

1) General remarks

We again appreciate the thorough review of our manuscript and the detailed advice from the reviewers. Our detailed response is listed below.

2) Reviewer comments and our responses.

Review 1:

Reviewer's comment	Our response
I would recommend some basic grammar editing, as there are a few instances where the wrong preposition or verb form is used. Overall, the writing is still understandable, so this is not a major concern, but it would improve the reading experience.	We have checked grammar and style and edited the text. These minor corrections constitute the majority of the current revisions.
At line 19 in the abstract, it states the study spans 6000 years, while in the introduction at line 122, it states 7000 years.	We changed the abstract accordingly.
When referring to "Atlantic climate" or "sub-boreal climate," as in lines 30 and 31, I would recommend explicitly noting that these are specific periods during the Holocene with different climate regimes, as simply saying "Atlantic climate" may be misread as a regional climate type rather than a Holocene climate period. For example, you could rephrase to "during the warm and wet Atlantic period" and "during the colder and drier Sub-Boreal period."	We agree and follow this suggestion.
Define H ₂ S and DIN at first occurrence, lines 44 and 85, respectively.	We introduced both abbreviations as: 1) However, hydrogen sulfide (H ₂ S) in euxinic environments reduces the

	<p>degradability ...</p> <p>2) ... a substantial decrease of the Danube load of dissolved inorganic nitrogen (DIN), which is now below...</p>
Please add a citation to lines 240-243 regarding the increased transport of sand from the Sfântu Gheorghe branch.	We added a reference to Constantinescu et al. (2023).
Additionally, make sure that Sfântu Gheorghe is spelled consistently here and when it is referenced in the discussion.	We made sure that the Name Sfântu Gheorghe is now spelled consistently throughout the text.

Review 1:

Reviewer's comment	Our response
For figure 6 A, R^2 is 0.98, which is much higher than figure 6 C (R^2 is 0.64) that have similar data distribution. Please check the statistic results.	<p>We thoroughly checked the results from both linear regressions, and the R^2 values are stated correctly.</p> <p>The observation data for Models 1 and 2 are identical, the only difference is the applied linear model. Model 1 is without y-intercept, Model 2 is with y-intercept. The differences in the R^2 values are also reflected in slightly higher residuals in Model 2 than in Model 1.</p>
And I would suggest make consistent expression with figure 6 (R^2) and text (line 300-301 Pearson's R)	We agree and have changed R in the text to now R^2 .