

Dear Reviewers,

Thank you for all your comments on the manuscript. Making the required changes has improved the stylistic quality of the text and made the article more accessible to readers. I agree with all the reviewers' suggestions. I have incorporated the required changes into the manuscript. I have also corrected a few minor errors in the text that I caught at this stage (mainly related to the numbering of the figures).

I have responded to all reviewers' comments in the table below.

REVIEWER'S COMMENT	RESPONSE
<p>Please, clarify instances where you use “this” without a referent. I can infer what you mean, but it would make the writing stronger if you state this clearly. In this example, you might say, “The terrestrial cryosphere is responding to climate change...” I think this sentence could be revised to use active voice for further clarity, but throughout, I suggest revising language in this way. I believe reviewer 1 also suggested this, so one more review could strengthen the manuscripts language for clarity.</p>	<p>The article was reviewed for such stylistic errors. Corrections have been made to all such sentences. Where changes have been made, they have been corrected by a professional translator.</p>
<p>The word “Significant” is overused throughout this paragraph. A form of significant is used 4 times in this one paragraph. I would recommend altering your language to only use “significant” when you specifically mean “statistically significant”. For example, in line 36, you could say, “... a notable increase in air temperature...”</p>	<p>Throughout the text, the word 'significant' has been changed to synonyms (except where the use of this word was necessary). In some cases whole sentences have been changed to improve style. Where changes have been made, they have been corrected by a professional translator</p>
<p>Can you say more explicitly what you mean by “transformed”? Ice cover disappears? Becomes less frequent? Doesn’t last as long? Starts later? Ends earlier? It’s unclear to me what you mean. You also use transformed in line 18 of the abstract. I think that’s why I’m confused on what you mean. Can you be more explicit in both of these instances?</p>	<p>Appropriate improvements have been made in the required places.</p>
<p>I have a quibble with the wording here. You seem to be arguing that reservoirs apply direct pressure on the downstream reaches of rivers, which reduces ice cover duration through the mechanisms described in the introduction (e.g., releasing warmer hypolimnetic water during the winter). I think it is slightly misleading to say reservoirs have a “greater impact”</p>	<p>In the required place and others where this type of statement was used, the sentences have been rephrased as suggested.</p>

<p>than climate change. I would recommend rewording this to something more like: “Reservoirs apply direct pressure to downstream river systems that alter river ice occurrence more rapidly than climate warming alone.” I think a change similar to this is clearly about the role climate has on river ice. It definitely impacts river ice, as some of the sources you’ve cited indicated, but reservoirs cause stronger ice loss than climate alone suggests.</p>	
<p>This is not absolutely required, but I think that a vertical line in the “b)” panels for C1-C4 for the time of the dam construction would help make the time series easier to read (just because it’s such a large figure – similar to figure 8). But again, that’s more of a personal preference than a requirement.</p> <p>Can you better explain the box color (light to dark blue) in the figure (a) caption? I would also move the legend closer to the other symbol explanations.</p>	<p>The required changes have been added to the figures.</p>