

Supplementary Table S4: List of the thirteen pigments associated to their phytoplankton taxa and their associated size groups.

Pigments	Phytoplankton taxa	Corresponding groups
Chlorophyll b	Chlorophyceae	Pico-nanophytoplankton
Lutein	Chlorophyceae	Pico-nanophytoplankton
Neoxanthin	Chlorophyceae	Pico-nanophytoplankton
Violaxanthin	Chlorophyceae/chrysophyceae	Pico-nanophytoplankton
Alloxanthin	Cryptophyceae	Pico-nanophytoplankton
Zeaxanthin	Cyanobacteria/ Synechococcus	Pico-nanophytoplankton
Diatoxanthin	Diatoms	Microphytoplankton
Fucoxanthin	Diatoms	Microphytoplankton
Diadinoxanthin	Dinophyceae	Microphytoplankton
Peridinin	Dinophyceae	Microphytoplankton
19'-Butanoyloxyfucoxanthin	Pelagophyceae	Pico-nanophytoplankton
Prasinoxanthin	Prasinophyceae	Pico-nanophytoplankton
19'-Hexanoyloxyfucoxanthin	Prymnesiophyceae	Pico-nanophytoplankton