

Dear Caroline Slomp,

Thank you very much for your help and additional input. We have expanded the discussion on eukaryotic denitrification to include more detail about radiolarians in the Santa Barbara Basin, and quoted the rates of denitrification found in Bernhard et al. 2012. We added an additional sentence discussing denitrification by fungi which we believe could also be a possibility in the Santa Barbara Basin. This was a great addition to our discussion, and we are excited to have it included.

Beyond your suggested edits, we discovered an error with the units for DIC and alkalinity in Figures 2 & 3 and have corrected that (replaced μM by mM). Additionally, we re-exported figures 1, 4 & 5 to increase the image quality and we changed the font for Figures 1A and 1B to be consistent with the rest of the manuscript. Lastly, we added one person to the acknowledgements.

Thank you!

David Yousavich and Tina Treude in the name of all Co-Authors