

Interactive comment on “Last 2400 yrs. Environmental changes and human activity recorded in the gyttja-type bottom sediments of the Młynek Lake (Warmia and Masuria Region, northern Poland)” by Fabian Welc et al.

Anonymous Referee #1

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The ms: Last 2400 yrs environmental changes and human activity recorded in the gyttja-type bottom sediments of the Młynek Lake (Warmia and Masuria Region, northern Poland), is a multiproxy paleoenvironmental study about environmental and climate changes during the last 2400 years in northern Poland. It gives precious information about the Medieval time and presence of human indicators during the Roman period in the area. However, I believe it needs a lot more work to be considered for publication. My first concern about the ms is the whole structure. The introduction is too short regarding the rest of the ms and needs more elaboration regarding background

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information, context, which analysis will be covered, how and why they were selected, references, etc. Besides, the study lacks of a clear objective. Although a multi-faceted study is mentioned, there is no explanation about how it will be addressed and the expectations of such study. Regarding the following sections, I believe there is a lot of information but not well structured: in the Methodology section some Results are shown; in the Results section there is part of the Discussion and finally, the section called Conclusions and Discussion (it should be: Discussion and Conclusions) , there is a mix of both. In addition, the Discussion is confusing. For instance, the zones or phases delimited are not completely clear how they were established. Indeed, I think the split of the zones is not correct as they follow pollen changes but not diatoms and geochemical changes, which leads to erroneous interpretations. Regarding figures and tables, some of them are non sense and should be removed. As general comments, I suggest to check by a native English speaker the English grammar and written style of the ms. All of my comments and suggestions are on the pdf.

Please also note the supplement to this comment:

<https://cp.copernicus.org/preprints/cp-2020-45/cp-2020-45-RC1-supplement.pdf>

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2020-45>, 2020.

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