

Responses to Reviewer 1

General comments:

The revised manuscript demonstrates substantial improvements, with the authors addressing reviewer feedback through enhanced historical contextualization, clearer data presentation, improved methodological clarity, more effective visual aids, and increased technical accuracy. Notable revisions include a stronger introduction to key historical figures, improved data visualizations, a more comprehensive literature review, refined analytical categorizations, and corrections to supplementary materials. These enhancements significantly elevate the manuscript's accessibility, scholarly rigor, and readability. With minor revisions, it is well positioned for publication and offers valuable insights into the volcanic impacts on the Western Han Dynasty.

We appreciate the reviewer's positive feedback regarding our revised manuscript and the constructive comments to help us improve.

Specific comments:

Line 392: It would be helpful to briefly explain the meaning of the term Chanyu to aid readers who may not be familiar with it. I also suggest reviewing the manuscript for other Chinese phrases or terms to see if similar clarifications might enhance accessibility for a broader audience.

Line 531: It is recommended to delete the term Fangshi, as readers who are not familiar with Chinese history may not understand its meaning.

Technical corrections:

Line 234: The correct spelling of the place name should be Jingyuan.

Line 576: There is an extra comma between the name and volume number in the citation of historical documents, which is inconsistent with the formatting used elsewhere in the manuscript. The same issue is observed in lines 578, 615, 637, 682, and 684.

The citations of figures: The citations of figures in the text are inconsistent. Some instances use the full term "Figure" while others use the abbreviation "Fig." It is recommended to standardize the format throughout the manuscript.

References: The formatting of the newly added references appears to be inconsistent with the existing ones. In particular, there should be a new line separating the two references on line 892.

Thank you for the careful reading and the comments; we have corrected all these matters as suggested.

Responses to Reviewer 2

The authors have sufficiently addressed the questions and suggestions raised during the previous review. I therefore recommend the acceptance of the manuscript, after the authors satisfactorily address the following issue:

Please consider rewrite the second half of the abstract, focusing on summarizing the results drawn from this investigation, instead of (or expanding on) the justification of choosing the two case study periods.

We appreciate the reviewer's positive feedback regarding our revised manuscript and the helpful suggestion. We have made changes accordingly.