

Dear editor,

We thank you for the last improvement suggestions before the final acceptance of the manuscript.

Please find here below our reply to the suggested technical corrections.

We hope that the corrected version will be suitable for final acceptance.

Best regards

Corentin Guilhermic and co-authors

Response to editor's comments

Specifically: 1) the authors should acknowledge that freezing at -20 C does not sterilize sediment (unless they have a reference they can cite that proves otherwise)

We specified in the text (lines 149-150) that the freezing step was to stop OM degradation by bacterial activity and to defaunate and to kill meiofauna and macrofauna that could interfere with our experiment.

2) the authors should include that inox spatulas were used to slice the cores and that no evidence of shell debris and/or fragmentation resulting from slicing were observed

The precision of the use of inox spatulas was added in line 228. A sentence indicating the absence of shell fragmentation was also added after (line 228-229).