EnSAG Phase II: Scientific preparation of the EnMAP imaging spectroscopy mission

Helmholtz Centre Potsdam
GFZ German Research Centre for Geosciences

Abstract:

The scope of the project is the scientific preparation of the hyperspectral satellite mission EnMAP (Environmental Mapping and Analysis Program). The scientific lead of the mission lies with the Remote Sensing section at GFZ Potsdam, supported by a Science Advisory Group (EnSAG). Tasks of the EnSAG include (I) developing and updating the EnMAP Science Plan, (ii) organising and conducting workshops and summer schools, (iii) coordinating networking and dissemination activities, and (iv) developing algorithms for processing and analysing hyperspectral data as well as implementing them into the free software package EnMAP box, developed in the frame of the EnMAP scientific preparation program.

Within the project "ENSAG Phase II", the successful work of the EnSAG is continued by addressing new scientific challenges in the field of hyperspectral remote sensing. More specifically, the focus of the work at GFZ Potsdam in the scientific preparation of the EnMAP mission phase II comprises:

- Software developments for validation and simulation of EnMAP data
- Software developments for hyperspectral data analysis in the research fields geology and soils, with a particular focus on the detection of rare Earth elements, noble metals and mine waste, mapping of soil properties and characterisation of erosion states
- Scientific coordination of the EnSAG and the activities for community building and training

EnSAG

Duration: 01.01.2013 – 31.12.2015

EO Data Source: EnMAP, Sentinel-2, Hyperion, HySpex, AISA

Support Program: EnMAP Utilization Preparation

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