

Biogeosciences Discuss., author comment AC2  
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## Reply on RC2

Inga Köhler et al.

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Author comment on "How are oxygen budgets influenced by dissolved iron and growth of oxygenic phototrophs in an iron-rich spring system? Initial results from the Espan Spring in Fürth, Germany" by Inga Köhler et al., Biogeosciences Discuss.,  
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### Reviewer #2

### Answers

This is an interesting work, particularly for its novelty as a pilot study and the first of its kind in the study region. The presentation or results, discussion, and conclusion are generally well-supported and presented, and I would recommend this study for publication pending minor revisions. Some specific edits are outlined below:

Lines 36 - 38: This sentence seems a bit long, and can be divided into two separate sentences.

We have separated the sentence.

Lines 42-43: This passage should be referenced.

We have added some relevant references to this section.

Figure 1: It may be more clear to overlay the sampling sites on the traced graphical map, rather than the satellite image.

The figure was not changed as overlaying the sampling sites on the graphical map would have decreased the font sizes beyond readability.

Line 80: This should more correctly read  
"Overview of", rather than "Overview on"

We changed the wording here

Line 82: I assume this should read "image E shows" rather than "image is shows"

The wording was changed.

Line 87: Spelling error; "assess", rather than "asses"

We have corrected this mistake.

Line 99: A geological description of the  
Buntsandstein Formation would be useful  
here.

We have added a description of the  
Buntstandstein formation.

Line 125: The acronym "pe" should be  
defined here or elsewhere.

We have now explained the acronym.

Lines 131-132: Minor grammar corrections  
here. "...at first small pond..." should be  
corrected to "...at the first small pond...",  
and "...from algal mat..." should be "...from  
an algal mat...".

We have changed this accordingly.

Line 143: The word "bulb" here should not  
be pluralized as "bulbs".

We have changed this accordingly.

Lines 146 - 150: This sentence is too long,  
and can be split into two.

The sentence was split into two parts now.

Lines 150 - 151: This sentence appears to be  
a fragment and needs to be corrected.

The sentence was changed.

Line 164: "Per mille" should be written as "per mil". Per mil was changed into the correct form.

Line 197: The passage "Oxygen values rise from..." should be corrected to "Oxygen values range from..." The sentence was corrected.

Line 259: "Neither" should be replaced with "Either" to avoid a double-negative. We exchanged neither for either.

Line 292: Minor grammar edit; "Steep increase" should be correct to "A steep increase". The grammar was corrected.

Line 326: Minor grammar edit. "...until equilibrium establishes" should be corrected to "until equilibrium is established". The grammar was corrected.

Line 385: What are some examples of these "associated perturbations"? We explain the perturbations in the new text.

Line 413: Minor grammar edit. "Analyses" should be corrected to "analysis". The grammar was corrected.

Line 417: Minor grammar edit. "cannot hardly be detected any longer" should be corrected to "can hardly be detected" or "can no longer be detected". The grammar was corrected.

Lines 421 - 424: This sentence is too long, We shortened the sentence.  
and can be split up into two sentences.