

Interactive comment on “Can morphological features of coccolithophores serve as a reliable proxy to reconstruct environmental conditions of the past?” by Giulia Faucher et al.

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We thank Dr. Suchéras-Marx for his suggestions and for wishing us the success of our paper.

We wrote in the paper more clearly and in the caption of Fig.3 that we measured 50 coccoliths for every treatment, for every replicate, in every species. We also followed his good advice and we modified Fig.3 from scatter graphs to box plots. We also changed the caption in Fig.4, the font size in Fig.3 and in Tables.

We didn't apply the statistical analyses that he suggested but we accurately looked at

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the papers that Dr. Suchéras-Marx suggested to us and we thank him for his advice.

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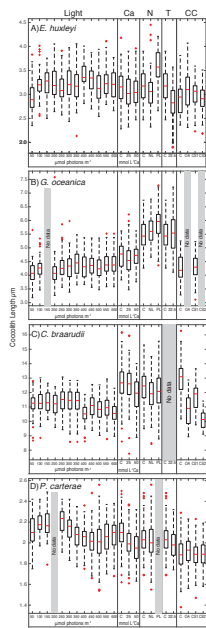


Fig. 3 Box plots of coccolith length from the different experiments. In A) *E. huxleyi*; B) *G. oceanica*; C) *C. braarudii*; D) *P. carterae*. C= control treatment. Light: experiment with 12 different light intensities from 50 to 600 $\mu\text{m photons m}^{-2} \text{s}^{-1}$; Ca: calcium manipulation experiment, in 25, $[\text{Ca}^{2+}] = 25 \text{ mmol L}^{-1}$; in 50, $[\text{Ca}^{2+}] = 50 \text{ mmol L}^{-1}$; N: nutrient limitation experiment. N1= nitrogen limited conditions; PL= phosphate limited experiment. T: temperature experiment. 22.5 = temperature tested; CC: carbonate chemistry experiment; theoretical CO_2 values: C= 400 ppm, O= 1000 ppm, S1= 1000 ppm, S2= 2000 ppm (for further information see paragraph 2.3). The top and bottom of each "box" are the 25th and 75th percentiles of the sample respectively. The red line in the middle of each box is the median. The whiskers, extending above and below each box, represent the furthest observations. Observations beyond the whisker length are marked as outliers (red cross). For the light experiment, 50 specimens were considered for every treatment. For Mg/Ca experiment (Ca), nutrient experiment (N), temperature (T) and carbonate chemistry manipulations (CC) experiments, every box plot represents 150 measurements in total, (50 measurements for each replicate).

Fig. 1.

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