

Biogeosciences Discuss., referee comment RC1  
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## Comment on bg-2022-128

Anonymous Referee #1

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Referee comment on "How biogenic polymers control surfactant dynamics in the surface microlayer: insights from a coastal Baltic Sea study" by Theresa Barthelmeß and Anja Engel, Biogeosciences Discuss., <https://doi.org/10.5194/bg-2022-128-RC1>, 2022

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The manuscript is a very well-written manuscript on biogenic sources of surfactants in the surface water at a coastal Baltic Sea site. This study explores which biopolymer composition controls surface activity by setting the focus on amino acids and carbohydrates as the main components of phytoplankton. The study hypothesized that phytoplankton products contribute to the surfactant stock but their release mechanisms and microbial turn-over times control surfactant concentration rather than incident phytoplankton production. The manuscript can be accepted after minor modifications.

### Detail commitment

1. I consider the Conclusion in the manuscript too general. I suggest the authors include the main findings supported by quantitative evidence/data.
2. For tables A2, A3 and A4. Include a note for number in bold and number of stars \*\*

