

Interactive comment on “Constraining the Stream Power Law: a novel approach combining a Landscape Evolution Model and an inversion method” by T. Croissant and J. Braun

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I found this paper very insightful, for 1) its quick and clear review of the Stream Power Law (SPL), 2) the parametrization of the problem using a novel Landscape Evolution Model (LEM), coupled with an efficient inversion algorithm, and 3) applying this to a natural object in New Zealand. The authors are very well aware of the limitations of their approach (steady state assumption, transport-limited or hillslope-controlled portion of the landscape, importance of the fracture density on K ...) and successfully manage to discuss their findings under the shade of these limitation, with no prejudice.

Minor comments on the figures: Fig 5: I could be worthwhile to locate on a larger-scale

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map the studied catchment, for readers unfamiliar with NZ. Fig 6b, I guess that "K" (y-axis) should be "log K" (by the way, on the other figures, k is expressed in natural scale).

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