Dear Fréderic and editorial team,

We are delighted by this news! We have replied briefly to your suggestions below. All replies in blue below.

We note that to prepare final figure files, we made superficial edits to make the labels more attractive on figures 2-9; no data or other substantive information was changed in so doing. Fig 1 is exactly as resubmitted in the previous rounds. For figures S5-S7, we also edited scale bar labels to be more consistent with abbreviations in the text.

We also made minor edits to correct figure references to Copernicus style and added a brief financial support statement to the end, as I think is now required.

Please let us know if you have any questions. Thank you for your time and attention to our work.

## All the best, Simone and co-authors

I am happy to accept your revised manuscript following very few technical corrections which I would like you to consider.

L35: consistently had

## Changed.

L44: I do not really understand this sentence, are we talking about present day or risks for the future (I would remove "in the future" at the end of the sentence but am not sure this is what you meant)

We see your point and appreciate the opportunity to clarify. While we did intend to say "in the future," the reality is that those impacts may also be occurring now. So we removed "in the future," because this way it may be read to apply to now. The implication that it is even more likely to do so in the future should also be clear.

L84: the projected (remove future) time

Done.

L251: define CTD

## Done.

Section 3.2: I appreciate the amount of details given here but I wonder if this is important for most readers, could you consider moving at least some of the information given here to a supplementary material? Also, did you use the Error function of seacarb for the uncertainty propagation? If so, it should be mentioned as well.

Good suggestion. We shortened this section from 56 lines to 30 lines by moving many of the details to a new Supplemental Material section. We did not use the Error function of seacarb. These are just the estimated errors in Orr et al. 2018; we have edited the sentence to clarify this.

L275: Why is it important to mention a regression determination coeff for 2 variables that are calculated using similar dissociation constants? Maybe I am missing something here.

Fair point. We have removed the coefficient of determination wording.

L337: prepared in Surfer and can be found

## Done.

L338: Comparable plots of temperature, salinity, as well as oxygen, DIC, TA and nutrient content

Corrected to "Comparable plots of temperature and salinity as well as oxygen, DIC, TA, and nutrient content..."

Figure 5: I agree with R1 that the position of Figure 5 is odd, I see that you cite it now regarding S and T in section 4.1. Perhaps a better solution would be to divide this figure in 2 and present O2, fCO2 and Omega panels closer to section 4.3. Also remove PSU from Y-axis label.

Thank you for catching the errant PSU and for the idea to split the figure in two. That seems like the solution we did not come upon prior to resubmission. We have done so now and updated all figure references in the text.

L471: median values from April to September

Done.