

## ***Interactive comment on “Standardised soil profile data to support global mapping and modelling (WoSIS snapshot 2019)” by Niels H. Batjes et al.***

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### **1 General comments**

I want to start congratulating ISRIC for the excellent work with the World Soil Information Service (WoSIS). The importance of such a service cannot be overstated. The international community is certainly happy to hear that a second static WoSIS snapshot is finally released, bringing with it almost 200 thousand soil profiles. The present manuscript has the important role of informing soil data producers and users on the current status of WoSIS and availability of standardised point soil data for digital soil mapping and earth system modelling. Thus, I understand that it is well suited for publication, provided that the authors make a few technical corrections and provide

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some further information. In the next section I give more details on how this could be achieved.

### **2 Specific comments**

I have found a few typos in the abstract. There are unnecessary parenthesis around soil property names (lines 10 to 15). Also, there is no need to use capitals for soil property names. When you mention that the original soil classification is provided, please specify that it is only the international soil classification that you are considering. These typos and inconsistencies appear in other parts of the document and should be taken care of.

In the introduction (page 3, line 15), specify that you are discussing the changes since the preceding **static** snapshot. In line 20 of the same page, make it clear that you are referring to various **spatial** scale levels.

In section *WoSIS workflow* you mention numbers of profiles several times. Add a percent estimate along these figures (between parenthesis) so that the user can more properly see them in relative terms. You should do the same in the other sections of the manuscript as well.

In **Consistency checks**, be careful with generalizations such as 'in accord with current conventions' (page 6, line 11). I understand that the conventions that are used in WoSIS are those agreed internationally but that not necessarily are used in various countries. Perhaps you should say something such as 'in accord with current **internationally accepted** conventions'. In the same page, explain how organic layers are flagged, e.g. do you create an auxiliary variable?

In *Flagging duplicate profiles*, I think that readers and soil data users would like to know one or two examples of what is done when you perform 'additional visual checks'. You

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also mention that this is a laborious process. Provide some time estimate so that readers can value your efforts.

In *Ensuring naming consistency*, first paragraph, you could use a sentence to say what happens when data do not pass a quality check.

In *Providing measures for geographic and attribute accuracy*, add the respective units to measures of geographic accuracy.

In your second figure, you could highlight the new soil profiles included in the present snapshot so that one can have a better idea of the improvement. You could also have two images to show this improvement.

In the last paragraph of page 11, you mention soil depth, but you make no reference to the depth range spanned by the data. I think that this would be a valuable information. Note that you're also not mentioning the period of time covered by the data, another interesting information for readers – specially if country or region specific.

In *Data availability* you mention the CSV file format. However, in page 13, you state that the data is distributed in tab-separated values format, that is TSV. Please verify if this information is correct to avoid confusion among readers.

In the conclusions, you state that 'important gaps in the geographic and feature space will be addressed in future releases'. I think that it would be useful – for soil data users – to present a calendar for the planed releases of snapshots, at least for static snapshots. This way, soil data users could plan their activities with more certainty.

### **3 Final considerations**

As I have said above, ISRIC has been doing a great job preparing standardized soil data for global applications. The present manuscript is necessary for soil data users

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to understand the soil data available in WoSIS. It also serves as a reference for soil data repository managers to define their workflow as to meet international standards. I recommend the publication of the manuscript after the authors deal with the necessary technical corrections.

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