

## ***Interactive comment on “Ocean acidification accelerates dissolution of experimental coral reef communities” by S. Comeau et al.***

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First, I need to highlight the fact that I am not a coral biologist and have no practical experience with the used methods. As a consequence, my report focusses on general experimental procedures.

The most interesting part of the manuscript is the use of artificial “controlled” communities to evaluate the impact of ocean acidification on net calcification. This is an under-used methodological approach and a nice alternative to natural analogs and/or in situ mesocosms with the potential to better understand the mechanisms behind the response at the community level.

From my limited expertise, I do not see any major problem with the manuscript and

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only have a few comments/questions:

- Can you provide some information on the natural variability experienced by these communities in the field? That would help putting the tested scenarios into context.
- Please provide a Table with the seawater chemistry over the course of the experiment. Also include statistics to demonstrate that you have significant differences between treatments. Provide graphs if necessary to illustrate the variability.
- Full statistics should be better presented in the results (provide model, F and p values for tested parameters (pCO<sub>2</sub> and replicate).
- At the end of the Results, it is claimed that coralline algae experienced high mortality. Information on “health” of all tested species should be provided and presented at the beginning of the result section.

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