

Dear Petr Kuneš,

We adjusted the text according to your two points, the last paragraph of the intro now reads as follows:

To answer these questions, we investigate a sediment core from a small kettle hole lake on the Swiss Plateau, Amsoldingensee, using a multiproxy approach. This lake is located adjacent to Gerzensee in an area that responded in extraordinary detail to Late-Glacial climatic changes documented in the North Atlantic domain and Greenland (Eicher, 1987, Lotter et al., 1992, Ammann et al., 2013). Amsoldingensee contains the complete Late-Glacial sediment sequence, including early deglacial anoxic periods (Lotter and Boucherle, 1984). ~~a multi-proxy dataset including Hyperspectral Imaging, sedimentary pigments, XRF, CNS, P, Fe, Mn fractions, and pollen was produced from the sedimentary record of lake Amsoldingen. Hyperspectral Imaging offers a way to reconstruct primary production, hypolimnetic anoxia and compositions of major primary producer groups at unprecedented (μm -scale) resolution on long time scales (Zander et al., 2023). Sedimentary pigments were used to investigate changes in past producer communities (Leavitt & Hodgson, 2001; Bianchi and Canuel, 2011). Pigments of anoxygenic phototrophic bacteria APBs (purple sulphur bacteria) are used as indicators for lake stratification and hypolimnetic anoxia (Züllig, 1986; Zander et al. 2022). We use XRF, CNS, and sequential extraction of sedimentary P, Mn and Fe to diagnose potential chemical feedback during events of hypolimnetic anoxia (Tu et al., 2021).~~

And regarding your second point:

We already added in the caption of the RDA (in SOM) that the pollen data are from (Rey et al., 2020), but now we also explicitly mention this in the methods section where RDA is mentioned.

“For RDA (Fig. S9) we used the pollen record from Moossee (Fig 1b, Rey et al., 2020).”

Alongside, we made some minor edits in the Introduction and Method sections.

Best, Stan