**Biogeosciences
Discussions**

Interactive comment on "Evidence for aggregation and export of cyanobacteria and nano-eukaryotes from the Sargasso Sea euphotic zone" *by* M. W. Lomas and S. B. Moran

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Reviewer #1. We thank the reviewer for the positive comments about writing style and the appropriateness of the work and the presentation. The reviewer had 4 minor suggestions and they are addressed below.

1) Assumption of equal contributions to biomass and productivity of a given size class of autotrophs. We were aware of the Fernandez et al paper, but didn't reference it as it addresses problems with the biomass estimates due to changes in grazing, perhaps toxicity, in incubation samples. Because all of the samples were filtrations without incubation perhaps the findings of Maranon et al. 2000 and Tremblay and Legendre

1994 are more relevant. Regardless, we've more clearly stated the assumption and its caveats earlier on in the manuscript, and made appropriate qualifying statements.

2) Definition of 'PF' and use of subscript 'i'. Yes, PF is proportion factor, we have now defined when introduced. Upon further consideration, yes, the subscript 'i' really is not necessary so has been removed throughout.

3) Inclusion of a paragraph on statistical analyses. A short section has been added to the methods to describe the analyses done.

4) Importance of diatoms and dinoflagellates below the euphotic zone. This statement is based upon the pigment data shown in Figure 5. The pigments that are summed in the mPF calculation are fucoxanthin and peridinin and represent diatoms and dinoflagellates; so we just stated that. We do have other data (not from these cruises but the fall and spring seasons) that suggest large diatoms and dinoflagellates are an important component of the autotrophic carbon below the euphotic zone. Because these data are from other cruises, we've not included it.