Supplement

Observation of biogenic secondary organic aerosols in the atmosphere of a mountain site in central China: Temperature and relative humidity effects

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Table S1

Statistical results of the correlations of the BSOA tracers with temperature and relative humidity. The values of BSOA tracers, temperature and relative humidity were used as daily average.

BSOA tracers	Air mass	N	R	Slope		Intercept		*p*
				Value	SE[a]	Value	SE[a]	
I. Correlation with temperature								
3-MeTHF-3,4-diols[b]	S	17	0.66	0.10	0.03	-1.5	0.60	0.004
	E	11	0.59	0.06	0.03	-0.81	0.44	0.055
	N	6	0.69	0.02	0.01	-0.32	0.22	0.126
2-methylglyceric acid	S	17	0.73	0.65	0.16	-7.1	2.9	0.001
	E	11	0.69	1.5	0.52	-20	8.4	0.019
	N	6	0.68	0.47	0.25	-5.6	4.3	0.137
C_5-alkene triols	S	17	0.55	3.2	1.2	-48	23	0.021
	E	11	0.54	1.5	0.77	-20	12	0.086
	N	6	0.50	1.7	1.5	-23	26	0.313
2-methyltetrols	S	17	0.88	2.7	0.38	-38	7.0	0.000
	E	11	0.43	2.0	1.2	-26	20	0.136
	N	6	0.63	0.79	0.49	-9.8	8.4	0.182
cis-pinonic acid	S	17	0.60	0.42	0.14	-4.4	2.7	0.010
	E	11	0.72	0.70	0.23	-8.8	3.6	0.013
	N	6	0.64	0.39	0.24	-4.0	4.1	0.171
3-hydorxyglutaric acid	S	17	0.81	0.44	0.08	-5.4	1.5	0.000
	E	11	0.69	0.47	0.16	-5.9	2.6	0.019
	N	6	0.89	0.26	0.07	-3.3	1.2	0.018
MBTCA[b]	S	17	0.66	0.35	0.10	-4.0	1.9	0.004
	E	11	0.48	0.27	0.16	-3.3	2.6	0.138
	N	6	0.87	0.18	0.05	-2.3	0.9	0.026
β-caryophyllinic acid	S	17	0.54	0.29	0.12	-2.6	2.1	0.026
	E	11	0.67	0.57	0.21	-7.2	3.3	0.023
	N	6	0.69	0.48	0.25	-6.3	4.3	0.129
II. Correlation with relative humidity								
3-MeTHF-3,4-diols	S	17	-0.87	-0.03	0.00	2.7	0.33	0.000
	E	11	-0.86	-0.02	0.00	2.0	0.36	0.000
	N	6	-0.79	-0.01	0.00	0.39	0.11	0.061
2-methylglyceric acid	S	17	-0.56	-0.10	0.03	13	3.2	0.019
	E	11	-0.75	-0.38	0.11	38	10	0.008
	N	6	-0.78	-0.08	0.03	7.9	2.2	0.065
C_5-alkene triols	S	17	-0.79	-0.89	0.18	86	15	0.000
	E	11	-0.88	-0.55	0.10	54	9.2	0.000
	N	6	-0.77	-0.39	0.16	33	12	0.076
2-methyltetrols	S	17	-0.81	-0.49	0.09	53	7.7	0.000
	E	11	-0.84	-0.82	0.18	80	16	0.001
	N	6	-0.73	-0.13	0.06	13	4.5	0.101
cis-pinonic acid	S	17	-0.89	-0.12	0.02	14	1.4	0.000
	E	11	-0.69	-0.15	0.05	16	5.0	0.019
	N	6	-0.84	-0.08	0.02	8.0	1.7	0.035
3-hydorxyglutaric acid	S	17	-0.72	-0.08	0.02	9.1	1.6	0.001
	E	11	-0.85	-0.13	0.03	14	2.5	0.001
	N	6	-0.61	-0.03	0.02	3.0	1.2	0.202
MBTCA	S	17	-0.66	-0.07	0.02	7.9	2.5	0.004
	E	11	-0.60	-0.08	0.03	8.0	3.1	0.051
	N	6	-0.69	-0.02	0.01	2.3	0.8	0.127
β-caryophyllinic acid	S	17	-0.47	-0.05	0.02	6.7	2.0	0.057
	E	11	-0.75	-0.14	0.04	15	3.9	0.008
	N	6	-0.85	-0.09	0.03	7.9	1.9	0.032

[a] SE: standard error.

[b] 3-MeTHF-3,4-diols: 3-methyltetrahydrofuran-3,4-diols; MBTCA: 3-methyl-1,2,3-butanetricarboxylic acid.