

Interactive comment on “Pleistocene climate characteristics in the most continental part of the northern hemisphere: insights from cryolithological features of the Batagay mega thaw slump in the Siberian Yana Highlands” by Kseniia Ashastina et al.

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Dear Dr. Benjamin Gaglioti,

Thank for your helpful and detailed feedback. You are absolutely right with the resume of the manuscript: we focus on the description and interpretation of the depositional environments of the Batagay sequence, and discuss the palaeoclimatic implications of this archive.

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The data discussed in our manuscript originate from a terrestrial permafrost archive and one of our goals is to check the link between the global/regional climatic changes during the Late Quaternary and response of the depositional processes to these changes. For this purpose, we compare the dated sections of the Batagay outcrop with sections of a similar age, described from other terrestrial permafrost outcrops in Northeastern Asia.

We find it appropriate to submit the manuscript to *Climate of the Past* journal because the manuscript suits one of the main subject areas of *Climate of the Past* (“reconstructions of past climate based on ... data from marine and terrestrial (including ice) archives”). The Editorial board of *Biogeosciences* proposed that we submit the manuscript to *Climate of the Past*. In addition, the journal published a special issue on the Elgygytgyn Impact Crater, with a set of articles focusing on sediment interpretation, depositional dynamics, and their climatic implications. A number of other articles published in this journal with the focus on sediment interpretation give us confidence to publish our results in *Climate of the Past*.

We understand your concerns about the unconformities in dating results presented in the manuscript. Due to this reason we used several other proxies (description and comparison of the sedimentary facies, plant macrofossils) to connect dated parts of the record to dating results available from other regional permafrost sequences. We are confident that our stratigraphical interpretation is reasonable.

We appreciate your effort, detailed comments, and useful suggestions. We will take up your constructive comments to improve our manuscript.

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