

## ***Interactive comment on “On soil textural classifications and soil texture-based estimations” by Miguel Ángel Martín et al.***

**Anonymous Referee #2**

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The manuscript is generally well written and aims to test the hypothesis if the use of fraction sizes in triplets with a size boundaries range different from the USDA standard textural fraction triplet ‘sand-silt-clay’ allows a more accurate reconstruction of the particle size distribution for estimate some soil parameters. The manuscript is well researched and subject of this work is relevant for the scope of Solid Earth and sufficiently novel and interesting to warrant publication. Abstract provide a concise and complete summary and the number and quality of references are appropriate. All sections of the manuscript (introduction, materials and methods, results, discussion and conclusions) are explicit and developed in an appropriate way. However sometimes the text is confused and there are some inconsistencies that need clarification. In the specific comments, I provide a few indications that illustrate these concerns, which I

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consider as minor revisions, and after fixing these problems this will be a very good paper whose publication I recommend without reservation.

Specific comments: Abstract: line 4 – “...experimental data for 6300 soil samples.”. The same occurs in the Conclusions section in line 10 – “...for 6300 predominantly...”. In the Materials and Methods section, authors included a total of 6240 soil samples in this study after application of a selection criteria (described in Martín et al. (2017a)). I think it’s better to put the same value of samples included in the study, which is 6240.

Line 5, 6 – “... original ones in 25 and 85% of cases...” but in Results section -> page 4, line 31 – “...bigger than 97% of the total...”. Why this difference?

Line 6 – The triplet ‘sand-silt-sand’ must be ‘sand-silt-clay’

Discussion: Line 19 – “The diameter. ... medium sand” (line 21). It’s difficult to understand this phrase by looking at figure 2! Figure 2 should illustrate the phrase? It’s not very clear!

There is a PDF file attached with some misspellings found on the manuscript.

Please also note the supplement to this comment:

<https://www.solid-earth-discuss.net/se-2017-84/se-2017-84-RC2-supplement.pdf>

Interactive comment on Solid Earth Discuss., <https://doi.org/10.5194/se-2017-84>, 2017.

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