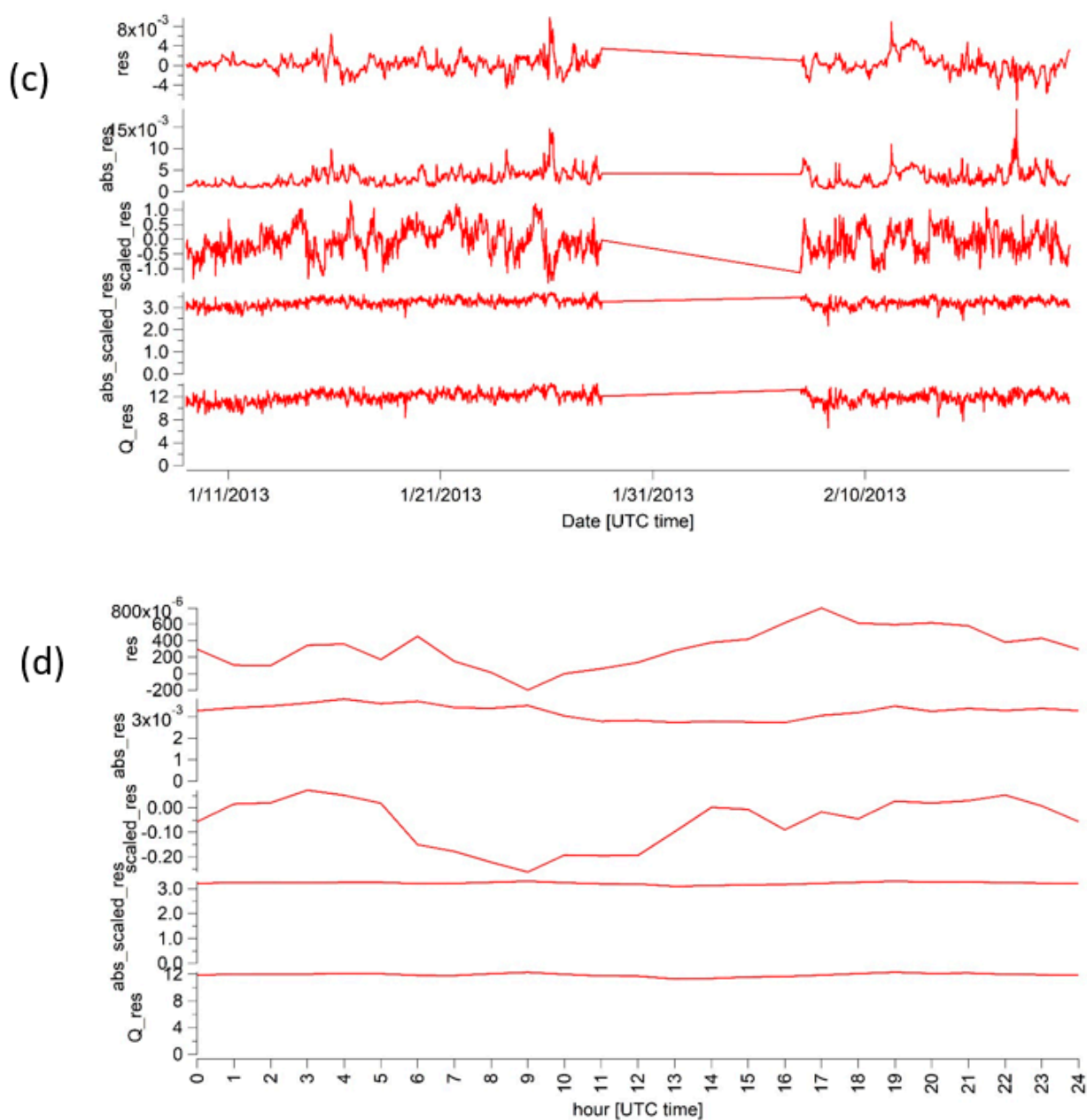
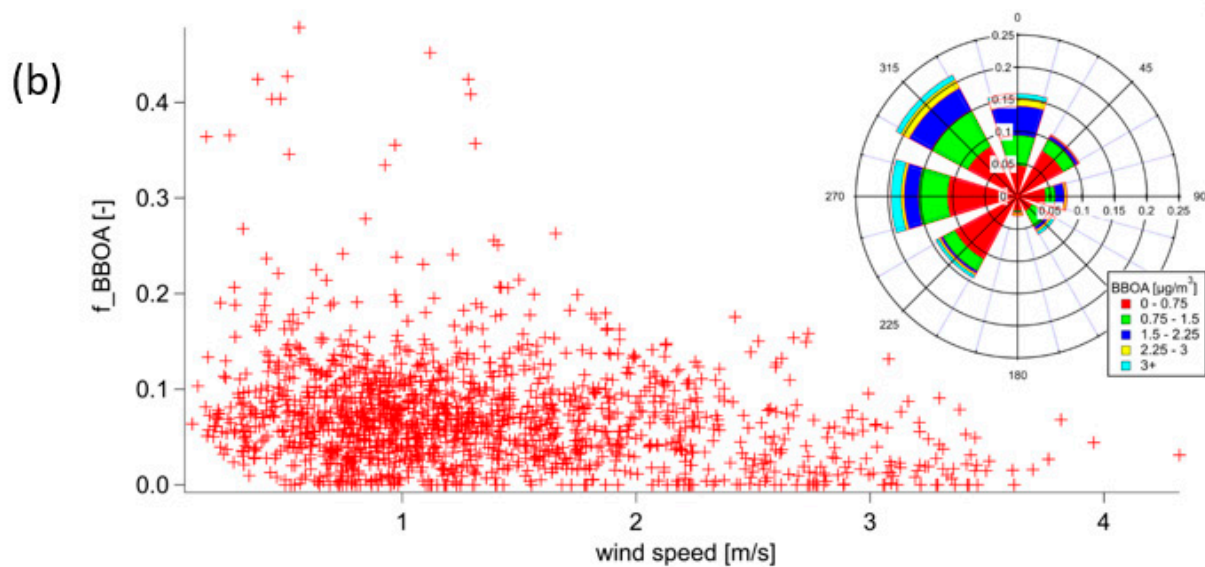
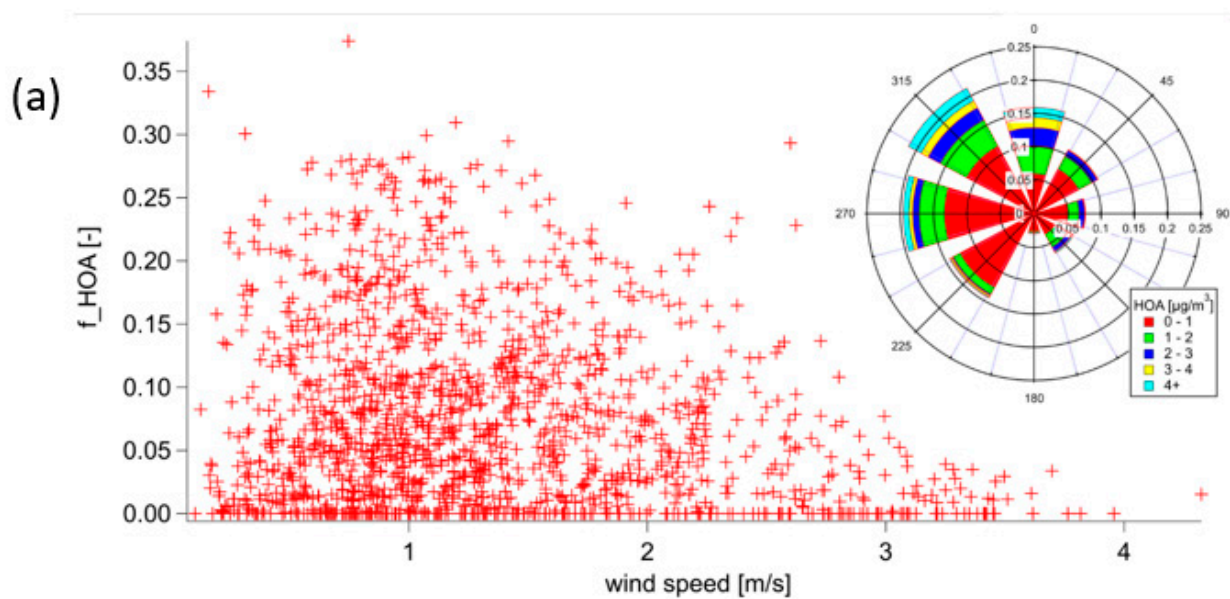


Figure S4. (a,b) Time series (top) and diurnal cycles (bottom) of residues obtained from analysis of combined mass spectra during the summer season. (c,d) Time series (top) and diurnal cycles (bottom) of residues obtained from analysis of combined mass spectra during the winter season.



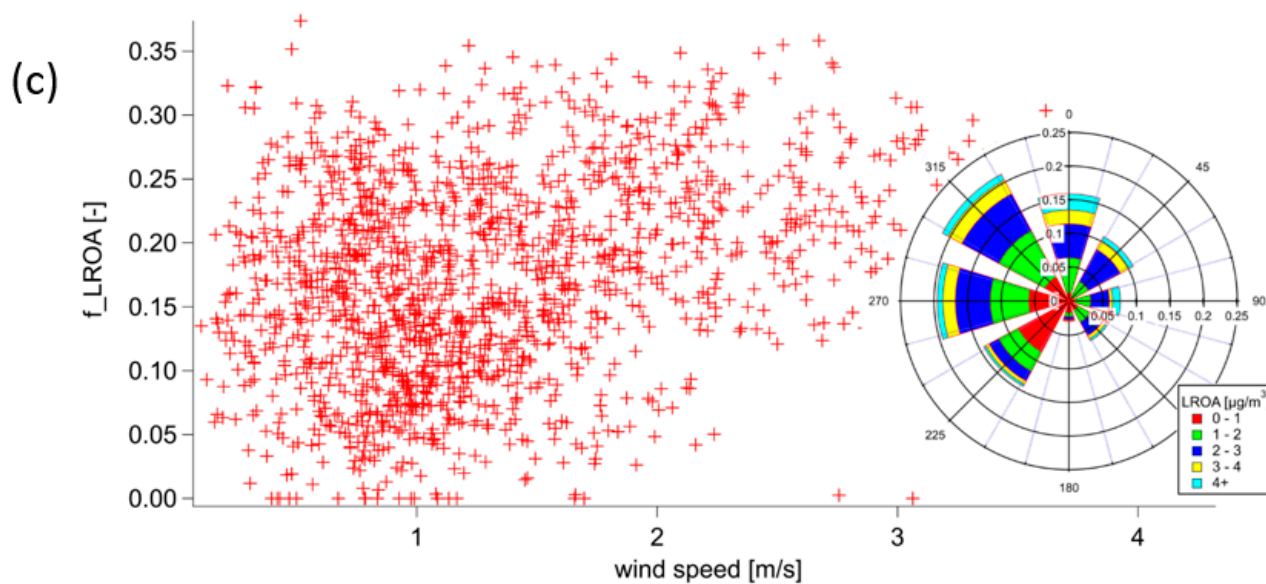
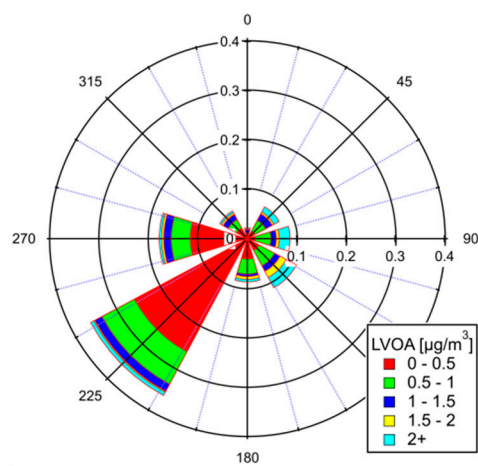
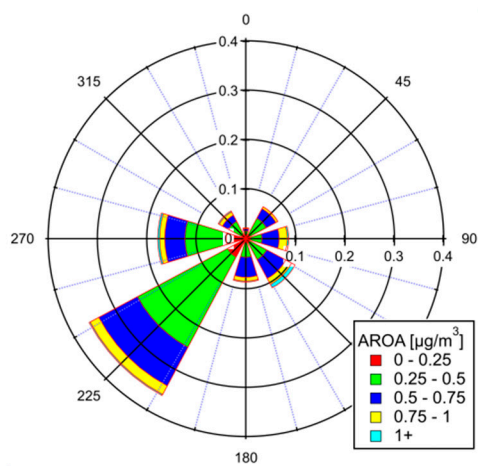
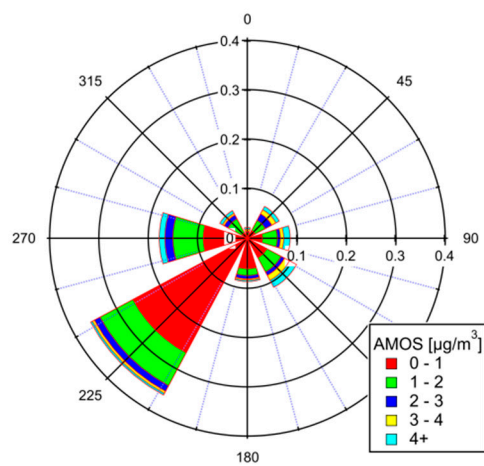
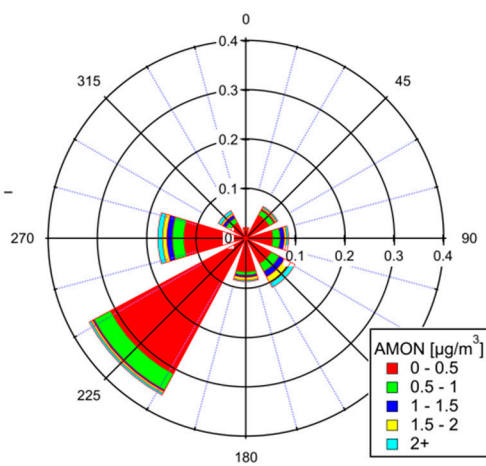
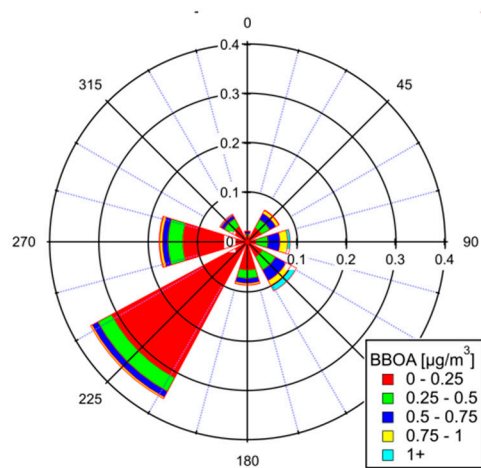
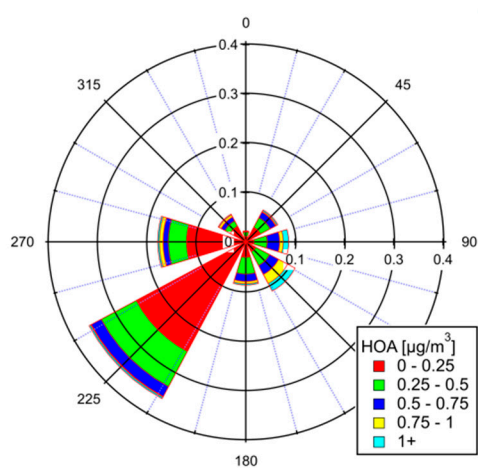


Figure S5. (a,b) Dependence of proportion of HOA (top) and BBOA (bottom) fractions on wind speed. Fractions are obtained as a proportion of a factor to the total mass of all factors. The graphs also contain wind roses showing the directionality of the factors. (c) Dependence of proportion of LROA fraction on wind speed. Fraction is obtained as the proportion of a factor LROA to the total mass of all factors. The graph also contains wind rose showing the directionality of the factor LROA.



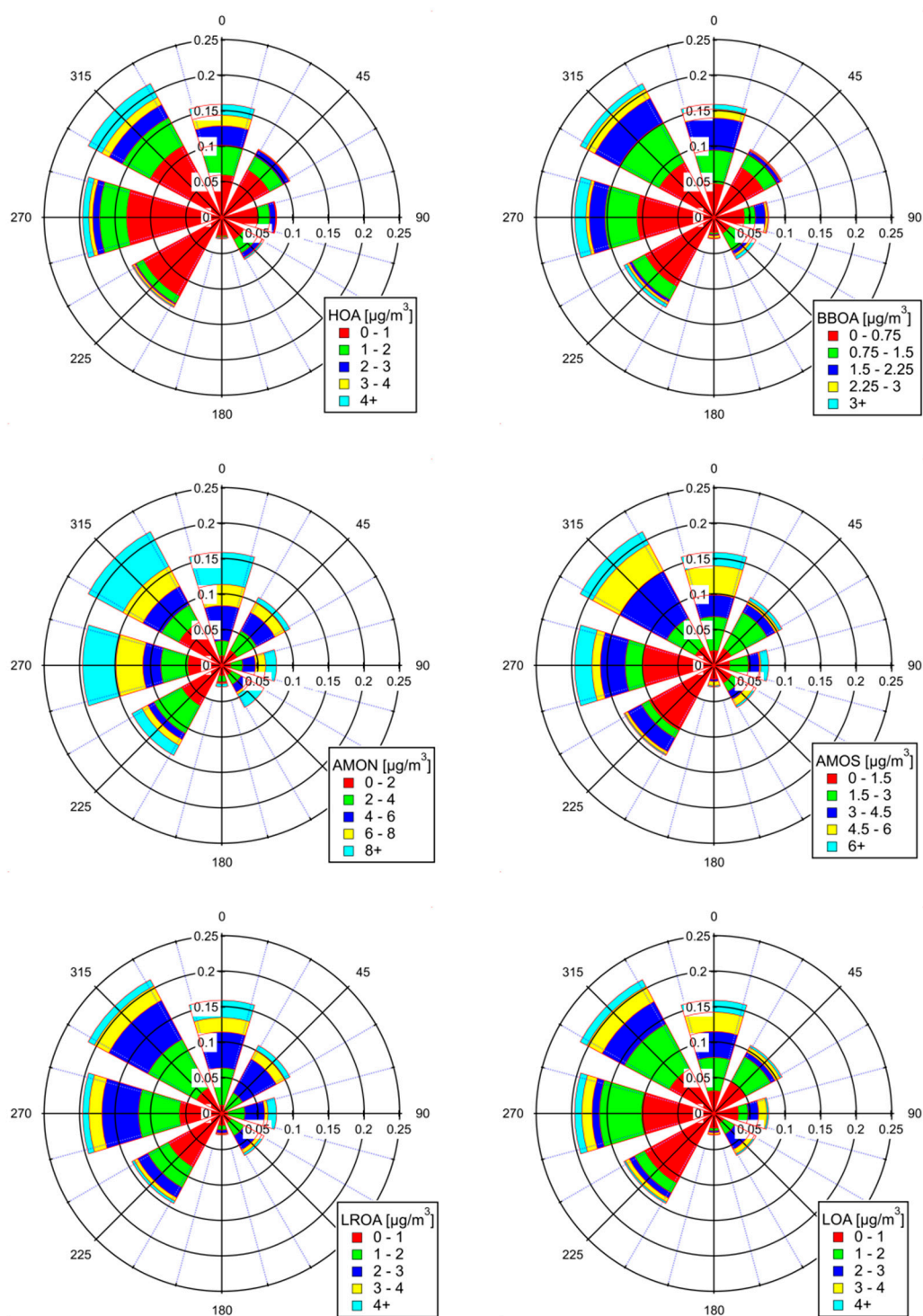


Figure S6. (a) Directionality of all factors obtained from combined mass spectra analysis for summer season. (b) Directionality of all factors obtained from combined mass spectra analysis for winter season.

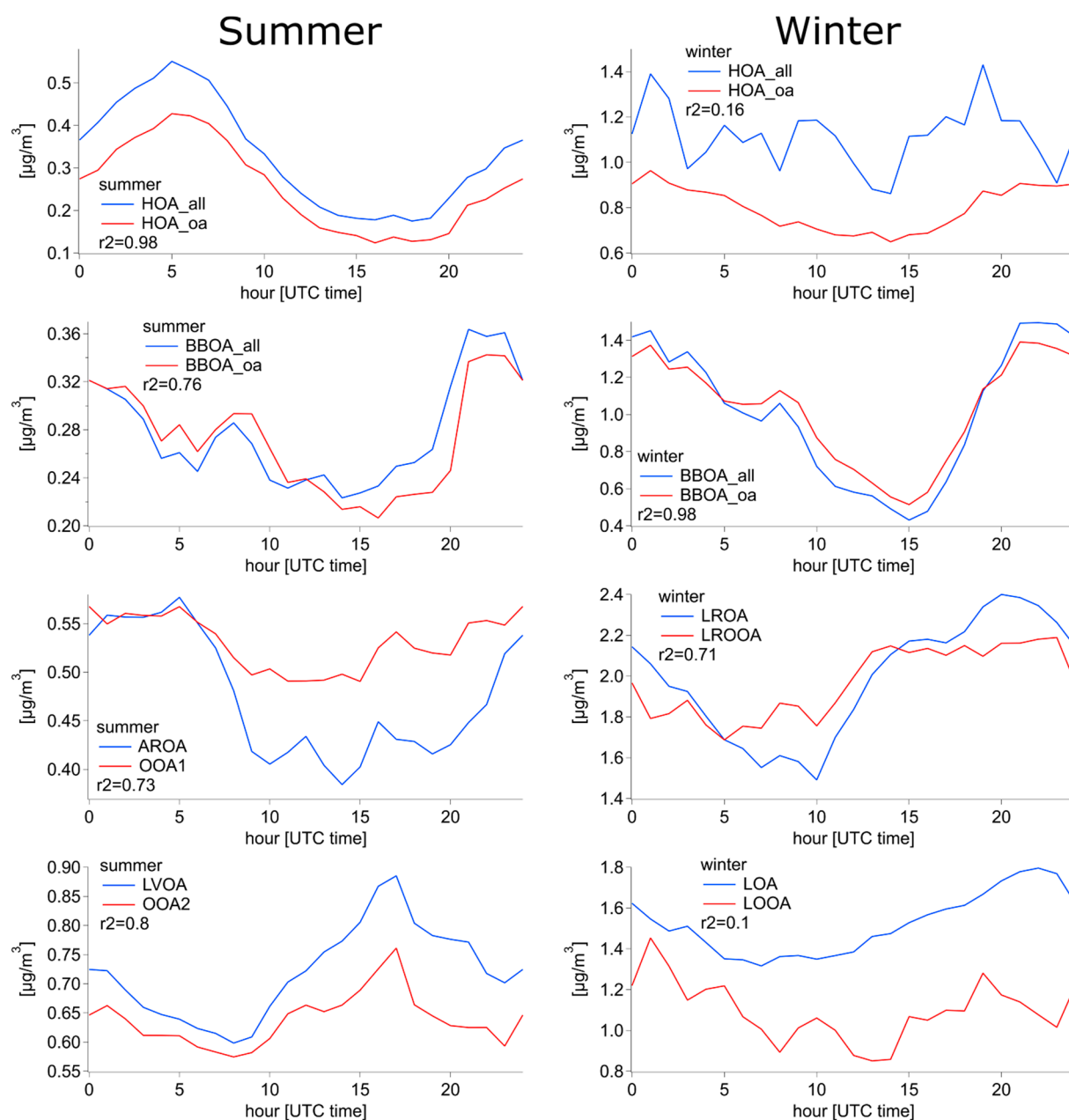


Figure S7. Comparison of the average diurnal cycles of the factors obtained by analysing the organic part of the spectra and the combined spectra. The blue colour indicates the results for the combined spectra, and the red colour indicates the organic spectra. The r^2 value indicates the linear fit expressed by the coefficient of determination.