



**INTERNATIONAL SYMPOSIUM ON APPLIED GEOINFORMATICS 2026**  
FULL PROGRAMME

**WEDNESDAY, 13 MAY 2026**

9:00-10:30	<b>REGISTRATION</b>	
	<b>OPENING CEREMONY - HALL UA2</b>	
10:30-11:00	Chair of ISAG2026, Prof. Dr. Bulent Bayram Co-Chair of ISAG2026, Dr. Michal Kačmařík, prof. Jiří Horák	
	<b>KEYNOTE SPEAKER - HALL UA2</b>	
11:00-11:30	Prof. Dr. Lena Halounová President of ISPRS; Professor in Remote Sensing, Czech Technical University in Prague, CZ	
	<b>HALL UA2</b>	<b>HALL UA3</b>
	<b>Session 1: Remote Sensing in Environmental Monitoring (chair: Dursun Zafer Şeker)</b>	<b>Session 2: Object Detection from Satellite Imagery, Project Dissemination Session (chair: Jiri Horak)</b>
	Baraka, G. E. et al.: Application of Earth Observation Spectral Indices in Monitoring Desert Locust Invasion in Kenya	Açmalı, S. S. et al.: Aircraft Detection from Remote Sensing Images Using Mask R-CNN and Region of Interest Based Learning
	Şahin, A. et al.: Monocular Depth Estimation for Polar Bathymetry: A Case Study from Horseshoe Island, Antarctica	Usman, M. S. et al.: Satellite Imagery and Deep Learning for Poverty Mapping in Low and Middle Income Countries: A Systematic Review
11:30-13:00	Nas, R. et al.: Time-Series Analysis of Lake Desiccation and Groundwater Storage Changes Using Google Earth Engine: The Case of Demirköprü Dam Reservoir, Türkiye	Golej, P. et al.: Detection of Vehicles from Satellite Images using Deep Neural Networks
	Ignacy, D.: Refining zoning of artificially-drained mining areas: relative elevation models and hydrological hazard frameworks as decision support tools for spatial planning	Meklav, Z. et al.: Participatory Design of an Advance Care Planning Toolkit for People with Dementia: A Three-Phase Co-Design Study
	Canbulat, N. et al.: Mapping Forest Fire Affected Areas Using Random Forest and Landsat-8 Imagery: A Case Study of the 2025 Gelibolu-Şarköy Fires, (Türkiye)	Mlakar, I. et al.: MEDVIEW: Medical Research Valorisation through Intelligent Engagement of Citizens for Wellbeing
13:00-14:00	<b>LUNCH BREAK</b>	
14:00-15:30	<b>SATELLITE IMAGE PROVIDER SESSION + PRESENTATION OF SPONZORS - HALL UA2 (chair Bülent Bayram, Michal Kacmarik)</b>	
15:30-16:00	<b>COFFEE BREAK</b>	
	<b>HALL UA2</b>	<b>HALL UA3</b>
	<b>Session 3: Natural Hazards (chair: Premysl Stych)</b>	<b>Session 4: Photogrammetry and LiDAR Point Clouds, Virtual Reality (chair: İsmail Rakıp Karas)</b>
	Shallas, A.: Integrated Python Workflow for Landslide Susceptibility and Geological Hazard Mapping in South-East Albania	Hamdan, A. et al.: The geometric features of iPhone LiDAR point clouds: statistical analysis and comparison with TLS reference
16:00-17:30	Nas, R. et al.: Flood Dynamics Evaluation Using Sentinel-1 SAR Intensity and Coherence for Mapping Extent and Depth Estimation	Ozturk, O. et al.: Geometry-Aware Semantic Classification of LiDAR Point Clouds Using Image-Based Labels
	Khan, I. et al.: SBAS-InSAR-Based Landslide Monitoring in Hunza Valley, Northern Pakistan	Yılmaz, R. et al.: Generation and Web-Based Visualization of HBIM Models from Point Cloud and Photogrammetric Data
	Cibula, R. et al.: Modernizing Geological Information Services: Architecture and Capabilities of the Slovak G-Portal	Sulzer, W. et al.: 3D Geovisualisation and historical reconstruction of Hanfelden Castle (Austria)
	Gunes, O. et al.: Comparative Analysis of GRACE-based TWS and Vertical Displacement Time Series Noise Characteristics: A case study in Türkiye	Özdemir, B. et al.: Digital Twin and Generative AI Integration for Virtual Reality-Based Cultural Heritage Reconstruction: A Case Study of Pompeii
17:30-18:00	<b>POSTER PRESENTATION</b>	
18:00-20:00	<b>ICEBREAKER</b>	

**THURSDAY, 14 MAY 2026**

	<b>HALL UA2</b>	<b>HALL UA3</b>
	<b>Session 5: Digital Terrain Models &amp; Remote Sensing (chair: Oguz Selbesoglu)</b>	<b>Session 6: Spatial Analysis in Urban Environment (chair: Jiri Horak)</b>
	Becek, K.: Introducing the Global Elevation Data Testing Facility 2 (GEDTF2)	Incekara, A. H. et al.: Investigating the Relationship Between Storage Strategy Choice and Urbanization
	Plíva, P. et al.: A Lightweight Configurable Brownout Susceptibility Model for VTOL Operations	Czaplicka, M. et al.: Environmental sustainability as a component of age-friendly residential areas: Evidence from Moldova
09:00-10:30	Černík, J. et al.: Mapping conflict-related changes in Gaza using advanced change detection methods and Sentinel-2 data	Kekula, F. et al.: Exploring Spatial Distributions of Street Lighting Points and Night-Time Radiance Using Global and Local Measures of Spatial Autocorrelation
	Elznicová, J. et al.: The comparison development of two streams with different restoration of fluvial dynamics in the Ore Mountains of the Czech Republic	Hasova, L. et al.: Mapping Ambient Vulnerabilities: Commuters' exposure to air pollution
	Aşçıoğlu, H. et al.: Deep Learning Approaches for Building Extraction and Height Estimation from Satellite Imagery	Karaş, S. et al.: User-Centered Design of a Sustainable Navigation Interface for Smart Transportation: A Case Study of the SO-SMART Framework

10:30-11:00	<b>COFFEE BREAK</b>	
	<b>Session 7: Image Processing and Computer Vision (chair: Kazimierz Becek)</b>	<b>Session 8: Spatial Intelligence (chair: Marta Czaplicka)</b>
	Susetyo, D. B. et al.: A Comparative Study of U-Net Variants and Transformer-Based Models for Building Segmentation	Rapant, P. et al.: Spatiotemporal Knowledge Base as a Data Source for Sketch Map Visualization
11:00-12:00	Rasheed, Z. et al.: Advancing Microplastics Detection through Digital Image Processing Using Vector-Based Fractal Dimension Analysis	Gulbe-Viluma, L. et al.: Integrating Commercial Thinning Estimation Research into the GeoHub Geospatial Intelligence Platform: An Application Example
	Oğurlu, M. et al.: Cross-Dataset Transfer Learning for Sewer Defect Classification Using YOLOv8l: From the Istanbul Dataset to the Denmark Dataset	Gross, M.: The Impact of Tram Network Expansion on Passenger Flow Dynamics: A Case Study of Olsztyn
12:00-13:00	<b>LUNCH BREAK</b>	
	<b>Project Dissemination Session (chair: Tolga Bakirman)</b>	<b>Excursion IT4IN super-computing centre (participants will meet at 12:40 p.m. by the coat check in the university hall - one floor below the conference rooms)</b>
	Sikakis, N. et al.: An Edge-Enabled Smart Livestock Monitoring Framework in Mountainous Crete: The AGRARIAN Approach	
	Sifakis, N. et al.: Towards AI-Enabled Livestock Monitoring in Extensive Mediterranean Rangelands: Algorithms, Data Pipeline and Deployment Considerations	
13:00-15:00	De Cola, T. et al.: A Novel Smart Farming Architecture Concept: The Insights from the AGRARIAN Project	
	Cruces, J. et al.: A Lightweight Cloud-to-Edge Orchestration Architecture for Smart Agriculture Across Terrestrial and Non-Terrestrial Networks	
	Cachao, M. et al.: Why aren't farmers using precision viticulture frequently? AGRARIAN case study as a model	
	Radu, C. et al.: From Agronomic Data to Digital Decision Support Crop Monitoring Algorithms within the AGRARIAN Platform The Romanian Pilot	
15:00-15:30	<b>COFFEE BREAK</b>	
	<b>Session 9: Atmosphere and Drought Monitoring (chair: Michal Kacmarik)</b>	<b>Session 10: Forests and Greenery Applications (chair: Kazimierz Becek)</b>
	Arshad, S. et al.: An Asymmetric Composite Index for Agricultural Drought Monitoring across Central Europe	Moyo, V. et al.: Assessing Pretrained GIS Deep Learning Models for Urban Tree Inventory Mapping
	Yilmaz, V.: Assessing the Relative Importance of Land-Atmosphere Variables for Extreme Heat Events in Czechia	Boldbaatar, E. et al.: Satellite-Based Forest Cover Change in Northern Mongolia
15:30-17:00	Yilmaz, C. S.: Performance Evaluation of CHIRPS, ERA5-Land and PERSIANN-CDR Precipitation Products over the Black Sea Region of Türkiye (1984-2024)	Loghmanieh, I. et al.: A comparative evaluation of UAV-LiDAR and deep learning for delineating tree crowns and conducting spectral analysis in walnut orchards
	Varna, I. et al.: Investigation of Atmospheric Anomalous Refraction Using the Digital Zenith Camera VESTA	Červenka, A. et al.: Developing a Municipal Greenery Concept: GIS-Driven Approach to Strategic Planning in Ostrava
	Selbesoğlu, M. O. et al.: Towards AI-Based Extreme Rainfall Prediction Using Multi-Source Precipitable Water Vapor and Meteorological Data	

## FRIDAY, 15 MAY 2026

	<b>HALL UA2</b>	<b>HALL UA3</b>
	<b>Session 11: GIS for Transportation and Urban Applications (chair: Pavel Kukuliac)</b>	<b>Session 12</b>
	Gavrilov, I. et al.: Impact of Road Geometry and Temporal Factors on Number of Vehicles in Accidents: A GIS Study	
9:00-10:30	Koktavá, N. et al.: HeiGIT Bikeability Index adjusted for Brno City	
	Růžičková, K. et al.: A Methodological Framework for Geospatial Data Preparation in Missing Persons Search Operations	
	Ekşi, M. et al.: AI-based Strategic Decision Support System in Data Management and Efficiency Valuation in Fatih Municipality Service Units	
10:30-11:00	<b>CLOSING CEREMONY</b>	

### CONFERENCE SPONZORS

