

Reply to Editor EC1

Dear Editor, Thank you very much for your reply and remarks. Please find below how I improve the figure according to RC1 remarks. The text was modified according to the improvement made in figures.

Lines 190-195: There is potential for an informative figure out of this data which would be more beneficial than the figures with only 4 data points. Just a suggestion.

Answer: A new figure 3 was added

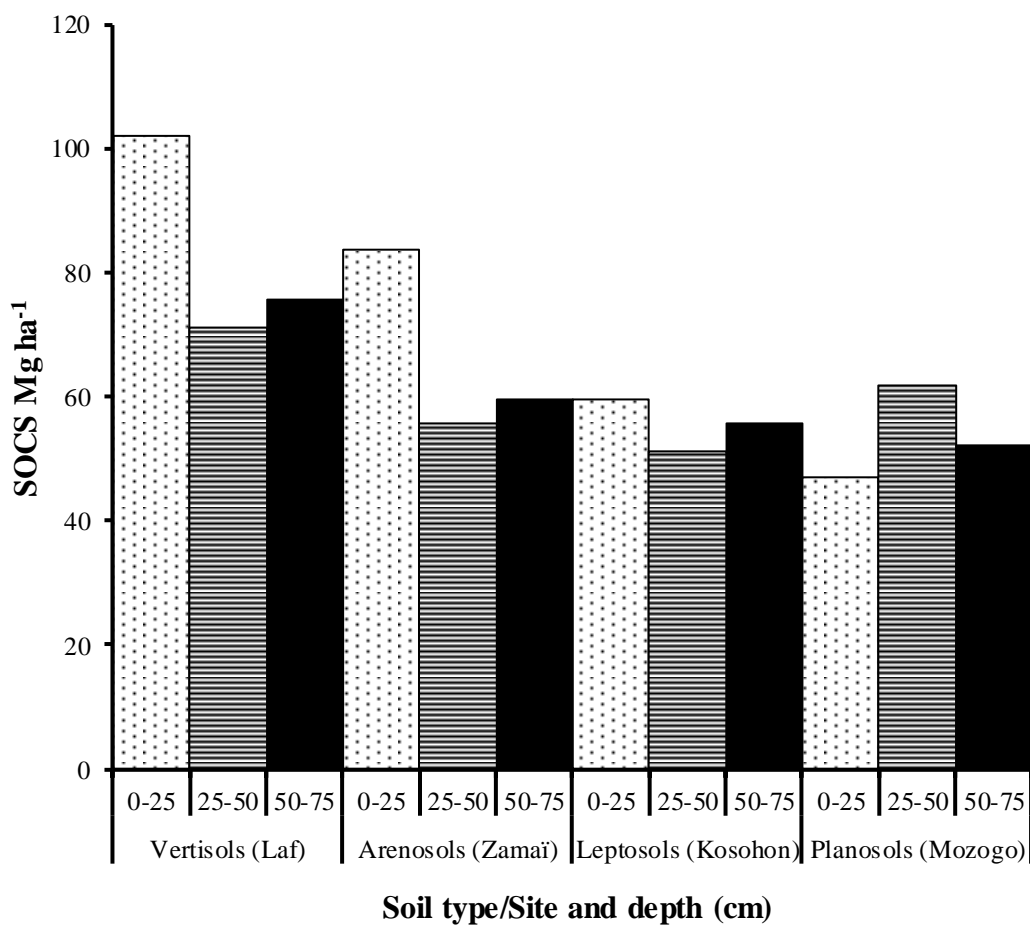


Fig. 3. Variation of SOCS along the soil profiles in the study sites.

Lines 199-200: Only 4 data points are used for this when a minimum of 10 is recommended. Four data points are not reliable. I suggest omitting this or use all the replicates.

Answer: Dear Sir, *T-SOCS is not a mean value according to IPCC (2003). As stated before, 4 data of T-SOCS correspond to 4 studied sites. To have 10 recommended data, we need then 10 studied sites. T-SOCS in a studied site is obtained through SOCS values from different*

soil profiles and different increments in soil profiles. This figure is important. In addition to the previous figure, we add another figure with different SOCS values (different replicates). Figure 4 is thus the plots of the soil organic carbon stock (SOCS) (a) and the total soil organic carbon stock (T-SOCS) (b) versus altitudinal gradient as presented below.

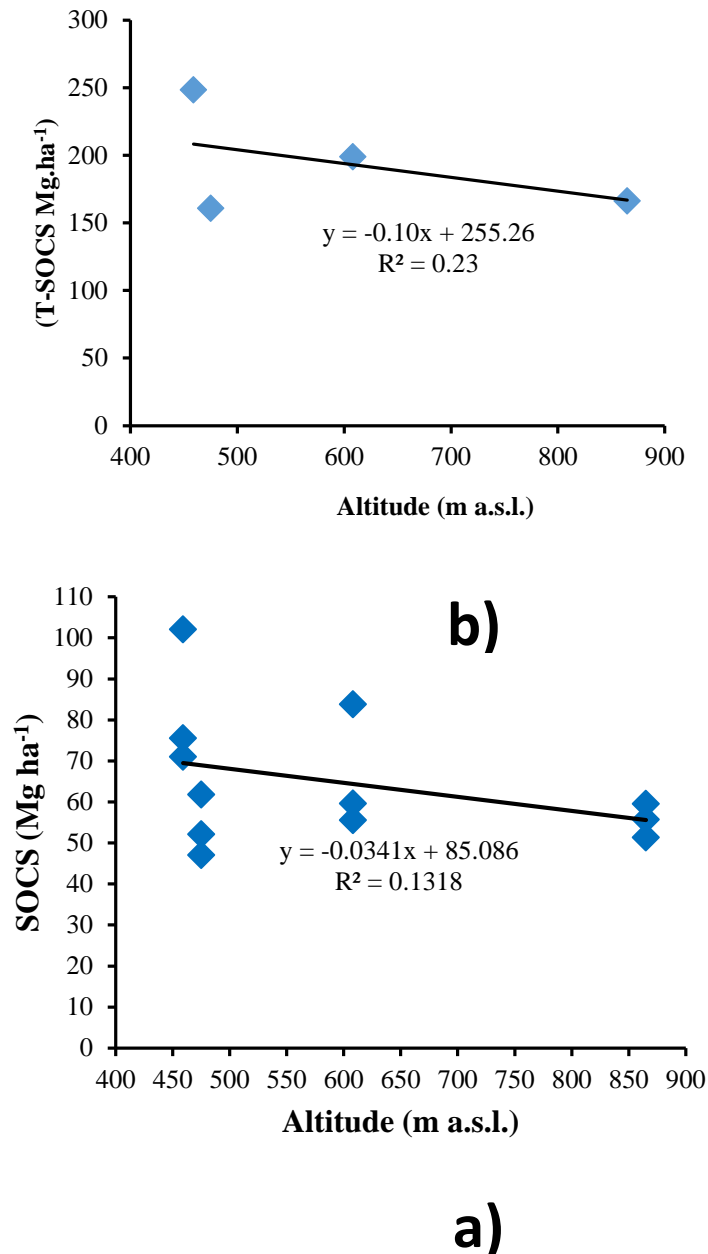
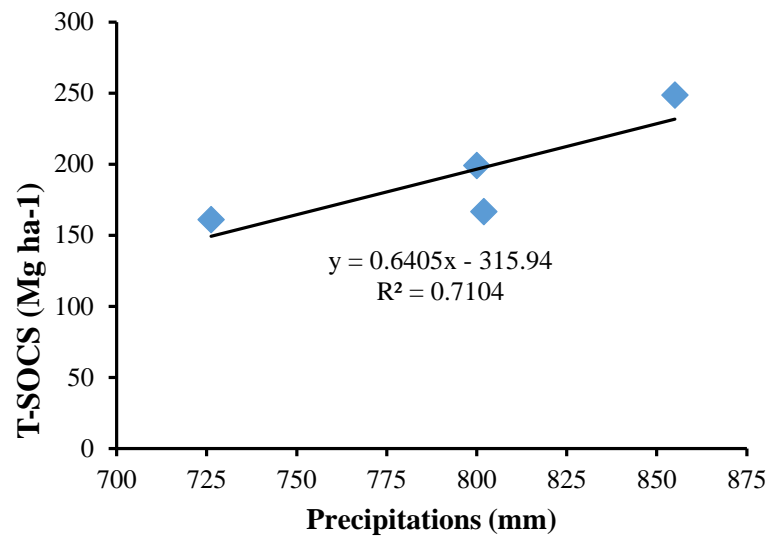


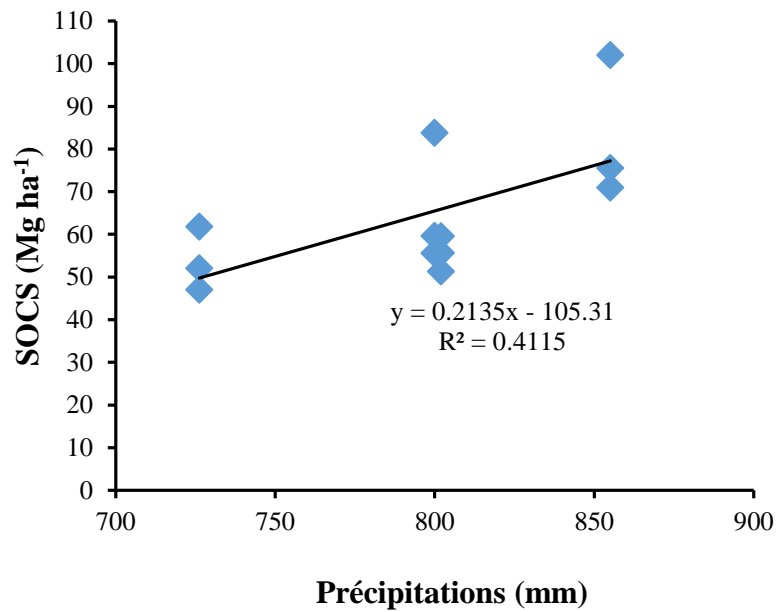
Fig 4. Plots of the soil organic carbon stock (SOCS) (a) and the total soil organic carbon stock (T-SOCS) (b) versus altitudinal gradient in the study area.

Lines 313-314: This sentence makes it sound like Plaza et al had an R^2 value of 0.7104 but from the figures I see it was this study. You only have 4 data points when a minimum of 10 is recommended for regression analysis. I therefore suggest that you don't report this in the text as it can't be considered reliable. Alternately, why not include the replicates?

Answer: As stated before, T-SOCS is not a mean value according to IPCC (2003). An additional figure with replicate for SOCS was added and modifications were made in the text. Please Sir, find below the new improved figure.



b)



a)

Fig. 5. Plots of the soil organic carbon stock (SOCS) (a) the total soil organic carbon stock (T-SOCS) (b) versus precipitations in the study area.