

## ***Interactive comment on “Analysing post-earthquake landslide activity using multi-temporal landslide inventories near the epicentral area of the 2008 Wenchuan earthquake” by C. Tang et al.***

**C. Tang**

c.tang@utwente.nl

Received and published: 14 July 2016

Dear referee, thank you for the comment.

We used different images for mapping each of the inventories. With the Dem we orthorectified all the images, and orientation problems only appear in the spot 5 images but covers a very limited cliffy area. Among the images only spot 5 images gave us some difficulties to identify the landslide activities due to its 2.5m resolution. For the pre-earthquake spot 5 image, it is very clear that there was only one landslide within the study area in 2005. When mapping the landslide activities of 2009, we carefully

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compared the spot 5 image with the other images (including the images that are not listed due to their cloud cover or shadows) to minimize the potential errors. Some errors caused by image resolution do exist in the enlarged and new small-sized landslides of 2009, but we believe they are minor problems.

The completeness of the inventory means that the proportion of mapped landslides out of all the actual existing landslides. We intended to show how different in quality can it be between large scale and regional scale works. Maybe I didn't explain this well in the manuscript.

We did encounter problems during stereo mapping due to low resolution of the Dem. Most of the mapping area is cliffy but not complex and the Dem works quite well. Some catchments with very complex terrain do exist and the stereo mapping did not work in those regions. We could still map most of them correctly due to several years of field experience. The two catchments gave us problems are: a big catchment in the west part, as its upper stream area has complex terrain and many small landslides, and not accessible during field works; a very small catchment in the east, as it is so small that the Dem cannot represent the terrain correctly.

And for the rainfall threshold values, we do not have sufficient data to do further analysis. This will be discussed further in the next phase of research

According to your comments the following changes will be made in the manuscript:

1. expand the introduction part, add the references
2. explain more about the image quality and related mapping issues
3. explain better our intention for comparing the FAD curves and explain the term “completeness”
4. more detailed discussion
5. replace the inappropriate words.

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