

Biogeosciences Discuss., author comment AC1
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Reply on RC1

Jessica G. M. Crumpton-Banks et al.

Author comment on "Technical note: No impact of alkenone extraction on foraminiferal stable isotope, trace element and boron isotope geochemistry" by Jessica G. M. Crumpton-Banks et al., Biogeosciences Discuss., <https://doi.org/10.5194/bg-2022-187-AC1>, 2022

We would like to thank Reviewer 1 for providing prompt and thoughtful feedback on our manuscript, and give our responses to their suggestions below. Reviewer comments are in italics.

Page 1, lines 24-26: the logic of the grouping of proxies between clauses a) and c) seems a bit unclear. Also what about micropalaeontological/assemblage work, like transfer functions etc.?

Our intention here was to introduce the proxies that we worked with in this study, and so those are the only proxies we discussed in this section. We can amend this to make this context clearer if this would address your concerns.

Section 2- the first sentence of this detailing where all the samples were taken is far too long and unwieldy, with too many clauses and brackets. Suggest breaking up for the benefit of the reader.

We agree that this sentence would benefit from being revised for clarity.

Page 3, Line 71: Can the authors please clarify if these growths were seen only in the ASE-treated samples, or in both the ASE and non-ASE samples?

Thank you for pointing this out, we mention this in the caption and later in the discussion but agree that it should be mentioned here as well.

Page 5, Line 109-110: the authors mention here the Al/Ca measurement results, and then mention it again later on Page 6, Lines 130-131. Could the authors perhaps avoid repetition by saying 'despite the shorter ultrasonication time in some samples' at the end of the Page 6 line 130-131 instead?

Thank you for this suggestion, we will include it in the revised manuscript.

Page 6, Line 128: Please give the absolute values of these measured E/Ca ratios as well as the % variability between measurements.

We will incorporate these into our revised manuscript.

Table 2: Why should d18O and d13C be reported 1sigma, and boron 2? I have never understood why O/C isotopes should be held to a lower standard.

We are happy to amend this and report the oxygen and carbon isotope results to 2 sigma.

*Table 12, Line 260: give reference for this statement – e.g.
<https://www.nature.com/articles/ncomms15441?>*

We agree that this statement should be referenced, and we will include an additional citation in the revised manuscript.

Page 1, Line 45: foraminiferal geochemistry.

Thank you for pointing out this error!