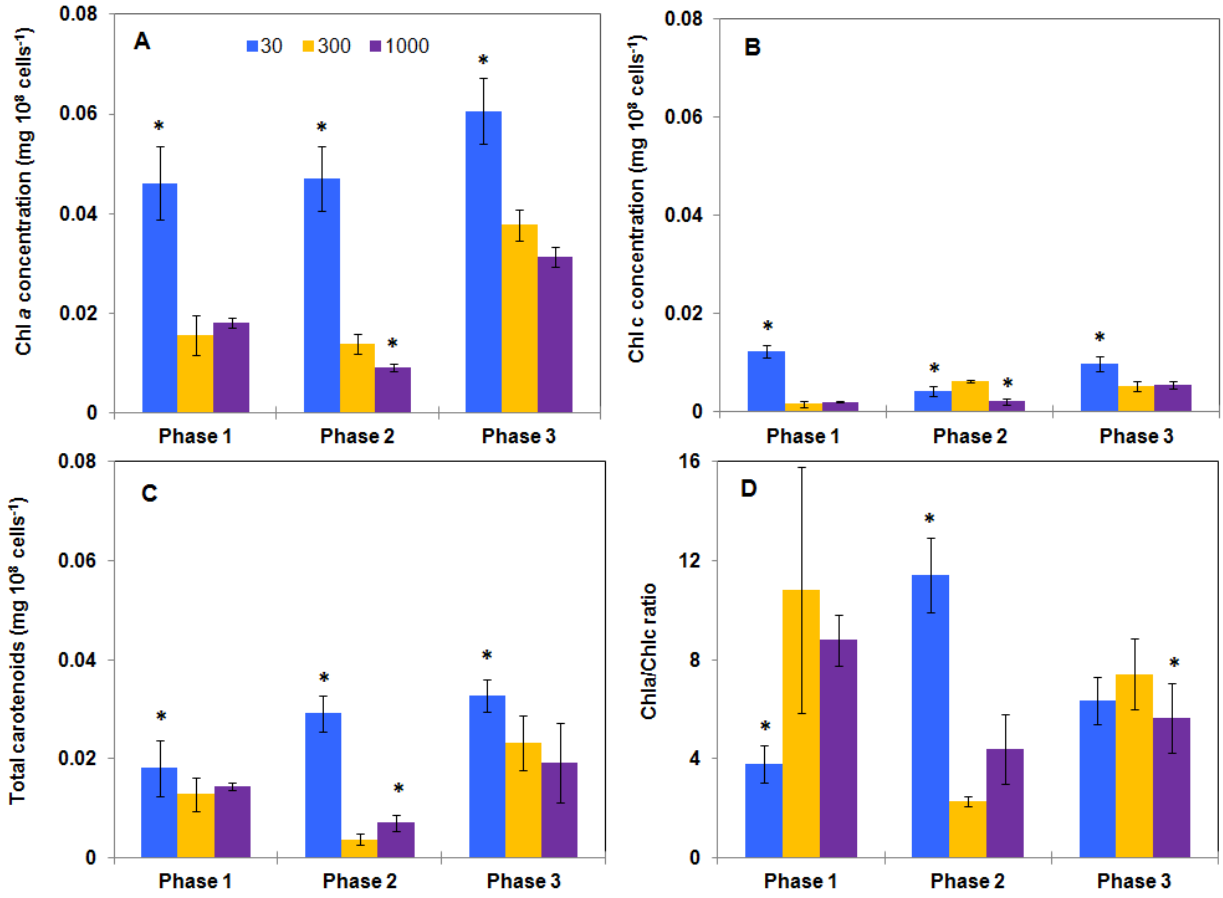
Supplemental Data 2: Cellular pigment quota



<u>Figure SD2.1</u>. Pigments content per cell in *Phaeodactylum tricornutum* grown under different light intensities.

Changing photon flux densities altered pigment concentrations. The time-course of Chl *a* and total carotenoid accumulations were very similar under ML and HL: both decreased during the transition between phase 1 to phase 2 and significantly increased in phase 3. Under LL, the level of individual pigments increased from phase 1 to phase 3 except Chl c that first decreased and then increased. During phase 1 and phase 3, Chl c content was higher under LL than under ML or HL. Under LL, the ratio increased from phase 1 to phase 2 and then decreased until phase 3 is reached. At the end of phase 3 the ratio was similar for all conditions. Interestingly, carotenoids mostly followed the Chl *a*/Chl c ratio except during phase 2 to phase 3 transition under LL.

Data are mean values ± SE (n = 3) and error bars represent SD. Means followed by asterisks are significantly different from the corresponding value for ML ($p < 0.05$).