

Dear editor Nathalie Combourieu Nebout,

We thank you for your constructive comments on our manuscript entitled “Changing sources and burial of organic carbon in the Chukchi Sea sediments with retreating sea ice over recent centuries” (No. egosphere-2023-64). We have revised the manuscript according to your suggestions. Besides, some minor mistakes or typos have been corrected. The Appendix Table and Figures have been put into the Supplement, according to the editing system of Climate of the Past. Therefore their corresponding names have been transferred to Table S1 and Figure S1-S6. Please find below our responses in **blue**.

Best regards,  
Jian Ren (on behalf of all co-authors)

-----  
Nevertheless make attention to the bibliography. I have not seen some of references in the text. Please verify all of them and especially those below and then add in the text or remove from the bibliography.

Belt et al., 2019  
Arrigo et al, 2012  
Cabedo-Sanz et al., 2013 (if it is in the text, it remains bad-palced in the bibliography)  
Müller and Stein, 2014  
Sicre et al., 2001 and 2013  
Stein et al., 2016  
van Dongen et al, 2008  
Zhang et al., 2012.

- We have removed these uncited references from the bibliography.

If it is possible, I would like an enlargement of the characters in the figure 8 a and b and in Appendix A1 and A6 to be more readable. The characters are really very small at 100%. In Appendix A2, please place the label on the cores on the left and they will be more readable.

- We have enlarged the characters in Figure 8 and Appendix A1 and A6 (now Figure S1 and S6). The labels in Appendix A2 have been placed to the left of the cores (now Figure S2).