

Interactive comment on "A new dataset of soil Carbon and Nitrogen stocks and profiles from an instrumented Greenlandic fen designed to evaluate land-surface models" by Xavier Morel et al.

Anonymous Referee #1

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Dear authors, the paper is very interesting, well-documented and novel. The information included can be very useful to help the scientific community to understand the carbon cycle and the soil dynamics in arctic and boreal areas. However, I found some issues that must be solved prior to accepting this paper. 1. There are a lot of typographical mistakes (parenthesis, spaces, etc.). 2. I miss some literature about soil geography, soil mapping and soil catena. Why? Because you talking about soil variations at different spatial positions. 3. I miss a complete discussion, using these above-mentioned terms, related to differences among different years or transects,

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other studies in boreal and arctic areas. Are these data representative for other regions? Or this region? 4. The results and discussion must be merged since the authors included several references there. Please, do not include equations here, this is methodology. 5. The conclusions must be included without references. Please, check them. 6. Figures: They are very nice, but in figure 1, you have to include coordinates. See more comments in my attached, pdf.

Please also note the supplement to this comment: https://www.earth-syst-sci-data-discuss.net/essd-2019-225/essd-2019-225-RC1-supplement.pdf

Interactive comment on Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2019-225, 2020.