

Biogeosciences Discuss., referee comment RC1
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Comment on bg-2021-329

Anonymous Referee #1

Referee comment on "Contrasting vertical distributions of recent planktic foraminifera off Indonesia during the southeast monsoon: implications for paleoceanographic reconstructions" by Raúl Tapia et al., Biogeosciences Discuss.,
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The contribution "Contrasting vertical distribution of recent planktic foraminifera off Indonesia during the southeast monsoon: implications for paleoceanographic reconstructions" presents new plankton net data from the eastern tropical Indian Ocean. They analyzed the planktic foraminiferal abundances from 5 depth intervals between 0-500 m water depth at 37 sites covering the Indonesian marginal seas off Sumatra, Java and the Lesser Sunda Islands in order to shed light on the spatial distribution of planktic foraminifera during the southeast monsoon and established the relationship between their abundance and the environmental parameters to finally compare those findings with sediment trap and core top assemblage data to further improve the foraminifera-based proxy reconstructions in the region. This study represents an important contribution to the scientific progress within the scope of this journal. It adds new ideas, applies reliable methods, and contributes with new data.

The manuscript is well organized, easy to follow and very well written. The introduction is very rich, referring global and regional previous contributions. Methods are very complete and correctly explained. The results are properly presented and the discussion is very rich. At some point, I consider that the authors could avoid the discussion about the changes in the species size as it is not even plotted in the main manuscript and later is not taken into account for the paleoceanographic implications discussion. Figures and tables are correct, even the Appendix ones. The references fit the journal requirements. Below I detailed a few minor points, though mostly recommendations rather than criticisms. I recommend minor revisions and consider this manuscript fitting very well for the Journal Biogeosciences.

- Line 6: Is it "those" or "the"?
- Line: 23: I would write "e.g." because the sentence refers to global reconstructions of past ocean conditions, and globally there are plenty more contributions than those cited in line 23.

- Line 43: The sentence is hard to understand. I suggest to shorten it in order to make the idea clearer.
- Line 176: Try to avoid sentences that sound like "discussion" in the results. Lines 176 and 177 are an example of this.
- Line 305: Please, check if the idea of this sentence is correctly expressed