Dear Editor and Referee #1,

We sincerely appreciate your constructive feedback on our manuscript entitled **"Assessment of the vulnerability of buildings destroyed during postfire debris flow events in Kule village, Yajiang County, China" (Manuscript ID: egusphere-2025-772)**. Thank you for your recognition of our work and your valuable suggestions for its improvement. We have carefully addressed all comments and revised the manuscript accordingly. Should further suggestions arise, we remain fully prepared to incorporate them. Our primary task is to carefully revise to meet the standards of the journal, and we hope this research merits your consideration for publication. Once again, we extend our deepest gratitude for your insightful review and endorsement.

Our point-by-point responses and corresponding revisions are detailed below:

Reviewer	Comments	Response
1	This is an interesting and valuable paper on post-fire debris flow disaster in mountainous regions. After I carefully read the paper, I think this paper is quite detailed; however, it still needs to improve the conciseness and logic of its expression. Some comments and suggestions are listed and hope it's helpful for the authors to improve the manuscript.	Dear Referee, We are deeply grateful for your exceptionally generous and insightful feedback on our manuscript. Your kind words and positive assessment have been a tremendous encouragement to our entire team. **Firstly,** we are truly honored that you considered our study "interesting and valuable" in advancing debris flow disaster mitigation in mountainous regions. Thank you for recognizing the impact and thoroughness of our work—it is especially rewarding to know that our research resonates with experts like you, whose perspectives are highly valued in the field. **Secondly,** we sincerely appreciate your insightful comments and constructive suggestions for improving the conciseness and logic of expression. Following your guidance, we have carefully revised and

		supplemented the relevant sections. Our specific point-by-point responses and modifications are detailed below. **Finally,** Thank you once again for your valuable suggestions and recognition. We are deeply grateful for your encouraging feedback and actionable advice, which have significantly strengthened our study. Should any aspects still require further refinement, we warmly welcome your additional guidance. Please accept our profound gratitude for your mentorship throughout this revision process.
2	**1.Abstract:** Two points (1) Further refinement the abstract is needed, and the verbose sentences need to be rewritten.	Thank you for your valuable suggestion. Following your professional guidance, we have thoroughly revised the abstract to improve clarity and eliminate verbosity, restructuring long sentences for directness. Thank you again for your valuable comments and assistance.
3	(2) Reduce procedural descriptions and appropriately increase quantitative results.	Thank you very much for your valuable comments. Based on your valuable suggestion, we also recognize that that the original version overemphasized the process; consequently, we have significantly increased the emphasis on our quantitative results by incorporating key data to better highlight our main findings and further highlight this expression more clearly. Thank you again for your suggestions on enhancing the expression.
4	**2.Introduction** Three points (1) Reduce the total word count of the introduction.	Thank you very much for your valuable comments on the Introduction section. Your suggestions have helped us make it more concise and logically coherent. We have streamlined the entire section by

		consolidating sentences with similar meanings to achieve more compact expression and removing redundant background information. Through these measures, the total word count of the introduction has been reduced, resulting in a sharper focus. Thank you again for your suggestions on enhancing the expression of our paragraphs.
5	(2) Line 137-144, move to "Section 2 Study area".	Thank you for your careful guidance and suggestions. We greatly appreciate this suggestion regarding placement. You are absolutely correct that the description of the study area's specific characteristics is out of place in the Introduction and more naturally belongs in the dedicated "Study Area" section. We have moved the content from lines 137-144 in its entirety to Section 2 (Study Area). We have also polished the transition to ensure it integrates smoothly with the surrounding text in its new location. Thank you again for your valuable advice and guidance.
6	(3) Add a clear statement of the aims.	We would like to express our gratitude for your valuable suggestions. Under your professional guidance, we have added and modified a clearer and more concise statement of the research aims at the end of the introduction section, which explicitly outlines the primary objectives of our study. Thank you again for this important feedback and suggestions.
7	**3.Study area**: One point (1) Merge the contents of the following two sections: Section 2 and Section 3.1 and 3.2.	Thank you for your valuable suggestion. As your suggested, we have consolidated the content from the original Section 2 (Study Area) and Sections 3.1 & 3.2 into a single and comprehensive section. This new section provides a more coherent and streamlined description of the

		geographical context and the characteristics of debris flow channels. Thank you again for these constructive suggestions regarding the manuscript's structure.
8	**4. Methods:** One point (1) Retain the introduction and verification of numerical simulation methods (Section 3.3) and Development of empirical vulnerability models for buildings (Section 3.4).	Thank you for valuable suggestion and guidance. We have retained the core methodological components as your instructed. The content from the original Section 3.3 (introduction and verification of numerical simulation methods) and Section 3.4 (Development of empirical vulnerability models for buildings) now forms the main body of our revamped "3. Methods" section. This ensures the methodological description is focused on the most critical and innovative aspects of our work. Thank you again for your valuable comments.
9	**5.Results**: Two points (1) Merge Figure 7 and Figure 8, Revise the expressions in the text.	Thank you for this valuable suggestion. According to your suggestion, we have merged Figure 7 and Figure 8, which will facilitate a more direct and effective comparison of the results. Furthermore, we have thoroughly revised the corresponding text in the Results section. All previous references to the separate Figure 7 and Figure 8 have been updated to direct the reader to the new and combined figure. Thank you again for your careful guidance.
10	(2) Revise the title of Section 4.2 and 4.3, to highlight the characteristics of this part.	Thank you for your valuable suggestion. We have revised the titles to more accurately and prominently reflect the core findings and applications presented: The original title 4.2 and 4.3 has been revised to "4.2 Development of an intensity-vulnerability model for debris flow"

		and "4.3 Model application: intensity Prediction and spatial vulnerability assessment for the G2 gully". Thank you again for helping us improve our expression.
11	**6. Discussion**: Further refine the content, now it's about 15 pages.	Thank you for your valuable suggestion. We have critically reviewed the entire section to eliminate redundancy and consolidate related arguments. The focus has been sharpened to provide a more concise and impactful interpretation of the key results, their direct implications and compared with existing literature. Thank you again for your suggestion.
12	**7. Conclusion**: Further refine the conclusions.	We greatly appreciate your valuable suggestions. According to your suggestion, we have thoroughly revised the Conclusion section to ensure it is precise and impactful. Thank you again for your guidance and assistance.
13	**8. References:** Refer to the submission instructions, check the format and add DOI.	Thank you for this important reminder. The DOI for all references has been added. Thank you again for your careful suggestion.
14	**9.** Check the Figs and the title of the Fig.	Thank you for your careful suggestion. We will check and unify it. Thank you again for your careful inspection.
15	**10.** The final version of the MS should be reviewed by a native English speaker.	Thank you for your valuable suggestion. we have engaged the professional editing services to thoroughly review and polish the entire manuscript language. The final version has been meticulously checked for grammar, spelling, syntax, and overall fluency to ensure it meets the high

		standards required for publication. Thank you again for your suggestion. Finally, we are profoundly grateful for your thorough review and expert guidance. Thank you again for your high recognition of our manuscript, which has given us great confidence to strengthen this study. we greatly appreciate your suggestions for helping us improve our manuscript, and we hope these improvements meet the journal's standards for publication. Should further clarifications be needed, we are fully committed to addressing them promptly.