

Supplementary material on

**Increase in Delhi's air pollution linked with global energy crisis
due to West Asia War**

Avik Kumar Sam¹, Kounik De Sarkar¹, Abhinav Sharma², Navinya Chimurkar³, Harish C.
Phuleria^{1,2*}

1. Environmental Science and Engineering Department, Indian Institute of Technology Bombay, Mumbai, India
2. Centre in Climate Studies, Indian Institute of Technology Bombay, Mumbai, India
3. Department of Biological and Chemical Engineering, Aarhus University, Denmark

* Corresponding author: Harish C. Phuleria; phuleria@iitb.ac.in

Table S1: List of stations and their details.

Station	Latitude	Longitude	Number of Restaurants	Classification	Type
DTU	28.75	77.1112615	0	0-5 Low	Academic
Jawaharlal Nehru Stadium	28.5803	77.233829	0	0-5 Low	Stadium
Dwarka Sector-8	28.571	77.0719006	0	0-5 Low	Residential
Rohini	28.7325	77.11992	0	0-5 Low	Residential
Narela	28.8228	77.101981	0	0-5 Low	Commercial
Major Dhyan Chand National Stadium	28.6113	77.237738	7	6-10 Mid	Stadium
Lodhi Road	28.5918	77.2273074	9	6-10 Mid	Residential
Vivek Vihar	28.6723	77.31526	9	6-10 Mid	Residential
Anand Vihar	28.6476	77.315809	8	6-10 Mid	Commercial
Nehru Nagar	28.5679	77.250515	7	6-10 Mid	Academic
Okhla Phase-2	28.5308	77.271255	13	>10 High	Commercial
Chandni Chowk	28.6568	77.227234	15	>10 High	Residential
Shadipur	28.6515	77.1473105	16	>10 High	Residential
ITO	28.6286	77.24106	35	>10 High	Commercial
Punjabi Bagh	28.674	77.131023	30	>10 High	Residential
Sonia Vihar	28.7105	77.249485	19	>10 High	Residential

Table S2: List of stations and their details.

Station Name	CO % Change	NOx % Change	PM₁₀ % Change	SO₂ % Change	Type
DTU (0)	-8.70	-15.20	-58.60	-0.86	Academic
DWARKA SECTOR-8 (0)	8.70	11.26	-3.93	187.33	Residential
JAWAHARLAL NEHRU STADIUM (0)	6.96	-29.41	42.77	-15.43	Stadium
NARELA (0)	22.07	-29.77	-3.79	-7.17	Commercial
ROHINI (0)	4.72	-43.77	17.00	-6.36	Residential
MAJOR DHYAN CHAND NATIONAL STADIUM (6-10 Low)	33.40	-21.59	26.04	122.00	Stadium
NEHRU NAGAR (6-10 Low)	70.80	-18.53	35.95	44.26	Academic
ANAND VIHAR (6-10 Low)	22.05	-56.53	28.73	13.80	Commercial
LODHI ROAD (6-10 Low)	5.48	-17.42	24.99		Residential
VIVEK VIHAR (6-10 Low)	26.00	-20.71	21.75	-16.53	Residential
OKHLA PHASE-2 (>10 High)	74.67	9.85	12.97	15.39	Commercial
CHANDNI CHOWK (>10 High)	11.97	-33.13	54.66	32.00	Residential
SHADIPUR (>10 High)	33.14	-29.33	-7.28	-17.64	Residential
SONIA VIHAR (>10 High)	14.89	-38.59	12.29	39.11	Residential
PUNJABI BAGH (>10 High)	4.31	-38.48	62.89	-3.03	Residential
ITO (>10 High)	-3.04	-22.08	10.52	-28.82	Commercial

West Asia War Impact: PM_{10} changes by Peak Period & Density Group

Percentage changes from Baseline to 2026 West Asia War (Feb-Mar Comparison)

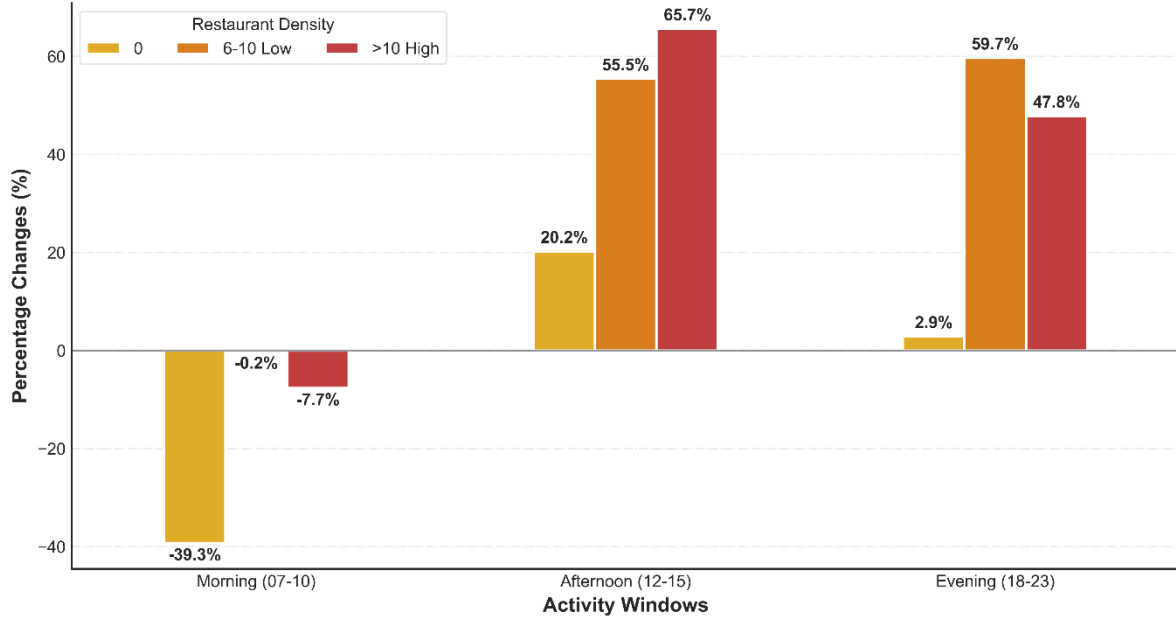


Figure S1: Changes observed in PM_{10} concentrations across peak periods and density groups.

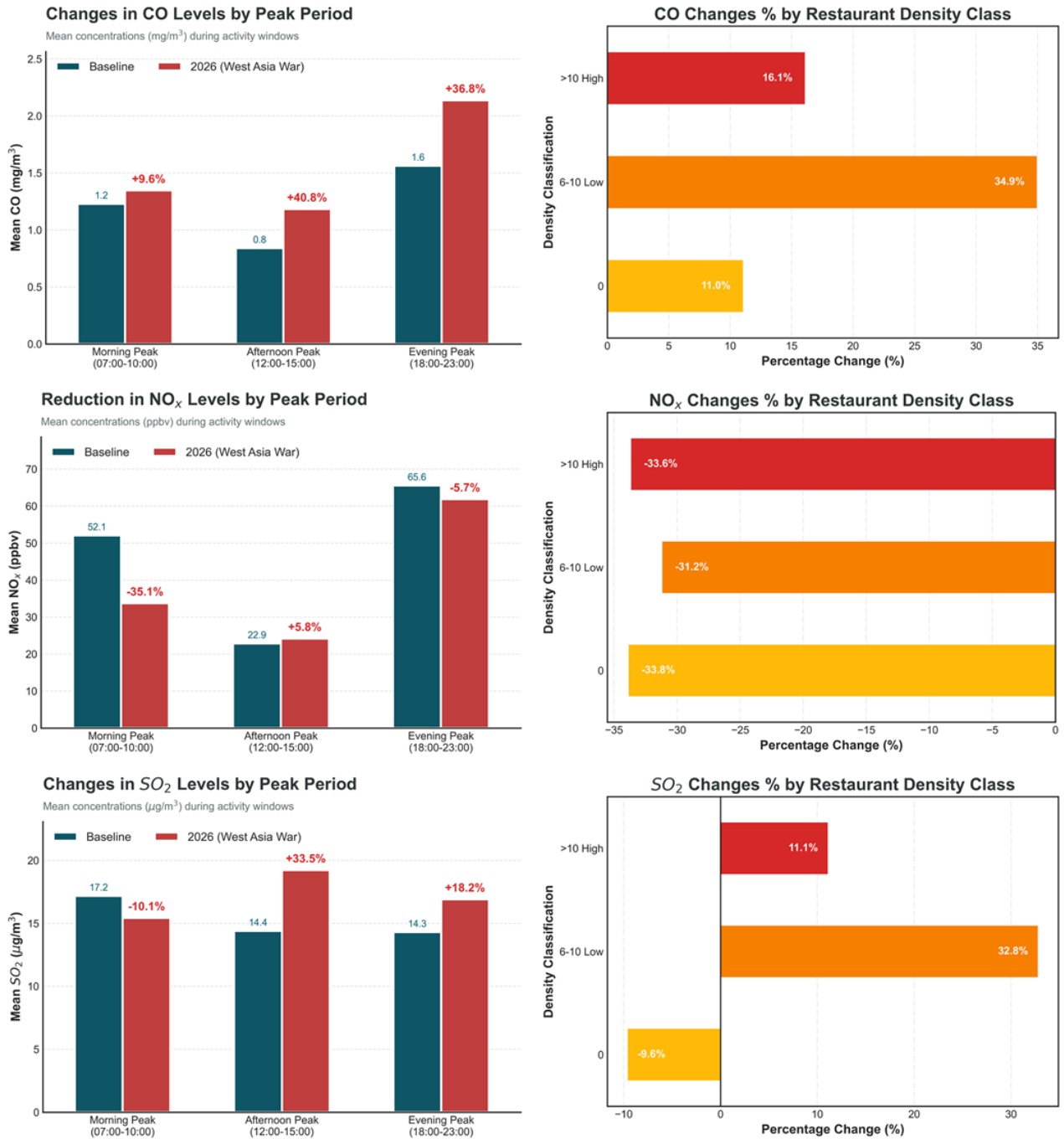


Figure S2: Changes observed in CO, NO_x and SO₂ across peak periods and restaurant density classes.

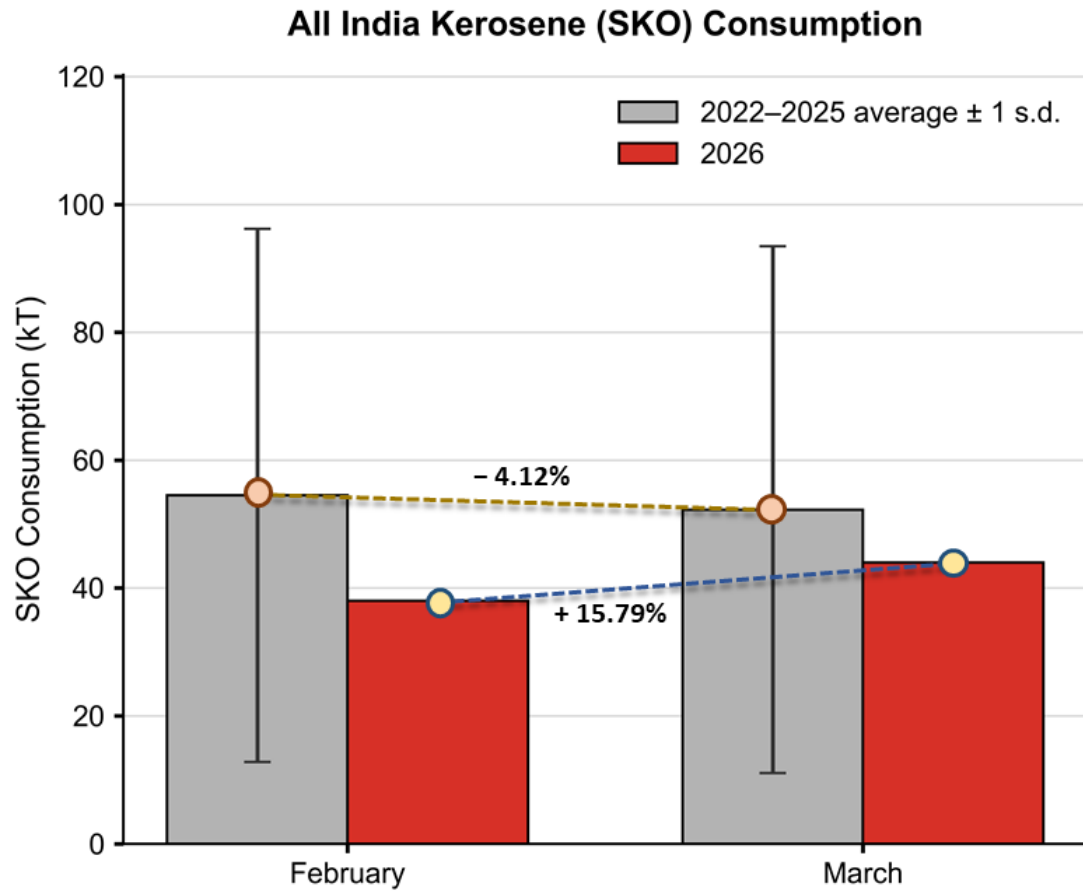


Figure S3: Changes observed in CO, NO_x and SO₂ across peak periods and restaurant density classes (Source: Petroleum Planning & Analysis Cell, 2026).