









## CONCLUSION

This article discussed the theory of homogeneous elastic half space rectangular plane dislocation model, constructed the particle swarm - BP neural network algorithm; Based on the study area, Determined subsidence center area is tension fault and the border area is dip-slip faults according to studying area.

Through simulation displacement is calculated for each station, have some comparison with observation data, subsidence center is mainly vertical deformation, deformation is in about two meters affected by topography and geomorphology, and no regularity; Subsidence boundary is pointing to the center to the vertical deformation and horizontal deformation, the closer the driveway roadway and the greater the shape variables. Subsidence could be divided into two fault working face, the subsidence basin shape caused by mining subsidence more real, further explore the activity rule of mining subsidence in the study area, and provides important reference basis to predict and monitor coal mining subsidence, there is an important practical significance on the related geological disaster prevention.

## CONFLICT OF INTEREST

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

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