

Interactive comment on “Impact of atmospheric and terrestrial CO₂ feedbacks on fertilization-induced marine carbon uptake” by A. Oschlies

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I thank the referee for her/his careful review and the useful suggestions for improvement. I have followed all the suggestions, except for the requested replacement of the bullet points describing the individual experiments by a table (see point 3 below).

1. The last two sentences in the abstract have been toned down and now explicitly state that these conclusions are valid only for pCO₂ sensitivities of the terrestrial carbon storage in the middle range of the C4MIP models. A more detailed discussion of the associated large uncertainty is included in section 5.
2. A short description of the different components and the grid resolution of the UVic C1224

Earth System Climate model has been added (Section 2).

3. I prefer to keep Figure 1, but I have shortened the figure caption to avoid too much repetition. I also prefer to keep the bullet points on page 4499 rather than replacing them by a table, because I think that the bullet points allow for a longer text and a more detailed description.

technical corrections:

page 4498: all done, thanks for pointing these out!

page 4503: This comment was confusing. It has been modified to "globally uniform increase in C:N ratios"

page 4509-4511. The numbers after the references apparently have been put in by the style file. Presumably to check whether all references are used in the text? I'll make sure that the final version corresponds to standard format.

page 4512. ASE is air-sea exchange. Now corrected.

page 4512 - 4519: all done. All labels a-d have been homogenized and all axis labels have been thickened.

page 4524, Fig.9: I'm afraid that the color code of Figure 8 was wrong (that of Fig 9 was consistent with all figures but Fig. 8). Sorry about this confusion and thanks for identifying this error, which has now been corrected.

page. 4525. Done. With color code of Fig.8 corrected, all figures now have the same color code.

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