

Reply to reviewer RC2

I still have concerns about presumptions about latitude and the data points. Your text states "Climate appears to be the principal factor explaining the low SOC contents in the studied soils (Plaza et al., 2018), with precipitations explaining 71.04% of the variability of T-SOCS ($R^2=0.7104$). " but as mentioned previously, this uses only 4 data points and a regression analysis shows the relationship is not significant ($p=0.155$). I haven't had time to check the significance using the second version of the figure with more data points.

Answer: Dear Sir, thank you very much. Some modifications were done in the text. Now the figure has two parts: (a) with T-SOCS ($R^2=0.7104$) where we have the four data corresponding to four sites and (b) with SOCS ($R^2=0.4115$) where we have twelve data obtains in and the sentence become as follows:

" Climate appears to be the principal factor explaining the low SOC contents in the studied soils as already observed by Plaza et al. (2018), with precipitations explaining 41.15% of the variability of SOCS ($R^2=0.4115$) along the soil profiles and 71.04% of the variability of T-SOCS ($R^2=0.7104$) "