



International Conference on AI and Geomatic Technology 2026

Official Conference Program

April 16-17, 2026
Beni Mellal, Morocco

Thursday, April 16, 2026

Time	Session	Details
09:00 - 10:00	On-site Registration	Participant registration and welcome.
10:00 - 11:30	Opening Ceremony	<ul style="list-style-type: none"> • M. Khalid Mehdi, Interim President of Sultan Moulay Slimane University, Beni Mellal, Morocco • M. Muhammad Kamran, Vice Chancellor of The Islamia University of Bahawalpur, Pakistan • M. Abderrazak El Harti, General Chair of ICAIGT 2026, Dean of the Polydisciplinary Faculty, Beni Mellal, Morocco • M. Ahmed Barakat, Dean of the Faculty of Sciences and Technics, Beni Mellal, Morocco
11:30 - 12:00	Tea & Coffee Break	Networking break.
12:00 - 13:30	Plenary Session 1	"Mapping Carob Forest Dieback using UAV-Based Multispectral Data, Biomass-Chlorophyll Indices and Machine Learning" By Dr. Abderrazak Bannari (Quebec, Canada)
13:30 - 15:00	Lunch Break	Lunch and networking.
15:00 - 16:20	Session 1 - Natural Resource Management and Geospatial Intelligence	<p>Location: Conference Amphitheater - FSTBM Chair: Pr. Muhammad Kamran</p> <ul style="list-style-type: none"> • ID #57 - Mapping Barite mineralization using fused spectral methods and Sentinel-2 data in Eastern Anti-Atlas - Zakaria Adiri • ID #110 - Integrating Machine Learning and Multi-Criteria Spatial Analysis for Sustainable Geotourism Site Selection in Fragile Karst Environments: A Case Study of the Amekla Plateau (Central Middle Atlas) - Chami Jaouad • ID #113 - Vertical Variation of Soil Organic Carbon Stock: Integrating Process-Based Understanding - Hassan Mosaid • ID #115 - Performance Assessment of Microbial-Based Biostimulants and Organic Amendments in Winter Wheat Using Spectral-Thermal Fusion and Temporal Density Analysis - Lahoucine Ech-Chatir

Time	Session	Details
16:20 - 19:00	Session 2 - Remote Sensing and Earth Observation Analytics	<p>Conference Amphitheater - FSTBM Chair: Pr. G. H. Abbasi (16:20-17:40)</p> <ul style="list-style-type: none"> • ID #59 - The contribution of multispectral drones to precision agriculture in the Tadla Plain (Morocco): efficiency, advantages, and challenges - Hasna Jinnou • ID #61 - Integration of Sentinel-2 imagery and machine learning models for high-resolution mapping of soil macronutrients in irrigated perimeters in semi-arid areas - Yassine Amrouss • ID #91 - Proposal of a New Method for Considering Olfactory Nuisances in Public Landfill Siting in Morocco - Moussaif Bouchta • ID #95 - Assessing Short-Term Soil Salinity Dynamics in Semi-Arid Landscapes Using Proximal Sensing and Ensemble Learning - Mongai Joyce Chindong <p>Chair: Pr. A. Bannari (17:40-19:00)</p> <ul style="list-style-type: none"> • ID #10 - Integrating NDVI Time Series and Climate Data to Evaluate Olive Tree Responses to Climate Change in Beni-Amir - Ayoub Daiz • ID #100 - A Comparative Assessment of Deep Learning Approaches for Semantic Segmentation of Plant Species Using High-Resolution UAV Imagery in a Mountainous Environment - Sani Amadou Mahamadou Mansour • ID #103 - Integrating Optical-Microwave Scintillometry with the SPARSE Model for Landscape Scale Evapotranspiration Monitoring in a Drip Irrigated Olive Orchard - Barguache (Online) • ID #117 - Vegetation Dynamics in Al Hoceima National Park (Morocco) Assessed Using Remote Sensing and Machine Learning - Alae Mouddou

Time	Session	Details
16:20 - 19:00	Parallel Session 2 - Remote Sensing and Earth Observation Analytics	<p>Classroom A Chair: Pr. T. Tagma (16:20-17:40)</p> <ul style="list-style-type: none"> • ID #55 - Advanced Euphorbia resinifera Detection for Sustainable Semi-Arid Ecosystem Management: A Comparative Deep Learning Analysis Using UAV Imagery - Ilias Jennaoui • ID #58 - Spatiotemporal assessment of citrus orchard health in Morocco Tadla plain using Sentinel-2 biophysical indices (2019-2024) - El Atiq Jaouad • ID #66 - Combined Forest Pressure Index (CFPI) for Spatial Diagnosis of Ecological and Anthropogenic Pressures in Semi-Arid Mediterranean Forest Ecosystems - Diouane Fatima • ID #74 - High-Resolution Land Surface Temperature Downscaling Using MODIS-Sentinel Data Fusion Over Semi-Arid Wheat Fields - Zainab Bouswir • ID #75 - Spatiotemporal Evaluation and Hyperspectral Modelling of Mudflat Gross Primary Production in France Estuarine Environments - Hajar Saad El Imanni <p>Chair: Pr. F. Shahzad (17:40-19:00)</p> <ul style="list-style-type: none"> • ID #77 - Monitoring Spatiotemporal Variability of Agricultural Drought Using VCI, TCI, and VHI Derived from Satellite Time Series - Rachida Guendour • ID #83 - Spatio-temporal analysis of forest dynamics in the Upper Oued El Abid watershed (High Central Atlas, Morocco) using remote sensing techniques - Yassine Eljaouhary • ID #85 - Advances and Future Directions in Remote Sensing Methods and Platforms for Sustainable Monitoring of Forest Degradation - Mohamed Chikh Essbiti • ID #9 - Assessing forest cover changes in Khenifra National Park (Middle Atlas, Morocco) using remote sensing - Salwa Mokrane (Online) • ID #90 - Influence of slope on sheet runoff erosion in the upper Sissili watershed (Burkina Faso) - Augustin Yameogo (Online) • ID #93 - Remote Sensing Pathways for Groundwater Depletion Assessment in Data-Scarce Irrigated Basins: Methodological Evaluation and Application to Morocco - Dakir Asmae • ID #99 - Mapping and prediction of soil salinity using Sentinel-2 imagery and machine learning models in the Tadla Plain (Morocco) - Abdessamad Hilali

Friday, April 17, 2026

Time	Session	Details
08:30 - 09:30	Plenary Session 2	"An overview of the scientific research advances on agricultural soils in Pakistan for sustainable exploitation" By Dr. Hassan Ghulam Abbasi (The Islamia University of Bahawalpur, Pakistan)
09:30 - 10:00	Tea & Coffee Break	Networking break.
10:00 - 14:00	Session 3 - GeoAI and Big Data Analytics	<p>Conference Amphitheater - FSTBM</p> <p>Chair: Pr. F. Shahzad (10:00-11:20)</p> <ul style="list-style-type: none"> • ID #14 - Citrus Canopy Segmentation from UAV Imagery Using U-Net and Morphological Processing: Application to a Citrus Orchard in Beni Mellal-Khenifra Region, Morocco - Daiaeddine Mohamed Jibril • ID #5 - AI-Driven Flood Susceptibility Modeling Using Geospatial Big Data: A Case Study of the Loukkos Watershed, Morocco - Coulibaly Demba • ID #6 - Temporal Deep Learning for Land Cover Dynamics: A 1D-CNN Approach to Analysis and Prediction - Rkia Bendaoud • ID #63 - The seasonal mapping land surface temperature using Landsat 8 OLI/TIRS thermal remote sensing data: A case study of Beni Mellal city, Morocco - Moha Errachdi <p>Chair: Pr. H. Mouncif (11:20-14:00)</p> <ul style="list-style-type: none"> • ID #78 - Spatio-Temporal Forecasting of PM2.5 in Bahawalpur, Pakistan Using Graph Neural Networks and Multi-Variate Transformers - Rameez Farooq • ID #79 - GeoAI-Based Cross-Sensor Fusion for Cloud-Free PRISMA and EnMAP Hyperspectral Reconstruction - Ghizlane El Guerch • ID #81 - Flood susceptibility mapping using unsupervised learning: A case study in the city of Tata, Morocco - Assia Erguigue • ID #76 - Spatial Modeling of Gully Erosion in Semi-Arid Mountain Environments Using Machine Learning Models - Oussama Nait-Taleb
14:00 - 15:30	Lunch Break	Lunch and networking.
15:30 - 16:15	Session 4 - Digital Twins and Smart Environment Monitoring	<p>Conference Amphitheater - FSTBM</p> <p>Chair: S. El Ghmari</p> <ul style="list-style-type: none"> • ID #105 - Heritage Valorization: Contribution of Laser Scanning to the Conservation of Historical Monuments in Bejaad - Ahanssal Chaima • ID #65 - Multisensor UAV Integration in Civil Engineering Projects - Toufik Enfissi • ID #69 - The Role of IoT and Edge Computing in Digital Twin: Sensors, Data Collection, and Real-Time Monitoring - Rotimi-Williams Bello (Online)

Time	Session	Details
16:15 - 17:45	Session 5 - GeoAI and Big Data Analytics	<p>Conference Amphitheater - FSTBM Chair: I. Aattouri</p> <ul style="list-style-type: none"> • ID #102 - GeoAI-Based Assessment of Pesticide Use Practices and Associated Health Risks among Farmers in the Tadla-Azilal Region, Morocco - Ouardi Fatima Zohra • ID #104 - Machine Learning-Based Lithological Mapping from Sentinel-2 Imagery in the Moroccan High Atlas: A Random Forest Approach - Zaina El Kamel • ID #106 - Theoretical Roadmap for Building an Intelligent Geomorphological Knowledge Base Using Large Language Models - Mohamed En-Nejmymy • ID #112 - Binary Classification of Fire and No-Fire Images Using Convolutional Neural Network - Aziz Akermoud • ID #114 - Rockfall Susceptibility Mapping Using GeoAI and Machine Learning: El Harrar Watershed (Eastern Pre-Rif Hills, Morocco) - Bahija Filal • ID #13 - Establishment of a conceptual framework to detect automatically the urban planning offences using Deep Learning and RGB orthophotos: study case of Morocco - Mohamed Mellaki
17:45 - 19:00	Workshop	Workshop session.
19:00 - 20:00	Closing Ceremony	Official closing of ICAIGT 2026.