

Table S1. Summary of meteorological conditions in Warm and Cold sampling periods in the Rural and Urban site.

		Rural				Urban			
		warm		cold		warm		cold	
		<i>mean</i>	<i>sd</i>	<i>mean</i>	<i>sd</i>	<i>mean</i>	<i>sd</i>	<i>mean</i>	<i>sd</i>
Temp.	(°C)	20	± 7	4	± 10	22	± 2	10	± 2
Rel.Humidity	(%)	69	± 23	80	± 22	55	± 3	72	± 8
Wind Speed	(m/s)	4	± 4	2	± 4	2	± 0	3	± 1
Wind Dir.	(°)	78	± 40	176	± 126	187	± 23	162	± 103
Atm.Pressure	(mbar)	1014	± 3	1008	± 26	1010	± 3	1005	± 1

Table S2. Selected ions (*m/z*) for the identification and quantification of molecular organic tracer compounds in the PM filter sample extract in GC-MS (EI).

compound family	compound name	ion <i>m/z</i>
acids+polyols	succinic acid (SA)	247
	glutaric acid (GA)	261
	adipic acid (AdA)	275
	pimelic acid (PA)	289
	suberic acid (SbA)	303
	azelaic acid (AzA)	317
	glyceric acid (GyA)	292
	malic acid (MA)	233
	3-hydroxyglutaric acid (3HGA)	349
	3-methyl-1,2,3-butanetricarboxylic acid (MBTCA)	405
	cis-pinonic acid (CPA)	171
	pinic acid (PNA)	171
	2-methylglyceric acid (2MGA)	219
	C5-alkene triols (C5T)	231
	2-methylthreitol (2MT1)	219
	2-methylerythritol (2MT2)	219
	phthalic acid (PhA)	295
	terephthalic acid (TPhA)	295
	C16:0 to C21:0 including C18:1 (oleic acid)	117
saccharides	galactosan (G)	217
	mannosan (M)	204
	levoglucosan (L)	204
	xylitol (X)	217
	mannitol (MaOL)	319
	α-glucose (αGL)	204
	β-glucose (βGL)	204
	dehydrabietic acid (DHA)	239
	sucrose (S)	261
	mycose (My)	261
alkaloid	nicotine (NIC)	84
quinones	fluorenone (flo)	180
	phenanthrenequinone (pheno)	208
	anthracenequinone (anto)	208
	benzo[a]fluorenone (baflo)	230
	benzo[b]fluorenone (bbflo)	230
	benzanthrenone (bao)	230
PAH	phenanthrene (phe)	178
	anthracene (ant)	178
	fluoranthene (fla)	202
	pyrene (pyr)	202
	retene (ret)	219
	benz[a]anthracene (baa)	228
	chrysene (chry)	228
	benzo[b+j]fluoranthene (bbjfla)	252
	benzo[k]fluoranthene (bkfla)	252
	benzo[e]pyrene (bep)	252
	benzo[a]pyrene (bap)	252
	indeno[123cd]pyrene (ip)	276
	dibenz[ah]anthracene (dba)	278
	benzo[ghi]perylene (bgp)	276
	coronene (cor)	300
hopanes	17a(H)21β(H)-29-norhopane (norHop)	191
	17a(H)21β(H)-hopane (Hop)	191
n-alkanes	nC20 to nC34	71

Table S3a-b. Summary of organic tracer compound concentrations in Warm and Cold sampling periods in the Rural site.

RURAL	Warm period					
	>7.2 μm	7.2 - 3.0 μm	3.0 - 1.5 μm	1.5 - 1.0 μm	1.0 - 0.5 μm	<0.5 μm
(ng/m ³)						
succinic acid (SA)	4.1 \pm 1.1	4.3 \pm 0.6	6.9 \pm 0.4	10.0 \pm 1.5	11.0 \pm 0.9	37.3 \pm 1.2
glutaric acid (GA)	0.5 \pm 0.0	0.4 \pm 0.0	0.6 \pm 0.1	1.0 \pm 0.1	1.9 \pm 1.0	4.7 \pm 0.2
adipic acid (AdA)	0.8 \pm 0.7	0.2 \pm 0.0	0.3 \pm 0.2	0.5 \pm 0.0	0.7 \pm 0.3	1.6 \pm 0.2
pimelic acid (PA)	0.4 \pm 0.1	0.4 \pm 0.2	0.5 \pm 0.0	0.4 \pm 0.1	0.5 \pm 0.1	1.6 \pm 0.5
suberic acid (SbA)	0.7 \pm 0.7	0.3 \pm 0.1	0.3 \pm 0.2	0.4 \pm 0.0	0.5 \pm 0.2	1.2 \pm 0.4
azelaic acid (Aza)	1.6 \pm 1.3	0.9 \pm 0.2	1.7 \pm 0.3	2.2 \pm 0.2	2.1 \pm 0.2	12.7 \pm 2.6
glyceric acid (GyA)	0.8 \pm 0.1	0.6 \pm 0.2	1.3 \pm 0.0	2.5 \pm 1.0	2.5 \pm 0.8	10.1 \pm 0.1
malic acid (MA)	0.5 \pm 0.1	0.7 \pm 0.2	2.1 \pm 1.9	2.4 \pm 1.8	3.1 \pm 1.9	90.4 \pm 8.6
3-hydroxyglutaric acid (3HGA)	0.1 \pm 0.0	0.1 \pm 0.0	0.2 \pm 0.2	0.4 \pm 0.5	0.9 \pm 1.2	46.5 \pm 4.5
MBTCA	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.7 \pm 0.9	44.3 \pm 3.1
cis-pinonic acid (CPA)	16.6 \pm 7.1	24.0 \pm 9.7	26.7 \pm 9.3	29.8 \pm 10.5	23.6 \pm 22.4	14.3 \pm 1.0
pinic acid (PNA)	9.2 \pm 1.0	10.0 \pm 1.3	19.0 \pm 1.2	23.9 \pm 2.6	17.7 \pm 19.7	151.8 \pm 13.6
2-methylglyceric acid (2MGA)	6.2 \pm 2.7	7.8 \pm 2.3	16.7 \pm 8.2	18.5 \pm 10.9	7.0 \pm 7.9	41.4 \pm 0.1
C5-alkene triols (C5T)	1.5 \pm 0.7	1.9 \pm 0.9	2.8 \pm 1.7	5.8 \pm 2.3	8.5 \pm 10.3	123.5 \pm 20.9
2-methylthreitol (2MT1)	5.0 \pm 1.2	14.4 \pm 7.3	18.1 \pm 9.9	15.1 \pm 8.5	8.0 \pm 9.6	60.3 \pm 2.9
2-methylerythritol (2MT2)	11.4 \pm 2.0	32.8 \pm 19.8	48.4 \pm 32.0	43.7 \pm 19.9	23.3 \pm 28.9	221.0 \pm 35.5
phthalic acid (PhA)	1.1 \pm 0.6	1.2 \pm 0.6	2.1 \pm 1.2	2.4 \pm 1.1	2.4 \pm 2.7	11.2 \pm 4.9
terephthalic acid (TPhA)	1.9 \pm 1.0	1.9 \pm 1.7	3.5 \pm 2.9	2.7 \pm 0.1	2.7 \pm 0.6	4.3 \pm 1.4
nicotine (NIC)	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.6 \pm 0.7
galactosan (G)	0.0 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.2 \pm 0.0	0.2 \pm 0.1	1.2 \pm 0.1
mannosan (M)	0.0 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.2 \pm 0.0	0.1 \pm 0.1	0.6 \pm 0.1
levoglucosan (L)	0.1 \pm 0.0	0.4 \pm 0.0	0.4 \pm 0.2	0.9 \pm 0.2	0.7 \pm 0.6	6.3 \pm 0.6
xylitol (X)	8.4 \pm 6.5	49.7 \pm 27.7	125.2 \pm 79.7	64.6 \pm 38.1	22.3 \pm 14.7	11.5 \pm 7.5
mannitol (MaOL)	6.1 \pm 4.6	43.8 \pm 15.5	70.4 \pm 2.8	31.3 \pm 4.3	12.5 \pm 5.3	4.8 \pm 2.2
α -glucose (α GL)	14.9 \pm 9.6	77.6 \pm 53.1	85.8 \pm 10.6	45.2 \pm 0.7	20.4 \pm 8.7	14.6 \pm 11.1
β -glucose (β GL)	18.4 \pm 12.6	88.2 \pm 58.4	98.8 \pm 7.6	53.2 \pm 2.7	21.8 \pm 7.2	15.8 \pm 11.6
dehydrabietic acid (DHA)	0.2 \pm 0.0	0.3 \pm 0.2	0.3 \pm 0.0	0.2 \pm 0.1	0.1 \pm 0.1	0.6 \pm 0.3
sucrose (S)	14.8 \pm 6.9	14.0 \pm 9.0	6.3 \pm 7.2	1.8 \pm 1.0	1.0 \pm 0.4	7.8 \pm 1.4
mycose (My)	1.9 \pm 0.9	34.5 \pm 17.5	46.8 \pm 27.1	11.0 \pm 6.9	2.9 \pm 0.5	2.4 \pm 0.9
C16:0	19.7 \pm 12.4	15.5 \pm 1.7	12.1 \pm 0.4	15.4 \pm 0.5	9.7 \pm 2.8	25.4 \pm 3.6
C17:0	0.8 \pm 0.4	0.5 \pm 0.1	0.5 \pm 0.0	0.5 \pm 0.1	0.4 \pm 0.2	1.2 \pm 0.1

C18:1	2.6 ± 2.4	2.3 ± 0.9	1.8 ± 0.5	1.2 ± 0.6	0.8 ± 0.3	1.7 ± 1.4
C18:0	4.1 ± 1.8	6.1 ± 0.7	4.2 ± 0.8	3.9 ± 0.0	1.9 ± 0.8	7.4 ± 2.1
C19:0	0.1 ± 0.1	0.2 ± 0.0	0.2 ± 0.0	0.2 ± 0.0	0.2 ± 0.2	0.5 ± 0.0
C20:0	0.4 ± 0.2	0.5 ± 0.2	0.5 ± 0.1	0.4 ± 0.0	0.2 ± 0.2	1.5 ± 0.0
C21:0	0.1 ± 0.0	0.1 ± 0.1	0.2 ± 0.2	0.1 ± 0.0	0.1 ± 0.0	0.5 ± 0.1
fluorenone (flo)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
phenanthraquinone (pheno)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
anthracenequinone (anto)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.00
benzo[a]fluorenone (baflo)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
benzo[b]fluorenone (bbflo)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
benzanthrenone (bao)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
phenanthrene (phe)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.01
anthracene (ant)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
fluoranthene (fla)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.05 ± 0.01
pyrene (pyr)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.07 ± 0.02
retene (ret)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00
benz[a]anthracene (baa)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.02 ± 0.01
chrysene (chry)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.04 ± 0.02
benzo[b+j]fluoranthene (bbjfla)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.10 ± 0.06
benzo[k]fluoranthene (bkfla)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.02
benzo[e]pyrene (bep)	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.13 ± 0.07
benzo[a]pyrene (bap)	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.08 ± 0.03
indeno[123cd]pyrene (ip)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.11 ± 0.05
dibenz[ah]anthracene (dba)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.01
benzo[ghi]perylene (bgp)	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.01	0.02 ± 0.01	0.15 ± 0.07
coronene (cor)	0.00 ± 0.00	0.01 ± 0.00	0.00 ± 0.00	0.01 ± 0.01	0.01 ± 0.00	0.06 ± 0.03
17a(H)21β(H)-29-norhopane (norHop)	0.03 ± 0.00	0.03 ± 0.01	0.03 ± 0.01	0.02 ± 0.00	0.05 ± 0.04	0.30 ± 0.06
17a(H)21β(H)-hopane (Hop)	0.03 ± 0.01	0.03 ± 0.01	0.02 ± 0.01	0.02 ± 0.00	0.04 ± 0.03	0.27 ± 0.07
nC20	0.03 ± 0.01	0.02 ± 0.00	0.01 ± 0.01	0.02 ± 0.00	0.04 ± 0.03	0.02 ± 0.01
nC21	0.09 ± 0.05	0.07 ± 0.06	0.04 ± 0.04	0.05 ± 0.00	0.08 ± 0.05	0.13 ± 0.03
nC22	0.09 ± 0.08	0.06 ± 0.00	0.03 ± 0.03	0.07 ± 0.01	0.13 ± 0.09	0.06 ± 0.03
nC23	0.05 ± 0.03	0.05 ± 0.02	0.02 ± 0.02	0.05 ± 0.01	0.07 ± 0.04	0.08 ± 0.04
nC24	0.04 ± 0.04	0.04 ± 0.00	0.02 ± 0.01	0.04 ± 0.01	0.06 ± 0.04	0.11 ± 0.04
nC25	0.15 ± 0.05	0.18 ± 0.08	0.10 ± 0.02	0.18 ± 0.01	0.24 ± 0.03	0.27 ± 0.16
nC26	0.08 ± 0.05	0.06 ± 0.02	0.03 ± 0.01	0.07 ± 0.02	0.13 ± 0.10	0.27 ± 0.27
nC27	0.21 ± 0.04	0.35 ± 0.15	0.22 ± 0.02	0.29 ± 0.04	0.27 ± 0.02	0.46 ± 0.36
nC28	0.08 ± 0.05	0.08 ± 0.01	0.04 ± 0.01	0.08 ± 0.03	0.06 ± 0.01	0.16 ± 0.16

nC29	0.27 ± 0.06	0.57 ± 0.19	0.42 ± 0.10	0.59 ± 0.03	0.41 ± 0.17	0.46 ± 0.26
nC30	0.05 ± 0.03	0.06 ± 0.02	0.03 ± 0.01	0.05 ± 0.01	0.07 ± 0.03	0.14 ± 0.09
nC31	0.16 ± 0.02	0.39 ± 0.09	0.23 ± 0.03	0.38 ± 0.13	0.24 ± 0.16	0.39 ± 0.13
nC32	0.06 ± 0.04	0.06 ± 0.01	0.04 ± 0.03	0.06 ± 0.01	0.08 ± 0.04	0.08 ± 0.04
nC33	0.06 ± 0.02	0.08 ± 0.02	0.05 ± 0.02	0.07 ± 0.00	0.08 ± 0.02	0.14 ± 0.05
nC34	0.05 ± 0.04	0.04 ± 0.00	0.02 ± 0.01	0.04 ± 0.00	0.03 ± 0.00	0.04 ± 0.01

	Cold period					
	>7.2 µm	7.2 - 3.0 µm	3.0 - 1.5 µm	1.5 - 1.0 µm	1.0 - 0.5 µm	<0.5 µm
(ng/m ³)						
succinic acid (SA)	4.1 ± 1.2	4.7 ± 1.1	5.8 ± 3.4	7.5 ± 2.5	10.5 ± 1.5	35.8 ± 13.3
glutaric acid (GA)	1.5 ± 1.0	1.5 ± 1.2	2.0 ± 1.4	2.4 ± 1.2	2.9 ± 0.0	11.4 ± 4.1
adipic acid (AdA)	1.6 ± 1.4	0.5 ± 0.4	0.7 ± 0.2	0.7 ± 0.4	0.9 ± 0.3	2.3 ± 0.3
pimelic acid (PA)	0.3 ± 0.2	0.2 ± 0.1	0.3 ± 0.2	0.4 ± 0.1	0.5 ± 0.1	4.0 ± 0.5
suberic acid (SbA)	0.8 ± 0.7	0.3 ± 0.2	0.3 ± 0.1	0.5 ± 0.2	0.7 ± 0.2	4.7 ± 0.6
azelaic acid (AzA)	2.2 ± 1.8	1.3 ± 0.7	1.5 ± 0.6	2.8 ± 0.9	5.3 ± 0.9	63.9 ± 5.4
glyceric acid (GyA)	2.4 ± 1.2	1.8 ± 1.6	2.4 ± 2.6	2.6 ± 2.4	3.5 ± 1.9	11.6 ± 4.4
malic acid (MA)	0.1 ± 0.1	0.2 ± 0.1	0.5 ± 0.1	0.5 ± 0.3	0.9 ± 0.3	25.2 ± 3.9
3-hydroxyglutaric acid (3HGA)	0.1 ± 0.0	0.1 ± 0.0	0.2 ± 0.1	0.1 ± 0.0	0.3 ± 0.0	7.6 ± 1.0
MBTCA	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.3 ± 0.3	6.4 ± 0.3
cis-pinonic acid (CPA)	4.8 ± 1.0	9.5 ± 0.4	8.5 ± 2.7	9.3 ± 1.6	9.6 ± 0.1	6.6 ± 0.6
pinic acid (PNA)	2.1 ± 2.0	2.9 ± 2.1	3.9 ± 3.3	4.5 ± 2.8	5.7 ± 3.2	31.7 ± 15.7
2-methylglyceric acid (2MGA)	0.4 ± 0.3	0.7 ± 0.6	0.8 ± 0.7	0.8 ± 0.5	1.0 ± 0.6	2.6 ± 0.8
C5-alkene triols (C5T)	0.1 ± 0.1	0.1 ± 0.1	0.1 ± 0.0	0.2 ± 0.2	0.4 ± 0.3	1.5 ± 0.2
2-methylthreitol (2MT1)	0.2 ± 0.0	0.3 ± 0.2	0.4 ± 0.2	0.3 ± 0.0	0.5 ± 0.2	0.5 ± 0.1
2-methylerythritol (2MT2)	0.3 ± 0.0	0.4 ± 0.0	0.7 ± 0.3	0.7 ± 0.2	1.0 ± 0.6	5.2 ± 4.4
phthalic acid (PhA)	3.5 ± 3.8	4.9 ± 5.1	4.8 ± 4.8	5.3 ± 4.9	7.0 ± 6.0	7.4 ± 2.4
terephthalic acid (TPhA)	18.6 ± 17.5	28.9 ± 34.8	33.6 ± 40.8	33.5 ± 36.1	37.6 ± 30.5	28.8 ± 13.8
nicotine (NIC)	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	1.7 ± 2.2
galactosan (G)	0.8 ± 0.1	1.4 ± 0.1	2.8 ± 0.1	6.2 ± 2.3	18.0 ± 1.4	160.4 ± 52.3
mannosan (M)	0.6 ± 0.0	1.1 ± 0.0	2.7 ± 0.2	7.2 ± 2.4	24.1 ± 8.0	216.3 ± 22.0
levoglucosan (L)	4.5 ± 1.5	9.8 ± 1.6	20.3 ± 2.0	63.2 ± 1.9	173.4 ± 20.4	1329 ± 275.0
xylitol (X)	0.6 ± 0.1	2.8 ± 2.1	8.0 ± 6.1	5.9 ± 3.9	3.9 ± 2.2	14.5 ± 4.8
mannitol (MaOL)	0.4 ± 0.3	1.8 ± 1.9	4.2 ± 3.6	2.2 ± 1.3	0.8 ± 0.7	0.8 ± 0.3
α-glucose (αGL)	2.4 ± 2.1	10.6 ± 11.4	11.5 ± 12.7	6.0 ± 5.2	3.4 ± 1.3	12.5 ± 5.5
β-glucose (βGL)	3.5 ± 2.3	14.3 ± 16.0	13.9 ± 15.2	8.4 ± 7.4	4.3 ± 1.6	14.5 ± 3.1

dehydrabietic acid (DHA)	1.2 ± 0.8	4.4 ± 1.1	6.8 ± 1.7	24.2 ± 7.3	81.2 ± 5.7	350.0 ± 94.1
sucrose (S)	4.8 ± 2.2	0.9 ± 0.8	0.6 ± 0.1	1.3 ± 0.2	1.1 ± 0.2	10.8 ± 2.8
mycose (My)	0.4 ± 0.2	2.8 ± 3.7	2.7 ± 2.6	1.9 ± 1.2	0.9 ± 0.5	1.4 ± 0.4
C16:0	14.6 ± 13.7	8.4 ± 1.8	5.2 ± 2.0	7.5 ± 2.7	13.1 ± 2.2	73.7 ± 3.2
C17:0	0.7 ± 0.6	0.4 ± 0.0	0.3 ± 0.0	0.6 ± 0.1	0.9 ± 0.0	4.4 ± 0.2
C18:1	9.1 ± 12.1	1.6 ± 0.7	1.4 ± 1.0	1.2 ± 0.6	3.8 ± 1.6	17.4 ± 0.8
C18:0	3.3 ± 3.2	4.0 ± 0.7	2.3 ± 0.6	2.9 ± 0.8	5.2 ± 0.6	49.3 ± 2.1
C19:0	0.2 ± 0.1	0.2 ± 0.1	0.1 ± 0.0	0.4 ± 0.0	1.1 ± 0.1	3.4 ± 0.1
C20:0	0.4 ± 0.4	0.4 ± 0.1	0.3 ± 0.0	0.8 ± 0.2	2.2 ± 0.6	12.0 ± 0.5
C21:0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.3 ± 0.1	0.8 ± 0.3	5.0 ± 0.2
fluorenone (flo)	0.02 ± 0.01	0.02 ± 0.01	0.01 ± 0.01	0.01 ± 0.00	0.02 ± 0.00	0.14 ± 0.09
phenanthraquinone (pheno)	0.10 ± 0.12	0.12 ± 0.12	0.08 ± 0.08	0.07 ± 0.04	0.10 ± 0.03	0.81 ± 0.47
anthracenequinone (anto)	0.03 ± 0.03	0.04 ± 0.04	0.03 ± 0.02	0.03 ± 0.02	0.03 ± 0.02	0.22 ± 0.11
benzo[a]fluorenone (baflo)	0.02 ± 0.03	0.04 ± 0.04	0.02 ± 0.01	0.01 ± 0.01	0.03 ± 0.02	0.59 ± 0.31
benzo[b]fluorenone (bbflo)	0.02 ± 0.03	0.04 ± 0.05	0.01 ± 0.01	0.01 ± 0.01	0.03 ± 0.03	0.79 ± 0.25
benzanthrenone (bao)	0.04 ± 0.05	0.08 ± 0.10	0.03 ± 0.01	0.03 ± 0.03	0.07 ± 0.07	1.15 ± 0.17
phenanthrene (phe)	0.02 ± 0.02	0.03 ± 0.03	0.02 ± 0.01	0.01 ± 0.01	0.02 ± 0.01	0.26 ± 0.12
anthracene (ant)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.05 ± 0.01
fluoranthene (fla)	0.08 ± 0.08	0.14 ± 0.13	0.06 ± 0.03	0.05 ± 0.02	0.08 ± 0.03	1.23 ± 0.73
pyrene (pyr)	0.09 ± 0.08	0.17 ± 0.16	0.07 ± 0.03	0.06 ± 0.02	0.10 ± 0.05	1.63 ± 0.92
retene (ret)	0.25 ± 0.30	0.43 ± 0.48	0.19 ± 0.17	0.12 ± 0.00	0.22 ± 0.01	2.03 ± 1.49
benz[a]anthracene (baa)	0.05 ± 0.05	0.15 ± 0.18	0.03 ± 0.01	0.03 ± 0.03	0.10 ± 0.11	1.43 ± 0.71
chrysene (chry)	0.07 ± 0.08	0.18 ± 0.21	0.05 ± 0.02	0.05 ± 0.04	0.12 ± 0.12	1.55 ± 0.82
benzo[b+j]fluoranthene (bbjfla)	0.09 ± 0.10	0.24 ± 0.29	0.05 ± 0.01	0.08 ± 0.09	0.22 ± 0.26	2.02 ± 0.47
benzo[k]fluoranthene (bkfla)	0.02 ± 0.03	0.07 ± 0.09	0.01 ± 0.00	0.02 ± 0.03	0.06 ± 0.07	0.73 ± 0.20
benzo[e]pyrene (bep)	0.07 ± 0.07	0.15 ± 0.16	0.05 ± 0.01	0.06 ± 0.06	0.13 ± 0.13	1.04 ± 0.27
benzo[a]pyrene (bap)	0.07 ± 0.07	0.17 ± 0.21	0.04 ± 0.00	0.06 ± 0.07	0.16 ± 0.20	0.99 ± 0.27
indeno[123cd]pyrene (ip)	0.06 ± 0.06	0.14 ± 0.16	0.04 ± 0.00	0.06 ± 0.07	0.14 ± 0.16	1.14 ± 0.29
dibenz[ah]anthracene (dba)	0.02 ± 0.02	0.04 ± 0.04	0.01 ± 0.00	0.01 ± 0.02	0.03 ± 0.04	0.35 ± 0.09
benzo[ghi]perylene (bgp)	0.06 ± 0.06	0.13 ± 0.13	0.05 ± 0.00	0.06 ± 0.06	0.13 ± 0.14	0.82 ± 0.19
coronene (cor)	0.03 ± 0.02	0.06 ± 0.06	0.02 ± 0.00	0.03 ± 0.03	0.07 ± 0.07	0.44 ± 0.09
17a(H)21β(H)-29-norhopane (norHop)	0.04 ± 0.02	0.05 ± 0.01	0.03 ± 0.01	0.02 ± 0.01	0.04 ± 0.00	0.12 ± 0.00
17a(H)21β(H)-hopane (Hop)	0.03 ± 0.02	0.03 ± 0.01	0.02 ± 0.00	0.02 ± 0.00	0.03 ± 0.01	0.13 ± 0.01
nC20	0.10 ± 0.04	0.11 ± 0.10	0.07 ± 0.04	0.04 ± 0.01	0.07 ± 0.01	0.65 ± 0.42
nC21	0.18 ± 0.00	0.24 ± 0.09	0.19 ± 0.10	0.12 ± 0.10	0.13 ± 0.04	1.40 ± 1.07
nC22	0.17 ± 0.11	0.28 ± 0.30	0.09 ± 0.05	0.07 ± 0.03	0.12 ± 0.04	2.16 ± 1.60
nC23	0.24 ± 0.10	0.38 ± 0.39	0.11 ± 0.02	0.09 ± 0.07	0.16 ± 0.11	2.71 ± 1.27

nC24	0.22 ± 0.16	0.38 ± 0.43	0.09 ± 0.03	0.08 ± 0.07	0.16 ± 0.13	2.05 ± 0.75
nC25	0.29 ± 0.15	0.45 ± 0.47	0.12 ± 0.04	0.12 ± 0.09	0.20 ± 0.15	1.74 ± 0.33
nC26	0.25 ± 0.18	0.42 ± 0.49	0.11 ± 0.04	0.11 ± 0.08	0.20 ± 0.18	1.12 ± 0.18
nC27	0.31 ± 0.13	0.50 ± 0.35	0.19 ± 0.01	0.17 ± 0.15	0.27 ± 0.19	1.39 ± 0.11
nC28	0.24 ± 0.16	0.38 ± 0.42	0.11 ± 0.04	0.12 ± 0.09	0.19 ± 0.17	0.96 ± 0.02
nC29	0.43 ± 0.21	0.64 ± 0.33	0.35 ± 0.01	0.29 ± 0.24	0.52 ± 0.28	2.48 ± 1.06
nC30	0.17 ± 0.15	0.28 ± 0.29	0.09 ± 0.04	0.07 ± 0.05	0.16 ± 0.13	0.60 ± 0.16
nC31	0.30 ± 0.21	0.49 ± 0.28	0.25 ± 0.04	0.22 ± 0.20	0.48 ± 0.34	2.43 ± 1.80
nC32	0.17 ± 0.09	0.22 ± 0.22	0.07 ± 0.04	0.06 ± 0.01	0.12 ± 0.09	0.44 ± 0.05
nC33	0.17 ± 0.06	0.22 ± 0.21	0.08 ± 0.04	0.04 ± 0.01	0.13 ± 0.06	0.60 ± 0.08
nC34	0.14 ± 0.05	0.16 ± 0.16	0.06 ± 0.02	0.04 ± 0.00	0.06 ± 0.03	0.19 ± 0.09

Table S2c-d. Summary of organic tracer compound concentrations in Warm and Cold sampling periods in the Urban site.

URBAN (ng/m ³)	Warm period					
	>7.2 µm	7.2 - 3.0 µm	3.0 - 1.5 µm	1.5 - 1.0 µm	1.0 - 0.5 µm	<0.5 µm
succinic acid (SA)	0.8 ± 0.6	1.2 ± 0.4	2.6 ± 1.0	3.9 ± 0.2	6.2 ± 2.2	9.5 ± 6.5
glutaric acid (GA)	0.4 ± 0.3	0.4 ± 0.1	0.6 ± 0.1	1.0 ± 0.1	1.4 ± 0.4	2.6 ± 2.0
adipic acid (AdA)	0.2 ± 0.0	0.2 ± 0.0	0.3 ± 0.1	0.3 ± 0.1	0.5 ± 0.2	1.1 ± 0.4
pimelic acid (PA)	0.4 ± 0.1	0.4 ± 0.1	0.4 ± 0.1	0.4 ± 0.1	0.4 ± 0.1	1.0 ± 0.5
suberic acid (SbA)	0.1 ± 0.1	0.1 ± 0.0	0.2 ± 0.0	0.3 ± 0.0	0.4 ± 0.2	1.2 ± 0.0
azelaic acid (AzA)	0.9 ± 0.1	0.8 ± 0.0	1.1 ± 0.0	1.8 ± 0.3	2.8 ± 1.2	10.2 ± 1.6
glyceric acid (GyA)	1.0 ± 0.8	0.7 ± 0.0	0.9 ± 0.4	1.4 ± 0.6	1.5 ± 0.6	3.0 ± 1.1
malic acid (MA)	0.2 ± 0.1	0.3 ± 0.0	0.7 ± 0.2	1.0 ± 0.0	1.3 ± 0.4	16.0 ± 7.3
3-hydroxyglutaric acid (3HGA)	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.1	0.2 ± 0.1	5.7 ± 1.0
MBTCA	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	7.4 ± 4.2
cis-pinonic acid (CPA)	6.6 ± 2.0	8.9 ± 2.6	12.6 ± 3.8	12.6 ± 4.9	12.0 ± 5.9	10.1 ± 12.5
pinic acid (PNA)	0.6 ± 0.4	0.4 ± 0.3	0.6 ± 0.2	1.5 ± 1.0	2.7 ± 1.7	11.4 ± 4.1
2-methylglyceric acid (2MGA)	1.7 ± 1.4	4.5 ± 3.8	7.4 ± 8.8	7.0 ± 6.0	5.4 ± 3.8	10.2 ± 11.3
C5-alkene triols (C5T)	0.4 ± 0.3	0.4 ± 0.2	0.8 ± 0.7	1.7 ± 1.6	5.1 ± 5.3	21.5 ± 20.5
2-methylthreitol (2MT1)	2.1 ± 1.6	8.3 ± 8.1	7.0 ± 6.0	2.9 ± 2.2	1.9 ± 1.4	5.0 ± 4.4
2-methylerythritol (2MT2)	8.6 ± 6.6	26.0 ± 25.0	30.0 ± 29.7	15.1 ± 12.7	9.9 ± 7.5	21.4 ± 19.2
phthalic acid (PhA)	0.7 ± 0.3	1.1 ± 0.4	3.3 ± 1.3	5.4 ± 1.1	6.7 ± 1.9	4.9 ± 1.5

terephthalic acid (TPhA)	8.7 ± 4.4	4.9 ± 2.0	8.0 ± 2.1	25.6 ± 10.6	38.4 ± 11.7	39.5 ± 14.1
nicotine (NIC)	0.2 ± 0.1	0.3 ± 0.1	0.4 ± 0.2	0.6 ± 0.5	1.6 ± 1.7	12.7 ± 7.2
galactosan (G)	0.1 ± 0.0	0.2 ± 0.1	0.3 ± 0.2	0.2 ± 0.2	0.3 ± 0.3	0.3 ± 0.4
mannosan (M)	0.0 ± 0.0	0.1 ± 0.1	0.2 ± 0.2	0.2 ± 0.3	0.4 ± 0.4	0.6 ± 0.8
levoglucosan (L)	0.4 ± 0.1	0.8 ± 0.4	1.5 ± 1.1	2.4 ± 2.5	4.4 ± 6.0	8.2 ± 10.9
xylitol (X)	20.3 ± 10.0	23.3 ± 5.2	16.1 ± 4.6	4.1 ± 0.6	1.5 ± 0.2	5.7 ± 3.2
mannitol (MaOL	6.6 ± 1.5	10.5 ± 3.3	6.9 ± 2.3	1.6 ± 0.4	0.5 ± 0.0	2.0 ± 0.4
α-glucose (αGL)	35.4 ± 17.4	32.1 ± 1.7	18.1 ± 4.0	6.1 ± 1.1	2.3 ± 0.1	11.6 ± 8.0
β-glucose (βGL)	35.1 ± 11.4	30.6 ± 2.3	18.9 ± 4.0	6.6 ± 1.4	2.5 ± 0.1	12.6 ± 8.1
dehydrabietic acid (DHA)	1.9 ± 1.0	1.1 ± 0.4	0.4 ± 0.1	0.3 ± 0.0	0.3 ± 0.1	1.3 ± 0.9
sucrose (S)	180.7 ± 58.7	102.5 ± 28.2	51.7 ± 21.6	10.9 ± 3.1	2.9 ± 1.1	63.1 ± 37.0
mycose (My)	35.3 ± 22.1	34.2 ± 13.1	14.3 ± 5.4	2.6 ± 1.0	0.6 ± 0.3	4.0 ± 2.0
C16:0	22.5 ± 5.4	23.7 ± 6.0	16.5 ± 3.7	16.5 ± 2.5	19.8 ± 5.6	37.4 ± 10.8
C17:0	1.6 ± 0.9	0.8 ± 0.2	0.7 ± 0.2	0.8 ± 0.2	0.8 ± 0.3	1.8 ± 0.4
C18:1	8.8 ± 6.0	3.5 ± 1.3	3.0 ± 1.3	2.8 ± 0.9	5.6 ± 4.4	2.8 ± 2.0
C18:0	16.6 ± 4.1	14.4 ± 5.4	9.4 ± 3.7	8.8 ± 3.5	15.0 ± 11.2	14.9 ± 4.2
C19:0	3.8 ± 3.4	1.4 ± 1.7	0.2 ± 0.1	0.2 ± 0.1	0.3 ± 0.1	0.9 ± 0.2
C20:0	2.9 ± 0.8	2.2 ± 0.7	1.2 ± 0.4	0.9 ± 0.3	1.3 ± 0.8	2.5 ± 0.2
C21:0	0.2 ± 0.0	0.2 ± 0.0	0.2 ± 0.1	0.2 ± 0.1	0.2 ± 0.1	0.9 ± 0.1
fluorenone (flo)	0.00 ± 0.00	0.01 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.04 ± 0.02
phenanthraquinone (pheno)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.03 ± 0.00
anthracenequinone (anto)	0.01 ± 0.00	0.01 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.06 ± 0.01
benzo[a]fluorenone (baflo)	0.00 ± 0.00	0.01 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.07 ± 0.01
benzo[b]fluorenone (bbflo)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.05 ± 0.01
benzanthrenone (bao)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.06 ± 0.00
phenanthrene (phe)	0.01 ± 0.01	0.02 ± 0.01	0.01 ± 0.01	0.01 ± 0.01	0.02 ± 0.02	0.12 ± 0.04
anthracene (ant)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.02 ± 0.00
fluoranthene (fla)	0.02 ± 0.01	0.03 ± 0.01	0.02 ± 0.01	0.02 ± 0.01	0.03 ± 0.02	0.19 ± 0.04
pyrene (pyr)	0.05 ± 0.02	0.06 ± 0.04	0.03 ± 0.02	0.03 ± 0.02	0.05 ± 0.04	0.33 ± 0.08
retene (ret)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00
benz[a]anthracene (baa)	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.01	0.01 ± 0.01	0.07 ± 0.01
chrysene (chry)	0.02 ± 0.01	0.02 ± 0.01	0.01 ± 0.01	0.02 ± 0.01	0.03 ± 0.02	0.12 ± 0.02
benzo[b+j]fluoranthene (bbjfla)	0.02 ± 0.01	0.02 ± 0.01	0.01 ± 0.01	0.02 ± 0.01	0.04 ± 0.03	0.14 ± 0.02
benzo[k]fluoranthene (bkfla)	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	0.01 ± 0.00	0.04 ± 0.01
benzo[e]pyrene (bep)	0.04 ± 0.03	0.05 ± 0.02	0.03 ± 0.02	0.03 ± 0.02	0.05 ± 0.04	0.17 ± 0.02
benzo[a]pyrene (bap)	0.03 ± 0.02	0.03 ± 0.01	0.02 ± 0.01	0.02 ± 0.01	0.03 ± 0.02	0.09 ± 0.02
indeno[123cd]pyrene (ip)	0.02 ± 0.01	0.02 ± 0.01	0.01 ± 0.01	0.02 ± 0.01	0.03 ± 0.02	0.12 ± 0.03

dibenz[ah]anthracene (dba)	0.01 ± 0.01	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.01	0.04 ± 0.01
benzo[ghi]perylene (bgp)	0.07 ± 0.04	0.06 ± 0.03	0.03 ± 0.02	0.04 ± 0.02	0.06 ± 0.04	0.17 ± 0.02
coronene (cor)	0.05 ± 0.03	0.04 ± 0.02	0.02 ± 0.01	0.02 ± 0.01	0.03 ± 0.02	0.08 ± 0.01
17a(H)21β(H)-29-norhopane (norHop)	0.26 ± 0.19	0.22 ± 0.10	0.11 ± 0.10	0.10 ± 0.08	0.13 ± 0.13	0.27 ± 0.05
17a(H)21β(H)-hopane (Hop)	0.24 ± 0.16	0.19 ± 0.08	0.10 ± 0.06	0.09 ± 0.06	0.18 ± 0.23	0.27 ± 0.05
nC20	0.15 ± 0.08	0.19 ± 0.09	0.14 ± 0.08	0.15 ± 0.10	0.19 ± 0.13	0.12 ± 0.02
nC21	0.22 ± 0.10	0.16 ± 0.14	0.16 ± 0.09	0.16 ± 0.10	0.18 ± 0.12	0.20 ± 0.06
nC22	0.17 ± 0.09	0.25 ± 0.13	0.16 ± 0.10	0.11 ± 0.10	0.15 ± 0.11	0.16 ± 0.04
nC23	0.54 ± 0.34	0.56 ± 0.24	0.32 ± 0.29	0.25 ± 0.20	0.29 ± 0.26	0.43 ± 0.11
nC24	0.32 ± 0.12	0.46 ± 0.32	0.18 ± 0.13	0.16 ± 0.12	0.20 ± 0.18	0.27 ± 0.03
nC25	1.20 ± 0.49	1.28 ± 0.61	0.60 ± 0.25	0.49 ± 0.17	0.57 ± 0.40	0.85 ± 0.19
nC26	0.42 ± 0.09	0.61 ± 0.49	0.20 ± 0.09	0.20 ± 0.09	0.27 ± 0.19	0.32 ± 0.08
nC27	1.40 ± 0.43	1.59 ± 0.67	0.84 ± 0.11	0.70 ± 0.09	0.66 ± 0.27	1.03 ± 0.26
nC28	0.36 ± 0.03	0.60 ± 0.47	0.23 ± 0.04	0.20 ± 0.03	0.22 ± 0.12	0.19 ± 0.03
nC29	1.64 ± 0.49	2.40 ± 0.97	1.56 ± 0.28	1.28 ± 0.32	0.88 ± 0.21	0.83 ± 0.19
nC30	0.31 ± 0.08	0.41 ± 0.29	0.17 ± 0.05	0.15 ± 0.04	0.19 ± 0.14	0.18 ± 0.03
nC31	1.39 ± 0.44	2.22 ± 0.99	1.47 ± 0.23	1.10 ± 0.18	0.83 ± 0.28	0.91 ± 0.14
nC32	0.22 ± 0.05	0.29 ± 0.15	0.16 ± 0.05	0.13 ± 0.04	0.17 ± 0.11	0.16 ± 0.02
nC33	0.38 ± 0.12	0.57 ± 0.32	0.35 ± 0.10	0.26 ± 0.08	0.29 ± 0.23	0.37 ± 0.04
nC34	0.14 ± 0.02	0.18 ± 0.08	0.10 ± 0.03	0.07 ± 0.03	0.09 ± 0.07	0.05 ± 0.00

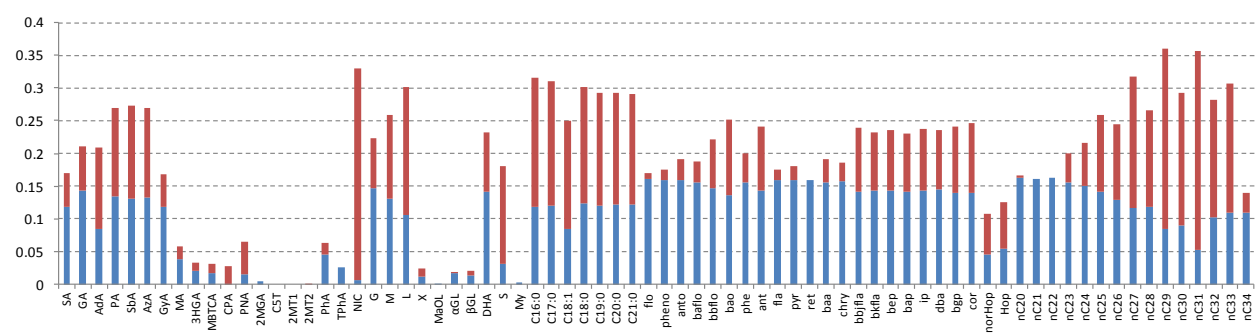
	Cold period					
	>7.2 µm	7.2 - 3.0 µm	3.0 - 1.5 µm	1.5 - 1.0 µm	1.0 - 0.5 µm	<0.5 µm
(ng/m ³)						
succinic acid (SA)	2.0	1.5	1.6	1.7	3.7	36.0
glutaric acid (GA)	0.3	0.3	0.3	0.5	1.2	6.7
adipic acid (AdA)	0.5	0.2	0.2	0.3	0.5	1.7
pimelic acid (PA)	0.4	0.3	0.3	0.3	0.5	1.6
suberic acid (SbA)	0.7	0.1	0.2	0.2	0.3	1.4
azelaic acid (AzA)	2.3	1.2	0.9	1.2	2.4	10.6
glyceric acid (GyA)	0.8	0.4	0.9	1.9	3.1	14.2
malic acid (MA)	0.2	0.1	0.1	0.2	0.6	33.4
3-hydroxyglutaric acid (3HGA)	0.1	0.1	0.1	0.1	0.1	7.0
MBTCA	0.1	0.1	0.1	0.1	0.1	2.8
cis-pinonic acid (CPA)	2.3	3.4	3.9	3.7	4.3	8.3
pinic acid (PNA)	0.5	0.2	0.4	0.8	1.2	9.0

2-methylglyceric acid (2MGA)	1.5	0.7	0.8	1.1	1.5	2.9
C5-alkene triols (C5T)	1.0	0.1	0.1	0.2	0.2	1.2
2-methylthreitol (2MT1)	0.3	0.1	0.1	0.3	0.3	0.8
2-methylerythritol (2MT2)	1.0	0.4	0.6	0.7	1.4	9.7
phthalic acid (PhA)	0.6	0.7	0.8	1.4	3.5	11.5
terephthalic acid (TPhA)	26.2	10.7	20.5	38.9	53.0	21.4
nicotine (NIC)	0.1	0.1	0.1	0.4	0.6	14.6
galactosan (G)	0.2	0.4	0.9	1.3	2.9	9.5
mannosan (M)	0.1	0.2	0.4	0.7	1.8	10.1
levoglucosan (L)	1.4	2.5	4.5	9.9	27.0	110.2
xylitol (X)	3.0	4.8	4.2	1.6	1.1	3.2
mannitol (MaOL)	0.7	0.7	0.5	0.3	0.2	0.9
α -glucose (α GL)	14.8	14.5	8.4	4.2	1.8	5.3
β -glucose (β GL)	17.7	16.5	10.9	4.9	2.2	5.6
dehydrabietic acid (DHA)	3.2	2.7	1.1	0.9	1.8	13.5
sucrose (S)	52.0	60.1	45.9	10.0	6.0	16.1
mycose (My)	1.4	1.9	1.3	0.4	0.2	0.4
C16:0	40.3	23.5	13.3	10.1	12.2	44.1
C17:0	1.6	1.0	0.6	0.5	0.6	2.1
C18:1	7.8	4.2	3.5	0.9	1.1	13.1
C18:0	26.8	20.9	12.1	4.7	5.0	34.1
C19:0	0.1	0.3	0.1	0.1	0.2	0.9
C20:0	1.7	1.1	0.6	0.4	0.6	4.1
C21:0	0.2	0.1	0.1	0.1	0.2	1.5
fluorenone (flo)	0.01	0.01	0.01	0.01	0.01	0.07
phenanthraquinone (pheno)	0.00	0.01	0.01	0.01	0.01	0.10
anthracenequinone (anto)	0.01	0.01	0.01	0.01	0.01	0.11
benzo[a]fluorenone (baflo)	0.01	0.01	0.01	0.01	0.02	0.21
benzo[b]fluorenone (bbflo)	0.00	0.01	0.01	0.01	0.01	0.18
benzanthrenone (bao)	0.00	0.01	0.01	0.01	0.02	0.18
phenanthrene (phe)	0.02	0.02	0.01	0.01	0.02	0.16
anthracene (ant)	0.00	0.00	0.00	0.00	0.00	0.04
fluoranthene (fla)	0.03	0.03	0.03	0.03	0.04	0.36
pyrene (pyr)	0.05	0.06	0.05	0.04	0.06	0.62
retene (ret)	0.01	0.01	0.01	0.01	0.01	0.08
benz[a]anthracene (baa)	0.01	0.01	0.01	0.01	0.02	0.27
chrysene (chry)	0.01	0.02	0.02	0.03	0.05	0.44

benzo[b+j]fluoranthene (bbjfla)	0.01	0.02	0.02	0.03	0.07	0.48
benzo[k]fluoranthene (bkfla)	0.00	0.00	0.00	0.01	0.02	0.15
benzo[e]pyrene (bep)	0.03	0.04	0.03	0.04	0.08	0.43
benzo[a]pyrene (bap)	0.02	0.02	0.02	0.03	0.06	0.33
indeno[123cd]pyrene (ip)	0.02	0.02	0.02	0.02	0.05	0.40
dibenz[ah]anthracene (dba)	0.01	0.01	0.01	0.01	0.02	0.11
benzo[ghi]perylene (bgp)	0.05	0.05	0.04	0.04	0.08	0.43
coronene (cor)	0.04	0.03	0.02	0.02	0.04	0.22
17a(H)21β(H)-29-norhopane (norHop)	0.22	0.20	0.11	0.08	0.08	0.45
17a(H)21β(H)-hopane (Hop)	0.21	0.21	0.11	0.07	0.08	0.41
nC20	0.14	0.14	0.10	0.09	0.08	0.32
nC21	0.17	0.22	0.14	0.14	0.11	0.45
nC22	0.18	0.19	0.11	0.09	0.12	0.63
nC23	0.28	0.30	0.17	0.16	0.20	1.13
nC24	0.22	0.25	0.15	0.16	0.22	1.10
nC25	0.35	0.40	0.23	0.26	0.35	1.55
nC26	0.26	0.28	0.16	0.16	0.22	0.66
nC27	0.50	0.59	0.35	0.36	0.48	1.46
nC28	0.29	0.36	0.19	0.14	0.15	0.26
nC29	0.51	0.70	0.56	0.38	0.45	0.91
nC30	0.31	0.32	0.19	0.12	0.11	0.24
nC31	0.53	0.67	0.52	0.33	0.37	1.11
nC32	0.32	0.32	0.19	0.11	0.09	0.21
nC33	0.29	0.28	0.22	0.15	0.13	0.46
nC34	0.18	0.16	0.13	0.07	0.05	0.09

Figure S1. Two potential Biomass Burning Organic Aerosol component loadings (1) and scores (2) from separate MCR-ALS analysis of the data from the Rural site. R_COLD_1.x are the fall samples, while and R_COLD_2.x are the winter samples. The x.6 samples are the PM<0.5µm fraction of the samples.

1)



2)

