

Comments on changes made to the ms - here I have copied the editors comments from the website and added notes on how i have followed them. Many thanks for the careful checking

- p1120: "exponential growth from a low level". Either "Exponential growth" or "exponential growth from a low cell density"
CHANGED

-p1120-21: "no artificial simulation" is cryptic if one has not read the paper. Why not "no nutrient enrichment"
CHANGED

- p1124: 1000 uatm CO2
CHANGED

- p2120 and elsewhere: Omega_c should suffice. In any case, be consistent: "Calcite" or "calcite"?
I have changed this to Ω_{calcite} consistently, for chemists Ω_c would be fine but for many palaeontologists using Ω_{calcite} will significantly aid comprehension

- p2123: also in *E. huxleyi*. See table 3 in Fiorini et al. (2011; Journal of Phycology)
ADDED ref to Fiorini et al. 2011 in paragraph on *Ehux*

- p8127-29: it is a pity that you do not elaborate more on this result which seem important and very much relevant to the question asked in the title of the manuscript, with data collected during the same cruise as the other results discussed. It would be worrisome if this is part of a "salami" publication strategy.

The *Braarudosphaera* response is indeed interesting but it requires explaining in the context of *Braarudosphaera* life-cycle research and needs a separate paper, which we are working on. Also this paper is specifically addressing *Emiliana huxleyi*.-

p918: "after 96 h."
CHANGED

- p9129-30: "... environmental conditions... To investigate these possibilities, ..."
CHANGED

- I recommend that the size of Fig. 10 is increased, especially the font

size.

NOT CHANGED - this diagram does look small on the word document but is intended to be reproduced at half column width in the final Biogeosciences pdf and at this scale the font size appears suitable to me.

- p10 l23-25, p11l24 (and possibly elsewhere): a referee commented that "calcification" was not consistently used. Here, it is still confusing. Calcification is usually used to indicated a rate (as you do when citing data from Poulton et al.). I disagree with this use in the case of morphometric measurements because there is no direct relationship between the calcite mass and the rate of calcification. I suggest that you use "degree of calcification" instead, as you do earlier in the manuscript (as well as at the end of this paragraph).

CHANGED (also in one other place)

- 11l5: "low initial cell density/abundance"

CHANGED

- p12l22: "in situ" rather than "in-situ"

CHANGED

-p13l22: please provide the doi of the data set at BODC.

ADDED

- Table 1, Fig. 8: salinity is the ratio of two conductivities and is therefore unit-less.

CHANGED

- Legend of table 3, fig. 5: always add a space between a number and its unit.

CHANGED

- All figures: use negative exponents in axes labels.

CHANGED

- Note that guideline for formatting references have not been followed. NOT CHANGED - I cannot see in what way the guidelines have not been followed. They were formatted using the Endnote style file from the Biogeosciences website and as far as I can see have identical layout to references in other Biogeosciences papers.