

Dear Pohjola et al.,

Thank you for reacting to the comments of my first review by incorporating the suggested changes into the written part and figures of your manuscript. Beside a few minor comments (see below), the revision with the implemented corrections, additional information and discussion has improved its quality and readability.

Having checked the two datasets/files with the archaeological and mire/lake isolation data accessible on PANGAEA, I was not able to find changes or additional data yet. This concerns the requests for:

- ➔ changing of headers (age unit terminology, see first reviewer comment, it needs to be clear that the ages in the data files are uncalibrated)
- ➔ providing a separate column for the type of dated material (wood, bone, bulk peat, macrofossils, charcoal, etc.) in both files
- ➔ providing a separate column for the dated archive/basin type (lake, mire or pond)
- ➔ adding URLs to the radiocarbon reports of the lake/mire isolation data, where available (like in the archaeological data file).

Although there is a lot of dry work involved, I strongly suggest adding this information to raise the quality of the data and increase the impact of this publication. If changes were already made and the changes are just not visible because the files are in review on the PANGAEA website, just ascertain again, that the adjustments were correct.

Please find a few minor comments and technical issues below. Please excuse me that I might have overseen some of them in the first review:

Page 1

I. 17: Instead of 'timing', the term 'chronological order' should be used.

I. 21: comma after satellites

Page 2

I. 4: 'on the bottom sediments' instead of 'in'

I. 5: to the 'time period of Ancylus Lake', the time period should be given in numbers, with a reference.

I. 6: isolation and contact contradict each other. You could remove 'contact'.

II. 7-8: '...in mire studies and references...', technically, these mire studies are among the references. You can write that there are interpretations of the retreat drawn from mire studies and then put a few literature references behind, which are specifically evidencing it. In other words, if you already use 'references', then also name a few.

I. 10: comma after 'In Fennoscandia'

I. 13: 'data based on expert judgement on the sediment layers of mires...' sounds weird, as if it is unclear what "expert judgement" is or who these experts are. It would sound more serious if you just write: 'data based on the initial layers of mire development as well as ...'

II. 20-21: put 'method' behind <sup>14</sup>C.

'Each data point has a spatial location, elevation and age information that is preferably obtained using the 14C dating and calibration.' Because the chapter is called data description, the sentence suggests or may be misinterpreted, that the ages provided in the files are calibrated already. It should be made clear that the data user still needs to calibrate the 14C-dates. The (raw) 14C-dates are already there, but the calibration still needs to be done, which is not differentiated here yet.

Page 3

I. 3: It is not completely clear what is meant by the statement that 'in some cases the layers of different datings are close to one another in the core.' Does it mean that there are big age discrepancies between samples that are almost in the same layer/depth or very close to each other?

II. 3-4: You could give some hint to the reader for possible reasons for these age reversals. For example, roots that were accidentally dated and give ages that are less old than a layer above, redeposited older material from outside the catchment.... Possibly with a few references. At least, remove the 'for some unknown reasons'. Otherwise, it may sound slightly unprofessional.

Page 4

In Figure 2, the figure caption still says height instead of elevation. Consider using m a.s.l. (above sea level).

Page 5

II. 20-21: Again the pointer to the two datasets and the need to apply the changes concerning terminology, units and additional columns on sample type, links to the reports where missing, etc. (see first review).

I. 25: Put citation/syntax in order/rephrase to: 'In earlier studies (e.g. Pohjola et al., 2014, 2018), the calibration.....'

Page 6 (mind that the line numbers are not displayed correctly)

I. 33: on the Estonian side

II. 1-5: To streamline the conclusion slightly, consider ending the sentence after the Church et al. reference and then: 'In contrast, the land uplift in the Gulf of Finland is 0-5 mm / year (Poutanen et al., 2010). Therefore, future housing development planning in the northern Baltic Sea coastal areas can benefit from this data set as a tool to assess the flooding probability.'

Page 8 (References)

II. 2-3: DOI is missing for this reference.

All pages:

'modeling' is American English. Change to British 'modelling'. Check for consistency throughout the manuscript.

Page 1, lines 7, 17, 20, Page 2, l. 26., Page 4, l. 10, Page 5, l. 18