**Interactive comment on** “Effects of CO$_2$ on particle size distribution and phytoplankton abundance during a mesocosm bloom experiment (PeECE II)” *by A. Engel et al.*

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- Identification of species from Flow Cytometer signature: The species Nitzschia spp. and Micromonas spp. were identified based on the signatures that were obtained from cultures, and were, at least for Nitzschia spp., cross-checked by microscopy of the field sample. We will change Micromonas spp. to Micromonas-like following the classification given by Larsen et al. (1999), who observed a similar signature for Micromonas spp. by Flow Cytometry of mesocosm samples. For clarification, we added this information to the revised version of the manuscript.

- With respect to the potential underestimation of large cells see comment to Referee #2.
- Interference between phytoplankton cells and detritus: Significant differences between the treatments were observed during the height of the bloom. Here the amount of detritus was still low, as indicated by the overall agreement of particles counted with the Coulter and phytoplankton cells determined with the Flow Cytometer (Fig. 2).

- We included the information that various phytoplankton taxa had small cells in this experiment, as personal observation by V. Martin-Jezquel.

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