

Figure S1: Main diatom genera/species composition in % contribution at the intermediate depth (6 m) in each mesocosm.

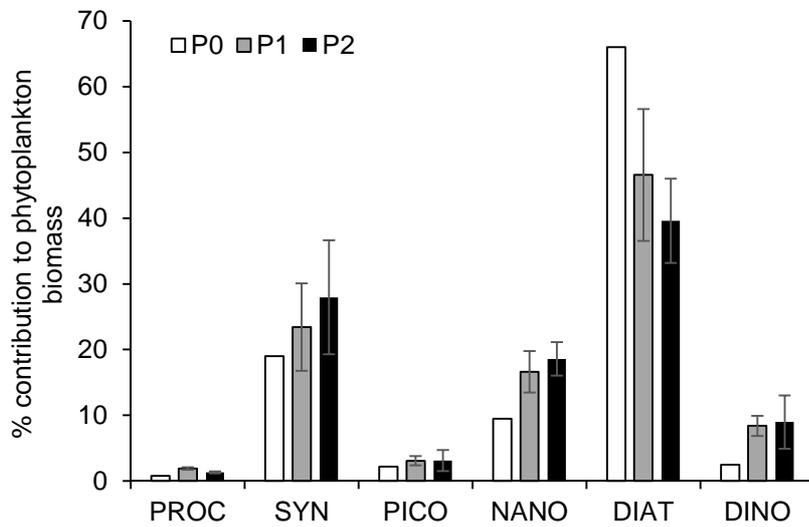


Figure S2 : Average ( $\pm$ SD) contribution to C biomass of the main groups constituting phytoplankton communities (diazotrophs not included) over the course of the experiment following the three periods P0, P1 and P2 for *Prochlorococcus* (PROC), *Synechococcus* (SYN), pico-phytoeukaryotes (PICO), nano-phytoeukaryotes (NANO), diatoms (DIAT) and dinoflagellates (DINO).

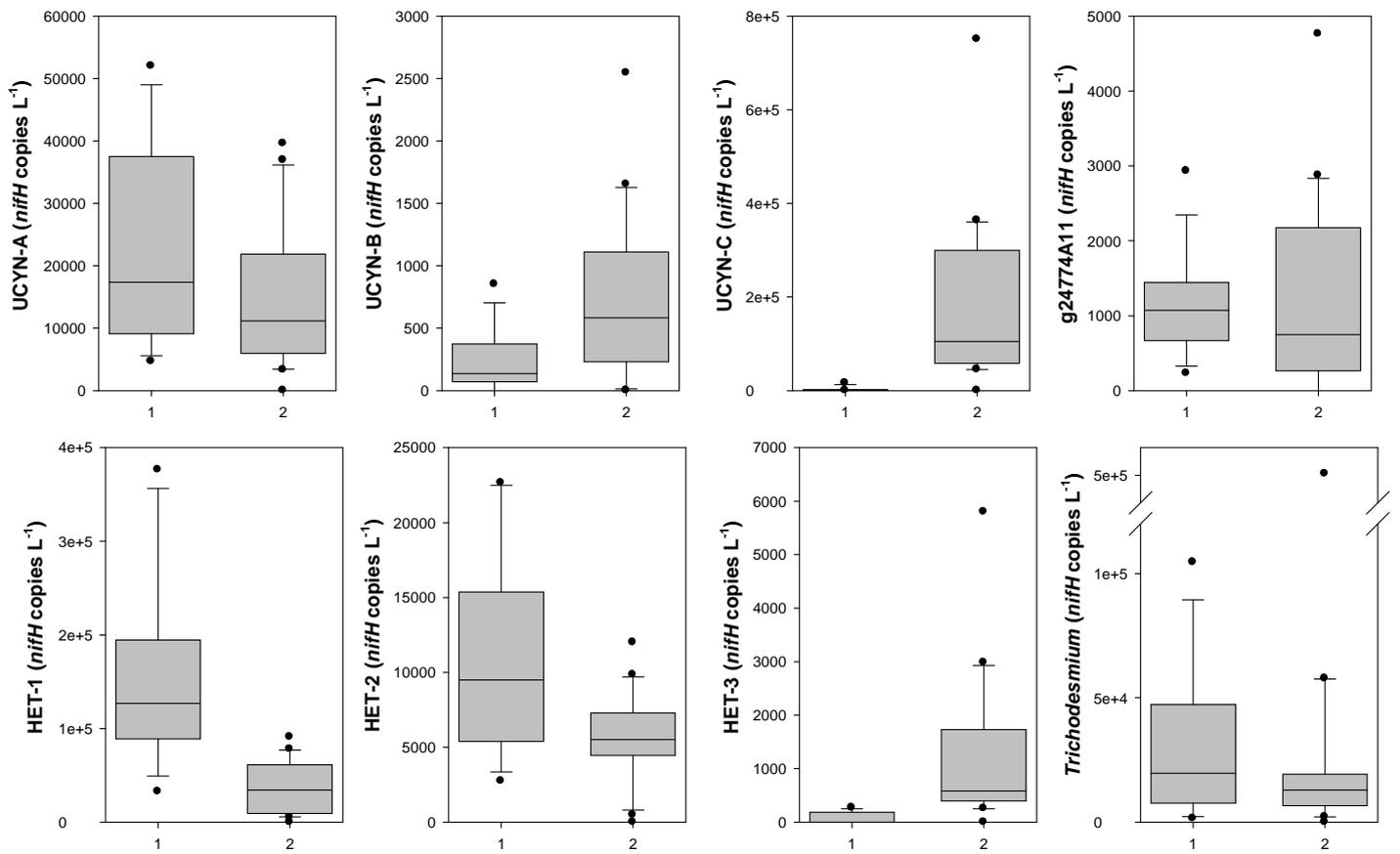


Figure S3 : Boxplots of the main diazotrophs groups in *nifH* gene copies L<sup>-1</sup> in the three mesocosms during the two periods P1 and P2.