

Interactive comment on “Vegetative impacts upon bedload transport capacity and channel stability for differing alluvial planforms in the Yellow River Source Zone” by Z. W. Li et al.

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The authors present a relevant study on the effect of vegetation on bedload transport capacity and channel stability. Therefore, they study 4 reaches of the upper Yellow River, China. The 4 reaches differ in planform. Despite the potential interest, the paper is highly descriptive and hypothetical. Barely any data is collected to justify the conclusions. This leads to the question what we can learn from this study. The river planform is not really something we can easily adjust and the role of vegetation is more a result of the planform, than a cause. Maybe this also relates to the fact that there is no study objective given.

C1

Abstract:

The abstract starts immediately with describing what the study entails, but the existing knowledge gap is missing. As well as the 'reason for this study'.

Introduction:

The introduction is really long and very general. It seems like a 'lecture' on river planforms in relation to bars. I would advise to shorten the introduction and focus on what is currently missing (knowledge gap) and why this study is relevant (what will it bring). Furthermore, I would also explain how the existing study differ from exiting studies.

P9L1-25:

add dimensions or units to symbols

Equation 3-5:

Why do you need eq 4 if you can also derive it from Eq 3 and 5?

Section 5:

Based on what can the authors conclude how the bars are developed/eroded? (fig 10, 12,13). Can this not better be answered with satellite images over several years?

Figure 1:

Naming R1, R2, R3, and R4 are not visible in the figure

Figure 8:

What's happening during the low flows? This seems to weird behaviour. How can the stage drop when Q increases? That is remains constant is possible if the river width increase after a certain threshold, but this seems unrealistic. Please elaborate/explain.

Figure 9:

Please be consistent. The upper graphs are Qh-plots, while the lower two are hQ-plots. Furthermore, the coloring is not that clear, which makes the plot difficult to interpret.

Figure 11:

Is the stage unit correct? What is the datum of this stage?

C2

Throughout the entire manuscript:

- Textual : after "i.e." and "e.g." a comma should be placed
- Order appearance figures in text, is order figure numbers (e.g., figure 11 and 12). Please check

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