

Conference Agenda

Session Overview

Date: Monday, 17/June/2024

8:00am - 5:00pm	Reg 1: Registration Location: Business School of Manchester Metropolitan University	
8:45am - 9:00am	Opening ceremony Location: BS G.36 Chair: Dr. Elias Symeonakis Chair: Dr. Christina Karakizi Opening ceremony 5-min talks from: - MMU Dean of Faculty of Science & Engineering, Prof. Mark Sterling - President of EARSeL, Dr Jean-Christophe Schyns - Local Organiser, Dr Elias Symeonakis	
9:00am - 9:30am	Keynote C. Tucker Location: BS G.36	
9:30am - 11:00am	<p>UAS S1 Location: BS G.35</p> <p>Improving Accessibility Of Drone-based Environmental Monitoring Through A Direct Georeferencing-based Image Processing Service Klaas Pauly, Pieter-Jan Baeck, Liesbeth De Keukelaere, Dominique De Munck, Wouter Dierckx, Walter Horsten, Robrecht Moelans, Sam Oswald, Gert Strackx, Kris Vanhoof, Dries Raymaekers VITO, Belgium</p> <p>Near Real-Time Flood Detection And Mapping Using UAS Pieter-Jan Baeck, Lisa Landuyt, Kris Vanhoof, Walter Horsten, Klaas Pauly, Nicolas Lewyckyj VITO, Remote Sensing Department, Belgium</p> <p>AI-based Tree Species Classification and Segmentation from UAS Multispectral Data Romy Schlögel¹, Nicola Dimarco¹, Louis Andreani¹, Matthieu Duval², Cadwal Borremans^{1,3}, Benoît Bartiaux¹ 1: Spacebel sa., Earth Observation Applications, Belgium; 2: Multitel asbl, Department of AI, Belgium; 3: University of Liège, Department of Geography, Belgium</p> <p>Prediction of Turbidity and TDS in Dam Reservoir from Multispectral UAV-Drone and Sentinel-2 Image Sensors using Stacked Machine Learning Models Yashon Ouma¹, Phillimon Odirile¹, Boipuso Nkwae¹, Ditiro Moalafhi², George Anderson¹, Bhagabat Parida³, David Mandiyanike¹, Jiaguo Qi⁴ 1: University of Botswana, Botswana; 2: BUAN; 3: BIUST; 4: Michigan State University</p> <p>Integrating Field Surveys with UAV Imagery for Agricultural Plant Cover Monitoring Carmen Orts¹, Maria Desamparados Soriano², Ramón Pons-Crespo³, Ángel Marqués-Mateu³, Gabriel Riutort-Mayol⁴ 1: Instituto Valenciano de Investigaciones Agrarias (IVIA), Spain; 2: Universitat Politècnica de València, Department of Plant Production, Spain; 3: Universitat Politècnica de València, Department of Cartographic Engineering, Geodesy and Photogrammetry, Spain; 4: Fundación para el Fomento de la Investigación Sanitaria y Biomédica (FISABIO), Spain</p> <p>Glacier Change Monitoring from Multitemporal UAV data: the Case Study of Forni Glacier (Italy) Davide Fugazza Università degli studi di Milano, Italy</p>	<p>W1 Agriculture Location: BS G.36 Chair: Prof. Enrico Borgogno-Mondino Chair: Prof. Dr. Francesco Pirotti</p> <p>Satellite Based Estimation Of Grassland Yield And Quality Dynamics Andreas Schaumberger¹, Andreas Klingler¹, Aleksandar Dujakovic², Konrad Mayer³, Felix Reuß⁴, Clement Atzberger², Francesco Vuolo² 1: Agricultural Research and Education Center (AREC) Raumberg-Gumpenstein, Austria; 2: University of Natural Resources and Life Sciences, Institute of Geomatics, Austria; 3: GeoSphere Austria; 4: Vienna University of Technology, Department of Geodesy and Geoinformation, Austria</p> <p>Subnational Statistics from Field-Level Yield Estimation and Forecast: Evaluation of Models Ingesting Sentinel-2 data Pierre Houdmont¹, Martin Claverie², Pierre Defourny¹ 1: UCLouvain, Earth and Life Institute, Belgium; 2: EU Commission, Joint Research Center (JRC-ISPRA), Italy</p> <p>Annual Grassland Yield Estimation Based On Sentinel-2 Time Series Sophie Reinermann^{1,2}, Anne Schucknecht³, Ursula Gessner², Sarah Asam², Ralf Kiese⁴, Claudia Kuenzer^{1,2} 1: Department of Remote Sensing, Institute of Geography and Geology, University of Wuerzburg, Germany; 2: German Remote Sensing Data Center (DFD), Earth Observation Center (EOC), German Aerospace Center (DLR), Germany; 3: OHB System AG, Image Simulation and Processing Team, Germany; 4: Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research – Atmospheric Environmental Research, Germany</p> <p>Towards the Early Detection of Autumn Wheat in PRISMA Images Mihai Ivanovic¹, Serban Oprisescu¹, Corneliu Florea^{1,2} 1: Transilvania University of Brasov, Romania; 2: National University of Science and Technology Politehnica of Bucharest, Romania</p> <p>Grassland History From Remote Sensing Time Series: Improving The Data Basis For Greenhouse Gas Reporting Lukas Blickensdörfer^{1,2}, Tom Brög¹, Felix Lobert^{1,2}, Patrick Hostert^{2,3}, Stefan Erasmi¹ 1: Thünen Institute of Farm Economics, Thünen Earth Observation (THEO), Germany; 2: Humboldt-Universität zu Berlin, Earth Observation Lab, Geography Department, Germany; 3: Humboldt-Universität zu Berlin, Integrative Research Institute of Transformations of Human-Environment Systems (IRI THESys), Germany</p> <p>A Systematic Study On The Influence Of Remote Sensing Data Resolution Designed To Improve The</p>

		<p>Efficiency Of Soil Organic Carbon Monitoring Activities Savannah McGuirk^{1,2}, S. Mohammad Mirmazloumi³ 1: Carbon Monitoring Services, Canberra, Australia; 2: CUAVA, the ARC Training Centre for CubeSats, UAVs and their Applications, University of Sydney, Australia; 3: Leibniz-Centre for Agricultural Landscape Research (ZALF), Germany</p>
<p>11:00am - 11:30am</p>	<p>Coffee break Mon1 Location: Business School of Manchester Metropolitan University</p>	<p>Monday Poster Session Location: Business School North Atrium Foyer</p> <hr/> <p>Exploring the Time-lag Effect of Meteorological and Vegetation Features on European Summer Wildfires with Explainable Artificial Intelligence (XAI) Hanyu Li¹, Stenka Vulova^{1,2}, Alby Duarte Rocha¹, Birgit Kleinschmit¹ 1: Technical University of Berlin, Germany; 2: University of Kassel, Germany</p> <hr/> <p>The Importance of Feature Engineering for the Explainability of (German) Digital Soil Mapping Products – a SOC Content Modelling Example in Bavaria Markus Möller¹, Simone Zepp², Martin Wiesmeier³, Younes Garosi¹, Uta Heiden⁴ 1: Julius Kühn Institute (JKI), Germany; 2: German Aerospace Center (DLR), German Remote Sensing Data Center (DFD); 3: Bavarian State Research Center for Agriculture, Institute for Organic Farming, Soil and Resource Management; 4: German Aerospace Center (DLR), Remote Sensing Technology Institute (IMF)</p> <hr/> <p>Accuracy Assessment of Remote Sensing UAV's Spatial Positioning when Processing Predefined Flight Patterns and during Automatic Landing Process Timo P. Lehmann, Simon Drollinger, Daniela Sauer, Jonas Fierke, Birgitta M. Putzenlechner, Daniel Wyss, Martin Kappas Georg-August-University of Goettingen, Institute of Geography, Germany</p> <hr/> <p>Integrating IEEE P4001 Standards For Hyperspectral Imager Calibration Into UAS Sensor Calibration Workflows – The Case Of NERC FSF's UAS Sensor Suite Robbie Ramsay NERC Field Spectroscopy Facility, United Kingdom</p> <hr/> <p>Plant Species Richness Across Grasslands in Germany Javier Muro Thuenen Institute, Germany</p> <hr/> <p>Mowing Detection Based On Sentinel-2 Time Series: From Wallonia to Europe François Godechal¹, Emilie Beriaux¹, Alban Jago¹, Marcel Schwieder², Felix Lobert², Adrien Cassiers¹, Viviane Planchon¹ 1: Walloon Agricultural Research Centre, Belgium; 2: Thünen Institute of Farm Economics, Germany</p> <hr/> <p>Multi-frequency SAR Time Series for the Detection of Tillage Practices and Seedbed Preparation Basile Boland, Tom Kenda, Jean Bouchat, Pierre Defourny Université catholique de Louvain, Earth and Life Institute, Belgium</p> <hr/> <p>FAIR Research Data: Analysis-Ready Sentinel-1 and Sentinel-2 Data as a Standardized Web Service Florian Beyer¹, Jennifer McClelland², Tanja Riedel², Marvin Dierks¹, Heike Gerighausen¹, Markus Moeller¹</p>

1: Julius Kuehn Institute, Institute for Crop and Soil Science, Germany; 2: Julius Kuehn Institute, Institute for Strategies and Technology Assessment, Germany

Climate Scenarios And Earth Observation For Agriculture: Insights From the Agritech Project

Francesco Pirotti^{1,2}, Marco Piragnolo^{1,2}, Francesco Morari³, Samuele Trestini¹

1: University of Padua, Department of Land and Agroforestry Systems (TESAF), Italy; 2: University of Padua, Interdepartmental Research Centre in Geomatics (CIRGEO), Italy; 3: University of Padua, Department of Agronomy, Food, Natural Resources, Animals and the Environment (DAFNAE), Italy

Within-field Crop Growth Heterogeneity from Multi-year Leaf Area Index Time Series Analysis

Tom Kenda, Céline Champagne, Xavier Draye, Pierre Defourny

Université catholique de Louvain, Earth and Life Institute, Belgium

Time-Series Of Remotely Sensed Data To Estimate Wheat Grain Yield At Field Level

Francesco Nutini¹, Mattia Scarpantoni¹, Federico Filippini², Mirco Boschetti¹

1: Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy, Milano, Italy; 2: Institute of Environmental Geology and Geoengineering, National Research Council of Italy, Roma, Italy

Exploring The Relationships Between Ground Observations And Remotely Sensed Hazelnut Spring Phenology

Sofia Bajocco¹, Mara Di Giulio¹, Abdoul Hamid Mohamed Sallah², Simone Bregaglio¹

1: CREA - Council for Agricultural Research and Economics, Research Center for Agriculture and environment, Italy; 2: Ferrero Hazelnut Company, Ferrero Trading Lux, Senningerberg, Luxembourg

Is the MOD16A2 Product Reliable enough for Mapping Potential Evapotranspiration for Agriculture-related Applications? Preliminary Results in Piemonte (NW Italy).

Alessandro Farbo, Filippo Sarvia, Samuele De Petris, Federica Ghilardi, Enrico Borgogno-Mondino

DISAFA – Department of agriculture, forest and food sciences, University of Turin, Italy

Analysing Sentinel-1 Temporal Profiles for Discriminating Winter Catch Crops Along with Main Crops in Germany

Shanmugapriya Selvaraj¹, Phillip Lemke¹, Damian Bargiel², Heike Gerighausen¹

1: Julius Kuehn Institute, Institute for Crop and Soil Science, Germany; 2: Hochschule Geisenheim University, Department of Landscape Planning and Nature Conservation, Germany

Application of YOLOv8n for Agricultural Parcel Delineation from Historical Aerial Photographs in the Ecuadorian Andes

Fabián Santos, Fernanda Suárez, Santiago Bonilla

Universidad Indoamerica, Ecuador

On the Use of NDVI to Estimate LAI in Field Crops: presenting the LAI_r package

Sofia Bajocco¹, Carlotta Ferrara², Lorenzo Crecco¹, Nicola Puletti², Simone Bregaglio¹, Francesco Chianucci²

1: CREA - Council for Agricultural Research and Economics, Research Center for Agriculture and Environment, Italy; 2: CREA - Council for Agricultural Research and Economics, Research Center for Forestry and Wood, Italy

		<p>Exploring Snow Cover Trends In Western Alps (NW Italy) By Remote Sensing And Their Possible Effects On Agriculture Francesco Parizia^{1,2}, Luigi Perotti¹, Samuele De Petris¹, Enrico Borgogno Mondino¹ 1: Università degli Studi di Torino, Italy; 2: Università degli Studi di Roma "La Sapienza", Italy</p> <hr/> <p>The Use Of Unmanned Aerial Vehicle (UAV) Remotely Sensed Data And Biophysical Variables To Predict Maize Above-Ground Biomass In Small-Scale Farming Systems. Celuxolo Dlamini, Trylee Nyasha Matongera, John Odindi, Onesimo Mutanga University of KwaZulu-Natal, South Africa</p> <hr/> <p>Unsupervised Winter Crop Mapping with Sentinel-1 and -2 temporal analysis Hsuan-Yi Li¹, James A Lawrence¹, Philippa J Mason², Richard C Ghail³ 1: Department of Civil and Environmental Engineering, Skempton Building, Imperial College London, South Kensington, London SW7 2AZ, UK; 2: Department of Earth Science & Engineering, Imperial College London, Prince Consort Road, London SW7 2AZ, UK; 3: Department of Earth Sciences, Queens Building 245, Royal Holloway, University of London Egham, Surrey TW20 0EX, UK</p> <hr/> <p>Interannual Transfer of Species-specific Weed Instance Segmentation in Beet Crops Using UAV Imagery Maren Pukrop, Thomas Jarmer University of Osnabrueck, Germany</p>
<p>11:30am - 1:00pm</p>	<p>UAS S2 Location: BS G.35</p> <p>Surface Reflectance Intercomparison Exercise For Vegetation (SRIX4Veg) Overview And Results Niall Origo¹, Harry Morris^{1,3}, Chloe Randall¹, Morven Sinclair¹, Rasma Ormane¹, Matthew Scholes¹, Bernardo Mota¹, Fernando Camacho², Jorge Sanchez-Zapero², Enrique Martínez-Sánchez², Jadu Dash³, Luke A Brown^{3,4}, Valentina Boccia⁵ 1: National Physical Laboratory, United Kingdom; 2: Earth Observation Laboratory (EOLab); 3: School of Geography and Environmental Science, University of Southampton; 4: School of Science, Engineering and Environment, University of Salford; 5: European Space Research Institute, European Space Agency</p> <hr/> <p>Predicting of Canopy Nitrogen Content based on UAVs and Satellites Data Fusion in Citrus Orchards Tarin Paz Kagan¹, Avioz Dagan², Eran Raveh³, Sahar Baram⁴, Raphael Linker² 1: Ben-Gurion University of the Negev, Israel, Israel; 2: Technion – Israel Institute of Technology, Haifa Israel; 3: Institute of Plant Sciences, Agriculture Research Organization, Gilat Research Center,; 4: Institute of Soil, Water and Environmental Sciences, Agricultural Research Organization, Volcani Center</p> <hr/> <p>Towards Drone-Based Aquatic Reflectance Fiducial Reference Measurements To Validate Aquatic Reflectance Satellite Products Liesbeth De Keukelaere¹, Sindy Sterckx¹, Klaas Pauly¹, Ils Reusen¹, Agnieszka Bialek², Niall Origo² 1: VITO, Belgium; 2: National Physical Laboratory, United Kingdom</p> <hr/> <p>A Methodological Workflow for Ultra-high Resolution Dsm Generation with LiDAR Data in Wetlands</p>	<p>W2 Agriculture Location: BS G.36 Chair: Prof. Enrico Borgogno-Mondino Chair: Prof. Dr. Francesco Pirotti</p> <p>Crop Phenology Assessment with Multiscale and Multisource Time Series Magdalena Main-Knorn¹, Claas Nendel^{1,2,3}, Laura Flores^{1,4}, Gohar Ghazaryan^{1,5} 1: Leibniz Centre for Agricultural Landscape Research (ZALF), Germany; 2: Institute of Biochemistry and Biology, University of Potsdam, Potsdam, Germany; 3: Integrative Research Institute on Transformations of Human-Environment Systems (IRI THESys), Humboldt-Universität zu Berlin, Berlin, Germany; 4: Institute of Earth and Environmental Science, University Potsdam, Potsdam, Germany; 5: Earth Observation Lab, Geography Department, Humboldt-Universität zu Berlin, Berlin, Germany</p> <hr/> <p>How Does Phenology Shape Crop- And Orbit-Specific InSAR Coherence And PolSAR-Signatures Of Sentinel-1 Johannes Markus Löw¹, Steven Hill², Michael Thiel², Tobias Ullmann², Christopher Conrad¹ 1: Martin-Luther-University Halle-Wittenberg, Germany; 2: Earth Observation Research Cluster, Department of Remote Sensing, Institute of Geography and Geology, University of Würzburg, Germany</p> <hr/> <p>An Optimization Approach for Deriving Phenological Information of Different Crop Types in Germany Using Sentinel-2 Time Series Abdelaziz Htitiou, Florian Beyer, Markus Möller, Heike Gerighausen Julius Kühn-Institut, Institut für Pflanzenbau und Bodenkunde, Braunschweig, Germany</p> <hr/> <p>"Sensitivity Of C-band Backscatter To Field Management Practices" Felix Reuß, Mariette Vreugdenhil, Emanuel Bueechi, Bernhard Raml, Wolfgang Wagner Vienna University of Technology, Austria</p>

	<p>Erika Piaser^{1,2}, Andrea Berton³, Giovanna Sona^{2,4}, Paolo Villa¹ 1: Institute for Electromagnetic Sensing of the Environment, National Research Council of Italy; 2: Department of Civil and Environmental Engineering, Politecnico di Milano, Italy; 3: Institute of Geosciences and Earth Resources, National Research Council of Italy; 4: National Biodiversity Future Centre (NBFC), Italy</p> <p>Monitoring Vegetation Phenology Using Time-series of High-resolution UAV Images</p> <p>Lammert Kooistra¹, Jasper Kleinsmann², Simon Bosselaar¹ 1: Wageningen University, Netherlands, The; 2: World Agroforestry, Kenya</p> <p>Weakly Supervised Image Semantic Segmentation of UAV Multispectral Orthophotos to Reduce Image Labelling Effort for the Mapping of Woody Invasive Alien Plants</p> <p>Diogo André Duarte¹, Gil Gonçalves^{1,2}, Cidália Fonte^{1,2} 1: INESC Coimbra - Instituto de Engenharia de Sistemas e Computadores de Coimbra, Portugal; 2: University of Coimbra, Department of Mathematics, Coimbra, Portugal</p>	<p>Integration of Remote Sensing, Ground Data and Meteorological Variables for Agricultural Drought Monitoring: First Results of a Data-driven Approach</p> <p>Filippo Bocchino^{1,3}, Riccardo Contu¹, Lorenza Ranaldi¹, Antonio Denaro³, Laura Rosatelli³, Camillo Zaccarini³, Deodato Tapete⁴, Alessandro Ursi⁴, Maria Virelli⁴, Patrizia Sacco⁴, Valeria Belloni¹, Roberta Ravanelli¹, Mattia Crespi^{1,2} 1: Geodesy and Geomatics Division - DICEA, Sapienza University of Rome, Italy; 2: Sapienza School for Advanced Studies, Sapienza University of Rome, Italy; 3: Institute of Services for the Agricultural and Food Market (ISMEA) - Agricultural Risk Management Department; 4: Italian Space Agency (ASI), Italy</p> <p>Classification Of Organic And Conventional Farming Practices And Crop Types Using A Multitask Deep Learning Model</p> <p>Jan Hemmerling¹, David Mickisch², Theresa Follath², Begüm Demir², Stefan Erasmi¹ 1: Thünen Institute of Farm Economics; 2: Technische Universität Berlin</p>
<p>1:00pm - 2:30pm</p>	<p>Lunch Monday Location: Business School of Manchester Metropolitan University</p>	
<p>2:30pm - 3:00pm</p>	<p>Keynote P. Hostert Location: BS G.36</p>	
<p>3:00pm - 4:00pm</p>	<p>Semantic S1 Location: BS G.36</p> <p>Plato: Implementing a Semantic Data Cube System Dimitris Bilidas, Anastasios Mantas, Filippos Yfantis, George Stamoulis, Manolis Koubarakis National and Kapodistrian University of Athens, Greece</p> <p>Prediction And Transferability Of Median Grain Size On Tidal Flats Using A Deep Learning Model With Sentinel-2 Images</p> <p>Logambal Madhuanand¹, Catharina J. M. Philippart^{1,2}, Wiebe Nijland¹, Steven M. de Jong¹, Allert I. Bijleveld², Elisabeth A. Addink¹ 1: Utrecht University, Department of Physical Geography, The Netherlands; 2: NIOZ Royal Netherlands Institute for Sea Research, Department of Coastal Systems, The Netherlands</p> <p>One-layer RGB Representation Of Big EO Data Analyses For Supporting The Visual Communication Of Multi-temporal Change Detection</p> <p>Dirk Tiede¹, Hannah Augustin¹, Thomas Strasser¹, Steffen Reichel², Markus Kerschbaumer², Kristýna Měchurová², Martin Sudmanns¹ 1: University of Salzburg, Department of Geoinformatics - Z_GIS, Austria; 2: Spatial Services GmbH, Austria</p> <p>Multi-scale Hierarchical Graph Convolutional Network for Semantic Segmentation of Remote Sensing Imagery</p> <p>Zhiqiang Liu, Ping Tang, Zheng Zhang, Zhitao Zhao Aerospace Information Research Institute, CAS, China, People's Republic of</p>	<p>W3 Agriculture Location: BS G.36 Chair: Prof. Enrico Borgogno-Mondino Chair: Prof. Dr. Francesco Pirotti</p> <p>Graph Neural Networks for Crop Cover Mapping</p> <p>Elif Donmez¹, Johannes Leonhardt³, Ribana Roscher^{2,3}, Thomas Heckelee¹, Hugo Storm¹ 1: Institute for Food and Resource Economics, University of Bonn, Bonn, Germany; 2: Institute of Bio-and Geosciences, Forschungszentrum Jülich GmbH, Jülich, Germany; 3: Institute of Geodesy and Geoinformation, University of Bonn, Bonn, Germany</p> <p>Using Orthophotos And Deep Learning For Mapping Hedgerows In Bavaria, Germany</p> <p>Verena Huber Garcia¹, Jennifer Kriese¹, Sarah Asam¹, Mariel Dirscherl¹, Kristel Kerler², Johanna Buchner², Michael Stellmach², Ursula Gessner¹ 1: German Aerospace Center (DLR), Germany; 2: Bayerisches Landesamt für Umwelt (LfU), Germany</p> <p>National Scale Hedgerow Monitoring with Planet Scope</p> <p>Javier Muro, Lukas Blickensdörfer, Anna Köber, Gideon Tetteh, Marcel Schwieder, Stefan Erasmi Thuenen Institute, Germany</p> <p>National Scale Drought Impact and Risk assessment with the use of Sentinel-2 and Sentinel-3 time series</p> <p>Gohar Ghazaryan^{1,6}, Maximilian Schwarz², S. Mohammad Mirmazloumi¹, Harison Kipkulei¹, Tobias Landmann³, Henry Kyalo³, Rose Waswa⁴, Tom Dienya⁵ 1: Leibniz Centre for Agricultural Landscape Research, Germany; 2: Remote Sensing Solutions GmbH, Germany; 3: International Centre of Insect Physiology and Ecology, Kenya; 4: Regional Centre for Mapping of Resources for Development, Kenya; 5: Ministry of Agriculture and Livestock Development, Kenya; 6: Geography Department, Humboldt-Universität zu Berlin, Germany</p>
<p>4:00pm - 4:30pm</p>	<p>Coffee break Mon2 Location: Business School of Manchester Metropolitan University</p> <p>Monday Poster Session (cont) Location: Business School North Atrium Foyer</p>	

<p>4:30pm - 6:00pm</p>	<p>Semantic S2 Location: BS G.35</p> <p>An Approach for the Semantic Enrichment of Sentinel-1 Imagery Suitable for Large-scale Analysis <u>Luke McQuade</u>, Martin Sudmanns, Dirk Tiede University of Salzburg, Department of Geoinformatics - Z_GIS, Austria</p> <hr/> <p>Semantic World – A Novel Benchmark Dataset For Semi-Supervised Semantic Segmentation <u>Felix Kröber</u>¹, Dirk Tiede¹, Andrea Baraldi², Sébastien Lefèvre³ 1: University of Salzburg, Department of Geoinformatics – Z_GIS, Austria; 2: Spatial Services GmbH, Austria; 3: Université Bretagne Sud, IRISA UMR 6074, France</p> <hr/> <p>Fine-Tuning SAM for Accurate Impervious Surface Segmentation in Very High-Resolution Orthophotos <u>Jan-Philipp Langenkamp</u>¹, Thomas Chrisitan van Dijk², Andreas Rienow¹ 1: Ruhr-University Bochum, Institute of Geography, Interdisciplinary Geoinformation Science, Germany; 2: Ruhr-University Bochum, Faculty of Civil and Environmental Engineering, Institute for Infrastructure and Environment, Environmental Informatics, Germany</p> <hr/> <p>Hybrid Temporal Attention for Crop Type Mapping from Satellite Image Time Series Weixiong Zhang, <u>Ping Tang</u>, Zheng Zhang Aerospace Information Research Institute, CAS, China, People's Republic of</p> <hr/> <p>Building Energy Forecasts Using Earth Observation Open Data <u>Stylianos Kokkas</u>, Paschalis Bizopoulos, Antonios Lalas, Konstantinos Votis Centre for Research and Technology Hellas, Greece</p>	<p>W4 Agriculture Location: BS G.36 Chair: Prof. Enrico Borgogno-Mondino Chair: Prof. Dr. Francesco Pirotti</p> <p>Understanding Inter-Model Variability In Satellite-based Estimates Of Irrigation Water Use <u>Amali A. Amali</u>¹, Timothy Foster², Angela Harris¹ 1: Department of Geography, School of Environment, Education and Development, The University of Manchester, Manchester, UK; 2: School of Engineering, The University of Manchester, Manchester, UK</p> <hr/> <p>High Resolution Crop Condition and Drought Impact Mapping Using Sentinel-2 Imagery and Machine Learning <u>S. Mohammad Mirmazloumi</u>¹, Harison Kipkulei¹, Gohar Ghazaryan^{1,2} 1: Leibniz Centre for Agricultural Landscape Research (ZALF), Germany; 2: Geography Department, Humboldt-Universität zu Berlin, Germany</p> <hr/> <p>Leveraging Embedded Cameras to Build a Time Machine for Field Observations <u>Alban Jago</u>, François Godechal, Emilie Beriaux, Adrien Cassiers, Viviane Planchon Walloon Agricultural Research Centre, Belgium</p> <hr/> <p>Potential of Hyperspectral EnMAP Data to Improve Crop-Type Classification of Sub-Acre Smallholder Fields in Kenya <u>Leander Leist</u>¹, Sebastian Egli², Johannes Dröner³, Jörg Bendix¹ 1: University of Marburg, Germany; 2: AgriBORA GmbH; 3: Geo Engine GmbH</p> <hr/> <p>Temporally Transferable Crop Mapping With Temporal Encoding And Deep Learning Augmentations <u>Vu Dong Pham</u>^{1,2}, Gideon Tetteh³, Fabian Thiel¹, Stefan Erasmi³, Marcel Schwieder^{3,4}, David Frantz⁵, Sebastian van der Linden^{1,2} 1: Institute of Geography and Geology, University of Greifswald, Friedrich-Ludwig-Jahn-Str. 16, 17489 Greifswald, Germany; 2: Interdisciplinary Centre for Baltic Sea Region Research (IFZO), University of Greifswald, 17489 Greifswald; 3: Thünen Institute of Farm Economics, Bundesallee 63, 38116 Braunschweig, Germany; 4: Geography Department, Humboldt-Universität zu Berlin, Unter den Linden 6, 10099 Berlin, Germany; 5: Geoinformatics – Spatial Data Science, Trier University, Behringstraße 21, Trier 54296, Germany.</p> <hr/> <p>The GROUNDED EO Project: Developing Improved Decametric Vegetation Products by Combining Earth Observation, Machine Learning, and Routine Ground Reference Measurements <u>Luke Brown</u>¹, Philippe Goryl², Stephen Plummer² 1: University of Salford, Manchester, United Kingdom; 2: European Space Agency, Frascati, Italy</p>
<p>6:00pm - 9:00pm</p>	<p>IB: Icebreaker Location: Business School North Atrium Foyer</p>	<p>Monday Poster Session (cont.) Location: Business School North Atrium Foyer</p>

<p>8:00am - 5:00pm</p>	<p>Reg 2: Registration Location: Business School of Manchester Metropolitan University</p>	
<p>9:00am - 9:30am</p>	<p>Keynote R. Lucas Location: BS G.36</p>	
<p>9:30am - 11:00am</p>	<p>Thermal Location: BS G.35</p> <p>Multi-angular Airborne Observations For Evaluation Of Thermal Directionality At The Satellite Scale Mary Francesca Langsdale^{1,2}, Martin Wooster^{1,2}, Dirk Schuettemeyer³, Simon Hook⁴, Callum Middleton^{1,2}, Mark Grosvenor^{1,2}, Bjorn Eng⁴, Roberto Colombo⁵, Franco Miglietta⁶, Lorenzo Genesio⁶, Jose Sobrino⁷, Micol Rossini⁵, Gerardo Rivera⁴, Daniel Beeden⁸, William Jay⁹ 1: National Centre for Earth Observation, United Kingdom; 2: Department of Geography, King's College London, UK; 3: European Space Agency, Netherlands; 4: NASA Jet Propulsion Laboratory, USA; 5: University of Milano Bicocca, Italy; 6: Institute of Bioeconomy, CNR, Italy; 7: University of Valencia, Spain; 8: British Antarctic Survey, UK; 9: NEODAAS Plymouth Marine Laboratory, UK</p> <p>Understanding The Thermal Environment Of Uk Cities With Satellite Remote Sensing Charlotte Paton^{1,2}, Darren Ghent^{1,2}, Mike Perry^{1,2}, John Remedios^{1,2} 1: University of Leicester, Earth Observation Science, School of Physics and Astronomy, UK; 2: National Centre for Earth Observation, Space Park Leicester, University of Leicester, UK</p> <p>A City-scale 3D Thermographic Model for Inspection of Building Energy Efficiency Shaojuan Xu, Bastian Heider Research Institute for Regional and Urban Development, Germany</p> <p>Monitoring Land Surface Temperature from Space - New Perspectives for Environmental Monitoring Daniel Spengler¹, Elsy Ibrahim², Tianran Zhang¹, Matthieu Taymans² 1: constellr GmbH, Germany; 2: constellr S.e., Belgium</p> <p>Evaluation and Application of Uncertainty to Thermal Product Validation Jamie Luke McMillan, Joshua Chadney, Sophie Millen, James O'Connor, Teresa Steinke SatVu, United Kingdom</p> <p>Aerosol Correction for SWIR Methane Retrieval Michael Pieper, Ronald Lockwood, Michael Chrisp Massachusetts Institute of Technology Lincoln Laboratory, United States of America</p>	<p>W1 LULC Location: BS G.36 Chair: Dr. Gregory Giuliani Chair: Dr. Birgitta Putzenlechner</p> <p>Comparative Validation of Recent High-Resolution Global Land Cover Maps Panpan Xu¹, Nandin-Erdene Tsendbazar¹, Martin Herold^{1,2}, Sytze de Bruin¹, Myke Koopmans¹, Tanya Birch³, Sarah Carter⁴, Steffen Fritz⁵, Myroslava Lesiv⁵, Elise Mazur⁴, Amy Pickens⁶, Peter Potapov⁶, Fred Stolle⁴, Alexandra Tyukavina⁶, Ruben Van de Kerchove⁷, Daniele Zanaga⁷ 1: Wageningen University, The Netherlands; 2: GFZ German Research Centre of Geosciences, Germany; 3: Google, USA; 4: World Resources Institute, USA; 5: International Institute for Applied Systems Analysis (IIASA), Austria; 6: University of Maryland, USA; 7: Flemish Institute for Technological Research (VITO), Belgium</p> <p>Mapping Ecosystem Conditions Using Multi-source EO Data Cubes Chaonan Ji¹, Hannes Feilhauer^{1,2,3}, Stefanie Holzwarth⁴, Eya Cherif^{1,3}, David Montero^{1,2}, Maximilian Söchting¹, Miguel D. Mahecha^{1,2,3} 1: Leipzig University, Remote Sensing Centre for Earth System Research, Germany; 2: German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig, Germany; 3: Center for Scalable Data Analytics and Artificial Intelligence (ScaDS.AI), Dresden-Leipzig, Germany; 4: German Aerospace Center, Remote Sensing Data Center, Germany</p> <p>The TIMELINE Project: Four Decades of Geophysical Data to Observe the Impacts of Climate Change in Europe Stefanie Holzwarth¹, Sarah Asam¹, Martin Bachmann¹, Martin Böttcher², Andreas Dietz¹, Christina Eisfelder¹, Andreas Hirner¹, Matthias Hofmann¹, Grit Kirches², Detmar Krause¹, Julian Meyer-Arneke¹, Simon Plank¹, Thomas Popp¹, Philipp Reiners¹, Sebastian Rößler¹, Thomas Ruppert¹, Alexander Scherbachenko¹, Meinhard Wolfmüller¹ 1: German Aerospace Center (DLR), German Remote Sensing Data Center (DFD), Germany; 2: Brockmann Consult GmbH, Germany</p> <p>Generating a 40-years AVHRR NDVI Composite Time Series for Europe at 1 km resolution Sarah Asam, Christina Eisfelder, Andreas Hirner, Philipp Reiners, Martin Bachmann, Stefanie Holzwarth German Aerospace Center (DLR), Germany</p> <p>Environmental Impacts of Earth Observation (EO) Data in the Constellation Age Karen Anderson, Magdalena Mleczko, Robert Brewin, Kevin Gaston, Markus Mueller, Jamie Shutler, Xiaoyu Yan, Ruby Wilkinson University of Exeter, United Kingdom</p> <p>The Enmap-Box: Making Better Use of Multi- and Hyperspectral Data in Qgis Benjamin Jakimow¹, Akpona Okujeni¹, Andreas Janz¹, Fabian Thiel², Leon-Friedrich Thomas³, Patrick Hostert¹, Sebastian van der Linden²</p>

		1: Humboldt-Universität zu Berlin, Earth Observation Lab, Germany; 2: University of Greifswald, Earth Observation and Geoinformation Science Lab, Germany; 3: University of Helsinki, Department of Agricultural Sciences, Finland
11:00am - 11:30am	Coffee break Tue1 Location: Business School of Manchester Metropolitan University	Tuesday Poster Session Location: Business School North Atrium Foyer Mapping and Monitoring of Grass Species in Arid Ecosystems of Namibia – A Multi-Sensor Approach Daniel Wyss¹, Paul Bantelmann¹, Martin Kappas¹, Helen Sophie Schmidt¹, Elisabeth Twitileni Pius² 1: Georg August University Göttingen, Germany; 2: Namibia University of Sciences and Technology <hr/> Towards A Comprehensive Appraisal Of Eco-Hydro-Geomorphic Functioning In Drylands Based On Structure Traits And UAS Data Eva Arnau-Rosalen¹, Adolfo Calvo-Cases², Angel Marques-Mateu³, Emilio Rodriguez-Caballero⁴, Ramon Pons-Crespo³, Matilde Balaguer-Puig³, Roberto Lazaro-Suau⁵, Jorge Lopez-Carratala⁶, Elias Symeonakis¹ 1: Manchester Metropolitan University, United Kingdom; 2: University of València, Interuniversity Institute for Local Development (IIDL), Spain; 3: Universitat Politècnica de València, Department of Cartographic Engineering, Geodesy and Photogrammetry, Spain; 4: University of Almería, Department of Agronomy, Spain; 5: Experimental Station of Arid Zones (EEZA-CSIC), Department of Desertification and Geo-Ecology, Almería, Spain; 6: Catholic University of Murcia-UCAM, Spain <hr/> Remote-Sensing Based Detection of Dunes in the Atacama Desert – a Contribution to the Pedosphere-Biosphere Interaction of Coastal Fog Ecosystems in Northern Chile Luca Jehle¹, Maike Petersen¹, Alexander Siegmund^{1,2} 1: Heidelberg University of Education, Department of Geography - Research Group for Earth Observation (rgeo), Germany; 2: Heidelberg University, Institute of Geography & Heidelberg Center for the Environment (HCE), Germany <hr/> Towards Sustainable Water Resource Management: WebGIS-Based Real-Time River Discharge Optimization System. Martin W. Chege^{1,2}, Kuria B. Thiong'o^{1,2}, Arthur W. Sichangi², Moses M. Ngigi², Andreas Rienow³ 1: Remote sensing Research Group (RSRG); 2: Institute of Geomatics GIS & Remote sensing, Dedan Kimathi University of Technology (DeKUT), Kenya; 3: Ruhr-University Bochum, Interdisciplinary Geographic Information Science, Germany <hr/> Thermal Remote Sensing Application on Brazilian Subtropical Region to Identify Sandinization Processes Fabio Marcelo Breunig¹, Lenio Soares Galvão², Marcos Adami², Ricardo DalAgnol³, Tony Vinicius Sampaio¹, Romario Trentin⁴ 1: Federal University of Paraná (UFPR), Department of Geography, Brazil.; 2: Brazilian National Institute for Space Research (INPE), Remote Sensing Division, Brazil.; 3: University of California Los Angeles (UCLA), Institute of the Environment and Sustainability, USA.; 4: Federal University of Santa Maria (UFSM), Department of Geography, Brazil. <hr/> Land Use and Climate Change Dynamics in the Okavango River Basin of Namibia and Angola Kaleb Negussie^{1,2}, Daniel Wyss², Martin Kappas² 1: Namibia University of Science and Technology, Namibia; 2: Georg-August University Göttingen, Germany <hr/> 30-years Vegetation Trends for Europe Derived from the TIMELINE NDVI Time-series Christina Eisfelder, Sarah Asam, Andreas Hirner, Philipp Reiners, Martin Bachmann, Stefanie Holzwarth

		<p>German Aerospace Center (DLR), German Remote Sensing Data Center (DFD), Germany</p> <hr/> <p>Annual Monitoring Of Vegetation Dynamics In The Baltic Sea Region (2000 – 2022)</p> <p>Vu Dong Pham^{1,2}, Fabian Thiel¹, Farina de Ward¹, Christina Hellman¹, Duc Viet Nguyen¹, Felix Beer¹, Alexandra Barthelmes³, David Frantz⁴, Sebastian van der Linden^{1,2}</p> <p>1: Institute of Geography and Geology, University of Greifswald, Partner in the Greifswald Mire Centre, Friedrich-Ludwig-Jahn-Str. 16, 17489 Greifswald, Germany; 2: Interdisciplinary Centre for Baltic Sea Region Research (IFZO), University of Greifswald, 17489 Greifswald.; 3: Institute of Botany and Landscape Ecology, University of Greifswald, Soldmannstraße 15 17487 Greifswald; 4: Geoinformatics – Spatial Data Science, Trier University, Behringstraße 21, Trier 54296, Germany.</p> <hr/> <p>Using RNN-based Models For Vegetation Prediction With PlanetScope Time Series And Meteorological Data</p> <p>Ales Marsetic^{1,2}, Ursa Kanjir¹</p> <p>1: ZRC SAZU, Slovenia; 2: Space-SI, Slovenia</p> <hr/> <p>Land Cover Data Mapping from Multisensor Imagery for Soil Erosion Predictive Modelling in Mountain Protected Areas. A Case Study from Bucegi Mountains High Plateau, Romanian Carpathians.</p> <p>Bogdan Andrei Mihai¹, Marina Virghileanu¹, Ionuț Săvulescu¹, Bogdan Olariu¹, Ionuț Șandric¹, Carmen Bizdadea²</p> <p>1: University of Bucharest, Faculty of Geography, Romania; 2: University of Bucharest, Simion Mehedinți Doctoral School, Faculty of Geography, Romania</p>
<p>11:30am - 1:00pm</p>	<p>W2 LULC Location: BS G.36 Chair: Prof. Dr. Sebastian van der Linden Chair: Dr. Gregory Giuliani</p> <p>Monitoring Vegetation Essential Climate Variables using Multispectral Satellite Imagery: What can we actually map?</p> <p>Richard Anthony Fernandes¹, Luke Brown², Jadu Dash³, Najib Djamai¹, Gang Hong¹, Courtney Meier⁴, Harry Morris⁵, Lixin Syn¹</p> <p>1: CANADA CENTRE FOR REMOTE SENSING, GOVERNMENT OF CANADA, CANADA; 2: UNIVERSITY OF SALFORD, UNITED KINGDOM; 3: UNIVERSITY OF SOUTHAMPTON, UNITED KINGDOM; 4: BATELLE ECOLOGY, UNITED STATES OF AMERICA; 5: NATIONAL PHYSICAL LABORATORY, UNITED KINGDOM</p> <hr/> <p>SI Traceable Validation Of Copernicus Biophysical Products Using An fAPAR Network</p> <p>Harry Morris, Chloe Randall, Morven Sinclair, Rasma Ormane, Matthew Scholes, Niall Origo National Physical Laboratory, United Kingdom</p> <hr/> <p>Prediction of Forest Floor Spectral Properties from LiDAR and SAR Sensors in Temperate and Boreal Forests</p> <p>Audrey Mercier¹, Mari Myllymäki^{1,2}, Aarne Hovi¹, Daniel Schraik^{1,2}, Miina Rautiainen¹</p> <p>1: School of Engineering, Aalto University, Espoo, Finland; 2: Natural Resources Institute Finland (Luke), Latokartanonkaari 9, 00790 Helsinki, Finland</p> <hr/> <p>Assessing Effects of Forest Disturbance on Land Surface Temperature in Low Mountain Ranges of Central Germany using GEE and the Landsat Archive</p> <p>Simon Grieger¹, Lajos Blume¹, Martin Kappas¹, Susanne Karel², Philipp Koal³, Birgitta Putzenlechner¹</p>	<p>Young Scientist Awards Location: BS G.35</p> <p>Canopy Temperature Mapping at Different Crop Growth Stages to Assess Water Stress in Maize</p> <p>Quanxing Wan¹, Magdalena Smigaj¹, Benjamin Brede², Lammert Kooistra¹</p> <p>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</p> <hr/> <p>Phytoplankton Diversity Along The Spanish Mediterranean Coast Through Satellite Optical Radiometry</p> <p>Gonzalo Martínez Fornos^{1,2,3}, Annalisa Di Cicco⁴, Marco Talone^{1,2}, Elisa Berdalet²</p> <p>1: Barcelona Expert Centre, Barcelona, Spain; 2: Instituto de Ciencias del Mar (ICM-CSIC), Barcelona, Spain; 3: Universidad Politécnica de Catalunya, Barcelona, Spain; 4: Istituto di Scienze Marine (ISMAR-CNR), Rome, Italy</p> <hr/> <p>Measuring Urban Socioeconomic Disparities In The Global South From Space Using Convolutional Neural Network: The Case of City of Kigali, Rwanda</p> <p>Esaie Dufitimana Quantum Leap Africa/African Institute for Mathematical Sciences (AIMS), Rwanda</p> <hr/> <p>Improving Land Surface Temperature Observations With Machine Learning Techniques</p> <p>Abigail Marie Waring^{1,2}, Darren Ghent^{1,2}, David Moffat^{2,3}, John Remedios^{1,2}</p> <p>1: University of Leicester, School of Physics & Astronomy, Department of Earth Observation Science; 2: National Centre</p>

	<p>1: Georg August University of Göttingen, Institute of Geography, Department Cartography, GIS and Remote Sensing, Germany; 2: Austrian Research Centre for Forests (BFW), Department of Forest Inventory, Austria; 3: Forestry Research and Competence Centre Gotha (FFK), ThüringenForst AöR, Germany</p> <p>Biogeophysical Effects of Forest Cover Loss and the Role of Forest Management: Multi-scale Optical and Thermal Monitoring of Disturbance Plots in Central Germany</p> <p>Birgitta Putzenlechner¹, Simon Grieger¹, Philipp Koal², Susanne Karel³, Leon Ramin¹, Lajos Blume¹, Timo Lehmann¹, Martin Kappas¹, Ingolf Profft²</p> <p>1: Georg-August-University Göttingen, Germany; 2: Forest Research and Competence Center Gotha (FFK), ThüringenForst AöR, Germany; 3: Austrian Research Centre for Forests (BFW), Department of Forest Inventory, Austria</p> <p>Earth Observation Based Tools to Support Sustainable Forest Certification</p> <p>Janik Deutscher¹, Martin Puhm¹, Petra Miletich¹, Andreas Wimmer¹, Roland Perko¹, Max Kampen², Koimé Kouacou³, Sebastian Vogler³, Anh Nguyen³, Natalia Kobliuk³</p> <p>1: Joanneum Research, Austria; 2: Sinergise Solutions GmbH, Austria; 3: Beetle ForTech, Austria</p>	<p>for Earth Observation (NCEO); 3: Plymouth Marine Laboratory</p> <p>Semi-supervised Learning for the Mapping of Salix Trees Using Multi-temporal Planetscope Imagery.</p> <p>Robbe Neyns, Pieter Libin, Kyriakos Efthymiadis, Frank Canters</p> <p>Vrije Universiteit Brussel, Belgium</p> <p>Multi-sensor Analysis Of Variability In Rice Transplanting Dates In Smallholder Rice Production Systems In South Asia</p> <p>Pauline Kimani^{1,2}, Timothy Foster¹, Ben Parkes¹, Shu Kee Lam², Alexis Pang²</p> <p>1: The University of Manchester; 2: The University of Melbourne</p>
<p>1:00pm - 2:30pm</p>	<p>Lunch Tuesday Location: Business School of Manchester Metropolitan University</p>	
<p>2:30pm - 3:00pm</p>	<p>Keynote M. Disney Location: BS G.36</p>	
<p>3:00pm - 4:00pm</p>	<p>Drylands S1 Location: BS G.35</p> <p>Towards a Global Spectral Biocrust Dataset, a Missing Piece of Drylands's Earth Observation</p> <p>Juan Francisco Martinez-Sanchez¹, Yolanda Canton¹, Sonia Chamizo², Bettina Weber³, M.Pilar Martín⁴, Emilio Rodríguez-Caballero¹</p> <p>1: Center for Scientific collections at the University of Almeria (CECOUAL), Spain; 2: ESTACION EXPERIMENTAL DE ZONAS ARIDAS (CSIC), Spain; 3: UNIVERSITY OF GRAZ, Austria; 4: ENVIRONMENTAL REMOTE SENSING AND SPECTROSCOPY LABORATORY (SPECLAB-CSIC), Spain</p> <p>Application of Unmanned Aerial vehicles to Enhance the Spatial Distribution of Indigenous Species to be introduced during dryland ecosystem Restoration</p> <p>Yolanda Canton¹, Janira Fernandez¹, Juan Martinez¹, Lisa Maggioni¹, Aitor Alameda¹, Sonia Chamizo², Emilio Rodriguez¹</p> <p>1: University of Almeria, Spain; 2: EEZA-CSIC</p> <p>Biocrust Effects on the Spectral Response of Drylands Regions to Water Pulses, Implications for Ecosystem</p> <p>Borja Rodríguez-Lozano, Emilio Rodríguez-Caballero, Carlos Adolfo Urueta-Urueta, Yolanda Cantón University of Almeria, Spain</p> <p>Vegetation Colonization On Agricultural Terrace Landscapes: Recovery Trends Triggered By Abandonment And Wildfires Using Landsat Series In The Mediterranean.</p> <p>Eva Arnau-Rosalen^{1,3}, Adolfo Calvo-Cases², Alberto Belenguer-Estevan³, Elias Symeonakis¹</p> <p>1: Manchester Metropolitan University, United Kingdom; 2: University of València, Interuniversity Institute for Local Development (IIDL), Spain; 3: University of València, Department of Geography, Spain</p>	<p>W3 LULC Location: BS G.36 Chair: Dr. Gregory Giuliani Chair: Dr. Birgitta Putzenlechner</p> <p>Quality Estimation Of Land Cover Maps: Review Of Methods And An Outlook From The Perspective Of Metrology</p> <p>Anna Pustogvar^{1,2}, Bernardo Mota¹, Samuel E. Hunt¹, Andrew Thompson¹, Heiko Balzter^{2,3}</p> <p>1: National Physical Laboratory, United Kingdom; 2: University of Leicester, United Kingdom; 3: National Centre for Earth Observation, United Kingdom</p> <p>Evaluation of Large Scale Synthetic Multispectral Satellite Images using Generative Adversarial Networks on Land Cover and Sentinel-2 Data</p> <p>Torben Dedring, Andreas Rienow Ruhr University Bochum, Germany</p> <p>Impacts of Equal and Proportional Allocations in Accuracy Assessment of a Rare Class</p> <p>Ismael José Ferverça de Jesus^{1,2}, Cidália Maria Parreira da Costa Fonte^{2,3}, Alberto Jorge Lebre Cardoso¹, Jacinto Paulo Simões Estima¹</p> <p>1: University of Coimbra, CISUC, Department of Informatics Engineering, Coimbra, Portugal; 2: Institute for Systems Engineering and Computers at Coimbra (INESC Coimbra), Coimbra, Portugal; 3: University of Coimbra, Department of Mathematics, Coimbra, Portugal</p> <p>A Method for Detecting and Distinguishing Light and Dark Terrain Shadows in Very High-resolution Satellite Imagery</p> <p>Xiao Zhu¹, Tiejun Wang¹, Andrew Skidmore¹, Stephen Lee², Isla Duporge^{3,4}</p> <p>1: University of Twente, Faculty of Geo-Information Science and Earth Observation, The Netherlands; 2: U.S. Army Research Laboratory, Army Research Office, United States; 3: The National Academies of Sciences, United States; 4: Princeton University, Department of Ecology and Evolutionary Biology, United States</p>

		<p>Mapping of Invasive Black Locust (<i>Robinia pseudoacacia</i>): Investigating Temporal and Spatial Transferability of classification model using 6-year Sentinel-2 data</p> <p>Tomáš Rusňák, Andrej Halabuk ILE SAS v.v.i., Slovak Republic</p>
4:00pm - 4:30pm	<p>Coffee break Tue2 Location: Business School of Manchester Metropolitan University</p>	<p>Tuesday Poster Session (cont) Location: Business School North Atrium Foyer</p>
4:30pm - 6:00pm	<p>Drylands S2 Location: BS G.35</p> <p>Dryland Patchy Vegetation Cover Delineation From Orthoimages: Spatial Patterns And Scale Issues Eva Arnau-Rosalen¹, Angel Marques-Mateu², Antonis Korkofigkas³, George Vamvoukakis³, Christina Karakizi¹, Ramon Pons-Crespo², Emilio Rodriguez-Caballero⁴, Roberto Lazaro-Suau⁵, Adolfo Calvo-Cases⁶, Elias Symeonakis¹ 1: Manchester Metropolitan University, United Kingdom; 2: Universitat Politècnica de València.; 3: National Technical University of Athens; 4: University of Almería; 5: Experimental Station of Arid Zones (EEZA-CSIC);; 6: University of València</p> <p>Fractional Mapping of Savannah Vegetation Species using Drone and EnMap Hyperspectral Data Christina Karakizi¹, Akpona Okujeni², Konstantinos Karantzas³, Patrick Hostert², Elias Symeonakis¹ 1: Manchester Metropolitan University; 2: Humboldt-Universität zu Berlin; 3: National Technical University of Athens</p> <p>How Satellite-derived Phenology Reveals Vegetation Growth Forms in Namibia's Drylands Lasse Harkort¹, Vistorina Amputu², Jari Mahler³, Leon Nill¹, Akpona Okujeni¹, Achim Röder³, Patrick Hostert^{1,4} 1: Humboldt University Berlin, Germany; 2: University of Tübingen, Germany; 3: Trier University, Germany; 4: IRI THESys, Humboldt-Universität zu Berlin</p> <p>Exploring the Resilience of Holm Oak Woodlands to Extreme Droughts Using a Large-scale Remote Sensing Approach in Eastern Spain Mariano Moreno de las Heras¹, Esther Bochet², Sergio M. Vicente-Serrano³, Tiscar Espigares⁴, Maria J. Molina², Vicente Monleón⁵, José M. Nicolau^{6,7}, Jaume Tormo^{6,7}, Patricio García-Fayos² 1: Universitat de Barcelona, Spain; 2: Desertification Research Centre (CIDE, CSIC-UV-GVA), Spain; 3: Pyrenean Institute of Ecology (IPE-CSIC), Spain; 4: Universidad de Alcalá, Spain; 5: US Forest Service Pacific Northwest Research Station, USA; 6: Universidad de Zaragoza, Spain; 7: Environmental Sciences Institute of Aragón (IUCA), Spain</p> <p>Exploring the Influence of Land Use Changes on Soil Quality in Dryland Regions Using Imaging Spectroscopy Tarin Paz Kagan Ben-Gurion University of the Negev, Israel, Israel</p> <p>A Combined Approach of Optimizing Object-Based Image Analysis (OBIA) for WorldView-3 Imagery of Mankweng, South Africa Deepthi Patric¹, Gertrud Schaab¹, Martin Kappas², Daniel Wyss² 1: KARLSRUHE UNIVERSITY OF APPLIED SCIENCES, INSTITUTE OF APPLIED RESEARCH, GERMANY; 2: UNIVERSITY OF GÖTTINGEN, INSTITUTE OF GEOGRAPHY, GERMANY</p>	<p>W4 LULC Location: BS G.36 Chair: Dr. Birgitta Putzenlechner Chair: Dr. Gregory Giuliani</p> <p>Land Use and Land Cover Mapping on National Scale Roland Perko, Sead Mustafic, Petra Miletich, Karlheinz Gutjahr Joanneum Research, Austria</p> <p>Land Cover Classification Refinement Through Image Segmentation Jan Svoboda¹, Bertrand le Saux², Peter Naylor², Josef Laštovička¹, Přemysl Štych¹ 1: Charles University - Faculty of Science, Czech Republic; 2: Φ-lab, ESRIN, European Space Agency, Frascati I-0044, Italy</p> <p>Insects and Earth Observation for Biodiversity Monitoring Faith Ashiono, Tobias Landmann, Juliet Onditi, Henri E.Z Tonnang International Centre of Insect Physiology and Ecology (icipe), Nairobi, Kenya</p> <p>Assessing The Accuracy Of Sentinel 1 And Sentinel 2 Derived Shorelines Using Ground Truth Data Adéla Šedová¹, Triantafyllia-Maria Perivolioti², Jesús Palomar-Vázquez³, Markéta Potůčková¹, Josep E. Pardo-Pascual³, Antonios Mouratidis² 1: Charles University, Czech Republic; 2: Aristotle University of Thessaloniki, Greece; 3: Polytechnical University of Valencia, Spain</p> <p>An Assessment Of Long-term And Large-scale Wetlands Change Dynamics In The Limpopo Transboundary Basin Using Cloud-based Earth Observations Data Siyamthanda Gxokwe^{1,2}, Timothy Dube¹, Nancy Job², Dominic Mazvimavi¹ 1: University of the Western Cape, South Africa; 2: South African National Biodiversity Institute, South Africa</p> <p>Imaging Spectrometer Employing Digital Focal Plane Array for Fire Detection Ronald Lockwood, Michael Griffin, Kevin Ryu, Michael Chrisp, James Johnson, Corrie Smeaton, Michael Pieper Massachusetts Institute of Technology Lincoln Laboratory, United States of America</p>
6:00pm - 7:00pm	<p>EARSeL Council Meeting (members only) Location: BS G.34</p>	

6:00pm
-
9:00pm

City tour
Location: [Business School of Manchester Metropolitan University](#)
City tour on foot, meet up in the Conference Venue (Business School).

<p>8:00am - 5:00pm</p>	<p>Reg 3: Registration Location: Business School of Manchester Metropolitan University</p>	
<p>9:00am - 9:30am</p>	<p>Keynote M. Belgiu Location: BS G.26</p>	
<p>9:30am - 11:00am</p>	<p>Urban S1 Location: BS 3.11</p> <p>Improving Settlement Classification Method For Urban Systems Using Satellite-Derived Building Footprint Dataset Wole Ademola Adewole^{1,2}, Ortis Yankey^{1,2}, Edson Utazi^{1,2}, Chris Lloyd^{1,2}, Samantha Cockings¹, Andrew J Tatem^{1,2} 1: University of Southampton, United Kingdom; 2: WorldPop, Geography and Environmental Science, University of Southampton, United Kingdom</p> <p>Modelling Business-As-Usual Scenario To Study Dynamics Of Built Up Development Using Cellular Automata Model For Brussels Metropolitan Development Area Anasua Chakraborty¹, Ahmed Mustafa², Jacques Teller¹ 1: University of Liege, Belgium; 2: The New School University, Urban Systems Lab, New York, USA.</p> <p>Heat Health Risk Mapping at Regional Scale Using Land Surface Temperature and Socioeconomic Indicators in Wallonia, Belgium Yasmina Loozen¹, Coraline Wyard¹, Laure Roupioz², Eric Hallot¹ 1: ISSeP, Remote sensing and Geodata Unit, Belgium; 2: ONERA DOTA, France</p> <p>A Comparative Multitemporal Analysis of Spatial Justice and Sustainable Development in Conflict-affected Regions: Lessons from the Syrian War and the Nacala Development Corridor in Mozambique Andreas Rienow¹, Mounir Azzam, Ricardo Gellert Paris Ruhr-University Bochum, Germany</p> <p>Constructing a Large-scale 3D Building and Tree Model for Glasgow City via Airborne LiDAR Point Clouds Qiaosi Li, Qunshan Zhao Urban Big Data Centre, School of Social and Political Sciences, University of Glasgow, Glasgow, UK</p> <p>Calculating a Multitemporal Local Climate Zone Dataset for European Cities Anna Hellings^{1,2}, Andreas Rienow², Benjamin Bechtel², Matthias Demuzere³ 1: BBSR, Federal Institute for Research on Building, Urban Affairs and Spatial Development, Germany; 2: Ruhr University Bochum, Germany; 3: Ghent University, Belgium</p>	<p>W1 G. South Location: BS G.26 Chair: Monika Kuffer Chair: Dr. Stefanos Georganos</p> <p>Data-Centric AI To Map And Characterize Informal Settlements From Earth Observation Data Bedru Tareke¹, Paulo Silva Filho¹, Claudio Persello¹, Monika Kuffer¹, Raian V. Maretto¹, Jon Wang¹, Angela Abascal¹, Priam Pillai², Binti Singh³, Juan Manuel D'Attoli⁴, Caroline Kabaria⁵, Juilo Pedrassoli⁶, Patricia Brito⁶, Peter Elias⁷, Elio Atenogenes⁸, Andrea Ramirez Santiago⁸ 1: University of Twente, Netherlands, The; 2: Pillai College of Engineering, Navi Mumbai, India; 3: KRVI, Mumbai, India; 4: National Registry of Informal Settlements (RENABAP), Argentina; 5: APHRC, Nairobi, Kenya; 6: Universidade Federal da Bahia, Salvador, Brazil; 7: University of Lagos, Nigeria; 8: INEGI, Mexico</p> <p>Urban Heat Analysis In Africa's Most Deprived Areas: Combining Earth Observation, Machine Learning And Citizen Science Angela Abascal¹, Monika Kuffer², Sabine Vanhuysse³, Stefanos Georganos⁴, Jon Wang², Nicera Wanjiru⁵ 1: Department of Engineering, Public University of Navarre (UPNA), Pamplona, Spain; 2: Faculty of Geo-Information Science & Earth Observation (ITC), University of Twente, Enschede, The Netherlands; 3: Department of Geosciences, Environment & Society, Université libre De Bruxelles (ULB), 1050 Bruxelles, Belgium; 4: Geomatics Unit, Department of Environmental and Life Sciences, Karlstad University, Sweden; 5: Community mappers, Nairobi, Kenya</p> <p>Evaluating Geospatial Data Adequacy for Integrated Risk Assessments: A Malaria Risk Use-Case Linda Petuschnig^{1,2}, Thomas Clemen², E. Sophia Klaußner¹, Ulfia Clemen², Stefan Lang¹ 1: University of Salzburg, Austria; 2: University of Applied Sciences Hamburg, Germany</p> <p>Assessing Habitat Fragmentation and Landscape Patterns in the Cerrado and Amazon Transition (CAT) Chuanze Li, Angela Harris, Polyanna da Conceição Bispo, Matthew Dennis Department of Geography, School of Environment, Education and Development, University of Manchester, Oxford Road, Manchester M13 9PL, UK</p> <p>Assessment Of Burned Areas In Africa From High And Medium Spatial Resolution Multi-spectral Satellite Images Daniela Stroppiana¹, Matteo Sali^{1,2}, Giovanna Sona³, Pietro Alessandro Brivio¹, Magi Franquesa^{4,5}, M. Lucrecia Pettinari⁵, Emilio Chuvieco⁵ 1: Consiglio Nazionale delle Ricerche – Istituto per il Rilevamento Elettromagnetico dell'Ambiente (CNR-IREA), Milano, Italy; 2: Università degli Studi di Milano-Bicocca, Milano, Italy; 3: Dipartimento di Ingegneria Civile e Ambientale (DICA), Politecnico di Milano, Milano, Italy; 4: Instituto Pirenaico de Ecología, Consejo Superior de Investigaciones Científicas (IPE-CSIC), Zaragoza, Spain; 5: Universidad de Alcalá, Environmental Remote Sensing Research Group, Department of Geology, Geography and the Environment, Alcalá de Henares, Spain</p>

		<p>Navigating Urban Complexity: assessing Socio-Spatial Dynamics in Household Waste Practices in Bandung, Indonesia Giulia Frigo, Claudia Binder, Christian Zurbrugg EPFL (École Polytechnique Fédérale de Lausanne), Switzerland</p>
<p>11:00am - 11:30am</p>	<p>Coffee break Wed1 Location: Business School of Manchester Metropolitan University</p>	<p>Wednesday Poster Session Location: Business School 3rd Floor South Atrium open space</p> <p>Identifying “Hot Spots” And “Cold Spots” In Urban Areas Using Remote Sensing Data Petra Miletich¹, Heinz Gallau¹, Judith Köberl², Dominik Kortschak², Michael Kernitzky² 1: JOANNEUM RESEARCH Forschungsgesellschaft mbH, DIGITAL - Remotesensing and Geoinformation, Austria; 2: JOANNEUM RESEARCH Forschungsgesellschaft mbH, LIFE - Weather and Climate Risk Management, Austria</p> <hr/> <p>Monitoring Climate Change in Urban Environments: Integrating Satellite and Ground Data in a Krakow Case Study Ewa Glowienka, Krystyna Michałowska, Sławomir Mikrut AGH University of Krakow, Poland</p> <hr/> <p>A Comparative Tree Height Analysis Using GEDI, Photogrammetry Data And Field Measurements Of Selected Areas Of Patagonia Martin Kappas¹, Katharina Walter¹, Birgitta Putzenlechner¹, Ariel Winter^{1,2}, Daniel Wyss¹ 1: University of Goettingen, Germany; 2: Centro de Investigación y Extensión Forestal Andino Patagónico (CIEFAP), Argentina</p> <hr/> <p>Potential of TanDEM-X 30m Edited DEM Karsten Jacobsen Leibniz University Hannover, Germany</p> <hr/> <p>Deriving Leaf Area Index Time Series Over Heterogeneous Landscapes In West Africa Verena Huber García, Frank Thonfeld, Jonas Meier, Ursula Gessner German Aerospace Center (DLR), Germany</p>
<p>11:30am - 1:00pm</p>	<p>Urban S2 Location: BS 3.11</p> <p>Differentiating the Urban-Rural Dichotomy: A Probability-Based Approach Applied to Bavaria, Germany Hannes Taubenböck^{1,2}, Ariane Droin², Ines Standfuß¹, Michael Wurm¹, Marta Sapena¹, Tobias Ullmann² 1: German Aerospace Center (DLR), German Remote Sensing Data Center (DFD), Germany; 2: Julius-Maximilians-Universität Würzburg, Institute of Geography and Geology, Germany</p> <hr/> <p>Do Disasters Disrupt The Spatial Growth Of Informal Settlements? The Case Of Mocoa, Colombia Ricardo Camacho, Jagannath Aryal, Abbas Rajabifard The University of Melbourne, Australia</p> <hr/> <p>Spectral Unmixing of PRISMA Hyperspectral Imagery for Assessing the Correlation Between Material Abundances and LST Alberto Vavassori, Maria Antonia Brovelli Politecnico di Milano, Italy</p> <hr/> <p>Web Tool for Detecting and Extracting Rooftop Solar Panels Adedayo Kelvin Adeleke, Hlonela Mntonintshi University of Pretoria, South Africa</p>	<p>W2 G. South Location: BS G.26 Chair: Monika Kuffer Chair: Dr. Stefanos Georganos</p> <p>Assessing the Data Quality of GHSL and Other Global Data Sets for Monitoring Urbanisation in the Global South Thomas Kemper, Martino Pesaresi, Michele Melchiorri, Johannes H. Uhl European Commission, Italy</p> <hr/> <p>Mapping Urban Land Use in Data-scarce Areas of the Global South Jasper van Vliet, Job Rosier VU University Amsterdam, Institute for Environmental Studies, the Netherlands</p> <hr/> <p>Introduction to DIY-BU-Mapping Tool: Mapping Urban Expansion in Africa on the Cloud Marta Sapena¹, Johannes Mast¹, Christian Geiß^{1,2}, Hannes Taubenböck^{1,3} 1: German Aerospace Center (DLR), German Remote Sensing Data Center (DFD), Germany; 2: University of Bonn, Department of Geography, Germany; 3: Julius-Maximilians-Universität Würzburg, Institute of Geography and Geology, Germany</p> <hr/> <p>Measuring and mapping Tenure Security using Earth Observation and Open Geo-Spatial Data</p>

	<p>Daily Ground-Level O3 Prediction Models for the Continental Biogeographical Region using Open Remote Sensing Data and Machine Learning: A Case Study for the Veneto Region</p> <p>Luka Mamic¹, Francesco Pirotti^{2,3} 1: Sapienza University of Rome, Department of Civil, Building and Environmental Engineering, Italy; 2: University of Padua, Department of Land and Agroforestry Systems (TESAF), Italy; 3: University of Padua, Interdepartmental Research Centre in Geomatics (CIRGEO), Italy</p>	<p>Divyani Kohli-Poll Jonker¹, Dana Thomson², Ron Mahabir³, Monika Kuffer¹ 1: ITC, University of Twente, The Netherlands; 2: Columbia climate School, United States; 3: University of Liverpool, United Kingdom</p>
	<p>UHeat – Assessing Urban Heat Island Intensity</p> <p>Mark Hallows, Guneet Hawley, Dimple Rana, Nabihah Ghufour, Attila Lukacs, Ben Coombs Arup, United Kingdom</p>	<p>Monitoring Urban Green Space Cover Change Using GIS and Remote Sensing in Two Rapidly Urbanizing Cities, Debre Berhan and Debre Markos, Ethiopia</p> <p>Alemaw Kefale Getnet^{1,2}, Aramde Fetene Mengistu², Hayal Desta Yimer² 1: Addis Ababa Science and Technology University, Ethiopia; 2: Ethiopian Institute of Architecture, Building Construction and City Development, Addis Ababa University, Ethiopia</p>
		<p>Assessing And Monitoring The Effectiveness Of The Biological Control Implemented To Address The Invasion Of Water Hyacinth (Eichhornia Crassipes) In Hartbeespoort Dam, South Africa</p> <p>Timothy Dube¹, Pawu Mqingwana¹, Cletah Shoko², Siyamthanda Gxokwe¹ 1: University of the Western Cape, South Africa; 2: The University of Witwatersrand, South Africa</p>
1:00pm - 2:30pm	<p>Lunch Wednesday Location: Business School of Manchester Metropolitan University</p>	
2:30pm - 3:00pm	<p>Keynote M. Pfeifer Location: BS G.26</p>	
3:00pm - 4:00pm	<p>W3 G. South Location: BS G.26 Chair: Monika Kuffer Chair: Dr. Stefanos Georganos</p>	
	<p>Spatio-Temporal Changes of Morphological Slums Around the World</p> <p>John Friesen^{1,2}, Nicolas Johannes Kraff³, Hannes Taubenböck^{2,3} 1: Technische Universität Darmstadt, Germany; 2: University of Würzburg, Germany; 3: German Aerospace Center, Germany</p>	
	<p>The IDEAMAPS Modelling Framework: Modelling Sub-domains of Deprivation</p> <p>Monika Kuffer¹, Angela Abascal¹, Ryan Engstrom², Grant Tregonning³, Dana R. Thomson⁴, Adenike Shonowo³, Qunshan Zhao³, Alexandra Middleton⁵, Wenlan Zhang⁶, Joao Porto de Albuquerque³ 1: University of Twente, Netherlands, The; 2: George Washington University, USA; 3: University of Glasgow, UK; 4: Columbia University, USA; 5: University of Warwick, UK; 6: UCL, UK</p>	
	<p>Between Light Pollution and Missing Access to Essential Light at Night</p> <p>Angela Abascal^{1,2}, Monika Kuffer², Alejandro Sanchez³, Christopher C. M Kyba^{4,5}, Miguel Román⁶, Franz Höller⁷ 1: Public University of Navarre, Spain; 2: University of Twente, The Netherlands; 3: Universidad Complutense de Madrid, Spain; 4: GFZ German Research Centre for Geosciences, Germany; 5: Ruhr-University Bochum, Germany; 6: Leidos, Inc. United States; 7: Leibniz Institute of Freshwater Ecology and Inland Fisheries, Germany</p>	
	<p>Differences Between Formal and Informal Settlements in Accessibility to Healthcare in Sub-Saharan Cities</p> <p>John Friesen¹, Stefanos Georganos², Jan Haas² 1: Technische Universität Darmstadt, Germany; 2: Karlstad University, Sweden</p>	
4:00pm - 4:30pm	<p>Coffee break Wed2 Location: Business School of Manchester Metropolitan University</p>	<p>Wednesday Poster Session (cont) Location: Business School 3rd Floor South Atrium open space</p>
4:30pm - 6:00pm	<p>Geological Location: BS 3.11</p> <p>Satellite Data Processing In The Frame Of The M4mining Project. A Case Study From Greece.</p> <p>Konstantinos Nikolakopoulos¹, Evlampia Kouzeli¹, Saeid Asadzadeh², Nicole Köllner², Friederike Koerting³, Justus Constantin Hildebrand³, Steven Micklethwaite⁴, Ekaterina Savinova⁴ 1: University of Patras, Greece; 2: GFZ, Germany; 3: NORSELEKTRO OPTIKK AS, HYSPEX, NORWAY; 4: THE UNIVERSITY OF QUEENSLAND, SUSTAINABLE MINERALS INSTITUTE, AUSTRALIA</p>	<p>W4 G. South Location: BS G.26 Chair: Monika Kuffer Chair: Dr. Stefanos Georganos</p> <p>Deep Learning-based Atmospheric Correction for Landsat 8 OLI in Tropical inland Water</p> <p>Dewinta Heriza¹, Manh Van Nguyen², Chao-Hung Lin¹ 1: National Cheng Kung University, Taiwan; 2: Hanoi National University of Education, Hanoi, Vietnam</p> <p>Mapping population in deprived urban areas using Earth Observation and Machine Learning</p> <p>Stefanos Georganos¹, Sabine Vanhuyse², Angela Abascal², Jon Wang³, Monika Kuffer³</p>

	<p>Mapping permafrost thawing induced landslides in the European Arctics Ionut Sandric, Radu Irimia University of Bucharest, Faculty of Geography</p> <hr/> <p>Enhancing the Detection of Rare Earth Element Contents using Space-Borne Hyperspectral Data Veronika Kopackova-Strnadova¹, Johannes Giebel², Vladislav Rapprich¹, Tomas Magna¹ 1: Czech Geological Survey, Czech Republic; 2: TU Berlin, 10587 Berlin, Germany</p> <hr/> <p>Integrating Remote Sensing Products and Advanced Methodological Models for Resilient Blue Economy: The OCEANIDS Approach Eirini Marinou, Polychronis Kolokoussis, Christos Kontopoulos, Vasiliki Charalampopoulou Geosystems Hellas SA, Greece</p> <hr/> <p>Preserving Cultural Heritage Sites From Geohazards Using Remote Sensing Methods. Aggeliki S. Kyriou, Konstantinos G. Nikolakopoulos University of Patras, Greece</p>	<p>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: Faculty of Geo-Information Science & Earth Observation (ITC), University of Twente, Enschede, The Netherlands</p> <hr/> <p>Nighttime Lights Time Series Analysis Unveil Spatial Inequalities and Extractive Economic Dynamics along the Nacala Development Corridor in Lichinga, Mozambique Ricardo Gellert Paris¹, Andreas Rienow² 1: Ruhr-University Bochum, Institute of Geography, Institute of Development Research and Development Policy, Germany; 2: Ruhr-University Bochum, Institute of Geography, Interdisciplinary Geoinformation Science, Germany</p> <hr/> <p>Mapping And Modelling Land Values In African Cities With Machine Learning And Openly Accessible Data Felix Agyemang¹, Michael Osei Asibey², Sean Fox³ 1: University of Manchester, Department of Planning, Property and Environmental Management, United Kingdom; 2: Kwame Nkrumah University of Science and Technology; 3: University of Bristol</p> <hr/> <p>Navigating Data Privacy and Utility by Integrating Multiple Imputation and Deep Learning: A Study on Linking Satellite Images with Anonymized Surveying Mohammad Kakooei¹, James Bailie², Xiao-Li Meng², Adel Daoud^{1,3} 1: Chalmers university of technology, Göteborg, Sweden; 2: Harvard University, Cambridge, MA, USA; 3: Institute for Analytical Sociology (IAS), Linköping University, Linköping, Sweden</p>
<p>6:00pm - 6:30pm</p>	<p>EARSel General Assembly (members only) Location: BS G.26</p>	
<p>7:00pm - 11:00pm</p>	<p>SD: Symposium dinner Location: HOME Theatre, Cinema and Exhibition Centre</p>	

<p>8:00am - 10:00am</p>	<p>Reg 4: Registration Location: Business School of Manchester Metropolitan University</p>	
<p>9:00am - 9:30am</p>	<p>Keynote R. Santoleri Location: BS G.36</p>	
<p>9:30am - 11:00am</p>	<p>Education S1 Location: BS G.35</p> <p>Monitoring Natural Phenomena from the Classroom with Edusat. Rosa Olivella, Josep Sitjar, Laura Olivás University of Girona, Spain</p>	<p>W1 Coastal Location: BS G.36 Chair: Dr. Florinda Artuso Chair: Dr. Federico Angelini</p>
	<p>Empowering Equality and Access to the Copernicus Space Programme - Insights, Challenges and Collaborative Strategies - a View from Women in Copernicus Alina - Mihaela Vizireanu¹, Nathalie Stephenne², Grazia Fiore³, Eleni Loulli⁴ 1: Milton Keynes City Council, United Kingdom; 2: Service Public de Wallonie (SPW), Geomatic Department, Belgium; 3: Space Y, Permanent Representative, France; 4: Cyprus University of Technology, Cyprus</p>	<p>Forel-Ule Index As A Universal Indicator Of Optical Water Types And A Proxy for Water Quality: Application to Coastal Areas Around the World Lenka Fronkova¹, Tiago Silva¹, Naomi Greenwood¹, Michelle Devlin¹, Richard Heal¹, Kate Collingridge¹, Richard Harrod¹, Michael Day¹, William Procter¹, Danja Hoehn-Adams¹, Dave Sivyer¹, Charlotte Reeve¹, Tom Hull¹, Roi Martinez¹, Alakesh Samanta³, Pravakar Mishra², Tune Usha² 1: Centre for Environment Fisheries and Aquaculture Science, United Kingdom; 2: National Centre for Coastal Research, India; 3: National Centre for Coastal Research, India</p>
	<p>A Multi-Level Perspective on Developing Earth Observation Educational Content for Diverse Audiences Henryk Hodam, Andreas Rienow Ruhr-Universität Bochum, Germany</p>	<p>Validation of Satellite Hyperspectral Radiometric Measurements Based on Multispectral Data from the AERONET-OC Network: an Assessment of the Uncertainty Due to Spectral Mismatch Marco Talone^{1,2}, Giuseppe Zibordi³, Jaime Pitarch⁴ 1: Barcelona Expert Centre, Barcelona, Spain; 2: Instituto de Ciencias del Mar (ICM-CSIC), Barcelona, Spain; 3: Goddard Space Flight Center of the National Aeronautics and Space Administration, Greenbelt, MD 20771 USA; 4: Istituto di Scienze Marine (ISMAR-CNR), Rome, Italy</p>
	<p>Enhancing Learners' Involvement In Participatory Environmental Conservation Bartholomew Thiongo Kuria¹, Wisdom Kipkemboi¹, Simon Wachira Muthee¹, Martin Wainaina Chege¹, Johanna Anyesi Wanjala¹, Andreas Rienow² 1: Dedan Kimathi University of Technology, Kenya; 2: Ruhr University Bochum</p>	<p>Pigments Distribution In The Mediterranean Sea Through Satellite Optical Radiometry Borja Sanchez^{1,2}, Marco Talone^{1,2}, Jesus Cerquides³, Annalisa Di Cicco⁴, Emanuele Organelli⁴ 1: Barcelona Expert Center, Barcelona, Spain; 2: Institut de Ciències del Mar, ICM-CSIC, Barcelona, Spain; 3: Instituto de Investigación en Inteligencia Artificial, IIIA-CSIC, Barcelona, Spain; 4: Istituto di Scienze Marine, ISMAR-CNR, Rome, Italy</p>
	<p>Capacity Development on digital Geomedia for UNESCO sites: Effectiveness and lasting effects of short-term training courses on Remote Sensing, GIS and mobile Geotools Kristina Hild¹, Maike Petersen¹, Alexander Siegmund^{1,2} 1: Heidelberg University of Education, Department of Geography - Research Group for Earth Observation (rgeo), Germany; 2: Heidelberg University, Institute of Geography & Heidelberg Center for the Environment (HCE), Germany</p>	<p>Phytoplankton Groups In The Baltic Sea From Ocean Colour Observations Annalisa Di Cicco¹, Vittorio Ernesto Brando¹, Elisabetta Canuti², Joanna Stoń-Egiert³, Michela Sammartino¹, Marco Picone⁴, Simone Colella¹, Luis González Vilas¹ 1: National Research Council - Institute of Marine Sciences (CNR-ISMAR), Italy; 2: Joint Research Centre, European Commission (JRC-EC), Italy; 3: Institute of Oceanology, Polish Academy of Sciences (IOPAN), Poland; 4: Institute for Environmental Protection and Research (ISPRA), Italy</p>
		<p>Continuous Evaluation of Uncertainties in HPLC-Based Phytoplankton Pigment Quantification in Support to Remote Sensing Validation: A Comprehensive Approach. Elisabetta Canuti^{1,2}, Florinda Artuso³, Astrid Bracher⁴, Vanda Brotas⁵, Terese Buchaca⁶, Emmanuel Devred⁷, Annalisa Di Cicco⁸, Celine Dimier⁹, Vesna Flander Putrle¹⁰, Isabella Giardino³, Priscilla Goela¹¹, Merete Grung¹², Carlo Rafael Mendes¹³, Sandra Murawski⁴, Ilka Peeken⁴, Andreia Tracana⁴, Josephine Ras⁹, Rudiger Röttgers¹⁴, Crystal Thomas¹⁵, Sonja Wiegmann⁴ 1: Joint Research Centre (European Commission), Italy; 2: University of Urbino, Urbino, Italy; 3: Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, Frascati, Italy; 4: Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research,</p>

		<p>Bremerhaven, Germany; 5: University of Lisbon, Lisbon, Portugal; 6: Centre d'Estudis Avançats de Blanes – CEAB, CSIC, Girona, Spain; 7: Bedford Institute of Oceanography, Fisheries and Oceans, Dartmouth, Canada; 8: ISMAR - Consiglio Nazionale per le Ricerche, Italy; 9: Laboratoire d'Océanographie de Villefranche, IMEV-CNRS, Villefranche-sur-Mer, France; 10: National Institute of Biology, Piran, Slovenia; 11: S2AQUAcoLAB, Olhão, Portugal; 12: Norsk Institutt for Vannforskning, Norway; 13: Federal University of Rio Grande, Rio Grande, Brazil; 14: Helmholtz-Zentrum hereon GmbH, Germany; 15: NASA Earth Sciences Division, Goddard, USA</p> <hr/> <p>Experience of the Diagnostic and Metrology Laboratory of ENEA in Coastal Remote Sensing and the INSURE Project Federico Angelini, Florinda Artuso, Francesco Colao, Luca Fiorani, Valeria Spizzichino, Antonio Palucci ENEA, Italy</p>
<p>11:00am - 11:30am</p>	<p>Coffee break Thu1 Location: Business School of Manchester Metropolitan University</p>	<p>Thursday Poster Session Location: Business School North Atrium Foyer</p> <hr/> <p>Linking Biodiversity And Hyperspectral Bio-Optics From A Process-Based Sampling Strategy In Tidal Environments Federico Falcini¹, Jaime Pitarch¹, Isa Schon², Domenico D'Alenio³, Daniele Bellardini³, Pier Francesco Moretti⁴, Mario Sprovieri¹, Patrick Roose² 1: Consiglio Nazionale delle Ricerche, Institute of Marine Sciences, Italy; 2: Royal Belgian Institute of Natural Sciences, Operational Directorate Natural Environments, Freshwater Biology, Belgium; 3: Stazione Zoologica Anton Dohrn, Department of Integrative Marine Ecology, Italy; 4: Consiglio Nazionale delle Ricerche, Department Of Earth System Sciences And Environmental Technologies, Italy</p> <hr/> <p>The Importance Of Tidal Variability On Ocean Color Remote Sensing Applications For Transitional Waters Giulia Sent¹, Carlos Manuel Antunes², Evangelos Spyrakos³, Thomas Jackson⁴, Elizabeth C. Atwood⁵, Ana Cristina Brito¹ 1: Universidade de Lisboa, Faculdade de Ciências, MARE centre, Lisbon, Portugal; 2: Universidade de Lisboa, Faculdade de Ciências, Instituto Dom Luiz, Lisbon, Portugal; 3: University of Stirling, Faculty of Natural Sciences, Stirling, UK; 4: EUMETSAT, Darmstadt, Germany; 5: Plymouth Marine Laboratory, Plymouth, UK</p> <hr/> <p>Mapping Coastal Area Dynamics in Oristano Gulf (Italy) Using Satellite Images Mariano Bresciani¹, Monica Pinardi¹, Salvatore Mangano¹, Alice Fabbretto¹, Claudia Giardino¹, Andrea Satta², Juan Montes Pérez³, Enrico Duo³, Paulo Cabrita³, Paolo Ciavola³ 1: CNR - IREA Institute for Electromagnetic Sensing of the Environment, National Research Council, Milan, Italy; 2: CNR – IAS Institute for the Study of Anthropic Impact and Sustainability in Marine Environment, Oristano, Italy; 3: Department of Physics and Earth Sciences, University of Ferrara, Ferrara, Italy</p> <hr/> <p>EnsAD: Improving Coastal Algae Forecasts With EnMAP Hyperspectral Data Eefke Marijn Van Der Lee¹, Johannes Timm¹, Annika Grage¹, Karin Heyer¹, Ina Lorkowski¹, Thorger Brüning¹, Dagmar Mueller², Kerstin Stelzer², Carsten Brockmann² 1: Federal Maritime and Hydrographic Agency, Germany; 2: Brockmann Consult GmbH, Germany</p> <hr/> <p>Monitoring the Impact of Climatological Changes on the Spatial Changes of the Aletsch Glacier Andrija Krtalic¹, Kristina Zeman Štekočić², Ana Kuveždić Divjak¹ 1: Faculty of Geodesy University of Zagreb, Croatia; 2: SOPRA PROJEKT LTD</p>

<p>11:30am - 1:00pm</p>	<p>Education S2 Location: BS G.35</p> <p>The Earth-Moon System with Remote Sensing in Education – Implementing Lunar and Cis-Lunar Topics into the School Curriculum Roman Johannis Hiby, Claudia Lindner, Andreas Rienow Ruhr-University Bochum, Germany</p> <hr/> <p>Learning transfer @ Copernicus Master in Digital Earth – Encoding a swift transition to the Workplace in Education Eva-Maria Steinbacher, Stefan Lang, Barbara Schernthanner-Hofer PLUS University of Salzburg, Austria</p> <hr/> <p>Empowering Student Communities: Integrating Crowdsourcing, Remote Sensing, And Geoinformatics For Climate Change Mitigation Eleni Loulli¹, Marianna Hadjichristodoulou¹, Despina Makri¹, Eleni Neofytou¹, Dimitris Koumoulides¹, Eleftherios Theodoropoulos², Stavroula Sigourou², Foteini Salta², Charalampos Kontoes², Christiana Papoutsas¹ 1: ERATOSTHENES Centre of Excellence, Cyprus; 2: BEYOND Center for EO Research and Satellite Remote Sensing, Institute for Astronomy, Astrophysics Space Applications and Remote Sensing (IAASARS), National Observatory of Athens (NOA), Greece</p> <hr/> <p>Time-Series-Analysis, Drone-Data, and EnMAP-Data in schools – Teachers Beliefs and Needs Johannes Keller¹, Mario Blersch¹, Christian Plass¹, Alexander Siegmund^{1,2} 1: DEPARTMENT OF GEOGRAPHY – RESEARCH GROUP FOR EARTH OBSERVATION (RGeo), HEIDELBERG UNIVERSITY OF EDUCATION, GERMANY; 2: HEIDELBERG CENTER FOR THE ENVIRONMENT (HCE) & INSTITUTE OF GEOGRAPHY, HEIDELBERG UNIVERSITY, GERMANY</p> <hr/> <p>Copernicus Academy CZ Office - a Success Story of EO/Copernicus Capacity Building Activities Přemysl Štych, Josef Laštovička, Jan Svoboda, Daniel Paluba, Jakub Jelen Charles University, Faculty of Science, Department of Applied Geoinformatics and Cartography, EO4Landscape team, Czech Republic</p>	<p>W2 Coastal Location: BS G.36 Chair: Dr. Florinda Artuso Chair: Dr. Federico Angelini</p> <p>Phytoplankton Response To Marine Heatwaves Using Satellite Data Francesca Neri, Angela Garzia, Tiziana Romagnoli, Stefano Accoroni, Francesco Memmola, Marika Ubaldi, Alessandro Coluccelli, Pierpaolo Falco, Cecilia Totti Università Politecnica delle Marche, Italy</p> <hr/> <p>Marine Heatwave in the Mediterranean: The 2022/2023 Event, Remote Sensing, and In-Situ Observations with a Focus on Lampedusa Island marine environment Salvatore Marullo¹, Rosalia Santoleri¹, Damiano Sferlazzo², Alcide di Sarra², Francesco Monteleone², Daniela Meloni², Mattia Pecci² 1: CNational Research Council of Italy (CNR), Institute of Marine Sciences (ISMAR), Rome, Italy; 2: ENEA - Laboratory for Observations and Measurements for Environment and Climate, Rome, Italy</p> <hr/> <p>Exploring Long-Term Trends and Anomalies in Coastal Sea Surface Temperature Using AVHRR Data Reiners Philipp¹, Obrecht Laura², Dietz Andreas¹, Stefanie Holzwarth¹, Künzer Claudia^{1,2} 1: German Aerospace Center (DLR), German Remote Sensing Data Center (DFD), Germany; 2: University of Würzburg, Institute of Geography and Geology, Germany</p> <hr/> <p>Satellite Detection And Analysis Of Hawksbill Turtle Habitats In The Gulf Of Honduras/Caribbean Sea Fiona Brurein¹, Lauren Biermann², Meret Huber¹, Vanda Brotas³ 1: University of Mainz; 2: University of Plymouth; 3: University of Lisbon</p> <hr/> <p>An Extended Analysis of Coastal Reclamation Areas through the Utilization of Remote Sensing Data and Landscape Metrics Busra Karagoz, Nebiye Musaoğlu Istanbul Technical University, Turkiye</p> <hr/> <p>The Surface Water and Ocean Topography Mission in the Coastal Zone: 2D Altimetry for Mapping Intertidal Morphology Area and Change Ian Dougal Lichtman¹, Paul Bell¹, P. David Cotton², Chris Banks¹, Francisco J. M. Calafat^{1,3}, Christine Gommenginger¹ 1: National Oceanography Centre, UK; 2: SatOC Ltd.; 3: University of the Balearic Islands, Spain</p>
<p>1:00pm - 1:30pm</p>	<p>Closing ceremony Location: BS G.36 Chair: Dr. Elias Symeonakis Chair: Dr. Christina Karakizi Closing ceremony 5-min talks from: - Local Organiser Dr Elias Symeonakis - EARSeL President Dr Jean-Christophe Schyns - Local Organiser of 44th EARSeL Symposium 2025</p>	
<p>1:30pm - 3:00pm</p>	<p>Lunch Thursday Location: Business School of Manchester Metropolitan University</p>	