

Appendix H Graphs and Tables of Filtered Mobile vs Height Data

This Appendix details the results of the orthogonal regression analyses between pollutant concentrations at 0.80 m (LOW) and 1.68 m (HIGH) filtered by the following measured quartile concentrations.

- Concentrations less than the 25th percentile (<25th%'ile)
- Concentrations less than the 50th percentile (<50th%'ile)
- Concentrations less than the 75th percentile (<75th%'ile)
- Concentrations greater than the 25th percentile (>25th%'ile)
- Concentrations greater than the 50th percentile (>50th%'ile)
- Concentrations greater than the 75th percentile (>75th%'ile)

The results for the following pollutants are provided:

- Nitrogen dioxide (NO₂)
- Nitric oxide (NO)
- Sulphur dioxide (SO₂)
- Particulate matter with a mean aerodynamic diameter of 0.5 µm (PM_{0.5})
- Particulate matter with a mean aerodynamic diameter of 1.0 µm (PM_{1.0})
- Particulate matter with a mean aerodynamic diameter of 5.0 µm (PM_{5.0})
- Particulate matter with a mean aerodynamic diameter of 10 µm (PM₁₀)
- Total particulate matter (TPM)
- Black carbon (BC)
- Ultrafine particles between 10 nm and 300 nm in diameter (UFP)

Regression plots together with the following results and units are reported for each filtered data set:

- Number of measurement pairs (n_{bs}).
- Mean absolute error (MAE) - $\mu\text{g m}^{-3}$ for all pollutants excluding UFP (N Particles cm^{-3}).
- Coefficient of Determination (r^2).
- Slope (d).
- Uncertainty in slope (u_d).
- Intercept (c) - $\mu\text{g m}^{-3}$ for all pollutants excluding UFP (N Particles cm^{-3}).
- Uncertainty in intercept (u_c) - $\mu\text{g m}^{-3}$ for all pollutants excluding UFP (N Particles cm^{-3}).

Both results using data from each filtered group in addition to using all data are provided.

Figure H1 NO₂ vs Height Regression – Filtered by Quartile (µg m⁻³)

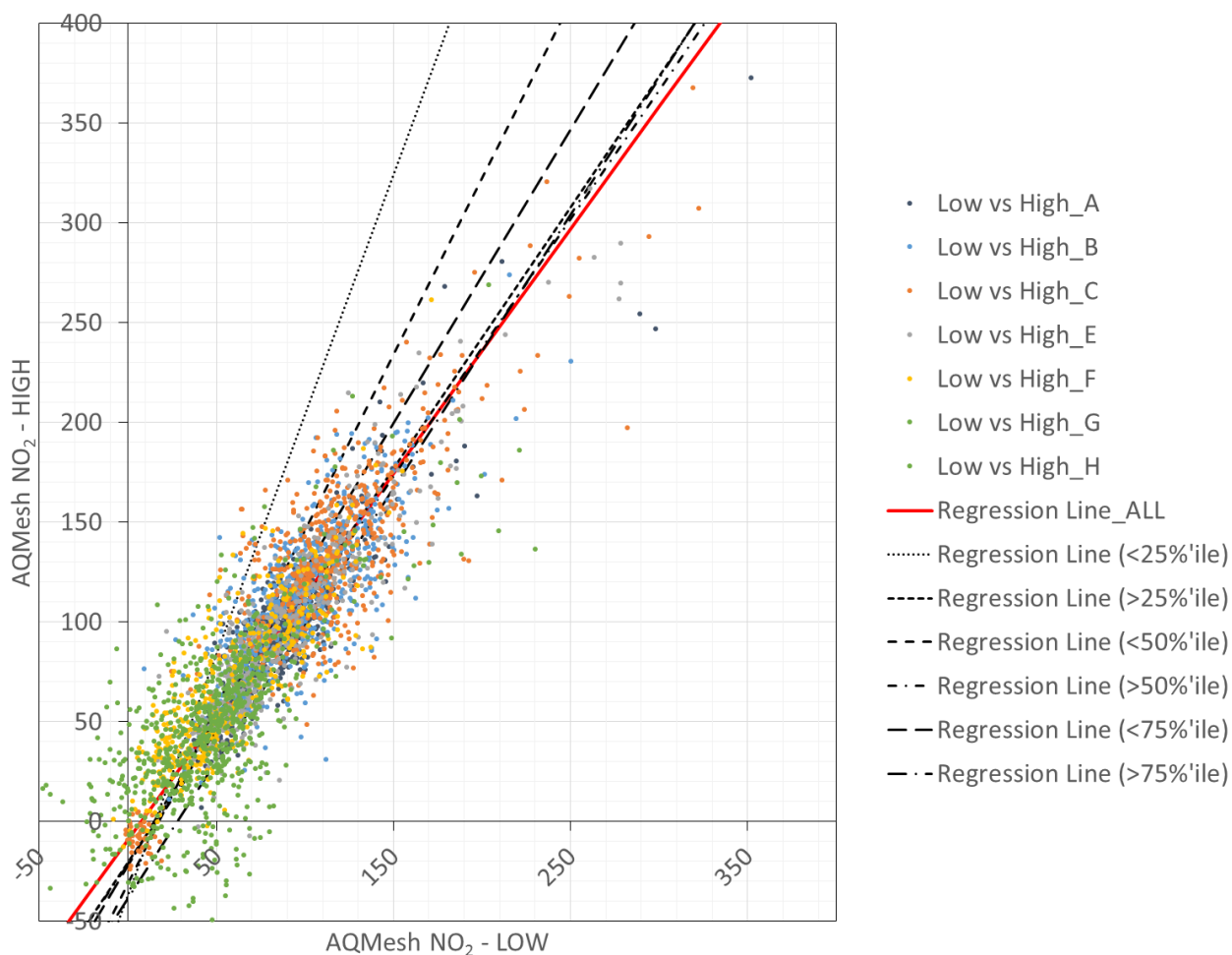


Table H1 NO₂ vs Height Regression Results – Filtered by Quartile

AQ Mesh NO ₂	Percentile	1 minute		Orthogonal Regression		
		<i>n</i> _{bs}	MAE	<i>r</i> ²	Slope (<i>d</i>) ± <i>u</i> _{<i>d</i>}	Intercept (<i>c</i>) ± <i>u</i> _{<i>c</i>}
Colocations Exercises	< 25%'ile	927	19.12	0.262	2.406 ± 0.046	-36.858 ± 1.622
	> 25%'ile	2778	18.41	0.672	1.314 ± 0.014	-20.536 ± 1.413
	< 50%'ile	1853	18.74	0.452	1.767 ± 0.026	-31.170 ± 1.372
	> 50%'ile	1852	18.44	0.602	1.294 ± 0.018	-21.360 ± 2.116
	< 75%'ile	2779	18.16	0.630	1.476 ± 0.016	-21.937 ± 1.102
	> 75%'ile	926	19.81	0.544	1.371 ± 0.028	-38.582 ± 3.867
All Exercises	All Data	3705	18.59	0.764	1.224 ± 0.010	-9.155 ± 0.873

Figure H2 NO vs Height Regression – Filtered by Quartile ($\mu\text{g m}^{-3}$)

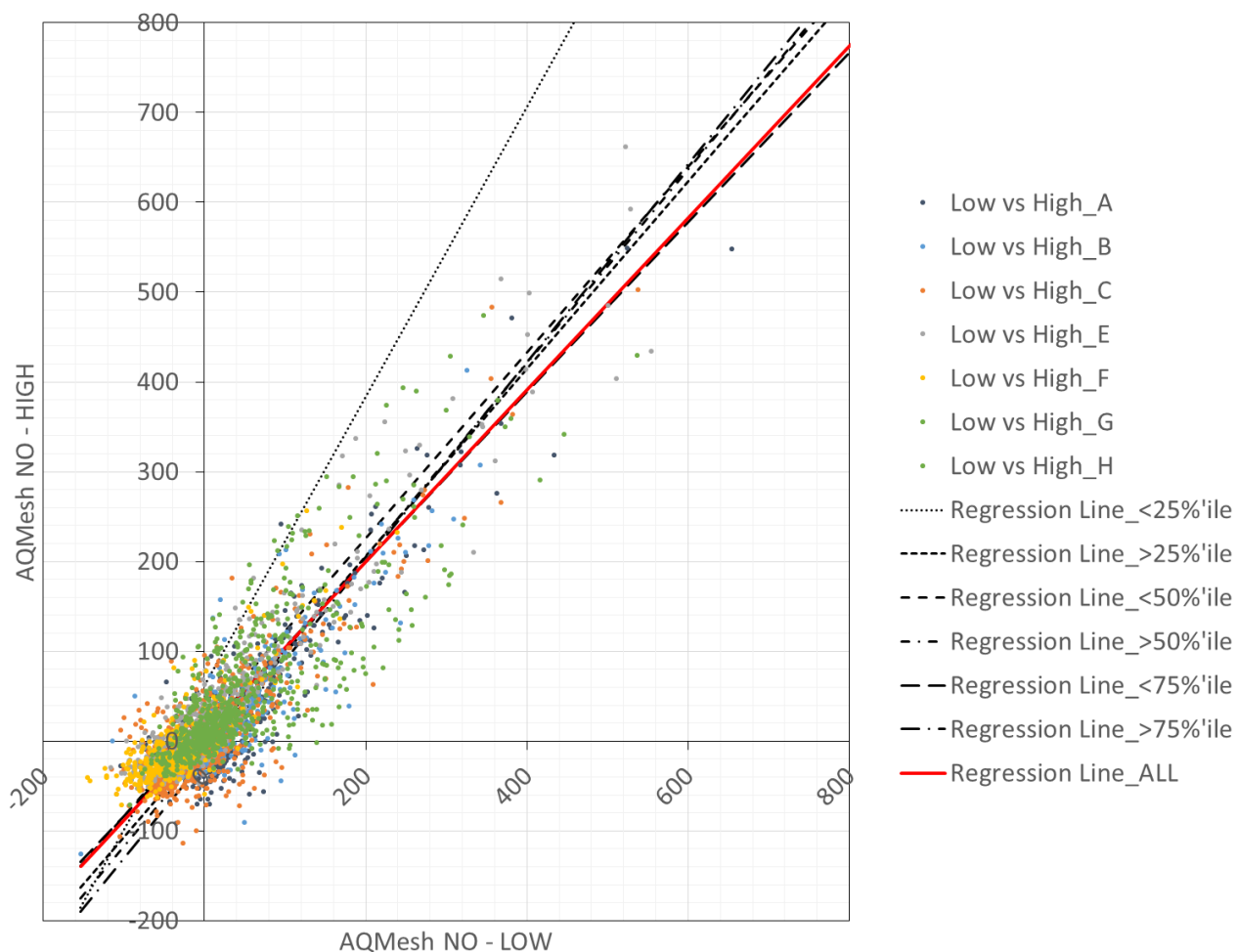


Table H2 NO vs Height Regression Results – Filtered by Quartile

AQ Mesh NO	Percentile	1 minute		Orthogonal Regression		
		n_{bs}	MAE	r^2	Slope (d) $\pm u_d$	Intercept (c) $\pm u_c$
Colocations Exercises	< 25%'ile	906	26.22	0.087	1.609 \pm 0.037	61.842 \pm 2.056
	> 25%'ile	2723	27.66	0.790	1.042 \pm 0.009	-2.497 \pm 0.819
	< 50%'ile	1815	21.32	0.152	1.033 \pm 0.022	19.553 \pm 0.900
	> 50%'ile	1814	32.33	0.779	1.077 \pm 0.012	-9.802 \pm 1.289
	< 75%'ile	2722	21.87	0.280	0.945 \pm 0.016	10.870 \pm 0.556
	> 75%'ile	907	42.37	0.755	1.104 \pm 0.018	-20.058 \pm 2.754
All Exercises	All Data	3629	27.15	0.781	0.959 \pm 0.007	7.534 \pm 0.619

Figure H3 SO₂ vs Height Regression – Filtered by Quartile (µg m⁻³)

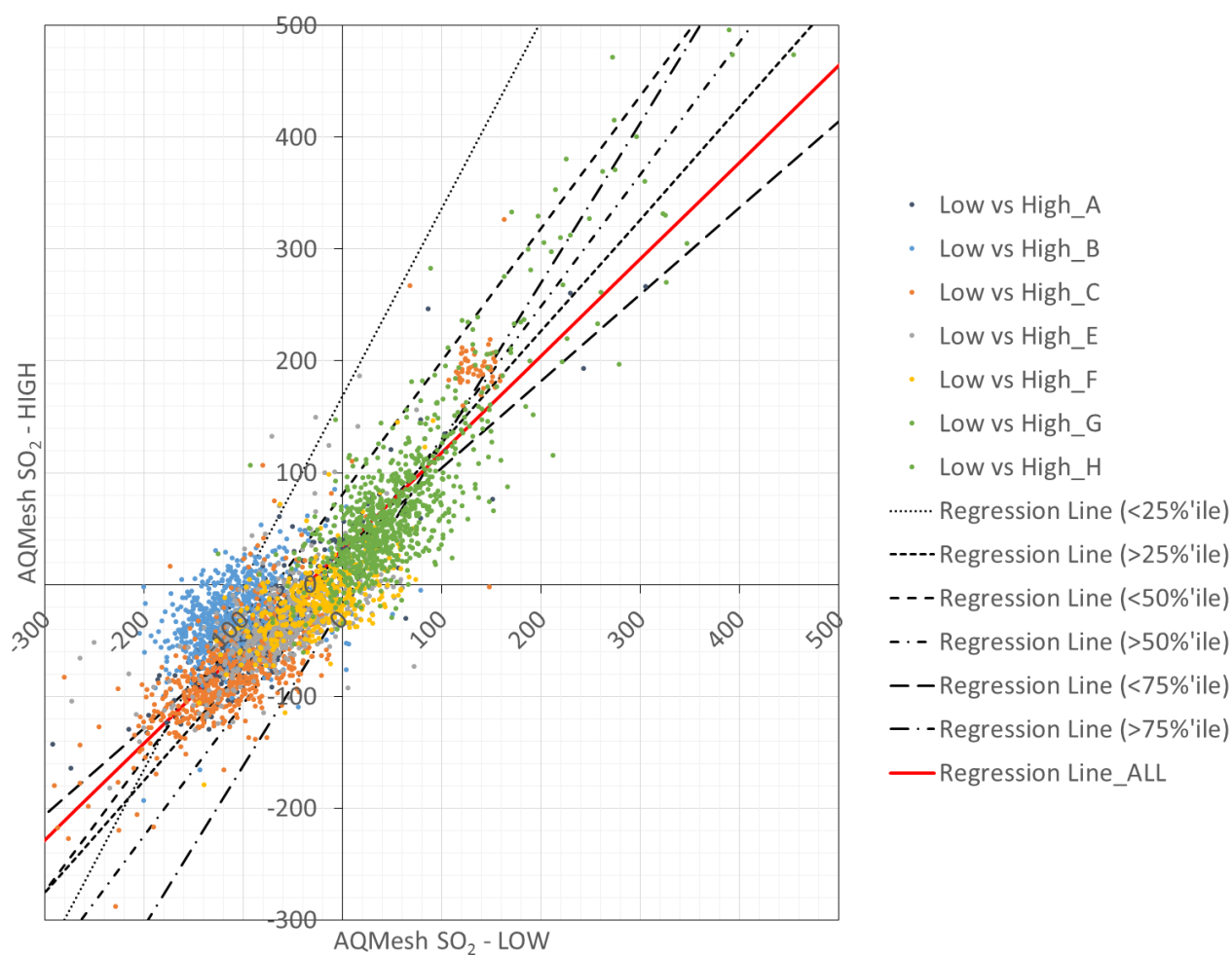


Table H3 SO₂ vs Height Regression Results – Filtered by Quartile

AQ Mesh SO ₂	Percentile	1 minute		Orthogonal Regression		
		<i>n</i> _{bs}	MAE	<i>r</i> ²	Slope (<i>d</i>) ± <i>u</i> _{<i>d</i>}	Intercept (<i>c</i>) ± <i>u</i> _{<i>c</i>}
Colocations Exercises	< 25%'ile	927	37.26	0.273	1.671 ± 0.037	169.229 ± 5.397
	> 25%'ile	2786	30.20	0.738	1.002 ± 0.010	25.917 ± 0.740
	< 50%'ile	1857	32.74	0.270	1.185 ± 0.022	81.412 ± 2.619
	> 50%'ile	1856	30.77	0.749	1.181 ± 0.013	12.281 ± 0.925
	< 75%'ile	2785	27.83	0.404	0.775 ± 0.012	26.887 ± 1.257
	> 75%'ile	928	33.90	0.720	1.437 ± 0.024	-17.807 ± 2.119
All Exercises	All Data	3713	31.08	0.734	0.866 ± 0.007	31.274 ± 0.735

Figure H4 CO vs Height Regression – Filtered by Quartile ($\mu\text{g m}^{-3}$)

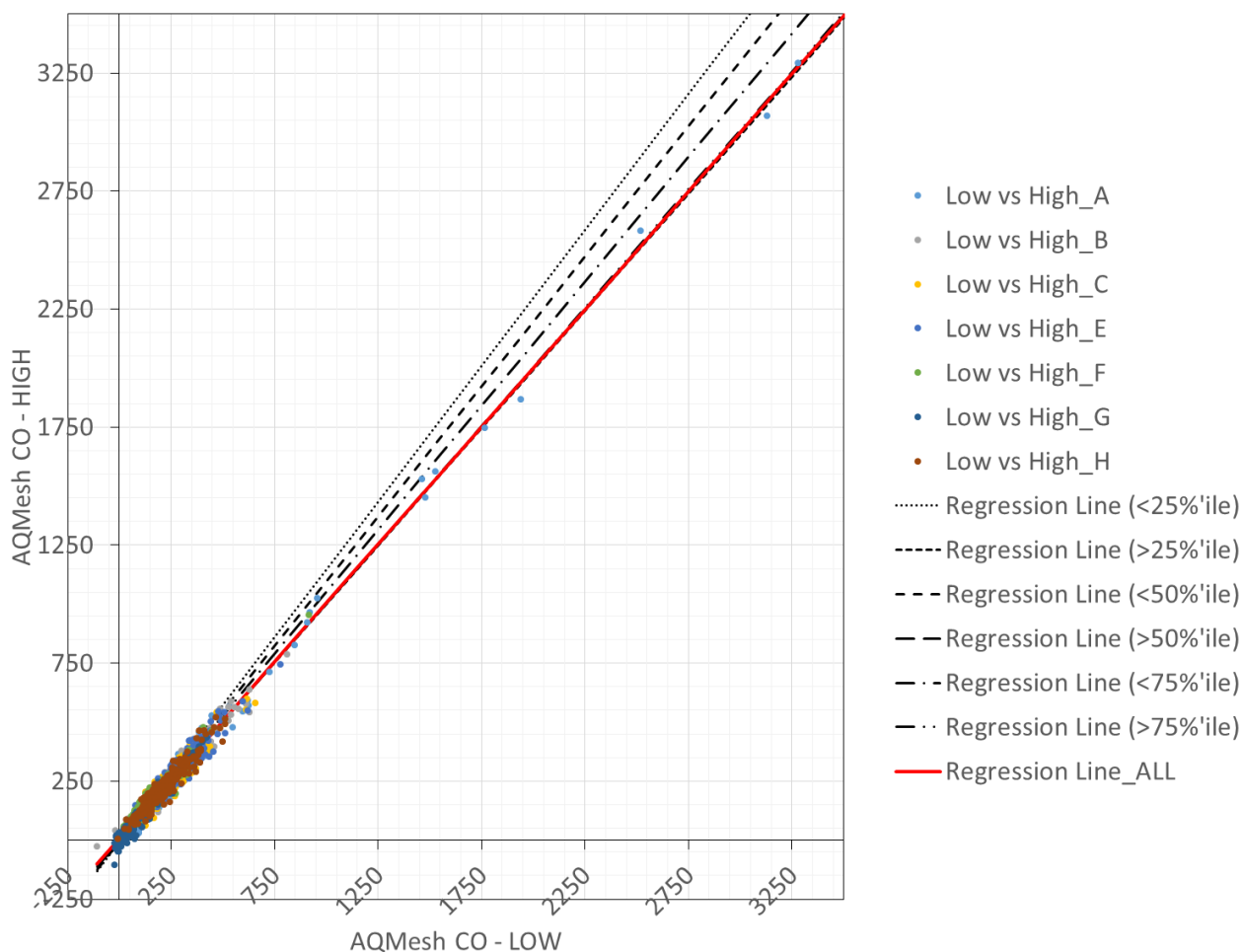


Table H4 CO vs Height Regression Results – Filtered by Quartile

AQ Mesh CO	Percentile	1 minute		Orthogonal Regression		
		n_{bs}	MAE	r^2	Slope (d) $\pm u_d$	Intercept (c) $\pm u_c$
Colocations Exercises	< 25%'ile	903	13.82	0.823	1.151 \pm 0.016	-5.325 \pm 1.405
	> 25%'ile	2708	15.55	0.974	0.993 \pm 0.003	7.901 \pm 0.836
	< 50%'ile	1806	13.02	0.890	1.100 \pm 0.009	-3.574 \pm 1.089
	> 50%'ile	1805	17.27	0.975	0.997 \pm 0.004	5.011 \pm 1.153
	< 75%'ile	2708	12.84	0.920	1.052 \pm 0.006	0.208 \pm 0.912
	> 75%'ile	903	22.14	0.978	1.002 \pm 0.005	0.980 \pm 1.912
All Exercises	All Data	3611	15.01	0.976	0.997 \pm 0.003	6.971 \pm 0.613

Figure H5 PM_{0.5} vs Height Regression – Filtered by Quartile (µg m⁻³)

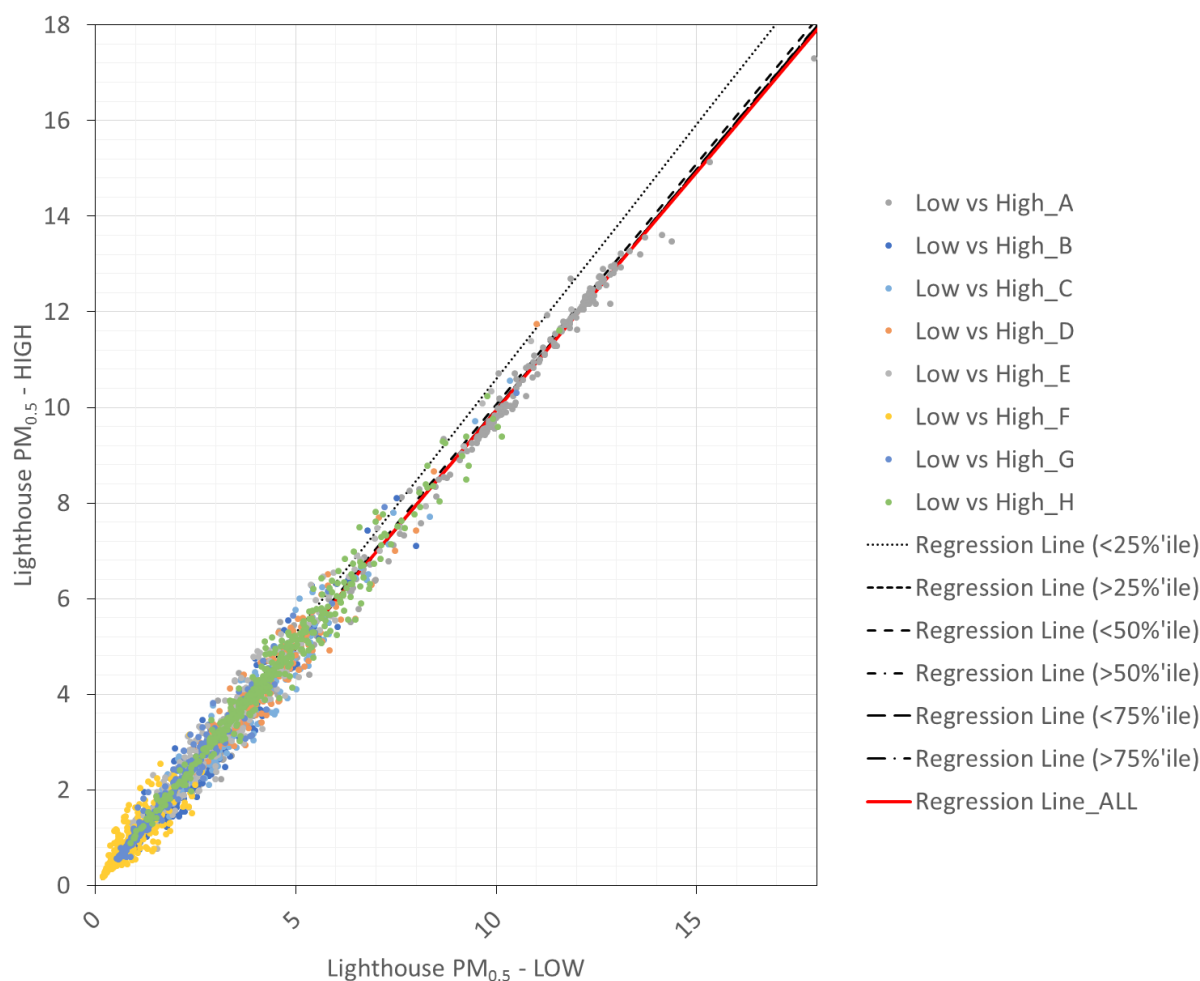


Table H5 PM_{0.5} vs Height Regression Results – Filtered by Quartile

Lighthouse PM _{0.5}	Percentile	1 minute		Orthogonal Regression		
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c
Colocations Exercises	< 25%'ile	1026	0.08	0.812	1.063 ± 0.014	-0.035 ± 0.013
	> 25%'ile	3075	0.17	0.989	0.999 ± 0.002	-0.030 ± 0.008
	< 50%'ile	2050	0.09	0.922	1.007 ± 0.006	-0.007 ± 0.009
	> 50%'ile	2051	0.20	0.987	1.002 ± 0.003	-0.048 ± 0.013
	< 75%'ile	3076	0.11	0.959	0.994 ± 0.004	0.001 ± 0.007
	> 75%'ile	1025	0.24	0.986	1.002 ± 0.004	-0.055 ± 0.024
All Exercises	All Data	4101	0.14	0.991	0.995 ± 0.002	-0.005 ± 0.006

Figure H6 PM_{1.0} vs Height Regression – Filtered by Quartile (µg m⁻³)

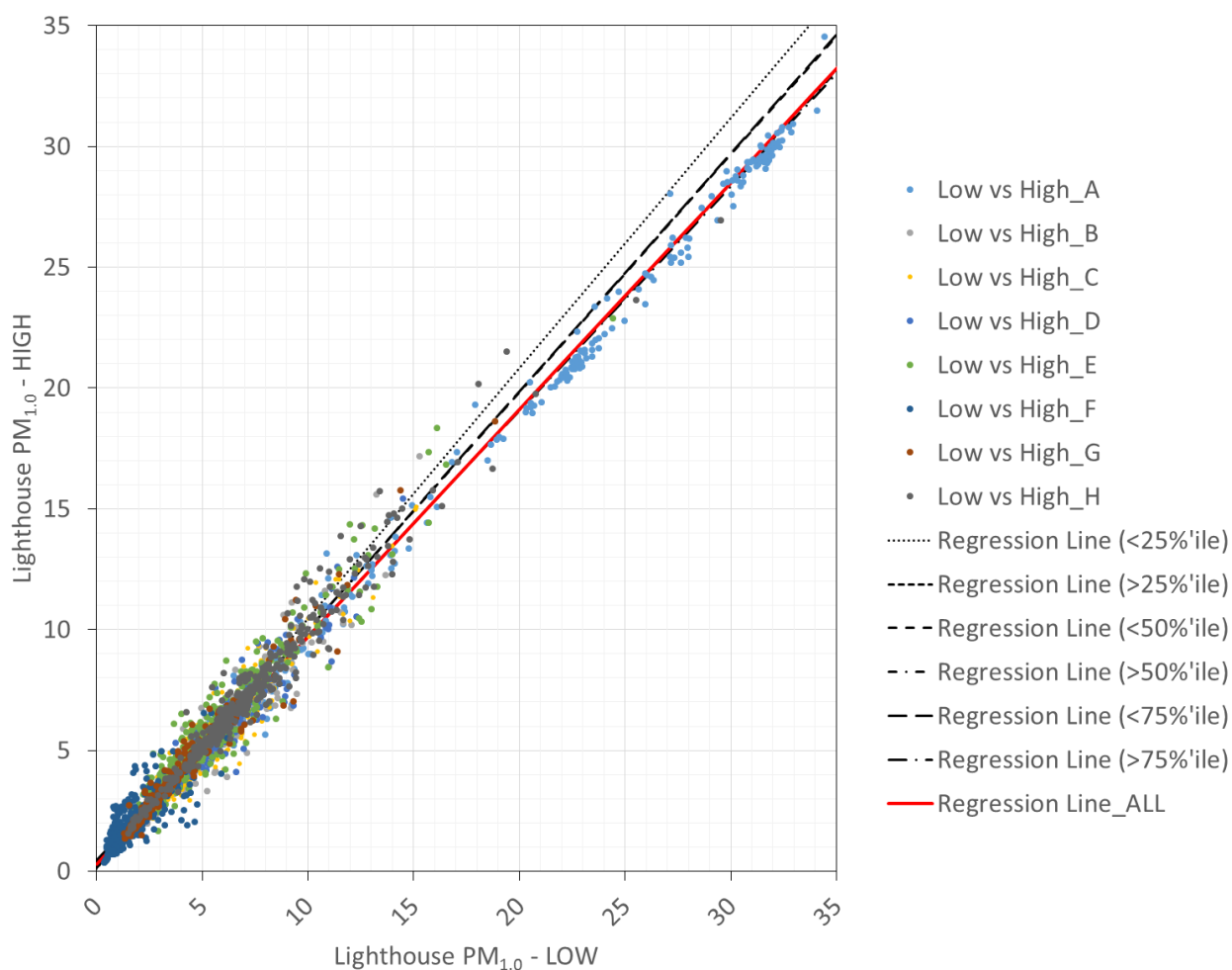


Table H6 PM_{1.0} vs Height Regression Results – Filtered by Quartile

Lighthouse PM _{1.0}	Percentile	1 minute		Orthogonal Regression		
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c
Colocations Exercises	< 25%'ile	1041	0.25	0.717	1.035 ± 0.017	0.105 ± 0.035
	> 25%'ile	3121	0.38	0.986	0.940 ± 0.002	0.295 ± 0.016
	< 50%'ile	2081	0.23	0.849	0.984 ± 0.008	0.154 ± 0.024
	> 50%'ile	2081	0.45	0.985	0.936 ± 0.002	0.344 ± 0.024
	< 75%'ile	3121	0.26	0.907	0.986 ± 0.005	0.121 ± 0.020
	> 75%'ile	1041	0.57	0.986	0.931 ± 0.003	0.431 ± 0.045
All Exercises	All Data	4162	0.34	0.987	0.941 ± 0.002	0.291 ± 0.012

Figure H7 PM_{2.5} vs Height Regression – Filtered by Quartile (µg m⁻³)

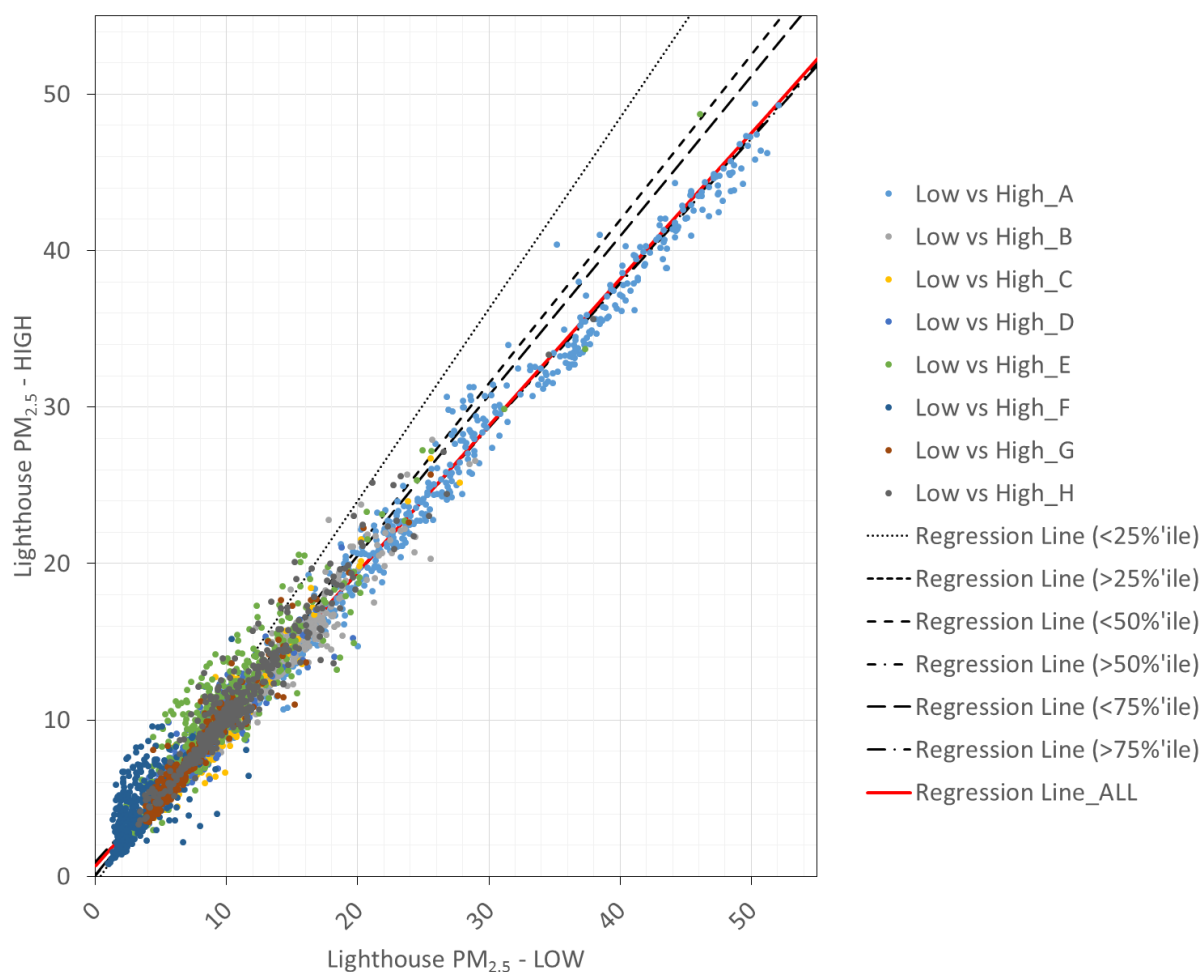


Table H7 PM_{2.5} vs Height Regression Results – Filtered by Quartile

Lighthouse PM _{2.5}	Percentile	1 minute		Orthogonal Regression		
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c
Colocations Exercises	< 25%'ile	1044	0.88	0.459	1.225 ± 0.026	-0.470 ± 0.113
	> 25%'ile	3130	0.80	0.979	0.936 ± 0.002	0.708 ± 0.038
	< 50%'ile	2087	0.71	0.720	1.050 ± 0.012	0.027 ± 0.072
	> 50%'ile	2087	0.89	0.978	0.928 ± 0.003	0.882 ± 0.055
	< 75%'ile	3130	0.72	0.845	1.021 ± 0.007	0.119 ± 0.054
	> 75%'ile	1044	1.00	0.977	0.925 ± 0.004	0.937 ± 0.102
All Exercises	All Data	4174	0.80	0.978	0.937 ± 0.002	0.703 ± 0.029

Figure H8 PM_{5.0} vs Height Regression – Filtered by Quartile (µg m⁻³)

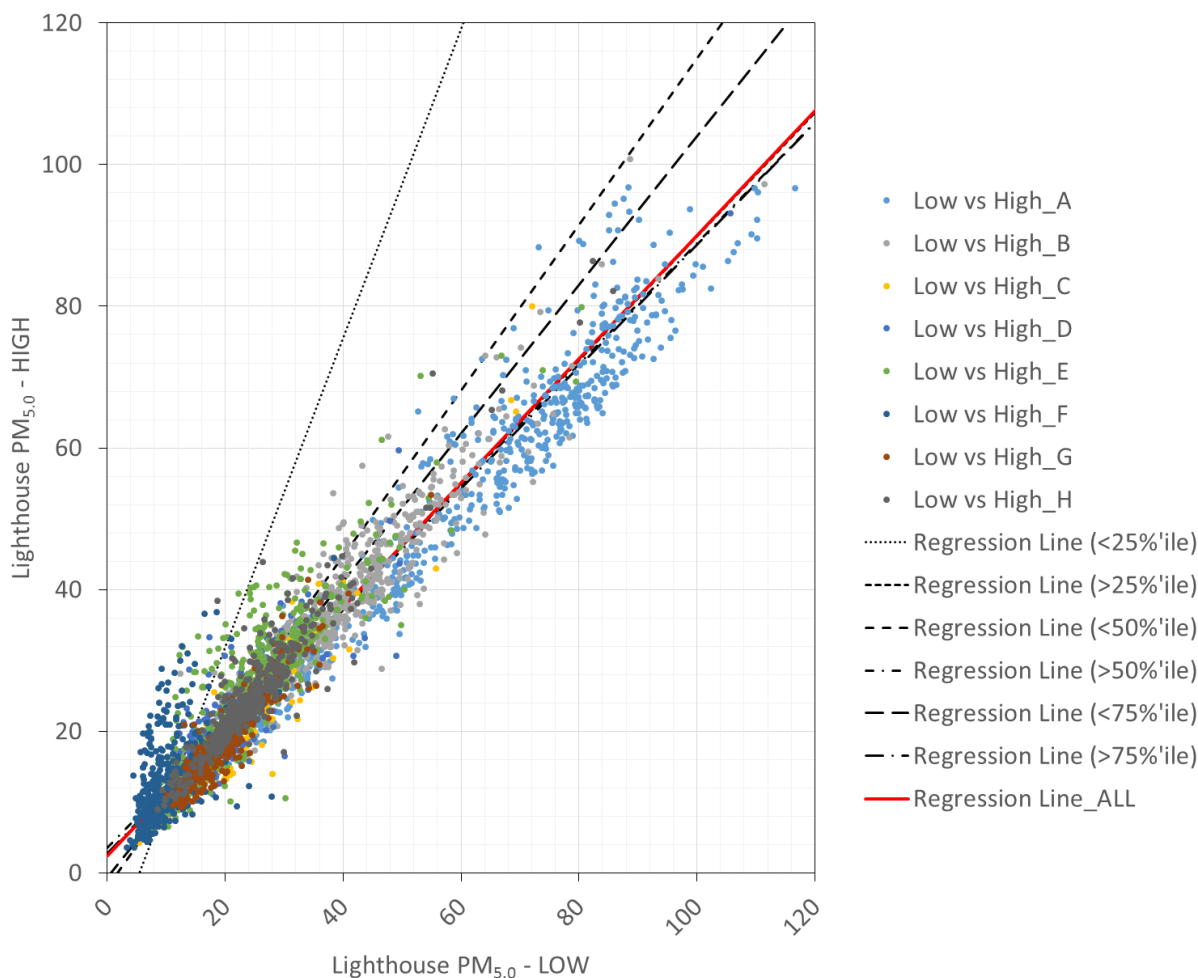


Table H8 PM_{5.0} vs Height Regression Results – Filtered by Quartile

Lighthouse PM _{5.0}	Percentile	1 minute		Orthogonal Regression		
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c
Colocations Exercises	< 25%'ile	1061	4.32	0.237	2.188 ± 0.040	-12.031 ± 0.464
	> 25%'ile	3183	3.02	0.938	0.873 ± 0.004	2.502 ± 0.150
	< 50%'ile	2122	2.57	0.522	1.170 ± 0.017	-2.068 ± 0.261
	> 50%'ile	2122	3.38	0.928	0.854 ± 0.005	3.507 ± 0.228
	< 75%'ile	3336	2.50	0.778	1.046 ± 0.008	-0.671 ± 0.177
	> 75%'ile	908	4.23	0.888	0.859 ± 0.010	2.759 ± 0.596
All Exercises	All Data	4244	2.89	0.942	0.876 ± 0.003	2.452 ± 0.110

Figure H9 PM₁₀ vs Height Regression – Filtered by Quartile (µg m⁻³)

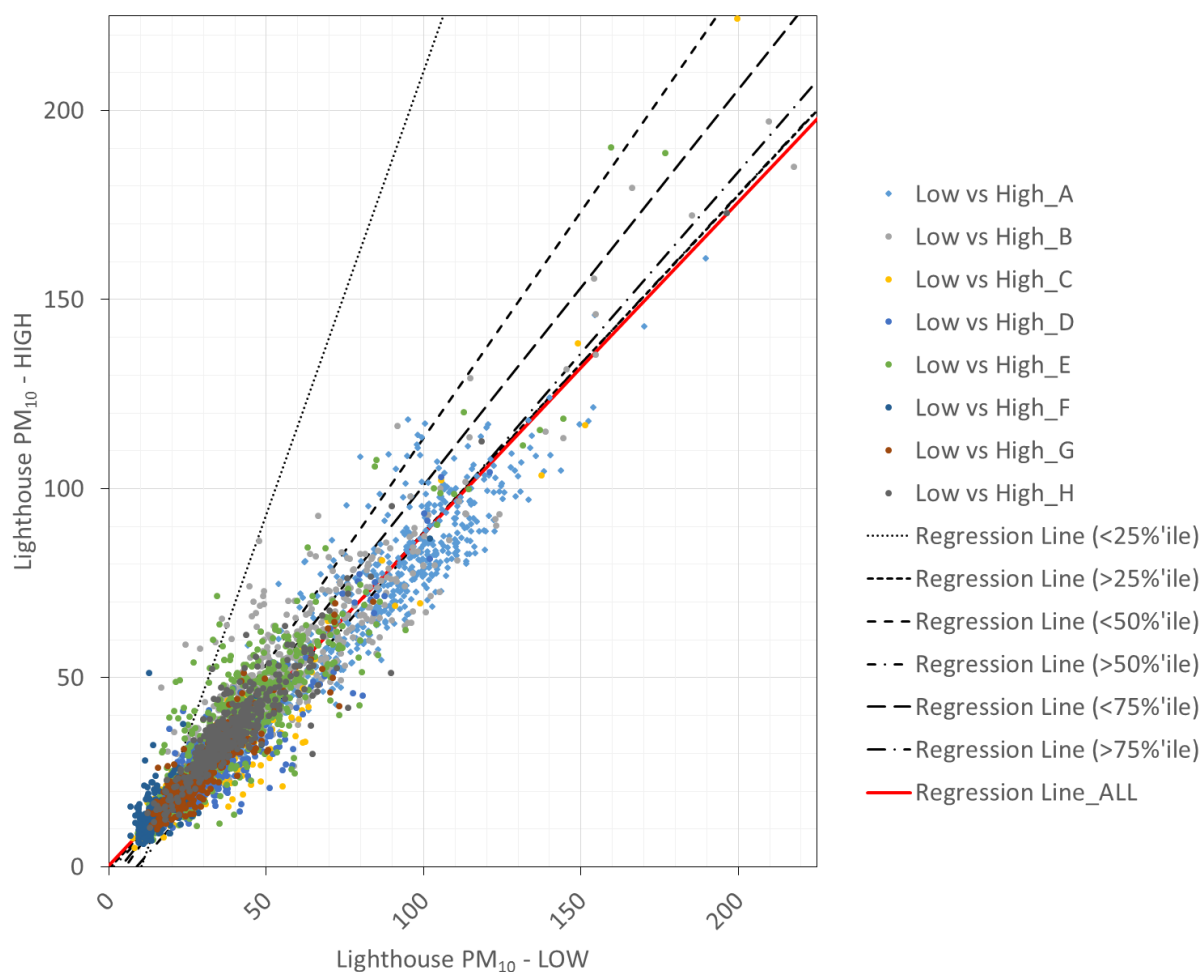


Table H9 PM₁₀ vs Height Regression Results – Filtered by Quartile

Lighthouse PM ₁₀	Percentile	1 minute		Orthogonal Regression		
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c
Colocations Exercises	< 25%'ile	1055	6.98	0.191	2.344 ± 0.042	-24.042 ± 0.754
	> 25%'ile	3163	5.98	0.879	0.890 ± 0.006	-0.555 ± 0.319
	< 50%'ile	2109	4.53	0.458	1.197 ± 0.018	-6.315 ± 0.444
	> 50%'ile	2109	6.96	0.851	0.895 ± 0.008	-1.212 ± 0.510
	< 75%'ile	3163	4.75	0.672	1.046 ± 0.011	-3.782 ± 0.336
	> 75%'ile	1055	8.31	0.814	0.961 ± 0.013	-8.350 ± 1.088
All Exercises	All Data	4218	5.36	0.897	0.876 ± 0.004	0.583 ± 0.221

Figure H10 TPM vs Height Regression – Filtered by Quartile ($\mu\text{g m}^{-3}$)

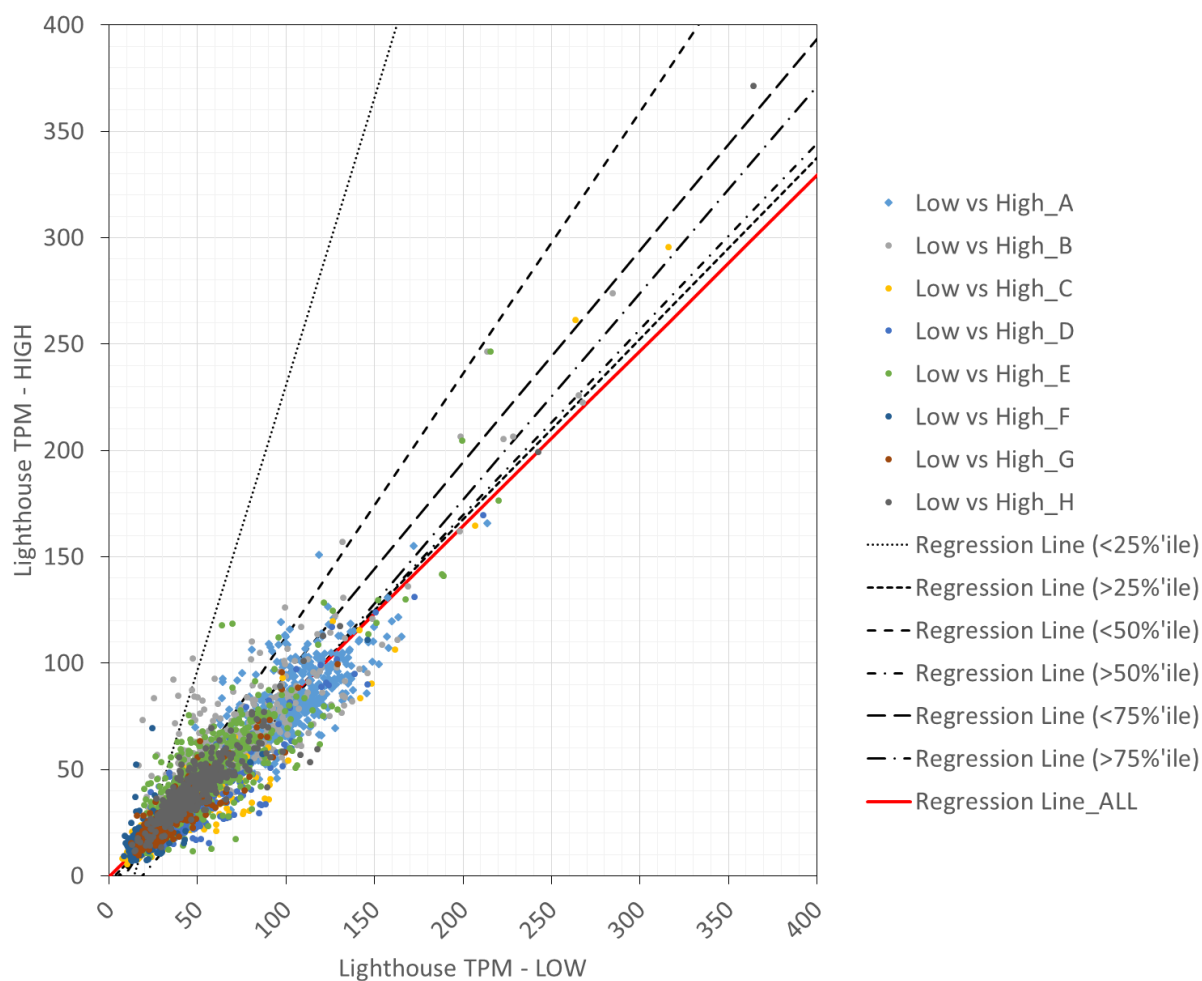


Table H10 TPM vs Height Regression Results – Filtered by Quartile

Lighthouse TPM	Percentile	1 minute		Orthogonal Regression		
		n_{bs}	MAE	r^2	Slope (d) $\pm u_d$	Intercept (c) $\pm u_c$
Colocations Exercises	< 25%'ile	1049	10.54	0.156	2.694 \pm 0.044	-38.229 \pm 0.983
	> 25%'ile	3146	8.21	0.818	0.851 \pm 0.007	-2.748 \pm 0.449
	< 50%'ile	2097	6.38	0.382	1.232 \pm 0.020	-10.540 \pm 0.586
	> 50%'ile	2098	9.67	0.781	0.875 \pm 0.009	-5.546 \pm 0.724
	< 75%'ile	3146	6.47	0.577	0.998 \pm 0.012	-5.429 \pm 0.449
	> 75%'ile	1049	11.68	0.753	0.974 \pm 0.015	-18.206 \pm 1.504
All Exercises	All Data	4195	7.31	0.843	0.824 \pm 0.005	-0.292 \pm 0.308

Figure H11 BC vs Height Regression – Filtered by Quartile ($\mu\text{g m}^{-3}$)

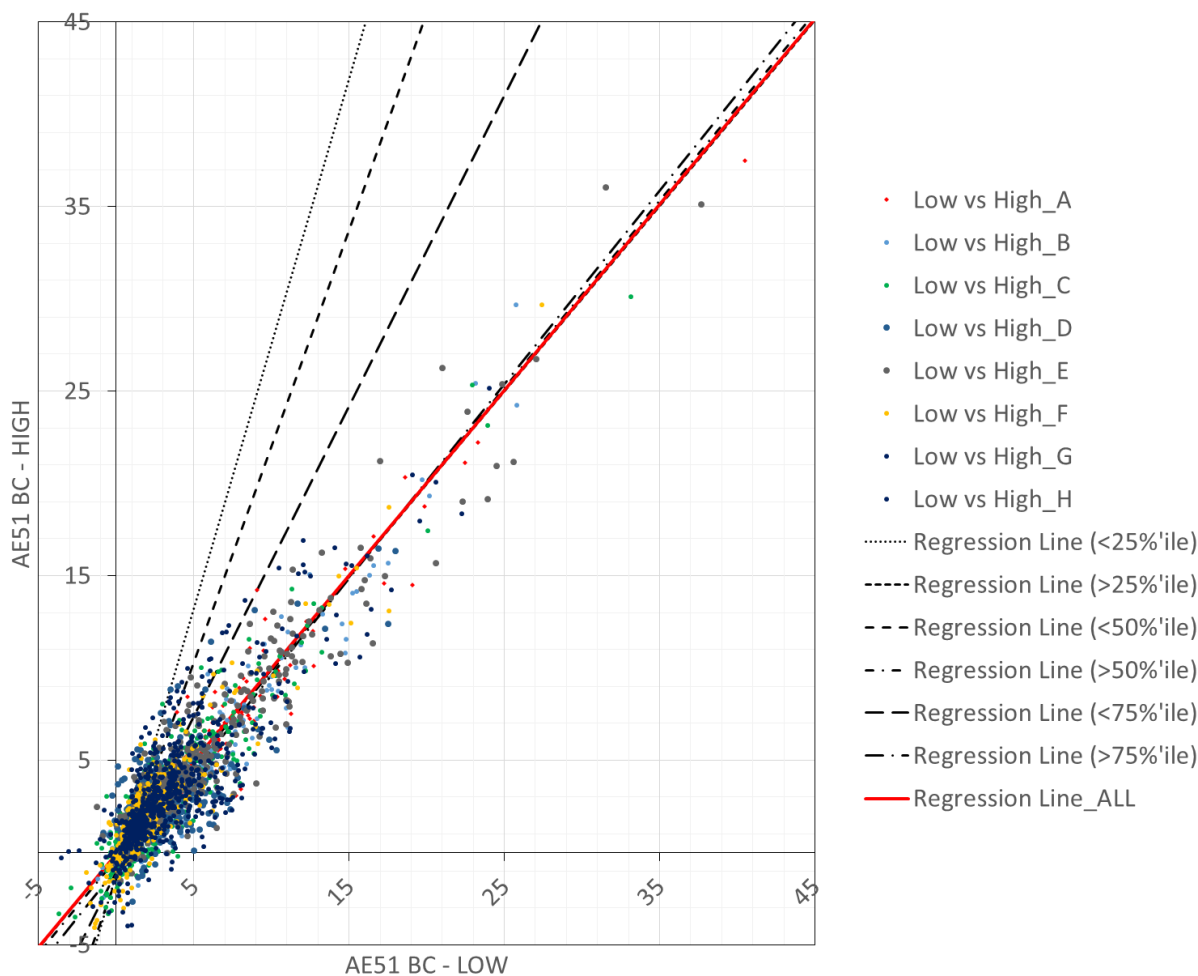


Table H11 BC vs Height Regression Results – Filtered by Quartile

AE51 BC	Percentile	1 minute		Orthogonal Regression		
		n_{bs}	MAE	r^2	Slope (d) $\pm u_d$	Intercept (c) $\pm u_c$
Colocations Exercises	< 25%'ile	1031	0.94	0.311	2.874 \pm 0.050	-1.189 \pm 0.044
	> 25%'ile	3090	0.95	0.866	1.005 \pm 0.007	-0.144 \pm 0.035
	< 50%'ile	2061	0.88	0.378	2.343 \pm 0.030	-1.443 \pm 0.040
	> 50%'ile	2060	1.14	0.864	1.019 \pm 0.008	-0.349 \pm 0.053
	< 75%'ile	3091	0.84	0.476	1.682 \pm 0.019	-1.057 \pm 0.036
	> 75%'ile	1030	1.49	0.867	1.051 \pm 0.012	-0.899 \pm 0.104
All Exercises	All Data	4121	0.87	0.868	1.007 \pm 0.006	-0.101 \pm 0.026

Figure H12 UFP vs Height Regression – Filtered by Quartile (N Particles cm⁻³)

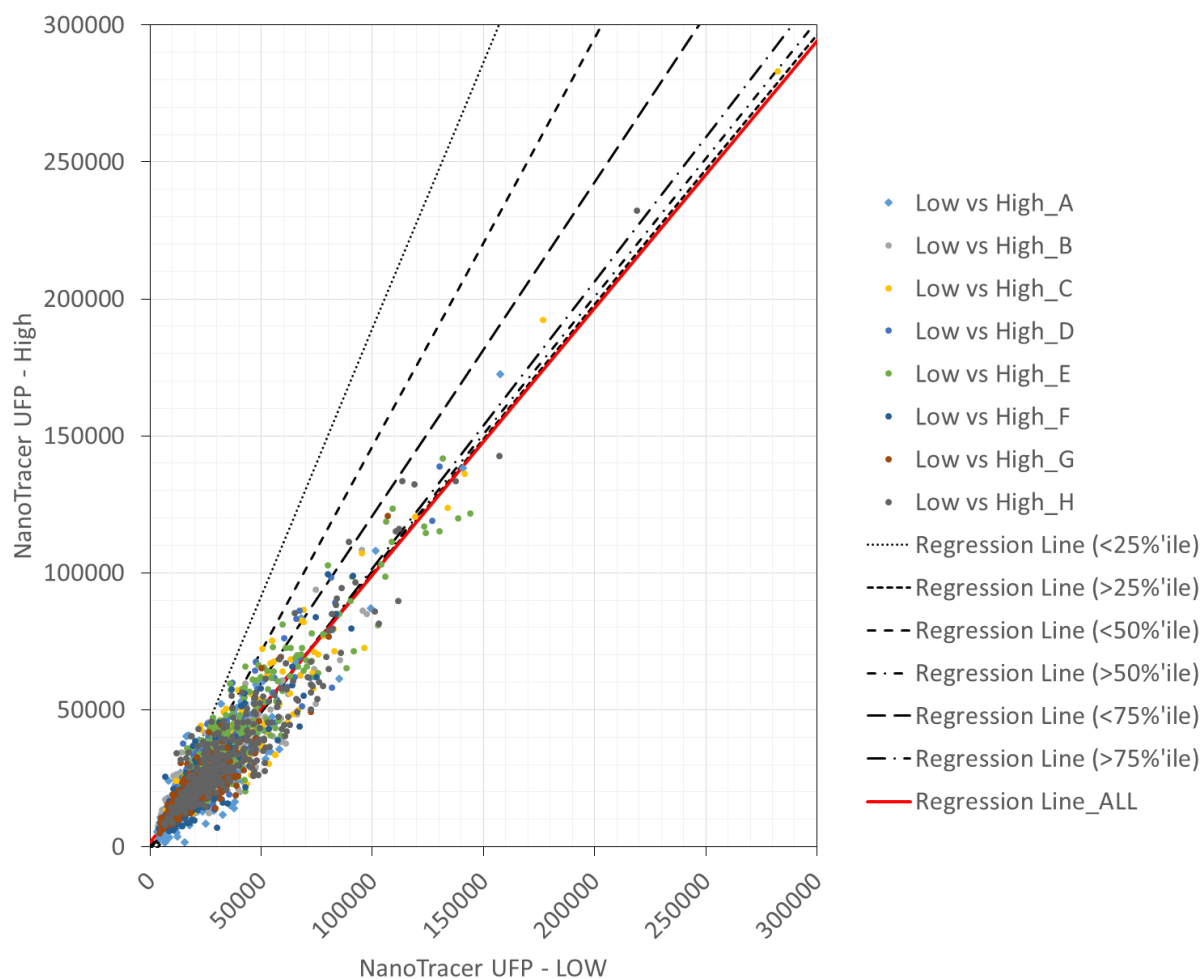


Table H12 UFP vs Height Regression Results – Filtered by Quartile

NanoTracer UFP	Percentile	1 minute		Orthogonal Regression		
		n_{bs}	MAE	r^2	Slope (d) $\pm u_d$	Intercept (c) $\pm u_c$
Colocations Exercises	< 25%'ile	1035	2636	0.394	1.954 \pm 0.038	-6511 \pm 359
	> 25%'ile	3102	4911	0.855	0.983 \pm 0.007	1405 \pm 221
	< 50%'ile	2069	2869	0.556	1.496 \pm 0.020	-3755 \pm 259
	> 50%'ile	2068	5915	0.841	1.005 \pm 0.009	-6 \pm 341
	< 75%'ile	3103	3217	0.657	1.220 \pm 0.012	-1264 \pm 210
	> 75%'ile	1034	7664	0.838	1.052 \pm 0.013	-3794 \pm 651
All Exercises	All Data	4137	4129	0.877	0.973 \pm 0.005	1923 \pm 153

Table H13 Pollutant vs Height Regression Results – Data <25%’ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 25 th %’ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	< 25%’ile	All Data
NO ₂	< 25%’ile	927	19.12	0.262	2.406 ± 0.046	-36.858 ± 1.622	60.5%	1.1%
NO	< 25%’ile	906	26.22	0.087	1.609 ± 0.037	61.842 ± 2.056	189.7%	12.1%
SO ₂	< 25%’ile	927	37.26	0.273	1.671 ± 0.037	169.229 ± 5.397	327.5%	40.1%
CO	< 25%’ile	903	13.82	0.823	1.151 ± 0.016	-5.325 ± 1.405	9.8%	7.0%
PM _{0.5}	< 25%’ile	1026	0.08	0.812	1.063 ± 0.014	-0.035 ± 0.013	2.8%	-0.5%
PM _{1.0}	< 25%’ile	1041	0.25	0.717	1.035 ± 0.017	0.105 ± 0.035	7.0%	4.0%
PM _{2.5}	< 25%’ile	1044	0.88	0.459	1.225 ± 0.026	-0.470 ± 0.113	18.9%	-1.0%
PM _{5.0}	< 25%’ile	1061	4.32	0.237	2.188 ± 0.040	-12.031 ± 0.464	38.6%	4.5%
PM ₁₀	< 25%’ile	1055	6.98	0.191	2.344 ± 0.042	-24.042 ± 0.754	-84.2%	-8.1%
TPM	< 25%’ile	1049	10.54	0.156	2.694 ± 0.044	-38.229 ± 0.983	22.4%	-21.4%
BC	< 25%’ile	1031	0.94	0.311	2.874 ± 0.050	-1.189 ± 0.044	95.9%	-7.8%
UFP	< 25%’ile	1035	2636	0.394	1.954 ± 0.038	-6511 ± 359	48.0%	6.7%

Table H14 Pollutant vs Height Regression Results – Data <50%’ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 50 th %’ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	< 50%’ile	All Data
NO ₂	< 50%’ile	1853	18.74	0.452	1.767 ± 0.026	-31.170 ± 1.372	28.7%	7.4%
NO	< 50%’ile	1815	21.32	0.152	1.033 ± 0.022	19.553 ± 0.900	25.4%	5.9%
SO ₂	< 50%’ile	1857	32.74	0.270	1.185 ± 0.022	81.412 ± 2.619	110.0%	25.1%
CO	< 50%’ile	1806	13.00	0.890	1.100 ± 0.009	-3.574 ± 1.089	7.4%	5.2%
PM _{0.5}	< 50%’ile	2050	0.09	0.922	1.007 ± 0.006	-0.007 ± 0.009	0.0%	-0.2%
PM _{1.0}	< 50%’ile	2081	0.23	0.849	0.984 ± 0.008	0.154 ± 0.024	3.9%	1.4%
PM _{2.5}	< 50%’ile	2087	0.71	0.720	1.050 ± 0.012	0.027 ± 0.072	5.0%	-1.7%
PM _{5.0}	< 50%’ile	2122	2.57	0.522	1.170 ± 0.017	-2.068 ± 0.261	7.6%	-1.4%
PM ₁₀	< 50%’ile	2109	4.53	0.458	1.197 ± 0.018	-6.315 ± 0.444	-9.0%	-11.1%
TPM	< 50%’ile	2097	6.38	0.382	1.232 ± 0.020	-10.540 ± 0.586	-3.8%	-21.4%
BC	< 50%’ile	2061	0.88	0.378	2.343 ± 0.030	-1.443 ± 0.040	68.7%	-4.6%
UFP	< 50%’ile	2069	2869	0.556	1.496 ± 0.020	-3755 ± 259	31.0%	4.1%

Table H15 Pollutant vs Height Regression Results – Data <75%’ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 75 th %’ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	> 75%’ile	All Data
NO ₂	< 75%’ile	2779	18.16	0.630	1.476 ± 0.016	-21.937 ± 1.102	21.2%	10.8%
NO	< 75%’ile	2722	21.87	0.280	0.945 ± 0.016	10.870 ± 0.556	3.1%	1.9%
SO ₂	< 75%’ile	2785	27.83	0.404	0.775 ± 0.012	26.887 ± 1.257	-0.1%	14.6%
CO	< 75%’ile	2708	12.84	0.920	1.052 ± 0.006	0.208 ± 0.912	5.2%	3.6%
PM _{0.5}	< 75%’ile	3076	0.11	0.959	0.994 ± 0.004	0.001 ± 0.007	0.0%	-0.1%
PM _{1.0}	< 75%’ile	3121	0.26	0.907	0.986 ± 0.005	0.121 ± 0.020	0.6%	-1.2%
PM _{2.5}	< 75%’ile	3130	0.72	0.845	1.021 ± 0.007	0.119 ± 0.054	2.8%	-2.6%
PM _{5.0}	< 75%’ile	3336	2.50	0.778	1.046 ± 0.008	-0.671 ± 0.177	2.6%	-5.7%
PM ₁₀	< 75%’ile	3163	4.75	0.672	1.046 ± 0.011	-3.782 ± 0.336	-4.9%	-12.5%
TPM	< 75%’ile	3146	6.47	0.577	0.998 ± 0.012	-5.429 ± 0.449	-9.0%	-21.4%
BC	< 75%’ile	3091	0.84	0.476	1.682 ± 0.019	-1.057 ± 0.036	41.1%	-2.6%
UFP	< 75%’ile	3103	3217	0.657	1.220 ± 0.012	-1264 ± 210	17.7%	1.7%

Table H16 Pollutant vs Height Regression Results – Data >25%’ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 25 th %’ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	> 25%’ile	All Data
NO ₂	> 25%’ile	2778	18.41	0.672	1.314 ± 0.014	-20.536 ± 1.413	-13.2%	1.1%
NO	> 25%’ile	2723	27.66	0.790	1.042 ± 0.009	-2.497 ± 0.819	-1.0%	12.1%
SO ₂	> 25%’ile	2786	30.20	0.738	1.002 ± 0.010	25.917 ± 0.740	39.9%	40.1%
CO	> 25%’ile	2708	15.55	0.974	0.993 ± 0.003	7.901 ± 0.836	7.2%	7.0%
PM _{0.5}	> 25%’ile	3075	0.17	0.989	0.999 ± 0.002	-0.030 ± 0.008	-3.0%	-0.5%
PM _{1.0}	> 25%’ile	3121	0.38	0.986	0.940 ± 0.002	0.295 ± 0.016	3.8%	4.0%
PM _{2.5}	> 25%’ile	3130	0.80	0.979	0.936 ± 0.002	0.708 ± 0.038	-1.0%	-1.0%
PM _{5.0}	> 25%’ile	3183	3.02	0.938	0.873 ± 0.004	2.502 ± 0.150	4.0%	4.5%
PM ₁₀	> 25%’ile	3163	5.98	0.879	0.890 ± 0.006	-0.555 ± 0.319	-11.0%	-8.1%
TPM	> 25%’ile	3146	8.21	0.818	0.851 ± 0.007	-2.748 ± 0.449	-25.5%	-21.4%
BC	> 25%’ile	3090	0.95	0.866	1.005 ± 0.007	-0.144 ± 0.035	-11.1%	-7.8%
UFP	> 25%’ile	3102	4911	0.855	0.983 ± 0.007	1405 ± 221	8.5%	6.7%

Table H 17 Pollutant vs Height Regression Results – Data >50%'ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 50 th 'ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	> 50%'ile	All Data
NO ₂	> 50%'ile	1852	18.44	0.602	1.294 ± 0.018	-21.360 ± 2.116	-3.5%	7.4%
NO	> 50%'ile	1814	32.33	0.779	1.077 ± 0.012	-9.802 ± 1.289	-5.0%	5.9%
SO ₂	> 50%'ile	1856	30.77	0.749	1.181 ± 0.013	12.281 ± 0.925	31.9%	25.1%
CO	> 50%'ile	1805	17.27	0.975	0.997 ± 0.004	5.011 ± 1.153	3.7%	5.2%
PM _{0.5}	> 50%'ile	2051	0.20	0.987	1.002 ± 0.003	-0.048 ± 0.013	-2.4%	-0.2%
PM _{1.0}	> 50%'ile	2081	0.45	0.985	0.936 ± 0.002	0.344 ± 0.024	2.2%	1.4%
PM _{2.5}	> 50%'ile	2087	0.89	0.978	0.928 ± 0.003	0.882 ± 0.055	-1.3%	-1.7%
PM _{5.0}	> 50%'ile	2122	3.38	0.928	0.854 ± 0.005	3.507 ± 0.228	1.3%	-1.4%
PM ₁₀	> 50%'ile	2109	6.96	0.851	0.895 ± 0.008	-1.212 ± 0.510	-16.0%	-11.1%
TPM	> 50%'ile	2098	9.67	0.781	0.875 ± 0.009	-5.546 ± 0.724	-26.7%	-21.4%
BC	> 50%'ile	2060	1.14	0.864	1.019 ± 0.008	-0.349 ± 0.053	-14.0%	-4.6%
UFP	> 50%'ile	2068	5915	0.841	1.005 ± 0.009	-6 ± 341	0.0%	4.1%

Table H 18 Pollutant vs Height Regression Results – Data >75%'ile

Pollutant	Percentile	1 minute		Orthogonal Regression			Percentage Difference (P) at Measured 75 th 'ile	
		n _{bs}	MAE	r ²	Slope (d) ± u _d	Intercept (c) ± u _c	> 75%'ile	All Data
NO ₂	> 75%'ile	926	19.81	0.544	1.371 ± 0.028	-38.582 ± 3.867	-9.4%	10.8%
NO	> 75%'ile	907	42.37	0.755	1.104 ± 0.018	-20.058 ± 2.754	-5.4%	1.9%
SO ₂	> 75%'ile	928	33.90	0.720	1.437 ± 0.024	-17.807 ± 2.119	28.9%	14.6%
CO	> 75%'ile	903	22.14	0.978	1.002 ± 0.005	0.980 ± 1.912	0.0%	3.6%
PM _{0.5}	> 75%'ile	1025	0.24	0.986	1.002 ± 0.004	-0.055 ± 0.024	-1.4%	-0.1%
PM _{1.0}	> 75%'ile	1041	0.57	0.986	0.931 ± 0.003	0.431 ± 0.045	0.3%	-1.2%
PM _{2.5}	> 75%'ile	1044	1.00	0.977	0.925 ± 0.004	0.937 ± 0.102	-2.3%	-2.6%
PM _{5.0}	> 75%'ile	908	4.23	0.888	0.859 ± 0.010	2.759 ± 0.596	-5.7%	-5.7%
PM ₁₀	> 75%'ile	1055	8.31	0.814	0.961 ± 0.013	-8.350 ± 1.088	-24.8%	-12.5%
TPM	> 75%'ile	1049	11.68	0.753	0.974 ± 0.015	-18.206 ± 1.504	0.0%	-21.4%
BC	> 75%'ile	1030	1.49	0.867	1.051 ± 0.012	-0.899 ± 0.104	-18.0%	-2.6%
UFP	> 75%'ile	1034	7664	0.838	1.052 ± 0.013	-3794 ± 651	-7.6%	1.7%