

## Response to Editor's comments

Dear Prof. Treude,

Thank you very much for handling our manuscript, the comments of the three reviewers were very constructive. Below is a response to your comments. Regarding the figures, we will now upload vectorized pdfs or high resolution (>300 dpi) images, so the production office can check whether the resolution is sufficient to see the small details, esp. in fig. 2.

On behalf of all authors, kind regards

Ellen Schnabel

**L47:** Another indicator of HC seepage can be chemosynthetic communities, such as sulfur bacteria mats, clams, and tubeworms.

*Sentence was updated accordingly.*

**Line 121:** Suggestion similar to above (chemosynthetic communities).

*Sentence was updated accordingly.*

**L148:** Weblinks always carry the risk of expiring or being moved. Can you provide more stable information for this mapping program? At a minimum, please provide the last access date of the website.

*We have reduced the use of links as much as possible and now cite literature instead.*

**L208:** Porosity is actually unitless (volume divided by volume).

*True. Thanks for catching this.*

**L272:** Same comment as above regarding weblinks. Please provide permanent information or (at a minimum) the last access date of the website.

*See above.*

**L287:** Same comment as above regarding weblinks. Please provide permanent information or (at a minimum) the last access date of the website.

*See above.*

**L307:** Same comment as above regarding weblinks. Please provide permanent information or (at a minimum) the last access date of the website.

*See above.*

**Fig 2f:** The resolution of this graph may be too low. I fear it will not be readable in the final paper. I consider the information important, but perhaps we should move it to the Supplementary materials in a larger size. Please collaborate with the production office to find the best solution.

*We have attempted to improve the image quality. All attempts to improve the image quality in Word were unsuccessful. However, we can provide the figure as a high-resolution PDF.*

**L327-328:** '...and some representative profiles.' I suggest changing it to: '...along with some representative profiles.'

*Done.*

**L555-556:** Can you specify the source of the information about anoxic conditions (or just cite the previous study)?

*The sentence was changed to "form other fieldwork in the area,...".*

**Data Availability:** Not a requirement since you provide the data in the Supplementary materials, but I think you should consider submitting the profiles to PANGAEA. The scientific community will likely appreciate it. :-) Just a recommendation.

*The data have been submitted to PANGAEA, but we have not received a DOI number yet. In case it arrives before publication we will inform the production office.*