

Interactive comment on “CHLSOC: The Chilean Soil Organic Carbon database, a multi-institutional collaborative effort” by Marco Pfeiffer et al.

Anonymous Referee #4

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*There are still areas where the grammar and sentence structure needs work, especially in the first few paragraphs.

*page 3, I don't think the most of the paragraph that begins at line 65, where the number of data points contributed by various people is mentioned, adds much to the manuscript. I'd suggest shortening this paragraph just to the first two sentences and general information that the data came from a variety of sources, including areas of low representation (i.e. METHANOBASE and SEIA data) and by scientists as well as beneficiaries (farmers) of the Agricultural and Livestock Service (SAG by its Spanish acronym) subsidy program.

*page 3, line 94: It would be better to introduce this section with a topic sentence saying that there are several caveats users should be aware of with these data and

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then list these caveats in sentences starting with first, second, and finally, so the reader understands when they authors are transitioning from one idea to another

*page 3, line 97: what level of uncertainty is added by using the wet oxidation method? Why? Is there a reference you could add here where users of the data could learn more about this issue if they wanted to? Oh, some of that information is at line 103. These sentences need to be together. And I'd like more information explicitly given to the reader about the potential errors introduced by wet oxidation (too high, too low?) so they don't need to go to that reference to figure that information out.

*page 3, line 102: I don't think you need include "which is not properly addressed in Chile on a national level", especially since the authors bring this up again in page 4, line 1.

*Table 2: I'm suspicious of the SOC values based on what's listed in Table on as minimum and maximum values. First, the minimum value is listed as 0.00006 % C. I don't know any method that can accurately measure C levels that low. The maximum value is also listed as over 80 % C. I work in highly organic C soils and I have never seen a % C value higher than about 60 % and that was in a burned area. In addition, based on Table 3, these point are found in areas that are not known for high C soils. Should these data have been excluded during a QC process. Did you do any QCing? Or did you accept all data given to you? Either way, it should be explicitly stated that the data were or were not reviewed (and if they were how they were evaluated should also be included).

*I notice where the data are online there is no metadata file. I would suggest you add a meta data file to the online location of the data so that users who come upon the data without finding this reference are able to use it. (This is not something that needs to happen before the paper is published, but a recommendation for future users.)

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2019-161, 2019.

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