

Interactive comment on “Erosional response of an actively uplifting mountain belt to cyclic rainfall variations” by J. Braun et al.

J. Braun et al.

jean.braun@ujf-grenoble.fr

Received and published: 13 October 2014

We thank the reviewer for his comments and note his appreciation of our manuscript, both in its form and content. In preparing a revised version of the manuscript, we will take his comments into account, in particular:

- we will show that a finite rainfall perturbation (rather than infinitesimal perturbation assumed to derive the analytical solution) does not affect the main findings; we will also include references concerning estimates of the magnitude of rainfall variations associated with Quaternary climate cycles;
- we will better describe the differences/similitudes between the analytical and numerical solutions; we have been working on an additional figure to highlight this C450

point.

- in an earlier version of the manuscript, we had included the computed river profile through time for the reference model run, showing that the topographic perturbation is not characteristic of a knickpoint; we will insert topographic profiles as an additional panel in Fig 3 or 4.
- there are obviously several options to interpret the offset seen between Nd and O in the ODP core in the Bengal Fan and this is discussed in the Gourlan et al paper.

Interactive comment on Earth Surf. Dynam. Discuss., 2, 971, 2014.