

## ***Interactive comment on “Significant long-term increase of fossil fuel CO<sub>2</sub> uptake from reduced marine calcification” by A. Ridgwell et al.***

**A. Ridgwell et al.**

Received and published: 23 June 2007

The Referee lists a number of specific comments, which we have addressed as follows:

- > Page 1765, line 12: We have expanded on the description and added additional equations for completeness as requested.
- > Page 1766, 1st par: We have re-written the description of the fitting procedure.
- > Page 1766, line 9: “At values  $0 < n < 1$  as given in the table the smallest value gives the strongest sensitivity near OHMEGA=1.” We have not addressed this because the referee’s point is completely unclear.
- > Page 1766, line 17: We have expanded on the reference to the EnKF method and added the reference suggested.

- > Page 1767, line 5: We have made available the parameter values of all 54 ensemble members as electronic information. We have also clarified which parameters are calibrated and added a new table (#2) to summarize these.
- > Page 1767, line 22: The omission of sediment interaction has been clarified.
- > Page 1768, line 15: Organic carbon export value has now been quoted and some discussion of this added.
- > Page 1769, line 9: Wording altered as requested.
- > Page 1771, line 11: We have added some additional discussion regarding the feedback implications of bulk POC production vs. ecosystem composition (potentially affecting POC penetration).

---

Interactive comment on Biogeosciences Discuss., 3, 1763, 2006.

**BGD**

3, S1076–S1077, 2007

---

Interactive  
Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper