

Interactive comment on “Changes in ocean circulation and carbon storage are decoupled from air-sea CO₂ fluxes” by I. Marinov and A. Gnanadesikan

Anonymous Referee #1

Received and published: 2 November 2010

One thing that just came to my mind that I did not think of when I wrote the review yesterday is the issue of air-sea carbon disequilibrium and the gas-exchange coefficient. According to e.g. Toggweiler et al. (2003), varying the gas-exchange coefficient has a strong impact on air-sea fluxes as well as on the distribution of carbon in the ocean. Did the authors perform any model experiments to assess the sensitivity of their results to the gas-exchange coefficient?

Interactive comment on Biogeosciences Discuss., 7, 7985, 2010.