

Comments to the revised manuscript titled: “Arctic Ocean CO₂ uptake: an improved multi-year estimate of the air–sea CO₂ flux incorporating chlorophyll-a concentrations”.

General comments: This is second time I have reviewed the manuscript. It seems to me that the authors have made a lot of efforts to improve the manuscript based on the reviewer’s comments and I find that the revised manuscript is well documented. So I would like to recommend it for publication after the technical corrections.

Technical comments:

Line 506: The unit of GtC yr⁻¹ should change to PgC y⁻¹ since the authors usually use TgC y⁻¹ in the manuscript.

References: Zheng et al. (2014) mentioned in line 290 is not listed.