Paper Session:

5552 Multi-temporal Analysis of Remote Sensing Data: Methods and Applications II

is scheduled on Saturday, 4/25/2015, from 4:00 PM - 5:40 PM in Stetson BC, Hyatt, West Tower, Purple Level

Sponsorship(s):
Remote Sensing Specialty Group
Geographic Information Science and Systems Specialty Group
Spatial Analysis and Modeling Specialty Group

Organizer(s):
Le Wang - SUNY at Buffalo
Cuizhen Wang - University of South Carolina

Chair(s):
Cuizhen Wang - University of South Carolina

Abstract(s):

4:00 PM Author(s): *Sory Toure - San Diego State University
Douglas Stow, Pr - San Diego State University

Abstract Title: *Land Cover and Land Use Change Analysis Using Multi-Spatial Resolution Data and Object-Based Image Analysis*

4:20 PM Author(s): *Firooza Pavri - University Of Southern Maine

Abstract Title: *Land use change and habitat fragmentation across a vulnerable freshwater system in northern New England*

4:40 PM Author(s): *Bassil El Masri - Murray State University

Abstract Title: *Examining the spatial and temporal variability of soil moisture in Kentucky, using a land surface model, remote sensing and observational data*

5:00 PM Author(s): *Lei Zou - Louisiana State University
Nina Lam - Louisiana State University
Yi Qiang - Louisiana State University
Kenan Li - Louisiana State University
Heng Cai - Louisiana State University

Abstract Title: *A Genetic Algorithm Optimized Agent-based Modelling of Land Loss and Urban Growth in the Lower Mississippi River Basin*

5:20 PM Author(s): *Willem J.D. Van Leeuwen - University of Arizona - Arizona Remote Sensing Center - School of Geography and Development
Kyle Hartfield - University of Arizona - School of natural Resources and the Environment

Abstract Title: *Remotely Sensed Woody Plant Encroachment Dynamics in the Southern Great Plains*

Session Description: A plethora of multi-temporal remote sensing data ranging from

passive to active, local to global coverage have been acquired and made available to scientific community. Such dataset presents us an unprecedented opportunity to advance our scientific understanding of various dynamic processes associated with earth system, particularly land change science. However, there are lack of methods and applications to synthesize the spectral, spatial, and temporal information embedded in such rich dataset. Of particular note is the added temporal dimension presenting special challenges in the data analysis. To this end, this session invites papers focusing on both methodological and applied research using multi-temporal remotely sensed data. Potential topics for this session may include, but are not limited to:

- Multi-source image registration, intercalibration and correction
- Data fusion
- Multi-temporal image classification
- Change detection
- Accuracy assessment and uncertainty analysis
- Multi-temporal LIDAR, SAR and InSAR data analysis
- Land-cover and land-use dynamics monitoring and modeling
- Ecosystem process monitoring and modeling
- Urban dynamics characterization
- Water resources monitoring and modeling
- Vegetation dynamics monitoring and modeling
- Ecosystem response to the climate change

New Query