

1    **Supporting Information**

2    Table S1. Mean particle size distributions (in % of mass per size fraction) for major and trace  
3    elements in indoor and outdoor air.

	<b>Indoor Quasi-UF</b>	<b>Indoor Accumulation</b>	<b>Indoor Coarse</b>		<b>Outdoor Quasi-UF</b>	<b>Outdoor Accumulation</b>	<b>Outdoor Coarse</b>
<i>Major components</i>							
<b>Mass</b>	31%	22%	48%	<b>Mass</b>	38%	23%	39%
<b>OM</b>	18%	26%	56%	<b>OM</b>	23%	36%	41%
<b>EC</b>	56%	23%	21%	<b>EC</b>	68%	22%	10%
<b>Al<sub>2</sub>O<sub>3</sub></b>	33%	6%	61%	<b>Al<sub>2</sub>O<sub>3</sub></b>	48%	4%	48%
<b>Ca</b>	14%	14%	71%	<b>Ca</b>	31%	11%	57%
<b>Fe</b>	19%	9%	73%	<b>Fe</b>	35%	9%	57%
<b>K</b>	36%	10%	54%	<b>K</b>	47%	6%	47%
<b>Mg</b>	23%	7%	69%	<b>Mg</b>	38%	6%	57%
<b>Na</b>	18%	18%	64%	<b>Na</b>	25%	5%	70%
<b>SO<sub>4</sub><sup>2-</sup></b>	48%	30%	22%	<b>SO<sub>4</sub><sup>2-</sup></b>	44%	43%	13%
<b>NO<sub>3</sub><sup>-</sup></b>	28%	40%	32%	<b>NO<sub>3</sub><sup>-</sup></b>	28%	45%	28%
<b>Cl<sup>-</sup></b>	29%	28%	42%	<b>Cl<sup>-</sup></b>	31%	32%	38%
<b>NH<sub>4</sub><sup>+</sup></b>	51%	34%	16%	<b>NH<sub>4</sub><sup>+</sup></b>	42%	48%	9%
<b>Mineral</b>	22%	11%	67%	<b>Mineral</b>	39%	8%	53%
<b>Marine</b>	27%	27%	46%	<b>Marine</b>	30%	27%	44%
<b>SIA</b>	42%	33%	25%	<b>SIA</b>	35%	44%	21%
<b>OM+EC</b>	19%	26%	55%	<b>OM+EC</b>	25%	35%	40%
<i>Trace components</i>							
<b>Li</b>	15%	16%	69%	<b>Li</b>	29%	11%	61%
<b>P</b>	23%	24%	53%	<b>P</b>	35%	18%	48%
<b>Sc</b>	33%	33%	35%	<b>Sc</b>	33%	32%	34%
<b>Ti</b>	14%	11%	75%	<b>Ti</b>	27%	9%	64%
<b>V</b>	30%	23%	47%	<b>V</b>	41%	26%	33%
<b>Cr</b>	77%	5%	18%	<b>Cr</b>	76%	3%	21%
<b>Mn</b>	23%	11%	67%	<b>Mn</b>	37%	10%	52%
<b>Co</b>	30%	32%	38%	<b>Co</b>	32%	32%	35%
<b>Ni</b>	90%	5%	5%	<b>Ni</b>	92%	3%	5%
<b>Cu</b>	37%	18%	45%	<b>Cu</b>	32%	18%	51%
<b>Zn</b>	33%	26%	41%	<b>Zn</b>	37%	31%	32%
<b>Ga</b>	30%	28%	42%	<b>Ga</b>	34%	28%	39%
<b>Ge</b>	93%	4%	3%	<b>Ge</b>	89%	5%	6%
<b>As</b>	27%	21%	52%	<b>As</b>	36%	31%	33%
<b>Se</b>	31%	27%	42%	<b>Se</b>	40%	31%	29%
<b>Rb</b>	15%	13%	72%	<b>Rb</b>	30%	14%	57%
<b>Sr</b>	19%	8%	73%	<b>Sr</b>	39%	6%	56%
<b>Mo</b>	99%	0%	1%	<b>Mo</b>	98%	1%	0%
<b>Cd</b>	44%	32%	24%	<b>Cd</b>	49%	27%	25%
<b>Sn</b>	38%	23%	39%	<b>Sn</b>	38%	24%	39%
<b>Sb</b>	25%	25%	50%	<b>Sb</b>	16%	14%	70%
<b>Ba</b>	45%	9%	46%	<b>Ba</b>	53%	11%	36%
<b>La</b>	41%	5%	54%	<b>La</b>	49%	4%	47%
<b>Ce</b>	41%	6%	53%	<b>Ce</b>	51%	4%	44%
<b>Pb</b>	31%	23%	46%	<b>Pb</b>	38%	33%	29%

1 Table S2. Mean indoor/outdoor (I/O) ratios for major and trace elements in quasi-UF,  
 2 accumulation and coarse particles, for all types of schools (traffic and urban background).  
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	Quasi-UF	Accumulation	Coarse
OM	1.19	1.22	1.79
EC	0.69	0.87	1.25
TC	1.27	1.22	1.79
Al <sub>2</sub> O <sub>3</sub>	0.83	0.98	1.22
Ca	0.99	1.27	1.67
Fe	0.53	0.59	0.92
K	0.87	1.02	1.13
Mg	0.68	0.98	1.23
Na	0.96	1.15	0.99
SO <sub>4</sub> <sup>2-</sup>	0.78	0.61	1.10
NO <sub>3</sub> <sup>-</sup>	0.50	0.55	0.74
Cl <sup>-</sup>	1.18	1.16	1.02
NH <sub>4</sub> <sup>+</sup>	0.67	0.41	0.65
Li	0.81	0.95	NA
Sc	0.98	1.00	NA
Ti	0.76	0.71	1.30
V	0.72	0.74	0.99
Cr	0.99	0.99	1.02
Mn	0.53	0.79	0.94
Co	1.00	1.08	NA
Ni	0.73	0.97	1.00
Cu	1.03	0.94	0.89
Zn	1.02	0.91	0.97
As	0.84	0.64	1.05
Se	0.62	0.71	0.68
Rb	0.63	0.93	0.94
Sr	0.80	1.04	1.22
Cd	0.89	1.01	0.94
Sn	0.78	0.71	0.85
Sb	0.95	NA	0.65
Ba	0.81	0.92	0.98
La	0.77	0.94	0.94
Pb	0.74	0.52	1.16

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