

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

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Author's response on comments from R1 (J. White)

Comment: This study provides the most comprehensive dataset of which I am aware for a periglacial lake area in West Greenland. The measurements include hydrologic, geo-chemical, physiographic, biological, for the transitions from upland soils to profundal lake environments across seasons and multiple years. The measurements seem to have been carefully executed with proper quality control. Response: The authors wish to thank the reviewer for all comments and to helping out making the manuscript better, thanks! Manuscript changes: -

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Comment: The one area that needs some attention is the Results section. This section might be labeled Results and Discussion given the occasional effort to explore the results. In several subsections there is some discussion of trends in the data. However, it seems that the discussion has been restrained in this paper, which might be worth reconsidering. If a discussion of the results from the study is undertaken, then a more fulsome effort should be made. There are places where the effort seems only partially complete. Response: The data-paper concept is not a synthesis and result discussion type of forum. To explore the results and synthesize is out of scope. We will go through the Result section and make sure that the descriptive texts within each subsection have a good overall balance. However, we do not have any discussion on resulting data more than to inform the reader on the general data quality and appearance/structure. This to guide reader on data properties to a better use of the attached database. This is also how we have understood the ESSDD instructions for authors. Manuscript changes: the revised manuscript will have a slightly updated “Results”section. Any discussion that is out of scope for this work will be changed to a descriptive text on resulting data.

Author's response on supplementary comments from R1 (J. White)

1. Comments: Pg 1, Line 33: missing article 'a'. Author's response: revised according to comment. Changes in manuscript: adding "a" 2. Comments: Pg 2, Line 22: Spelling is Arctic. Author's response: changed according to comment. Changes in manuscript: Changing to Arctic 3. Comments: Pg 2, Line 33-34: Awkward conflation of thoughts using mixed verb tenses. May need to simplify structure to make more clear. Author's response: Agree. Changes in manuscript: Sentence revised to clarify. 4. Comments: Pg 5, Line 14: Spelling is 'through'. Author's response: revised according to comment. Changes in manuscript: revised spelling. 5. Comments: Pg 5, Line 15: misplaced phrase- 'water in small temporary ponds and ice wedges was sampled...'. Author's response: revised according to comment. Changes in manuscript: revised sentence. 6. Comments: Pg 6, Line 5: Spelling 'March'. Author's response: revised according to comment. Changes in manuscript: changed spelling. 7. Comments: Pg 8, Line

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24: remove 'of which'. Author's response: revised according to comment. Changes in manuscript: "of which" removed. 8. Comments: Pg 8, line 29: spelling correction 'sampled'. Author's response: changed according to comment. Changes in manuscript: spelling corrected. 9. Comments: Pg 8, Line 31: plural verb 'were' for plural noun fauna. Author's response: revised according to comment. Changes in manuscript: spelling corrected. 10. Comments: Pg 10, Line 36: semi-quantitative analysis should be explained. Author's response: Text have been added to explain semi-quantitative analysis. Changes in manuscript: New sentence added. 11. Comments: Pg 12, Line 25: Should be 'Vienna-Canyon Diablo Troilite". Author's response: Changed according to comment. Changes in manuscript: Spelling corrected. 12. Comments: Pg 12, Line 30: one word: 'database'. Author's response: Spelling changed to one word. Changes in manuscript: spelling corrected. 13. Comments: Pg 13, Line 10: first mention of Pingo in the sample area. Should be addressed or eliminated. Author's response: text added to clarify that the Pingo feature is located outside of the TBL-catchment and used as reference sample. Changes in manuscript: new sentence added. 14. Comments: Pg 13, Line 23: remove. Author's response: removed Changes in manuscript: - removed 15. Comments: Pg 14 Results: This might be labeled Results and Discussion. In several sections below there is some discussion of trends in the data. It seems that discussion has been restrained in this paper, which might be worth reconsidering. If discussion is undertaken, then a more fulsome effort should be made. Author's response: No further data analysis or synthesis is made in the paper. This is, as we understand it, according to journal policy. However, the data is described under the section "Results" to facilitate further use and to clarify data structure and data sub-set linkage. We will update result to get a slightly better balance between the resulting data descriptions in the revised manuscript. Changes in manuscript: text in Results updated 16. Comments: Pg 14, Line 23: Stable isotopic results should be described as enriched or depleted in the heavy isotope rather than the ambiguous terms 'low' and 'high'. This should be fixed throughout the manuscript. Author's response: The text sections describing stable isotopes have been changed according to comment.

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Changes in manuscript: "low and "high" have been changed to "depleted" and "enriched" 17. Comments: Pg 15, Line 5: This suggests temporal sampling throughout ice cover. But you only have a single time point. This should be modified to more accurately reflect the limits of the study. Author's response: We do have data for one winter period as time series. This is described on Pg 6 Line 5-9. Changes in manuscript: none 18. Comments: Pg 17, Line 5: word here is 'dominant' taxa should be taxon and verb is 'was'. Author's response: Absolutely. Changes in manuscript: According to comment. 19. Comments: Pg 17, Line 21: Awkward sentence here. 'biomasses'. Suggest 'greater depth of 16 m' as a better phrase. Author's response: ok. Changes in manuscript: text changed as suggested. 20. Comments: Pg 17, Line 38: superscript missing. Author's response: ok. Changes in manuscript: superscript added.

Interactive comment on Earth Syst. Sci. Data Discuss., doi:10.5194/essd-2016-23, 2016.

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