

Vortrag

Space2Place – Earth Observation to Empower UNESCO-Site Stakeholders

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Since the adoption of the UNESCO World Heritage Convention in 1972, the UNESCO compiled a list of 1,073 World Heritage Sites. Designated sites of UNESCO are distinguished by their outstanding universal value for mankind. However, 54 UNESCO World Heritages Sites, especially in Africa and the Arab States, are currently considered as being endangered, often caused by armed conflicts, natural disasters, and urban sprawl. For the management and monitoring of these sites, Earth observation data offers considerable potentials. The Research Group for Earth Observation (rgeo) as part of the Department of Geography at Heidelberg University of Education developed “Space2Place” as contribution to the Copernicus Master Challenge in 2016. The e-learning module aims at empowering stakeholders of UNESCO sites to incorporate Earth observation data into their daily working routines.

Backbone of Space2Place is an e-learning environment, established in the framework of the project “Space4Geography”. It provides key features such as optimized presentation on different end user devices, introduction to various Earth observation applications, e.g. deforestation and forest fire mapping, integration of various optical satellite images, e.g. Sentinel 2, Landsat 8, and RapidEye, interactive approach and integration of different media, and final quizzes to check learning success. Furthermore, Space2Place is adaptable and can be dynamically combined to personalized learning paths with real-time adaptation of content and complexity. The e-learning module is linked with a web-based remote sensing application, called “BLIF”. The connected application comprises a large set of useful satellite data processing functions, including image enhancement, analysis and digital image processing tools. The improved understanding of inherent benefits of Earth observation technologies will enable participants of “Space2Place” to incorporate Earth observation data for customized monitoring of ongoing processes. Furthermore, participants will stimulate the communication about Earth observation as well as actively promote Earth observation in a wider context.