

Dear editor,

Thank you for your comments. We have now produced a revised version of the manuscript and a document with tracked changes, including the corrections recommended by the referees. We have paid special attention in the reviewed manuscript on expanding on the discussion on the mismatch between model and zooplankton observations. It was mentioned in the response to the second referee that we would exchange the positions of Appendices A and B in the manuscript. However, after carefully revising the manuscript, we decided to leave them as Appendix A: Plankton parameters, and Appendix B: Mesozooplankton evaluation, as this is the order in which they are referenced in the main text. We corrected the value of the initial slope of the P-I curve of small phytoplankton in Table A1. We have also made small language corrections to improve the readability of the manuscript. We have included as supplementary material a figure on the model temporal evolution, and a figure comparing our large zooplankton to an additional mesozooplankton dataset, and a short comment about it in Sect. 2.3. All other changes to the manuscript have been specified in the individual responses to the referees.

Kind regards,

Mariana Hill Cruz