

# Preliminary Symposium Agenda

## 42nd EARSeL Symposium

**Date: Monday, 03/July/2023**

1:00pm -	<b>RD1: Participants registration</b> Location: <b>Registration desk</b>	
4:00pm		
2:00pm -	<b>OC: Opening Ceremony</b> Location: <b>Ioan Mihăilescu</b>	
2:30pm		
2:40pm -	<b>Keynote Forestry: Dr Sorin Popescu - Texas A&amp;M University</b> Location: <b>Ioan Mihăilescu</b>	
3:30pm		
3:30pm -	<b>CB1D1: Coffee break</b> Location: <b>First floor corridor</b>	
4:00pm		
4:00pm -	<b>ED: Trends in Remote Sensing applications</b> Location: <b>Dimitrie Cantemir</b>	<b>FS1: Earth Observation applied in forest hazards management</b> Location: <b>Grigore Moisil</b>
5:40pm	<b>E-learning On Time Series Analysis In Remote Sensing: The Way Towards Collaborative Course Development</b> <b>Markéta Potůčková<sup>1</sup>, Jana Albrechtová<sup>1</sup>, Katharina Anders<sup>2</sup>, Lucie Červená<sup>1</sup>, Jakub Dvořák<sup>1</sup>, Krzysztof Gryguc<sup>3</sup>, Bernhard Höfle<sup>2</sup>, Lucie Kupková<sup>1</sup>, Zuzana Lhotáková<sup>1</sup>, Adriana Marcinkowska-Ochtyra<sup>3</sup>, Andreas Mayr<sup>4</sup>, Eva Neuwirthová<sup>1</sup>, Adrian Ochtyra<sup>3</sup>, Martin Rutzinger<sup>4</sup>, Alex Šroller<sup>1</sup></b> 1: Charles University, Faculty of Science, Czech Republic; 2: Heidelberg University, Institute of Geography, 3DGeo Research Group, Germany; 3: University of Warsaw, Department of Geoinformatics, Cartography and Remote Sensing, Poland; 4: University of Innsbruck, Institute of Geography, Remote Sensing & Topographic LiDAR Research Group, Austria	<b>Monitoring Of Drought-induced Forest Damages In Germany</b> <b>Andreas Müterthies, Sebastian Mader, Nils Wolf</b> EFTAS Fernerkundung Technologietransfer GmbH, Germany
		<b>Modelling Vitality Loss Of European Beech (Fagus Sylvatica L.) Using Random Forest Regression</b> <b>Chunyan Xu, Michael Förster, Birgit Kleinschmit</b> Technical University of Berlin, Germany
	<b>Moon and Remote Sensing in Education – A Concept for Implementing Remotely-Sensed Lunar Topics into the School Curriculum</b> <b>Roman Johannis Hiby, Claudia Lindner, Fabian Meyer-Heß, Andreas Rienow</b> Ruhr-University Bochum, Institute of Geography, Germany	<b>Implementation of a Fuel Type Classification System for Sardinia, Italy, with the Integration of Remotely Sensed Data</b> <b>Debora Voltolina<sup>1</sup>, Daniela Stroppiana<sup>2</sup>, Simone Sterlacchini<sup>1</sup>, Matteo Sali<sup>2</sup>, Bachisio Arca<sup>3</sup>, Mariano García<sup>4</sup>, Michele Salis<sup>3</sup>, Emilio Chuvieco<sup>4</sup></b> 1: National Research Council, Institute of Environmental Geology and Geoengineering, Milano Unit, Italy; 2: National Research Council, Institute for Electromagnetic Sensing of the Environment, Milano Unit, Italy; 3: National Research Council, Institute of BioEconomy, Sassari Unit, Italy; 4: Universidad de Alcalá, Department of Geology, Geography, and Environment Science, Spain
	<b>Global Cloud-free Maps of Essential Vegetation Traits Processed from the TOA Sentinel-3 OLCI Catalogue in Google Earth Engine</b> <b>Jochem Verrelst, David Kovács, Pablo Reyes-Muñoz, Matias Salinero-Delgado, Viktor Ixio Mészáros, Katja Berger</b> University of Valencia, Spain	<b>The Impact Of Wildfires On Water Quality Using CCI EO Products: Lake Baikal Case Study</b> <b>Daniela Stroppiana, Lorenzo Parigi, Giulio Tellina, Claudia Giardino, Monica Pinardi, Rossana Caroni, Mariano Bresciani</b> CNR-IREA, Italy
	<b>A Review of Remote Sensing Time Series Analysis for Vegetation Productivity Monitoring</b>	

**Katja Berger**<sup>1,2</sup>, **Lammert Kooistra**<sup>3</sup>, **Lukas Valentin Graf**<sup>4</sup>, **Benjamin Brede**<sup>5</sup>, **Clement Atzberger**<sup>6</sup>, **Pablo Reyes Munoz**<sup>1</sup>, **Jochem Verrelst**<sup>1</sup>

1: Image Processing Laboratory (IPL), University of Valencia, Spain; 2: Mantle Labs GmbH, Austria; 3: Wageningen University & Research, Laboratory of Geo-Information Science and Remote Sensing, Wageningen, The Netherlands; 4: Earth Observation of Agroecosystems Team, Division Agroecology and Environment, Agroscope, Zurich, Switzerland; 5: Helmholtz Center Potsdam GFZ German Research Centre for Geosciences, Section 1.4 Remote Sensing and Geoinformatics, Potsdam, Germany; 6: Institute of Geomatics, University of Natural Resources and Life Sciences, Vienna, Austria

### **Assessment of Fractional Woody Vegetation Cover Change in an African Savannah Region**

**Elias Symeonakis**<sup>1</sup>, **Christina Karakizi**<sup>1</sup>, **Eva Arnau**<sup>1</sup>, **Antonis Korkofigkas**<sup>2</sup>

1: Manchester Metropolitan University, United Kingdom; 2: National Technical University of Athens, Greece

### **Benchmarking of Grassland Dynamic Models Coupled with Sentinel-2 to Monitor Grasslands Growth over Wallonia Region (Belgium)**

**Cozmin Lucau Danila**<sup>1</sup>, **Yann Chemin**<sup>2</sup>, **Yannick Curnel**<sup>1</sup>, **Julien Morel**<sup>2</sup>, **Mattia Rossi**<sup>2</sup>, **Viviane Planchon**<sup>1</sup>

1: Walloon Agricultural Research Centre (CRA-W), Belgium; 2: EU Joint Research Centre (JRC), Italy

6:00pm  
-  
10:00pm

IB: Icebreaker

Date: Tuesday, 04/July/2023

8:00am - 4:00pm	<b>RD2: Participants registration</b> Location: <b>Registration desk</b>	
9:00am - 10:40am	<b>Env: Remote sensing applications for environment</b> Location: <b>Dimitrie Cantemir</b>  <b>Detecting oil spills in the Cyprus region using Sentinel-1 SAR data: A comparison of results using Sentinel Application Platform (SNAP) and Arc GIS Pro - Deep learning</b> <b>Eleftheria Kalogirou<sup>1,2</sup>, George Melillos<sup>1,2</sup>, Despoina Makri<sup>1,2</sup>, Diofantos G. Hadjimitsis<sup>1,2</sup></b> 1: Department of Civil Engineering and Geomatics, Cyprus University of Technology, Limassol, Cyprus; 2: ERATOSTHENES Centre of Excellence, Limassol, Cyprus	<b>W1Agriculture: Land cover mapping and monitoring for supporting decisions in agriculture</b> Location: <b>Grigore Moisil</b>  <b>Combining a Multivariate Statistical Model with the OBIA Technique to Detect Large-scale PV Systems from Sentinel-2 Images</b> <b>Claudio Ladisa<sup>1</sup>, Alessandra Capolupo<sup>1</sup>, Maria Nicolina Ripa<sup>2</sup>, Eufemia Tarantino<sup>1</sup></b> 1: DEPARTMENT OF CIVIL, ENVIRONMENTAL, LAND, CONSTRUCTION AND CHEMISTRY (DICATECH), POLITECNICO DI BARI, BARI, ITALY; 2: DEPARTMENT OF AGRICULTURAL AND FOREST SCIENCES (DAFNE), UNIVERSITÀ DEGLI STUDI DELLA TUSCIA, VITERBO, ITALY
	<b>Quantification Of Net Carbon Stock Change Due To The Norwegian Reservoirs Development</b> <b>Mahmoud Saber Kenawi, Tor Haakon Bakken</b> NTNU: Norwegian University of Science and Technology, Norway	<b>Methodological Proposal for Operational Monitoring of Agricultural Dynamics in Center Pivots Irrigation Areas in Brazil using Sentinel 2 Imagery</b> <b>Hugo do Nascimento Bendini<sup>1</sup>, Leila Maria Garcia Fonseca<sup>1</sup>, Luiz Mario Lustosa Pascoal<sup>1</sup>, Philippe Rufin<sup>3,4</sup>, Caio Augusto Bertolini<sup>1</sup>, Tharles de Sousa Andrade<sup>1</sup>, Ravi Fernandes Mariano<sup>1</sup>, Renato Gomes Silvério<sup>1</sup>, Pedro Lacerda Santos<sup>1</sup>, Daniel Assumpção Costa Ferreira<sup>2</sup>, Thiago Henriques Fontenelle<sup>2</sup></b> 1: National Institute for Space Research (INPE), Brazil; 2: National Water and Sanitation Agency (ANA), Brazil; 3: Humboldt-Universität zu Berlin, Geography Department, Germany; 4: Université Catholique de Louvain, Earth and Life Institute, Belgium
	<b>Integrating Low-cost Sensors and Remote Sensing to Monitor Small Reservoirs in Kenyan Wetlands</b> <b>Stefanie Steinbach<sup>1,2</sup>, Anna Bartels<sup>1</sup>, Martin W. Chege<sup>3</sup>, Niels Dedring<sup>1</sup>, Wisdom Kipkemboi<sup>3</sup>, Simon W. Muthee<sup>3</sup>, Andrew Nelson<sup>2</sup>, Kuria B. Thiong'o<sup>3</sup>, Sander J. Zwart<sup>4</sup>, Andreas Rienow<sup>1</sup></b> 1: Department of Geography, Ruhr University Bochum, Germany; 2: Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente, The Netherlands; 3: Institute of Geomatics, GIS and Remote Sensing (IGGRS), Dedan Kimathi University of Technology, Kenya; 4: Integrated Water Management Institute (IWMI), Accra, Ghana	<b>On the Use of NDVI to Estimate LAI in Field Crops</b> <b>Sofia Bajocco, Fabrizio Ginaldi, Francesco Savian, Danilo Morelli, Elisabetta Raparelli, Simone Ugo Maria Bregaglio</b> Council for Agricultural Research and Economics, Research Centre for Agriculture and Environment (CREA-AA), Italy
	<b>M.Sc student, Remote Sensing Lab</b> <b>Shir Fuchs<sup>1,2</sup>, Arnon Karnieli<sup>1,2</sup></b> 1: Ben Gurion University of the Negev, Israel; 2: Jacob Blaustein Institutes for Desert Research	<b>Products for Monitoring of Agriculture from Earth Observation Time Series and Very High Resolution Data</b> <b>Ursula Gessner<sup>1</sup>, Sarah Asam<sup>1</sup>, Andreas Hirner<sup>1</sup>, Jennifer Kriese<sup>1</sup>, Jonas Meier<sup>1</sup>, Sophie Reinermann<sup>2</sup>, Martina Wenzl<sup>1</sup></b> 1: German Aerospace Center, Germany; 2: Julius-Maximilians-Universitaet Wuerzburg, Germany
	<b>Monitoring Mining Operations In The Rovinari Area Using Radar Interferometry</b> <b>Andrei Toma, Ionut Sandric</b> University of Bucharest, Faculty of Geography, Romania	<b>The Data Cube of ERATOSTHENES Centre of Excellence to empower environmental monitoring in EMMENA Region</b> <b>Stelios Neophytides<sup>1,3</sup>, Thanasis Drivas<sup>2</sup>, Christiana Papoutsas<sup>1,3</sup>, Charalambos Kontoes<sup>2</sup>, Diofantos Hadjimitsis<sup>1,3</sup></b> 1: ERATOSTHENES Centre of Excellence, Cyprus; 2: National Observatory of Athens, Greece; 3: Cyprus University of Technology, Cyprus

**Quantification And Mapping Of Non-Photosynthetic Cropland Biomass Using Laboratory Hyperspectral Data And Machine Learning**

**Stefanie Steinhäuser<sup>1</sup>, Matthias Woche<sup>1</sup>, Andrej Halabuk<sup>2</sup>, Svetlana Košanová<sup>3</sup>, Tobias Hank<sup>1</sup>**

1: Ludwig-Maximilians-Universität (LMU), Germany; 2: Slovak Academy of Sciences, Slovakia; 3: Constantine the Philosopher University in Nitra, Slovakia

**10:40am CB1D2: Coffee break**  
- Location: **First floor corridor**

**11:10am**

**11:10am Keynote Agriculture: Dr Lorenzo Seguini - Joint Research Centre (JRC)**  
- Location: **Ioan Mihăilescu**

**12:00pm**

**12:00pm Posters D2 WAgriculture: Crop dynamics monitoring using earth observation**  
- Location: **First floor corridor**

**1:00pm**

**Exploring Sentinel-2 Dense Image Time Series to Identify Cover Crop Emergence and Destruction dates in France: Towards the Development of an Approach for Biomass Estimation**

**Hugo do Nascimento Bendini<sup>1</sup>, Rémy Fieuzal<sup>1</sup>, Pierre Carrere<sup>2</sup>, Aubin Allies<sup>2</sup>, Aurélie Galvani<sup>2</sup>, Éric Ceschia<sup>1</sup>**

1: CESBIO, Université de Toulouse, CNES/CNRS/INRAE/IRD/UT3, Toulouse, France; 2: EarthDaily Agro, Balma, France

**The Relation Between Tree Above-ground Biomass and Crown Height Model Using a High-resolution Camera on UAV: a Case Study in Sessile Oak Stand**

**Alexandru-Bogdan Cucu, Gheorghe Raul Radu, Ștefan Petrea, Tibor Șerban**

National Institute for Research and Development in Forestry "Marin Drăcea", Romania

**Comparing Multispectral RPAS And Satellite Data For Rice Crop Multitemporal Characterisation**

**Enrico Chiesa, Samuele De Petris, Alessandro Farbo, Filippo Sarvia, Enrico Borgogno-Mondino**

University of Turin, Department of Agricultural, Forest and Food Sciences, Grugliasco L.go Braccini 10095, Turin, Italy

**Multisource Point Cloud Fusion For Forest And Post-fire Forest Mapping: Case Study From The Bohemian Switzerland National Park**

**Alex Šrollerů, Eva Štefanová, Markéta Potůčková**

Charles University, Faculty of Science, Department of Applied Geoinformatics and Cartography, Czech Republic

**Deriving Winter Wheat Phenology From Combined Optical And SAR Time Series With Deep Learning**

**Felix Lobert<sup>1,2</sup>, Johannes Löw<sup>3</sup>, Marcel Schwieder<sup>1,2</sup>, Alexander Gocht<sup>1</sup>, Michael Schlund<sup>4</sup>, Patrick Hostert<sup>2,5</sup>, Stefan Erasmí<sup>1</sup>**

1: Thünen Earth Observation, Thünen Institute of Farm Economics, Germany; 2: Earth Observation Lab, Geography Department, Humboldt-Universität zu Berlin, Germany; 3: Department of Geoecology, Institute of Geosciences and Geography, University of Halle-Wittenberg, Germany; 4: Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente, the Netherlands; 5: Integrative Research Institute of Transformations of Human-Environment Systems (IRI THESys), Humboldt-Universität zu Berlin, Germany

**Investigating Phenological Variability of Beech Forests across Europe using Satellite Data**

**Carlotta Ferrara<sup>1</sup>, Simone Ugo Maria Bregaglio<sup>2</sup>, Francesco Chianucci<sup>1</sup>, Carlo Ricotta<sup>3</sup>, Sofia Bajocco<sup>2</sup>**

1: Council for Agricultural Research and Economics, Research Centre for Forestry and Wood (CREA-FL), Italy; 2: Council for Agricultural Research and Economics, Research Centre for Agriculture and Environment (CREA-AA), Italy; 3: University of Rome "La Sapienza", Department of Environmental Biology, Italy

**Large Scale Urban Geospatial Databases for Assessment and Planning of Urban Environment**

**Kamini J, Bhavani SVL, Rama dasu M, Priya Madhuri P, SC Jayanthi**

National Remote Sensing Centre(NRSC), ISRO, India

**Mapping And Characterization Of Hedges In Agricultural Landscapes For Ecological Assessments In Bavaria, Germany**

**Jennifer Kriese<sup>1</sup>, Sarah Asam<sup>1</sup>, Mariel Dirscherl<sup>1</sup>, Michael Stellmach<sup>1</sup>, Kirstel Kerler<sup>2</sup>, Johanna Buchner<sup>2</sup>, Ursula Gessner<sup>1</sup>**

**Estimating Phenology Metrics From Sentinel-2 Time Series In Forest Sites**

**Lorenzo Parigi<sup>1</sup>, Mirco Boschetti<sup>1</sup>, Francesco Nutini<sup>1</sup>, Filippo Bussotti<sup>2</sup>, Martina Pollastrini<sup>2</sup>, Daniela Stroppiana<sup>1</sup>**

	<p>1: German Aerospace Center, Germany; 2: Bayerisches Landesamt für Umwelt, Germany</p> <p><b>Monitoring Irrigated Areas By Applying Convolutional Neural Networks To Sentinel-2 And Meteorological Time Series</b></p> <p><b>Alejandro Martín Simón-Sánchez<sup>1</sup>, José González-Piqueras<sup>1</sup>, Luis de la Ossa<sup>2</sup>, Juan Manuel Sánchez<sup>1</sup></b></p> <p>1: Remote Sensing and GIS Group, Regional Development Institute, University of Castilla-La Mancha, Campus Universitario s/n, 02071 Albacete, Spain; 2: Computing Systems Department, University of Castilla-La Mancha, Campus Universitario s/n, 02071 Albacete, Spain</p>	<p>1: Institute for Electromagnetic Sensing of the Environment, National Research Council, Milan, 20133, Italy; 2: University of Florence, Dipartimento di Scienze e Tecnologie Agrarie, Alimentari, Ambientali e Forestali (DAGRI), Florence, Italy</p> <p><b>Development Of A Geospatial Telemetric Water Quality Monitoring System.</b></p> <p><b>Martin W. Chege<sup>1,2</sup>, Kuria B. Thiong'o<sup>1,2</sup>, Arthur W. Sichangi<sup>2</sup>, Stefanie Steinbach<sup>3,4</sup>, Andreas Rienow<sup>4</sup></b></p> <p>1: Remote sensing Research Group (RSRG); 2: Institute of Geomatics GIS &amp; Remote sensing (IGGRes), Dedan Kimathi University of Technology (DeKUT), Kenya; 3: Faculty of Geo-Information Science and Earth Observation (ITC). University of Twente, Netherlands.; 4: Interdisciplinary Geographic Information Science, Institute of Geography, Ruhr-University Bochum, Bochum, Germany.</p>
	<p><b>Derivation of Crop Parameters Using Sentinel-1 SAR Data: A Case Study for Winter Wheat in Northern Germany</b></p> <p><b>Karlmarx Thangamani, Tanja Riedel, Jennifer McLelland, Markus Moeller, Heike Gerighausen</b></p> <p>Julius Kühn Institute, Germany</p>	<p><b>Climate versus Vegetation Indices Regression Models Classification across desert-fringe ecosystem</b></p> <p><b>Maxim Shoshany, Sofia Mozhaeva</b></p> <p>Technion, Isr. Institute of Technology, Israel</p>
1:00pm - 2:00pm	LD2: Lunch	
2:00pm - 3:40pm	<p>NH2: Monitoring and mapping multi-hazards under climate change</p> <p>Location: <b>Dimitrie Cantemir</b></p> <p><b>Spatiotemporal Characteristics Of Drought And Their Impacts On Cropland Vegetation Over The Lower Mekong Basin Using Satellite-Based Time-Series Observations</b></p> <p><b>Tuyen Ha<sup>1,2</sup>, Juliane Huth<sup>1</sup>, Soner Uereyen<sup>1</sup>, Claudia Kuenzer<sup>1,2</sup></b></p> <p>1: German Aerospace Center (DLR), Germany; 2: University of Wuerzburg, Germany</p>	<p>W2Agriculture: New methods and algorithms in EO for agriculture</p> <p>Location: <b>Grigore Moisil</b></p> <p><b>Apple Fruit Load Estimation In Multi-temporal High-resolution UAV Imagery By Deep Learning</b></p> <p><b>Chenglong Zhang<sup>1</sup>, Joao Valente<sup>2</sup>, Wensheng Wang<sup>4</sup>, Leifeng Guo<sup>3</sup>, Lammert Kooistra<sup>1</sup></b></p> <p>1: Wageningen University &amp; Research, Laboratory of Geo-Information Science and Remote Sensing, The Netherlands; 2: Wageningen University &amp; Research, Information Technology Group, The Netherlands; 3: Chinese Academy of Agriculture Science, Agriculture Information Institute, China; 4: Ministry of Agriculture and Rural Affairs, Key Laboratory of Agricultural Big Data, China</p>
	<p><b>Mapping Soil Erosion Intensity Based On Multitemporal Sentinel-1 SAR and Sentinel-2 MSI Satellite Imagery. An Inter-Comparison Approach Using In-situ Measurements</b></p> <p><b>Marina Virghileanu, Bogdan-Andrei Mihai, Ionuț Săvulescu</b></p> <p>University of Bucharest, Faculty of Geography, Romania</p>	<p><b>Leveraging PIXSEL's hyperspectral imagery for Land Use and Land Cover mapping in an agricultural region of Northeast Australia</b></p> <p><b>Spyridon E. Detsikas<sup>1</sup>, George P. Petropoulos<sup>1</sup>, Rahul Raj<sup>2</sup></b></p> <p>1: DEPARTMENT OF GEOGRAPHY, HAROKOPIO UNIVERSITY OF ATHENS, EL. VENIZELOU 70, KALLITHEA, 17671, ATHENS, GREECE; 2: PIXSEL.SPACE, BENGALURU, KARNATAKA, INDIA</p>
	<p><b>HEC-RAS simulation of a Glacial Lake Outburst Flood to determine potential impacts using the example of Chamlang North Tsho (Lake 464) in the Hongu Valley, Nepal</b></p> <p><b>Niels Dedring, Valerie Graw, Andreas Rienow</b></p> <p>Geomatics Research Group (GRG), Ruhr-University Bochum (RUB), Bochum, Germany</p>	<p><b>Mowing Detection Intercomparison Exercise (MODCIX): A Cross-European Evaluation of Mowing Detection Algorithms</b></p> <p><b>Marcel Schwieder<sup>1,2</sup>, Felix Lobert<sup>1,2</sup>, Arnab Muhuri<sup>3</sup>, Natascha Oppelt<sup>3</sup>, Sarah Assam<sup>4</sup>, Sophie Reinermann<sup>5</sup>, Julien Morel<sup>6</sup>, Mattia Rossi<sup>6</sup>, Dominique Weber<sup>7</sup>, Filippo Sarvia<sup>8</sup>, Samuele De Petris<sup>8</sup>, Enrico Borgogno-Mondino<sup>8</sup>,</b></p>

### Evaluation of Sentinel-1-Based Change Detection Approaches for Regressive Erosion along the Coca River, Ecuador

Valerie Graw<sup>1,2,3</sup>, Torben Dedring<sup>1</sup>, Roman Hiby<sup>1</sup>, Jose Jara-Alvear<sup>2,3,4</sup>, Pablo Guzman<sup>2,3,4</sup>, Carsten Juergens<sup>1</sup>, Andreas Rienow<sup>1</sup>

1: Geomatics Research Group (GRG), Ruhr-University Bochum (RUB), Bochum, Germany; 2: Transdisciplinary Center for Coupled Socio-Ecological Systems (TRACES), Universidad del Azuay (UDA), Cuenca, Ecuador; 3: Energy Sciences Research Group (CIENER), Universidad del Azuay (UDA), Cuenca, Ecuador; 4: La Corporación Eléctrica del Ecuador (CELEC EP), Cuenca, Ecuador

Oliver Buck<sup>9</sup>, Stefan Ernst<sup>2</sup>, Patrick Hostert<sup>2,10</sup>, Silvia Valero<sup>11</sup>, Anatol Garioud<sup>12</sup>, Ann-Kathrin Holtgrave<sup>13</sup>, Clément Mallet<sup>14</sup>, Mathilde De Vroey<sup>15</sup>, Andreas Schaumberger<sup>16</sup>, Iason Tsardanidis<sup>17</sup>, Ruth Sonnenschein<sup>18</sup>, Stefan Erasmí<sup>1</sup>

1: Thünen Institute of Farm Economics, Bundesallee 63, 38116 Braunschweig, Germany; 2: Humboldt Universität zu Berlin, Geography Department, Unter den Linden 6, 10099 Berlin, Germany; 3: Earth Observation and Modelling (EOM), Christian-Albrechts-Universität zu Kiel, Geographisches Institut, Ludewig-Meyn-Straße 8, 24118 Kiel, Schleswig-Holstein, Germany; 4: German Remote Sensing Data Center (DFD), German Aerospace Center (DLR), 82234 Wessling, Germany; 5: University of Würzburg, Institute of Geography and Geology, Department of Remote Sensing, 97074 Würzburg, Germany; 6: European Commission, Joint Research Center (JRC), 21027 Ispra, Italy; 7: Swiss Federal Research Institute WSL, Zürcherstrasse 111, 8902 Birmensdorf, Switzerland; 8: Department of Agricultural, Forest and Food Sciences, University of Turin, L.go Braccini 2, 10095 Grugliasco, Italy; 9: EFTAS Fernerkundung GmbH, Oststraße 2-18, 48145 Münster; 10: Humboldt Universität zu Berlin, Integrative Research Institute on Transformations of Human-Environment Systems - IRI THESys, Unter den Linden 6, 10099 Berlin, Germany; 11: CESBIO, Université de Toulouse, CNES/CNRS/INRAE/IRD/UPS, 31400 Toulouse, France; 12: IGN – French Mapping Agency (Institut Géographique National), 94160 Saint-Mandé, France; 13: Technische Universität Berlin, Geoinformation in Environmental Planning Lab, Straße des 17 Juni 145, 10623 Berlin, Germany; 14: Université Gustave Eiffel, IGN, ENSG, LASTIG, 94160 Saint-Mandé, France; 15: Earth and Life Institute, Université Catholique De Louvain, 1348 Louvain-la-Neuve, Belgium; 16: Agricultural Research and Education Center Raumberg-Gumpenstein, 8952 Irdning-Donnersbachtal, Austria; 17: BEYOND Centre of EO Research and Satellite Remote Sensing, IAASARS, National Observatory of Athens, 15236 Penteli, Greece; 18: Institute for Earth Observation, Eurac Research, Drususallee/Viale Druso 1, 39100 Bozen/Bolzano, Italy

### Potential of Planet's SkySat Collect Images for Topographic Mapping

Gurcan Buyuksalih<sup>1</sup>, Cem Gazioglu<sup>1</sup>, Karsten Jacobsen<sup>2</sup>

1: Istanbul University, Institute of Marine Sciences and Management, Turkiye; 2: Leibniz University Hannover, Institute of Photogrammetry and Geoinformatics, Germany

### Quantification Of Nitrogen Uptake In Cover Crops From UAV-based Multispectral Images

Paolo Dal Lago<sup>1</sup>, Nikos Vavlas<sup>1</sup>, Lammert Kooistra<sup>2</sup>, Gerlinde De Deyn<sup>1</sup>

1: Soil Biology Group, Wageningen University, The Netherlands; 2: Laboratory of Geo-information Science and Remote Sensing, Wageningen University, Netherlands, The

### VGG Convolutional Neural Network Hardware Implementation For Soil Roughness Estimation

Stefan Popa, George Feldioreanu, Mihai Ivanovici  
Transilvania University of Brasov, Romania

3:40pm

CB2D2: Coffee break

Location: First floor corridor

-

4:10pm

4:10pm

PPD2: Short - oral presentation of the posters

Location: Ioan Mihăilescu

-

5:50pm

4:30pm

EARSeL Council Meeting (members only)

Location: Sala Senatului

-

6:00pm

Date: Wednesday, 05/July/2023

8:00am - 4:00pm	<b>RD3: Participants registration</b> Location: <b>Registration desk</b>	
9:00am - 10:40am	<b>FS2: Remote sensing solutions for a sustainable forest management</b> Location: <b>Dimitrie Cantemir</b>  <b>Sentinel-2, PlanetScope 2 And Airborne Hypspx Hyperspectral Imagery For Mountain Woody Species Mapping</b> <b>Marcin Kluczek<sup>1</sup>, Bogdan Zagajewski<sup>1</sup>, Tomasz Zwijacz-Kozica<sup>2</sup></b> 1: Department of Geoinformatics, Cartography and Remote Sensing, Chair of Geomatics and Information Systems, Faculty of Geography and Regional Studies, University of Warsaw, Poland; 2: Tatra National Park, Poland	<b>W3Agriculture: Risk detection and management in agriculture - climate</b> Location: <b>Grigore Moisil</b>  <b>A Web Tool For Irrigation Management To Support Local Authorities And Farmers In Cyprus from ERATOSTHENES Centre of Excellence</b> <b>Stelios Neophytides<sup>1,3</sup>, Marinos Eliades<sup>1</sup>, Georgios Papadavid<sup>2</sup>, Christiana Papoutsas<sup>1,3</sup>, Diofantos Hadjimitsis<sup>1,3</sup></b> 1: ERATOSTHENES Centre of Excellence, Cyprus; 2: Agricultural Research Institute, Cyprus; 3: Cyprus University of Technology, Cyprus
	<b>Exploring Characteristics Of National Forest Inventories For Integration With Global Space-Based Forest Biomass Data</b> <b>Karimon Nesha<sup>1</sup>, Martin Herold<sup>1</sup>, Veronique De Sy<sup>1</sup>, Sytze De Bruin<sup>1</sup>, Arnan Araza<sup>1</sup>, Natalia Málaga<sup>1</sup>, Javier GP Gamarra<sup>2</sup>, Kristell Hergoualc'h<sup>3</sup>, Anssi Pekkarinen<sup>2</sup>, Carla Ramirez<sup>2</sup>, David Morales-Hidalgo<sup>2</sup>, Rebecca Tavani<sup>2</sup></b> 1: Wageningen University and Research, Netherlands, The; 2: Food and Agriculture Organization of the United Nations; 3: Center for International Forestry Research (CIFOR)	<b>Agricultural Drought Monitoring In The Danubian Lowland Using Vegetations Indices Derived From MODIS Time Series</b> <b>Tomáš Rusňák</b> ILE SAS v.v.i., Slovak Republic
	<b>Canopy Height Estimation Using Earth Observation Data and Machine Learning</b> <b>Sriram Babu Jallu<sup>1</sup>, Kathiravan Thangavel<sup>2</sup>, Riyaz Uddin Shaik<sup>3</sup>, Dario Spiller<sup>3</sup></b> 1: Department of Civil and Environmental Engineering, IIT Tirupati, A.P., India; 2: Sir Lawrence Wackett Defence & Aerospace Centre, RMIT University, Melbourne, VIC, Australia; 3: School of Aerospace Engineering, Sapienza University of Rome, Rome, Italy	<b>An Automated Cloud Detection Method for Sentinel-2 Imageries</b> <b>Rohit Singh<sup>1</sup>, Mantosh Biswas<sup>2</sup>, Mahesh Pal<sup>1</sup></b> 1: National Institute of Technology Kurukshetra, India; 2: National Institute of Technology Jamshedpur, India
	<b>Assessing the Correlation between Fractional Vegetation Cover (FVC) Variations and Regional Climate Variability in Beas Basin, Kullu district, Himachal Pradesh, India</b> <b>Savanta Ghosh, Aniruddh Soni, Jitendra Vir Sharma</b> The Energy and Resources Institute, India	<b>Evaluating Sentinel-1's ability to identify bare soil on tillage parcels in winter in the Republic of Ireland using Random Forest Model</b> <b>Mohana Priya Logakrishnan<sup>1,2</sup>, Jesko Zimmermann<sup>1</sup>, Stuart Green<sup>1,2</sup></b> 1: TEAGASC, Ireland; 2: TERRAIN-AI, Ireland
	<b>Automatic Detection of Tree Species in Heterogeneous Forests Using RGB Imagery and Deep Learning</b> <b>Mirela Beloiu, Nataliia Rehus, Verena Griess</b> ETH Zurich, Department of Environmental Systems Science, Switzerland	<b>From the Lab to the Farm: Quantifying Factors Influencing Temperature Measurements from Miniaturized Thermal Cameras to Benefit Crop Water Stress Detection at Different Crop Growth Stages</b> <b>Quanxing Wan<sup>1</sup>, Magdalena Smigaj<sup>1</sup>, Benjamin Brede<sup>2</sup>, Lammert Kooistra<sup>1</sup></b> 1: Laboratory of Geo-Information Science and Remote Sensing, Wageningen University & Research, Droevendaalsesteeg 3, 6708 PB Wageningen, The Netherlands; 2: Helmholtz Center Potsdam GFZ German Research Centre for Geosciences, Section 1.4 Remote Sensing and Geoinformatics, Telegrafenberg, 14473 Potsdam, Germany
10:40am - 11:10am	<b>CB1D3: Coffee break</b> Location: <b>First floor corridor</b>	

11:10am **Keynote natural hazards: Dr Filippo Catani - University of Padova**  
Location: **Ioan Mihăilescu**

-

12:00pm

12:00pm **Posters D3 WAgriculture: Integrated remote sensing methods for improving agricultural practices**  
Location: **First floor corridor**

-

1:00pm

**Posters D3: Remote sensing applications for natural hazards**  
Location: **First floor corridor**

**Assessing the Impact of Ozone on Crop Health and Productivity Using Open-Source Remote Sensing Data and Machine Learning**

**Luka Mamic<sup>1</sup>, Francesco Pirotti<sup>2,3</sup>**

1: Sapienza University of Rome, Department of Civil, Building and Environmental Engineering, Italy; 2: University of Padova, Department of Land and Agroforestry Systems (TESAF), Italy; 3: University of Padova, Interdepartmental Research Centre in Geomatics (CIRGEO), Italy

**A Semiautomated Mapping of Landslide Volume Displacements Using UAV Aerial Imagery**

**Radu Irimia<sup>1</sup>, Ionut Sandric<sup>1</sup>, Viorel Ilinca<sup>2</sup>, Zenaida Chitu<sup>3,4</sup>, Ion Gheuca<sup>2</sup>**

1: University of Bucharest, Romania; 2: Geological Institute of Romania, Romania; 3: National Meteorological Administration, Romania; 4: National Institute of Hydrology and Water Management, Romania

**On-board Data Processing for real time inference using Edge-AI: An application on Weed Detection.**

**Sarathchandrakumar Thottuchirayil Sasidharan<sup>1</sup>, Daniele Latini<sup>2</sup>, Mihai Ivanovici<sup>3</sup>, Giovanni Schiavon<sup>1</sup>, Kathiravan Thangavel<sup>4</sup>, Fabio Del Frate<sup>1</sup>**

1: University of Rome, "Tor Vergata", Rome, Italy; 2: GEO-k srl, Rome, Italy; 3: University of Brasov, Braşov, Romania; 4: RMIT UNIVERSITY, Melbourne, Australia

**Eo-persist: a Cloud-based Remote Sensing Data System for Promoting Research and Socioeconomic Studies in Arctic Environments**

**George P. Petropoulos<sup>1</sup>, Vassilia Karathanassi<sup>2</sup>, Ionut Sandric<sup>3</sup>, Dimitris Sykas<sup>4</sup>, Marko Scholtz<sup>5</sup>, Łukasz Kubowicz<sup>6</sup>, Giuseppe Di Carpio<sup>7</sup>, Juha Lemmetyinen<sup>8</sup>, Massimiliano Chersich<sup>9</sup>, Manfred Kruschke<sup>10</sup>, Spyridon E. Detsikas<sup>1</sup>**

1: Department of Geography, Harokopio University of Athens, El. Venizelou 70, Kallithea, 17671, Athens, Greece; 2: Remote Sensing Laboratory, School of Rural, Surveying and Geoinformatics Engineering, National Technical University of Athens, 9 Heron Polytechniou St., Zographou, Athens, 157 80, Greece; 3: Faculty of Geography, University of Bucharest, Bd. N. Balcescu, 1, 010041 Bucharest, Romania; 4: CloudEO Hellas, Boukouvala 8, 11471 Athens, Greece; 5: Department of Physical Geography and Ecosystem Science, Lund University, Se-22362 Lund, Sweden; 6: CloudFerro Sp. z o. o, ul. Nowogrodzka, 31 00-511, Warszawa, Poland; 7: PlanetGIS-SKY, Street Theodor Aman 17 E, Sinaia, Romania; 8: Arctic Space Center, Finnish Meteorological Institute, P.O. Box 503, 00101 Helsinki, Finland; 9: YETITMOVES SRL, Via Ferrata 1, 27020, Pavia, Italy; 10: CloudEO AG, Ludwigstrasse 8, 80539 Munich, Germany

**Monitoring the Impacts of Climate Change on Changing Crop Cultivation Patterns using an Integrated Approach of Remote Sensing and Google Earth Engine**

**Mohammad Kazemi Garajeh**

Sapienza University of Rome, Italy

**Fertilization of Maize Crops Using Remote Sensors of an Autonomous Field Robot**

**Katarzyna Kubiak, Jan Kotlarz**

Lukasiewicz - Institute of Aviation, Poland

**Monitoring Urban Traffic Impact In Urban Environments Using Yolo7**

**Marian Puie, Bogdan-Andrei Mihai, Ionuț Şandric**  
University of Bucharest, Romania

**Uncertainty Analysis Method for Hyperspectral Remote Sensing Surface Reflectance Products**

**Yujie Zhao, Guorui Jia, Huijie Zhao**

北京航空航天大学, China, People's Republic of

**Assessment of Grassland Forage Quality in the Context of Northern Europe Agriculture Using Sentinel-2**

**Julianne Oliveira<sup>1</sup>, Julien Morel<sup>2</sup>, Junxiang Peng<sup>1</sup>, Bengt-Ove Rustas<sup>3</sup>, David Parsons<sup>1</sup>**

1: Swedish University of Agricultural Sciences, Department of Crop Production Ecology, Sweden; 2: European Commission, Joint Research Center, Ispra, Italy; 3: Swedish University of Agricultural Sciences, Department of Animal Nutrition and Management, Sweden

**Identification, Mapping And Assessment Of Windthrow Effects Using Remote Sensing Methods**

**Constantin-Cosmin Loghin<sup>1</sup>, Flaviu Popescu<sup>1</sup>, Florin Achim<sup>1</sup>, Ionel Ban<sup>1</sup>, Mihai Furdul<sup>1</sup>, Robert-Ştefan Ciobanu<sup>1</sup>, Razvan Raducu<sup>1</sup>, Virgil Zamfira<sup>2</sup>, Aurelian Vladoiu<sup>2</sup>**

1: National Institute for Research and Development in Forestry "Marin Drăcea", Romania; 2: Curtea de Argeş Forest District

**Identification Of The Driving Factors For The Occurrence Of Forest Fires And The Zoning Of Forest Fire Hazard Through Logistic Regression And**



**Mowing Detection Based On Sentinel-1 & -2 Data For Supporting CAP In Wallonia**

**François Godechal, Emilie Beriaux, Alban Jago, Adrien Cassiers, Cozmin Lucau-Danila, Yannick Curnel, Viviane Planchon**

Walloon Agricultural Research Centre, Belgium

**Random Forest In Romania Fire Hazard Through Logistic Regression and Random Forest in Romania**

**Adrian Lorent<sup>1,2</sup>, Marius Petrila<sup>1</sup>, Bogdan Apostol<sup>1</sup>, Florinel Capalb<sup>1,2</sup>, Cristiana Marcu<sup>1</sup>, Ovidiu Badea<sup>1,2</sup>**

1: National Institute for Research and Development in Forestry (INCDS), "Marin Drăcea", Romania; 2: "Transilvania" University of Braşov, Faculty of Silviculture and Forest Engineering, Braşov, Romania

**Forest post fire regrowth mapping using metric burn severity and Google Earth Engine (case study West of Algeria)**

**Ghabi Mohamed, Nadjla Bentekhici, Assia Saad**  
AGENCE SPATIAL ALGERIENNE, Algeria

1:00pm

LD3: Lunch

-

2:00pm

2:00pm

-

3:40pm

**NH1: Recent Earth Observation technology applications in natural hazards research**

Location: **Dimitrie Cantemir**

**Automatic Mapping of Landslides by Deep Learning and High-Resolution LiDAR Products**

**Ales Létal, Ionuț Şandric, Jan Klimes**

Palacký University Olomouc, Czech Republic

**W4Agriculture: Risk detection and management in agriculture - pests and weeds**

Location: **Grigore Moisil**

**Early Detection of Red Palm Weevil in Date Orchards Using Drone Imagery**

**Micha Silver, Arnon Karnieli**

Ben Gurion University, Israel

**Satellite Analysis Of The Impact Of Severe Meteorological Phenomena On The Vulnerable Sandy Lands Of The Baragan Plain**

**Claudiu-Valeriu Angearu, Anișoara Irimescu, Denis Mihăilescu, Irina Onțel, Argentina Nerțan, Vasile Crăciunescu**

National Meteorological Administration, Romania

**Leveraging Multimodality For Disease Detection In Seed Potatoes**

**Magdalena Smigaj, Harm Bartholomeus, Lammert Kooistra**

Laboratory of Geo-Information Science and Remote Sensing, Wageningen University & Research, Droevendaalsesteeg 3, 6708 PB Wageningen, The Netherlands

**Mapping active slow-moving landslides using Persistent Scatters Interferometry in Romania**

**Ionuț Sandric<sup>1</sup>, Viorel Ilinca<sup>2</sup>, Zenaida Chitu<sup>3,4</sup>, Radu Irimia<sup>1</sup>**

1: University of Bucharest, Faculty of Geography, Romania; 2: Geological Institute of Romania, Romania; 3: National Meteorological Administration, Romania; 4: National Institute of Hydrology and Water Management, Romania

**Mapping Vineyards Pathogens Using Convolutional Neural Networks**

**Diana Petre<sup>1</sup>, Ionuț Şandric<sup>2</sup>, Diana Vizitiu<sup>3</sup>, Ionela Sărdărescu<sup>3</sup>, Marian Dârdală<sup>1</sup>, Cristian Ioniță<sup>1</sup>**

1: Bucharest University of Economic Studies, Romania; 2: University of Bucharest; 3: INCDBH Ștefănești, Romania

**Enhancing Landslide Deformation Prediction in Southern Italy Using a CNN-LSTM Algorithm with Spatio-Temporal Dependency**

**Mohammad Amin Khalili, Luigi Guerriero, Domenico Calcaterra, Diego Di Martire**

University of Naples "Federico II", Department of Earth, Environmental and Resource Sciences, Italy

**Sentinel-2 And PlanetScope Data For Alien Invasive Species of Goldenrod (Solidago Spp.) Mapping**

**Karolina Barbara Zdunek, Marcin Kluczek, Bogdan Zagajewski**

Department of Geoinformatics, Cartography and Remote Sensing, Chair of Geomatics and Information Systems, Faculty of Geography and Regional Studies, University of Warsaw, Poland

**Desertification Mitigation Policies In The Face Of Climate Change In Kenya: Exploring The Potential Of Remote Sensing For Supporting Stakeholder Involvement**

**Spatialization of Japanese Knotweed Colonies: from Local Drone Scale to Regional Airborne Application**

**Coraline Wyard<sup>1</sup>, Florian Bueno<sup>1,2</sup>, Benjamin Beaumont<sup>1</sup>, Yasmina Loozen<sup>1</sup>, Eric Hallot<sup>1</sup>**

**Martin W. Chege<sup>1</sup>, Angeline Asangire Oprong<sup>2</sup>**

1: Remote Sensing Research Group (RSRG), Institute of Geomatics GIS & Remote sensing (IGGRoS), Dedan Kimathi University of Technology (DeKUT), Kenya; 2: Carl von Ossietzky Universität Oldenburg

1: Remote Sensing and Geodata Unit, Institut Scientifique de Service Public (ISSeP), Liège, Belgium; 2: Ecole Nationale des Sciences Géographiques (ENSG), Paris, France

**3:40pm**

-

**CB2D3: Coffee break**

Location: **First floor corridor**

**4:10pm**

**4:30pm**

-

**EARSeL General Assembly (members only)**

Location: **Ioan Mihăilescu**

**6:00pm**

**7:00pm**

-

**SDinner: Symposium dinner**

**11:00pm**

Date: Thursday, 06/July/2023

8:00am - 12:00pm	<b>RD4: Participants registration</b> Location: <b>Registration desk</b>	
9:00am - 10:40am	<b>LULC: Land use and land cover - remote sensing</b> Location: <b>Dimitrie Cantemir</b>  <b>Comparison of Machine Learning Algorithms For Land Cover Mapping According to Corine Land Cover Nomenclature</b> <b>Marcin Kluczek<sup>1</sup>, Bogdan Zagajewski<sup>1</sup>, Edwin Raczko<sup>1</sup>, Marlena Kycko<sup>1</sup>, Anca Dabija<sup>1</sup>, Ahmed H. Al-Sulttani<sup>1</sup>, Anna Tardá<sup>2</sup>, Lydia Pineda<sup>2</sup>, Jordi Corbera<sup>2</sup></b> 1: Department of Geoinformatics, Cartography and Remote Sensing, Chair of Geomatics and Information Systems, Faculty of Geography and Regional Studies, University of Warsaw, 00-927 Warszawa, Poland; 2: Catalan Earth Observation Centre, Cartographic and Geological Institute of Catalonia, E-08038 Barcelona, Spain	<b>UAS: Using UAS for natural hazards and environmental studies</b> Location: <b>Grigore Moisil</b>  <b>Can We Trust LiDAR? The Influence Of Scanner Type And Setup On Derived Forest Structural Parameters.</b> <b>Harm Bartholomeus</b> Wageningen University, Netherlands, The
		<b>Self-Calibration Still An Underestimated Tool</b> <b>Karsten Jacobsen</b> Leibniz University Hannover, Germany
	<b>Can we Improve the Accuracy of the Land Cover Classification by Pre-selection of the Reference Samples and Applying DEM in the Mountain Area in Norway?</b> <b>Adam Waśniewski<sup>1</sup>, Agata Hościło<sup>1</sup>, Linda Aune-Lundberg<sup>2</sup></b> 1: Institute of Geodesy and Cartography, Centre of Applied Geomatics, Poland; 2: Norwegian Institute of Bioeconomy Research, Division of Survey and Statistics, Norway	<b>Geo-monitoring Of Tree Species, Vitality And Maintenance Condition Of Fruit Trees In Meadow Orchards Using UAV Technology</b> <b>Sarah Pflüger<sup>1</sup>, Mario Bliersch<sup>1</sup>, Maïke Petersen<sup>1</sup>, Alexander Siegmund<sup>1,2</sup></b> 1: Heidelberg University of Education, Germany; 2: Heidelberg Center for the Environment (HCE) & Institute of Geography, Heidelberg University, Germany
	<b>ST_LUCAS: Easy Access System for Harmonized LUCAS Dataset</b> <b>Tomáš Bouček, Martin Landa, Lukáš Brodský, Lena Halounová, Ondřej Pešek</b> CTU in Prague, Faculty of Civil Engineering, Czech Republic	<b>Trends and Challenges of Earth Observation</b> <b>Doris Klein</b> Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Germany
	<b>Exploring The Use Of Orthophotos In Google Earth Engine For High-Resolution Mapping Of Impervious Surfaces: A Data Fusion Approach In Wuppertal, Germany</b> <b>Jan-Philipp Langenkamp, Andreas Rienow</b> Ruhr-University Bochum, Geomatics Research Group, Institute of Geography, Germany	<b>The Support of the UAV Imagery in Complementarity of the Satellite High Resolution Remote Sensing Imagery for the Romanian Shore Monitoring</b> <b>Razvan Mateescu<sup>1</sup>, Liliana Rusu<sup>2</sup>, Elena Vlasceanu<sup>1</sup>, Dragos Niculescu<sup>1</sup></b> 1: NIMRD, Romania; 2: DJUG, Romania
10:40am - 11:10am	<b>Regional Modeling of Future Urban Growth based on Global Settlement Products – Comparing the Performances of OSM with the Global Human Settlement Layer and the World Settlement Footprint</b> <b>Andreas Rienow</b> Ruhr University Bochum, Germany	
11:10am - 12:50pm	<b>CB1D4: Coffee break</b> Location: <b>First floor corridor</b>  <b>Hy: Hyperspectral and multispectral applications of remote sensing</b> Location: <b>Dimitrie Cantemir</b>	<b>UCUG: Urban climate and green infrastructure applications with remote sensing</b> Location: <b>Grigore Moisil</b>

**A Pathway to Simultaneous Data Volume Reductions and Quantitative Analysis of Hyperspectral Geological Remote Sensing Data**

**Edward Anthony Cloutis**

University of Winnipeg, Canada

**Investigating Extreme Temperature Variabilities in Deprived Urban Areas in Sub-Saharan African Cities**

**Stefanos Georganos<sup>1</sup>, Sabine Vanhuyse<sup>2</sup>, Angela Abascal<sup>3</sup>, Jon Wang<sup>4</sup>, Monika Kuffer<sup>4</sup>**

1: Geomatics Unit, Department of Environmental and Life Sciences, Karlstad University, Sweden; 2: Department of Geosciences, Environment & Society, Université libre De Bruxelles (ULB), 1050 Bruxelles, Belgium; 3: Navarra Center for International Development, Instituto de Cultura y Sociedad (ICS), University of Navarra, Pamplona, Spain; 4: Faculty of Geo-Information Science & Earth Observation (ITC), University of Twente, Enschede, The Netherlands

**Assessment Of The Novel Watersat Imaging Spectrometer Enhanced (WISE) Sensor For The Mapping Of Optically Shallow Inland And Coastal Waters**

**Gabriela Ifimov<sup>1</sup>, Raymond Soffer<sup>4</sup>, Raphaël Mabit<sup>2</sup>, Simon Belanger<sup>2</sup>**

1: National Research Council Canada; 2: Université du Québec à Rimouski

**Comparative Study of Urban Heat and its Vulnerability in Nashville and Portland, USA**

**Sunhui Sim**

University of North Alabama, United States of America

**Detection of Geothermal Anomalies Using Pre-Dawn Thermal Remote Sensing Data from ECOSTRESS Sensor**

**Agnieszka Soszynska<sup>1</sup>, Thomas Groen<sup>1</sup>, Harald van der Werff<sup>1</sup>, Eunice Bonyo<sup>2</sup>, Robert Hewson<sup>3</sup>, Robert Reeves<sup>4</sup>, Christoph Hecker<sup>1</sup>**

1: University of Twente, the Netherlands; 2: KenGen, Kenya; 3: Independent researcher, Australia; 4: GNS Science, New Zealand

**Semantic Identification of Urban Green Spaces: Urban Gardens**

**Irada Ismayilova, Sabine Timpf**

University of Augsburg, Germany

**Initial Validation of Sentinel-2 Collection-1 L2A-Products**

**Bringfried Pflug<sup>1</sup>, Jérôme Louis<sup>2</sup>, Avi Putri Pertiwi<sup>1</sup>, Raquel de los Reyes<sup>1</sup>, Francesco C. Pignatale<sup>3</sup>, Silvia Enache<sup>4</sup>, Rosario Quirino Iannone<sup>5</sup>, Valentina Boccia<sup>6</sup>, Ferran Gascon<sup>6</sup>**

1: German Aerospace Centre, Remote Sensing Technology Institute, Germany; 2: Telespazio France - A Leonardo / Thales Company, France; 3: Telespazio Germany GmbH – A Leonardo / Thales Company, Germany; 4: CS Group, France; 5: Rhea spa, Italy; 6: European Space Agency (ESA), European Space Research Institute (ESRIN), Italy

**Using GEOBIA and Vegetation Indices to Assess Small Urban Green Areas in Two Climatic Regions**

**Ana-Maria Popa<sup>1,2</sup>, Diana-Andreea Onose<sup>1,2</sup>, Ionut-Cosmin Sandic<sup>2</sup>, Evangelos Dosiadis<sup>3</sup>, George Petropoulos<sup>3</sup>, Athanasios-Alexandru Gavrilidis<sup>1,2</sup>, Antigoni Faka<sup>3</sup>**

1: University of Bucharest, Centre for Environmental Research and Impact Studies, Romania; 2: University of Bucharest, Faculty of Geography, Romania; 3: Harokopio University of Athens, Department of Geography, Greece

**Improving Land Use and Land Cover Mapping with VHR \& Multi-Temporal Sentinel 2 Imagery**

**Suzanna Cuyppers<sup>1</sup>, Andrea Nascetti<sup>2</sup>, Maarten Vergauwen<sup>1</sup>**

1: KU Leuven, Belgium; 2: University of Liege, Belgium

**Monitoring High-Resolution LST In Woody Crops From The Synergy Of Sentinel-2 And Sentinel-3**

**Juan Manuel Sánchez<sup>1</sup>, Joan Miquel Galve<sup>1</sup>, Alejandro Martín Simón-Sánchez<sup>1</sup>, José González-Piqueras<sup>1</sup>, Ramón López-Urrea<sup>2</sup>**

1: University of Castilla-La Mancha, Remote Sensing and GIS group, IDR, Campus Universitario s/n, 02071 Albacete, Spain; 2: Instituto Técnico Agronómico Provincial, Parque empresarial Campollano, 2ª Avda. Nº 61, 02007 Albacete, Spain.

12:50pm

LD4: Lunch

-

2:00pm

2:00pm

-

6:00pm

FE: Field excursion