SOIL Discussions

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Interactive comment on "**Arctic soil development on a series of marine terraces on Central Spitsbergen, Svalbard: a combined geochronology, fieldwork and modelling approach**" *by* **W. M. van der Meij et al.**

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Page 1361, Lines 8-14 - Linear regression was used to model isostatic rebound, but isostatic rebound is not linear, it is logarithmic. See Brevik and Reid (2000) for a review of isostatic rebound calculation following deglaciation. I know the authors obtained a good r2 value with their linear model, but Figure 3 also shows the linear trend line overestimating age at both high and low altitudes and underestimating age at mid altitudes. This is because of the logarithmic nature of isostatic rebound. I think this aspect of the manuscript needs to be reconsidered.

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Interactive Discussion

Discussion Paper

Brevik, E.C., and J.R. Reid. 2000. Uplift-Based Limits to the Thickness of Ice in the Lake Agassiz Basin of North Dakota During the Late Wisconsinan. Geomorphology 32(1-2): 161-169.

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Interactive comment on SOIL Discuss., 2, 1345, 2015.

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