

Interactive comment on “Seasonal, daily and diel N₂ effluxes in permeable carbonate sediments” by B. D. Eyre et al.

B. D. Eyre et al.

bradley.eyre@scu.edu.au

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This paper presents the results of a robust and well-constructed experiment that is built upon a well-supported body of research at the same site. The research expands our understanding of sediment denitrification/N₂-efflux rates at this, and related sites (i.e., carbonate sands), while also addressing the potential role of different OM sources, including those associated with coral spawning events.

While I understand the author's reasons for excluding data in incubations with DO greater than 96% saturation, I question the impact of excluding these data; specifically whether that exclusion will systematically shift the denitrification rate results.

Reply: Comment

C8602

Outside of minor editorial revisions noted below, I find no reason to exclude the article and consider it to be well worth accepting for publication.
Note that there is a typographical error in the citation of Nowicki (1994), which is cited as Norwicki, 1994.

Reply: Corrected

The use of lower-case “l” for litres, rather than the upper case “L” creates confusion, as the lower-case “l” can be confused with a number one (1).

Reply: The journal changed these when put online..

I prefer the use of italics and lack of hyphenation when writing “in situ” and “ex-situ”, though I must admit I am not sure of the journal's preference and could not find said preference in the instructions to authors at http://www.biogeosciences.net/submission/general_terms.html

Reply: As I also couldn't find a journal preference so these were left unchanged.

Table 1 is poorly formatted and it is difficult to discern between the four sampling campaigns listed; adding a space between each campaign would address this issue. I have similar issues with reading tables 2, 4 and 5: the large number of results included combined with the formatting used makes it difficult for the reader to clearly distinguish between table elements (i.e., rows of results)

Reply: These were changed by the journal when put online.

Interactive comment on Biogeosciences Discuss., 9, 17437, 2012.

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