

Supplementary Materials: Variability of Black Carbon and Ultrafine Particle Concentration on Urban Bike Routes in a Mid-Sized City in the Po valley (Northern Italy)

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Table S1. Summary statistics of 1-min PNC concentrations (10^4 cm^{-3}) for the warm season datasets.

	Morning				Evening			
	S1-OCL	S2-GCP	S3-SCL	S4-NCL	S1-OCL	S2-GCP	S3-SCL	S4-NCL
Number of data	108	93	83	107	94	62	80	78
Minimum	1.02	0.54	0.68	0.77	0.55	0.42	0.43	0.68
Maximum	6.16	2.57	3.15	5.21	5.62	4.30	4.31	8.62
1st quartile	1.67	.80	0.92	1.46	1.11	0.52	0.73	1.18
2nd quartile	2.11	1.01	1.14	1.93	1.52	0.72	1.04	1.54
3rd quartile	2.67	1.48	1.56	2.49	2.35	0.99	1.43	1.95
Number of outliers	9	1	2	6	3	2	12	6

Table S2. Summary statistics of 1-min EBC concentrations ($\mu\text{g}\cdot\text{m}^{-3}$) for the warm season datasets.

	Morning				Evening			
	S1-OCL	S2-GCP	S3-SCL	S4-NCL	S1-OCL	S2-GCP	S3-SCL	S4-NCL
Number of data	47	36	31	40	46	38	31	35
Minimum	1.6	0.8	0.4	0.4	2.0	0.3	0.9	1.7
Maximum	25.7	4.8	16.4	29	20.6	8.1	9.5	20.8
1st quartile	6.5	2.3	3.2	3.7	4.3	0.7	2.2	4.1
2nd quartile	7.9	2.7	4.0	5.4	6.3	1.5	3.9	6.9
3rd quartile	10.4	3.1	5.9	8.9	9.4	2.3	6.1	8.9
Number of outliers	5	3	3	8	4	4	0	3

Table S3. Summary statistics of 1-min PNC concentrations (10^4 cm^{-3}) for the cold season datasets.

	Morning				Evening			
	S1-OCL	S2-GCP	S3-SCL	S4-NCL	S1-OCL	S2-GCP	S3-SCL	S4-NCL
Number of data	47	46	46	39	39	36	34	32
Minimum	1.52	1.18	1.26	2.04	1.82	1.99	2.52	2.49
Maximum	14.5	8.20	7.75	7.56	19.4	7.10	10.5	11.77
1st quartile	3.56	2.06	2.05	3.49	4.70	2.74	3.72	3.93
2nd quartile	4.92	3.72	2.58	4.13	6.69	3.44	4.45	6.71
3rd quartile	7.48	5.49	4.38	5.17	9.25	5.37	6.96	8.90
Number of outliers	1	0	0	0	1	0	0	0

Table S4. Summary statistics of 1-min EBC concentrations ($\mu\text{g}\cdot\text{m}^{-3}$) for the cold season datasets

	Morning				Evening			
	S1-OCL	S2-GCP	S3-SCL	S4-NCL	S1-OCL	S2-GCP	S3-SCL	S4-NCL
Number of data	43	17	45	43	40	36	33	32
Minimum	2.1	1.7	0.9	1.2	2.5	2.9	3.5	3.2
Maximum	24.8	19.0	14.0	15.7	17.6	14.9	19.6	23.4
1st quartile	5.7	3.9	3.7	5.5	7.2	5.5	5.3	4.4
2nd quartile	8.2	6.4	5.2	7.1	9.4	7.8	8.0	10.7
3rd quartile	10.3	7.7	6.9	10.1	11.9	9.3	9.9	13.8
Number of outliers	5	3	3	0	0	0	0	1

Table S5. Daily averaged (morning and evening data) PM10, PM2.5 and PM1 concentrations ($\mu\text{g}\cdot\text{m}^{-3}$) recorded by the OPC.

	Cold Season				Warm Season			
	S1-OCL	S2-GCP	S3-SCL	S4-NCL	S1-OCL	S2-GCP	S3-SCL	S4-NCL
PM10	31.0	28.5	34.4	25.0	24.2	20.6	23.4	23.5
PM2.5	8.3	7.6	9.7	7.2	8.6	7.0	8.5	8.0
PM1	3.0	2.9	4.0	2.9	4.8	4.1	4.9	4.6



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