Response to reviewer Emilia Trudnowska - report-1:

The authors are grateful for all the comments and changes provided by both reviewers in Round 1 and now for round 2, and we are pleased to see our modifications improved the manuscript.

The confusion –pointed out by both reviewers on round 1, concerning the relation between both data papers, was mostly since –at that time, there was only one dataset published. Since then, another dataset has been published under its own DOI for the cruise data. We genuinely thought that having now clearly two separate papers and two datasets (each with its own DOI) would be clear enough for the readers (who would all be unaware of the initial problem). That is the reason why we did not add any explanation in the manuscript for the last round. However, we have now added a new paragraph at the end of the introduction section to make sure no confusion is possible.

Table 3 links work fine on the .docx version of the file, but for some reasons the links to the SEANOE website do not function on the pdf version. Apparently, this is due to the link not being on a single lane. There is nothing we can do but try to have the table formatted properly but the problem may reappear when the manuscript will be published electronically. In the meantime, we have made the link column larger to avoid the problem. I will make the publisher aware of the problem. noted We also that access to the links http://www.obsvlfr.fr/proof/php/GREENEDGE/ were still restricted by a login/password combination. We have made the necessary request for the protection to be removed and the data to become public. We are awaiting the confirmation anytime soon.

All the very specific mistakes pointed out during round one, were about data published in the original dataset (<u>https://www.seanoe.org/data/00487/59892/</u>, which is mostly Ice-Camp data). Since we created a new dataset exclusive to the cruise data, it was no longer our goal to correct any problem pertaining to the Ice-Camp dataset. However, we took great care in double-checking the files uploaded for the cruise dataset again. Please also note that being a published DOI, the files cannot be changed anymore.

Units on Figure 11: Indeed 8000 cm^3/m^3 is an exceptionally high value for non-integrated Copepod biomass. We went back to the data files and to the data owner and verified all calculations made to generate this graph. It is legitimate.

Table 2 has been extensively modified to ensure homogeneity and precision within the different columns. Column 1 now read "Parameter" and the sensors are now specifically placed in Column 2. Sensor's makes and models have been ordered within their column and verified throughout the table.