

***Interactive comment on “The interaction of ocean acidification and carbonate chemistry on coral reef calcification: evaluating the carbonate chemistry Coral Reef Ecosystem Feedback (CREF) hypothesis on the Bermuda coral reef” by N. R. Bates et al.***

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We thank Dr. Silverman for posting a very helpful comment on the paper. In the revised paper, we included a brief section on the approach used by Silverman et al., 2009. In the original paper and revised paper, we estimate the preindustrial calcification rate. Given that there are many caveats and uncertainties (also discussed in the text) in this approach, the Bermuda data suggest that calcification has decreased to less than

C4145

20% of the preindustrial calcification rate during the spring period, but not at other times during the year. Thus, for a mean annual state, the Bermuda reef has not yet transitioned, but for parts of the year it appears to have done so. In the revised paper we have also specifically commented on the results of Silverman et al., 2009.

Our response to the comment by Dr. Silverman is presented in indented Arial font for ease of review in the supplement.

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/6/C4145/2010/bgd-6-C4145-2010-supplement.pdf>

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C4146