

Biogeosciences Discuss., referee comment RC2 https://doi.org/10.5194/bg-2022-48-RC2, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on bg-2022-48

Anonymous Referee #2

Referee comment on "Unprecedented summer hypoxia in southern Cape Cod Bay: an ecological response to regional climate change?" by Malcolm E. Scully et al., Biogeosciences Discuss., https://doi.org/10.5194/bg-2022-48-RC2, 2022

I apologize for my delay in submitting this review. I thought this paper was cleary written and convicingly documents a complex environmental change that spans phsuical, chemical, and biological variables. I have a few suggestions and comments.

- (1) I wonder if the N-S wind plot in figure 3, currently at the top of this figure, could be placed to the left and rotated 90 degrees? This might help the wind-events be more easily alinged with the contour data. This is just a suggestion if it works.
- (2) were any PAR of kd measurements made? It would be a nice addition to know how much light is available at 10 and 20 meters depth in this system where the fluoresence peaks were found.
- (3) there are a couple of instances in the 2011-2018 fluorescence records (figure 5) where values reached comparable levels to the recent data at 5N and 6M. Did you examine if these periods were associated with comparable physical conditions as 2019-2020?