

## ***Interactive comment on “Monitoring of the reconstruction process in a high mountainous area affected by a large earthquake and subsequent debris flows” by Chenxiao Tang et al.***

**Chenxiao Tang et al.**

c.tang@imde.ac.cn

Received and published: 18 December 2019

Dear referee 2

Thank you for your comments and useful literature recommendations. I will reply your comments on behalf of all the authors of this manuscript.

I appreciate your approval for the value of the work. I found that not much attention has been paid on the aspect of post-disaster recovery – how, when and where should recovery being carried out and how prolonged effect from earthquakes would affect communities. I considered this manuscript would be an interesting case to show the

C1

importance of having a good understanding of hazard and careful planning after major earthquakes.

I agree that some parts of the manuscript were poorly written and did not show the significance and value of the topic. Therefore, I have rewritten many texts, which are majorly in the introduction and conclusion sections.

Sincerely

Chenxiao Tang

Specific comments

Your comment: This study on the effects of earthquakes and subsequent other hazards is an interesting case study, but authors do not tell potential readers what is novel. This needs to be done both at the beginning but also in discussion, telling potential readers the importance of multi-hazard and risk studies, such as e.g. done by Kappes et al. (2010; 2012a; 2012b). Moreover, the overall literature provided is quite restricted to Chinese sources while in the international field many other studies exist on distinct aspects, such as hazard and risk chains (see Kappes above), hazard and risk dynamics (Fuchs et al., 2013) and general land use dynamics (Cammerer et al., 2013; Rougé et al., 2015; Fuchs and Glade, 2016), etc. So it is highly recommended to extent the review to the broader context of such international sources, which in turn would allow the international readers to better understand the situation in China.

Reply: Major revision was done for the introduction and conclusion sections. Many new texts and re-structure were made. A separate section of recommendation was made after the conclusion, to fulfill the goal stated in the introduction: to fill the knowledge gap about how, when and where to rebuild after major earthquakes.

Your comment: Moreover, if authors were to explain the results of their case study to someone in another country, what would they gain from this Chinese case study? Do they learn from the methodology applied?

C2

Reply: A recommendation section was added to address this issue.

Your comment: In many phrases, authors provide facts, information, or ideas, but without supporting sources as to where those ideas or facts came from. All facts and information that are not common knowledge need to have citations (which are then put into the reference list) and all items in the reference list should be cited at least once in the manuscript. Examples include but are not limited to: Section 1.1., lines 30-36 and 40, then further lines 270-284, and the events descriptions (e.g., in section 3.4) and also the final section 5.

Reply: References were added to these descriptions. In where literatures could not be found, I rephrased them to show they are not certain conclusions.

Your comment: The niche and gap for this research have to be clearly addressed in section 1.1 so that the overall need and motivation for this work becomes clear, ideally this will go in lines 85-90 of the present manuscript.

Reply: a major revision of the introduction section was carried out. Most texts were rewritten.

Your comment: Section 1.3 has to be shortened and included in section 1.2

Reply: We shortened and merged it with section 1.2 based on the comments of you and referee 1.

Your comment: Figures: fonts are too small, Figures need north arrow, measured grid and maybe an inset showing the case study area in China.

Reply: Most of the figures are designed to be printed in full or nearly full page size to make elements visible and the font size was designed to fit for that. North arrows have been added in all maps. A grid and an inset map have been added in Figure 1.

Your comment: Figure 2: only Figure 2A is mentioned in the main text body.

Reply: The description of construction types was accidentally removed before submit-

C3

tion. I wrote a new paragraph that describes construction types briefly and referred to the figures.

Your comment: Please carefully check the English again, even if the material reads fluently, there are some minor errors such as debrisflow versus debris flow, etc.

Reply: I corrected several spelling and grammar mistakes.

Your comment: As already noted by referee #1, the overall text reads more like a technical report as a scientific paper. As such, I recommend to shorten the overall text by putting more information in Tables, and by combining some of the materials presented to that the overall appearance becomes more concise.

Reply: I tried to remove some non-essential part. In my opinion it would be nice to tell the story in a detailed manner than summarization that common researches would do, as the descriptions may provide information to planners and engineers. If the referees insist that a shortened version will be better, then the introduction about the Wenchuan earthquake and monitoring sections could be largely shortened in the next revision.

---

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-202>, 2019.

C4

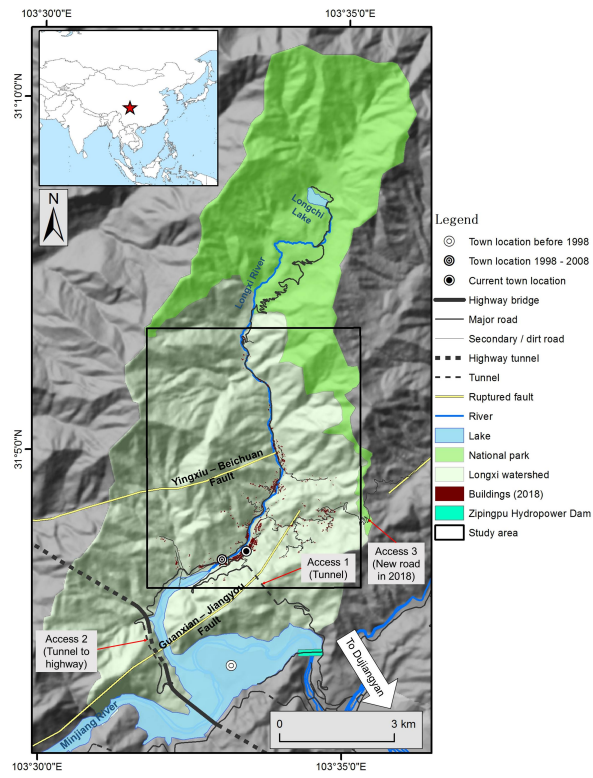


Fig. 1.