

Ocean Sci. Discuss., author comment AC2  
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## Reply on RC1

Tereza Jarníková et al.

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Author comment on "A clustering approach to determine biophysical provinces and physical drivers of productivity dynamics in a complex coastal sea" by Tereza Jarníková et al., Ocean Sci. Discuss., <https://doi.org/10.5194/os-2021-66-AC2>, 2022

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Dear Dr. Sloyan and Dr. Jackson,

Thank you for giving us the opportunity to respond to the constructive comments on our manuscript, "A clustering approach to determine biophysical provinces and physical drivers of productivity dynamics in a complex coastal sea". We are grateful for the time and effort that the editor and both reviewers dedicated to providing feedback on our manuscript and appreciate the insightful comments on and valuable improvements to our paper.

We have provided a point-by-point response to each of the comments, below. We indicate planned revisions of the manuscript, with reference to the line numbers of the original manuscript. Some highlights of the most significant revisions include:

- In response to Dr. Jackson's comment regarding comparing with phytoplankton functional groups from observations (comment R1.1), we provide an outline of a planned comparison with available observational data for the revised manuscript.
- We revise the wording of the introduction for clarity (R1.5).
- We revise the wording of the clustering methodology for clarity (R1.10, R1.16).
- We change the colorbar of Figure 10 to make the phytoplankton bloom dates more visible (R1.22).

Because these revisions include quite a few images, I attach them as a .pdf.

Sincerely,

Tereza Jarnikova

Please also note the supplement to this comment:

<https://os.copernicus.org/preprints/os-2021-66/os-2021-66-AC2-supplement.pdf>