

## ***Interactive comment on “Added value of geophysics-based soil mapping in agro-ecosystem simulations” by Cosimo Brogi et al.***

**Cosimo Brogi et al.**

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We thank the anonymous referee for taking the time to evaluate our manuscript. The provided review is nice and thorough and I can assure you that all comments will be carefully addressed.

Once the open discussion of the manuscript will come to an end, we will provide a new edited version of the manuscript and a response letter where comments and edits from both referees as well as other eventual sources will be addressed and discussed in detail.

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A couple of aspects from this review can be already mentioned here in this short and preliminary reply:

First, we will try to include data on crop productivity for sugar beet. Unfortunately, we have very limited actual yield data from the given year in the study area. Thus, only one small field cropped with sugar beet has the necessary data. Furthermore, it is true that the yield simulated with the three maps can be compared. However, to provide farmers with a meaningful economical evaluation it would be necessary to investigate in detail further aspects such as irrigation and fertilization (preferably across multiple seasons and with different climatic variables). Thus, we would like to stress that this would go well beyond the scope of this study. Another aspect that should be taken into account is that LAI, for which we have a nice dataset, is more and more frequently used as a proxy for biomass in crop modelling (as the two are generally closely linked). For these reasons, we think that including the proposed information on yield will be an interesting addition, but we are aware that we do not have the data to expand the topic to the broad boundaries suggested by the reviewer. We will then carefully introduce the topic and discuss the limitations of our findings as well as the aspects mentioned above and the potential for future research.

Second, editing parts of the conclusions is a very good suggestion that we will be happy to implement. This could not only discuss future research but also aspects such as the one proposed by the referee in his previous comment in addition to those brought up by the second referee.

Thank you again for your time, Cosimo Brogi, on behalf of all co-authors

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Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2020-78>, 2020.

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