

Biogeosciences Discuss., referee comment RC2  
<https://doi.org/10.5194/bg-2022-59-RC2>, 2022  
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## Comment on bg-2022-59

Ralf Schiebel (Referee)

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Referee comment on "Upper-ocean flux of biogenic calcite produced by the Arctic planktonic foraminifera *Neogloboquadrina pachyderma*" by Franziska Tell et al., Biogeosciences Discuss., <https://doi.org/10.5194/bg-2022-59-RC2>, 2022

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Overall, the manuscript on by Tell and coauthors reads goods, and adds useful information on the population dynamics and flux of *N. pachyderma*. In addition to the comments and suggestion made by another reviewer, Robert Spielhagen, I would suggest amendments, which I have detailed in an annotated pdf file I send along with this review. In particular, wording needs to be revised in places. Some of the figures are not up to publication standard, and labels need to be revised and/or added. Most importantly, the manuscript needs to be rearranged in places, and some sections need to be moved from the "Results" to the "Discussion". I would also suggest to analyze the data on test size for any relationship with the synodic lunar cycle, which would strongly support (or not) the population dynamics and pulsed flux discussed in the manuscript.

Please also note the supplement to this comment:

<https://bg.copernicus.org/preprints/bg-2022-59/bg-2022-59-RC2-supplement.pdf>