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Comment

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

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I enjoyed reading the paper - and found it well presented and argued. This very much represents a behaviour in an upland context - in an uplifting mountain region - and I wondered how this might feed into larger floodplain systems? It would be good if the discussion could take this further and look at the wider implications for lowland/more depositional river environments and sediment delivery into and further down the 'fluvial conduit'? The paper mentions the work of Castellort and Van Den Driessche (2003) in the introduction - and it would be nice to see how your findings would map back to this.

In addition - there is a body of work that has looked at shorter time scale impacts of changes in climate and tectonics (Coulthard & Van de Wiel, 2013) and the 'shredding' ideas of Jerolmack and Paola (2010) and how non linearity in the system can generate

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stratigraphy (Van de Wiel and Coulthard, 2010). I think this could be useful background context for some of the points you make in the discussion - and could add to this section.

Best wishes,

Tom

Castelltort, S. and Van Den Driessche, J.: How plausible are high-frequency sediment supply-driven cycles in the stratigraphic record?, *Sediment. Geol.*, 157(1-2), 3–13, doi:10.1016/S0037-0738(03)00066-6, 2003.

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Jerolmack, D. J. and Paola, C.: Shredding of environmental signals by sediment transport, *Geophys. Res. Lett.*, 37(19), 1–5, doi:10.1029/2010GL044638, 2010.

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