

AQUIFER project approaches completion of phase 2

AQUIFER is one of the demonstrator projects of ESA's initiative "Earth Observation for Integrated Water Resources Management in Africa", known as TIGER. It is funded by ESA's Data User Element (DUE) programme. AQUIFER focuses on the development and demonstration of Earth observation based products and services for supporting national authorities and international institutions in the transboundary management of ground water resources. AQUIFER deals with two prominent, internationally shared aquifers: the SASS basin in the Sahara and lullemeden basin in the Sahel zone. The AQUIFER project brings together national and international water management entities with remote sensing and GIS service providers from 3 Maghreb, 3 African and 5 European countries.

AQUIFER project now approaches the completion of its prototype phase and can announce the following achievements:

- Several meeting and discussions with the future Aquifer users on their requirements and expectations resulted during phase 1 in a consolidated list of aimed at Aquifer products and services
- Prototypes products based on satellite imagery (limited in geographic coverage to the selected prototype areas) are generated and made available on the AQUIFER website www2.gaf.de/aquifer. They are currently available for assessment and feedback by the users.
- The AQUIFER website is established and continuously updated to keep the public informed on the aims of Aquifer, its status of achievements, latest news and on the future planning. In the internal section the website provides a forum for exchange and discussion among the more than 20 AQUIFER partners.
- Training and extensive on-site cooperation has been already performed with Water Management Organizations as well as Remote Sensing Institutes in Algeria, Libya, Mali, Niger and Tunisia.
- Ground truth campaigns were performed by our partners in Africa with participation from experts from Europe
- The programming and acquisition of optical and radar satellite data for the areas of interest is ongoing and to a considerable extend completed.
- in the frame of AQUIFER an ESA funded airborne campaign – AquiferEx - was performed by the German Aerospace Establishments DLR and has mapped 2 test sites in Tunisia with hyperspectral and radar imagery. This data which will be put to use in the following phase 3 of Aquifer and result in a refined land use and land cover map.

The completion of AQUIFER phase 2 foresees now a review by all stakeholders and the subsequent necessary project adjustments before entering into the phase 3, which shall last till May 2007.