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Earth Surface Dynamics Discussions

Interactive comment on "Bias and error in modelling thermochronometric data: resolving a potential increase in Plio-Pleistocene erosion rate" *by* Sean D. Willett et al.

Anonymous Referee #4

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I have taken a quick look at the manuscript submitted by Willett et al.

My immediate impression is that this is a serious, high quality study that is of interest to publish (bearing in mind that it's not really something within my current field of research). The paper appears to be largely inspired by the Schildgen et al. nature paper in which the authors argued that inferred late Cenozoic increases in erosion rates might be due to a spatial correlation data bias. The Willett paper addresses this issue with an extensive look into errors inherent to interpreting thermo-chronological data. Based on what appears to be detailed analysis, they show that there is no systematic bias of the nature suggested by Schildgen et al.. I agree the Willett paper is contro-

versial in the sense that it won't please the authors of the Schildgen paper. However, I also think that the results published by Schildgen deserve to be critically analysed and questioned and this seams like a good attempt at achieving this. This paper will definitely generate interest and it will undoubtedly rekindle debate on the influence of late Cenozoic climate change on erosion rates.

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