

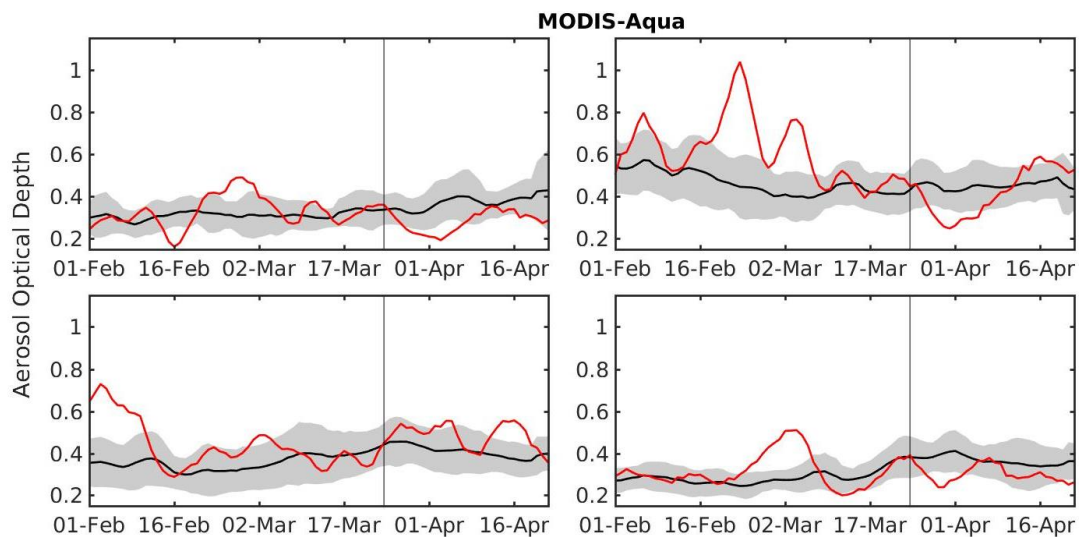
## Supplementary Material

# Surprising changes in aerosol loading over India amid COVID19 Lockdown

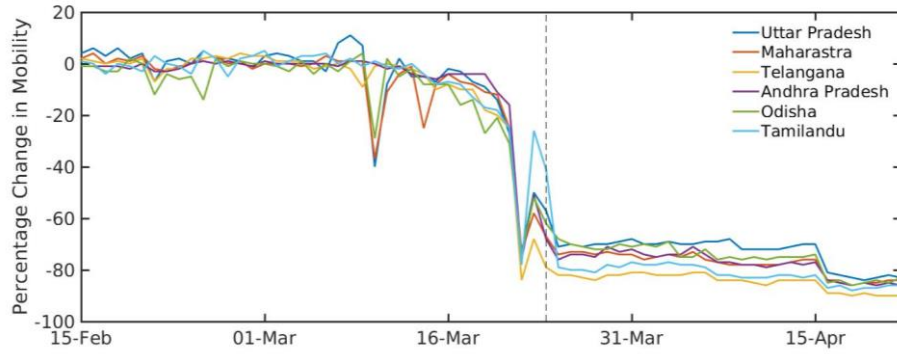
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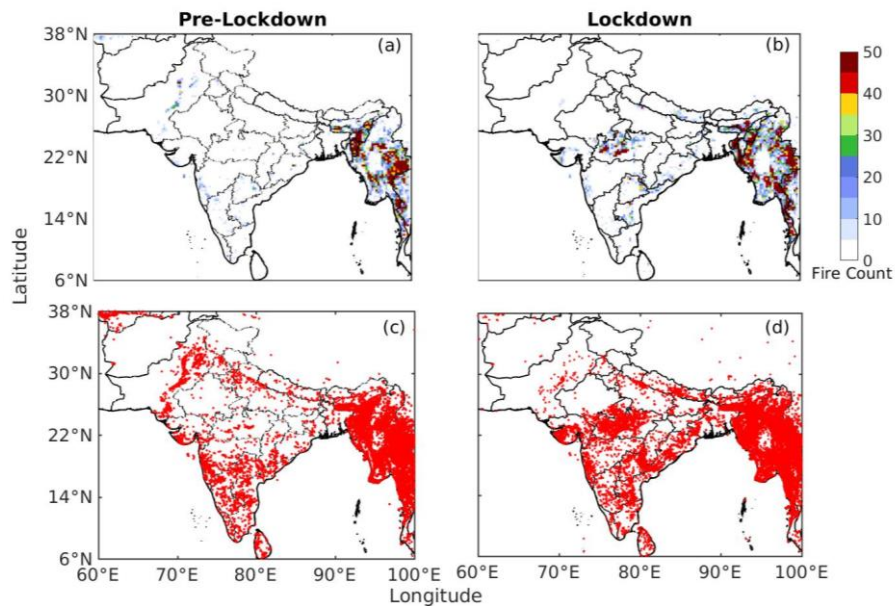
Email: [sp25@iitbbs.ac.in](mailto:sp25@iitbbs.ac.in); [vinoj@iitbbs.ac.in](mailto:vinoj@iitbbs.ac.in)



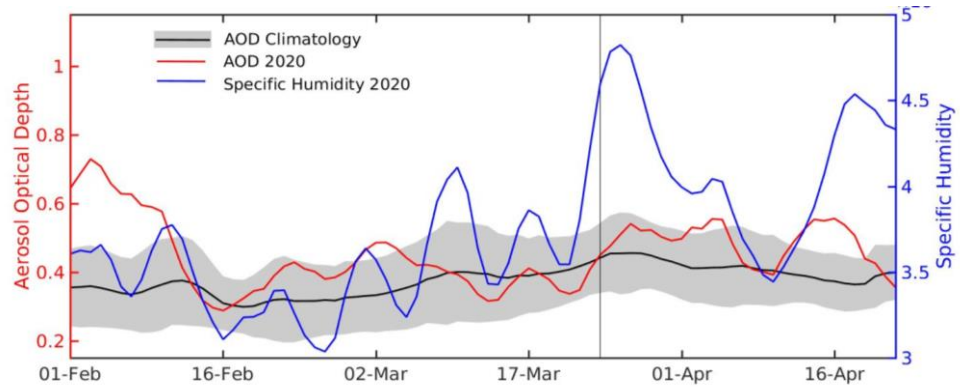
**Figure S1 :** Observed time series of AOD over (a) NW (b) EIGP (c) CI and (d) SI. The black-line (shaded region) shows the interannual mean (standard deviation) for the years (2003-2019), and the red-line indicates daily mean for the year 2020.



**Figure S2:** Percentage change in the number of footfalls across major Indian states compared to baseline mobility (defined as median value of 3<sup>rd</sup>Jan - 6<sup>th</sup>Feb 2020.) data source: Google LLC “*Google COVID-19 Community Mobility Reports*”. <https://www.google.com/covid19/mobility/> Accessed: <23062020>



**Figure S3** Total number of fire events during (a) pre-lockdown and (b) lockdown period gridded at a resolution of  $0.25 \times 0.25$  latitude-longitude box. Locations of detected fire during (c) Pre-Lockdown and (d) Lockdown (data source: MODIS Collection 6, [doi: 10.5067/FIRMS/MODIS/MCD14DL.NRT.006](https://doi.org/10.5067/FIRMS/MODIS/MCD14DL.NRT.006))



**Figure S4:** Covariability of AOD with specific humidity ( $\text{g kg}^{-1}$ )