

Comments to the editor.

We are very grateful for the attention and patience to our manuscript. Yes, some readers may have similar questions about Reviewer #2. We have incorporated our response to Reviewer #2 key issues in the revised manuscript.

In fact, as stated by the manuscript itself, there are many factors to determine the grain-size distribution of fluvial sediments, including climate, vegetation, hydrology, geomorphology, lithology, and fault slip rate etc. Thus, it is lack solid evidence for their implication.

In lines 47-51, we emphasize that “although many factors determine the grain-size distribution of fluvial sediments, but there are one or two mainly controlling factors in specific region; in addition, previous studies have shown that it is feasible to discuss the main control factors for changes in grain-size”, which is the theoretical and practical basis for the smooth implementation of this research.

No question was raised for solving in the Introduction, so I cannot catch the significance of the study. In fact, nearly all discussion or implications are common knowledge, without solid contribution.

In lines 112-116, we emphasize the significance of this study.

There are coarse sediments and gravels along the Min River, but no data for these depositions.

In lines 130-133, we illustrate that earthquakes have a significant effect on regional detrital source supply, and lacustrine deposition has a significant response to regional earthquakes.

In lines 484-487, on the basis of the understanding of 2008 Ms 8.0 Wenchuan earthquake, we determine that “the extensive existence of gravel in Min River can reveal tectonic activity for a long time, but these studies cannot explain the relatively fine fluvial and wind transport characteristics”. These further illustrate the significance of the study of fluvial sediments in the upper Min River.

There is no rule to divide the river into four segments in the main text, but it was divided into three segments in Abstract and conclusion.

In “2.2 Segmented Characteristics of the Min River”, the rule to divide the river into four segments and the characteristics of each segment are described in detail (lines 185-216).

In abstract (lines 22-34) and conclusion (lines 547-551), we mainly emphasize the segmented character of regional tectonic activity along the upper Min River.

For the sections of “Climate controlled finer grained fluvial sediments” and “Coarser grained deposits controlled by tectonism”, there is no solid evidence for either.

In lines 406-408, we emphasize that the discussion in the sections “5.2 Climate controlled finer grained fluvial sediments” and “5.3 Coarser grained deposits controlled by tectonism” is based on the conclusions of section “5.1 Dynamic and provenance implications of fluvial sediments”