

Biogeosciences Discuss., referee comment RC3  
<https://doi.org/10.5194/bg-2021-160-RC3>, 2021  
© Author(s) 2021. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## **Comment on bg-2021-160**

Anonymous Referee #3

---

Referee comment on "Causes of the extensive hypoxia in the Gulf of Riga in 2018" by  
Stella-Theresa Stoicescu et al., Biogeosciences Discuss.,  
<https://doi.org/10.5194/bg-2021-160-RC3>, 2021

---

The topic of the manuscript is interesting and the analysis of data is very useful. However, the manuscript is too unfocussed and much too long. The reading was difficult for me because a red line does not exist. One possibility would be to only focus on the oxygen budget of the deep water of the Gulf of Riga and to compare the fluxes and inventories from the observations with numerical model data. With the help of a model it would be possible to disentangle the drivers of hypoxia and also to evaluate longer time series. As the natural variability of the system is large, the short study period does not allow to investigate statistically significant trends. Hence, a major revision of the manuscript is needed.