

Reviewer #1

Line 31: added CO₂ only has lead to an increase in acidity of 30% at the surface of the ocean, not the whole ocean.

Done.

Reviewer #2

I first would like to thank the authors for their willingness to address my comments. I particularly appreciate the effort made for redoing the statistical analyses.

That said, I think that the MS will be suitable for publication after major revisions.

1) The tables summarizing GLMM results related to figure 3 and 4 should definitely be provided in the core MS, as suggested in my first comment. The reader cannot appreciate the strength of the evidence as it stands. The statistical results are not presented anywhere in the MS. For example, it seems to me that time and treatment interacted in their effect on pH_{tot} or omega (Figure 3), but this does not appear in the text, therefore leaving an impression of incompleteness.

The GLMM tables have been added to the main text.

2) I somehow disagree with interpreting "marginally" significant results as did the authors for %shell new growth. In this case, this is particularly concerning because $p=0.11$, which is above the generally accepted threshold for marginal significance (0.10). Furthermore, shell weight, which relate to shell size and growth, was not affected by the treatment and therefore do not support the actual interpretation of the result obtained on %shell new growth.

We have removed the word “marginally” from the relevant sentence.

3) Instead, I suggest to discuss the fact that replication level was very low ($n=2$), making unlikely the detection of significant differences among treatments. This would probably be supported by a statistical power analysis. This is one of the major limitations of the study that should be highlighted properly in the discussion.

We have re-written the discussion to emphasize the issue of low replication level.

4) The authors should provide raw data of porewater chemistry and clam growth.

The raw porewater chemistry data is already provided in Supplemental Datasets 2 and 3. The raw clam growth data is provided in Supplemental Dataset 8. If there is anything we can do to make this clearer, please let us know.

Few minor comments:

Page 16, line 93: what do you mean by “complicated” here?

We have changed this sentence to be more specific, from “complicated our statistical analyses” to “limited the power of our statistical analyses.

Figure 3: Title variables should be placed as left-aligned / vertically oriented y-axis labels with proper units where necessary (i.e. alkalinity). As said in my previous comment, data should be presented in the following order: 1) pH, 2) TA, and then 3) omega. Start with the two measured parameters, followed by the one that is calculated based on the first two.

We have made the requested edits to Figure 3.