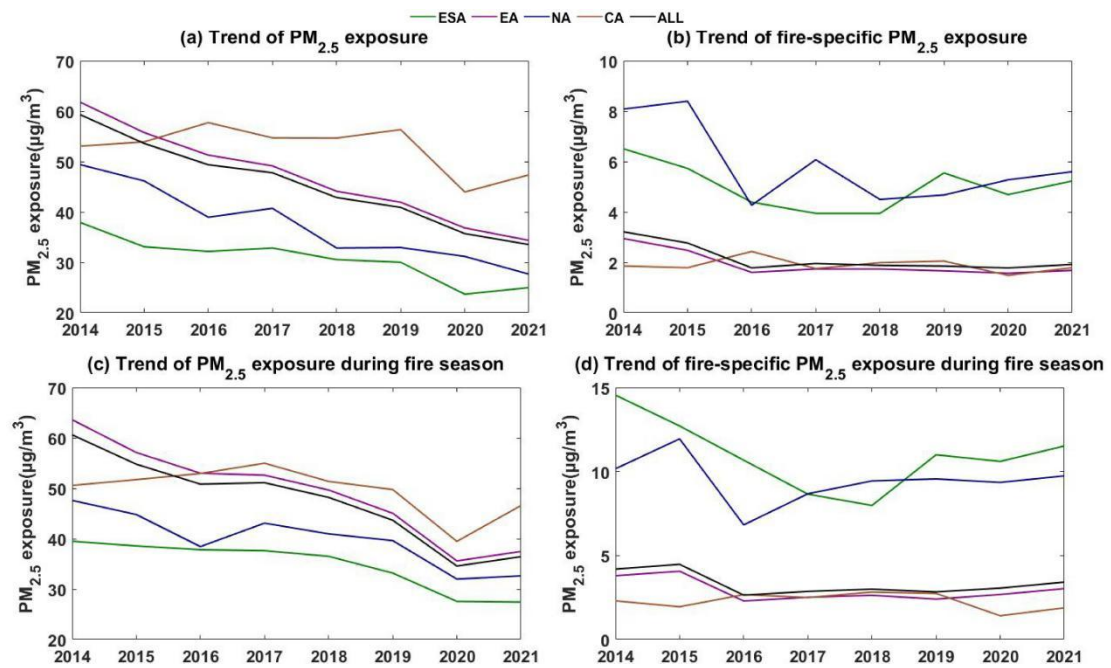
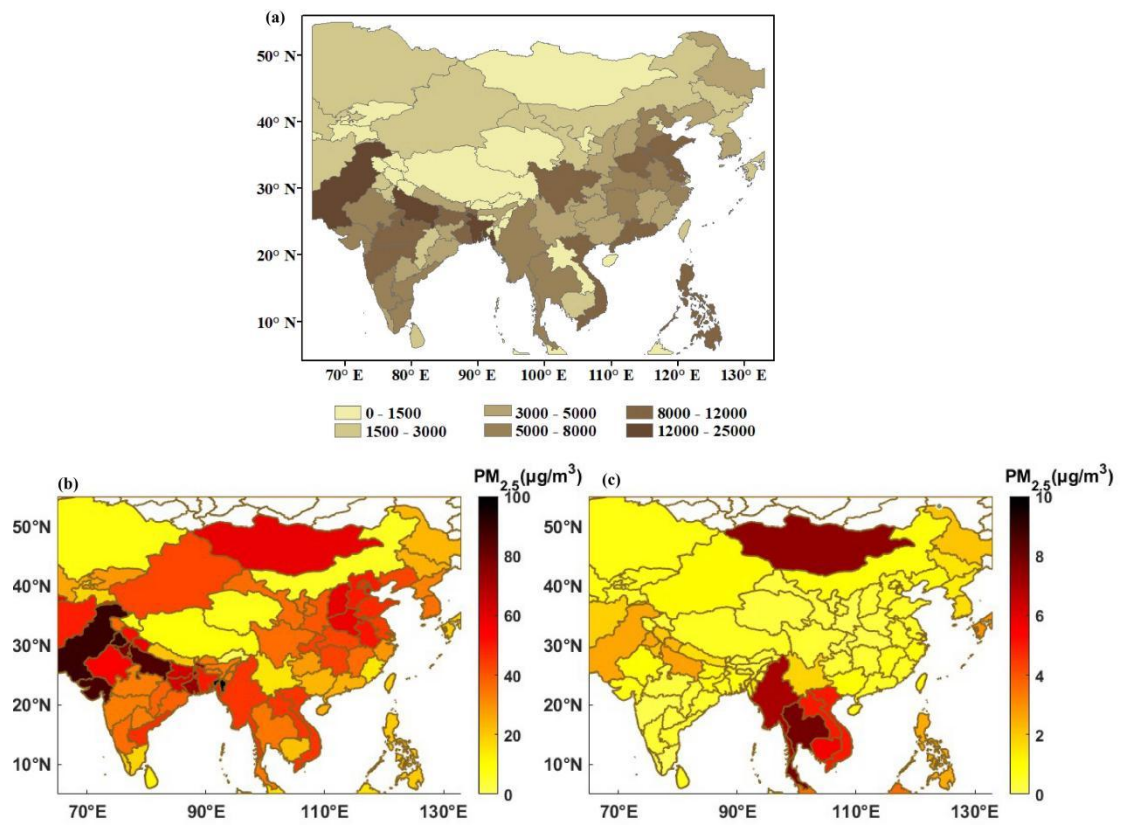


**Figure S1.** Distribution of air quality monitoring stations in Pacific Asia, with shading color in the background indicating green vegetation fraction.



**Figure S2.** Temporal variations of (a) annual mean  $PM_{2.5}$  exposure and (b) annual mean fire-specific  $PM_{2.5}$  in different regions; (c)(d) similar to (a)(b), but for fire season mean.



**Figure S3.** Temporal variations of (a) populations ( $\times 10^4$ ) and (b) annual mean  $PM_{2.5}$  in different regions; (c) annual mean fire-specific  $PM_{2.5}$ .