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Research on emergency rescue plan of plateau area after earthquake based on road accessibility

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Road damage in plateau mountainous areas has a significant impact on emergency rescue, and the size of the area where emergency rescue vehicle teams travel at different rescue stages is different, which also gives rise to different considerations of road demand. Current research finds that the respective characteristics of Dijkstra's algorithm and ant colony algorithm can meet the different needs of emergency rescue vehicle teams when they are traveling at different regional sizes. Therefore, the article simulates the earthquake and calculates the road accessibility results after the earthquake, and then considers the differences in road demand and considers the size of different regions, the Dijkstra algorithm and the ant colony algorithm are used respectively to plan the overall emergency rescue plan by setting different scenarios. The results show that the emergency rescue-planning route in different scenarios provided by the plan is scientific and reasonable, and can provide support in the research of key links.