Interactive comment on “Global riverine N and P transport to ocean increased during the twentieth century despite increased retention along the aquatic continuum” by A. H. W. Beusen et al.

Anonymous Referee #2

Received and published: 19 February 2016

As I responded before accepting, the manuscript is largely beyond my expertise. Having said that I have read it with interest and consider it well written. My comments mainly refer to some presentation issues. Overall I think it is suitable for publication after satisfactory revisions.

Lines 8 and 9: N => P for the second ranges I guess?

Section 2: I found this Data and methods section very condensed and referring to many other data sources and publications mostly. It is very difficult to learn from this section how the study was performed precisely. A lot of further reading is needed when readers are not familiar with these sources.

Section 3: I like and welcome the attempt to validate the global model with some local data. That is fairly rare but very much needed! Having said that, I have two comments: in fact some of this first paragraph should go to Section 2 (Data and methods) and I find the conclusion that the model performed acceptable (line 19, page 20128) a bit easy – this requires more underpinning. On page 20137 the authors even conclude that the model performance was in ‘good agreement’ with measurements. Not sure I can conclude this from Figure 2.

Page 20129: line 4: the validation was only partial and again, the underpinning of the conclusion is not so strong.

Sections 3.1-3.3 present a lot of data in the narrative, which makes the text a bit hard-going. Is there no better way to present all these numbers? E.g. in some tables, while the text only highlights the key issues?

Perhaps some schemes or diagrams with numbers may also help to make things more clear and provide more overview to the readers.

Figures were very small and hard to read in my print out.

Interactive comment on Biogeosciences Discuss., 12, 20123, 2015.