

RESPONSE TO EDITOR'S COMMENT

for the manuscript “*River discharge impacts coastal Southeastern Tropical Atlantic sea surface temperature and circulation: a model-based analysis*” by Aroucha et al., submitted to *Ocean Science*.

We thank the editor for her thorough evaluation of our manuscript and suggestions. Below, we provide a response to the editor's comment.

*References cited in this document are included at the end. Responses to individual comments are provided below, with specific references to the corresponding lines and sections in the revised manuscript. For clarity, our responses are highlighted in **blue font** throughout this response letter.*

Editor's comment (EC1)

This is an interesting model experiment paper. There are a couple of things I spotted on initial review that I'd like you to address when you come to revision - there are some units psu for salinity, which should be removed as there are no units for salinity on the practical salinity scale. And there are a few instances of referring to something being 'in' a reference which should be replaced with 'by'. Personally, I don't like the use of parentheses for opposites, as you have in the abstract. Since there is no word limit for Ocean Science, it would be clearer to write the two cases out in full. But I know plenty of people use this formulation. Thanks for submitting your work to Ocean Science.

R. Thank you for the comments and suggestions. We have removed the salinity units in the manuscript and the figure's labels. We also revised our abstract and conclusion paragraph in Sect. 4 to replace the use of parentheses with a full write-out of each case. Finally, we fully revised the manuscript writing.