

## ***Interactive comment on “Biogeochemical data from terrestrial and aquatic ecosystems in a periglacial catchment, West Greenland” by Tobias Lindborg et al.***

**Tobias Lindborg et al.**

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Author's response on comments from R2 (J. Stern)

Comment: This manuscript presents a large and detailed set of new measurements taken in a location that may be representative of portions of the Arctic currently subject to global change. As such, this dataset is a great contribution to the community and will hopefully stimulate some interpretation and comparison between other Greenland sites and the Arctic as a whole. Response: The authors wish to thank the reviewer for all comments and to help us making the manuscript better, thanks! Manuscript changes: -

C1

Comment: When I first read the manuscript, I was surprised at the relatively small amount of discussion and synthesis there was of the results. However, after reading the aims and scope of ESSD, I understand that interpretation is not required and is in fact somewhat discouraged. Regardless, it would have been nice to see a small discussion section making connections between the various data in the dataset, even though I realize that this is not the aim of the journal. As such, it is difficult to comment on anything more than the data collection methods and data presentation, which appear to be thorough and appropriate for the scientific study. The data presented is interesting and suggests, to me, other possible measurements and studies that could be performed at this site to provide even more information about the exchange of carbon between different pools. Response: Yes, this is a data-paper manuscript and structured as outlined by ESSDD with no synthesis or higher level of discussion (apart from data descriptive texts). Synthesis, interpretations and following discussions will be a task for future users of the database/manuscript, and in other journals. We ourselves have ongoing work related to this dataset doing this. We are happy that you find the methods and data presentation appropriate and interesting. Manuscript changes: -

Comment: I did notice that none of the trace and major elemental data obtained by ICP-MS was presented in results, and I think this is a big omission that could be remedied with a figure similar to figures 10 and 11 showing at least major elements. Response: Agree, we will update the manuscript with a figure according to comment. Manuscript changes: New figure illustrating ICP-MS data will be added to Result with a descriptive text.

Comment: Also, it should be made clear exactly on which carbon phase isotopes are measured. While this is somewhat clear in the methods section, but in figures 10 and 11, it should be made clear that in waters you are measuring  $^{13}\text{C}$ -DIC only (and not POC or DOC). Response: Yes, the figures will be updated in revised manuscript. Manuscript changes: Figure/caption will be updated according to comment. Comment:

C2

Finally, some of the figures are referenced incorrectly or not referenced at all. For example, Fig. 12 should be referenced on p. 15, l.3. On the same page, l. 13, where Fig. 8 is referenced, it appears that Fig. 9 is the one that should be referenced, and because this is the first reference to this figure, it should appear after Fig. 12. Response: Thank you for pointing this out. Manuscript changes: Figure references will be updated according to comment.

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