



Institut für Geographie
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Erlangen, den December 3, 2019

Small field seminar PG/KG **(Digital) Ground truthing for remote sensing**

Prof. Dr. Matthias Braun

Study programs: B.Sc. PG / B.A. KG

ECTS: 2 (3-4 days)

Number of participants: 20-25

Language: English on demand

Content: Field surveys are often an important part of remote sensing or other geographic studies. Depending on the topic to be studied, they can include various different survey techniques. In the class, you will get to know different field techniques and learn to handle different survey equipment. The techniques cover a standardized land use / land cover survey, techniques to measure e.g. leaf area index, spectrometry, GPS surveys with different degrees of precision. Students will work in groups and do the surveys themselves. The data acquired in this class may be used in class projects such as the "Introduction to Satellite Remote Sensing".



Aim of the class:

- Learn what to consider for efficient field surveys
- Learn how to use digital devices for mapping (tablet PCs) to generate GIS-ready survey results
- Get to know scientific measurement devices and techniques
- Understand the measurement principles of these devices and the subsequent analysis steps
- Get an idea of the possibilities, limitations and efforts for ground truthing

Entry requirements: Basic GIS knowledge, lecture GIS & Remote Sensing, cartography, basics in physical geography

Assessment: Documentation of the mapping result as GIS-map as well as a short write-up and analysis of acquired data (e.g. DGPS, LAI, spectrometer).

Preparatory meeting / places: **22nd April 2020, 16:15 (obligatory)**

class schedule: **1 joint field day on 26. Juni 2019 (obligatory)**, 1-3 field days in groups (flexible timing by group), 1 meeting for data processing

Costs: The excursion will take place in the ER-N-FO region. All surveys can be done either by bicycle or with student cars.