

#### Authors final comments

We would like to thank the five the reviewers who accepted to review our study. We appreciate the contrasting points of view, which together have shown that although our study did not reach consensus, it nonetheless generated a stimulating discussion on various technical and fundamental aspects of the aquatic carbon cycle. The very different inputs suggest that certain comments are more a matter of opinion regarding the way to analyze and discuss our results, and more importantly, the large number of reviews allowed us to target portions of the manuscript that repeatedly emerged as unclear and needing improvement. We believe that the revised manuscript has been considerably improved in the light of the reviewers' comments. We provide individual responses to each review, in which we address all the comments.