A MAP MODELLING LANGUAGE

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ABSTRACT

Object based models are developed to overcome the problems of scale and application dependence in current map database systems. The object oriented geographical information base is distributed across three different types of sub-database, holding, respectively:

- object attributes associated with a single object;
- relational data connecting different objects;
- data defining the geometrical form of objects.

Scale projection and application projection are introduced as techniques for extending an object database to allow information to be obtained at scales or for applications different from those already provided for.

A map modelling language has been defined to provide a framework for the processing of information associated with object oriented map modelling. The manipulation of single objects and collections of objects is a basic function of the map modelling language, which incorporates database handling and Pascal block structured elements.