Dear Phillipa and Richard,

Thank you for your final technical corrections provided for our manuscript. These have all been addressed bar one, as detailed below. Additionally, unnormalised EPMA data has been added to the supplementary material (Table S4), as previously discussed.

Table 1: Briefly specify parts (a) and (b) in the legend. Also in the legend-briefly specify the significance of italicised rows. Specified as requested.

L13: Double-check the grammar of this sentence is ok?- balance 'highlight and help' with pluralisation of 'cryptotephra'? This sentence has been reworded.

Tables 1-3: Please check the numbering of these and ensure it is sequential. Table 2 was erroneously still referring to data that has been removed during the review responses – this has now been addressed and the sequential order of the tables has been checked.

L55: was there a reason for removing "e.g.,"? This has been replaced with "for example".

L113: technically, that should be "AD 1700" (rather than "1700 AD"). Addressed.

L175: here, you use the US spelling "centimeter" and "millimeter", whereas elsewhere in the document you use UK English (e.g., L141 "modelled"). Addressed, British English should be used consistently throughout the manuscript.

Table 1(b): could you note that the 14C uncertainties stated are ±1sigma. Addressed – this has been added to the column heading and the caption.

L317-320: can you clarify for the present manuscript (i.e., if read as standalone) what is meant by "strong agreement for 210Pb dates (19–43 ages/site with age ranges of 2–10 years) and poor agreement for 14C dates (4–7 ages/site for the same period, with age ranges of to 130 calibrated years)"? / L318-319: something is missing from "age ranges of ___ to 130 calibrated years". / L319: in this case, how do you KNOW that the 14C ages were accurate? (Again, via testing with tephrostratigraphy/chronology, as in the present manuscript?) We felt that explaining this example required several sentences that disrupted the flow of the text and distracted from the main points being made in this section. We have therefore removed it.

L327-330: if you have used outlier analysis (to down-weight the influence of the inconsistent data), then you don't need to also look at the agreement indices. Noted, and two sentences have been rearranged in the previous paragraph to ensure this process is now clearer.

L626: delete "in". Addressed.

L703-704: Extra parentheses are required for the citations within the overall sentence-check for consistent referencing style. This comment has not been addressed because we could not tell what or where it was referring to; due to complications with the line reference numbers this appears to refer to a gap over a page break.

L896: change "…to one another" to "…in relation to one another". Addressed.

L1099: change "…in Swedish lake in Davies et al." to "…in the Swedish lake reported by Davies et al.". This has been reworded as requested and the lake names have also been added.

L1178: change "between 630–10 cal yr BP" to "between 630 and 10 cal yr BP". Addressed.

L1193: change "statistics" to "statistical approaches". Addressed.