

***Interactive comment on “An open marine record  
of the Toarcian oceanic anoxic event” by  
D. R. Gröcke et al.***

**S. Robinson (Editor)**

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Dear Darren,

The reviewers all recognise the value and potential significance of your record but do raise a number of concerns. I would encourage you to try and address these in a revised manuscript. I think you need to pay particular attention to the following areas as these are common across all three reviews:

1. The biostratigraphic framework requires more explanation with regards to both the biostratigraphy of the section and the correlation scheme used to tie the radiolarians to the North American and Tethyan ammonites and, ultimately, to the timescale. Perhaps a table or a figure would help greatly.

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2. The significance and interpretation of the extremely negative carbon-isotope data value.

3. The discussion and interpretation of the TOC records with regards to their palaeoceanographic significance and the role of equatorial crossings.

4. The resolution and correlation of C-isotope data. The tie-lines in Figure 4, in particular, need some rethinking.

I see from your response to Jerry Dickens that you have already started to think about some of these issues. Nonetheless, when you submit your revisions, it would be useful if you could also summarise your response to the criticisms of the reviewers and, where appropriate, how you have addressed them in the manuscript.

I look forward to seeing your response and revised manuscript.

Best wishes,

Stuart

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Interactive comment on Solid Earth Discuss., 3, 385, 2011.

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