Supplement material for the manuscript:
Source apportionment of $PM_{2.5}$ using Positive Matrix Factorization (PMF) and PMF with factor selection

Table A1. Contributions ($\mu g/m^3$) for the four factor model for ambient air (urban background and residential outdoor).

	Seasalt + Resuspension	Traffic	Local Combustion	LRT + Ship emission	Sum of species
PM2.5	0.708	0.904	1.273	4.348	7.23
PMrest	0.361	0.194	0	2.712	3.27
BC	0	0.548	0.541	0.353	1.44
S	0	0	0.538	1.103	1.64
Cl	0.094	0	0.009	0.017	0.119
K	0.032	0.018	0.028	0.013	0.091
Ca	0.023	0.007	0	0.010	0.041
Ti	0.003	0.001	0.001	0.001	0.006
V	0.002	0	0.001	0.004	0.007
Mn	0.001	0.001	0.001	0.001	0.003
Fe	0.008	0.034	0.009	0.009	0.060
Ni	0	0	0	0.001	0.002
Cu	0	0.001	0	0	0.002
Zn	0.004	0.005	0.011	0	0.020
Br	0	0	0.001	0.001	0.002
Pb	0	0.001	0.002	0.001	0.004
Sum of Factor	0.528	0.810	1.142	4.226	6.71

Table A2. Contributions ($\mu g/m^3$) for the six factor model for the indoor samples.

	LRT	Marine	Traffic	Soil Resuspension	Indoor Resuspension	Indoor Cu	Sum of Species
$PM_{2.5}$	0.0325	0.6106	2.6650	0.5716	5.1352	0.5022	9.5171
PMrest	0	0.0044	1.0232	0	4.7777	0.3509	6.1562
BC	0.2150	0	1.0049	0	0	0.0523	1.2722
S	0.4929	0.3300	0.0982	0.2678	0.1436	0.0816	1.4141
Cl	0	0.1640	0.0468	0	0.0077	0.0050	0.2235
K	0.0598	0.0057	0	0	0.0854	0.0090	0.1599
Ca	0	0.0189	0.0175	0.0506	0.0016	0	0.0886
Ti	0.0009	0.0022	0.0017	0.0071	0.0010	0.0010	0.0139
V	0.0026	0.0021	0.0007	0.0009	0.0008	0.0008	0.0079
Mn	0.0005	0.0005	0.0010	0.0009	0	0.0001	0.003
Fe	0.0007	0.0044	0.0185	0.0281	0.0043	0.0023	0.0583
Ni	0.0008	0.0003	0	0.0005	0.0003	0.0001	0.002
Cu	0	0.0002	0.0029	0.0007	0	0.0102	0.014
Zn	0.0057	0.0013	0.0043	0.0065	0.0013	0.0006	0.0197
Br	0.0002	0.0002	0.0004	0.0002	0.0003	0	0.0013
Pb	0.0015	0	0.0007	0.0004	0	0	0.0026
Sum of Factor	0.78	0.53	2.22	0.36	5.02	0.51	9.44

Table A3. Contributions (μg/m^3) for the seven factor model for the personal exposure.

	LRT	Marine	Resuspension	Indoor Resuspension	Indoor Cu	Indoor burning	Personal	Sum of Species
$PM_{2.5}$	1.3166	0.4463	1.2122	4.8515	1.1249	1.6740	0.5012	11.1267
PMrest	0	0	0.8990	4.3045	0.9139	0.8486	0	6.966
BC	0.7208	0	0	0	0.1051	0.4564	0.2042	1.4865
S	0.6370	0.2866	0	0.3093	0.1392	0	0.1836	1.5557
Cl	0.0201	0.1733	0	0	0.0225	0.0383	0.0120	0.2662
K	0	0.0144	0.0535	0.0327	0	0.0970	0	0.1976
Ca	0.0285	0.0268	0.0480	0.0175	0.0098	0.0009	0	0.1315
Ti	0.0044	0.0029	0.0069	0.0015	0.0007	0.0016	0.0019	0.0199
V	0.0040	0.0016	0.0008	0.0006	0.0010	0.0003	0	0.0083
Mn	0.0007	0.0004	0.0004	0.0007	0.0005	0	0.0006	0.0033
Fe	0.0172	0	0.0160	0.0218	0.0119	0.0034	0.0361	0.1064
Ni	0	0.0001	0.0005	0.0004	0.0001	0.0001	0.0012	0.0024
Cu	0	0.0007	0.0014	0	0.0092	0.0014	0.0017	0.0144
Zn	0.0121	0	0.0088	0.0021	0.0007	0	0.0008	0.0245
Br	0	0	0	0.0013	0	0.0003	0.0002	0.0018
Pb	0.0015	0.0001	0.0006	0	0	0.0001	0.0001	0.0024
Sum of Factor	1.45	0.51	1.04	4.69	1.21	1.45	0.44	10.79

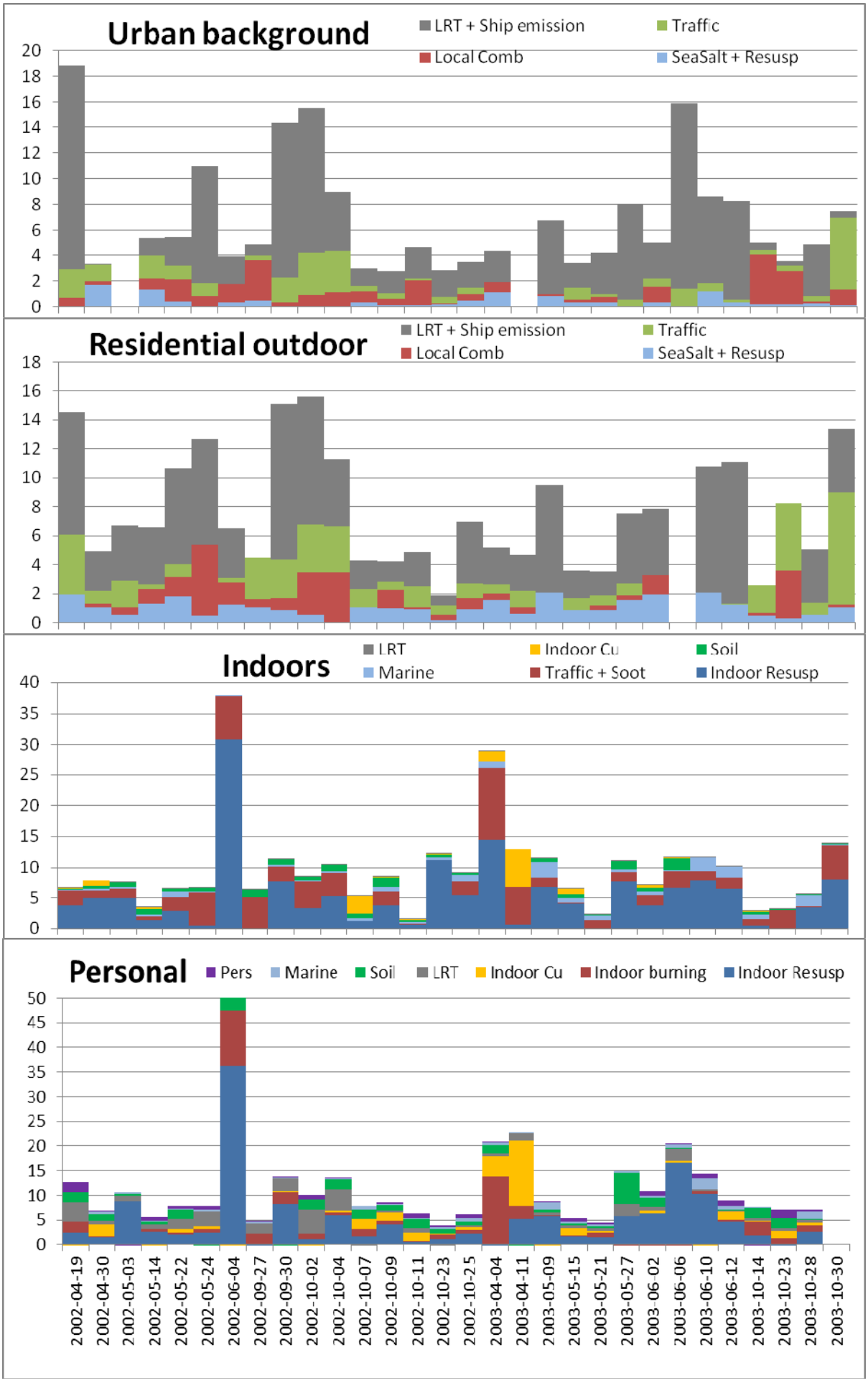

Fig. A1. Time series of the UB/O four factor models for Urban Background (top graph) and the Residential outdoor, the six factor model Indoors, and the seven factor model for Personal exposure. Units are in µg/m^3.