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First insights into northern Africa high-altitude background aerosol chemical composition and source influences

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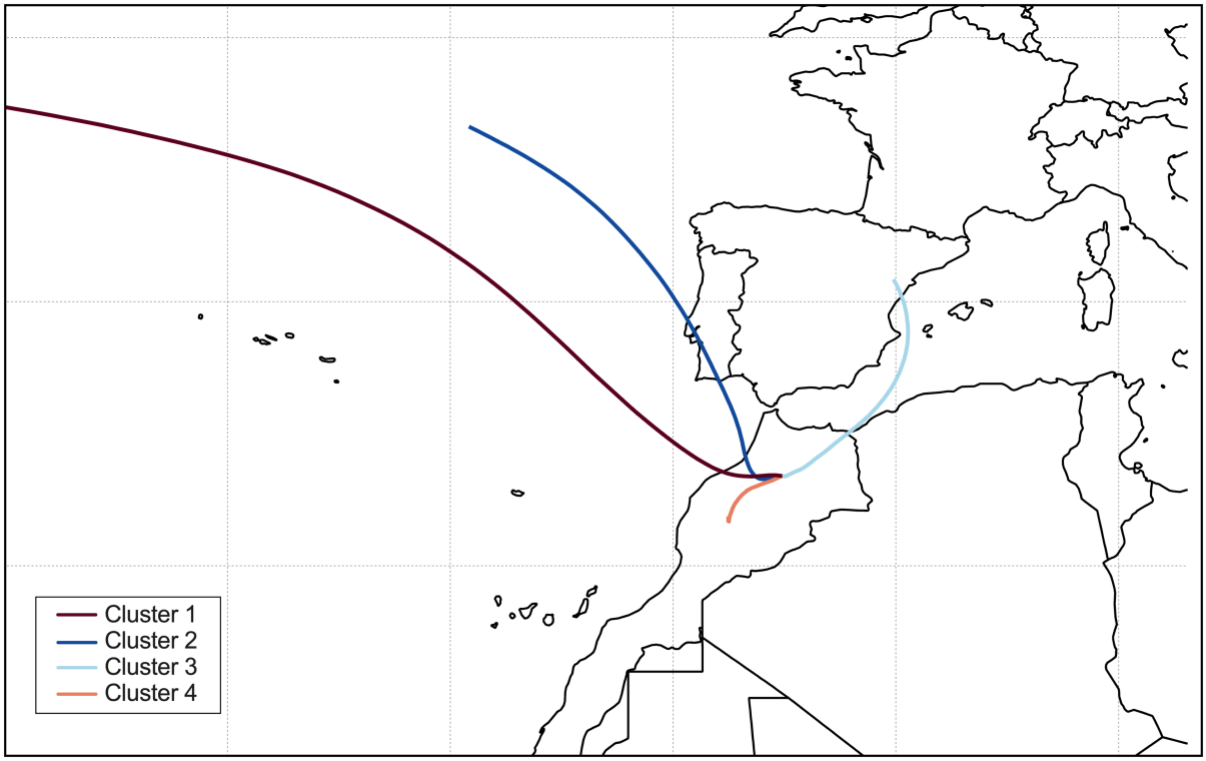

Figure S1. Cluster analysis of back trajectories arriving at AMV site from August to December 2017 classified into 4 trajectory clusters.

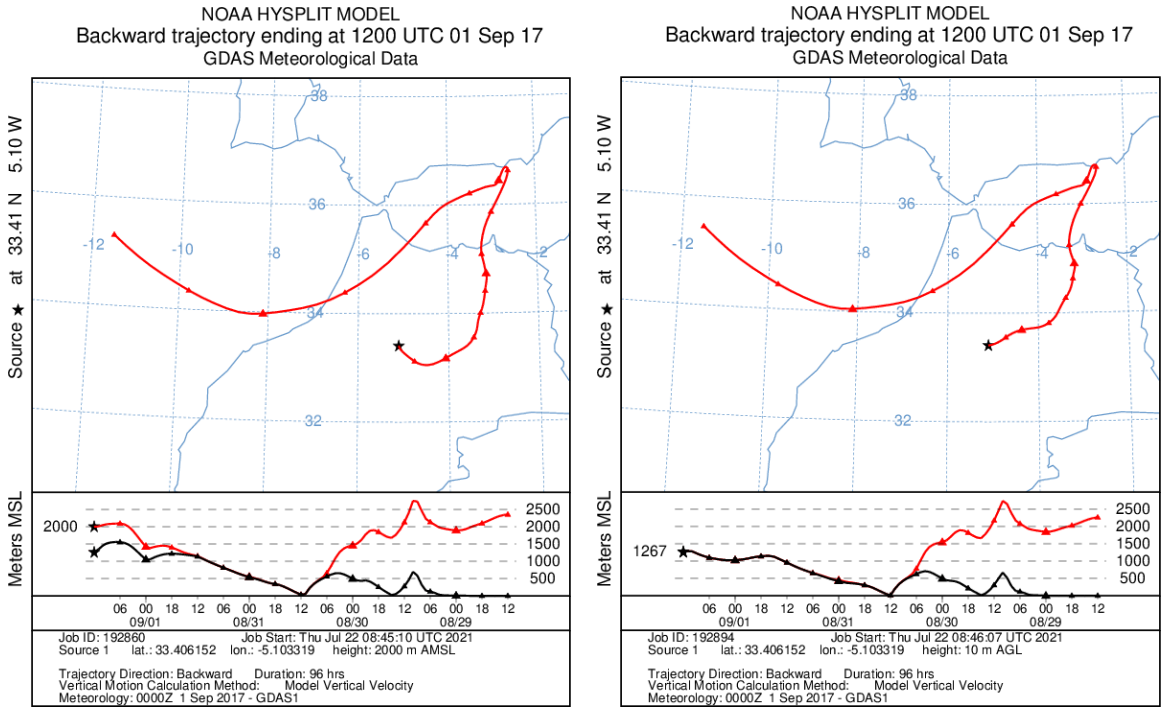

Figure S2. Back trajectory calculated at 1267 m above ground level and 2000 m above sea level.

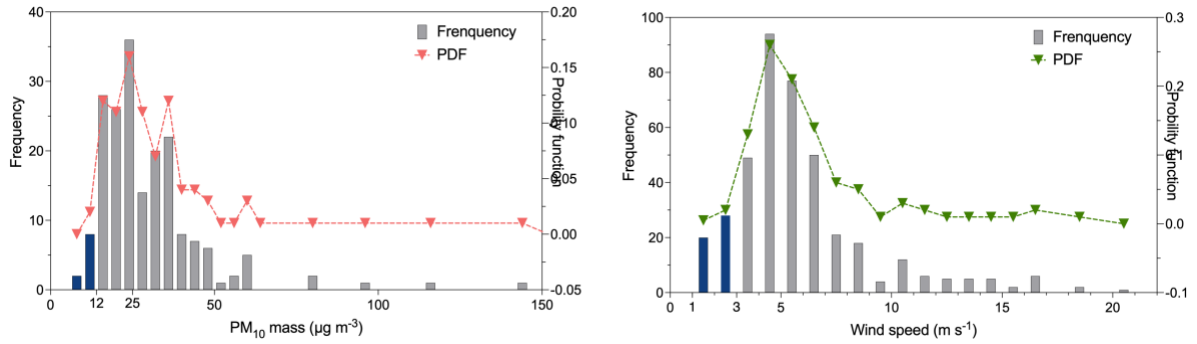

Figure S3. Frequency distribution and corresponding probability density function of PM_{10} mass and wind speed during the sampling period.

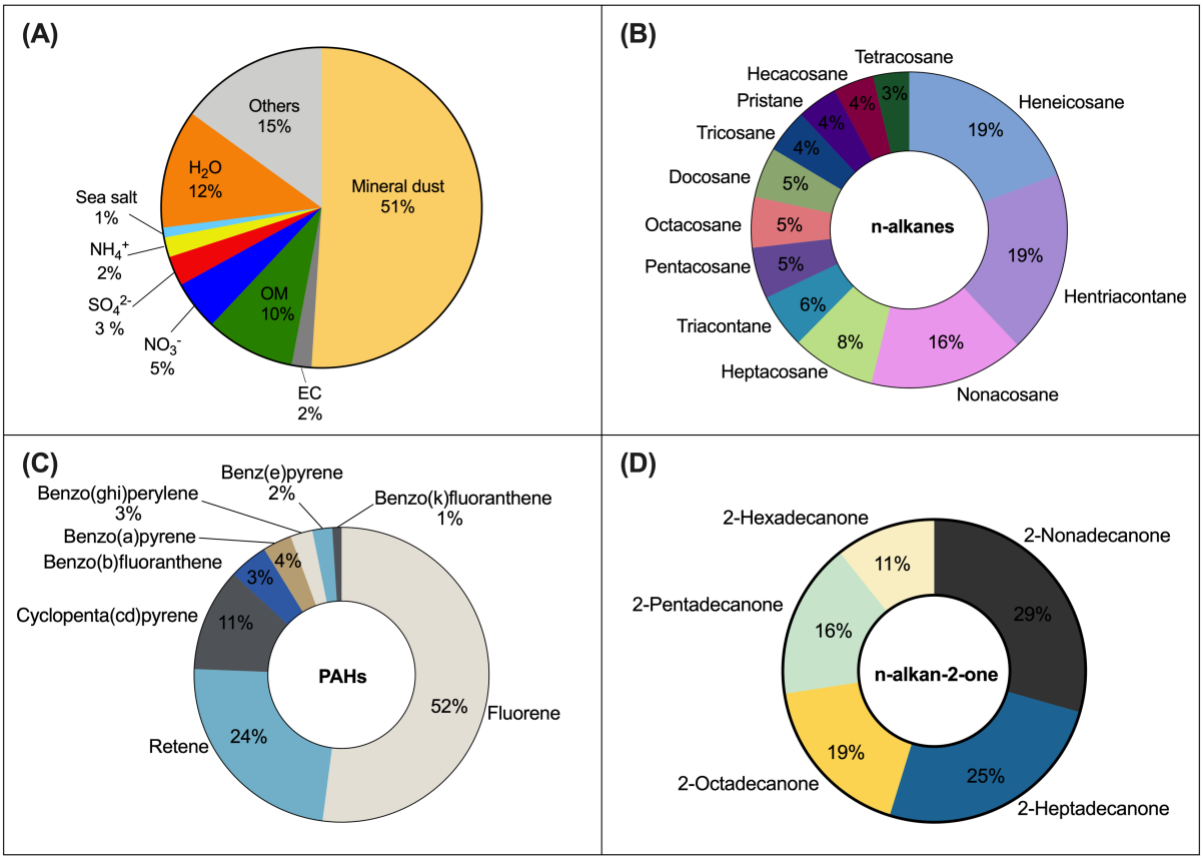

Figure S4. (A) Typical background chemical composition average at AMV station (10 samples); (B) n-alkanes; (C) Polycyclic aromatic hydrocarbons (PAHs); (D) n-alkan-2-ones; identified compounds.

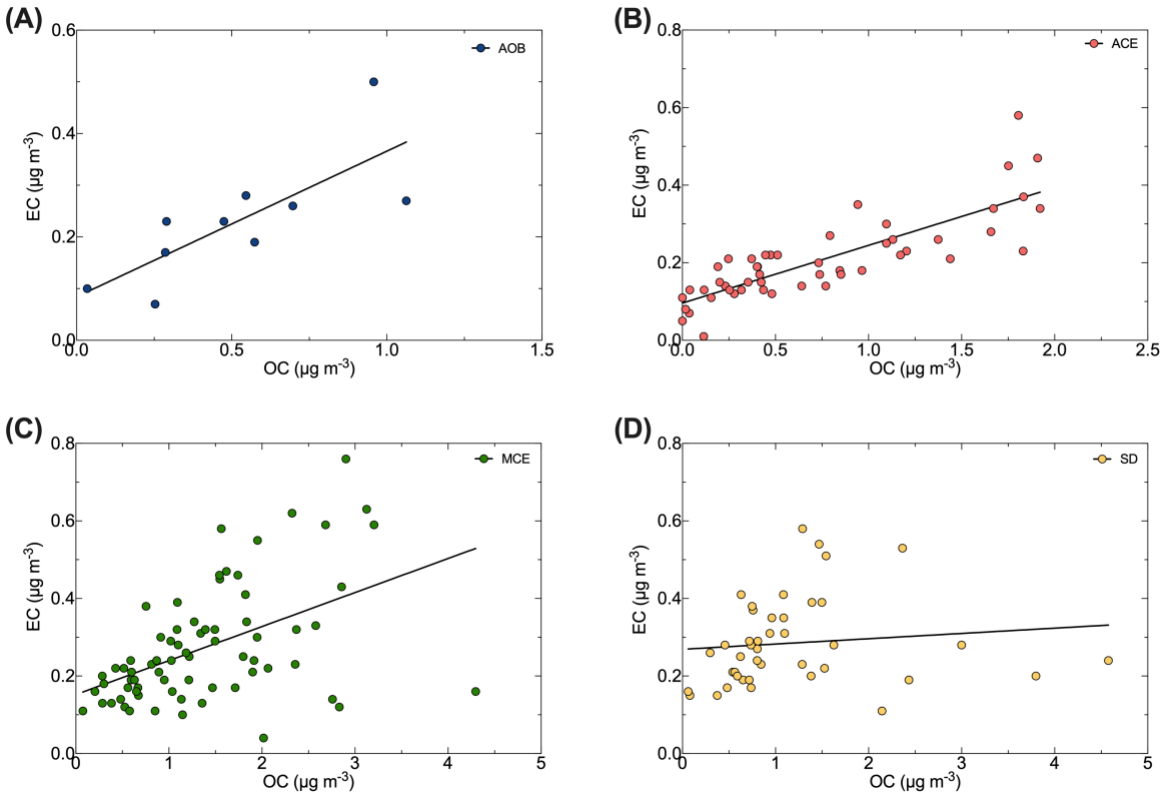

Figure S5. Correlation between OC and EC concentration at the AMV site according to each air mass; The black line represent the linear.

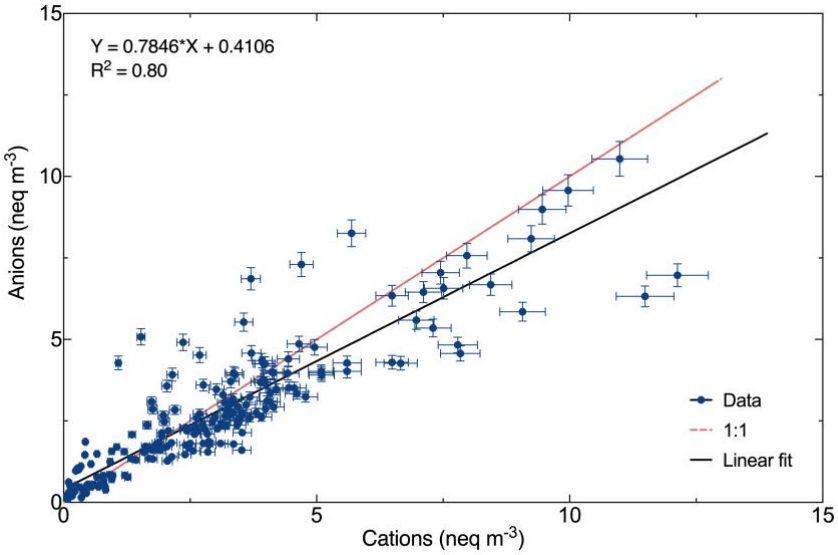

Figure S6. Correlation between anions and cations concentration (in equivalent); data corresponds to the concentrations measured at AMV for the study period.

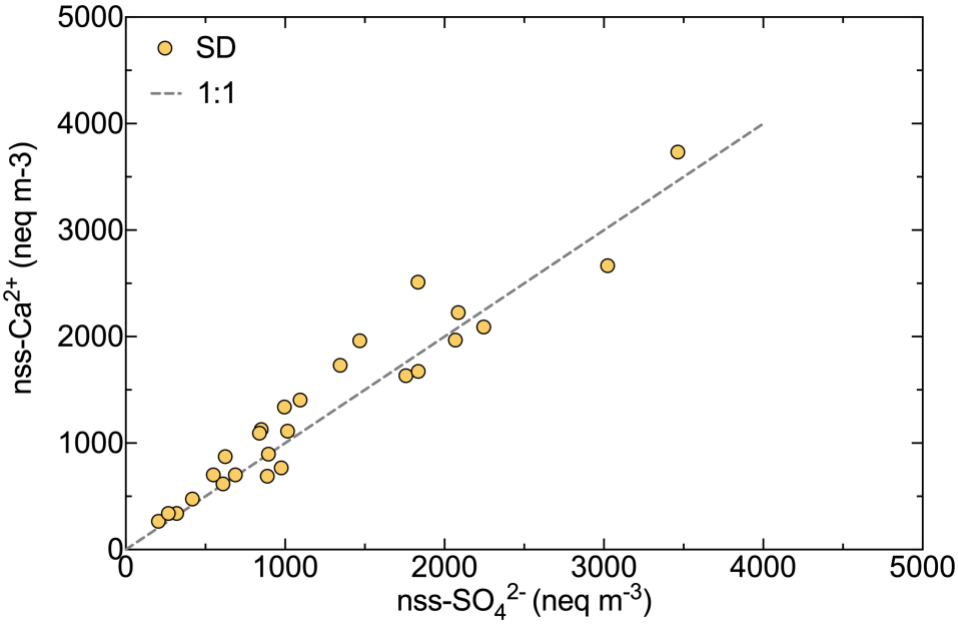

Figure S7. Correlation between nss-SO_4^{2-} and nss-Ca^{2+} during Saharan dust (SD) air mass.

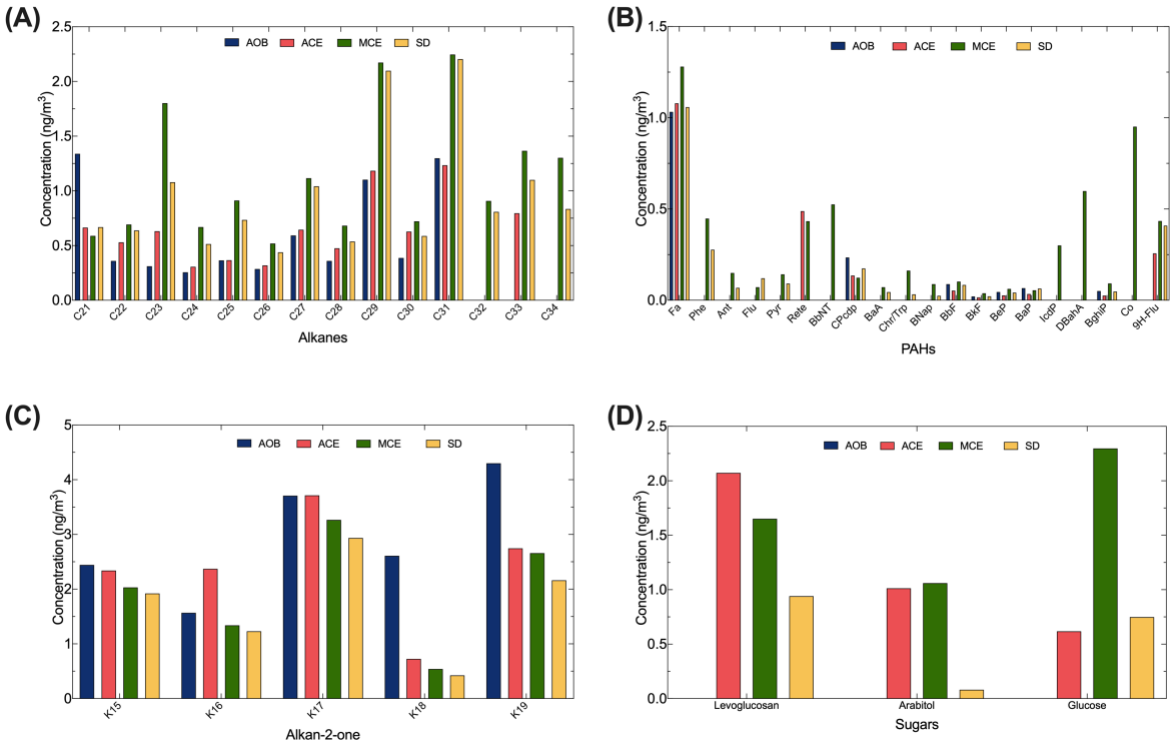

Figure S8. Average concentration of organic identified compounds at AMV station according to air masses for; (A) n-alkanes; (B) Polycyclic aromatic hydrocarbons (PAHs; (C) n-alkan-2-ones (PAHs); (D) sugars.

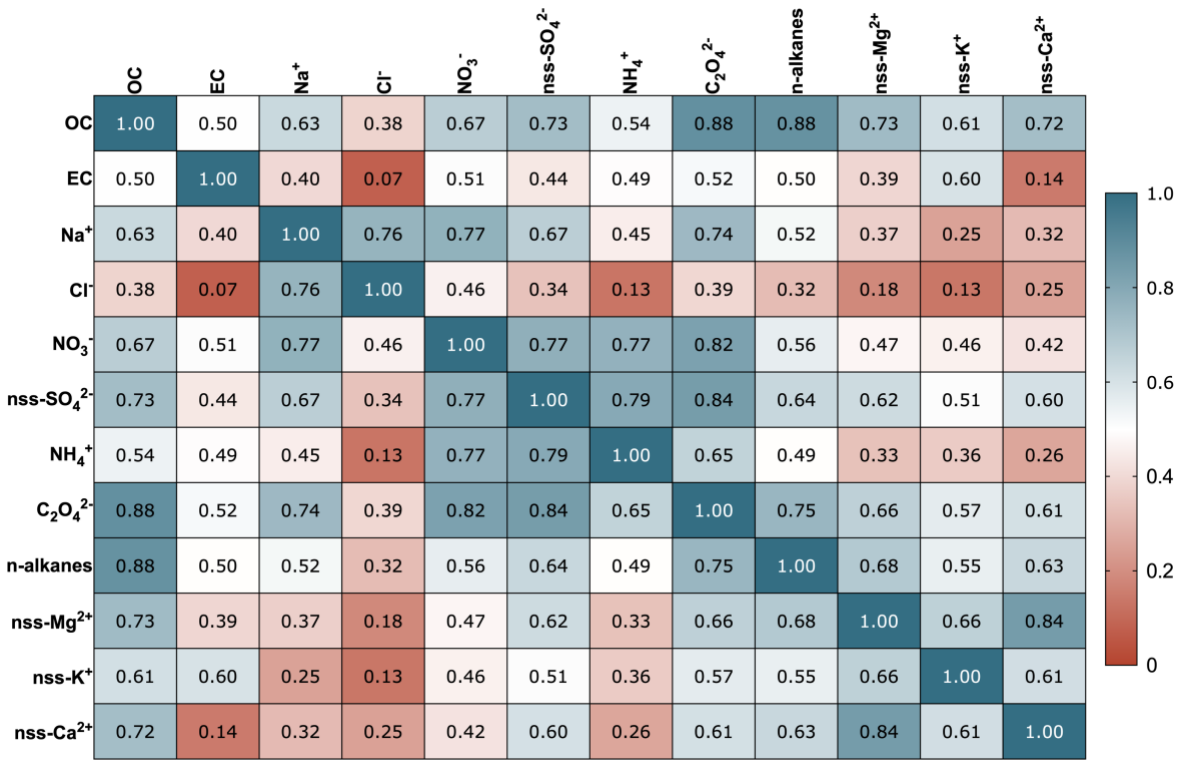

Figure S9. Correlation matrix plot for various compound and elements.

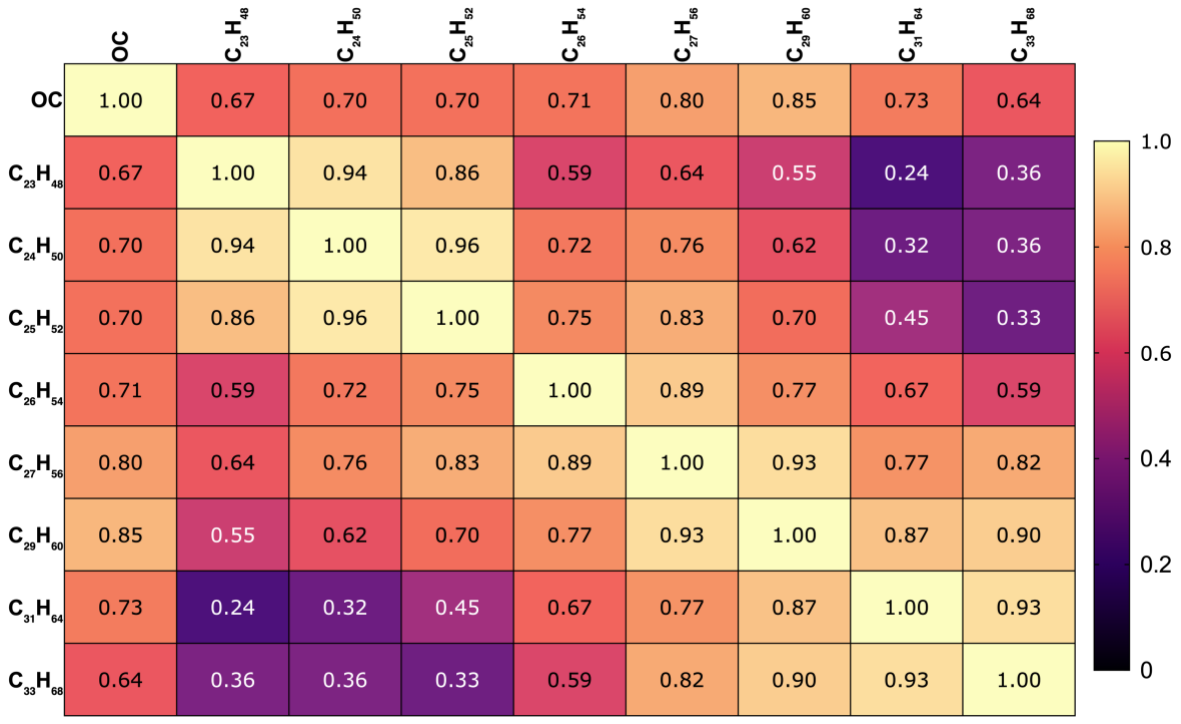

Figure S10. Correlation between measured concentrations of OC and organic compounds.

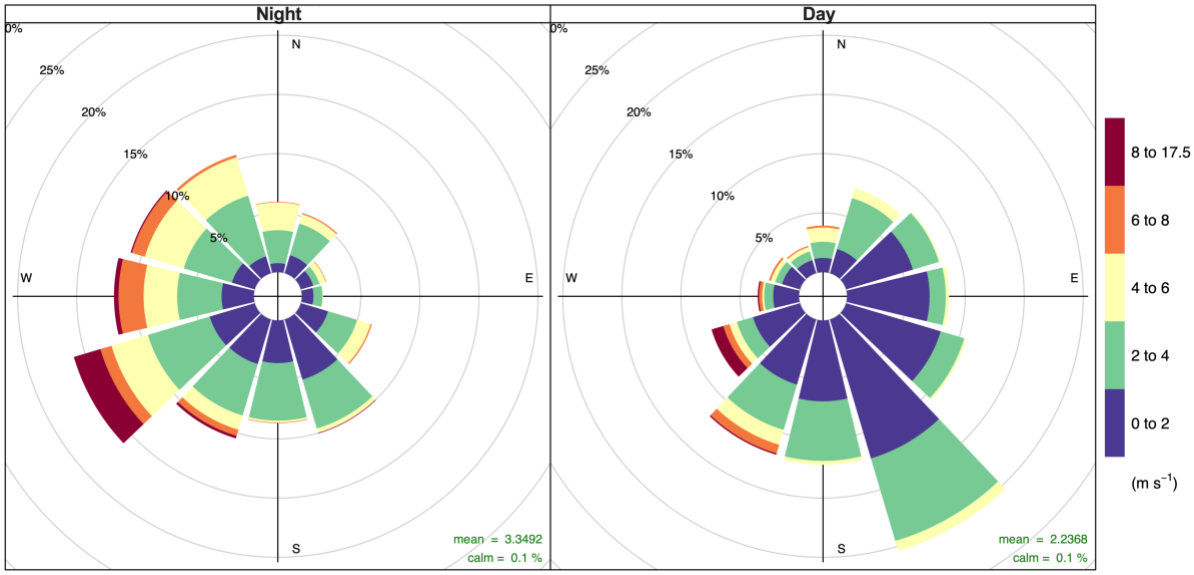

Figure S12. Wind rose plot during day and night-time from August to December 2017 at AMV.