

## ***Interactive comment on “High denitrification and anaerobic ammonium oxidation contributes to net nitrogen loss in a seagrass ecosystem in the central Red Sea” by Neus Garcias-Bonet et al.***

### **Anonymous Referee #1**

Received and published: 25 August 2018

General comments: This paper contributes significantly to the understanding of nitrogen cycling in seagrass meadows. There are few studies quantifying anammox, denitrification, and n-fixation in seagrass meadows. The authors did a great job quantifying anammox and denitrification rates in this system and presented most of their data in a clear and concise manner.

Specific comments: The authors did not address the known issues with using the Acetylene Reduction Assay technique to measure nitrogen fixation (Fulweiler et al., 2015; Mohr et al., 2010). I would like to see these issues addressed in the paper. It was also very difficult to tell the difference between the brown (sulfide) and dark red

C1

(oxygen) in figure 1.

Technical corrections: 1. Line 50 “estimated in” should be “estimated at” 2. Line 51 same as above

---

Interactive comment on Biogeosciences Discuss., <https://doi.org/10.5194/bg-2018-344>, 2018.

C2