An interactive and dynamically generated web-based interface for satellite data

M. Dobbermann, **T. Nauss**, J. Bendix

Laboratory for Climatology and Remote Sensing (LCRS), Marburg University, Germany

The authors have developed an interactive, web-based interface for the satellite database of the LCRS (Marburg University, Germany) solely based on open source tools. Currently, the database holds data from Terra-/Aqua-MODIS, NOAA-AVHRR and Meteosat-VISSR/SEVIRI. One can access the interface via www.lcrs.de (http://www.lcrs.de/index.php?id=41).

The current version of the interface enables the user to search the database by satellite, product and date, view high-resolution browsable images of the scenes and products, animate the search results and generate overlays (borders, etc.). The data includes calibrated images as well as several own and third party products (cloud and fog masks, cloud properties, rainfall, forest fires etc.). Since the satellite data is operationally received, processed and archived at the LCRS, the interface can provide a near-realtime data access.

The architecture of the interface is in accordance with the Model-View-Controller (MVC) design pattern and the technical implementation is realized by the Struts framework and Java servlets running on an Apache Tomcat server. This ensures a modular and easy to extend program design. The content of the web-interface is created dynamically with respect to the information stored in a MySQL database. The sources for the interface can be made available upon request.