

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

Jacopo Boaga (Referee)

jacopo.boaga@unipd.it

Received and published: 3 February 2021

The paper regards the comparison of geophysics-based and classical soil mapping as input for agronomical simulations. I agree with the previous revisions of the colleagues. Paper is well written and results are supported by the data presented. Topic is of interest for Soil and I think the paper is acceptable for publication after minor corrections.

In particular authors should underlined that nowadays inversion of Eca data are common, since a number of proficient codes are available. From the paper reading it seems only nominal exploration depth of EMI is used, limiting the precision of the subsoil characterisation. This is just one way to use EMI survey, but not the unique one. Inversion

C1

routine suitable for the equipment used for the study is easily accessible (e.g. EmgapY by McLachlan et al., just to name one). This option should be at least suggested in the text, as the resolution limits of the technique and the problems that can occur with calibration/drift (e.g. Von Hebel et al 2019, Mester et al. 2014, Boaga 2017, Tan et al. 2018).

Ln54-56 This sentence about management is not clear, please re-phrase

Fig.2a Please provide a color scale and improve caption (also in other figures). A reader should have a clear comprehension of a figure just from the caption.

Ln310 'vales' instead of 'values'?

Fig. 7 insert a color scale for the density

Ln 355 please introduce RapidEye for non specialist

Fig.8 improve caption

Ln 395-400 Specify if you are using the nominal exploration depth of EMI

Thanks for the very interesting contribution it was a pleasure to read

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

C2