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Interactive comment on "Uncertainty indication in soil function maps ndash; Transparent and easy-to-use information to support sustainable use of soil resources" *by* Lucie Greiner et al.

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I enjoyed reading this paper and it revives memories of a similar project in which I was involved in the mid 2000s; it is good to see how the science has progressed since then. It represents the sort of research that demonstrates the value of soils science and data to wider society. that I have swayed between minor and major revision and I will leave it to the editor to decide whether my principal comments need to be addressed.

I attach the paper with some minor comments and suggestions in 'sticky notes' in addition to those below. Please let me know if it is not attached, it appeared to attach very quickly!

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Discussion paper

The paper relies heavily on the output from the DSM exercise which models data from 418 data points in the study area (170 square kilometres). From my experience this study area is 'data heavy' - over 2 observations to a metre depth per square kilometre. Are these data from a specific grid survey or does it represent the density of observations across Switzerland? This poses the question of whether this approach can be replicated across larger areas to the same degree of detail. The DSM appears to have been conducted independently of soil type; what was the reason (s) for this?

The study area is a curious shape. It would have been beneficial if it had been a river catchment or an administrative area and was it chosen, at least in part, because of data availability?

The DSM was carried out using soil legacy data for which no detail is provided . The paper would benefit from some information on the age, purpose and the attributes within these data; it would make the paper more transparent and the reader would understand the opportunities and limitations of such data. Are they still fit for purpose? Don't worry,it is an issue for soil science everywhere!

Use the term 'sub-functions' throughout, they are not the high level functions.

Some figures are very good e.g. Figures 4, 6 and 7 whereas others are too small (3, 5) and do not encourage scrutiny and I would suggest screening out the areas that are not assessed (mainly forestry) on Figure 1.

Table 1 stretches across two pages and much of the title would be better as a footnote below it.

I appreciate the problem but some sections are quite difficult to read as they are 'acronym heavy' e.g. Section 2.4. The use of acronyms for the models and their outputs add to this but I cannot suggest a better way I'm afraid.

Please also note the supplement to this comment:

https://www.soil-discuss.net/soil-2017-41/soil-2017-41-RC2-supplement.pdf

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