## Author's response to ESSD-2024-306

We would like to thank the editor for their constructive feedback and their diligent review of our manuscript. Below, we provide point-by-point answer to the editors comments.

(Editor comments in **bold**, author responses in blue)

Reply to comments from the Editor

Chapter 6 Data availability: could you provide in this chapter the direct link to your data Kern et al. with DOI (https://doi.pangaea.de/10.1594/PANGAEA.973049, the link in the manuscript only leads to the PANGAEA landing page)

Thank you for pointing out this mistake. We have corrected the link to the correct PANGAEA dataset.

Page 4 instead of the citation of the PANGAEA repository with the description of the repository by Felden et al. 2023, could you list here all the PANGAEA data publications that you used and cite the PANGAEA data publications also in the reference list, (all data publications that you re-used should appear in the reference list of your manuscript).

We have changed the citation and included citations for all datasets that are available on PANGAEA that were used in this study. The citations have been added to the references accordingly.

As for the ESSD manuscript of Schild et al. 2025 LegacyVegetation: Northern Hemisphere reconstruction of past plant cover and total tree cover from pollen archives of the last 14 kyr. Earth System Science Data, 17(5), 2007-2033, https://doi.org/10.5194/essd-17-2007-2025

we were asked by NEOTOMA to assure the traceability of the NEOTOMA source of the published data showing the NEOTOMA DOIs - e.g. Schild et al added the information of the NEOTOMA DOI in their data publication LegacyPollen2.0, an updated global taxonomically and temporally standardized fossil pollen dataset of 3728 palynological records https://doi.org/10.1594/PANGAEA.965907, Li et al., 2024 and finally discussed in the revised manuscript the reconstructed Northern hemisphere data reconstruction (not the gobal reconstruction): Herzschuh, U., Ewald, P., Schild, L., Li, C., and Böhmer, T.: LegacyVegetation: Northern Hemisphere reconstruction of past plant cover and total tree cover from pollen archives of the last 14 ka, PANGAEA [data set], https://doi.org/10.1594/PANGAEA.974798, 2025

(Eventually these PANGAEA data sets are also interesting for you to cite in your ESSD manuscript and reference list? This part is not meant as editorial requirement, only to be considered, if it is of use for your ESSD manuscript).

Thank you for highlighting these very interesting datasets. Unfortunately, however, they both cover younger time periods that only marginally overlap with the time interval of our study. Otherwise we would have gladly used these existing databases in our study. Nonetheless, we do cite the original publications in our study as they are highly relevant from a methodological perspective.

The solution in your case it that you could provide the NEOTOMA DOI for the NEOTOMA sources you used, e.g. in the form of a new Zenodo publication on your NEOTOMA metadata. You then can link

in Zenodo your new Zenodo NEOTOMA DOI metadata publication to your PANGAEA data publication Kern et al. 2024 https://doi.pangaea.de/10.1594/PANGAEA.973049, and ask PANGAEA to link your data publication to your new Zenodo metadata publication as related data publication, that usually can be done very fast in PANGAEA and is easily added to existing DOI data publications. During this process, please also ask PANGAEA to link your Code publications in Zenodo in form of 'related code / software' within your PANGAEA data publication.

Thank you very much for providing such an in-depth and step-by-step solution. We have uploaded the metadata with all NEOTOMA DOIs to Zenodo (<a href="https://doi.org/10.5281/zenodo.16812766">https://doi.org/10.5281/zenodo.16812766</a>) and have contacted PANGAEA to link the PANGAEA datasets to this Zenodo publication, as well as the others included in this study (<a href="https://doi.org/10.5281/zenodo.12782121">https://doi.org/10.5281/zenodo.12625222</a> (REVEALS R code)). These Zenodo publications have been added to the PANGAEA dataset (<a href="https://doi.pangaea.de/10.1594/PANGAEA.973049">https://doi.pangaea.de/10.1594/PANGAEA.973049</a>) under the "related to:" section and have also been added to the manuscript as well as the references.