

Interactive comment on “Significant long-term increase of fossil fuel CO₂ uptake from reduced marine calcification” by A. Ridgwell et al.

C. Chris

clangdon@rsmas.miami.edu

Received and published: 8 December 2006

I am concerned about the use of the model $G=k(W-1)^n$ for all calcifiers. This model seems to provide a reasonable fit for corals, however, this is not the case for coccolithophorids or forams. Both of these organisms exhibit significant rates of calcification at $\omega=1$. I think a considerable bias can be introduced to the analysis by forcing the $G=k(W-1)^n$ relationship to the coccolithophorid and foram data sets. The authors should investigate the impact of fitting simple linear functions to these data sets. If they feel it is important to fit the same function to all data sets then the linear function would likely introduce the least bias.

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