Interactive comment on “Production, partitioning and stoichiometry of organic matter under variable nutrient supply during mesocosm experiments in the tropical Pacific and Atlantic Ocean” by J. M. S. Franz et al.

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We thank Anonymous Referee #2 for the constructive comment. As already mentioned, contribution of heterotrophic bacteria and microzooplankton to the organic carbon pool will be added to the revised manuscript, to give the reader an improved impression of the composition of the plankton community. The term “phytoplankton biomass” will be changed into “microbial biomass” to address that the plankton assemblage consists not only of photoautotrophic microbes, but also of bacteria and protozoans. Indeed, microbial cell counts were performed, but only during the PU experiment (see Hauss et al., 2012). However, we are able to provide the structure of the phytoplankton community for each experiment via marker pigment analysis based on HPLC measurements. The following five taxonomic groups are defined: diatoms, flagellates (including chrysophytes, haptophytes, dinoflagellates and cryptophytes), chlorophytes (including chlorophytes and prasinophytes), N-fixing cyanobacteria, picocyanobacteria (including Synechococcus). The mean contribution of each phytoplankton group to the total chlorophyll a content over time within the various N:P treatment will be included for each experiment. We think that this additional data of phytoplankton taxa abundance represents an appropriate overview of the key players of phytoplankton within each experiment.

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