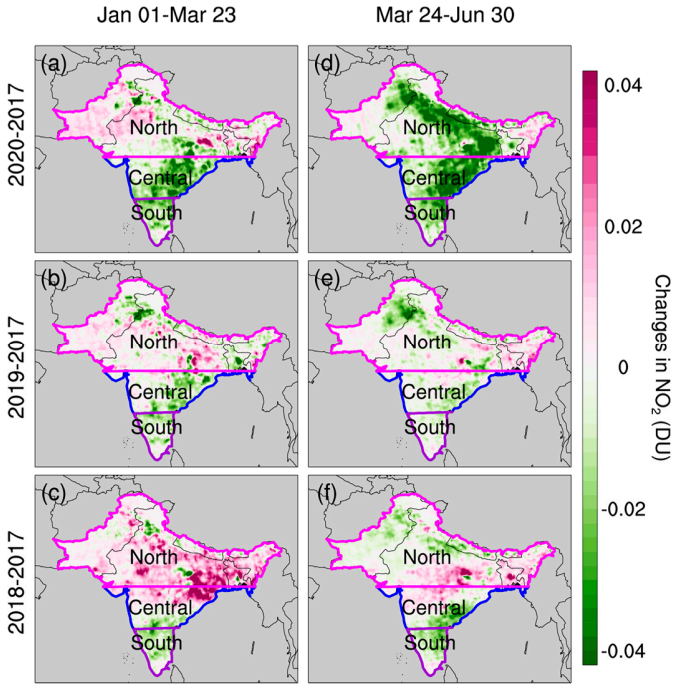


Figure S1. The changes of tropospheric NO_2 in 2020 (a and d), 2019 (b and e), 2018 (c and f) as compared with that in 2017. (a)–(c): pre-lockdown period and (d)–(f): lockdown period. Pre-lockdown and lockdown are defined as periods of January 1–March 23, 2020 and March 24–June 30, 2020, respectively. Data are from the Ozone Monitoring Instrument (OMI).

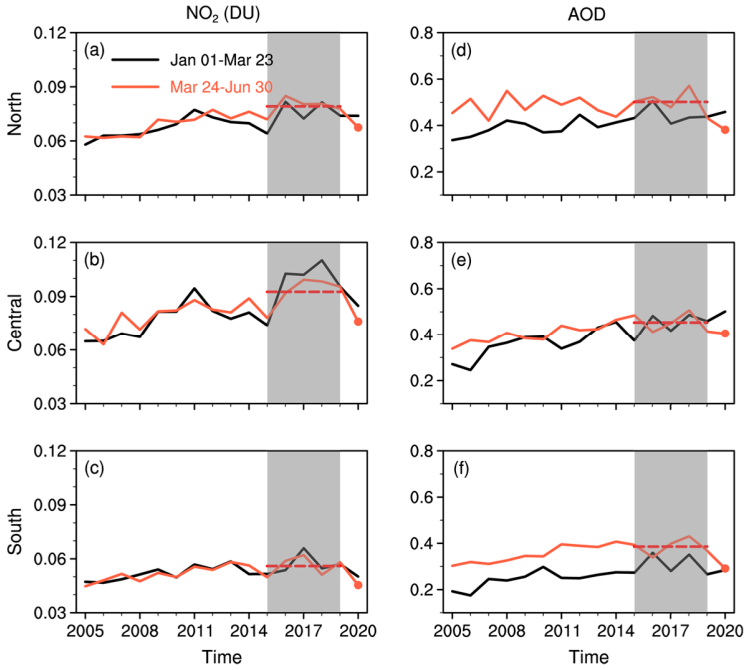


Figure S2. Annual series of the regional mean tropospheric NO_2 and total column AOD from 2005 to 2020 over three subregions in the Indian subcontinent (Figure 1). (a)–(c): NO_2 and (d)–(f): AOD. The black and light-red lines respectively represent the period of January 1–March 23 and March 24–June 30. The light-red dotted line represents average value of 2015–2019 during the period of March 24–June 30. The light-red dot shaded represents the value of 2020 during the period of March 24–June 30.

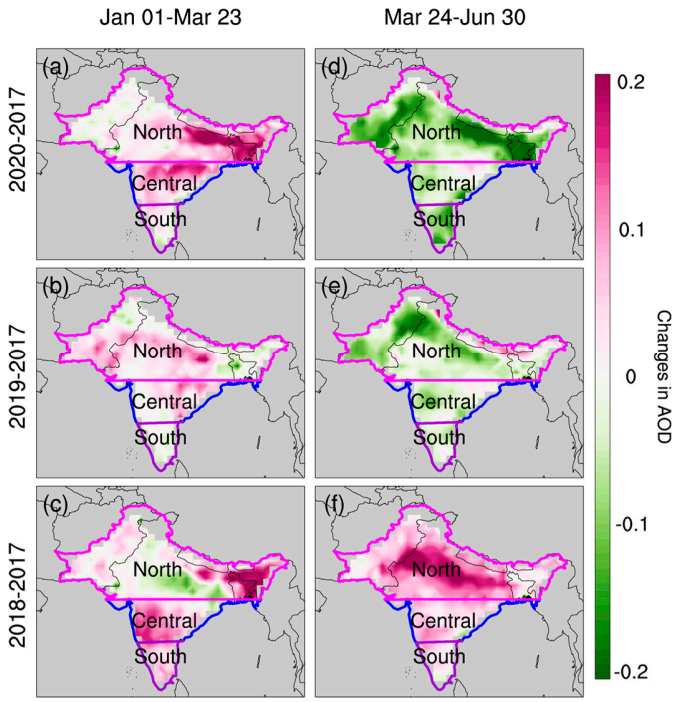


Figure S3. Same as Figure S1, but for total column AOD. Data are from MODIS.

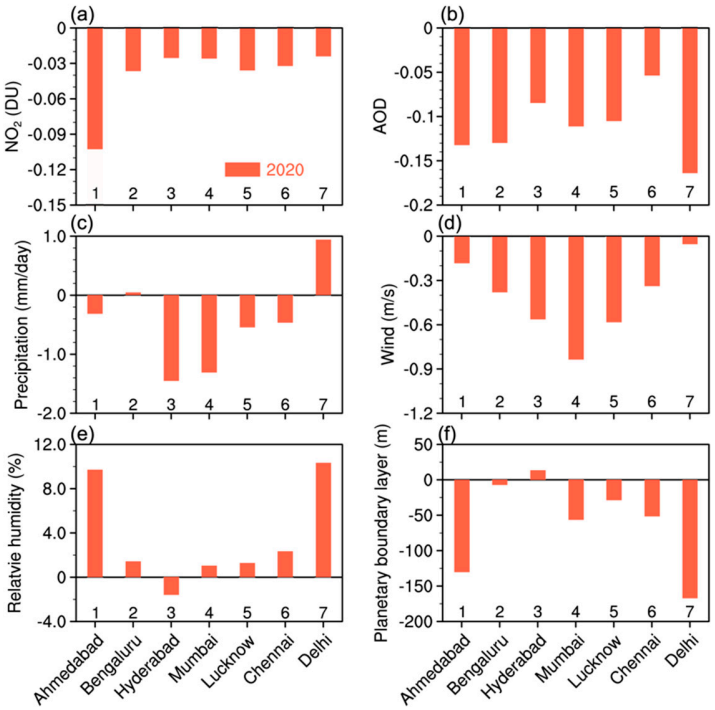


Figure S4. The changes (lockdown minus climatology) of the tropospheric NO_2, AOD, precipitation, wind, relative humidity, and planetary boundary layer at 7 sites in 2020 (light-red bar).

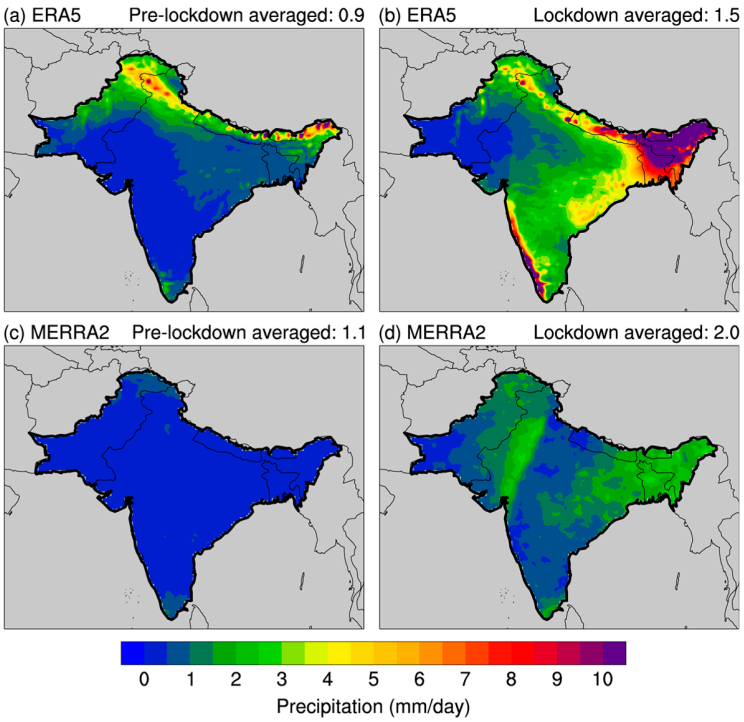


Figure S5. Spatial distribution of precipitation for the period of 2015-2020. (a): ERA5 during the per-lockdown period, (b): ERA5 during the lockdown period, (c): GPM during the per-lockdown period, and (d) GPM during the lockdown period.

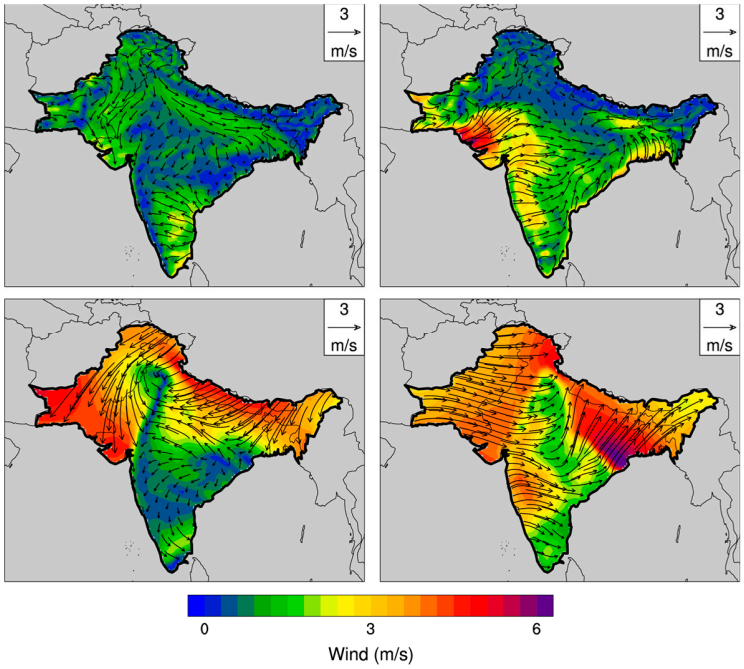


Figure S6. Spatial distribution of wind at 10 meter for the period of 2015-2020. (a): ERA5 during the per-lockdown period, (b): ERA5 during the lockdown period, (c): MERRA2 during the per-lockdown period, and (d) MERRA2 during the lockdown period.

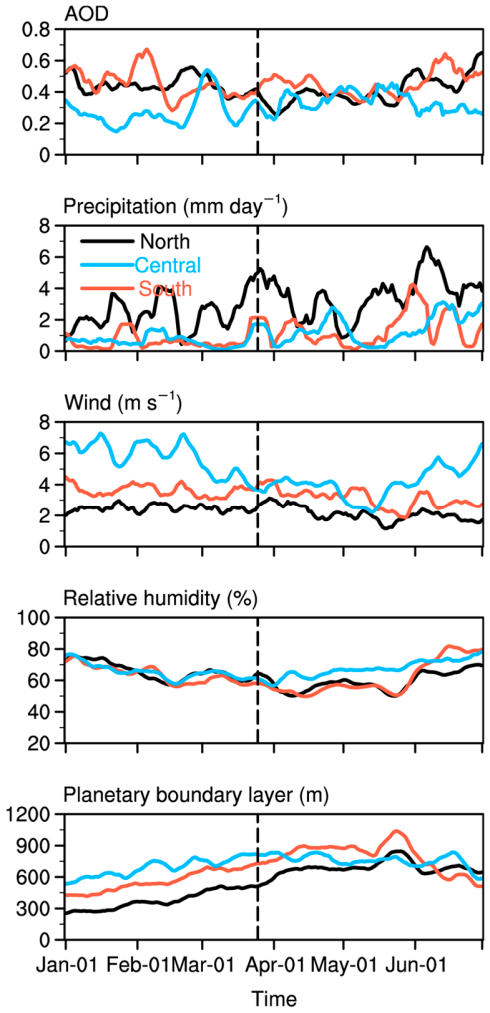


Figure S7. Time evolution of AOD, precipitation, wind, relative humidity and planetary boundary layer in 2020 over three subregions in the Indian subcontinent. The black, light-blue, and light-red lines respectively represent North, Central, and South Indian subcontinent