

General Comments

The manuscript uses glider and buoy measurements of dissolved O₂ and inorganic carbon (DIC) concentrations along with horizontal advection, air-sea exchange and mixing, to compute net community production (N) in the euphotic zone of the NW Mediterranean Sea in spring 2016. I think it is a good manuscript and very intriguing.

The work to assess/ compute the N rates provides us with an important building block for a better understanding on the biotic contribution to the ocean carbon sink, which is a hot topic. The presentation of methods is well organized and explained in detail the work done.

After the revision following the two reviewers, I still agree with the fact that the conclusions do not give proper importance to the work done both in terms of the method and the conclusions that come out of the work. They turn out not to be incisive as they do not summarize in broad terms the results achieved. I think the aspects that still constitute the uncertainties should also be explained in an organized way.

We have revisited the conclusion section, adding extra text (e.g. on uncertainties), reorganising the paragraphs and sentences, and rewriting some text. We think that the conclusion section now summarizes our results nicely and is more neat.

Please see the tracked version of the manuscript to see our changes.

Specific comments

I noticed that the reviewers' suggestions were followed.

I would have 2 more suggestions: in the caption of figure 1 I would change 'the position of each glider point' to 'glider track' since you can't see the surfacing.

Done.

line 172 add Fig. to 1b

Done.