

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 #3

Received and published: 9 March 2020

General comments

This data manuscript describes a survey of soil properties—depth, carbon, nitrogen, bulk density, etc.—from a Greenland fen. Such data are useful and relatively uncommon, although the authors perhaps overstate how valuable this particular dataset will be for models. The methods seem generally sound and clearly described.

There are some problems. As noted by the other reviewers, the ms has language errors throughout that are distracting and cumulatively make reading difficult. Several of the

C1

figures should be re-thought, and some parts of the text need to be reconsidered. For all these, see specific comments below.

Specific comments

1. Page 1, line 2: “which makes primary productivity exceed decomposition” – while technically true this is misleading. High water content's primary effect is to reduce decomposition; reword
2. P. 1, l. 11: awkward; “modelisation” isn't an English word
3. P. 2, l. 5: attributed to?
4. P. 2, l. 13-14: this sentence seems to contradict itself
5. P. 2, bottom: good
6. P. 5, l. 1-4: awkward and unclear
7. Figure 1 needs proper scale bars and compass roses, not just a pasted-together pastiche of Google Earth images
8. Tables 3 and 4: why is the Ct line italicized?
9. Figure 4: necessary?

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

C2