## Response to revised "Net primary production annual maxima in the North Atlantic projected to shift in the 21st century."

Jenny Hieronymus, Magnus Hieronymus, Matthias Gröger, Jörg Schwinger, Raffaele Bernadello, Etienne Tourigny, Valentina Sicardi, Itzel Ruvalcaba Baroni, and Klaus Wyser

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Review by Dr. Lee de Mora, Plymouth Marine Laboratory, Plymouth, UK

Thanks for your hard work. The abstract, introduction are all significantly improved, with a much clearer flow and logic. The methods and results sections have been streamlined and the overall tone of the text makes it easier to follow. The revised figures look great and support your conclusions. I'm also glad that you are now using consistent colouring for the regions in your figures. It does really help! As does adding regular reminders of the region names in the text.

Also, in addition to the changes to the manuscript, thanks for your patience in answering my questions in the Author's response. This has helped me understand the work and clarified the overall paper.

I'm happy for this paper to accepted subject to a small number of very minor changes described below.

This is a great work and congratulations.

Lee de Mora

## **Minor comments:**

Please note that the line numbers here refer to the tracked changes document: <a href="https://editor.copernicus.org/index.php?">https://editor.copernicus.org/index.php?</a> mdl=msover md& jrl=11& lcm=oc104lcm105m& acm=g et authors tracked changes file& ms=110119&id=2268736&salt=1650201345432405649

L163 – Please add a sentence justifying the use of SSP5-8.5 (as you have in your response to the previous review.)

L243: Move the link to a reference.

Results section: It looks strange to me to refer to a decade as 2085s? Typically, the decade 2080-2089 would be the "2080s", not 2085s.

L412, L415: When you link to a software routine, it's best to use a monospace font like Courier New or something, or the command: \texttt{ks\_2samp} in latex. ie \text{ks\_2samp}, \text{crosscorr}

L637: "That is, the large range of correlated lags indicate that the whole story is not simply that MLD acts as a control on NPP." – this is a bit strangely worded, can you re-phrase it please? Maybe something like: "The large range of correlated lags indicate that that NPP is likely to be controlled by other factors, in addition to MLD." Or something like that?

Finally, the conclusion sections needs a closing statement of some kind.

## Bibliography:

- DOI's sometimes have an http link and sometimes don't?
- L729: Extra spaces around "Sverdrup's"
- Sometimes author lists are separated by "and" sometimes by "&"
- Sometimes journals are abbreviated and sometimes they're fully named
  - o ie: L 764: Geoscientific Model Development but L767: Geosci. Model Dev
- L898: Elsewhere Authors initials have periods: , ie: Smyth T.J.

As I said in my previous review, a citation manager should be able to automate this next time. It will save time in the long run. However, BG's typeset editor will likely notice (and hopefully correct) other issues here too.