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Title Integrating spatial and temporal probabilities for the annual landslide hazard maps in Shihmen watershed, Taiwan

Responses to comments raised by Reviewer 1

Comments	Responses
The study area (Shihmen watershed) is not mentioned in the abstract, whereas the last sentence points out that high landslide probability occurs in the Taigang River watershed. Basic information about study area, such as location, watershed area, etc., should be provided, whereas, Taigang watershed, which is no more mentioned in the paper and is shown only in figure 1, could be omitted from the abstract.	Following the comment, we added the basic information about study area in the abstract, and omitted Taigang River watershed from the abstract.
The results are presented in two sections of the paper: section 4 and section 5. The title clearly indicates that section 4 is intended to present results. The title of section 5 could be modified to underline that also this section includes results presentation, e.g. "Results of annual landslide probability".	Following the comment, section 5 was entitled by "Results of annual landslide probability".
Section 2.1, page 475, line 24: "GIS hydrology module" it is not clear what module the authors are referring to.	Thanks for the comment, the GIS-based hydrologic analysis and modeling tool, Arc Hydro (David, 2002), was used to divide the watershed into slope units.
Section 3.3, the authors could consider presenting a figure showing the temporal pattern of precipitation for the Typhoon Aere, for instance a plot of cumulative rainfall versus time. More details could be provided about the choice of rainfall durations. Rainfall for durations exceeding than 24 hours were not significant?	Following the comment, the temporal pattern of rainfall during Typhoon Aere was added as shown in Fig. 2. The maximum 24-hour rainfall was selected instead of other longer duration rainfalls mainly because of the higher AUC value.
Section 5 Page 486, lines 1-4. These sentences are rather cryptic; they should be revised, and probably extended to better introduce the integration of time series of maximum annual rainfall in the analysis. Page 486, lines 12 and 15. "different recurrence intervals": what recurrence intervals have been considered? How have they been selected?	We are sorry for our inaccuracy expression, those sentences were revised. Additionally, the different recurrence intervals in this research included 2-, 5-, 10-, 20-, 50-, 100- and 200-years. We added these descriptions in the text.
Figure 1: the geographical location of the studied watershed in Taiwan should be enlarged.	Following the comment, the geographical location of the studied watershed in Taiwan was enlarged.
Figure 2 could be complemented by the results for one more variable, possibly a variable excluded in the second step of the screening (absolute value of $D_j < 0.1$).	Following the comment, the variable, average elevation, excluded in the second step of the screening was added in fig. 3.