

Interactive comment on “Foraminiferal species responses to in situ experimentally induced anoxia in the Adriatic Sea” by D. Langlet et al.

D. Langlet et al.

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Anonymous reviewer 2:

1. Does the paper address relevant scientific questions within the scope of BG? The manuscript is timely in that it addresses the effect of hypoxia/anoxia on meiofaunal benthic diversity and is within the scope of the journal, which has already been determined by its being released as a discussion paper.
2. Does the paper present novel concepts, ideas, tools, or data? Yes, I believe so. The experimental design is effective in that by using the benthic chamber it more realistically represents conditions imposed on the benthic community under natural conditions unlike similar experiments conducted in a laboratory setting.

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3. Are substantial conclusions reached? The conclusions reached reveal aspects of benthic foraminiferal taxa that for some were suspected but the conclusions presented confirm those suspicions. Conclusions for other taxa identified are new and therefore provide a better understanding on their environmental preferences for use as proxies.
4. Are the scientific methods and assumptions valid and clearly outlined? Yes, the paper is logically presented and the experimental design well thought out and presented as well. The analyses are appropriate in testing the hypothesis.
5. Are the results sufficient to support the interpretations and conclusions? The results support the interpretations and conclusions drawn.
6. Is the description of experiments and calculations sufficiently complete and precise to allow their reproduction by fellow scientists (traceability of results)? Yes, however the collection and use of the “Normoxia” cores was not clear to me but perhaps this is due to my unfamiliarity with this type of sampling/study.
7. Do the authors give proper credit to related work and clearly indicate their own new/original contribution? Yes, well references.
8. Does the title clearly reflect the contents of the paper? Yes
9. Does the abstract provide a concise and complete summary? Yes
10. Is the overall presentation well structured and clear? Yes
11. Is the language fluent and precise? Yes, a few typos but otherwise good.
12. Are mathematical formulae, symbols, abbreviations, and units correctly defined and used? Yes
13. Should any parts of the paper (text, formulae, figures, tables) be clarified, reduced, combined, or eliminated? No
14. Are the number and quality of references appropriate? Yes

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15. Is the amount and quality of supplementary material appropriate? Yes

Author's response: We thank the reviewer for his/her positive comments. In the following response we will only reply to points 6 and 11.

Ad 6. "Anoxic sediment cores" were sampled in each chamber before termination of the experiment. "Normoxic cores" were taken at the onset of the experiment outside the benthic chambers. The initial "natural" conditions outside of the chambers were systematically termed "Normoxia" in the whole Biogeosciences special issue. This term refers to the compression of the terms "normal" and "oxygenation". The authors will modify the methods section of the revised manuscript to clarify the sampling strategy.

Ad 11. The authors will try to identify and eliminate the typos the anonymous reviewer is referring to.

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