

Interactive comment on “Land-use change effects on soil quality in Montilla-Moriles DO, Southern Spain” by M. Martín-Carrillo et al.

Anonymous Referee #2

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Dear Editor The paper addresses a fundamental issues: -the influence of land use change on C stock in semiarid environment . The topic is appropriate for the journal and the paper well-structured but there are some minor weaknesses in the paper.

The main problem of the paper is the lack of statistical result. Without these results, it is difficult understand when differences in SOC TN , C/N are significant or not.

Below some specific comments:

Do you know which analysis method were used in 1965?- Pg 169 line 1 Check the first sentence- Pg 170 line 5 , change ; with , - Pg 170 line 6 Which is the fate of residues of AC1? Add this information in material and method- Pg 170 lines 1-2 In my opinion is not clear why soc does not decrease in AC2- Pg 170 line 8 How are prune residue

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in vineyard and olive grove managed?- Pg 170 line 9 and 10 Maybe 11g kg-1 is not different from 10 g kg-1 – Could you add standard deviation please?- Pg 170 line 13, change deep with depth- Pg 170 line 23. If the soil under vineyard is managed with continuous tillage , why do you write that residue input is restricted to the topsoil?- Pg 171 line 5 . What does “soil uses “ mean?- Pg 171 line 6 change soil organic carbon with SOC- Pg 171 line 9 . add statistical results- Pg 171 line 9-10-11. Specify the soil depth -

Pg 171 line 16. Rewrite the sentence- Pg 172 line 22. Improve this sentence- Pg 172 line 23 . These data are referred at which depth?- Pg 173 line 128 Before you wrote 46 years , and now you write 40- Pg. 174 line 6. I'm not agree with this explanation. The highest carbon content in the top layer is due to C input from biomass residue - Pg 174 line 15-16 are you sure ?- In my opinion conclusion has to be rewritten, highlighting the main result and some suggestions for environmental policy - Fig 3: Data are means ??? How many samples? The bars of error are not clear in figure 3- Check figure 4 : Miss error bar- I suggest to revise the English by native speaker - I suggest to add a figure on study area- Could you add a table about statistical result?-

Interactive comment on Solid Earth Discuss., 5, 163, 2013.

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