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Remote Sensing for Agriculture, Ecosystems, and Hydrology XXV

Christopher M. Neale
Antonino Maltese
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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 Maltese