

Review Form 3

Journal Name:	Asian Journal of Geological Research
Manuscript Number:	Ms_AJGER_120277
Title of the Manuscript:	Lithological and Structural Analysis in the Lansdowne, Pauri Garhwal district Uttarakhand, India
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Please write few sentences regarding the importance this manuscript for scientific community. Why do you like (or dislike) this manuscript? Minimum 3-4 sentences may be required for this part.</p>	<p>The manuscript under review offers a comprehensive examination of the geological intricacies within the Lansdowne area of the Garhwal Himalayas, contributing significantly to our understanding of the region's tectonic evolution. The meticulous fieldwork and subsequent analysis of structural and lithological variations provide a clear depiction of the area's complex deformation history and metamorphic conditions. Notably, the transition from augen gneiss to granite in the town's core presents intriguing implications for the region's geological stability and suitability for human settlement.</p> <p>From a scientific perspective, the study's findings are particularly valuable as they shed light on the ongoing tectonic processes that continue to shape the Himalayan landscape. Such research is essential for advancing our knowledge of mountain-building mechanisms and the associated seismic risks. Moreover, the detailed mapping of faults, joint sets, and gouge zones enhances our comprehension of the regional stress regimes, which is vital for infrastructure planning and disaster mitigation strategies.</p> <p>The clarity and depth of the research methodology, including the use of GPS for precise location mapping and GIS for spatial analysis, ensure that the results are robust and reliable. The manuscript's contribution to the scientific community is underscored by its potential to inform future geological studies and to aid in the development of safer, more resilient communities within this dynamic and geologically sensitive region.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title of the article, "Lithological and Structural Analysis in the Lansdowne, Pauri Garhwal district Uttarakhand, India," is suitably descriptive and accurately reflects the content of the manuscript. It clearly states the focus of the study—lithological and structural analysis—and specifies the geographic location of the research, which is essential for readers interested in regional geological studies.</p> <p>However, if the title were to be refined for enhanced clarity and to capture the essence of the findings more succinctly, an alternative title could be:</p> <p>"Geological Dynamics and Stability in Lansdowne, Garhwal Himalayas: A Litho-Structural Perspective"</p> <p>This alternative title emphasizes the key themes of geological dynamics and stability, which are central to the manuscript's conclusions, while maintaining the specificity of the study's location and the scientific approach taken.</p>	

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<p>Is the abstract of the article comprehensive? Do you suggest addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>Here is a suggested revised abstract, incorporating these points:</p> <p>"Abstract: This study examines the geological features of Lansdowne town in the Lesser Himalayas of Uttarakhand, India, where rocks ranging from Precambrian to Recent are present. The region exhibits a transition from highly deformed augen gneiss to more uniform granite, reflecting varying degrees of tectonic activity. Detailed field analyses reveal fault lines, joint sets, and gouge zones, indicative of significant tectonic movements. The central part of Lansdowne, characterized by uniform granite, shows less intense deformation, suggesting a more stable environment for development. This study highlights the importance of geological stability in urban planning within seismically active regions."</p> <p>This revised abstract is more direct and concise, improving its clarity and the communication of the study's importance to the scientific community and urban development stakeholders.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The subsections and overall structure of the manuscript are generally appropriate, following the conventional format of scientific papers. However, the Geological Setting section could be better integrated as a subsection within the Introduction to maintain flow and coherence. Additionally, the Results and Discussion sections are typically separate to distinctly present findings and then interpret them, but in this manuscript, they are combined, which may limit clarity. Separating these sections could enhance the manuscript's organization and allow for a more focused discussion of the implications of the results.</p>	
<p>Please write few sentences regarding the scientific correctness of this manuscript. Why do think that this manuscript is scientifically robust and technically sound? Minimum 3-4 sentences may be required for this part.</p>	<p>The scientific robustness of the manuscript is supported by its methodical approach to fieldwork, data collection, and analysis, which are hallmarks of sound geological research. The use of GPS for precise location data and the employment of GIS for spatial analysis demonstrate a commitment to accuracy and the application of established scientific methods. Furthermore, the manuscript's detailed petrographic analysis and structural observations, such as the identification of fault lines, joint sets, and gouge zones, provide a strong empirical basis for its conclusions. Lastly, the integration of lithological variations with tectonic implications reflects a comprehensive understanding of geological processes, reinforcing the manuscript's technical soundness. My overall observation is that the article needs more attention to the specifics and the quality needs to be improved.</p>	
<p>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p>	<p>References are not as sufficient and recent that needs to be.</p>	

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<p>Minor REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article, as presented in the provided text, are generally suitable for scholarly communication. The manuscript employs technical terminology appropriate for a geological study and presents information in a structured and academic style. However, there are instances of redundancy and some complex sentences that could be simplified for clarity. To ensure the article meets the highest standards of scholarly communication, a thorough proofreading and possible revision for conciseness and readability would be beneficial. This would help in making the article more accessible to a wider scientific audience, including those for whom English may not be their first language.</p>	
<p>Optional/General comments</p>	<p>The manuscript provides a valuable geological analysis of the Lansdowne region, but the Abstract could be more concise, avoiding repetition and focusing on summarizing the study's objectives, methodology, key findings, and implications.</p> <p>The Introduction effectively sets the stage for the study but could benefit from a clearer statement of the research questions or hypotheses to guide the reader through the subsequent sections.</p> <p>The Geological Setting section contains important background information but should be integrated into the Introduction to improve the manuscript's flow and coherence.</p> <p>The Materials and Methods section is detailed and methodologically sound, yet it could be enhanced by explaining the choice of specific fieldwork sites and the criteria for sample selection.</p> <p>In the Results and Discussion section, the findings are well-presented, but separating these into two distinct sections would allow for a clearer distinction between empirical observations and their interpretation.</p> <p>The Conclusion succinctly encapsulates the study's findings; however, it could be strengthened by directly linking the results to broader geological theories and potential practical applications.</p> <p>The manuscript occasionally employs complex and lengthy sentences that could be simplified to improve readability and ensure the content is accessible to a broader audience.</p> <p>While the manuscript is technically sound, a careful review for grammatical precision and consistency in terminology would polish the article for publication.</p>	

PART 2:

	<p>Reviewer's comment</p>	<p>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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