

Classification oriented databases for facilitating plant and terrestrial modeling

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Abstract

Classification oriented databases has been developed to supply users with easy tool for creating user defined classification (of categories) and supply the respective categories with data according to certain indicators. Time and location data can supplied to each informational entity. We use the definitions – indicator, domain classification. The indicators are considered as measured, observed and reported characteristics of objects. Each indicator is related with a measurement unit. The domain is considered as a set of indicators for better navigation through full list of indicators. An indicator may belong to different (more than one) domains. Classification (classification category) is created as a hierarchical structure of characteristics in order to determinate indicators. Data will be entered and extracted in table format. In this way a flexible combination between hierarchical organization and table data presentation will be achieved.

Proposed approach is most expedient, convenient and useful in view of the fact that reflects to a hierarchical and complex structure of the natural systems. Classification oriented databases give unlimited possibilities to create different consequently human developed classifications and models according to set aims. The database built according to proposed approach is sufficiently flexible and allows scientists make various combinations of different parameters from different classification units. In this way we can examine the natural systems from different points of view and create more realistic and adaptive models.