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Remote Sensing for Agriculture, Ecosystems, and Hydrology XXV

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Contents

vii *Conference Committee*
ix *Introduction*

MACHINE LEARNING AND DEEP LEARNING I

- 12727 02 **Multisensor data fusion for automatized insect monitoring (KInsecta)** [12727-1]
- 12727 03 **ConvLSTM-based drought prediction using vegetation health index (VHI)** [12727-2]
- 12727 04 **Comparison of deep learning-based models for forecasting precipitation using era-5 and radar images** [12727-3]
- 12727 05 **Generating mustard crop maps using planet scope high resolution dataset by applying machine learning algorithms** [12727-50]

SURFACE, COASTAL, AND GROUND WATER

- 12727 06 **Remote sensing data upon application of methodology for defining the adjoining lands and flooding river stripes in Bulgaria** [12727-6]
- 12727 09 **Neyman-Pearson detection of ground water and nonwater sites using Sentinel-1 SAR data** [12727-9]
- 12727 0A **Country-wide flood monitoring service: methods, applications, and functionalities** [12727-10]
- 12727 0B **A radiometric contouring approach to map the shoreline** [12727-11]

FOREST MAPPING AND MONITORING I

- 12727 0C **Mapping forest microclimates using Sentinel 1 radar data: insights and complementarity with LiDAR and optical data** [12727-12]
- 12727 0E **Assessing the vulnerability of Western Himalayan ecosystem to climate change using machine learning algorithms** [12727-15]

FOREST MAPPING AND MONITORING II

12727 OH **Automatic extraction of former WWI battlefields from ancient maps** [12727-18]

AGRICULTURAL VEGETATION

12727 OJ **Insights into entangled variations in the red edge position and red to far-red ratios of soybean leaves** [12727-20]

12727 OL **Potential of optical and radar satellite observations to estimate rice biophysical variables and rice yield estimation** [12727-22]

12727 OM **Towards optimising the derivation of phenological phases of different crop types over Germany using optical high resolution image time series** [12727-23]

12727 ON **The dynamics of rice biophysical variables in irrigated and non-irrigated systems during the growing season** [12727-24]

12727 OO **Mapping rice paddy fields in semiarid northeastern Thailand using Sentinel-1 and -2 time series data and phenological clustering** [12727-25]

MACHINE LEARNING AND DEEP LEARNING II

12727 OQ **Feasibility analysis of using Sentinel-1 images to phenologically differentiate the areas of soybean seed and sub-irrigated bean planting in the period of sanitary void in the tropical floodplains of the Formoso River basin, Tocantins, Brazil** [12727-27]

12727 OR **Texture descriptors and machine learning algorithms for mistletoe detection in urban forests using multispectral imagery** [12727-28]

WILDFIRE MONITORING

12727 OS **Evaluation of orbit results on wildfire detection using a broad single-channel microbolometer sensor sensitive in the thermal infrared** [12727-30]

HYPERSPECTRAL, HIGH SPATIAL RESOLUTION

12727 OU **Adequacy of Mediterranean forest simulations from DART radiative transfer model and UAV laser scanning data to hyperspectral images** [12727-35]

12727 OV **Foliar spectral responses of sugarcane and maize: how comparable are they?** [12727-38]

ENERGY BALANCE, EVAPOTRANSPIRATION

- 12727 0W **Association of catchment characteristics to Budyko hydrologic model's uncertainty in humid catchments (Best Student Paper Award) [12727-39]**
- 12727 0X **Regional daily evapotranspiration estimation using remote sensing data and atmospheric-land exchange inverse energy model in Brazil [12727-41]**
- 12727 0Y **The feasibility of combining the two-source energy balance (TSEB) model with object-based approaches to estimate surface heat fluxes [12727-42]**
- 12727 0Z **Remote sensing-based evapotranspiration modeling for several land uses using SETMI model for Nebraska [12727-43]**
- 12727 10 **Evaluation of the SEBAL and SAFER models in the estimation of the actual evapotranspiration and crop coefficients of sugarcane in Colombia [12727-44]**

MODELLING, MACHINE LEARNING, AND DEEP LEARNING

- 12727 11 **Deep-learning-based image super-resolution for enhanced root hair visualization and root traits analysis [12727-47]**

UAV, LIDAR, AND SMART SOLUTIONS FOR FARMING

- 12727 15 **Grassland vegetation parameters estimation using UAV hyperspectral data [12727-52]**
- 12727 17 **Evaluation of the performance of DIAL system for the determination of ethylene concentration in an agricultural area [12727-54]**
- 12727 18 **TEBAKA: a technological platform for Apulian crop monitoring [12727-55]**

ENVIRONMENTAL REMOTE SENSING

- 12727 1A **Joint estimation of LSA SAF vegetation parameters with multi-task Gaussian processes [12727-57]**
- 12727 1C **Application of remote sensing for monitoring restoration measures in habitats under Natura 2000: a case study for Bulgaria [12727-59]**

POSTER SESSION

- 12727 1F **Infrared imaging for proximal and remote detection of soil-borne diseases on wild rocket [12727-61]**

- 12727 1G **Using Sentinel-1 data for soybean harvest detection in Vojvodina province, Serbia** [12727-62]
- 12727 1H **Assessment of elevation and slope exposure impact on snow cover distribution in the mountainous region in Bulgaria using Sentinel-2 satellite data** [12727-63]
- 12727 1I **Application of optical data from Sentinel-2-MSI for snow cover monitoring on the territory of the mountainous region of Bulgaria** [12727-64]
- 12727 1J **Satellite and drone multi-spectral and thermal images data fusion for intelligent agriculture monitoring and decision making support** [12727-65]
- 12727 1K **Drone multispectral and thermal images data processing for intelligent agriculture support** [12727-66]
- 12727 1L **Coupling multiscale remote and proximal sensors for the estimation of crop water requirements** [12727-68]
- 12727 1M **Design and development of an innovative online modular device for both water and wastewater monitoring** [12727-72]
- 12727 1O **Monitoring and spatial-temporal analysis of Stryama river flood event, Karlovo municipality, Bulgaria, occurred on 02.09.2022 by the methods of remote sensing** [12727-74]
- 12727 1Q **Development of drone acquisition imagery and AI-based field crop status and growth prediction model** [12727-76]

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Introduction

This proceedings volume contains papers presented during the Remote Sensing for Agriculture, Ecosystems, and Hydrology XXV conference.

This conference was a segment of the SPIE Sensors + Imaging symposium, which is a fusion of two of Europe's premier photonics conferences: SPIE Remote Sensing and SPIE Security + Defence.

The symposium took place at the RAI Exhibition and Convention Centre in Amsterdam, the Netherlands, from 3-6 September 2023. The conference this year featured approximately 30 oral presentations and 10 poster presentations, encompassing a wide array of topics related to the application of remote sensing in environmental science.

The conference was structured into 12 sessions, each focusing on a specific theme. These themes included, "Machine Learning and Deep Learning I", "Surface, Coastal, and Ground Water", "Forest Mapping and Monitoring I", "Forest Mapping and Monitoring II", "Agricultural Vegetation", "Machine Learning and Deep Learning II", "Wildfire Monitoring", "Hyperspectral, High Spatial Resolution", "Energy Balance, Evapotranspiration", "Modelling, Machine Learning, and Deep Learning", "UAV, LIDAR, and Smart Solutions for Farming" and "Environmental Remote Sensing".

The conference's Best Student Paper Award was given to the paper, "Association of catchment characteristics to Budyko hydrologic model's uncertainty in humid catchments", by Lilin Zhang, Michael Marshall, Anton Vrieling, and Andrew Nelson from the Department of Natural Resources, Faculty of Geo-Information Science and Earth Observation (ITC), University of Twente, Enschede, the Netherlands.

The poster presentations effectively mirrored the themes of the aforementioned sessions. They encompassed a spectrum of research activities, both fundamental and application-oriented, including modelling, laboratory and field experiments, and operational applications.

We extend our heartfelt thanks to the presenters for sharing their research and to the attendees for their thought-provoking questions and discussions. We also express our gratitude to the SPIE for providing an exceptional venue, and to the SPIE Europe Manager, Program Coordinators and Proceedings Coordinator for their unwavering support before, during, and after the symposium.

We look forward to an even more successful conference in 2024 in Edinburgh, UK.

Christopher M. U. Neale
Antonino Malfese

