

Interactive comment on “An upgraded carbon-based method to estimate the anthropogenic fraction of dissolved CO₂ in the Atlantic Ocean” by M. Vázquez-Rodríguez et al.

Anonymous Referee #2

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The interactive comments from C. Sabine appropriately raised all the right issues. In summary, as he also pointed out, it is very difficult to see what is new and innovative about the content of this manuscript.

What is the real purpose of this manuscript? Is it to present an upgraded method, or is it to provide Atlantic inventories of Cant? In both cases, nothing is new.

As indicated in this manuscript, this “upgraded” method has already been described and its results compared with those of four other methods (Vazquez-Rodriguez et al., 2009). This comparison indicates that for the Atlantic Ocean, within the uncertainty of the results, this somewhat complicated method provide similar results as the others.

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Then, why use this complicated method when it is possible to get similar results with another much simpler method?

Since the early 1980’s many publications provide inventories of Cant in the Atlantic Ocean. Thus, the present discussion on Atlantic inventories of Cant is far from thorough and does not add new insights especially that it does not provide an updated recent (less than 5 year-old) inventory.

As is, this manuscript does not present significant scientific advances. Prior publication, the authors should clearly demonstrate that their “upgraded method” is valid for all oceans (including the Pacific and the Indian Oceans) and presents considerable advantages over other methods.

Interactive comment on Biogeosciences Discuss., 6, 4527, 2009.

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