

## **EARSel ISPRS Young Scientist Days 2014**

Mon, 16 Jun 2014    **2014-06-16 Track 1**

### 08:45 Opening Session

Aula of the Old Library (Stary BUW), Krakowskie Przedmiescie 26/28, 00-927  
Warszawa, Poland

#### **Opening Session**

08:45 - 09:05

**Keynote: Chances and challenges of Polish EO sector after joining ESA,  
Prof. M. Banaszekiewicz**

09:05 - 09:40

**Keynote: Operational applications of satellite Synthetic Aperture Radar  
data, Dr. Paolo Pasquali**

09:40 - 10:15

**Climate (Rainer Reuter, Hans Tommervik)**

10:15 - 11:00

#### **Coffee Break**

11:00 - 11:30

### 11:30 Vegetation 1 (Adriana Marcinkowska, Lucie Cervena)

room 207

**Analysis of Tatra Mountains' grassland condition based on hyperspectral  
data**

Aneta N. Modzelewska, Anna M. Jarocińska, Marlena Kycko, Bogdan Zagajewski

11:30 - 11:45

**Different classification methods in analysis vegetation cover changes  
based on Landsat TM**

Małgorzata Białczak, Monika Kacprzyk, Piotr Multan, Anna M. Jarocińska

11:45 - 12:00

**Hyperspectral data for classification of selected vegetation species above  
tree-line in the Krkonoše Mts. National Park**

Renáta Suchá, Martina Andrštová, Lucie Kupková, Lucie Červená, Bogdan  
Zagajewski, Adriana Marcinkowska, Adrian Ochtyra

12:00 - 12:15

**Leaf angles in field crops: measurement methods and effects on spectral  
reflectance**

Xiaochen Zou

12:15 - 12:30

**Automatic mapping method of the Tatra Mountains vegetation using World View 2 imagery and neural network simulators**

Karolina Orłowska, Adrian Ochtyra, Marlena Kycko, Adriana Marcinkowska, Bogdan Zagajewski, Anna Jarocińska  
12:30 - 12:45

**Vegetation condition of non-forest communities in Karkonosze Mountains based on field measurements**

Monika Kacprzyk, Anna M. Jarocińska, Bogdan Zagajewski, Adrian Ochtyra, Adriana Marcinkowska, Lucie Kupkova  
12:45 - 13:00

**Lunch**

13:00 - 14:00

14:00 Vegetation 2 (Marlena Kycko, Renata Sucha)  
room 207

**The analysis of vegetation changes near Chernobyl based on remote sensing data**

Aneta Modzelewska, Anna M. Jarocinska, Paulina Pochrybniak  
14:00 - 14:15

**Multi-temporal Landsat data analysis for assessment of meadows condition**

Anna Chlebicka, Bogdan Zagajewski, Anna Jarocińska, Adrian Ochtyra  
14:15 - 14:30

**The analysis changes in vegetation related to the hurricane Katrina**

Anna Robak, Weronika Rucińska, Anita Sabat, Martyna Wietecha, Anna Jarocińska  
14:30 - 14:45

**VEGETATION CONDITION CHANGES IN CHITTAGONG HILL TRACTS (CHT), BANGLADESH, BASED ON LANDSAT IMAGERIES**

Salit Chakma, Anna Jarocińska  
14:45 - 15:00

**Analysis of evapotranspiration using MODIS data**

Mateusz Ślazek  
15:00 - 15:15

**The role of helophytes' rhizomes in shoreline protection on the example of two grass species: reed sweet grass *Glyceria maxima* and common reed *Phragmites australis***

Weronika Kowalik, Kinga Pachuta  
15:15 - 15:30

**Estimation of photosynthetic activity and pigments in maple leaves during senescence and fungal infection (tar spots)**

Anastasia V. Kharcheva, Daria A. Khundzhua, Irina P. Levykina, Vladimir A. Karavaev, Svetlana V. Patsaeva

15:30 - 15:33

**Coffee Break**

15:35 - 16:00

16:00 **Methods 1 (Adrian Ochtyra, Offer Rozenstein)**

room 207

**Assessing specific risk assessments for non-target plants**

Justyna Wrzosek-Jakubowska

16:00 - 16:15

**Understanding the earth with satellite images – Development of a student-centered learning environment to support the application of remote sensing in schools**

Vera Fuchsgruber, Nils Wolf, Kathrin Viehrig, Simone Naumann, Alexander Siegmund

16:15 - 16:30

**Spatial and Functional Analysis of Health Services in Dohuk governorate/Iraqi Kurdistan Region**

Redar Nabil Abdulrahman

16:30 - 16:45

**SPATIAL IMPLICATIONS OF ADOPTION OF SELECTED CRITERIA WIND POWER DEVELOPMENT IN POLAND**

Zdzisław Cichocki, Małgorzata Hajto, Agnieszka Kuśmierz, Jan Borzyszkowski, Małgorzata Bidłasik, Cezary Gorczynski

16:45 - 17:00

**The advanced 3D modeling of natural monument Oak "Bartek" in Zagnansk (Poland) - based on point cloud from Terrestrial Laser Scanning**

Piotr Rysiak, Kamil Pilch, Katarzyna Gadek, Jarosław Wójcik, Piotr Weżyk, Marta Szostak, Piotr Tompalski

17:00 - 17:15

**Tree species classification of Białystok city (NE Poland) using Support Vector Machines and AISA hyperspectral image**

Anna M. Jarocinska, Małgorzata Białczak, Adriana Marcinkowska, Łukasz Sławik, Bogdan Zagajewski, Tomasz Berezowski, Jarosław Chormański

17:15 - 17:30

17:30 IceBreaker

## **EARSel ISPRS Young Scientist Days 2014**

Mon, 16 Jun 2014    **2014-06-16 Track 2**

12:00 UAVs for remote sensing and photogrammetry applications  
Military Technical Academy (Klub WAT), Kaliskiego 25a, Warszawa. Organisers offer a bus transportation (11.30 at the Old Library University of Warsaw). A limit of 40 participants

17:30 IceBreaker

Mon, 16 Jun 2014 2014-06-16 Track 3

11:30 Courses of Exelis & ESRI (Klaudia Bielinska)

room 308

**Course: Analysis of time series of SAR amplitude and phase images in SARscape, Dr. Paolo Pasquali**

room 106

11:30 - 13:00

**Lunch**

13:00 - 14:00

**Course: ArcGIS - How to automate your geoprocessing efficiently? Visual programming with ArcGIS ModelBuilder, Maksymilian Ufa**

room 106

14:00 - 15:30

**Coffee Break**

15:30 - 16:00

**Course: ENVI - How to analyze vegetation condition in ENVI? Klaudia Bielińska**

room 106

16:00 - 17:30

**IceBreaker**

17:30 - 19:00

Tue, 17 Jun 2014      **2014-06-17 Track 1**

08:45 **Methods A**

**Keynote: Design aspects of UAV platforms used in remote sensing, Prof. Z. Goraj**

Audytorium

08:45 - 09:25

**Technical Break**

09:25 - 09:30

**Course: Introduction to basic RS data processing with LEOWorks 4 (Chris Stewart), part 1**

room 207

09:30 - 11:00

**Coffee Break**

11:00 - 11:30

**Course: Introduction to basic RS data processing with LEOWorks 4 (Chris Stewart), part 2**

room 207

11:30 - 13:00

**Lunch**

13:00 - 14:00

**Course: ALS in forestry - part 1 (Monika Moskal)**

room 107

14:00 - 16:00

**Coffee Break**

16:00 - 16:15

16:15 **Poster session**

**Thermal IR imaging in cold air influxes identification and topoclimatological investigations**

Grzegorz M. Siwek, Andrzej Gluza, Miroslaw Krukowski, Krzysztof Siwek

16:15 - 16:18

**Object Based Image Analysis (OBIA) method for analysis images obtained from UAV**

Marta Kołosowska, Anna Zmarz

16:18 - 16:21

**Geomorphological map of Polish alpine mountains using geoinformatics methods**

Radosław Gurdak, Elzbieta Wolk-Musiał, Bogdan Zagajewski

16:21 - 16:24

**Methods and Techniques applied for the urban growth and for the land use changes in the suburban areas of Warsaw**

Jaime Gonzalez Garcia

16:24 - 16:24

**Terrestrial Laser Scanning - a new approach of forest inventory method. Case study of Niepolomice Forest, South Poland**

Sara Moroni, Valerio Frattura, Márton Szabó, Piotr Weżyk

16:24 - 16:27

16:30 Course: ALS in forestry - part 2  
room 107

18:45 Hula Kula bowling competition. EARSel & ISPRS Young Scientist Days registered participants are invited  
The meeting is sponsored by MGGP Aero (<http://www.mggpaero.com/en/index.html>) & Wasat (<http://wasat.pl/en/>)



## **EARSel ISPRS Young Scientist Days 2014**

Tue, 17 Jun 2014      **2014-06-17 Track 2**

09:30 **Methods B**

**Ground based remote sensing with a Spectral Evolution spectroradiometer**

**Nate Bloomingdale**

room 106

09:30 - 11:00

**Coffee Break**

11:00 - 11:30

**Course: Field remote sensing (Geomor-Technik)**

room 105

11:30 - 13:00

**Lunch**

13:00 - 14:00

**Coffee Break**

14:00 - 14:15

**Poster session**

14:15 - 14:30

**Course: LAStools - rapidlasso (1) Martin Isenburg**

room 105

14:30 - 16:00

**Course: LAStools - rapidlasso (2) Martin Isenburg**

room 105

16:30 - 18:00

Tue, 17 Jun 2014      2014-06-17 Track 3

11:30 Hyperspectral Remote Sensing

**Course: Hyperspectral remote sensing (Hans-Jörg Fischer)**

room 106

11:30 - 13:00

**Lunch**

13:00 - 14:00

**Course: Hyperspectral remote sensing (Hans-Jörg Fischer)**

room 207

16:30 - 18:00

## EARSeL ISPRS Young Scientist Days 2014

Wed, 18 Jun 2014 2014-06-18

08:45 Land cover

Aula

**Keynote: Atmospheric corrections (E. Parlow)**

08:45 - 09:25

**Technical Break**

09:25 - 09:30

09:30 Land cover 1 (George Benekos, Ewa Wilk, Dunia Abdul Jabbar Al Khazraji)

room 207

**Misiones Province (Argentina) land cover classification based on Landsat imagery**

Aneta N. Modzelewska, Aneta Bohdan, Julia Cieślak, Anna M. Jarocińska

09:30 - 09:45

**Landsat ETM+ Land Cover Classification using Stuttgart Neural Network Simulator**

Edwin Raczko

09:45 - 10:00

**Land Cover classification of Warmian-Masurian Voivodeship using Landsat TM images and neural network simulator.**

Jakub Olczyk

10:00 - 10:15

**Potential of SAR data to ice-jam hazard identification**

Helena Łoś, Yves-Louis Desnos, Marek Grześ

10:15 - 10:30

**Creating a common symbol classification for a new historical geoportal of Poland**

Tomasz Panecki

10:45 - 11:00

**Coffee Break**

11:00 - 11:30

11:30 Land cover 2 (Karolina Orłowska, Haider Aboud AL-Karaawi, Grzegorz Siwek)  
room 207

**Land use-land cover maps production using data fusion concept and Geographic Object Based Image Analysis approach - the case study in Krakow city**

Paweł Hawryło

11:30 - 11:45

**Geographical analysis of the desertification phenomenon in Mahawel District, Middle of IRAQ by using remote sensing and GIS techniques**

Dunia Abdul Jabbar Al Khazraji

11:45 - 12:00

**Optimal Choice of Sustainable Development Areas in Al-Diwaniyah Governorate in Iraq**

Haider Aboud AL-Karaawi

12:00 - 12:15

**Analysys of impervious surfaces in Poland**

Agnieszka Soszyńska, Małgorzata Krówczyńska, Ewa Wilk, Piotr Pabjanek, Pavol Hurbanek, Konstantin Rosina

12:15 - 12:30

**The use of GIS tools in the study of ventilation corridors in Warsaw - the example of frontal area index method**

Edyta Bogucka

12:30 - 12:45

**Implementation of digital maps and documentation of the site based on Geographic Information System for the selected regions of Szlak Naftowy**

Adrianna Góra, Szymon Franczak, Michał Lupa, Marek Solecki, Adam Cygal, Andrzej Świader

12:45 - 13:00

**Lunch**

13:00 - 14:00

## **EARSel ISPRS Young Scientist Days 2014**

14:00 General Assembly

Aula

**General Assembly**

14:00 - 16:00

**Coffee Break**

16:00 - 16:20

**Keynote: ESA (F. Sarti)**

16:20 - 17:00

17:00 Water (Salit Chakma, Mateusz Slazek)

room 207

**Empirical line atmospheric correction of the hyperspectral data for water quality monitoring**

Malgorzata Slapinska, Tomasz Berezowski, Jarosław Chormański

17:00 - 17:15

**Analysis of the possibilities of using aerial photographs to determine the bathymetry in shallow coastal zone of the selected section of the Baltic Sea.**

Łukasz Cieszyński, Kazimierz Furmańczyk

17:15 - 17:30

**Determination of water quality parameters with satellite images**

Agnieszka Jenerowicz, Piotr Walczykowski

17:30 - 17:45

**Assessment of groundwater potential zones using remote sensing and GIS modeling techniques**

Abbas Fadhil Odaid Al-Qaraghuli, Ayad Ali Faris

17:45 - 18:00

Wed, 18 Jun 2014 2014-06-18 Track 2

09:30 Course: ESA

**Course: Introduction to optical data processing with BEAM (Samantha Lavender)**

room 308

09:30 - 11:00

**Coffee Break**

11:00 - 11:30

**Course: Introduction to optical data processing with BEAM (Samantha Lavender), part 2**

room 308

11:30 - 13:00

**Lunch**

13:00 - 14:00

14:00 GNSS Surveying

field measurements

**GNSS Surveying for remote sensing (Bartosz Smaczny)**

room 106

14:00 - 16:00

**Coffee Break**

16:00 - 16:15

**GNSS Surveying for remote sensing (Bartosz Smaczny)**

room 106

16:15 - 18:00

## **EARSel ISPRS Young Scientist Days 2014**

Wed, 18 Jun 2014    **2014-06-18 Track 3**

09:30 Field measurements

**Course: Hyperspectral remote sensing (Hans-Jörg Fischer)**

room 106

09:30 - 11:00

**Coffee Break**

11:00 - 11:15

**GNSS Surveying for remote sensing (Bartosz Smaczny)**

room 106

11:15 - 13:00

Thu, 19 Jun 2014 2014-06-19

08:45 Oceans

**Course: The role of the oceans in climate change**

room 207

Rainer Reuter

08:45 - 10:45

**Coffee Break**

10:45 - 11:15

**SEOS - EARSel's e-learning tutorials for science education**

room 207

Rainer Reuter

11:15 - 13:00

**Lunch**

13:00 - 14:00

**Ocean remote sensing using lasers**

room 207

Rainer Reuter

14:00 - 15:30

**Coffee Break**

15:30 - 16:00

16:00 Methods 2 (Dunia Abdul Jabbar Al Khazraji, Michał Lupa)

room 207

**Extraction of knowledge from Trained One-Class SVM Classifier**

Khelifa Djerriri, Mimoun Malki

16:00 - 16:15

**Evaluation of the RFM as a replacement for the Rigorous geometric Model of ASLAT-2A imagery**

Issam Boukerch, Mohamed Hadeid, Redouane Mahmoudi, Bachir Takarli, Kamel Hasni

16:15 - 16:30

**Evaluation of Time periods Role in modelling the Relationship Between Leishmaniasis Diseases Distribution and Environmental Variables Using GIS and Remote Sensing Techniques**

abbas alimohammadi, mohammad sharifikia

16:30 - 16:45



## **EARSel ISPRS Young Scientist Days 2014**

### **A matter of scale**

16:45 - 17:00

### **ANALYSIS OF SHADING USING PYTHON AND BLENDER APPLICATIONS**

Mateusz Ilba

17:00 - 17:15

### **Understanding of a dense matching**

Marta Kubacka

17:15 - 17:30

### **Assessment of the Imaging Spectroscopy for Rock Identification of the Karkonosze (Giant) Mountains**

Monika Mierczyk, Bogdan Zagajewski, Roksana Knapik

17:30 - 17:45

### **AGH University of Science and Technology in three-dimensional web world**

Karolina Materek, Mateusz Jabłoński, Łukasz Parkitny, Michał Lupa, Krystian Kozioł

17:45 - 18:00

Thu, 19 Jun 2014 2014-06-19 Track 2

16:00 Forest (Edwin Raczko, Paweł Hawryło, Kamil Kondracki )  
room 308

**Field hyperspectral techniques for monitoring condition of protected forest species**

Martyna Wietecha, Marlena Kycko, Bogdan Zagajewski, Adrian Ochyra

16:00 - 16:15

**MODELS FOR ESTIMATING LEAF PIGMENTS AND RELATIVE WATER CONTENT IN THREE VERTICAL CANOPY LEVELS OF NORWAY SPRUCE BASED ON LABORATORY SPECTROSCOPY**

Lucie Cervena, Zuzana Lhotakova, Lucie Kupkova, Monika Kovarova, Jana Albrechtova

16:15 - 16:30

**Automatic determination of selected forest inventory parameters of Scots Pine (*Pinus sylvestris* L.) using GNOM application designed for TLS point cloud processing**

Michał Ratajczak, Piotr Weżyk

16:30 - 16:45

**Accuracy of tree species classification based on WorldView-2 data (Białowieża Forest, NE Poland)**

Marcin Michalik, Piotr Pabjanek

16:45 - 17:00

**Spatio-temporal distribution of active fires from MODIS over Poland for the period 2001-2013**

Urszula Pytlak, Agata Hościło, Bogdan Zagajewski

17:00 - 17:15

**Use of SAR images for assessing forest fires in the Brazilian Amazonia**

Felipe C Costa, Mahdi Motagh, Olaf Hellwich

17:15 - 17:30

**Analysis of burned areas based on the Landsat images**

Urszula Pytlak, Katarzyna Chelmińska, Anna Jarocińska, Agata Hościło

17:30 - 17:45

**Forest biomass estimation with use of selected remote sensing technologies – ForseenPOMERANIA Project**

Kamil Kondracki, Mariusz Bembenek, Piotr S. Mederski, Maciej Skorupski, Paweł Strzeleński, Sławomir Sułkowski, Andrzej Wegiel

18:00 - 18:15



Fri, 20 Jun 2014      2014-06-20

08:45 Urban (Yetkin Ozum Durgun, Edyta Bogucka, Martyna Wietecha)  
room 207

**Quantitative modelling of urban changes using digital elevation models in a time series**

Cornelis Stal, Alain De Wulf, Philippe De Maeyer, Rudi Goossens, Timothy Nuttens, Frederik Tack, Marijn Hendrickx

08:45 - 09:00

**Comparison of spatial development patterns for selected European cities using on remote sensing data and spatial metrics**

Leopold Michał Leśko, Michael Wurm, Michael Wiesner, Jan Peter Mund, Hannes Taubenboeck

09:00 - 09:15

**Semi-automated building extraction from Airborne Laser Scanning data**

Marcin Marjasiewicz

09:15 - 09:30

**The Assessment of Landsat MSS and OLI Sensors for Urban Change Detection in Chinese Metropolises**

Radosław Gurdak, Monika Mierczyk, Martyna Golenia, Anna Jarocinska, Adrian Ochtyra

09:30 - 09:45

**MEASUREMENT OF URBANISATION CHARACTERISTICS OF CHITTAGONG CITY, BANGLADESH BASED ON LANDSAT IMAGES**

Salit Chakma, Anna Jarocińska, Adrian Ochtyra

09:45 - 10:00

**Environmental and recreational potential of Lublin city**

Paulina Owczarek, Szymon Chmielewski

10:00 - 10:15

**Analysis of the phenomenon of uncontrolled city spreading on the example of Warsaw's district Bialoleka**

Edyta Bogucka, Aleksandra Radecka

10:15 - 10:30

**The Potential of 3D GIS Tools and satellite imagery in Strategic Urban Planning Process; as an Approach for Sustainable Development in Algeria**

Bouhadjar MEGUENNI

10:30 - 10:45

## EARSeL ISPRS Young Scientist Days 2014

### **Coffee Break**

10:45 - 11:15

11:15 Agriculture (Michał Chiliński, Karolina Materek, Monika Kacprzyk)  
room 207

### **Identification and characterization of Biological Soil Crusts in a sand dune desert environment across Israel-Egypt border using LWIR emittance spectroscopy**

Offer Rozenstein, Arnon Karnieli

11:15 - 11:30

### **The Effect of Fertilizer Application of Granulated Organic - Mineral Fertilizers Formed from Spent Mushroom Substrate on Soil**

Ewa Kuśmirek, Ewa Kuśmirek

11:30 - 11:45

### **Nutrient management on farms of various types of production.**

Agnieszka Czopowicz, Ewa Kuśmirek, Aneta Perzanowska

11:45 - 12:00

### **Beauty of Polish Village**

Ewa Kuśmirek, Beata Rutkowska, Justyna Wrzosek – Jakubowska, Aniela Dziecioł, Agata Kaczmarek

12:00 - 12:15

### **Lunch**

13:00 - 14:00

### **Course: TLS in Forestry IBL**

room 207

14:00 - 15:30

### **Coffee Break**

15:30 - 16:00

### **Closing Session**

16:00 - 16:30

18:00 Pub Crawling

Fri, 20 Jun 2014      **2014-06-20 Track 2**

08:45 Course: Introduction to radar data processing with NEST, Chris Stewart

room 106

**Coffee Break**

10:45 - 11:15

11:15 Course: Introduction to radar data processing with NEST Chris Stewart

room 106

**Lunch**

13:00 - 14:00

14:00 Course: Integrated image processing and GIS using LEOWorks 4  
Chris Stewart

room 106

**Coffee Break**

15:30 - 16:00

**Closing Session**

room 207

16:00 - 16:30