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Title: Increased Nonstationarity of Stormflow Threshold Behaviors in a Forested Watershed Due to Abrupt Earthquake Disturbance

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Summary

The general summary of the manuscript remains the same from the first version:

Increased Nonstationarity of Stormflow Threshold Behaviors in a Forested Watershed Due to Abrupt Earthquake Disturbance assessed changes in hydrologic response of a forested experimental watershed in the eastern Tibet Plateau following an earthquake. The authors characterized longer-term changes in threshold behavior in the watershed and introduced a new metric to express thresholds for watersheds with areas of disparate land use, ecology, and physiography. The authors found that lower threshold values were observed in disturbed landslide regions and that non-stationarity in thresholds was mainly controlled by changes to the dominant runoff generation mechanisms of subsurface stormflow and the variable source area.

Significance

This work is significant in several ways:

- 1) It contributes to our growing understanding of threshold-mediated hydrologic response.
- 2) It contributes to the further advancement of a unified threshold-based hydrologic theory.
- 3) It assesses longer-term trends in threshold behavior following an environmental disturbance.
- 4) It introduced a new metric to quantify and compare thresholds.

General Comments

I appreciate the significant effort taken by the authors to address public comments and comments of the two formal reviewers. Significant improvements were made throughout the manuscript, namely:

- the Abstract is more clear and presents a more accessible *pitch* to prospective readers
- the clarity of the introduction is also improved and the requisite definitions are now present
- suggestions for future work are clearly articulated
- the overall study findings are presented clearly and reflect the analytic results.

Some general comments that could further improve the manuscript:

I think that using Tr as the abbreviation for the threshold is somewhat confusing since it is commonly used to describe the time of rise in hyetograph-hydrograph analysis.

Throughout the manuscript, the placement of inline citations is unusual and inconsistent. In some cases, it is unclear if the text is new information being presented by the authors or if the reference indicates similar findings in other studies.

Specific Suggestions

Abstract L17: Please add units to the lower rising threshold value.

Abstract L18: I think that "...a stormflow response faster..." is ambiguous, as it is unclear if the authors are referring to the velocity of the response or the delay between event and response. Please clarify.

Abstract L23: Clarify what is meant by "turning time".

Introduction L32: Can remove first word "Appropriately".

Introduction L72: missing units for 2×10^5

Section 2.2: A more rigorous explanation of how the DASI is obtained would be helpful, especially given its importance in the calculation of the IWA index.

Section 2.4: The calculation of the index is fairly clear. With that said, there is little explanation about interpreting the index. I think that some details on this would be beneficial.

Section 4.1 L249-251: I find this sentence very hard to follow.

Section 4.2 L290: I think you mean severely, not “severally”.