

## Best practice seminar papers carried out at the Earth Observation Lab

Type	Title	Abstract	Supervisor(s)
seminar paper	<a href="#"><u><i>Detecting permafrost landscape changes in northern Alaska and the Mackenzie River Delta with Landsat Data</i></u></a>	This seminar paper used the Landsat archive to identify change processes in the North American Arctic coast employing a trend analysis process based on research by Nitze and Grosse (2016). In addition, the extent of these processes were estimated based on the trend data and a general change classification was undertaken.	<a href="#"><u>Philippe Rufin,</u></a> <a href="#"><u>Patrick Hostert</u></a>
seminar paper	<a href="#"><u><i>Forest Structure and Land Use Change in the Bieszczady Mountains</i></u></a>	This seminar paper classifies the development of forest populations in the border triangle of Poland, Slovakia and Ukraine since 1860. Using field measurements, species compositions and forest structure were analysed in eight forest patches complemented by historic maps.	<a href="#"><u>Tobias Kümmerle,</u></a> Jan Knorn, Patrick Culbert
seminar paper	<a href="#"><u><i>Räumliche Interpolation des durchschnittlichen Jahresniederschlages im Harz</i></u></a>	This work discusses approaches for precipitation modelling in the Harz mountain range using inversed distance weighting interpolation. It gives a very structured insight in applied modelling in natural sciences including a detailed reflection of the work flow. It combines different data sets and adapts its method to regional particularities.	<a href="#"><u>Sebastian van der Linden,</u></a> Reinhard Kleßen, <a href="#"><u>Akpona Okujeni</u></a>
seminar paper	<a href="#"><u><i>Mapping impervious urban surfaces using regression analysis on synthetic hyperspectral EnMAP data</i></u></a>	This seminar project works on an algorithm for mapping urban imperviousness based on multiple regression analysis using R. It uses simulated data	<a href="#"><u>Akpona Okujeni,</u></a> <a href="#"><u>Cornelius Senf</u></a>

		of the future hyperspectral EnMAP satellite trying to model sub-pixel information by synthetically mixed training data of reference surfaces.	
seminar paper	<a href="#"><i>Grassland intensity in the Polish and Slovakian Carpathians - A methodological classification approach</i></a>	This project study develops a classification method for highly heterogeneous grassland surfaces in the Polish and Slovakian Carpathians using field and remote sensing approaches. It makes use of sophisticated methods of remote sensing and spatial statistics without neglecting political questions of land reform and agrarian policy.	<a href="#">Patrick Hostert</a> , Jan Knorn
seminar paper	<a href="#"><i>Qualitative Veränderung der Baumbestände in der Jungfernheide (Brandenburg, Deutschland) über die Jahre 1777, 1857 und 2013</i></a>	This seminar paper reconstructs historic land use patterns in the state of Brandenburg. It uses elaborate methods of geo referencing and analyses changes in tree populations since 1777. Christoph implements historic geodata into GIS and finds out that regional populations of beeches and pines decreased considerably within the last 250 years.	Jan Knorn, Richard Jäger