Dear editor and referees,

We acknowledge your last remarks and suggestions.

Please find here below our reply to the technical corrections suggested by the referee #3 to improve the manuscript before the final acceptance.

We hope that the amended version will be suitable for publication.

Best regards

Corentin Guilhermic and co-authors

Referee #3

One minor point: Cell Tracker Green was introduced to foraminiferal studies in 1995 (J Micropal v. 15, p. 68); it was widely used in cell research prior to that. It seems appropriate to site the original work rather than an application paper almost a decade later.

We specified in the text (lines 230-231) that the sources we cite specifically refer to the use of CTG for foraminiferal labelling.

We also added, as suggested by the referee, the reference "Bernhard, J. M. and Bowser, S. S.: Novel epifluorescence microscopy method to determine life position of foraminifera in sediments, J. Micropalaeontol., 15, 68–68, https://doi.org/10.1144/jm.15.1.68, 1996", which presents for the first time an adapted proctocol for living foraminiferal staining.

One revision the authors might want to consider: The sectioning process is reported to yield 0.2cm slices. I think details should be included -- what apparatus was used to precisely extrude the sediment from the core? (Certainly, this level of precision can't be achieved by hand!) What type of blade was used to cut the sediment slices? How many forams were damaged (i.e., how many were potentially lost as "dead" by sectioning? How might this have altered the results, particularly in the top cm where the forams ultimately cluster?

The following sentence was added in the manuscript: "A specifically designed push-core with a screw resolution of 1 mm/turn allowed accurate sediment extrusion." (lines 227-228).

Concerning the slicing process, inox spatulas commonly used in foraminiferal studies, were employed. No evidence of shell debris resulting from slicing were observed and all identified individuals did not show any fragmentation.