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Introduction

This proceedings volume contains papers presented during the Remote Sensing for Agriculture, Ecosystems, and Hydrology XXI conference. The conference was part of the SPIE Remote Sensing symposium held 9–12 September 2019 at the Palais de la Musique et des Congrès in Strasbourg, France. Approximately 40 oral and 20 poster papers were presented during this year's conference, covering a broad range of topics in the field of remote sensing applications for environmental science.

The program was organized into 11 sessions according to major themes, namely, Sentinel-1 and Sentinel-3; Sentinel-2; UAV, Hyperspectral, and High Spatial Resolution; Sentinel-1 and Sentinel-2 Precision Farming; Precision Farming I; Precision Farming II; Machine Learning, Deep Learning, and Classification; Forest; Hydrology I; Hydrology II; and Agriculture and Ecosystems.

The conference Best Student Paper Award was given to the paper, "Investigating impacts of calibration methodology and irradiance variations on lightweight drone-based sensor derived surface reflectance products," by Dominic Fawcett and Karen Ander from the Environment and Sustainability Institute at the University of Exeter (United Kingdom).

The poster presentations also had good representation from the abovementioned session themes. The presentations described both fundamental and applications-based research activities including modelling, laboratory and field experiments, and operational applications.

Our appreciation and gratitude go to the presenters for their efforts, and to the participants for their insightful questions and discussions. Special thanks are also due to the host city for the excellent venue, and to the SPIE staff for their support prior to, during, and after the symposium.

We look forward to an even more successful conference in 2020 in Edinburgh, UK.

Christopher M. U. Neale Antonino Maltese