

The paper by Fernandez et al reports on a very interesting set of experiments exploring bedrock erosion in a sinuous channel. Their novel approach and clever measurements make this paper a crucial addition to the bedrock erosion literature. The videos that will be included in the SI are fascinating. Several notable findings, including that the areas of transient and permanent cover were of similar magnitude will be useful to develop a bedrock erosion theory for sinuous channels. The authors responded to the previous comments including fixing the structure of the paper, beefing up some of their citations as pointed out by Jens, and addressed minor comments throughout the document. The comments below are very minor, and I do not think another review would be necessary once these comments are addressed.

The details about the transition between experiments were include in the response to comments, but not included in the revised paper or SI that I could see. To avoid any confusion, I think those details should be included in the methods section.

A sentence or two about the resolution of the camera in the SI or paper would be helpful.

Page 6. The discussion of the polynomial in the SI was clarifying and the SI should be referenced in the text where the polynomial was discussed.

Page 6, Line 20. A sentence about the pixel size of the camera would be helpful to interpret the results. If the pixel size is larger than the particle than the bed Presumably particles are mostly grouped, was the threshold to detect the presence of sediment set to pick up if a single particle fell into the pixel or is it likely that more than a single particle was necessary for Matlab to record the point as containing sediment? This may not matter since it sounds like the particles were moving in bedforms, but it might be worth addressing, and least in the SI.

Page 7, Line 7 and Figure 5a,b. Shouldn't figures 5a and 5b have two sets of data on them since the experiments were repeated? I am very surprised that the experiments were so repeatable. I think the authors misunderstood Jens' comments about human error. The most likely sources of human error are evenly distributing the particles.

Page 8 Line 6, Figure 2 shows that the bedload trap is downstream not upstream.

Page 9. The organizational issues have mostly been dealt with, with the exception of the description of figure 6 in Lines 11-14, which comes between the description of Figure 5 and the discussion of Figure 5.

Page 10. Equations 9 and 10. These equations feel like the should come before the previous paragraph to be immediately below the paragraph that describes them.

Page 11 and Figure 10. I spent a lot of time thinking about this figure and the discussion in the text. I wondered whether the small increases and decreases in persistent and transient cover were repeatable or if they were just scatter in the data. I think its just as likely that its scatter as it is due to a trend in the data. Another explanation is that equilibrium had yet to be reached when the data recording began. Figure 7 shows that the cover varied temporally in  $P_c=0.78, 0.72, 0.46,$

0.38, and 0.27 (where there was a increasing cover trend). It is really interesting that the persistently covered area and transiently covered area are similar. What a cool finding.

Page 11, Line 20. Why would the depth be constant? If the slope and roughness are changing you would think that the depth and velocity would adjust. I don't recall water surface (or velocity) measurements. If the slope is changing isn't the depth changing too?

Page 15, bottom. Did the authors observe particles striking the bank, or is that inferred?

Page 16, Lines 21-26. Presumably the distribution of the grain size and roughness matter too, which would likely be larger in the field? Also, there is a lot in "hydraulic conditions".

Table 2. Inferring the middle reach slopes for pc54-79 to two decimal points seems like too much. It is hard to justify 2 decimal points, and looking at the table, it seems like there would be a lot of scatter in the relationship between overall slope and middle bend slope. The more I think about this the more I think they shouldn't be included at all. The slope measurement with two local data points is probably not very robust anyway.