



S2 Fig. Surface roughness profile of pure polyester (0% SiO₂NPs) and polyester composite coatings (4.5% and 9% SiO₂NPs) on steel substrata under subtropical and tropical climate from year 0 to year 5. Corresponding surface profiles of atomic force micrographs (Fig. 1) showing the change in surface nanotopography of (A) 0% SiO₂NPs, (B) 4.5% SiO₂NPs, and 9% SiO₂NPs after the 5-year exposure to sub-tropical and tropical climates.