

SEMANTICS DEFINITION TO REPRESENT SPATIAL DATA¹

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ABSTRACT

To improve the spatial data representation for their subsequent processing, a description for spatial objects is proposed. The description is based on spatial semantics, i.e. the “essential spatial properties” of geographical data. The proposed spatial semantic rules are explored by the human experience. To establish well these rules, we suggest a spatial semantics definition. This definition is evaluated according to the behavior of spatial data processed. Thus, the spatial data processing can be considered as a knowledge discovery into the spatial databases in the context of our approach. In such databases, the spatial data are represented by means of spatial ontologies and classified by spatial taxonomies. In this paper, we focused on describing the definition of the spatial semantics and the representation of geographical objects through data description.

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