Data management of interdisciplinary research projects: Case studies CRC/TR32 “Soil-Vegetation-Atmosphere Patterns” and CRC806 “Our way to Europe”


Data storage and exchange in interdisciplinary research projects, which focus on spatial distributed field data collection in an organized framework, is a key issue. The overall and sustainable success of such projects also depends on the well organized data management and data exchange of/for all involved sub-projects. Therefore, the task is to solve the main problems of data storage and exchange within an interdisciplinary project by using a complex spatial database which allows the management of heterogeneous data. Besides spatial and attribute data, the database has to include metadata, file management, administrative and literature/publication, as well as picture and video data. Furthermore, a basis for an external and internal presentation of partial results and conclusions is provided. In the special focus is the sustainable use of all gathered data within the proposed CRC also after the project is finished.

The data management design focuses on three major parts. (i) Design and implementation of the project database framework. This includes the determination of the relevant data by implementing a questionnaire about expected data and used software. (ii) The second part deals with the design, development and implementation of the project database. Besides the storage of the collected data the focus is also on its corresponding metadata. (iii) The development of an online graphical user interface which accesses the database represents the third part. To meet the requirements of creating a user-friendly comprehensive database management system, self developed functionalities and interfaces, also based on WebGIS technologies, are programmed.

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