

Response to Reviewer 3 Comments

Point 1: Title of paper is looking long, make it concise.

Response 1: The title of the paper has been revised at the request of the reviewer.

Point 2: Highlight main novelty of your work.

Response 2: The paper has been revised at the request of the reviewer.

Point 3: Comparison of your current results with the existing literature to prove your novelty and contribution to the research.

Response 3: The current results are compared with the existing literature. The scheme proposed in this paper can optimize the engineering conditions of similar geological conditions and improve the economic benefits. Through theoretical analysis, numerical simulation and field engineering practice, this paper highlights the applicability of this scheme.

Point 4: Applications of this work?

Response 4: The application of this work has been verified in engineering practice.

Point 5: For numerical simulation for part mesh independence? Optimal mesh selected for solution? Mesh statistics.

Response 5: The simulation part of this paper has been verified by grid.

Point 6: Validation of results? If you are doing your own experiment still show your results matches within 10% error for experiment and simulation parts.

Response 6: Through the verification of field engineering practice, the error between numerical simulation experiment and field practice experiment is controlled within 10 %.

Point 7: Compare your contours/surface plots with experimental images to verify your results are similar in pattern or trend.

Response 7: According to the numerical simulation results of the selected optimal roof cutting height and coal pillar width, the surface deformation trend of the roadway is basically consistent with the surface trend of the field practice roadway.

Point 8: Add more references to your work.

Response 8: The paper has been revised at the request of the reviewer.

Point 9: Overall paper is looking short add some more data and results.

Response 9: The paper has been revised according to the requirements of the journal.

Point 10: Conclusion must be revised, and it will be aligned with the abstract and results.

Response 10: The paper has been revised at the request of the reviewer.