

Supplementary Material

Assessment of Air Pollution Mitigation Measures on Secondary Pollutants PM₁₀ and ozone using Chemical Transport Modelling over Megacity Delhi, India

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Table S1: Original NO_x EDGAR emissions and modified NO_x emissions based on energy sector control scenario over Delhi.

Original Edgar NO_x Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	4.13E-12	4.13E-12	1.21E-09	1.21E-09	1.21E-09	2.17E-09
28.5	4.14E-12	4.14E-12	1.22E-09	1.22E-09	1.22E-09	2.17E-09
28.6	0	0	0	0	0	0
28.7	0	0	0	0	0	0
28.8	0	0	0	0	0	0
Modified Edgar NO_x Emissions (kg/m²/s)						

Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	2.62E-12	2.62E-12	7.69E-10	7.69E-10	7.69E-10	1.37E-09
28.5	2.62E-12	2.62E-12	7.70E-10	7.70E-10	7.70E-10	1.38E-09
28.6	0	0	0	0	0	0
28.7	0	0	0	0	0	0
28.8	0	0	0	0	0	0

Table S2: Original PM₁₀ EDGAR emissions and modified PM₁₀ emissions based on energy sector control scenario over Delhi.

Original Edgar PM ₁₀ Emissions (kg/m ² /s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	3.51E-12	3.51E-12	1.03E-09	1.03E-09	1.03E-09	1.85E-09
28.5	3.52E-12	3.52E-12	1.03E-09	1.03E-09	1.03E-09	1.85E-09
28.6	4.92E-15	4.92E-15	2.74E-15	2.74E-15	2.74E-15	4.95E-15
28.7	4.92E-15	4.92E-15	2.75E-15	2.75E-15	2.75E-15	4.96E-15
28.8	8.57E-16	8.57E-16	8.21E-16	8.21E-16	8.21E-16	2.82E-15
Modified Edgar PM ₁₀ Emissions (kg/m ² /s)						
Lon (°)	76.8	76.9	77	77.1	77.2	77.3

Lat (°)						
28.4	3.51E-12	3.51E-12	1.03E-09	1.03E-09	1.03E-09	1.85E-09
28.5	3.52E-12	3.52E-12	1.03E-09	1.03E-09	1.03E-09	1.85E-09
28.6	4.91E-15	4.91E-15	2.74E-15	2.74E-15	2.74E-15	4.95E-15
28.7	4.92E-15	4.92E-15	2.74E-15	2.74E-15	2.74E-15	4.95E-15
28.8	8.56E-16	8.56E-16	8.20E-16	8.20E-16	8.20E-16	2.82E-15

Table S3: Original NO_x EDGAR emissions and modified NO_x emissions based on residential sector control scenario over Delhi.

Original Edgar NO_x Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	2.41E-11	2.41E-11	2.04E-11	2.04E-11	2.04E-11	3.68E-11
28.5	2.41E-11	2.41E-11	2.04E-11	2.04E-11	2.04E-11	3.68E-11
28.6	1.17E-11	1.17E-11	1.97E-11	1.97E-11	1.97E-11	3.64E-11
28.7	1.18E-11	1.18E-11	1.97E-11	1.97E-11	1.97E-11	3.65E-11
28.8	2.10E-11	2.10E-11	2.71E-11	2.71E-11	2.71E-11	3.42E-11
Modified Edgar NO_x Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	7.36E-12	7.36E-12	6.23E-12	6.23E-12	6.23E-12	1.12E-11
28.5	7.36E-12	7.36E-12	6.24E-12	6.24E-12	6.24E-12	1.12E-11
28.6	3.59E-12	3.59E-12	6.00E-12	6.00E-12	6.00E-12	1.11E-11
28.7	3.59E-12	3.59E-12	6.01E-12	6.01E-12	6.01E-12	1.11E-11
28.8	6.41E-12	6.41E-12	8.28E-12	8.28E-12	8.28E-12	1.05E-11

Table S4: Original PM₁₀ EDGAR emissions and modified PM₁₀ emissions based on residential sector control scenario over Delhi.

Original Edgar PM₁₀ Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	2.95E-11	2.95E-11	9.12E-11	9.12E-11	9.12E-11	9.43E-11
28.5	2.95E-11	2.95E-11	9.13E-11	9.13E-11	9.13E-11	9.44E-11
28.6	4.48E-11	4.48E-11	4.48E-11	4.48E-11	4.48E-11	9.36E-11
28.7	4.48E-11	4.48E-11	4.49E-11	4.49E-11	4.49E-11	9.37E-11
28.8	5.32E-11	5.32E-11	6.85E-11	6.85E-11	6.85E-11	8.69E-11
Modified Edgar PM₁₀ Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	9.32E-12	9.32E-12	2.88E-11	2.88E-11	2.88E-11	2.98E-11
28.5	9.33E-12	9.33E-12	2.88E-11	2.88E-11	2.88E-11	2.98E-11
28.6	1.41E-11	1.41E-11	1.42E-11	1.42E-11	1.42E-11	2.96E-11
28.7	1.42E-11	1.42E-11	1.42E-11	1.42E-11	1.42E-11	2.96E-11
28.8	1.68E-11	1.68E-11	2.16E-11	2.16E-11	2.16E-11	2.74E-11

Table S5: Original NO_x EDGAR emissions and modified NO_x emissions based on transport sector control scenario over Delhi.

Original Edgar NO_x Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	2.81E-09	2.81E-09	2.78E-09	2.78E-09	2.78E-09	3.58E-11
28.5	2.82E-09	2.82E-09	2.78E-09	2.78E-09	2.78E-09	3.59E-11
28.6	2.70E-09	2.70E-09	2.69E-09	2.69E-09	2.69E-09	3.59E-11
28.7	2.70E-09	2.70E-09	2.69E-09	2.69E-09	2.69E-09	3.60E-11
28.8	6.42E-11	6.42E-11	6.46E-11	6.46E-11	6.46E-11	3.68E-11
Modified Edgar NO_x Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	2.15E-09	2.15E-09	2.12E-09	2.12E-09	2.12E-09	2.74E-11
28.5	2.15E-09	2.15E-09	2.12E-09	2.12E-09	2.12E-09	2.74E-11
28.6	2.06E-09	2.06E-09	2.05E-09	2.05E-09	2.05E-09	2.75E-11
28.7	2.06E-09	2.06E-09	2.05E-09	2.05E-09	2.05E-09	2.75E-11
28.8	4.91E-11	4.91E-11	4.93E-11	4.93E-11	4.93E-11	2.81E-11

Table S6: Original PM₁₀ EDGAR emissions and modified PM₁₀ emissions based on transport sector control scenario over Delhi.

Original Edgar PM₁₀ Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	5.02E-10	5.02E-10	5.00E-10	5.00E-10	5.00E-10	9.31E-12
28.5	5.02E-10	5.02E-10	5.01E-10	5.01E-10	5.01E-10	9.32E-12
28.6	4.98E-10	4.98E-10	4.98E-10	4.98E-10	4.98E-10	9.33E-12
28.7	4.99E-10	4.99E-10	4.98E-10	4.98E-10	4.98E-10	9.34E-12
28.8	1.78E-11	1.78E-11	1.78E-11	1.78E-11	1.78E-11	9.76E-12
Modified Edgar PM₁₀ Emissions (kg/m²/s)						
Lon (°) Lat (°)	76.8	76.9	77	77.1	77.2	77.3
28.4	3.56E-10	3.56E-10	3.55E-10	3.55E-10	3.55E-10	6.60E-12
28.5	3.56E-10	3.56E-10	3.55E-10	3.55E-10	3.55E-10	6.60E-12
28.6	3.53E-10	3.53E-10	3.53E-10	3.53E-10	3.53E-10	6.61E-12
28.7	3.54E-10	3.54E-10	3.53E-10	3.53E-10	3.53E-10	6.62E-12
28.8	1.26E-11	1.26E-11	1.26E-11	1.26E-11	1.26E-11	6.92E-12