



## **Remote Sensing, New Media and Scientific Literacy for Competence Oriented School Education - A New Integrated Learning Portal**

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The project FIS – Fernerkundung in Schulen (German for “Remote Sensing in Schools”) – aims at a better integration of remote sensing in school lessons. Respectively, the overall objective is to teach pupils from primary school up to high-school graduation basics and fields of application of remote sensing. Working with remote sensing data opens up new and modern ways of teaching. Therefore many teachers have great interest in the subject “remote sensing”, being motivated to integrate this topic into teaching, provided that the curriculum is considered. In many cases, this encouragement fails because of confusing information, which ruins all good intentions. For this reason, a comprehensive and well structured learning portal on the subject remote sensing is developed. This will allow teachers and pupils to have a structured initial understanding of the topic. Recognizing that in-depth use of satellite imagery can only be achieved by the means of computer aided learning methods, a sizeable number of e-Learning contents have been created throughout the last 5 years since the project’s kickoff which are now integrated into the learning portal.

Three main sections form the backbone of the developed learning portal.

1. The “Teaching Materials” section provides registered teachers with interactive lessons to convey curriculum relevant topics through remote sensing. They are able to use the implemented management system to create classes and enregister pupils, keep track of their progresses and control results of the conducted lessons. Abandoning the functionalities of the management system the lessons are also available to non-registered users.
2. Pupils and Teachers can investigate further into remote sensing in the “Research” section, where a knowledge base alongside a satellite image gallery offer general background information on remote sensing and the provided lessons in a semi interactive manner.
3. The “Analysis Tools” section offers means to further experiment with satellite images by working with predefined sets of Images and Tools.

All three sections of the platform are presented exemplary explaining the underlying didactical and technical concepts of the project, showing how they are realized and what their potentials are when put to use in school lessons.