

*2nd review*

Laboratory observations on meltwater meandering  
rivulets on ice

*by*

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I find the second version of the manuscript significantly clearer than the first. I am therefore supportive of publication in E-Surf at this point.

Regarding the comment about the knickpoint, (formerly page 6): my point was a suggestion for improvement. The text says “It is likely that the neck cutoff produced a knickpoint”; I believe this can be supported—or invalidated—by measurements. If this hypothesis is correct, then the amplitude of the knickpoint, say  $\Delta h$ , should be related to the river’s slope,  $S$ , and to the length of the bend before cutoff,  $L_b$ , through:

$$\Delta h = SL_b. \tag{1}$$

Is this relation satisfied in the experiment, at least in order of magnitude?

Finally, about the slope of laminar rivers (formerly page 11). The new manuscript is still misleading about this. The sentence “Laminar river analogs have been observed to have 1.5-2.5 higher slopes than their natural counterparts (Malverti et al., 2008), suggesting a wide range of possibilities in the laminar regime” is correct, strictly speaking, but suggests that the factor of 1.5-2.5 is typical. It is not, because there can be no such thing as a typical slope for a river (laminar or natural). The slope of a river, in first approximation, is related to its discharge through a power law, and of course there is no typical discharge for a river. In fact, this factor could be pretty much anything, given enough variety for the fluid viscosity, and a sufficiently powerful pump for the experiment.