Comments		Response
Major comments		
1	Line 53-56: Landslides were mapped from eight satellite images covering a period between 1996 and 2001 and concluded that the density of rainfall-triggered landslides increased significantly after the earthquake, and the places where landslides occurred changed, and concluded that different triggers produced significantly different patterns, with rainfall-triggered landslides occurring more near channels and earthquake-triggered ones close to ridges. Long sentence. Rephrase	This reference was deleted due to the new structure of introduction. See Line 58-73.
2	Line 85: Missing reference at the end of the manuscript	The reference paper was added line 472: Fan X Y, Qiao J P, Meng H, et al. (2012) Volumes and movement distances of earthquake and rainfall-induced catastrophic landslides. Rock & Soil Mechanics, 33(10):3051-3058.
3	Line 136 a and b missing	We added to the figure
4	Line 141: Not clear chapter, highlighted sentences need to be reviewed and rephrased. Add resolution of used satellite images	This section was re-edited, see line 137-178
5	Line 166 how does the low resolution of the used data affects the reliability of the study?	For the susceptibility assessment, we extracted the point located in the highest part of the landslides, as indicative of the initiation conditions. Different DEMs, such as ASTER GDEM, SRTM Digital Elevation Model with both 90 m and 30m spatial resolution, as well as ALOS PALSAR DEM were evaluated to use in this study. After careful analysis however, both ASTER GDEM and 30m SRTM contained many erroneous data points, ALOS PALSAR DEM with highest resolution of 12.5m, was utilized in this study. ESRI ArcGIS software enabled the calculation of topographical factors

		including slope gradient, aspect, and curvature. Streams and gullies were obtained through DEM processing, and the drainage density was calculated. See line 163-169
6	Line 175 "." Was missed	We added it.
7	Line 185,186 Introduction to R and ROC	We added descriptions and references to R and ROC. Fawcett T (2006); An introduction to ROC analysis. Pattern Recognition Letters 27:861–874
8	Line 207 Explain β	We explained β and added some references. Size statistics of landslides are analyzed using frequency-area distribution curves of landslides (e.g., Malamud et al., 2004). There is a large literature arguing that frequency-area distribution of medium and large landslides has power-law distribution, which diverges from power-law towards smaller sizes (e.g., Hovius et al., 1997; 2000; Malamud et al., 2004). Given this argument, we can identify the divergence point of frequency-area distribution curve to determine a site specific threshold values referring to the limit between medium and small landslides. See line 211-215.
9	Line 218 For the value of 6000	Base on FAD method, we analyzed the cutoff value, comparing the value with other's work, we get this value, but we changed the value to 30,000 according to our new analysis. See line 216-229.
10	Line 244 ADD SW	Base on our new analysis, we change the description for this part.

11	Figure 6 Explain k2 and k1	We have removed k1 and k2 from the figure. Figure 1 already shows the physiographic units.
12	Line 304	We modified the description for this part: The areal coverage of the landslide susceptibility classes was calculated for each susceptibility map (Fig. 9). Compared to RTL, the ETL susceptibility maps have a larger area with low susceptibility, due to fact that the Koshi River basin is far from the epicenter of Gorkha earthquake, thus the earthquake affected region is only part of the basin. The very high and high susceptible region for ETL is mostly concentrated in the western and southwestern parts of the basin, clearly reflecting the PGA pattern (Fig 6i). The RTL susceptibility also reflects the triggering factor (monsoonal rainfall), with the highest susceptibility in the south of the basin. However, the higher rainfall peak in the Middle and High Himalaya region is less pronounced in the susceptibility maps, as well as in the inventory maps (Fig 3). The higher susceptibility classes for large ETL occupy more area than for small ETL, while the opposite can be observed for RTL. See line 325-331
13	Line 335 move it in the conclusion paragraph	We improved discussion and conclusion part dramatically. See 371-436