

EUFAR – European Facility for Airborne Research: Achievements for the “Hyperspectral Community”

Stefanie Holzwarth (DLR), Ils Reusen (VITO), Elisabeth Gerard (Météo France), Phil Brown (Met Office)

www.eufar.net

EUFAR is an Integrating Activity of the European Commission existing since 2000 currently representing a 24-partner consortium of institutions and organisations involved in airborne research. It evolved into the central network for the airborne research community in Europe. For the last 10 years the prominence of hyperspectral remote sensing increased rapidly.



REGISTER NOW!



<http://icare2017.besl-eventservice.de/front/conference.php>

2nd International Conference on Airborne Research for the Environment (ICARE 2017)

"Developing the infrastructure to meet future scientific challenges"

The programme will include sessions covering the following topics:

- Airborne support to future satellite missions
- Polar research
- Atmospheric science
- Oceans, lakes and inshore waters
- Land surface studies

Education and Training

Within EUFAR, also training courses cover different scientific topics dealing with hyperspectral remote sensing:

- ADvanced Digital Remote sensing in Ecology and earth Sciences Summer School (ADDRESS), 2010, Hungary
- Regional Experiments For Land-Atmosphere EXchanges (REFLEX), 2012, Spain
- Spectrometry of a Wetland And Modelling of Photosynthesis with Hyperspectral Airborne Reflectance and Fluorescence (SWAMP), 2015, Poland
- Remote Sensing for forest Essential Biodiversity Variables (RS4forestEBV), 2017, Germany

Transnational Access to Imaging Spectrometers

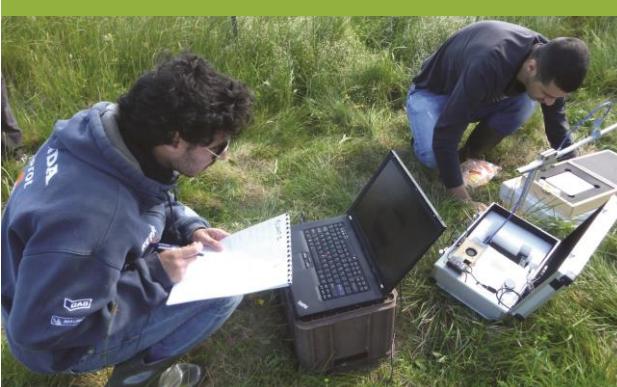
Multiple hyperspectral cameras of seven different operators are available through EUFAR transnational access to European researchers, who do not have access to a corresponding research infrastructure in their home country. The large percentage of flight requests based on hyperspectral sensors (~50% of all EUFAR flights) reflects the high interest for the research community.

Expert Working Groups

EUFAR also offers a platform to exchange knowledge and promote best practice in airborne research through Expert Working Groups (EWG), of which several relate to issues of hyperspectral remote sensing (e.g. hyperspectral data processing, hyperspectral applications for soil, calibration and validation). In 2016 alone three workshops took place organized by the hyperspectral EWGs.

Hyperspectral Research Activities

- “HYLIGHT” deals with the development of methodologies and tools for the integrated use of airborne hyperspectral imaging (HSI) data and airborne laser scanning (ALS) data in order to produce improved HSI and ALS products.
- “HYQUAPRO” developed, implemented and tested quality indicators and quality layers for airborne hyperspectral imagery, and developed higher performing water and soil algorithms as demonstrators for end-to-end processing chains with harmonised quality measures.



SWAMP Training Course, July 2015, Poland



ADDRESS Training Course, 2010, Hungary



REFLEX Training Course, July 2012, Spain