

Generating Real-Time Visual Summaries from Located Sensor-Based Data with Chorems

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Abstract : This paper describes a new approach for the automatic generation of the visual summaries dealing with cartographic visualization methods and sensors real time data modeling. Hence, the concept of chorems seems an interesting candidate to visualize real time geographic database summaries. Chorems have been defined by Roger Brunet (1980) as schematized visual representations of territories. However, the time information is not yet handled in existing chorematic map approaches, issue has been discussed in this paper. Our approach is based on spatial analysis by interpolating the values recorded at the same time, by sensors available, so we have a number of distributed observations on study areas and used spatial interpolation methods to find the concentration fields, from these fields and by using some spatial data mining procedures on the fly, it is possible to extract important patterns as geographic rules. Then, those patterns are visualized as chorems.

Keywords : geovisualization, spatial analytics, real-time, geographic data streams, sensors, chorems

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