Review of: "The Comparison of Traverses Adjusted by Non-Rigorous and Rigorous Methods of Adjustment"

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Potential competing interests: No potential competing interests to declare.

With major revisions, I believe it has the potential to make a valuable contribution to the journal.

1.The abstract jumps directly into the topic without providing any background or context for readers who may not be familiar with geodetic surveying or traverse adjustments. Providing a brief introduction or context could make the abstract more accessible.

2.The abstract mentions that the Transit method is superior to the Bowditch method but doesn't provide specific results or data to support this claim. Including some key findings or statistics could make the abstract more convincing and informative.

3. Introduction :There is some repetition in phrases like "relentless pursuit of precision" and "relentless march of progress," which, while emphasizing your point, can make the text less concise. Ensure that you convey your message clearly without unnecessary redundancy.

4. Data Sources: It mentions the use of both primary and secondary data, but it doesn't specify how secondary data were used in the study. Providing more details on the role of secondary data could enhance the understanding of the research process.

5.Justification: While you've provided a detailed account of what you did, it could be helpful to include some justification for your choices. Explain why you selected specific instruments, software, and methodologies over alternatives. This can provide context and rationale for your research approach.

6. Sensitivity analysis is recommended.

7. You should cite the following papers also

a. Biswas, K., Vasant, P. M., Vintaned, J. A. G., & Watada, J. (2021). A review of metaheuristic algorithms for optimizing 3D well-path designs. *Archives of Computational Methods in Engineering 28*, 1775-1793.

b. Biswas, K., Vasant, P. M., Vintaned, J. A. G., & Watada, J. (2021). Cellular automata-based multi-objective hybrid Grey Wolf Optimization and particle swarm optimization algorithm for wellbore trajectory optimization. *Journal of Natural Gas Science and Engineering*, *85*, 103695.

c. Wang, Z., Gao, D., & Liu, J. (2016). Multi-objective sidetracking horizontal well trajectory optimization in cluster wells

based on DS algorithm. *Journal of Petroleum Science and Engineering*, *147*, 771-778.

d. Huang, W., Wu, M., Chen, L., She, J., Hashimoto, H., & Kawata, S. (2020). Multiobjective drilling trajectory optimization considering parameter uncertainties. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, *52*(2), 1224-1233.

e. Atashnezhad, A., Wood, D. A., Fereidounpour, A., & Khosravanian, R. (2014). Designing and optimizing deviated wellbore trajectories using novel particle swarm algorithms. *Journal of Natural Gas Science and Engineering*, *21*, 1184-1204.

f. Wood, D. A. (2016). Hybrid bat flight optimization algorithm applied to complex wellbore trajectories highlights the relative contributions of metaheuristic components. *Journal of Natural Gas Science and Engineering*, *32*, 211-221.

g.Biswas, K., Nazir, A., Rahman, M. T., Khandaker, M. U., Idris, A. M., Islam, J., ... & Jallad, A. H. M. (2022). A hybrid multi objective cellular spotted hyena optimizer for wellbore trajectory optimization. *Plos one*, *17*(1), e0261427.

h. Biswas, K., Rahman, M. T., Almulihi, A. H., Alassery, F., Al Askary, M. A. H., Hai, T. B., ... & Ahmed, R. (2022). Uncertainty handling in wellbore trajectory design: a modified cellular spotted hyena optimizer-based approach. *Journal of Petroleum Exploration and Production Technology*, *12*(10), 2643-2661.