

CONCLUSION

Mining subsidence is one important factor to affect the natural and ecological environment in the coal mine and its neighborhood. Here we put forward one new method to monitor the subsidence of coal mining by the gravimetry technique. Gravity data can be used to inverse the settlements over the coal mining area with the high precision while knowing the mining coal mass. The real vertical gravity gradient can also be estimated from the gravity data and the height change data. The new method is of great significance to the mining research and the coal production. The experiment indicates that the new method can replace the leveling to monitor the surface subsidence.

CONFLICT OF INTEREST

The authors confirm that this article content has no conflict of interest.

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