



## *The GOFC-GOLD South Central and Eastern European Network (SCERIN)*

# **SCERIN activities for the next year**

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and Lucie Kupková<sup>2</sup>*

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# SCERIN Activities in Progress

## 1. SCERIN joint papers

- P1: Global land cover products validation (**Ioannis**)
- P2: Inventory of land use and land cover change and driving forces (**Greg + Premek**)
- P3: 30 years of LCC in SCERIN using AVHRR (**Ivan Pilas**)
- P4: hyperspectral databases for forest ecosystems and their use for monitoring physiological status

**Possibility to publish** Ecological Processes <https://ecologicalprocesses.springeropen.com/> (**Jana**)

## 2. SCERIN activities

- SCERIN stable reference sites** (**Petya**) - started discussion
- “SCERIN Land Use / Land Cover Changes Atlas (LUCCNET)” - postponed to 2018, for SCERIN-6 Meeting
  - digital atlas - web portal launching (**Lucie + Jana, Premek**)
  - hard printed issue of complex Atlas of European Landscape changes in the last 200 years (including driving forces, impacts, consequences – synthetic approach). (**Lucie + others**)
- proposals of projects in different fields and different groups of SCERIN countries + possible financial support of SCERIN activities (**???**)
- Networking activities: EARSEL (**Ioannis, others**), IGU LCCLU (**Lucie**)

## 3. SCERIN publicity

### a. Improving SCERIN web site web pages (START support will be requested) (**Jana, Petya**)

- Links for each participant with list of active projects and data collections (**all**)
- **Jana** - computer support, update and maintenance

### b. Social media: SCERIN Linked-in and Facebook - (**Mihai**)

## 4. Next SCERIN Meetings: 2017 – Pecs, 2018 – candidacies, invitations

# 1. SCERIN joint paper P4 to develop

## P4 : **Monitoring tree physiological status in SCERIN region**

- Bioindicators of ecosystems – Ioannis paper
- Review of the available airborne hyperspectral datasets acquired in the SCERIN region and their use for vegetation monitoring

**Jana, Petya, Lucie, František**

1. List of available datasets (dataset details, sensor, resolution, localization, timing, owner – contact person)
2. Comparison of different datasets and sensors
3. Use of datasets for vegetation monitoring
  - **Forest ecosystems:**
    - **Monitoring tree physiological status**
    - Mountain ecosystems mapping and inventarization.
    - Analyses of ecosystems species composition and invasive species introduction.
4. potential/feasibility assessment of hyperspectral data/technologies for the different forest ecosystem analysis and monitoring.

### **Interested participants in 2016:**

**CZ:** Jana, Lucie, Franta Zemek, Olga Brovkina

**SK:** Tuček, Bucha,

**PL:** Bogdan Zagajew

**HU:** Geza Kiraly

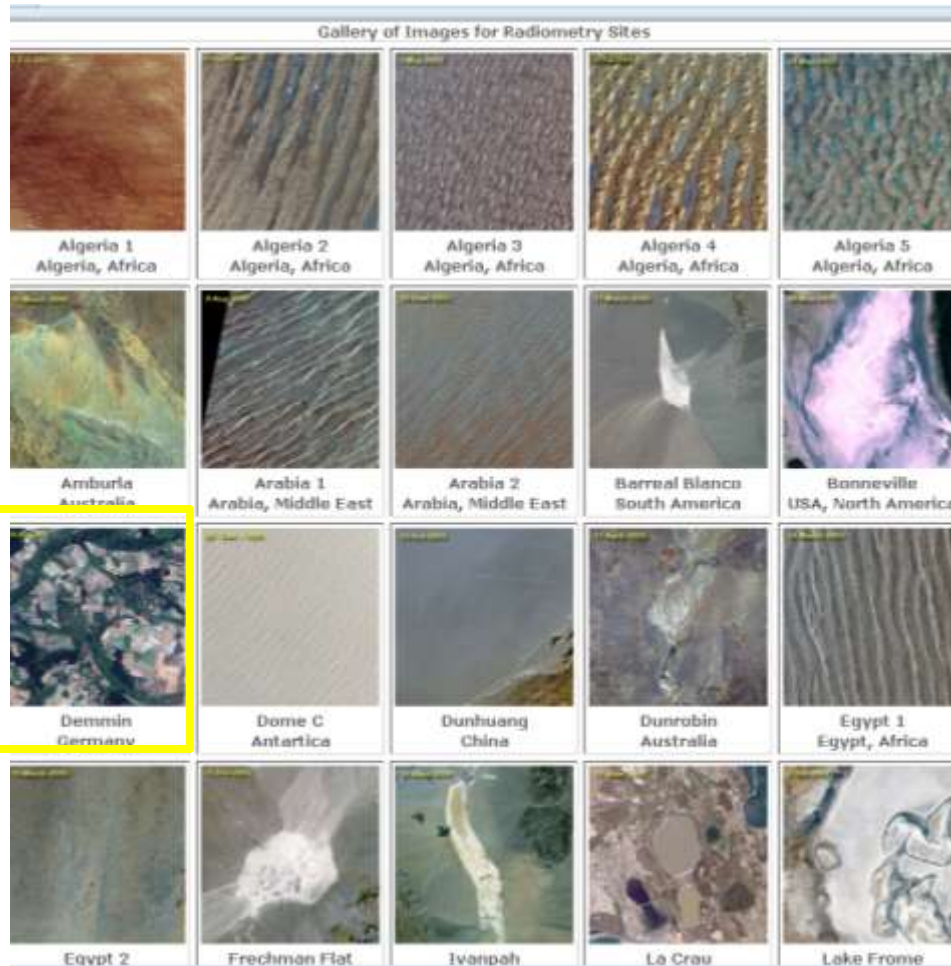
**BG:** Iliana Kamenova

Petya Campbell

# 2. SCERIN stable reference sites (**Petya**)

## CEOS, Radiometry Test Sites

Operational network of sites with automated instruments for the radiometric calibration of high spatial resolution optical sensors: RadCalNet. **LC = DESERT**



? SCERIN stable LC sites for product cal/val  
(after Demmin, Germany)

## 2. SCERIN stable reference sites (**Petya**)



Location (City, State, Country):	Near town of Demmin, North-East Germany, Europe
Altitude above sea level (meters):	8
Center Latitude, Longitude (Degrees):	+53.90 , +13.17
Landsat WRS-2 Path/Row:	193 / 22
Size of Usable Area (km):	Demmin consists of 5 limited and joint stock agricultural companies covering approximately 25.000 ha of agricultural fields
Owner:	Closely linked to a cooperation of DLR and the Interest Group Demmin, an association of local farmers.
Researcher:	Holger Maass , <a href="#">Email Researcher</a>
Purpose:	The test site has been implemented and operated for validation and calibration of remote sensing data, especially for thematic value added products.
Description:	The Demmin test site is located near the town Demmin in Mecklenburg-Western Pomerania in North-East Germany, approximately 80 km north of Neustrelitz and 220 km north of Berlin. DEMMIN extends from 54 2'54.29" N, 12 52'17.98" E to 53 45'40.42" N, 13 27'49.45" E. The landscape belongs to the north german lowlands formed during the last Pleistocene period (Pommersches stadium). It is characterized by glaci-fluvial and glaci-limnic deposits, and moraines which are reflected in a slightly undulating relief. Soil substrates are dominated by loamy sands and sandy loams alternating with pure sand patches or clayey areas. The altitudinal range within the test site is around 50 m with some slopes of considerable gradients (12 ) along the Tollense River in the south eastern part of the test site. Mean annual temperatures vary from 7.6 to 8.2 C. Precipitation ranges from about 500 to 650 mm. Due to micro-relief, climate conditions may vary significantly on a local scale. The field sizes in this area are large, averaging 80 - 100 ha. The main crops grown are winter crops covering almost 60 % of the fields in the area. Maize, sugar beet and potatoes make up about 13 %. <a href="#">Demmin Description PDF</a>
Support Data:	Digital quasi-static Data (Soil Maps, Land parcel - Field Maps), Digital dynamic Data (Yield Mapping, Application Maps, Agro-meteorological Weather Network), and Planned Measurements (Sites for Calibration)
<b>Suitability:</b>	<b>The test site is suitable for developing, calibrating, testing, and validating of thematic value added products for agriculture and forestry.</b>

## 2. SCERIN stable reference sites (**Petya**)

Input for LCLUC stable references sites, not deserts, wwwwith limited change

### **Interested participants: tentative**

**CZ: Premek Stych, Frantisek Zemek (will regard if Czechglobe can contribute after better definition), Jana Albrechtova**

**SK:**

**PL: Monika Tomaszewska (will provide contact**

**HU:**

**UA:**

**BG: Petya Campbell**

**RO: Mihai Nita**

**GR:**

**TU: Levent Genc**

**Serbia:**

**Others:**

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# SCERIN Project Proposals

## 2. SCERIN activities

c. proposals of projects in different fields and different groups of SCERIN countries + possible financial support of SCERIN activities (**Frantisek, Ioannis, Volodymyr**)

**D**



**Frantisek Zemek**

**Motivation**

Main threads of european landscape –  
shortage of water and inbalanced water regime

**Towards balanced water regime of  
Central European landscape**

**Franstisek will send info till 30 June,  
summarize**

Interreg  
CENTRAL EUROPE



European Union  
European Regional  
Development Fund

# SCERIN Project Proposals

## 2. SCERIN activities

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**Ioannis Manakos**

# SCERIN Project Proposals

**Volodymyr Starodubtsev**

**Proposal for future SCERIN activity – Focus Group:**

## Focus Group 4: Watersheds, catchments, DAMS – water management and ENVIRONMENT

Large scale land cover changes under direct and indirect  
impact of dams and reservoirs

Includes:

- Direct impact on banks of reservoirs (vegetation, banks of erosion, safe waterlogging, swamping, salinization, etc.)
- Impact on floodplains in river lower reaches
- Deltas degradation under river flow regulation
- Impact on sea and lakes under flow regulation (an example – Aral Sea, etc.)
- New deltas formation in large water reservoirs (example: Dnipro, etc)
- Social consequences of dams construction
- Lachezar Filchev, Ivan Pilas, Stanislaw Lewinski Gree Taff, Viktor Lagutov

# 4. Sustainable SCERIN Activities

Proposal of common European project or regional/bilateral projects

## Possible financial support of SCERIN activities

- **Horizon 2020** (Greg – proposal on meadow management)
- **Visegrad Fund** (Czech Republic, Slovakia, Poland, Hungary)  
<http://visegradfund.org/home/>
- **INTERREG EUROPE – František Zemek DANUBE REGION**
- **ESA, NASA** – financial support?
- Biodiversa
- Erasmus for student and research pedagogs exchange

**... any suggestions??? Anyone wants to take a lead???**

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**Greg Taff – Norway Funds**

# 4. SCERIN Activities

## NETWORKING

Continuation or improvement of collaboration with:

- **EARSeL Land use and Land Cover SIG – Ioannis - info**  
<http://www.earsel.org/SIG/LULC/>
- **IGU LUCC Commission – Lucie Kupkova – Member of Steering Committee**

**Conference of IGU LUCC Commission September 2017** – Lucie and Premek will inform about SCERIN activities and continue in networking activities

**ATLAS LUCC – Lucie Kupkova, (Ivan Bičík)**

Call for contributions to LUCC Atlas (deadline ASAP – contact Lucie Kupkova)

<http://lucc.zrc-sazu.si/Home.aspx>

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# 5. Improving SCERIN web site web pages

Jana, Petya

[www.csebr.cz/scerin](http://www.csebr.cz/scerin)

- **Archivation of presentations from SCERIN-5**: download your presentations at the desktop of the computer in lecture hall: **after lunch 23rd June at latest**
- all presentations will be archived and placed on SCERIN web site (**with exception of papers – they will be only internal**)

**Deadline of archiving: July 2017**

# 5. Improving SCERIN web site web pages

Jana, Petya

[www.csebr.cz/scerin](http://www.csebr.cz/scerin)

New structure: not only meetings, but generally:

## Meetings/Worskshops

### Participants:

Country:

Name, Institution, projects, etc....

### SCERIN Activities:

**Activities – tentative title, tentative abstract – description 250 words, contact person/s**

- P1: Global land cover products validation (**Ioannis**)
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- P3 : Review of the available airborne hyperspectral datasetes acquired in the SCERIN region and their use for vegetation monitoring, (**Jana, Petya, Lucie**)
- P4: „Trends of forest vegetation activity and observed climate change in Scerin countries“ (**Ivan Pilaš**)

SCERIN Atlas.....

### Related activities of SCERIN participants

Projects

Publications

Activities....

# 6. Social media: SCERIN Linked-in and Facebook

**Place your pictures, info on Facebook**

**Responsible person - Volunteer: Mihai Nita**

**Facebook: - link with Twitter, Linked in:**

participants can send small news to be posted

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2018:Croatia – Ivan Pilaš

**Candidacies, invitations:**

**2019: Serbia - Minucer Mesaros**

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