

Advanced Methods MSc: Remote Sensing:
Spectroscopy and Analysis of Spectral Data

Study programs: Master Climate & Environmental Sciences, MA Kulturgeographie

ECTS: 5 (2 SWS)

No. participants: 20

Language: English

Entry requirements: basic knowledge of multispectral remote sensing (like different sensors & platforms, indices, applications, masking, spectral behaviour of different surfaces), digital image processing (supervised/unsupervised classification, simple change detection, indices)

Class aims:

- get to know different advanced classification techniques and additional approaches for analyses of spectral data/imagery
- improve your presentation skill
- critical science interpretation

Content & structure:

In the weekly seminar, we will discuss papers that introduce the specific methods. For each seminar sessions, students will read 1-3 papers to a specific method and pose questions in a forum. During the respective sessions, the methods will be introduced and explained in more detail incl. background by one or several of the student/s (presentation) and a term paper per presentation. We will then jointly go through the questions posed in the forum to the introducing paper and discuss them based on our joint understanding and the talk given in this session.

Examination/grading: Presentation max 15-25 min per person (25min max per topic), coordinated between presenters within one thematic topic. Term paper (10-15 pages) per participant incl. figures, contribution to discussion forums. Each participant is required to pose to each paper/forum at least one original question. This should not replicate questions posed by other participants!

Evaluation: 40% talk, 40% term paper + 20% discussion contributions

All participant must contribute actively to the discussion and pass all three criteria/contributions!

Obligatory prep. Meeting incl. topic distribution: first seminar meeting, 26 Oct 2021, 17:00

When: blocked seminar 28th/29th January 2022