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Title: "Pelagic primary production in the coastal Mediterranean Sea: variability, trends and contribution to basin scale budgets" by Paula Maria Salgado-Hernanz et al. 2021.

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Response to Associate Editor Decision

We deeply thank the editor and the referees for their comments and the final acceptance of our manuscript for publication in Biogeosciences.

Response to minor comments from Referee #1:

#1.1: Table 4: Where did the river discharge data come from? I suggest you provide a reference for it.

Action: We thank the referee for notifying this lack. River discharge data (Q) was taken from the book "Tockner, K., Uehlinger, U. and Robinson, C.: *Rivers of Europe, 1st ed., Academic Press, Elsevier., 2008*". This reference has been now provided in the manuscript.

In addition, header of Table 4 now reads: "**Table 4.** Surface, river discharge flow (Q), annual mean PP (PP_{annual}), annual integrated PP (ΣPP) and its contribution respect to the total coastal Mediterranean Sea PP for each of the 18 alongshore zones characterized in the Mediterranean Sea. Mean and standard deviation ($S.D.$) are calculated from 14 year averages is calculated from 15-year averages (2002-2016). River discharge flow was extracted from Tockner et al. 2008"

#1.2: Line 467-468: "In addition, Chl exhibits a strong reduction starting from 2012 that could be the responsible for such trend". Please clarify this sentence as I don't follow what you are trying to say.

Action: We thank the referee for the demand of this clarification. We agree with the referee that that sentence did not provide new information. The sentence then has been removed since PP trends in the Adriatic Sea are previously discussed (lines 460-466) and that sentence mislead the information.

#1.3: Figures: I'm still concerned by the use of the rainbow colour scale but will not insist that the author change the figures that use it. However, I do wonder why the authors prefer the rainbow colour scale? If it is because it shows trends clearer, then I urge the authors to consider that the rainbow colour scale can emphasize patterns that are not actually significant and disappear in a linear colour scale such as the scale used in the figures presented in the response to authors.

Action: Figures 2 and 3 has been changed and the *rainbow* colour scale has been rejected. Now for the figures, we used instead *parula* colour scale.

#1.4: Line 396-397: I suggest change "might have alter very weakly" to "might very weakly alter".

Action: Thank you for the correction. The sentence has been modified.

#1.5: Line 431: “from” rather than “rom”

Action: Thank you for the typo. It has been now corrected.

#1.6: Line 446-447: suggest changing “so that temporal trends derived from their analysis are highly depending on decadal variability” to “so that temporal trends derived from their analysis highly depend on decadal variability”

Action: Thank you for the correction. The sentence has been refreshed.