Dear Editor,

We are grateful for your interest in our study, and for accepting our manuscript in minor revision. We are also grateful to the two anonymous reviewers for their helpful and constructive comments. We thank the referee 2 who spent time correcting our manuscript and for his English suggestions that helped us to further improve the presentation of our work. Below you find the point-by-point reply to the referee 2 comments.

Best regards
This is my third time reviewing the manuscript of Tzortzis et al. Overall, I think the authors have done a great job implementing my previous comments and I’m happy to see the manuscript reach the stage it is currently in. I appreciate the efforts of the authors and their attention to improving the grammar of the manuscript. With the implementation of some minor revisions (see below), I believe the manuscript constitutes a useful contribution to Biogeosciences.

Thank you very much for the attention that you have given to our work for a third time, as well as for your English corrections. We have reworked the manuscript, taking into account your suggestions.

Abstract:

Line 9. Would rephrase to “at a high spatial resolution”

Following your suggestions, we have rephrased (see line 8).

Line 13. “Different concentrations of chlorophyll-a and O2”?

Following your suggestions, we have modified that (see line 13).

Line 13. Comma after “Here”

We have added a comma (see line 13).

Introduction:

Line 31. Remove “fields and”?

We have removed that (see line 31).

Line 44. Remove “-well” in “well-known”?

We have corrected that (see line 43).

Line 88/89. “data set” should be “dataset”

We have modified that (see line 86).
**Methods:**

Line 120. Comma after “During the cruise”.

⇒ We have added a comma (see line 115).

**Results:**

Line 220. Correct spelling of “Substancially” to “Substantially”.

⇒ Thank you, we have corrected (see line 210).

Line 247. “which as” should be “which has”.

⇒ We have corrected (see line 236).

Line 303. “these latter” to “the latter”.

⇒ We have modified that (see line 288).

**Conclusions:**

Line 464. I think you need the word “Because”.

⇒ We have added this word (see line 447).

Line 469. Please correct the spelling of “recommmanded” to “recommended”.

⇒ Thank you, we have corrected (see line 452).

Line 475. Remove “in” after “for both”.

⇒ We have removed “in” (see line 457).

Line 484-485, I would rephrase to “which will provide a unique opportunity for a more detailed study of physical-biological fine-scale coupling”.

⇒ Thank you, we have rephrased following your suggestion (see line 466).