We would like to thank both reviewers for the time taken to provide constructive and insightful comments on our manuscript. Below we have copied their original suggestions and comments in full, followed by a response to each of the issues raised and how these will be addressed in a revised version.

## RC2: 'Comment on egusphere-2024-2714', Anonymous Referee #2, 17 Nov 2024

<u>REF:</u> This manuscript is well written, interesting, and has an easy to follow story. I think it absolutely deserves publication; well done authors! I have two suggestions that I think can improve the manuscript: I would suggest adding one or two sentences to the abstract or introduction explaining that higher oxygen isotope values are indicative of lower flow conditions. This relationship is key to understanding the premise and results of the paper, so I would recommend stating it explicitly, earlier in the paper. My second suggestion is to add more rationale in the method section as to why carbon isotopes were measured. Oxygen isotopes were clearly the focus, and it makes sense to also run carbon at the same time since the shell samples are already at the mass spec. But, I think more rational in the methods is needed for why carbon was included in the manuscript itself. I look forward to seeing this paper published.

Reply: Thanks for the very positive feedback on our work. We agree with the suggestion to mention the notion that higher  $\delta^{18}$ O values correspond to low flow conditions early on (i.e. in the abstract). Secondly, we will also incorporate the suggested rationale for including  $\delta^{13}$ C measurements. Indeed, on the one hand they are measured along with  $\delta^{18}$ O data (hence, there are available by default), but there was also an inherent potential value in the  $\delta^{13}$ C data, since we know from regular sampling on the Oubangui River that  $\delta^{13}$ C values of dissolved inorganic carbon (DIC) follow a clear seasonality (Bouillon et al. 2012, 2014), and we would expect  $\delta^{13}$ C values in bivalves shells to record this seasonality (although besides  $\delta^{13}$ C-DIC, metabolic CO<sub>2</sub> and other factors may also influence  $\delta^{13}$ C<sub>carbonate</sub> values). This will be made clear from the onset in the revised version.