Supplementary Information

Significance of PM2.5 air quality at the Indian capital

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Figure S1: Time series of mixing height in different seasons.

24-hr back trajectories, originating from the sampling location, were generated using National Oceanic and Atmospheric Administration’s Hybrid Single Particle Lagrangian Integrated Trajectory (HYSPLIT) model. The change in mixing height with time, during winter, pre-monsoon, monsoon and post-monsoon, is shown in Figure S1. Results indicate that mixing height peaks during afternoon at around 2:30 PM. Moreover, mixing height was the least in winter and highest during monsoon and pre-monsoon.

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Figure S2: Seasonal change in back trajectory of air masses originating at New Delhi generated using HYSPLIT. Yearly change in the trajectories is also shown.

Back-trajectory plots in Figure S2 clearly indicate that the neighbouring states of Punjab and Haryana could be the main sources of air pollution in Delhi during winter and pre-monsoon. However, in monsoon and post-monsoon the main sources were Uttar Pradesh and Rajasthan; and Punjab and Rajasthan, respectively.