

## ***Interactive comment on “Effects of low oxygen concentrations on aerobic methane oxidation in seasonally hypoxic coastal waters” by Lea Steinle et al.***

### **Anonymous Referee #2**

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The study from Steinle et al on the "Effects of low oxygen concentration on aerobic methane oxidation in hypoxic coastal waters" is well written and very interesting. I especially appreciate the experimental set-up, as it is certainly very tricky to perform incubations at defined O<sub>2</sub> and CH<sub>4</sub> concentrations! However, I have some questions and remarks (most of them are typed into the pdf file). I think it is a bit confusing that the authors jump between the usage of k' and MOX. Sometimes they report on correlation for MOX and some times correlations for k. This should be handled in a more coherent way. The statistic tests should be explained in more detail in the M&M section, and not in the figure legends. I also think that there are more informations hidden in the in situ data. For example one could split the data set into surface and

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bottom water and than do separate statistics. In addition I thought it is good / common practice now that at least the in situ data should be made available for the public. I could not find any indication here!

Please also note the supplement to this comment:

<http://www.biogeosciences-discuss.net/bg-2016-422/bg-2016-422-RC2-supplement.pdf>

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