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3 December 2020

Dear Editor,

Thank you for the invitation to submit our revised manuscript entitled *Response of biological productivity to North Atlantic marine front migration during the Holocene*. In response to your suggestion, our final section of the paper (5.4 Past and future controls on the Holocene migration of the Arctic and Polar Fronts) has been expanded following comments from the peer reviewers. This has now been modified to briefly address the impact of other oceanographic and atmospheric variables, for example NADW, AMOC, and NAO, as well as the movement of marine fronts in other regions of the North Atlantic. While more details of these comparisons are certainly warranted, our main aim in this paper was to compare long-term trends observable in our LOESS smoothing and statistical analyses. Once we finish analyzing the full Deglacial and Holocene portions of these marine sediment records, one major goal in this work will be to explore the shorter term variability of changes in all proxies and how this relates to major climatic and oceanographic events both locally and elsewhere in the North Atlantic. Hence, we prefer to retain these details for a subsequent manuscript.

Please find our revised manuscript with tracked changes attached and thank you again for handling our submission through the review process.

Sincerely,

A handwritten signature in black ink, appearing to read 'David J. Harning', written in a cursive style.

David J. Harning