Interactive comment on “Global runoff over 1993–2009 estimated from coupled land-ocean-atmosphere water budgets and its relation with climate variability” by S. Munier et al.

S. Munier et al.
simon.munier@gmail.com

Received and published: 12 June 2012

The major concern of Referee #1 seems to be that the weight of the different parts in the paper is not adequately reported in the title/abstract/introduction/conclusion. We agree with this remark and as suggested, we think that the paper could be improved by giving globally more importance to the method and by moving the data analyses (section 3) into the results section.

In particular, the introduction will be rewritten with a focus on the method and the need to cross-validate the available datasets. We will also add some sentences about the issue related to the ocean thermal expansion. The implications of the study will be developed in the conclusion. Besides, considerations on El-Nino events on P4643-L14 and P4645-L9 could be moved to the first paragraph of section 4.1 about the global runoff estimates (P4645).

Finally, figures 2b-2c visually support the choice of the land/ocean masks and may be useful to convince the reader that ice sheets and high latitude oceans only play a minor role in the interannual variability of global runoff. Nevertheless, the figures can be moved in the Supplementary materials, as well as figures 6 (ocean evaporation with OAFlux and HOAPS) and 7 (components of the atmospheric water budget).

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 4633, 2012.