

Supplementary figure

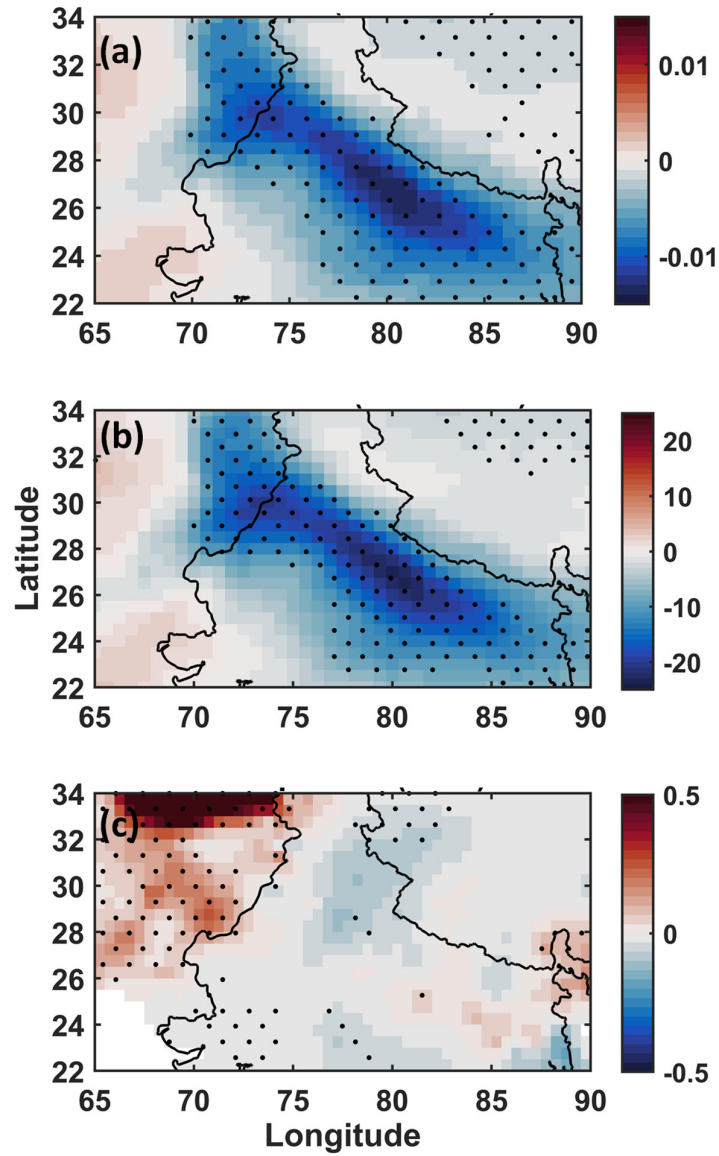


Figure S1. Trends (Year⁻¹) for pre-monsoon (a) dust AOD, (b) Dust burden (mg m⁻² day⁻¹), and (c) precipitation (mm day⁻¹) from MERRA-2 and Udel, respectively with respect to the base year (2001). Stipple shows the area where trends are significant at the 95% confidence level, determined using Mann-Kendall Trend Tests.

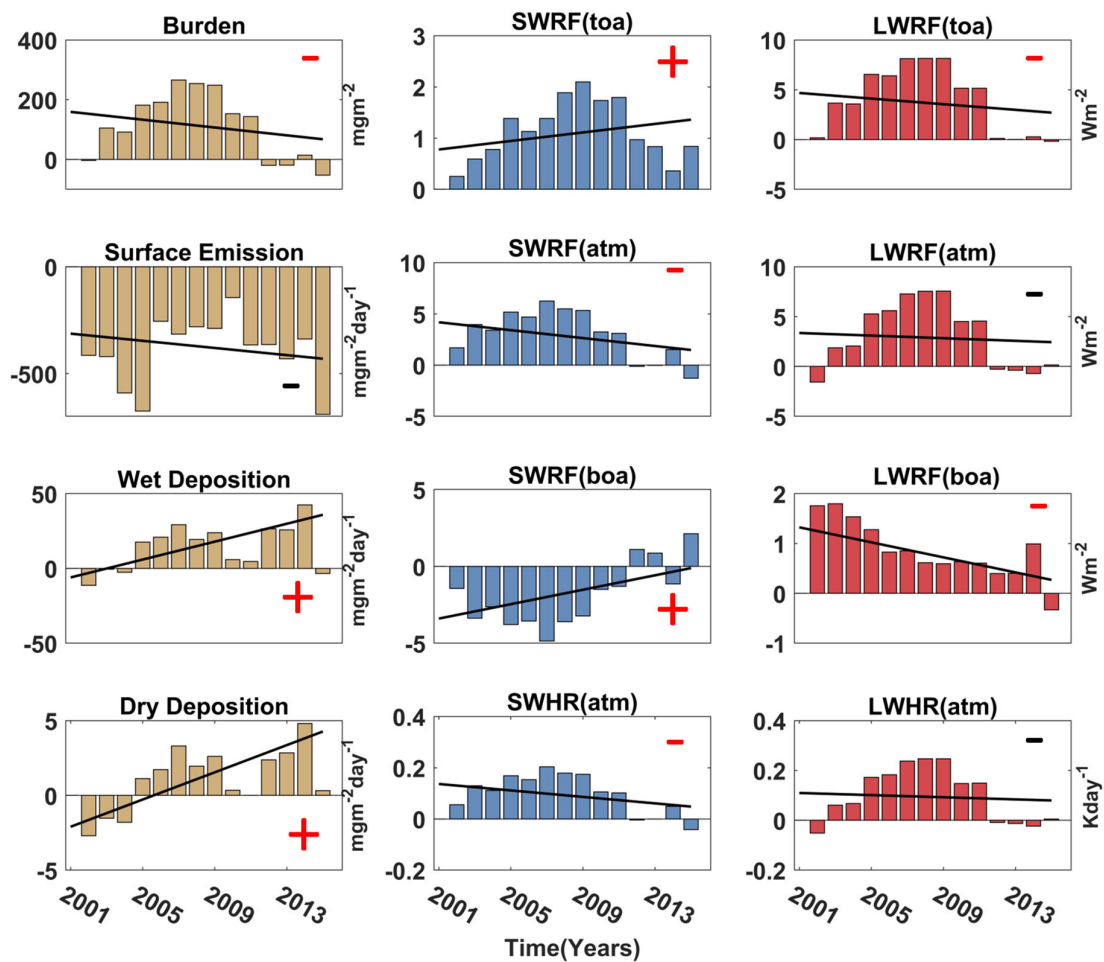


Figure S2. Trends (dust tracers and optical properties) within the NW box with respect to the base year (2001) in various parameters with the corresponding sign (positive/negative). SW, LW, and HR are acronyms for Shortwave, Longwave and Heating rate, respectively. The plus and minus signs show the nature of trend (with red colour for significant and black for insignificant trend) determined using Mann-Kendall trend test. The actual units of each variable are provided with each plot.