

Geosci. Model Dev. Discuss., referee comment RC1 https://doi.org/10.5194/gmd-2021-20-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on gmd-2021-20

Anonymous Referee #1

Referee comment on "The Lagrangian-based Floating Macroalgal Growth and Drift Model (FMGDM v1.0): application to the Yellow Sea green tide" by Fucang Zhou et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-20-RC1, 2021

The green tide of the Yellow Sea is famous in China and has happened every year since 2007. This paper developed a physical-ecological model for the growth and drift of the floating macroalgae, which validated well with the remote sensing observation data. Although some bias still existed, this is acceptable considering the complex influencing factors in the system. What is more remarkable is that this model can simulate the coverage and biomass of the floating macroalgae much better when using short-term modeling. This is pretty useful for predicting when green tides are happening.