

Supplementary Information

Frequent new particle formation events in the Indo-Gangetic Plain occur under reduced condensation sink but are obscured by air mass heterogeneity

Gaurav K. Srivastav^{1,2}, Aasif A. Wagay¹, Janne Lampilahti³, Jaswant Rathore¹, Ravi K. Kunchala¹, Dilip Ganguly¹, Markku Kulmala³, Tuukka Petäjä³, Pauli Paasonen³, Roseline C. Thakur^{3*}, Shahzad Gani^{1,3*}

¹Centre for Atmospheric Sciences, Indian Institute of Technology Delhi, New Delhi, India.

²India Meteorological Department, Ministry of Earth Sciences, Government of India.

10 ³Institute for Atmospheric and Earth System Research/Physics, University of Helsinki, Helsinki, Finland.

Correspondence to: shahzadgani@iitd.ac.in; roseline.thakur@helsinki.fi

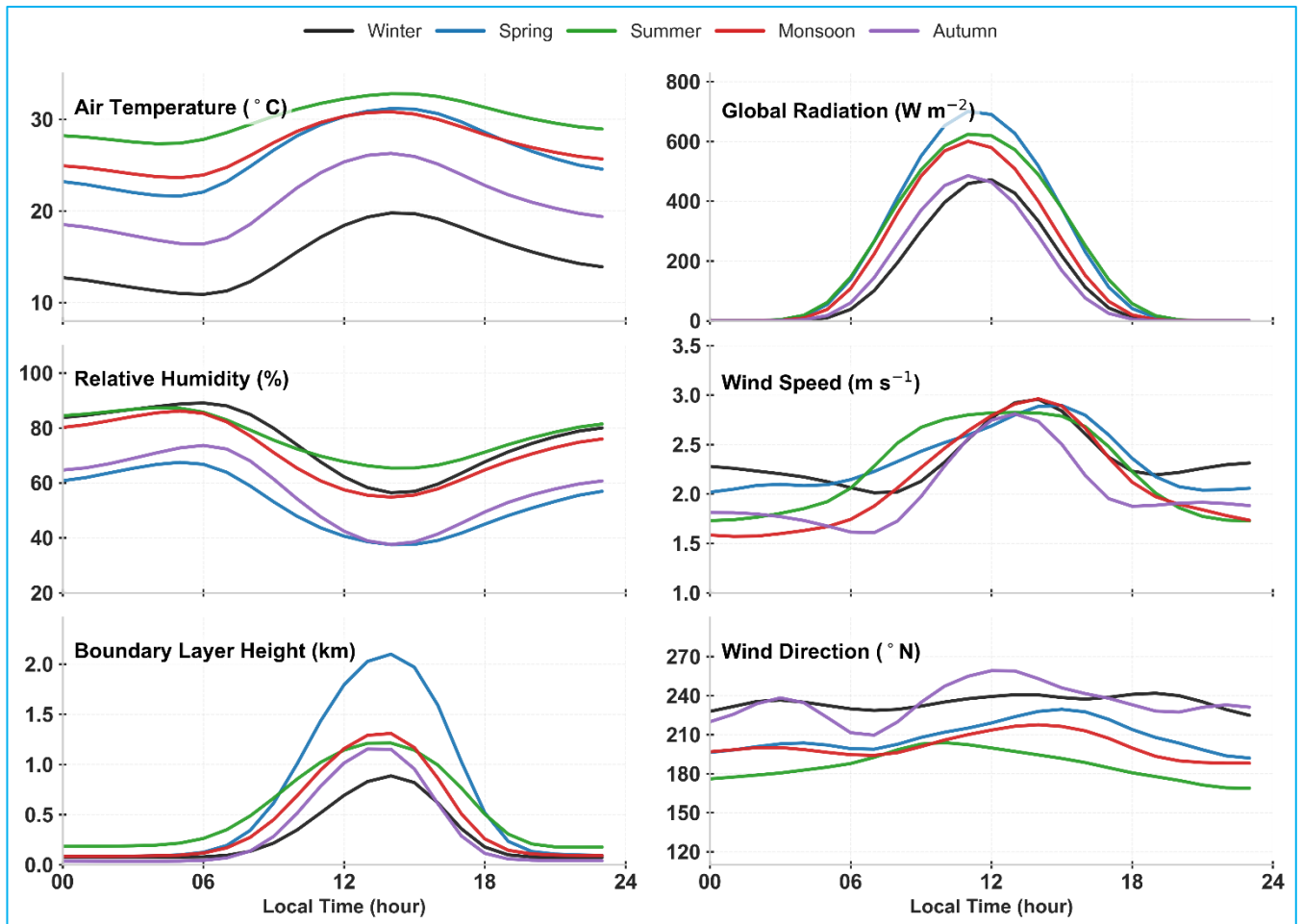


Figure S1: Diurnal profiles of meteorological parameters (temperature, relative humidity, Boundary layer height, global radiation, wind speed and wind direction) by season. Average values by season and hour of day are presented for all parameters except wind direction. The median value is presented for wind direction.

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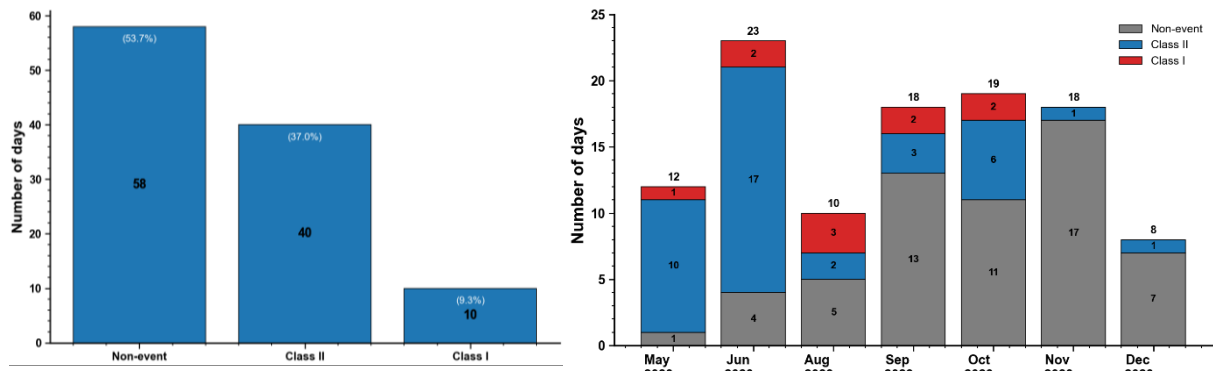


Figure S2: Dal Maso et. al, 2005 classification with absolute numbers.

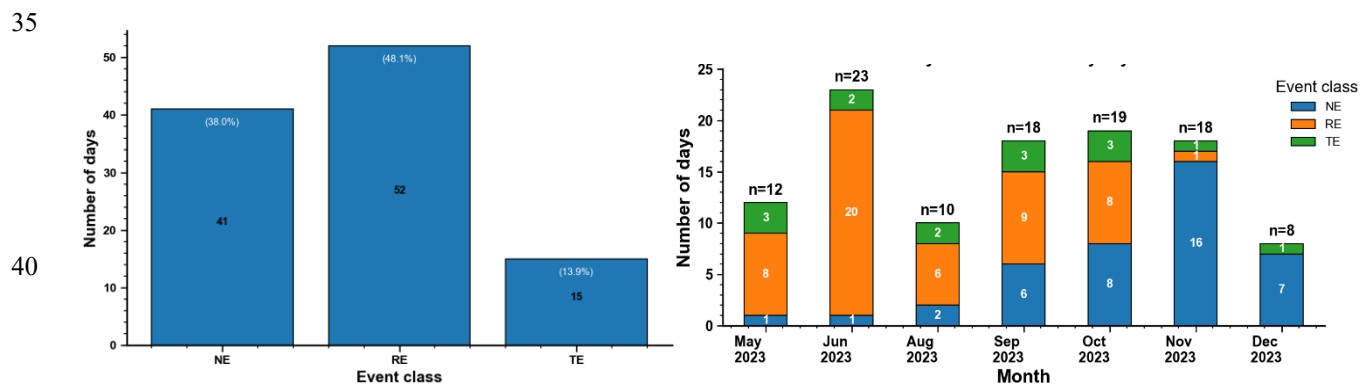


Figure S3: Dada et. al, 2018 classification with absolute numbers.

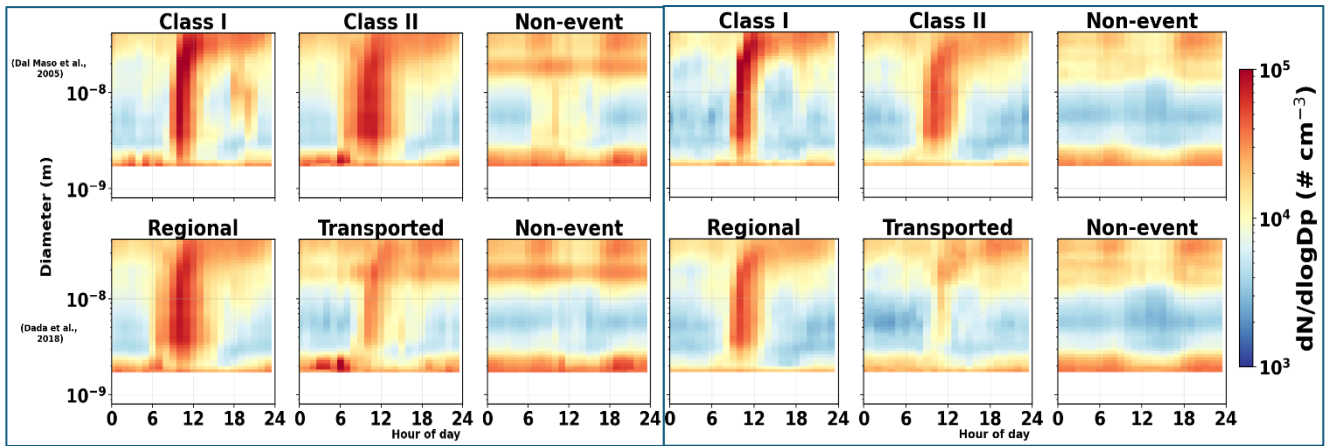


Figure S4: Mean (Left panel), Median (Right panel) particle size distributions (cm^{-3}) defined by two classification methods. Top panels (Dal Maso et al., 2005): Class I, Class II, and Non-event days. Below panels (Dada et al., 2018): Regional, Transported, and Non-event days. Data are aggregated over all days belonging to each class, showing the typical diurnal evolution of the aerosol size distribution for the different event types.

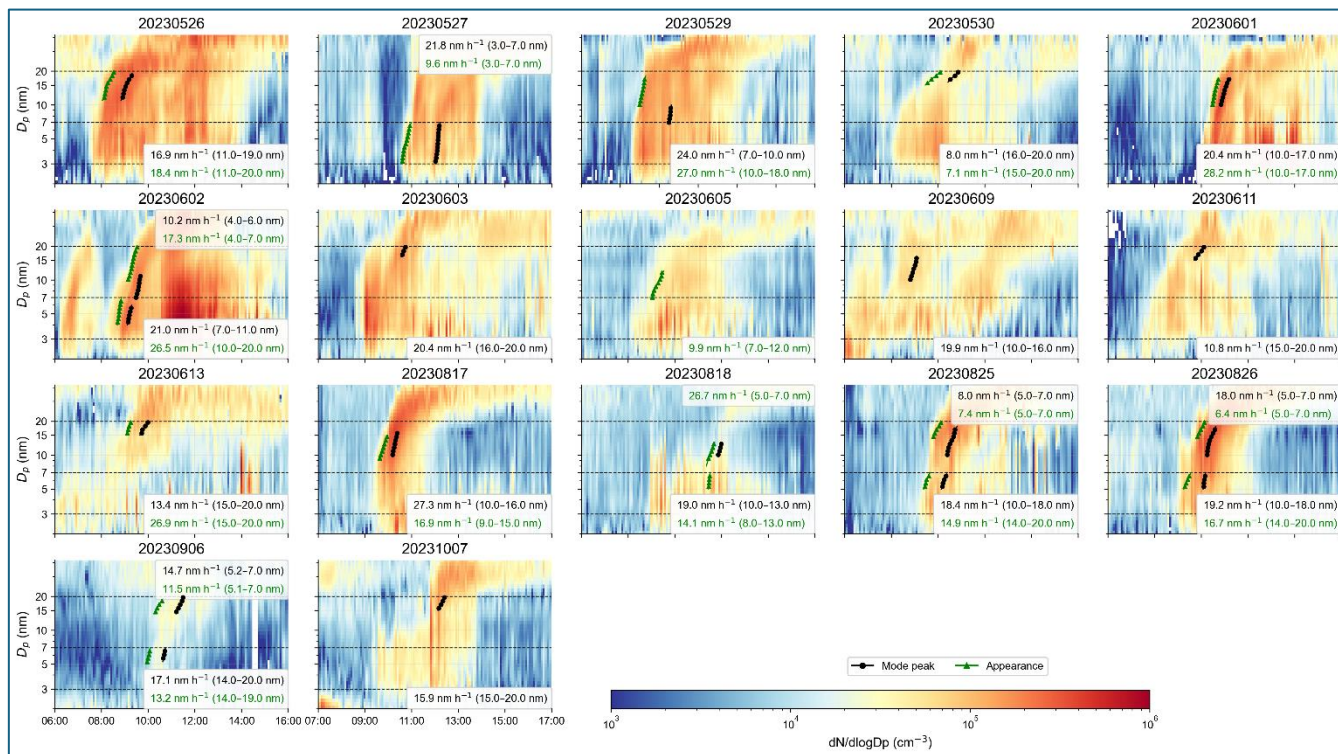


Figure S5. Individual day growth rate calculation for maximum concentration and appearance time method. Influence of different factors can be observed in addition to NPF signatures.

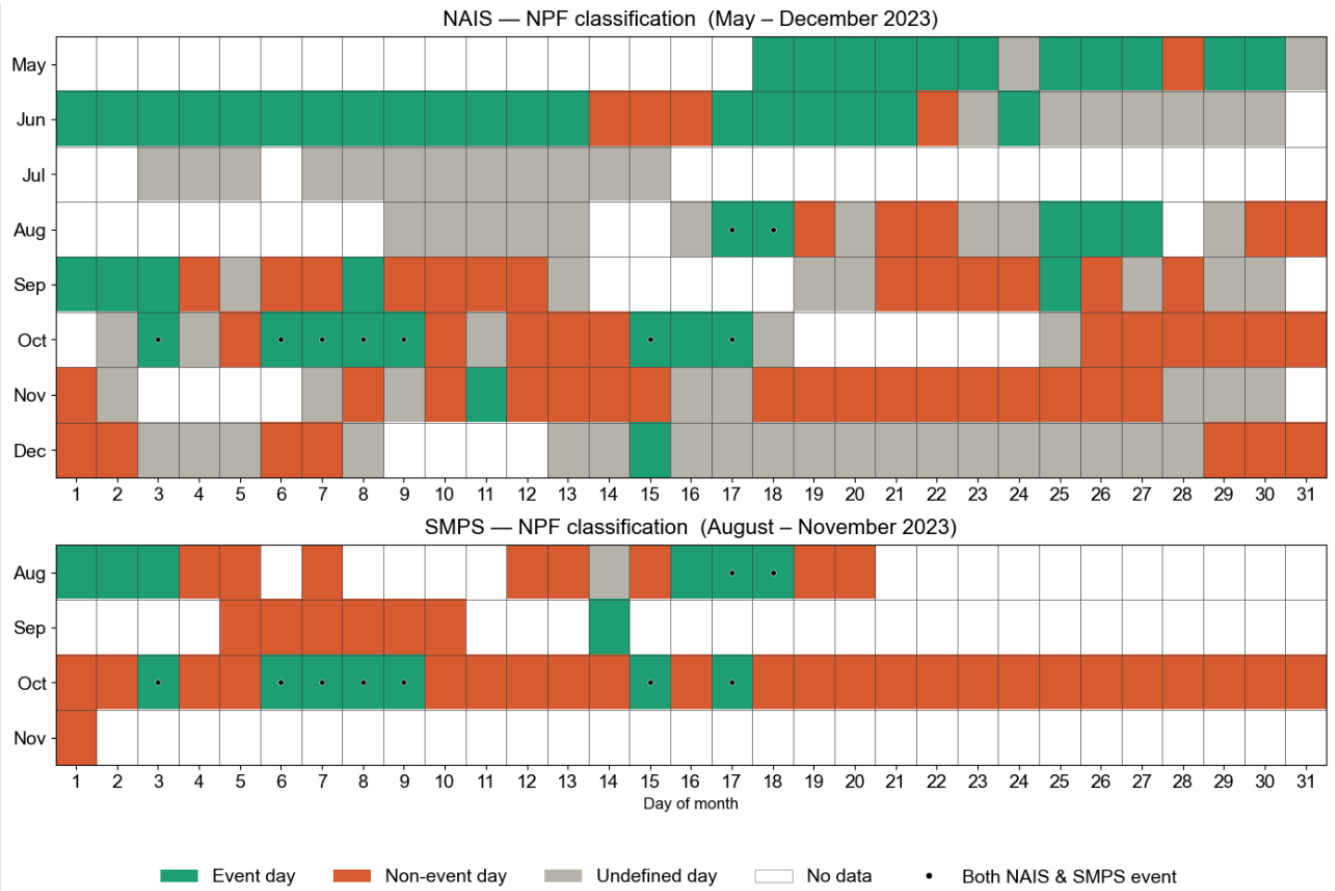


Figure S6: NAIS and SMPS data availability marking with NPF and non-event days for the whole study period.