

Dear Editor,

We very much appreciate the time you devoted to reviewing our revised Manuscript and for providing constructive comments that improved its quality.

We have edited the text according to all the suggestions, including the use of acronyms. A few clarifications:

Line 39: “..... transport which is....” The sentence was correct, but too long, we have shortened.

Line 165/166: total lipid loss? As in the extract never reached the column? Indeed, I lost a drop of concentrated total lipid extract while transferring it from the vial to the column.

We have adjusted Table 2 and it fits and reads better now.

Regarding figure 5, we haven't found a good way to modify it as to make it more self-explanatory. We could mark as “old” the alkenones for which we have data for both, forams and alkenones (i.e., NAM, SBB, SMB), but none of these three look like outliers. For the other samples, rather we miss the 14C of forams as time reference, or we miss the 14C age of the alkenones. We know, nevertheless, these alkenones are old based on the strong positive correlation existing between 14C age of OC and co-deposited alkenones (as shown in fig. 8), and because of previous work from the same core (Ohkouchi et al. 2002). However, to explain this in the figure caption we would need to recall to relationships that are explained later in the text, and we believe we add more confusion this way.

I wish you happy holidays and new year on behalf of all the authors.

Blanca Ausín and Co-authors.