

Interactive comment on “GLODAPv2.2019 – an update of GLODAPv2” by Are Olsen et al.

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1 Summary

Olsen et al. provide here an update of their GLODAPv2 product. This includes data from 116 cruises, mostly spanning the period 2012 until 2017. The authors followed the same procedures as used for their v2 product, but treated all v2 data as reference, and thus ended up adjusting (when needed) only the new data. The authors consider this procedure as an intermediate update of their "living data product", and defer to a future update for a re-evaluation of all data.

C1

2 Evaluation

The importance of the GLODAP data product cannot be overstated. As nicely illustrated in the text, this data set is broadly and heavily used, with some applications forming the very foundation of ocean carbon cycle research. I am thus very grateful that the authors have decided to regularly update their product.

The paper is very detailed, but overall excellently written and illustrated. The choices are well justified and transparent. I particularly like the additional analyses with regard to how the consistency across the data has changed through time. I also support their decision to adjust only the new data and to treat the older data as a reference. I do think, however, that this decision will have to be revisited for v3. I have no major comments, except to encourage the team to "Keep going"!

3 Recommendation

I recommend to accept this manuscript more or less as is. I have two smallish comments that the authors might want to consider before submitting the final version.

4 Minor comments

p10, lines 386-390: Overwriting other CO₂ system variables. I recommend to reconsider this choice for the next iteration of GLODAPv2. I prefer that you keep the actually measured values and add a new column with the overwritten values.

Figure 1: I suggest to add some information about the timing of the cruises, and the number of observations with regard to depth, season, etc.

C2

Nicolas Gruber, June 16, 2019.

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