

Interactive  
Comment

***Interactive comment on “A mathematical  
modelling of bloom of the coccolithophore  
*Emiliana huxleyi* in a mesocosm experiment” by  
P. Joassin et al.***

**K. Schulz**

kschulz@ifm-geomar.de

Received and published: 29 February 2008

I would like to comment on the cellular organic and inorganic carbon content in *Emiliana huxleyi* used in this modelling study. Both quotas are reported in numerous studies and are more in the range of 10 pg for particulate organic carbon (POC) and usually a bit less for particulate inorganic carbon (PIC). The values adopted by the authors are too high:  $2.7 \times 10^{-9}$  mmol of POC (33 pg) and 1.3 pg of PIC per coccolith with 15 coccoliths per cell. If the POC quota was indeed determined by dividing the amount of POC produced by *Emiliana huxleyi* cell numbers in the mesocosms, it seems that there were significant contributions of other phytoplankton species, detritus, bacteria

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



and/or TEP carbon to the measured built-up of POC. In this respect it would also be interesting to compare modelled with measured changes in PIC/POC during the 20 days of the experiment.

---

Interactive comment on Biogeosciences Discuss., 5, 787, 2008.

**BGD**

5, S92–S93, 2008

---

Interactive  
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

