



SCERIN - South/Central & Eastern European Regional Information Network

<http://www.fao.org/gtos/gofc-gold/net-SEERIN.html>

## SCERIN-1 Meeting

<http://csebr.cz/scerin/index.html>

### *"Monitoring Land Cover Changes & Forest Condition"*

17-19 June 2013



Faculty of Science, Charles University in Prague  
Albertov 6, Prague 2, Czech Republic



## SCERIN Network Coordinators:

**Petya Campbell\*** ([petya.campbell@nasa.gov](mailto:petya.campbell@nasa.gov))

**Jana Albrechtova<sup>a</sup>, Lucie Kupkova<sup>b</sup>, Premysl Stych<sup>b</sup>**  
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## SCERIN-1 Meeting Scientific Board

**Petya Campbell<sup>\*</sup>, Jana Albrechtova<sup>a</sup>, Garik Gutman<sup>e</sup>, Olga Krankina<sup>f</sup>**

*\* Joint Center for Earth Systems Technology (JCET), University of Maryland Baltimore County, NASA Goddard Space Flight Center, Biospheric Sciences Branch, Greenbelt, Maryland USA*

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*<sup>f</sup> Oregon State University, U.S.*

## SCERIN-1 Event Local Organizing Committee:

**Jana Albrechtova<sup>a</sup>, Lucie Kupkova<sup>b</sup>, Premysl Stych<sup>b</sup>, Petya Campbell<sup>\*</sup>**  
**Jana Souckova<sup>b</sup>, Jana Slacikova<sup>b</sup>**  
**Monika Kovarova<sup>a</sup>, Zuzana Lhotakova<sup>a</sup>, Zuzana Kubinova<sup>a</sup>, Anna Vrbova<sup>a</sup>, Lenka Dvorakova<sup>a</sup>,**  
**Veronika Kopackova<sup>c</sup>, Jan Misurec<sup>c</sup>**  
**Petr Rojik<sup>d</sup>**

*<sup>a</sup>Department of Experimental Plant Biology, Faculty of Science, Charles University in Prague*

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*\* Joint Center for Earth Systems Technology (JCET), University of Maryland Baltimore County, NASA Goddard Space Flight Center, Biospheric Sciences Branch, Greenbelt, Maryland USA*

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*The meeting was organized in collaboration with the Professional Congress Organizer, the company **GUARANT International** (<http://www.guarant.cz/en.html>)*

*Sponsors:*



## SCERIN-1 Day 1, Monday, 17 June 2013

Venue: Faculty of Science, Charles University(CU) Albertov 6, Prague 2, 3<sup>d</sup> floor

- registration: room no. 373 "Prava Rysovna"
- coffee breaks and lunches: room no. 371 "Leva Rysovna"
- all sessions: room "V Ž"(pass through the room no. 373 "Prava Rysovna")

### **8:00 – 9:00 Registration, introductions & meeting logistics (Hosts & SEERIN Coordinators)**

- 9:00 Welcome remarks [Jakub Langhammer, Vice Dean of Faculty of Sci., CU; Jana Albrechtova, C - CZ]
- 9:10 Meeting opening and agenda [Jana Albrechtova, CU, CZ]

### **Keynote Lectures [Jana Albrechtová]**

- 9:20 The NASA LCLUC program & GOFC-GOLD SCERIN [Garik Gutman, NASA, USA]
- 9:40 The GOFC-GOLD networks [Olga Krankina, Oregon State University, USA]
- 10:00 The SCERIN network, focus groups, meeting goals & agenda [Petya Campbell, UMBC & NASA/GSFC, USA]

### **10:20-10:40 Break, Coffee/Water**

- 10:40 GOFC-GOLD implementation teams, GEO LCLCC [Brice Mora, GOFC-GOLD, NL]
- 11:00 Land use changes in Czechia evaluated by data from cadastral evidency (1845 - 1896 - 1948 - 1990 - 2010). [Ivan Biík, IGU LC/LUC, CU, CZ]
- 11:20 ESA Earth Observation programme and results [Francesco Sarti, ESA, EU-I]
- 11:40 Land Cover Initiatives in GEOSS [Jan Kolar, Czech Space Office; CU, CZ]

### **12:00 Group Picture in front of the building of the Faculty of Science, Albertov 6, Prague**

### **12:15 – 13:00 Lunch [room 371]**

### **Session 1: Forest condition, disturbance & biomass [Lucie Kupková / Gregory Taff]**

- 13:00 Assessment of forest decline and forest regeneration process from combined space/airborne data [Frantisek Zemek, CzechGlobe, CZ]
- 13:20 Remote sensing of forests and forest fires in Europe [Lorenzo Busetto, JRC, EU-I]
- 13:40 Monitoring Norway spruce forest conditions using hyperspectral data [Jana Albrechtová, CU, CZ]
- 14:00 Vegetation mapping of the High Tatras and the Karkonosze Mts. using hyperspectral images and neural networks [Bogdan Zagajewski, University of Warsaw, PL]
- 14:20 Legal and illegal clear cutting of forest detection on Landsat imagery: a case study in Romania [Vladimir Gancz, Forest Research and Management Institute, RO]
- 14:40 *Questions & Discussion*

### **15:00-15:30 Break, Coffee/Water**

### **Session 2: Land Cover Changes [Levent Genc / Andrej Halabuk]**

- 15:30 GMES European Continental Mapping & Monitoring [Lukáš Brodský, GISAT, Czech University of Life Sciences, CZ]
- 15:45 Land Use and land Cover Change around Çanakkale (Dardanelles) Strait using Landsat Data: 1987-2011 [Levent Genc, CSM University, TR]
- 16:05 Land cover and land use change and its consequences: detection and simulation [Katarzyna Ostapowicz, Jagiellonian University in Krakow, PL]

- 16:25 Hyperspectral remote sensing as a tool to map and monitor open-pit mines in Sokolov [Veronika Kopařková, Czech Geological Survey, CZ]
- 16:40 Land use and land cover changes in the Carpathian Basin. Experiences in the vectorisation of the archive maps [Géza Király, University of West Hungary, H]
- 17:00 Remote sensing in invasive plant ecology? Detection, monitoring and control of alien plant species [Jana Müllerová, Institute of Botany Academy of Sciences of the Czech Republic, CZ]
- 17:15 GEONETCAB project: GeoNetwork for Capacity Building, FP7 [Premysl Stych, CU, CZ]
- 17:30 *Questions & Discussion*

**18:00    *Adjourn***

**19:30    *Reception at the Botanical Garden of the Charles University (Na Slupi 16, Prague)***

*[Host: Faculty of Science, Charles University in Prague, Jana Albrechtova and colleagues from the Departments of Experimental Plant Biology and of Applied Geoinformatics and Cartography ]*

*- visit the garden & greenhouses of Charles University, Prague & informally get to know your SCERIN colleagues & our hosts*

*- open tropical greenhouses to relax with a music of the ensemble 'TEMPERAMENT 430' playing Baroque and Renaissance music on original instruments (see program further)*

*- snacks/water available out of the greenhouses – "Café HAMU" Catering*



**21:30 *Adjourn***



## SCERIN-1 Day 2, Tuesday, 18 June 2013

8:30 – 9:00 Registration, coffee refreshment [Room 373]

### **Session 3: SCERIN Special topics** [*Géza Király / Brice Mora*]

- 8:45 Land cover and land cover change detection at national level - An example from Greece [*Ioannis Gitas, ARISTOTLE UNIVERSITY OF THESSALONIKI, GR*]  
9:00 Aerospace test sites on the territory of Bulgaria - state & prospects [*Lachezar Filchev, SRTI-BAS, BG*]  
9:15 Land cover changes in river deltas of the Black Sea basin [*Volodymyr Starodubtsev, National University of Life and Environmental Sciences of Ukraine, UKR*]  
9:30 Monitoring of grassland management practices by using multitemporal classification of Landsat & Modis [*Andrej Halabuk, Institute of Landscape Ecology, Slovak Academy of Sciences, Nitra, SK*]  
9:45 High-Resolution Global Monitoring of Urban Settlements [*Mattia Marconcini / DLR, G*]  
10:00 Urban Remote Sensing & Object-Based Image Analysis [*Levente Ronczyk, University of Pecs, H*]  
10:15 *Questions & Discussion*

**10:30-11:00 Break, Coffee/Water**

### **Session 3: SCERIN Special topics - continued** [*Vladimir Gancz / Bogdan Zagajewski*]

- 11:00 Using land surface phenologies for change analysis [*Geoffrey M. Henebry, G/ScCE/South Dakota State University, USA*]  
11:20 Reforestation in Central and Eastern Europe after the breakdown of socialism [*Gregory Taff, Norwegian Forestry Landscape Institute, N*]  
11:40 Broad scale LCLUC in Eastern Europe: patterns, drivers and effects [*Catalina Muntenau, University of Wisconsin-Madison, USA*]  
12:00 *Questions & Discussion*

**12:00 – 13:00 Lunch**

### **Session 4: SCERIN Focus Groups** [*Olga Krankina / Petya Campbell*]

- 13:00 Discussions on SCERIN Focus Group 1 (FG1)  
FG1: Forest monitoring - disturbances, health and biomass [*Frantisek Zemek/Bogdan Zagajewski/ Jana Albrechtova*]  
14:00 Discussions on SCERIN Focus Group 2 (FG2)  
FG2: Land Cover Changes: agricultural land abandonment, urban expansion [*Lucie Kupková/Premysl Stych/Levent Genc*]  
15:00 Formation of FGs & discussions of SCERIN "hot topics" [*Everyone, Krankina/Campbell*]

**15:30-16:00 Break, Coffee/Water**

### **16:00 SCERIN-1 reporting: Recommendations & Action items, Next venue**

[*Petya Campbell / Jana Albrechtova / Olga Krankina, Everyone*]

- 17:00 Instructions for the Scientific field trip on June 19 (Wednesday) 2013 [*Jana Albrechtova*]  
17:30 Concluding remarks [*Garik Gutman, Olga Krankina, Hosts & Coordinators, Everyone*]

**18:00 Adjourn**

## SCERIN-1 Day 3, Wednesday, 19 June 2013

### Scientific Field Trip: „*LCLUC in Sokolov Region in Northwestern Bohemia affected by mining activities*“

7:45 Arrival of the bus to the Hotel Green Garden, Fügnerovo nám stí 4, Prague

8:00 Departure in the front the building of the Hotel Green Garden

|             |  |
|-------------|--|
| app 10:30   | Arrival to Sokolov   |
| 10:30-15:30 | <b>Open-cast mine Ji í</b> overview (meeting with Petr Rojík from SU)  |
|             | Lunch ( <b>farm Bernard</b> ) Statek Bernard <a href="http://www.statek-bernard.cz/">http://www.statek-bernard.cz/</a> . |
|             | <b>Lítov</b> (former mine waste dump)  |
|             | <b>Medard</b> (artificial lake in the former coal mine Medard)   |
|             | <b>Erika</b> (former sand-pit)   |
| 15:30       | Departure from Sokolov   |
| 16:00-18:30 | <b>Karlovy Vary</b> (spa town)   |
| app 20:30   | Return to Prague   |

**Bus tour with guided field demonstration and work in the lignite mining area in the North-West of the Bohemia province, west of the town of Karlovy Vary, close to the German border.**

**Trip Guides: Veronika Kopa ková, Jan Mišurec and Petr Rojík**

The whole tour will be guided by Veronika Kopa ková and Jan Mišurec from the [Czech Geological Survey](#), Czech Republic. The field demonstration is prepared in collaboration with Petr Rojík, geologist working in the company Sokolovska uhelná, a.s. <http://www.suas.cz/>. Field Guide is at the conference web site: <http://www.csebr.cz/scerin/trip.html>.

The Sokolov basin, dating from the Oligocene to Miocene epochs, extends over 8 to 9 km in width and 36 km long with a total area of about 200 km<sup>2</sup>. The basin comprises 60 % volcanic ejecta resulting from faults and volcanic cones and 40 % sediments. Hydrothermal fluids have been circulating along the faults where silicification and sulphur are found, and exposure of the latter can result in Acid Mine Drainage. Land use changes connected with mining activities and soil reclamation will be demonstrated on the background of the project GACR 205/09/1989 „Assessment of Mining Related Impacts Based on Utilization of Airborne Hyperspectral Sensor“ <http://www.geology.cz/project619100/> and other projects.



## SCERIN-1 VENUE LOCATON

**Faculty of Science**  
**Charles University in Prague**  
Albertov 6, 128 43 Prague 2, Czech Republic



**Contacts on local organizers**  
**(if a problem occurs):**

[lucie.kupkova@gmail.com](mailto:lucie.kupkova@gmail.com) +420605281181  
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1) Botanical garden, Faculty of Science CU; 2) Faculty of Science, Albertov 6; 3) Green Garden Hotel; 4) Hotel Prague Centre Plaza.

## HOTELS

**GREEN GARDEN HOTEL** (<http://www.hotelgreengarden.cz/home.htm?jazyk=en>)

Fügnerovo nám stí 4, 120 00 Praha 2, Czech Republic

tel.: +420 224 261 181

fax: +420 224 262 182

**PRAGUE CENTRE, a.s.** (<http://www.praguecentreplaza.cz/en/>)

Fügnerovo nám. 1, 120 00 Praha 2, Czech Republic

Tel.: +420 234 711 414

Fax: +420 234 711 417

Checking in hotel – ID or passport

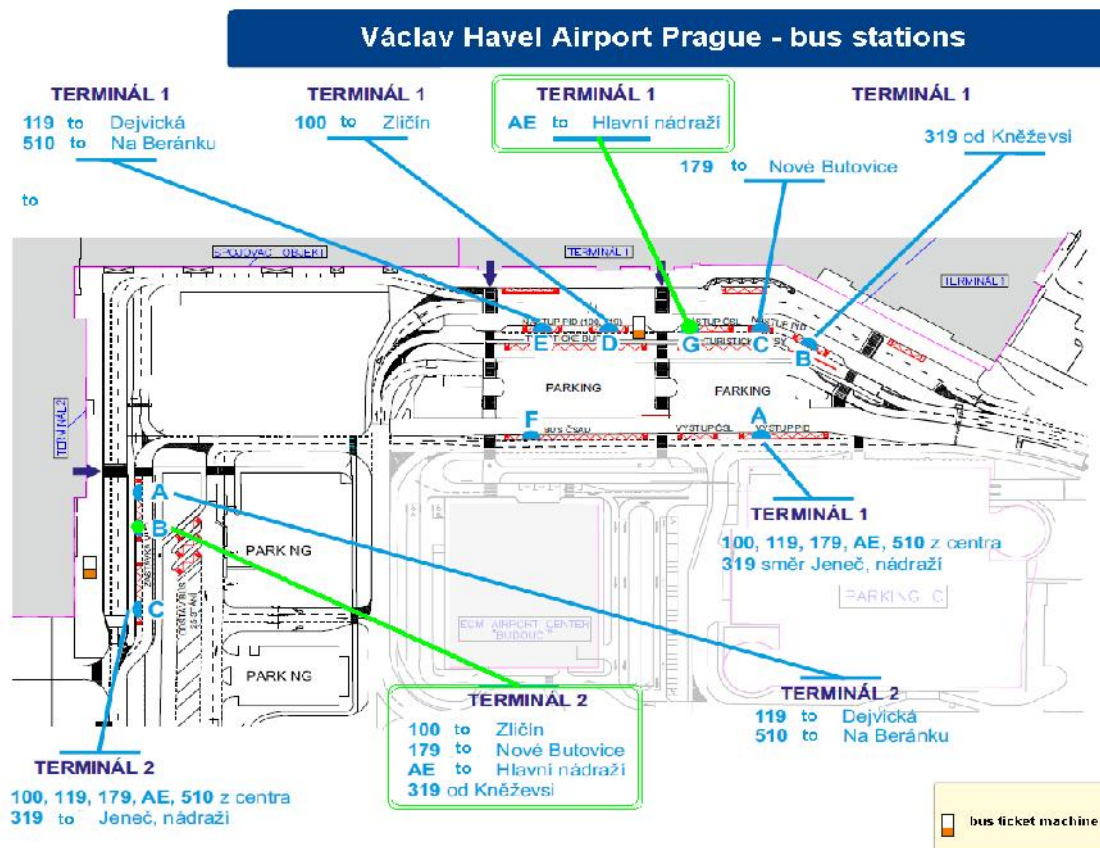
If you have received a confirmation about sponsored accommodation in advance, you are on the list of sponsored participants in the hotels and your stay is covered directly.

## TRANSPORTATION & MAPS

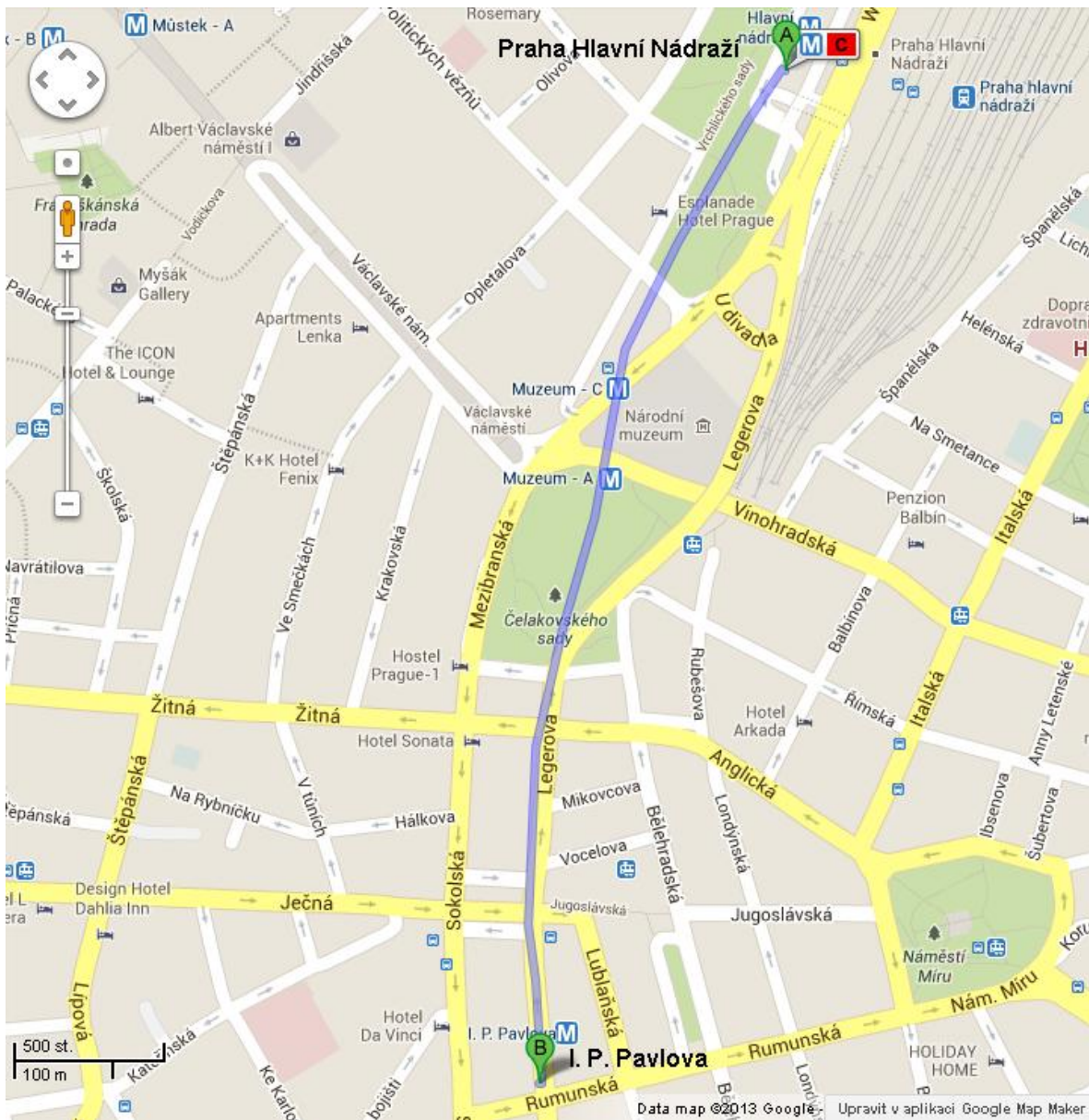
Take Airport Express (Bus AE), from Terminal 1 or 2 to the metro station “Praha Hlavní Nádraží” of the line C <http://www.dpp.cz/en/bus-ae-airport-express/>

- from 5:45 to 22:30, line AE goes to the metro station “Praha Hlavní Nádraží” of the line C
- interval: 30 minutes
- travel time: 33 minutes
- **purchase tickets from the bus driver - 60 CZK**
- luggage - free of charge

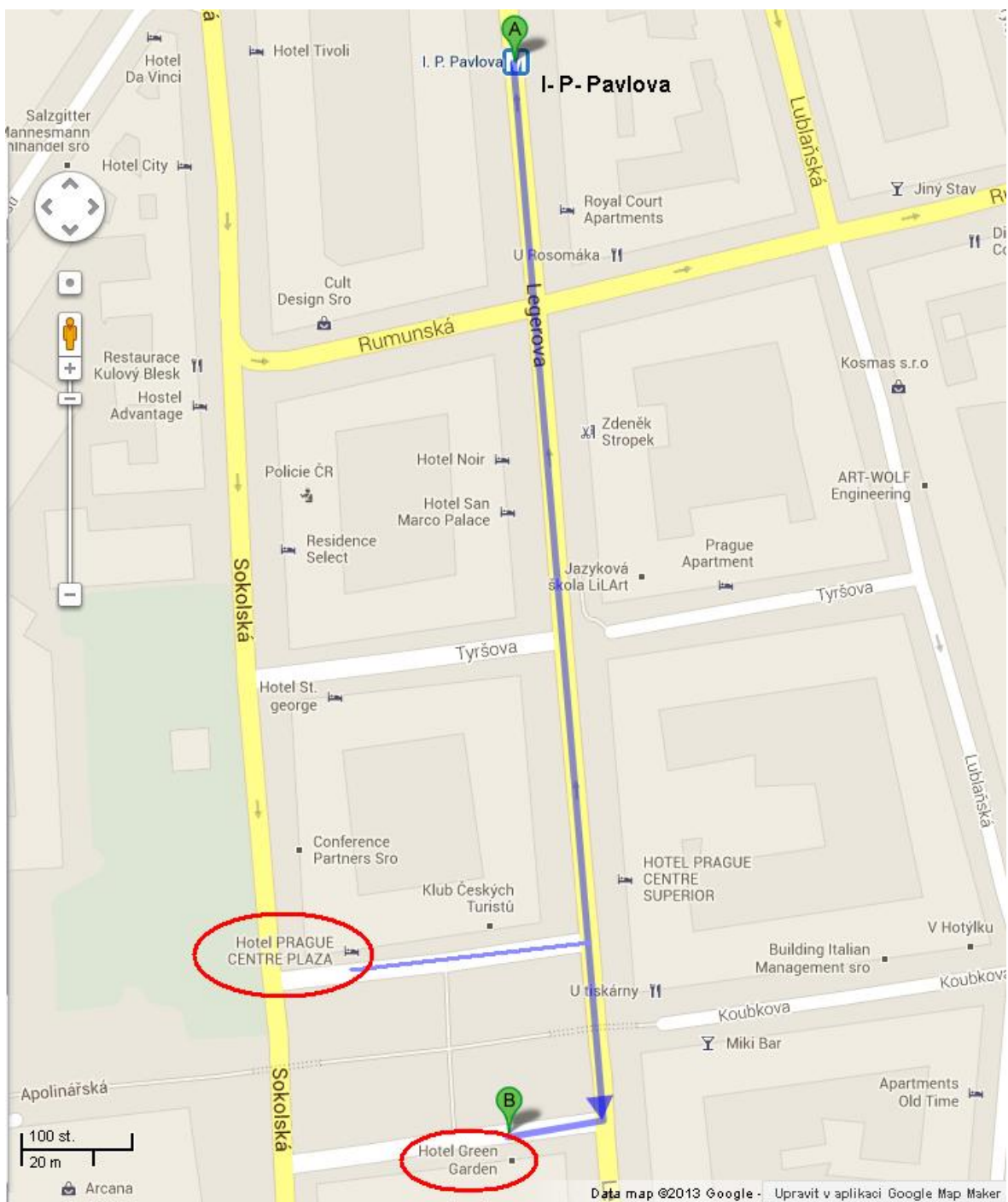
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<http://www.prg.aero/Images/content/EN/transport//Mapa-velka.jpg>



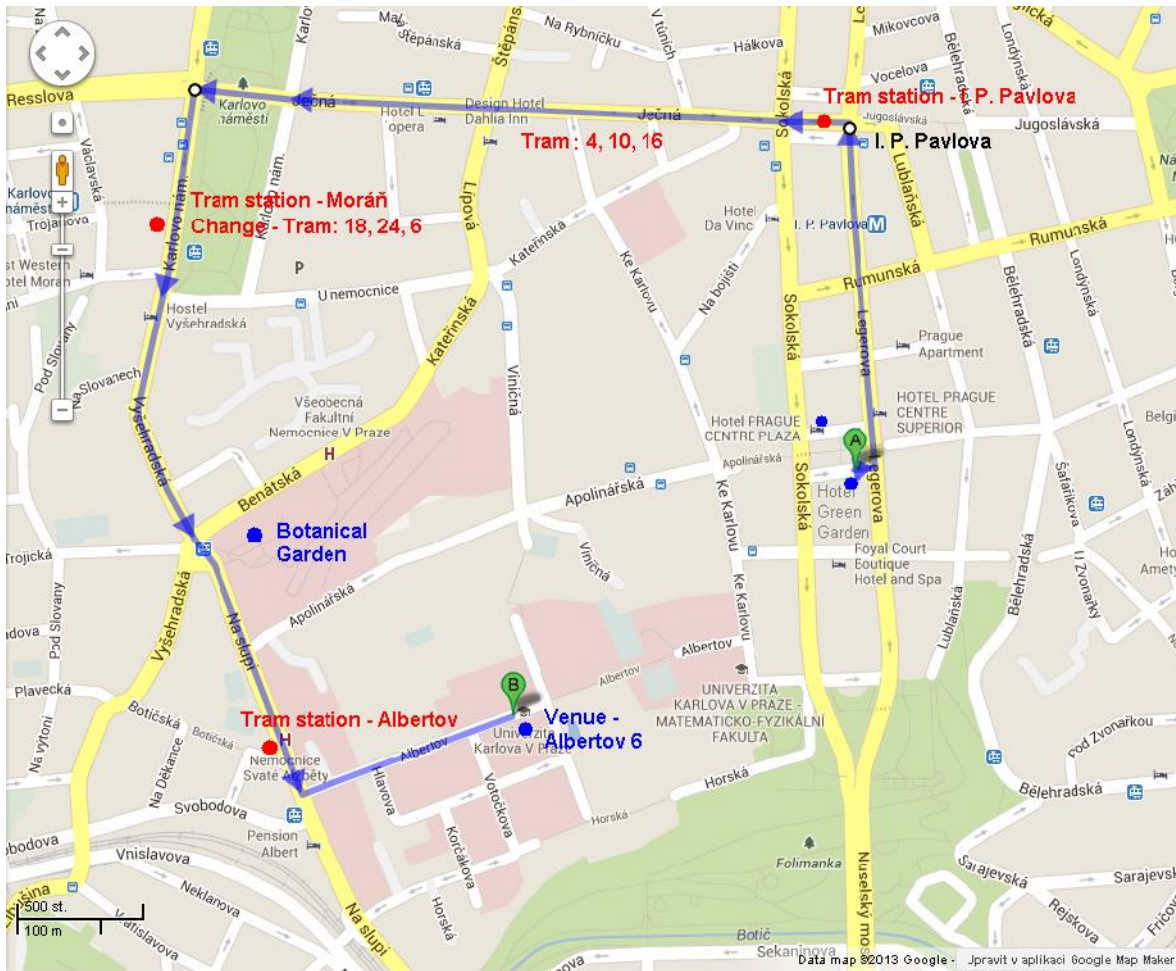




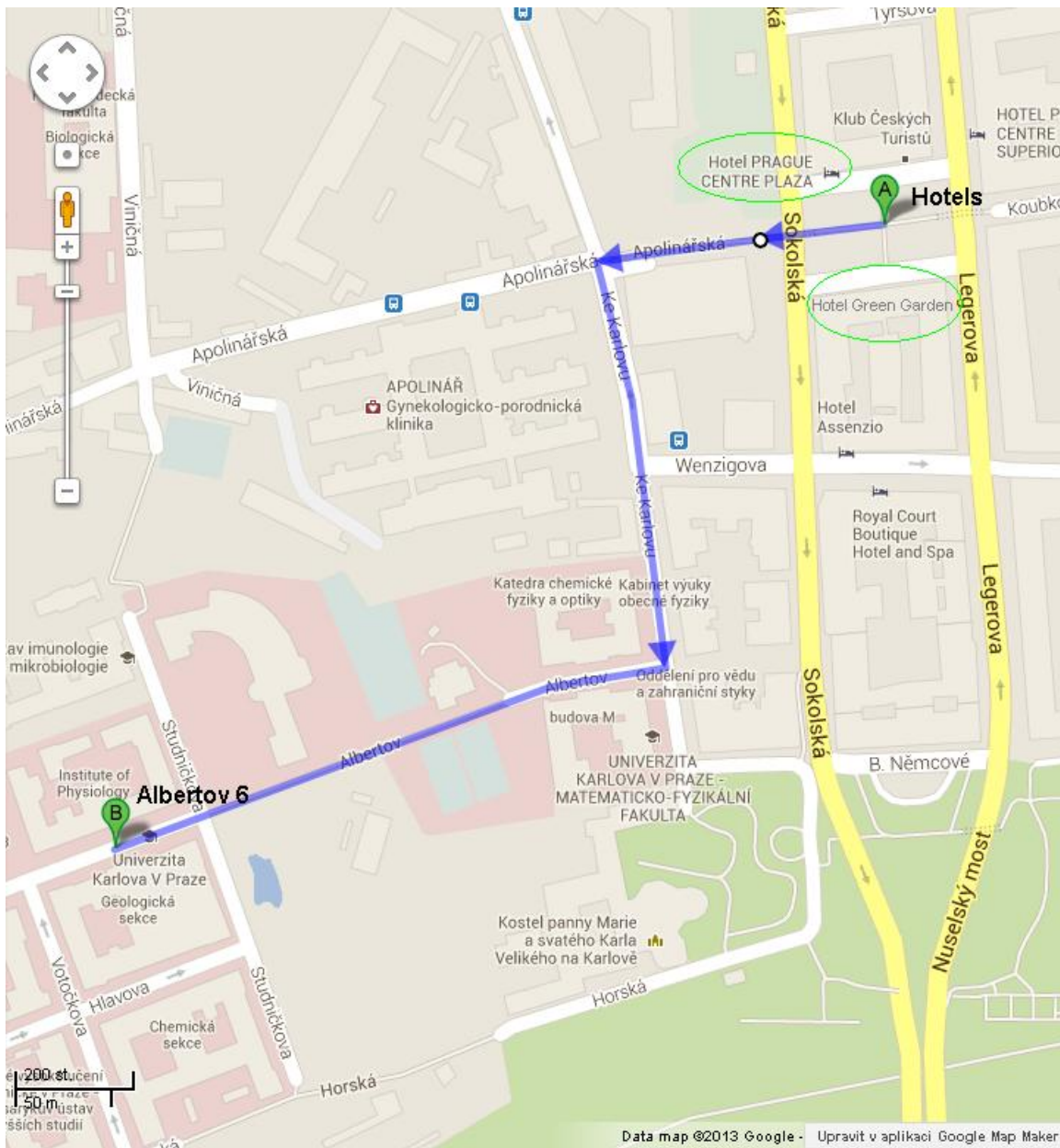
From the metro station **Praha Hlavní Nádraží** to the metro Station **I.P.Pavlova**  
(<http://goo.gl/maps/H344I>) - metro line C, 3<sup>rd</sup> stop.



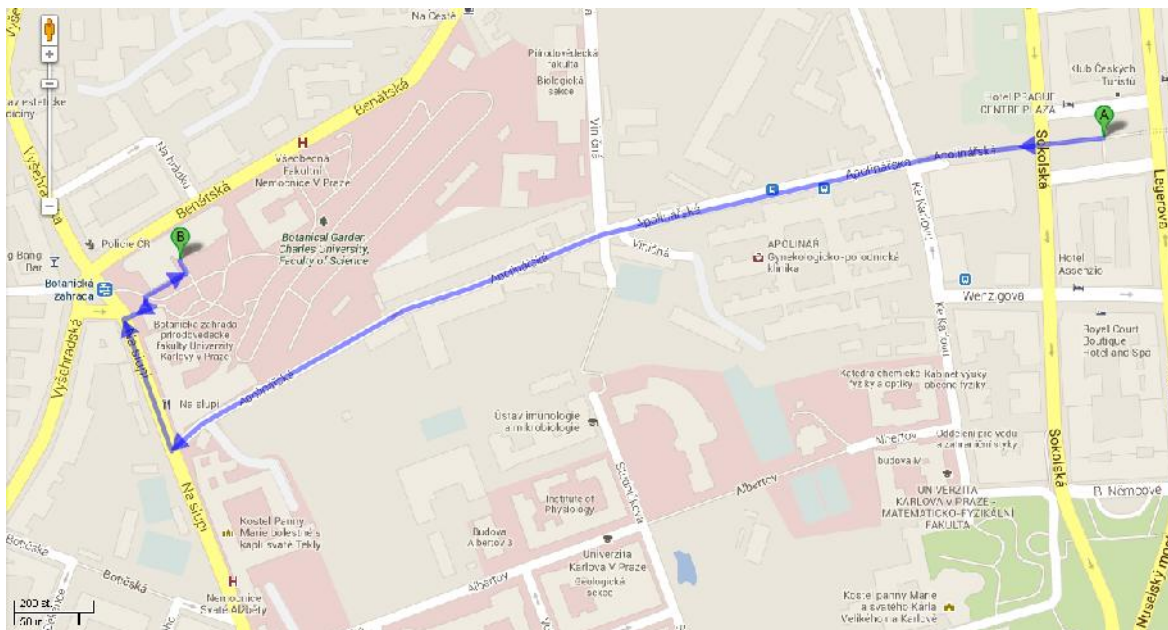
From the Metro Station **I.P.Pavlova** to **Hotels** (<http://goo.gl/maps/Oh1Wd>) - 400 m on foot.



From the **Hotels** to the **Venue**, Faculty of Science, Charles University in Prague, **Albertov 6** by tram (<http://goo.gl/maps/I76LX>)



From the **Hotels** to the **Venue**, Faculty of Science, Charles University in Prague, **Albertov 6** by – 10 minutes on foot (<http://goo.gl/maps/wUbki>)



From the **Hotels** to the **Botanical Garden of the Charles University, Na Slupi 16, Prague**  
<http://bz-uk.cz/en> (Monday Reception, 17 June, 2013, 19:30 - 21:30) – 10-15 minutes on foot  
<http://goo.gl/maps/2a72s>

## GENERAL INFORMATION

**Metro** from 5.00 to 24.00.

Line A • (green), Depo Hostiva –Dejvická

Line B • (yellow), erný Most–Zli ín

Line C • (red), Let any–Háje

### Tickets:

It is recommended to buy the tickets from the machines at the entrance to the Metro (subway) or in news stands.

90 minutes / 32 CZK for all types of public transport in Prague

30 minutes / 24 CZK for all types of public transport in Prague

1 day / 24 hours / 110 CZK for all types of public transport in Prague

**3 days / 72 hours / 310 CZK for all types of public transport in Prague**

Do not forget to mark your ticket when entering the subway, (in tram, in bus).

Reception at the CU Botanical Garden, Monday, 17 June 2013 19:30 – 21:30  
Venue: Na Slupi 16, Prague 2

Programme of the music  
*by Temperament 430*



*Jindra Černá, Martina Bernášková – flauti traversi*  
*Jakub Michl – viola da gamba*

The Temperament 430 ensemble specialises in interpreting chamber music of the high Baroque and Classicism period based on documents of the period and using original instruments or copies.

**The name of the ensemble reflects the prevailing tuning of the end of the 18th century when chamber-music a was pitched at 430 Hz.**

Programme during will include 19:45 - 21:15 (with breaks)

**Gottfried Keller (?–1704) Ground**

**Michel Blavet (1700–1768) Sonata g minor for flute and continuo (La Lumague) Adagio –  
Allegro: Allemande – Ciciliana – Presto – Allegro (Le Lutin)**

**Carl Friedrich Abel (1723–1797)**

*Fantasia d-moll for viola da gamba*

**Johann Joachim Quantz (1697–1773) Trio sonata C maior for traverso flute, recorder and  
continuo Affetuoso – Alla breve – Larghetto – Vivace**

**Michel Pignolet de Montéclair (1667-1737)**

*Concert for two flutes without bass*

*Prélude – Menuet – Air – Badine – Fugue*

**Thobias Hume (1569-1645)**

*Musicall Humours no. 12 for viola da gamba*

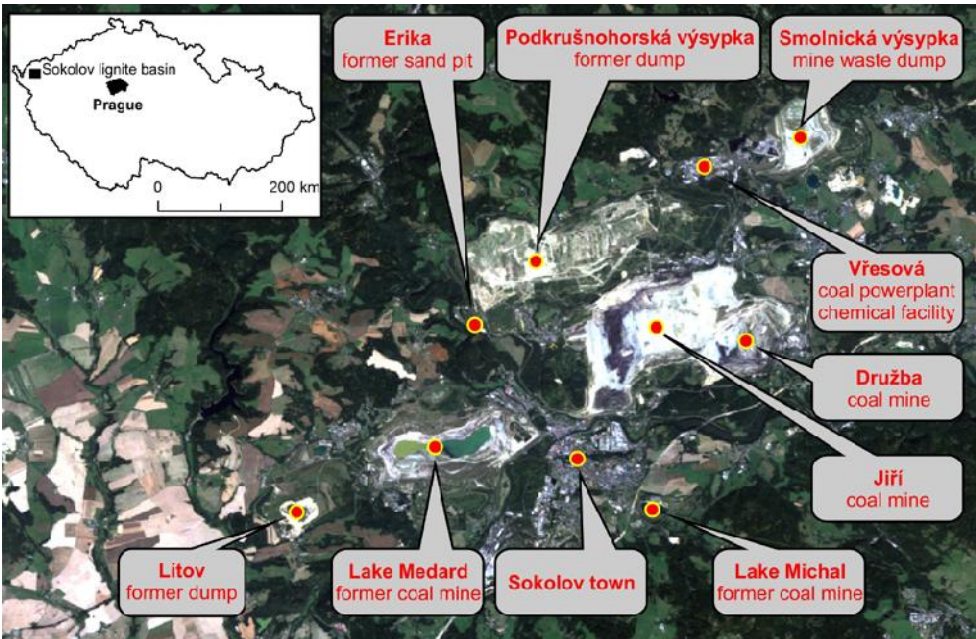
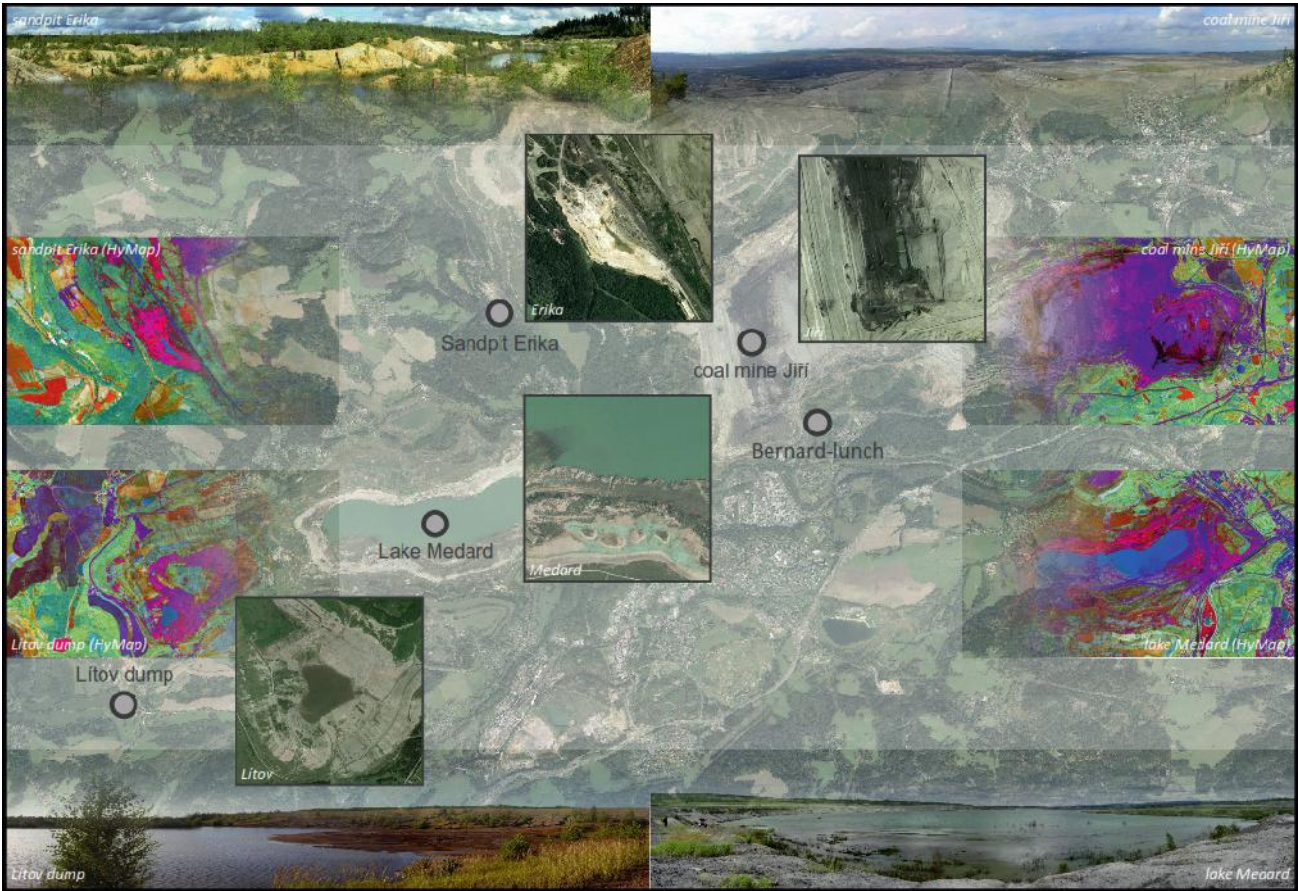
**English Renaissance Masques**

*for recorder and continuo*

**Joseph Haydn (1732–1809) London trio No. 3 G maior for two flutes and violoncello Spiritoso –  
Andante – Allegro**

**Jazzy duets for two flutes**

**Field Trip: SCERIN-1 Day 3, Wednesday, 19 June 2013**  
 „LCLUC in Sokolov Region in Northwestern Bohemia affected by mining activities“



Materials supplied by guides of the Field trip - Veronika Kopařková and Jan Mišurec from the [Czech Geological Survey](http://www.geology.cz), Czech Republic.