

Supplementary Information

Temporal trend of the major source contribution of particulate Polycyclic Aromatic Hydrocarbons (PAHs) at Seoul

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Table S1. Summarized information of the sampling data (unit: ng m⁻³).

	Period 1 (2002-2003)				Period 2 (2006-2007)				Period 3 (2011-2012)				Period 4 (2012-2013)				MDL
	Average	Min	Max	Missing + BDL (%)	Average	Min	Max	Missing + BDL (%)	Average	Min	Max	Missing + BDL (%)	Average	Min	Max	Missing + BDL (%)	
Phen	3.08	0.140	18.0	0	1.39	0.0276	8.51	0	0.715	0.0451	2.49	0	0.479	0.0212	2.58	0	0.00665
Anthr	0.271	0.0140	1.90	0	0.222	0.00980	1.06	7	0.122	0.0210	0.349	2	0.224	0.129	0.393	12	0.0135
Flt	3.81	0.0440	30.0	0	2.14	0.0433	11.4	0	1.21	0.0224	4.16	0	0.758	0.00999	3.30	0	0.00767
Pyr	3.28	0.110	27.0	0	1.77	0.0772	9.25	0	0.953	0.0183	3.13	0	0.572	0.000684	2.36	0	0.0105
BaA	1.94	0.0430	14.0	0	1.21	0.0603	5.22	0	0.458	0.0221	2.03	0	0.336	0.112	1.05	0	0.0115
Chry	3.05	0.0760	18.0	0	1.16	0.0549	4.56	0	0.953	0.0887	3.26	2	0.595	0.0244	2.23	0	0.00907
B(b+k)F	4.25	0.338	23.9	0	3.74	0.265	17.1	0	3.57	0.241	27.5	4	2.46	0.0716	18.0	0	0.00737
BeP	1.57	0.175	7.35	0	1.29	0.103	5.42	0	1.88	0.178	15.8	4	0.869	0.00621	7.23	0	0.00299
BaP	2.03	0.177	11.8	0	1.41	0.0677	7.77	0	0.865	0.0998	4.29	12	0.314	0.0876	1.12	7	0.0117
Ind	1.89	0.119	6.97	0	1.43	0.120	6.27	0	1.78	0.0737	9.44	13	0.539	0.112	9.45	8	0.00844
DahA	0.378	0.00517	1.99	1	0.341	0.0337	1.25	0	0.511	0.0621	1.50	87	0.111	0.0606	0.247	59	0.00689
BghiP	1.70	0.0577	6.35	0	1.18	0.106	5.47	0	0.779	0.00671	2.46	31	0.385	0.0000634	7.50	6	0.0134
Total	27.2	2.02	166		17.2	1.08	68.2		12.5	0.486	59.3		7.40	0.286	36.1		

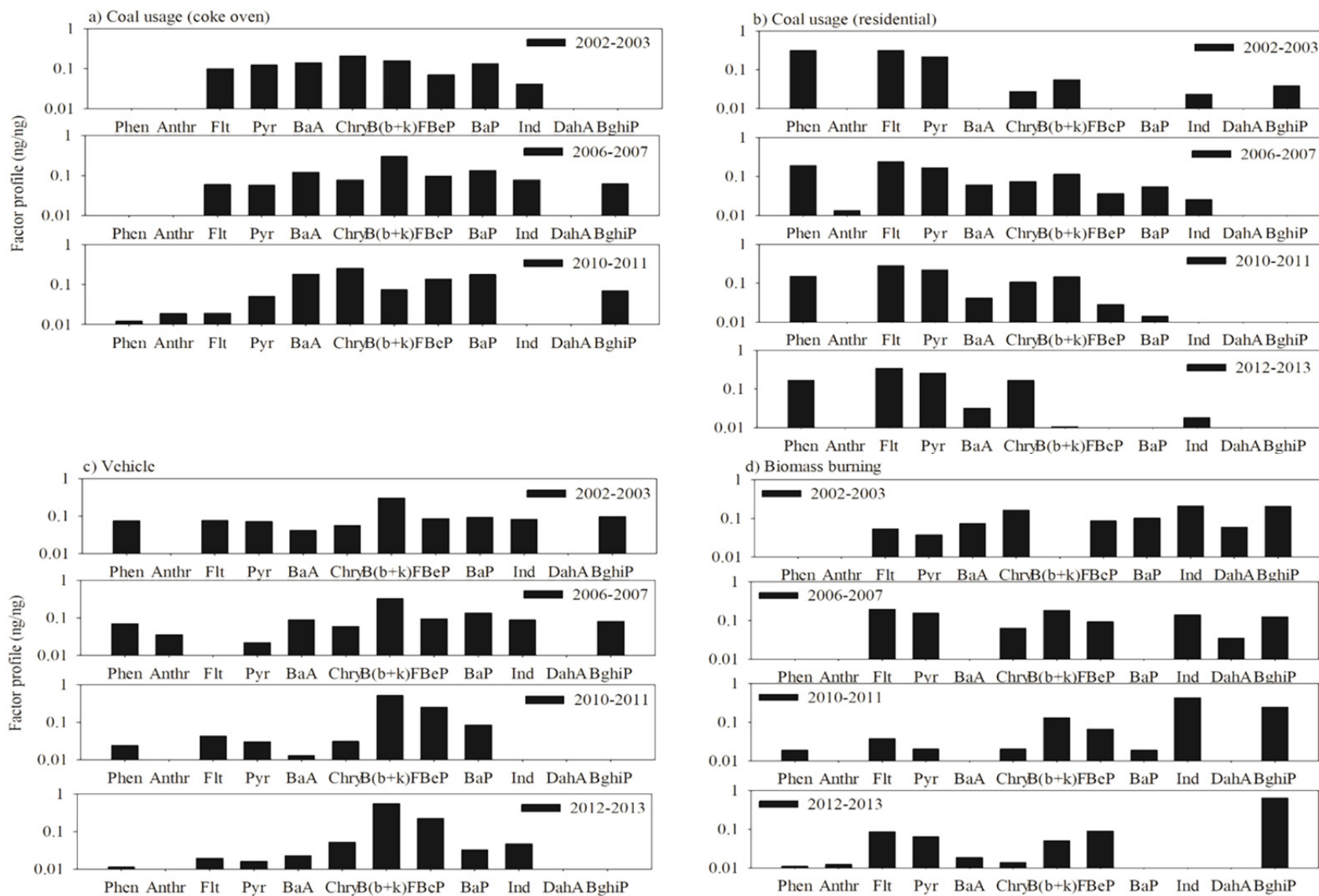


Fig. S1. Factor profiles of each factors of the modeling results each period.

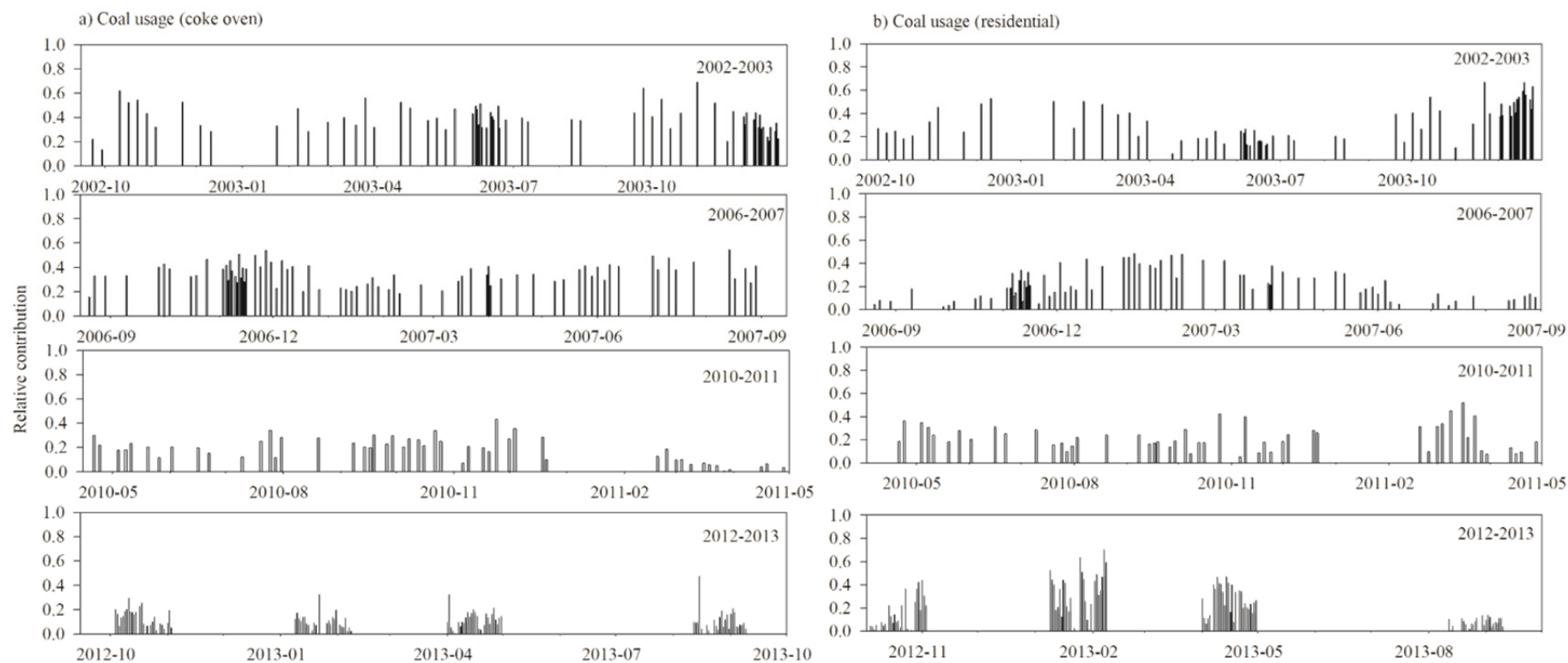


Fig. S2. Temporal variation of the relative contributions of coal usage of the modeling results for the whole periods.

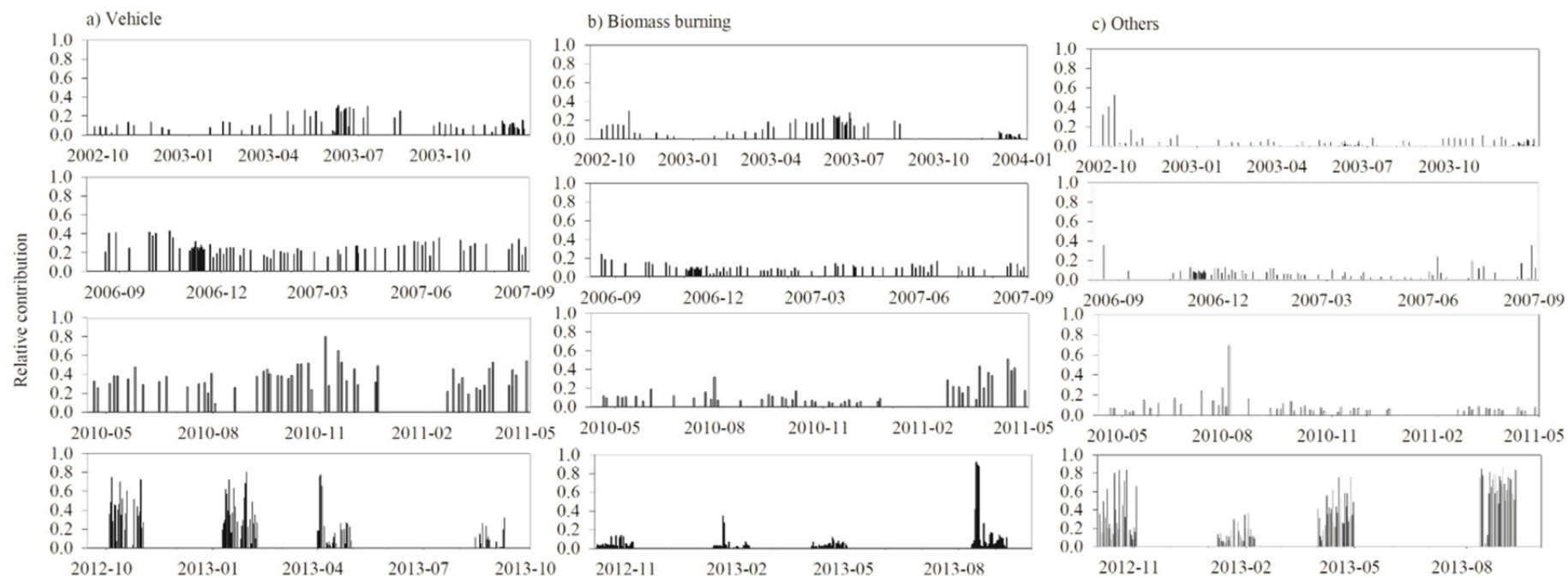


Fig. S3. Temporal variation of the relative contributions of vehicles, biomass burning, and others for the whole periods.