

Interactive comment on “Machine learning and soil sciences: A review aided by machine learning tools” by José Padarian et al.

Anonymous Referee #1

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This is a timely and very interesting paper.

I have on y a few minor suggestions that may improve the paper.

Page 15 lines 3-10. Another way to assess the importance/significance of the covariates in ML is to run the model several times excluding at each time one co-variate. This may in some cases be more efficient and robust than just counting the number of times they are used in the model. Some ML tools such as GBM also offer the possibility to visualize the effect of a covariate on a target property, this may be useful too to interpret the results.

Page 18 Lines 13-15. This consideration about how to open the 'black-box' of CNN or NN is very important. I am disappointed to find it just in the conclusion. I think it

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merits a section in the main text explaining how this black box has been opened and with corresponding cites and references.

I'm not a native English speaker but I find that the paper is well written.

Interactive comment on SOIL Discuss., <https://doi.org/10.5194/soil-2019-57>, 2019.

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