



Supplement of

Measurement report: Biogenic volatile organic compound emission profiles of rapeseed leaf litter and its secondary organic aerosol formation potential

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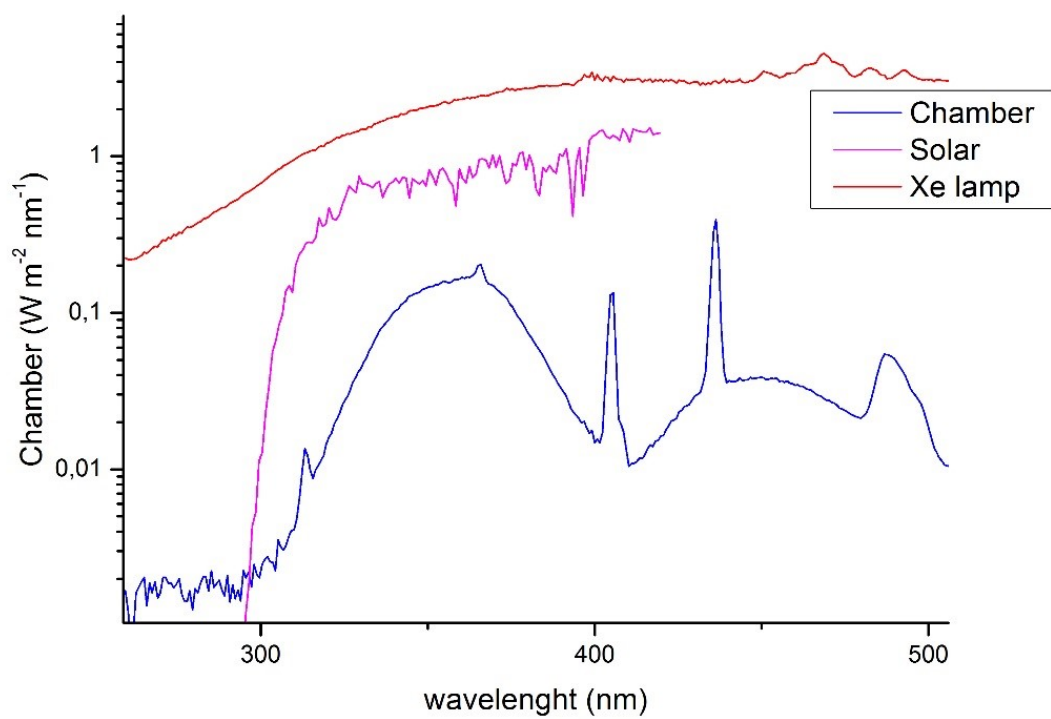


Figure S1. UV spectrum of the lamps used in the atmospheric simulation chamber compared to the solar spectrum and the spectrum generated by a Xenon lamp (Xe lamp).

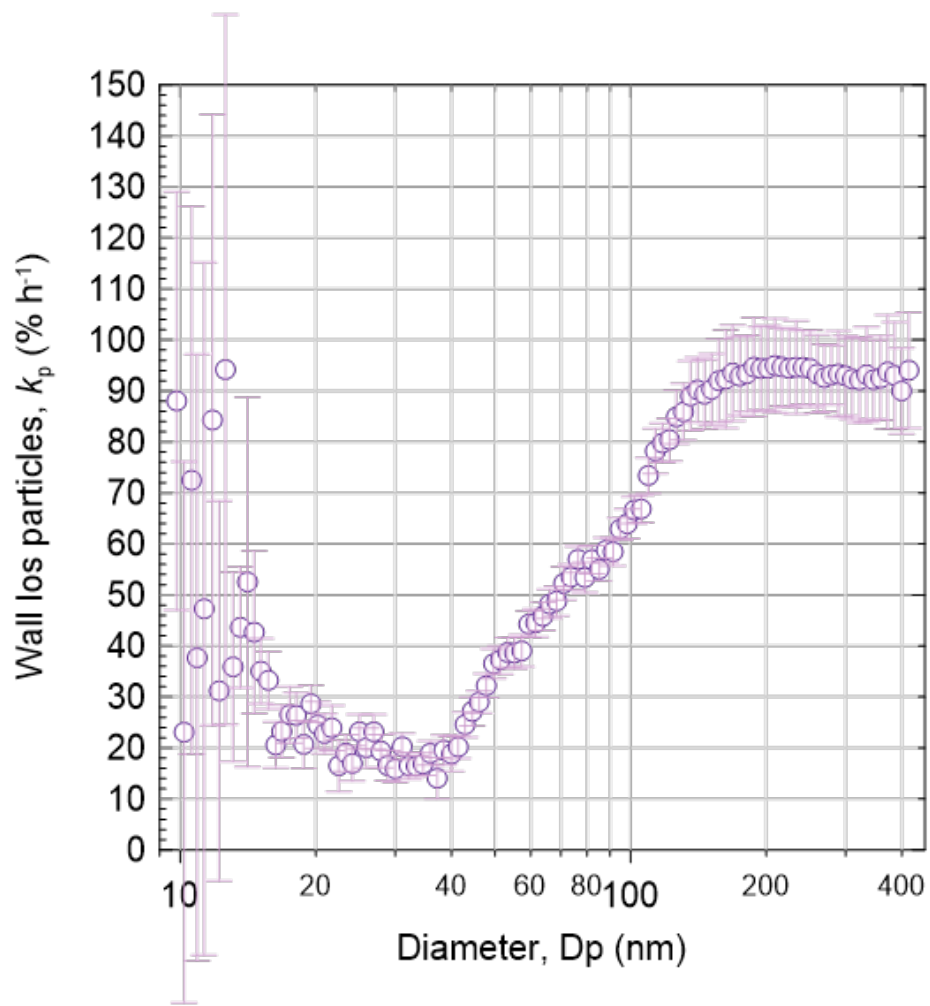


Figure S2. Estimation of the wall loss particles per diameter (nm) in the multiphase simulation chamber.

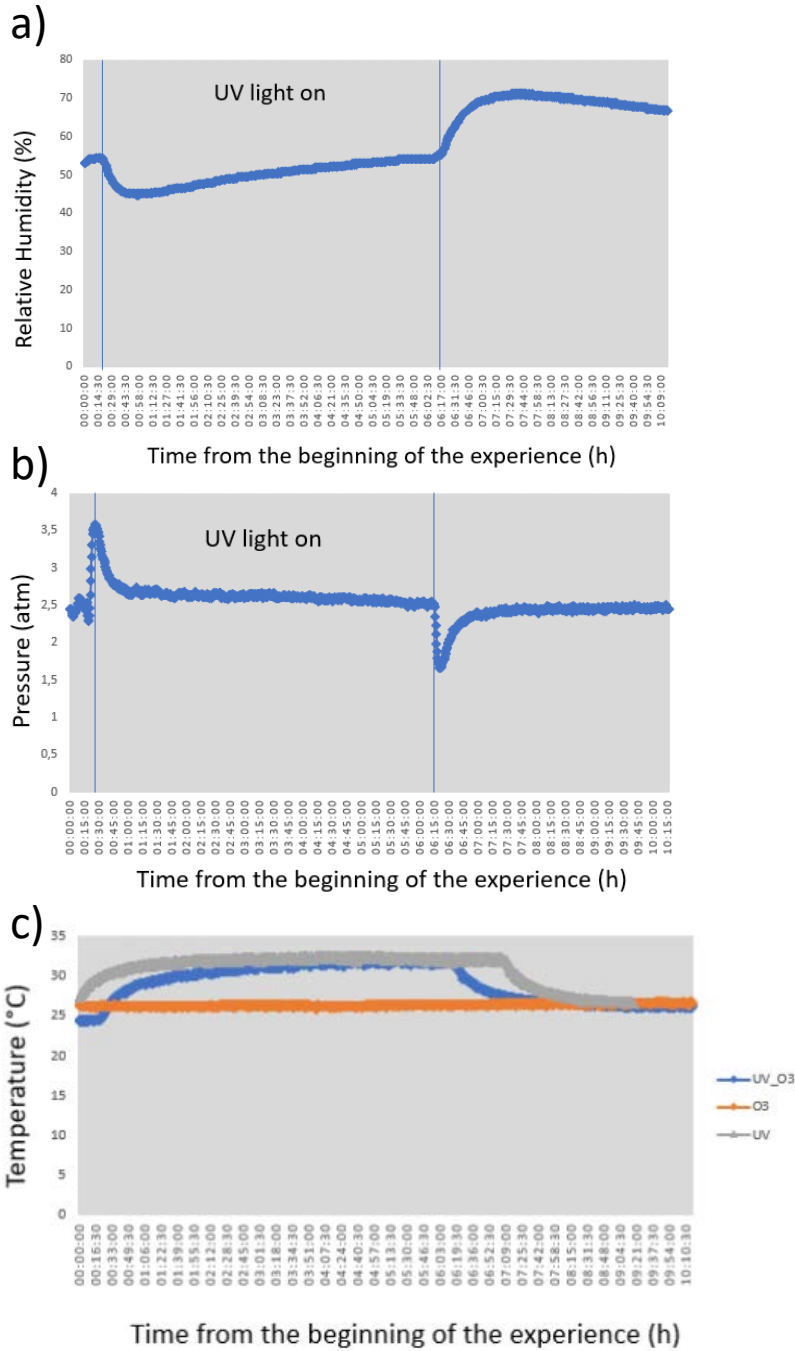


Figure S3. Evolution of a) Relative humidity, b) pressure and c) temperature during the experiment UV₃, O₃ and UV. Blue bars delimit the time where the UV light were on. The blue bar on the left of each graph also corresponds to the ozone injection time.

Table S1. Tentative identification and most likely formula of the most emitted compound for the UV, O₃, and UV_O₃ conditions.

LIST OF THE MOST EMITTED COMPOUNDS		
Masses	Most likely formula	Tentative identification
31.02	CH ₂ O	Formaldehyde
33.03	CH ₄ O	Methanol
42.03	C ₂ H ₃ N	Acetonitrile
43.02	C ₂ H ₂ O	Hexyl acetate fragment/ketene
43.03	C ₂ H ₂ O	
43.05	C ₃ H ₆	Propene
45.03	C ₂ H ₄ O	Acetaldehyde
45.99		
46.03	CH ₃ NO	Formamide
47.01	CH ₂ O ₂	Formic acid
47.02	CH ₂ O ₂ /C ₂ H ₆ O	Formic acid/ethanol
47.05	C ₂ H ₆ O	Ethanol
49.01	CH ₄ O ₂	Methanediol
49.99	H ₃ NS	
51.04	CH ₄ O-H ₂ O	Methanol-water cluster
55.93	C ₃ H ₃ O	1-Oxoprop-2-enyl
57.03	C ₃ H ₄ O	2-propenal (acrolein)
57.07	C ₄ H ₁₀ O/C ₄ H ₈	Butanol/butene
59.04	C ₃ H ₆ O	Acetone
60.05	C ₂ H ₅ NO	Acetamide/ N-methyl formamide/ nitrosoethano
61.03	C ₂ H ₄ O ₂	Acetic acid
69.07	C ₅ H ₈	Isoprene
71.05	C ₄ H ₆ O	Methyl vinyl ketone (MVK)
71.08	C ₅ H ₁₀	Pentene
73.03	C ₃ H ₄ O ₂	2-propenoic acid
73.06	C ₄ H ₈ O	2-butanone, (MEK)/2-methylpropanal
74.06	C ₃ H ₇ NO	N, N-dimethylformamide/Propanamide
75.01	C ₃ H ₆ O ₂	Hydroxyacetone
87.04	C ₄ H ₆ O ₂	Butenoic acid
87.07	C ₅ H ₁₀ O	2-methyl butanal/pentanone
88.04	C ₃ H ₅ NO ₂	Propene, 3-nitro-
89.06	C ₅ H ₁₂ O/C ₄ H ₈ O ₂	2-pentanol /Butanoic acid/Acetoin
90.06		
90.95		
93.95	C ₇ H ₈	Toluene
94.99		
96.007	C ₅ H ₅ NO/C ₆ H ₉ N	Pyridine-N-oxide/2,4-dimethylpyrrole
101.06	C ₅ H ₈ O ₂	2,3-Pentanedione
108.95	C ₇ H ₉ N	Pyridine, 2,4-dimethyl-
123.94		
125.95		