**Biogeosciences
Discussions**

Interactive
Comment

Interactive comment on "DOC-dynamics in a small headwater catchment as driven by redox fluctuations and hydrological flow paths – are DOC exports mediated by iron reduction/oxidation cycles?" *by* K.-H. Knorr

B. ÂăA. Bergamaschi (Editor)

bbergama@usgs.gov

Suggestions from the AE:

Reviewers suggested to one degree or another that alternative explanations exist for the observed trends in export - the simplest explanation being changes in hydrology (Reviewer 1). Alternative explanations should be explored. Reviewer 3 expresses this as a need for some experimental data to back up the observed trends. I agree with Reviewer 2 that publication of this study should not wait for additional experimental

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

data, but the author should more carefully explore alternative explanations.

Reviewer 3 points to the idea that the central hypothesis should be further tested using stoichiometric calculations to assess if the observed changes in iron concentration could account for the changes in DOC. Values from the literature could be used rather than experiments, but including the calculations would improve the paper.

The manuscript would be strengthened by addition of discharge (Reviewer 1) and nitrate data to figure 1. A figure showing the location of site and layout of the sampling at the site would also be useful.

The manuscript would benefit greatly from careful editing as there are many editorial and language issues that interfere with clarity.

Interactive comment on Biogeosciences Discuss., 9, 12951, 2012.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper