

The manuscript by Windirsch et al. "Organic Carbon Characteristics in Ice-rich Permafrost in Alas and Yedoma Deposits, Central Yakutia, Siberia" reports detailed analyses on organic carbon storage, grain size and other characteristics from two different deep cores. Such data is rare and valuable as it helps to understand the landscape development from that area. Especially, since it points out the heterogeneity within Yedoma deposits.

Overall, I am very happy with the revised version of the manuscript. However, the discussion section can still be improved. Partly, still not logically constructed with repeated information. Also, the language in the discussion section needs improvement (wrong usage of tenses etc. makes the reading complicated). Abstract is too long and, in the beginning, more of an introduction.

Below only a few minor comments.

Page 2, Line 2-4: In comparison to the total amount of C stored in permafrost is Yedoma's amount not particular large. I would suggest to remove 'In particular'.

Page 2, Line 3-4: 'After thaw, this carbon becomes available to the recent carbon cycle'. becomes part of the ..., Or just remove this sentence

Page 12, Line 19: 'We interpret....' Please rewrite this sentence. Also, there is no higher decomposed, more decomposed or higher decomposability

Page 12, Line 20: 'when the deposits became frozen...', once the deposits froze

Page 13, Line 34. Please use Deuterium instead the d, also in other places.

Figure 1a, please add a scale bar to the figure.

Figure S2, please add (a) and (b) for the two different sites