

Interactive comment on “Stable isotopic composition of top consumers in Arctic cryoconite holes: revealing different position in supraglacial trophic network” by Tereza Jaroměřská et al.

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Dear Mr. Rozwalak,

thank you very much for reading our work as well as for your comment. We appreciate it very much.

The data presenting the community structure of primary producers on each glacier were not incorporated into the manuscript because the preservation of the samples by freezing has usually a taxon-specific effect on the survival of the cells of phototrophs. Thus, it makes it impossible to provide quantification. For example, the cells of glacial

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algae withstand the repeated freeze-thaw cycles only with a low success, whereas cyanobacteria usually have no significant loss in observed cell numbers.

Even though we do have data about the presence or absence of particular species of primary producers on each glacier, we were not able to make a reliable quantitative image of the community structure of primary producers which could help us to elucidate the differences in the stable isotopic composition of cryoconite and invertebrates among glaciers and the differences in trophic groups of tardigrades among glaciers.

Regarding the presence/absence data, all determined species were present on all glaciers except for *Leptolyngbya* sp., which occurred only on Svenbreen and Ebbabreen.

Thank you very much once more and we will be pleased to continue the discussion if you have any further questions or concerns.

Yours sincerely,

Tereza Jaroměřská (on behalf of the other authors)

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