

We appreciate the feedback from the Topical editor and the reviewers, which will increase the value of the paper. We have addressed all comments and concerns from the reviewers and Topical editor. Major changes include the fit of a regional (Latin American) model and the comparison (with global estimates) of SOC stocks at the contextual resolution of 5x5km grids. We compare the resulting SOC stocks from our modeling approach in a country-specific basis with regional SOC models for Latin America and with previously reported SOC from global estimates (GSOCmapGSP, SoilGrids, and HWSD). We have also included a simple linear combination of the different modeling approaches by stacking the different predictions using a linear blend of models that we used to maximize the prediction accuracy. Our results suggest that global estimates predict higher SOC stocks than country-specific maps. We provide a reproducible example for SOC mapping that is currently being used for building capacities for digital soil mapping across Latin America with the ultimate goal of reducing uncertainties in the global carbon cycle.