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Introduction

Spatial analysis, spatial-temporal data modeling and data mining are key research topics in the field of geographical information science and have attracted great attention around the world. With the developments of space technologies, computer technologies, mathematics, communication technologies and information processing technologies, the existing techniques and methods on spatial analysis, spatial-temporal data modeling and data mining have enabled human beings to observe, analyze, and understand the earth resources and environment, which have made a tremendous contribution to the development of the geographical information science and sustainability of human society.

To exchange the latest and advanced technologies and methods of spatial analysis, spatial-temporal data modeling and data mining, to enhance the connection between international and Chinese colleagues in this field, the International Symposium on Spatial Analysis, Spatial-Temporal Data Modeling and Data Mining was held 13–14 October 2009 in Wuhan. The conference aims to provide a high-level platform for scholars, entrepreneurs and technical personnel to exchange and learn from each other.

These proceedings contains 194 academic papers, covering 12 themes including spatial-temporal data capturing, Spatial-temporal data modeling, visualization of spatial-temporal data, web-based spatial-temporal model and applications, spatial-temporal applications for mobile, wireless, location-based service networks, data mining and knowledge discovery, spatial simulation models, spatial analysis models, Spatial reasoning, multisensor, multiresolution, and multimode data fusion, applications of data fusion to object recognition, classification and change detection, and spatial analysis applications. We hope that these academic papers will contribute to the developments and improvements of related theories, methods, techniques and applications.

Yaolin Liu
Xinming Tang