

Review v2 of “Spatial and temporal variability in the response of phytoplankton and bacterioplankton to B-vitamin amendments in an upwelling system” by Joglar et al.

## **General comments**

The authors have put considerable effort into responding to all my previous concerns. The sampling campaign is definitely impressive, as well as the work that went in to the study and I think that the results and discussions makes this effort justice now.

I have some minor comments for the author, to further help with the readability and clarity of the manuscript. Some points are purely editorial whilst others needs to be answered and the text changed. I would also like to congratulate the authors on a job well done, both on the cruise, lab and writing a very interesting manuscript.

## **Specific comments**

### **Introduction**

L36-39; I feel the text would benefit from more precise examples, e.g. cyanobacterial blooms, red tides etc.

L71; change “drive” to thrive?

### **Methods**

L213; change “inned” to inner.

L226; For clarity, add  $\text{pmol l}^{-1}$  after 0.04.

L263;  $\mu\text{m}$  is in blue, change to black.

L282; For clarity, I would like that the non-normal variables are stated somewhere, either here or in supplementary material.

L288-289; Did you only compare differences between treatments and the control and not between all treatments? If so, why?

L289-292; I realize this might be due to different traditions, but for me non-metric multidimensional scaling is abbreviated as nMDS. It is no requirement to change, I simply wanted to raise the concern.

### **Results**

L339; change “below of” to “below the”.

L341-342; Does this statement relate to the average chl a levels, per month? If so it should be stated more clearly. If not, this does not seem to be the case in some days (a, b and c). Please look into this and change statement if needed or clarify.

L343; Add reference to figure 3d-f.

L357; “... sampling dates...”, maybe change to cruise if applicable.

L360; “... but their abundance...” add “relative” for clarity.

L372; Add “.” before Average...

L373; what does “gl=10” mean? If it is degrees of freedom, use df. In not you should still state df.

L380-381; “However, Chl-a mostly decreased in the coastal experiments conducted in August (Fig. 5a and Fig. 5c).” I do not agree with this statement, as this is not was is shown in the figures. For instance, all bars in a shade of blue is always higher for the than t0 for August samplings.

L446; Even if the eukaryotic community composition did not correlate significantly, you should still present the correlation coefficient and p value for this.

L450; Maybe remove underscore in “SAR11\_clade”? If this is common practice, please ignore.

L458; Change to *Planktomarina*.

## **Discussion**

L485; Change “bacteria” to prokaryotes.

L486; State which experiment situation you refer to.

L494-499; This sentence is too long (63 words), please restructure to give the reader a chance to follow.

L530-533 and 544; Change “cobalamin” to B12.

L602; “Flavobacteriia”, is this correct?

L608; Which predation do you refer to? Zooplankton or mixotrophs? Please clarify.

## **Figure captions**

L985-989; Add space between *shelf* and (*Oc*). You do not have any ns in figure, can be removed?

L991-995. This figure caption is incorrect. Now you have more facets/mosaics, please update the caption accordingly.

L1005-1009. In the figure you have 5m and SCM, but in caption you have surface and SCM. I would suggest changing the figure x axes. Add information about SCM.

L1011-1015; In the figure you have surface and SCM, but in caption you have 5m and SCM. Please be consistent. Change “(c) SCM” to (d) SCM.

L1023-1030; Change “bars” to dots or points. Add information about errorbars.

L1032-1039; You don’t have any “numbers” anymore. Can be removed from caption.

## **Figures**

**Figure 8;** In the figure you have 5m and SCM, but in the manuscript you have surface and SCM. Please be consistent.

## **Supplement information**

**Figure S1;** In the figure you have 5m and SCM, but in the manuscript you have surface and SCM. Please be consistent.

**Figure S3 + caption;** State that y axis is broken for a and b.