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## Abstract

An explosive growth of spatial data has been demanding to Spatial Data Mining (SDM) technology, emerging as a innovative area for spatial data analysis. Geographical Information System (GIS) contains heterogeneous data from multidisciplinary sources in different formats. Geodatabase is the repository of GIS data, representing spatial attributes, with respect to location. Rapidly increasing satellite imagery and geodatabases generates huge data volume related to real world and natural resources such as soil, water, temperature, vegetation, forest cover etc. Inferring information from geodatabases has gained value using computational algorithms. The intent of this paper is to introduce with GIS, and spatial data mining, GIS and SDM tools, algorithmic approaches, issues and challenges, and role of spatial association rule mining in big data of GIS.

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### Index Terms

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### Keywords

GIS, SDM, Geodatabases, Spatial and Nonspatial data, Bigdata, MRPrePost