

Earth Syst. Sci. Data Discuss., referee comment RC2
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Comment on essd-2021-351

Anonymous Referee #2

Referee comment on "Primary productivity measurements in the Ross Sea, Antarctica: a regional synthesis" by Walker O. Smith Jr., Earth Syst. Sci. Data Discuss.,
<https://doi.org/10.5194/essd-2021-351-RC2>, 2021

Remote sensing in polar oceans is primarily challenged by its inherent issues, e.g., high Sun zenith angle. The rarity of field data is one of external problems. The data provided here is valuable for ecological research as well as in some degree for remote sensing as it covers some early periods of current operating ocean color satellites.

Line 85: "photoperiods were 24h, and therefore samples were collected independent of local time" is an understatement, you still cannot normalize photoperiod effects at the beginning of incubation.

Line 156: Did you check if those spurious values were related to any bloom development or decline?

Line 199: It's Fig. 5 not Fig. 4.

Line 211: It's Fig. 6 not Fig. 5.

Line 211: "No difference was apparent" What's the test and stats number?

Figure 4, variations within each bin were not displayed and discussed.