Contents

ix *Authors*

xiii *Conference Committee*

xvii *Introduction*

xix *Conference Sponsorship and Support*

AGRICULTURE

10444 02 **Design of autonomous sensor nodes for remote soil monitoring in tropical banana plantation** [10444-47]

10444 03 **Land cover mapping using lidar data and aerial image and soil fertility degradation assessment for rice production area in Quezon, Nueva Ecija, Philippines** [10444-16]

10444 04 **Comparative analysis of tree classification models for detecting fusarium oxysporum f. sp cubense (TR4) based on multi soil sensor parameters** [10444-44]

10444 05 **Development of an asynchronous communication channel between wireless sensor nodes, smartphone devices, and web applications using RESTful Web Services for intelligent farming** [10444-37]

10444 06 **Extraction of inland Nypa fruticans (Nipa Palm) using Support Vector Machine** [10444-18]

10444 07 **Streamlining machine learning in mobile devices for remote sensing** [10444-38]

REMOTE SENSING

10444 08 **Evaluating ALOS AW3D30 data** [10444-48]

10444 09 **Commercial vs professional UAVs for mapping** [10444-56]

10444 0A **Studying the dynamics of mountain ecosystems in the context of climate change employing remotely sensed data** [10444-57]

10444 0B **Photogrammetry and remote sensing education subjects** [10444-36]

10444 0C **Terrestrial laser scanning for biomass assessment and tree reconstruction: improved processing efficiency** [10444-46]

10444 0D **Ubiquitous UAVs: a cloud based framework for storing, accessing and processing huge amount of video footage in an efficient way** [10444-2]

GIS

10444 0E **A discussion for integrating INSPIRE with volunteered geographic information (VGI) and the vision for a global spatial-based platform** [10444-3]

10444 0F **Implementing GIS in real estate price prediction and mass valuation: the case study of Nicosia District** [10444-72]

10444 0G **Including granulometric sediment coastal data composition into the Black Sea GIS** [10444-41]

10444 0H **On-line applications of numerical models in the Black Sea GIS** [10444-42]

10444 0I **PERSEUS QC: preparing statistic data sets** [10444-39]

NATURAL HAZARDS

10444 0J **Ground subsidence phenomena in Frakadona, West Thessaly, Greece** [10444-40]

10444 0K **TIR time series satellite and field data for seismic anomalies monitoring** [10444-33]

10444 0L **Using remote sensing to predict earthquake impacts** [10444-67]

10444 0M **Exposure and vulnerability assessment of buildings extracted from lidar derived datasets in Bucao River floodplains, Zambales, Philippines** [10444-8]

10444 0N **Hydrologic modeling of Guinale River Basin using HEC-HMS and synthetic aperture radar** [10444-21]

10444 0O **Detection and assessment of flood susceptible irrigation networks in Licab, Nueva Ecija, Philippines using LiDAR DTM** [10444-19]

FOREST AND FOREST FIRES - DISASTER RESPONSE

10444 0P **Mid-term fire danger index based on satellite imagery and ancillary geographic data** [10444-32]

10444 0Q **Remote sensing techniques in monitoring areas affected by forest fire** [10444-24]

10444 0R **Non-supervised method for early forest fire detection and rapid mapping** [10444-73]

10444 0S **IMPRESS: medical location-aware decision making during emergencies** [10444-51]

10444 0T **VHR satellite imagery for humanitarian crisis management: a case study** [10444-54]

FOREST AND FOREST FIRES

10444 0U **Evaluating horizontal positional accuracy of low-cost UAV orthomosaics over forest terrain using ground control points extracted from different sources** [10444-30]

10444 0V **Analysis of the urban green areas of Nicosia: the case study of Linear Park of Pedieos River** [10444-66]

CLOSED SESSION

10444 0W **The use of UAS in disaster response operations** [10444-70]

CULTURAL HERITAGE

10444 0X **Qualitative assessment of the medieval fortifications condition with the use of remote sensing data (Republic of Tatarstan)** [10444-50]

10444 0Y **Methodology for heritage conservation in Belgium based on multi-temporal interferometry** [10444-22]

10444 0Z **Endangerment of cultural heritage sites by strong rain** [10444-6]

GEOLOGY

10444 10 **Tracing dynamics of relative volumetric soil moisture content using SAR data** [10444-12]

10444 11 **Predicting heavy metal concentrations in soils and plants using field spectrophotometry** [10444-53]

10444 12 **Soil spectral measurements in the field: problems and solutions in light of the GEO-CARDEL project** [10444-63]

ATMOSPHERIC

10444 13 **Evaluation and intercomparison of GPM-IMERG and TRMM 3B42 daily precipitation products over Greece** [10444-69]

URBAN ENVIRONMENT

10444 14 **Unmanned aerial vehicle (UAV) application to the structural health assessment of large civil engineering structures** [10444-29]

10444 15 **Reflectance and thermal properties of the urban fabric studied with aerial spectral imaging** [10444-45]

10444 16 **Geospatial data for assessment of extreme climate impacts on urban environment** [10444-34]

COASTAL WATERS, OCEANS, AND LARGE WATER BODIES

10444 17 **Coastal habitat mapping in the Aegean Sea using high resolution orthophoto maps** [10444-52]

10444 18 **UAS close range remote sensing for mapping coastal environments** [10444-35]

10444 19 **Operational use of open satellite data for marine water quality monitoring** [10444-49]

10444 1A **Creation of a digital elevation model of the bottom according to echosounding** [10444-14]

10444 1B **Estimation of the particle size distribution slope with 3 methods: implications for the optical backscattering ratio and the bulk refractive index** [10444-10]

10444 1C **Remote sensing in detection of geophysical changes in Talisay River, Bataan, Philippines** [10444-9]

10444 1D **Assessment of the vulnerability to erosion for the Arctic coast** [10444-68]

POSTER SESSION

10444 1E **Development of web-based GIS services for sustainable soil resource management at farm level** [10444-43]

10444 1F **Predicting soil properties for sustainable agriculture using vis-NIR spectroscopy: a case study in northern Greece** [10444-28]

10444 1G **Measuring the environmental awareness of young farmers** [10444-71]

10444 1H **Analysis of Joss-Waldvogel disdrometer measurements in rainfall events** [10444-60]

10444 1I **The use of UAVs to monitor archeological sites: the case study of Choirokoitia within the PROTHEGO project** [10444-78]

10444 1J **Integration of multispectral and SAR data for monitoring forest ecosystems recovery after fire** [10444-5]

10444 1K **Land subsidence phenomena in urbanized areas of Attica observed by applying advanced DinSAR techniques** [10444-11]

10444 1L **Land subsidence susceptibility and hazard mapping: the case of Amyntaio Basin, Greece** [10444-15]

10444 1M **Investigation on the thermographic detection of corrosion in RC structures** [10444-75]

10444 1N **Quality enhancement of satellite images and its application for identification of surroundings of waste disposal sites** [10444-4]

10444 1O **Optical hyperspectral measurements of rocks and soils in Central Srednogorie, Bulgaria** [10444-13]

10444 1P **Satellite data based approach for the estimation of anthropogenic heat flux over urban areas** [10444-74]

10444 1Q **Ten years research activities in Earth observation at the Cyprus University of Technology** [10444-77]

10444 1R **Comparison of MODIS-derived land surface temperature with air temperature measurements** [10444-55]

10444 1S **Assessment of modern smartphone sensors performance on vehicle localization in urban environments** [10444-79]