

## ***Interactive comment on “Uncertainty indication in soil function maps – Transparent and easy-to-use information to support sustainable use of soil resources” by Lucie Greiner et al.***

### **Anonymous Referee #1**

Received and published: 3 February 2018

Manuscript soil-2017-41 Uncertainty indication in soil function maps –Transparent and easy-to-use information to support sustainable use of soil resources under review for journal SOIL is fitting this journal, and it is moderately stimulating. Tables: 2 Figures: 7 Appendix: 2 Citations: 56 (easily findable: 53; published after the year 2014: 9; SOIL: 4) Title: 19 words. Not very informative Abstract: not very informative Strengthens: a lot of data Weaknesses: aim, reproducibility

In detail (page.row): 1.20 SFA, please spell all the acronym out the first time they appear in the text 3.25 Please, describe the soils according to last edition of the WRB soil classification system (IUSS WG WRB, 2015). Main WRB Great Group proba-

C1

bly deserve consideration at keyword level. 5.5 “The capacity of the soil to filter and buffer trace metals (R-icont) were assessed for cadmium, copper and zinc.” A potentially misleading choice of elements in agricultural context. Please, explain why this choice. 9.5 Soil depth was treated as fixed value per raster cell. Quite strange choice in this geomorphological setting. Please, clarify maybe I did not understand well 11.5 The percentage of total variance attributed to internal variability and model uncertainty in the land carbon cycle comes normally mostly from model structure (e.g. DOI> 10.1126/science.aam8328) 10.21 “Mapping the ten soil functions for the agricultural soils.” Soil functions include the production (agriculture) function. This definition is highly confusing.

The study present the results of primary scientific research. Experiments, statistics, and other analyses are performed to a sound technical standard and are described in moderate detail. Conclusions presented are unfocused, although supported by the data. The article is presented in a partially comprehensible manner. The research meets all applicable standards for the research integrity. The article does not adhere at all to appropriate reporting guidelines and community standards for data availability for replication purposes, the full raw experimental database must be available or deposited at relevant data repository (e.g. Zenodo). The research output, in terms of novelty, scores modest uniqueness, not introducing an original way of thinking. The level of clarity is partially good. The state of the art in literature is quite up-to-date. Figures are not all necessary and informative, for instance Figure 1 should be replaced by a kmz file and geographical coordinates clearly indicated. This paper does adopt a standard methodology in respect to the object of research. The main goal has been not accomplished as unclear. If the main goal is communication, the experiment should have been conducted (and then described) by measuring audience reactions. This is, actually, a methodology paper. But, the Authors must clearly explain what the innovative part of the proposed method is. The paper does not fully discuss the limitations of the approach and potential biases due to the assumptions made. Moderate is forecast its potential impact upon the international scientific community of reference. Refer-

C2

ences IUSS Working Group WRB. 2015. World Reference Base for Soil Resources 2014, update 2015 International soil classification system for naming soils and creating legends for soil maps. World Soil Resources Reports No. 106. FAO, Rome IT, 192 p.

---

Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2017-41>, 2018.