

Photogrammetry and Remote sensing

- Physical background of remote sensing (active and passive remote sensing, electromagnetic spectrum)
- Platforms for photogrammetry and remote sensing (satellites, aircrafts, unmanned platforms and sensors)
- Active and passive satellites and sensors for cartography
- Processing of remote sensing data I. (pre-processing, corrections, inner orientation for images)
- Processing of remote sensing data II. (outer orientation for images, orthorectification)
- Methods for aerial triangulation and their mathematical background
- Processing and classification of passive remote sensing data
- Processing and classification of active remote sensing data

Literature:

James S. Aber – Irene Marzloff – Johannes Ries: Small-format aerial photography: Principles, techniques and geoscience application, Elsevier, 2010

Rainer Sandau: Digital airborne camera: Introduction and technology, Springer, 2010

Adams and Gillespie: Remote sensing of landscapes with spectral images, Cambridge, 2006

Suggested literature:

Karl Kraus: Photogrammetry, de Gruyter, 2007. (English edition)