



**ISPRS WG VI/5 & SC SUMMER SCHOOL  
NATURAL ENVIRONMENT MANAGEMENT, MONITORING AND  
CONSERVATION  
July 13-19, 2009  
Warsaw, Poland**

## **Report on 4<sup>th</sup> ISPRS WG VI/5 and Student Consortium Summer School**

The Student Consortium (SC), together with the WG VI/5: Promotion of the Profession to Students organized the 4<sup>th</sup> ISPRS Summer School in Warsaw, Poland 13 – 18 July 2009. After three previous Summer Schools in Istanbul (2005), Ljubljana (2007) and Nanjing (2008) main aim of this event was concentration on “Natural Environment Management, Monitoring and Conservation”, topic which is one of the most important aims of ISPRS activities, as it was decided during ISPRS Congress in Beijing, 2008.

The Summer School was hosted by Faculty of Forestry, Warsaw University of Life Sciences (SGGW), the oldest agricultural academic school in Poland, its history dates back to 1816. At present, the university consists of 12 faculties and 6 interfaculty units; there are 25,000 students enrolled. The organization of the Summer School was entrusted to the Faculty of Forestry and Joint Division of Spatial Economics. More than 20 student voluntaries from Forestry Students’ Research Association, Student Association of Spatial Management and Student Association of Environment Protection join organization comity. Krzysztof Stereńczak (ISPRS SC Co-Chair) and Prof Krzysztof Będkowski were coordinators of local organization host.

The success of the Summer School was already a great number of participants – 57 international participants from 15 countries (Romania, Turkey, Uzbekistan, and many others), and around 30 domestic participants (students, faculty teaching staff, representatives from sponsors) attended the Summer School.



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## Nationalities:

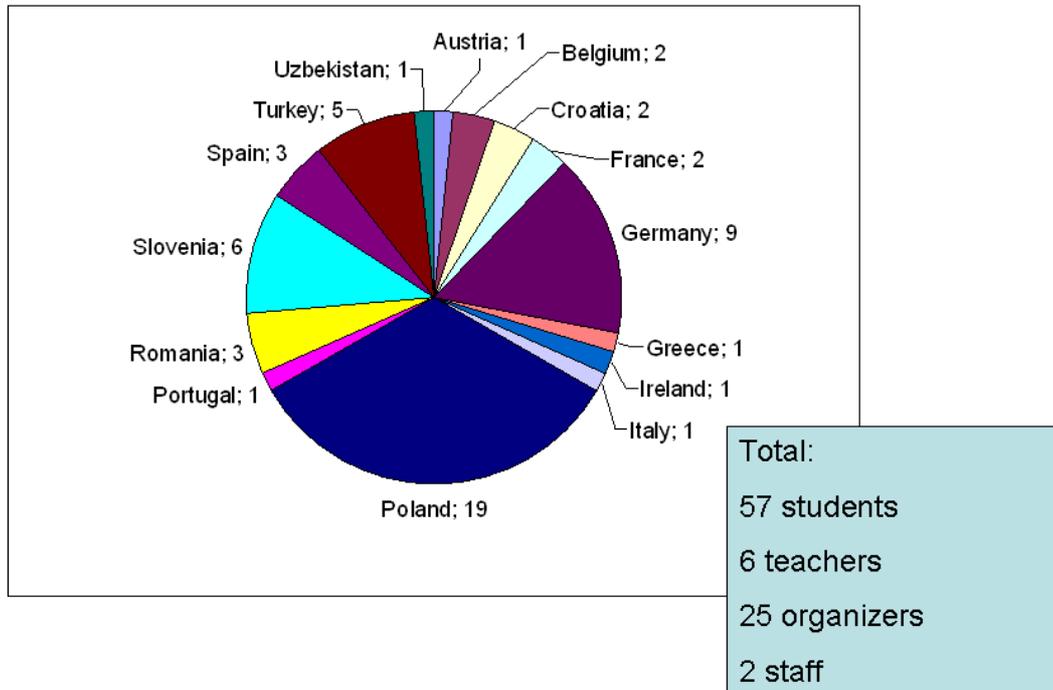


Figure 1 Statistic of 4th ISPRS SC Summer School participants.

Most foreign participants arrived in Warsaw on Sunday, 12<sup>th</sup> July, when local students accommodate them in student dormitory "Limba" on Warsaw University of Life Sciences Campus. The arrivals registered at the registration desk and received Summer School materials (program book, printing issue of *Annals of Geomatics*, CD with Fryderyk Chopin music, proceedings on CDROM, promotional material, etc.).

Summer School starts on Monday, 13<sup>th</sup> July, with the opening ceremony started by Folklore artistic group "Promni". The ISPRS SC Co-Chair Krzysztof Stereńczak welcomed the audience and gave the floor to the Faculty of Forestry Dean Mr. Michał Zasada. He warmly greeted the guests, introduced the Warsaw University of Live Sciences and the host Faculty. The next speaker was the ISPRS WG VI/5 Chair Prof. Emmanuel Baltsavias, who was present during the complete program of the Summer School. He gave summarized information about the ISPRS organization and activities, especially about Working Group activities. Next speaker, Krzysztof Stereńczak presents ISPRS Student Consortium and their activities. Last speaker - Prof. Aleksandra Bujakiewicz welcomed ISPRS Summer School participants and present Polish Society of Photogrammetry and Remote Sensing.



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Figure 2 Opening Ceremony, speech of the the ISPRS WG VI/5 Chair E. Baltasvias

The program started with lecture sessions. Each session was of 1.5 hours duration, followed by half an hour refreshment break or lunch at noon. Each day was dedicated to different topic and considers lecturers hours, practical labs and fields' session. On the sixth day 1<sup>st</sup> ISPRS Student Consortium Conference was organized. More than 30 abstracts were received, 15 oral presentations and 12 posters were presented during whole day.

During first day Mr. Paul Aplin, from University of Nottingham, UK gives a lecturers and, together with. Prof. Krzysztof Będkowski, practical labs on different classification methods and change detection. It was perfect lecture about RS background, especially for students not to much experience in this topic.

On late afternoon Mr. Peter Schreiber from Leica Geosystems, present new Digital Cameras and LS Systems. Leica founds small gifts for each of the participants and lecturers of Summer School.

First day finished with welcome party which many students recognized as very friendly and funny. It was perfect time for student and lecturers to get to know each other.

Second day starts with two sessions of lecturers given by Mr. Niklaus E. Zimmermann from Swiss Federal Research Institute WSL, Switzerland. This advance course as well as laboratories developed on R software were very



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advanced and give students possibility to investigate using statistics and RS data in vegetation study.

After lunch there was Field Session. During this part of day Summer School participants did had possibility to learn how to use traditional surveying techniques and others tool to acquire reference data for their research. Terrestrial LIDAR Systems (TLS), Unmanned Aerial Vehicle (UAV), Tachometers and different GPS systems were presented. Students did get a lot of theoretical information about all system and get possibility to use them practically. Such companies as Taxus SI, TPI and Faculties of Forestry from Warsaw and Poznań did present themselves

Last position in our program this day was a sport event. For all students tree different halls were prepared. They had have possibility to play basketball, volleyball and football.



Figure 3 Field session during second day of Summer School

During third day disaster monitoring was a main topic. Prof Piero Boccoardo gives 2 theoretical sessions follow by 2 practical labs sessions, carried out by Fabio Giulio Tonolo and Michał Brach. Students approved quality of presentation and very detail prepared hand book.

On the evening all participants and lecturers take part in Warsaw Old Town Excursion. After site visiting we moved to Pizza Hut for dinner. About 9 pm official part of day was finished. Almost all students went out for clubbing and closer integration. This was one from the longest days.



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**Figure 4 Warsaw Old Town trip.**

Thursday, 16<sup>th</sup> of July, was concentrated on forestry monitoring and inventory. Prof Barbara Koch from FELIS, Freiburg University gives lectures about this topic. She did introduce a lot of information especially about using airborne LIDAR systems for forest inventory.

After the lunch Polish company GISPRO present a Mobile Mapping System (MMS) to the Summer School participants. First we meet outside to see a car with all equipment. After the break company staff gives a lecturer about data processing, way of using and projects done by them. Additionally, company present Polish State Forest Experiences in using RS and GIS data to forest inventory and management.

Fourth day of Summer School finished with barbeque prepared by Polish voluntary students in Powsin. We move by underground to last station, and then we had had a 40 min walk through the Kabaty forest. Inside a special prepared place we did play a volleyball and football and eat variety of food backed on fire. It was very fruitful and relaxes time for participants after whole day.



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**Figure 5 GISPRO company presentation of MMS**

Friday did start again with forest connected topics. Mr. Fabian Fassnacht from FELIS and Krzysztof Stereńczak introduced TreesVis – software build in FELIS, Freiburg University. Software is dedicated to proceeding LIDAR data for acquiring forest inventory parameters. During two morning sessions students work on PC's with raw point LIDAR clouds generating different digital surface models and investigation this type of data for their own purposes.

After lunch presentation of organizers was done. Mr. Michał Zasada present Warsaw University of Life Sciences and Faculty of Forestry. Later Krzysztof Będkowski present Department of Spatial Information Systems and Forest Surveying which was responsible for Summer School organizing.

Last session of Summer School was Student Consortium General Assembly, during which some feedback from students was acquired. During discussion some new ideas and remarks were pointed out. On the end students received certificates of participation in Summer School with 2.5 ECTS awarded. As an evaluation of received ECTS points, students passed 5 tests, prepared by lecturers.

Friday finished with Ending Party on "Przyzba Club". After five days students did to know each other so the party was really fun and finished late in the night.



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**Figure 6 Ending Party of 4th ISPRS SC Summer School.**

On Sunday, 18<sup>th</sup> of July, 1<sup>st</sup> ISPRS Student Conference on "Photogrammetry and Remote Sensing in Natural Environment Management and Monitoring" was carried out. The main purpose of this conference was to acquire experience in presenting scientific work by young researchers.

There was more than 30 abstracts send for this event. After evaluation 15 students were asked for oral presentation and rest for poster presentation. There were 4 sessions:

- Land use / land cover classification
- Change detection
- Data processing techniques
- GIS and LIDAR applications

Mr. Emmanuel Baltsavias, Krzysztof Będkowski and Krzysztof Stereńczak did Chairing these sessions. After two first oral sessions poster session was carried out. Finally 12 posters were presented.

Level of presentation was height and cause a lot of very interesting discussions,



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continued during breaks. Organizers prepared Awards, which were given to best students for presentation, poster and paper.

Best Paper Award (funded by Teledetection of Environment Club, Polish Geographical Society) went to:

**B. Al Haddad, M. C. Burns, and J. R. Cladera** - Models for monitoring the detection of land use change through the classification of urban areas.

Best Poster Award (funded by Faculty of Forestry, SGGW) went to:

**J. Burdziej** - Multi-criteria spatial analysis of land accessibility for seismic operations.

Best Presentation Award (funded by Faculty of Forestry, SGGW) went to:

**W. Mücke, A. Hermann** - Contributions of full-waveform airborne laser scanning to biodiversity assessment.



Figure 7 Poster Session during 1st ISPRS SC Conference.

We can honestly say that this Summer School was again very successful Student Consortium event. There were a lot of very good opinions about it. Below some opinions and emails sent to Krzysztof Stereńczak after Summer School:

*Just a few words to thank you for giving me the opportunity to participate in this summer school!!!*

*Many congratulations to you personally, to the students that worked as volunteers and to everyone that contributed in order this summer school become a reality.*



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*For me it was a great experience, and to be honest I didn't expect to see such an organization!!! Even if some of the participants didn't find some of the lectures advanced enough, for me it was no problem at all...the program of the summer school was published months ago before registering...If one sees the title "Land Cover Classification" what he or she would expect to listen to? For me also there were things that I already know (I have done MSc in Photogrammetry - Remote Sensing and now I am on the PhD) but the fact that I have listened to at least a few things for the first time and I had the chance to interact with many fellow researchers, students and academic staff from around the world.....this was far more than my expectations! I wouldn't miss that for nothing!!!!!!*

*To make it short*

*You guys, were absolutely GREAT!!!!!!!!!!*

*THANK YOU!!!*

*I've arrived at home just a couple of hours ago.*

*Thank you and all other organizers once again for the great experience. See you (as) soon (as possible)! :)*

*I just want to thank you for the great event we had last week. Congratulations for the excellent and outstanding organization, you (and your "crew") really did a great job!*

*I think the program was well-balanced between theory and practice and most of the lectures were really interesting for me. Since you can never satisfy everybody with every lecture, this is a perfect result ;-)*

*You made us feel comfortable, you organized exciting social events and overall you gave us a great platform to get in contact with each other. We really felt in good hands and I will always remember the great hospitality we experienced in Warsaw.*

*In any case I will recommend ISPRS Summer School to other students and hope that the next host can keep up with you.*

Local host organizers would like to thank you all sponsors and supporters of 4<sup>th</sup> ISPRS Summer School, especially: Mr. Emanuel Baltsavias ISPRS WG VI/5 Chair for supporting and cooperation, ISPRS SC Board Members for fruitful ideas and advertising event and ISPRS Council for financial support of this event.

*Krzysztof Stereńczak, Krzysztof Będkowski*