

Interactive comment on “Spatiotemporal variations of $f\text{CO}_2$ in the North Sea” by A. M. Omar et al.

Anonymous Referee #2

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This is a very nice paper, making use of VOS data to study the carbon dynamics of the North Sea. The authors clearly demonstrate the value of quality controlled VOS data for basin-scale multiyear studies. Apart from a few minor changes (listed below), I recommend that the article be accepted pretty much as is.

pg 1659, 13 (line 13): "transects", not "transect"

1659, 22: "over time", not "overtime"

1660, 23: Why are ZERO and SPAN written in capital letters ?

1661, 13-14: "The SSS data are an ocean analysis product of ..."

1661, 19: Mace Head longitude is West of Greenwich, not East.

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1662, 10-11: Given that the box dimension is only 0.4 deg in latitude, why was a box average of 0.5 deg used ? Does this imply that data outside the box were used in the averaging ?

1663, 18: Delete comma after A_T.

1665, 7: "because", not "beacuse"

1666, 8-9: "enables us", not "enable us"

1666, 23: "seem to appear", not "seems to appear"

1667, 12: End sentence with (2008). That is, use "et al. (2008). Here we ..." instead of "et al. (2008), here we ...".

1669, 5: Add space between "of" and "fCO₂sw"

1670, 24: Avoid double negatives, e.g. "not unlikely"

1671, 7-9: Are the +/- showing 1 standard deviation ?

Table 1, last line: "A" is used for slope instead of "a"

Figure 3f: The brown color, along with the range (max value), should appear on the color bar.

Figure 3h: Please redraw the panel so that 0 appears as a boundary between colors. It will then be possible to see the transitions between upward and downward flux.

Interactive comment on Ocean Sci. Discuss., 6, 1655, 2009.

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