Dear Dr Weidner and colleagues,

Thank you for your thorough revisions to the paper, and response to the reviewers. They find your changes acceptable and I am happy to move forward to publication. I still find the paper a little long and occasionally jumbled, so I have made the following suggestions to remove redundant sentences here and there. I suggest another thorough read to see if you can streamline any sections, but ultimately the scientific content is now understandable to interested readers.

L22: 'low effort' – I would caution that deploying anything in high latitudes can count as 'low effort', although you mean it relatively. Instead, could it be 'relatively straightforward', or 'simple to operate' or some other synonym?

L54: 'The aim of this manuscript is to outline the potential of broadband scientific echosounders to help answer many outstanding questions of these high-latitude coastal regions.' Could you be specific about the type of questions that can be answered? Obviously it is a broad, introductory statement, but I don't think this instrument can answer all questions about the high latitude coastal environments. Perhaps 'address questions about geophysical processes in glacier terminus environments' or something similar that narrows down the field.

Similarly, L56: add 'geophysical' or similar to 'improve *geophysical* observational capabilities in glaciated fjords'. Or combine these two sentences.

L65: 'remote nature of acoustic data collection' – is it truly remote? I think this sentence can go, as you say the same throughout the manuscript.

L84: move the comma to after 'system'

L231: 'the study site was' is redundant, begin this section with 'Hornsund fjord is…' and move the figure ref to the end of the sentence (after Svalbard).

L264: 'in Hornsund fjord' is redundant here. Combine the first two sentences of the para.

L365: 'during the Hornsund campaign' is redundant here. Remove.

L514: 'During the 2023 field campaign In Hansbukta' also redundant.

L546: I don't think these 'future efforts' fit well here. Suggest removing, or incorporating a brief sentence about them in the conclusions. There's a real jumble of results, interpretation and conjecture in this section, so maybe have a final read through and see if you can streamline.

L910: remove 'research efforts in Hornsund fjord discussed in this paper will be expanded upon in the future' – this is obvious, and the next two sentences are not really relevant to this paper. Instead, begin the para with L914 'Tracking the spatiotemporal variability of…..'

L920: 80k is not a relatively low start up cost in my budget! I would instead state the cost, without implied value judgement, and make this sentence concise: 'The start up cost is approximately 80k for transducer, receiver and license to operate, and many systems are portable with flexible deployment geometries'.

L928: remove 'all this points to' – sentence could simply read 'The application of broadband echo sounders in polar regions could thus enable an improved understanding of the complex geophysical dynamics of high latitude fjords'.

I look forward to the final version, and thanks for your submission to the Cryosphere and patience in obtaining reviewers with relevant expertise.

Liz

Editor, The Cryosphere.