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.

Anonymous Referee #1

Received and published: 25 October 2019

General comments:

The paper describes the monitoring the post-earthquake reconstruction process of a town in China over 11 years. The authors use a range of remote sensing data from different times for image interpretation complemented with field mapping, interviews and literature surveys. Additionally, the manuscript provides an analysis of economic values. It seems that a lot of effort and time were needed to perform the analyses. The manuscript is well prepared and the provided information interesting. However, it reads rather like a report and not like a scientific research paper and the level of innovation regarding the methods is low. This is my major concern and makes it also difficult
for me to judge, if the paper should be accepted or not, even if the topic itself fits for NHESS. Also, parts of the descriptions are a bit lengthy, for example the descriptions of the economic values (even if relevant).

Specific comments:

Line 68: “The increased debris flow activity lasted for five years…” Do you have an explanation for that (maybe I missed it)?

Line 93: This is repetitive to the previous sentence.

Section 1.3: Is all the description relevant for the paper? It is a bit long.

Line 176 ff and in general: Did the authors consider the usage of any automated change detection approaches for image analysis? For some classes this might have been helpful and faster than digitizing all the features. For example, there are several studies and publications that successfully used such methods for post-earthquake damage assessment.

Figure 4: The color of the dormant landslides is not very well visible (it is better in the following figures). What is the dashed line in the image? There is only information later in the text, but not in the legend or the caption.

Line 265: First sentence. What is the reason for that?

Technical corrections:

In general, the paper is well written. However, spell check is needed, several typing errors need to be improved, partly formatting (chapter 1.3) should be adapted.

Table 4: The text “Sum…” is not readable.