Remote sensing of land surface parameters

This module deals with the characterisation of the earth’s surface by assessing relevant remotely sensed parameters. These parameters are seen as resources of different land surfaces. Presented are methods for the assessment of vegetation, water, soils and urban areas as well as techniques for deriving bio- and geophysical parameters (e.g. vegetation and soil indices and parameters, imperviousness). Methodological skills are imparted for landscape analysis (e.g. analysis of topology, fragmentation of landscape elements, urban structures) as well as (inter)national assessment approaches, monitoring methods and programmes and practical application examples.

Intended learning outcomes
The students acquire skills concerning the methodological acquisition and textual assessment of land surface parameters in the context of different geographical applications. Thereby, fundamentals of the understanding of remote sensing data and methods as well of observed land surface processes are provided. The scientific problem’s type and complexity encourage interdisciplinary work.

Method of assessment
a) term paper (approx. 20 pages) or b) preparing a poster (approx. 10 hours)
Assessment offered: Once a year, winter semester
Language of assessment: German and/or English

Allocation of places
15 places. Should the number of applications exceed the number of available places, places will be allocated according to the number of subject semesters. Among applicants with the same number of subject semesters, places will be allocated by lot. A waiting list will be maintained and places re-allocated by lot as they become available.

Master’s degree (1 major) Applied Human Geography (2015)
Master’s degree (1 major) Applied Physical Geography (2015)
Master’s degree (1 major) Applied Human Geography (2017)