

The manuscript "Bacterial survival governed by organic carbon release from senescent oceanic phytoplankton" deals with the highly interesting topic if additional extracellular organic matter release by senescent autotrophic organisms secures the survival of heterotrophic prokaryotes. The manuscript is well written and adds valuable information on bacterioplankton dynamics to the existing literature.

Comments:

P. 16975, l. 9: It's arguable if the word "phytoplankton" includes cyanobacteria – so it would make it easier for the reader if this information is added.

P. 16975, l. 19: Not sure why it is only "recently labelled" carbon.

P. 16976, ll. 5-9: The integrity of the prokaryotic cell membrane is often used as a proxy for living (or even active) and dead cells. However, it should be mentioned that this is not completely true and that there are many discussions about this point. As the results are strongly dependent on the amount of chemicals used the authors should also describe all their controls.

P. 16977, 2.2: Was the same CTD cast used to get the samples for primary production as for the other samples? At which day time were the samples incubated? Did the day time differ between samples? Was the light measured at incubation depths over time?

P. 16978, 2.3: At which depths were the samples taken? Corresponding to the primary production samples? Why are the authors sure to have only bacterioplankton and no Archaea?

P. 16979, 2.4: Same depths as before? Same CTD cast?

P. 16980, l. 15: Please, introduce abbreviations as LHB before first use.

P. 16980, 2.5: Which samples were not normally distributed?

P. 16982, l. 17: Only net production is measured...

P. 16982, l. 23: At least in the version I got, there is no figure 6.

Table 1: The authors may think about adding further information on the significance by showing \* for the different levels of significance ( $p < 0.05$  \*,  $p < 0.01$  \*\*,  $p < 0.001$  \*\*\*).

Table 2: Please, indicate significant differences.

Fig. 2: Why are the significant differences given in brackets? Same axes would make this figure better comparable.

Fig. 3: Level of significance would be a good addition.

Fig. 5: Please, explain better what's what, e.g. Percer, HLB etc.

In general there are a few spelling mistakes etc. in the text.