Interactive comment on “The Pelagic In situ Observation System (PELAGIOS) to reveal biodiversity, behavior and ecology of elusive oceanic fauna” by Henk-Jan Hoving et al.

Anonymous Referee #2

Received and published: 31 January 2019

First, I would like to mention that I'm not an expert in this field and can therefore not comment on the methods. I'm specifically thinking of section 3.4.

While I think the manuscript was carefully written, I did find a few things that need to be clarified.

Lines 56-57 say: “In the last decades, a variety of optical instruments has been developed to image and quantify plankton in situ.”

But then lines 73-75 say: “However, published descriptions of optical systems, other than ROVs and submersibles, that visualize macrozooplankton and micronekton (>1 cm) in the water column are, to the best of our knowledge, restricted to one (Madin et
This is confusing as it is currently not clear what the difference is between the above mentioned instruments and the ones that have not been described in publications... Maybe mention in lines 73-73 that there are no other instruments capable of capturing such large organisms?

75 ff Please be more specific about what makes PELAGIOS different from LAPIS

Line 123: Link does not work

Line 195: What was the total transect time during the night? Must be the same amount as during the day, if not, did you account for this in your analysis?

Section 3.5 I find it difficult to read through this section. While it is def. useful to know who lives there, I wonder if there would be a better way to summarize it all in a table and make this section shorter?

213-215: Do you have a reference for this statement?

Minor edits Figure captions Figure 2: Why is O2 plotted but never mentioned? Figure 5: Capitalize “Example”