

March 10, 2024

Dr. Paul F. Kemp, Editor-in-Chief  
Limnology and Oceanography: Methods

Dear Dr. Kemp,

Enclosed please find our revised manuscript, titled 'Fitting metabolic models to dissolved oxygen data: The Estuarine BAYesian Single-station Estimation method (EBASE)', to be considered as a description of new methods in Limnology and Oceanography: Methods.

We sincerely thank all three reviewers for providing helpful and constructive comments on our manuscript. It is clear that all three dedicated a substantial amount of time to the review and for that we are grateful. We have made every effort to address the comments provided by each reviewer, as noted in our line by line responses. In particular, we have added critical references that were missing from the original draft and provided a more thorough comparison of our approach with existing methods. We also expand on recommendations for model application regarding parameters that are not well constrained and provide additional suggestions for further model development.

We greatly appreciate the opportunity to publish this work in Limnology and Oceanography: Methods and are confident readers will consider it a valuable contribution. Please feel free to contact us directly should additional information be needed.

Regards,

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