

Major changes in the revised manuscript

We followed almost all suggestions of the three reviewers, see our letter in the open discussion.

Furthermore, we implemented some more changes, summarized here:

In the Discussion, we moved the former section 5.1 Model for a Precambrian deep biosphere ecosystem to the end, now section 5.4.

In section 5.3 Taxonomy and comparison with Precambrian biota, we added a paragraph about myxomycetes, after discussion with M. Schnittler and suggestions of one reviewer.

Fig. 1 now contains images about the cavities and the fossilization model.

Fig. 12 is replaced by a simplified figure, leaving out the fields for other organic matter.

The references have been updated.