<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
<th>Attending</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 AM to 5:45 PM</td>
<td>Registration Desk Open</td>
<td>Mezzanine Level Atrium</td>
<td></td>
</tr>
<tr>
<td>7:00 AM to 7:00 PM</td>
<td>Posters Open</td>
<td>301 C</td>
<td></td>
</tr>
<tr>
<td>8:00 AM to 9:15 AM</td>
<td>Technical Program — Keynote Address</td>
<td>104 D</td>
<td></td>
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<tr>
<td>8:00 AM to 5:00 PM</td>
<td>Career Interview Room Open</td>
<td>201 D</td>
<td></td>
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<tr>
<td>9:30 AM to 11:00 AM</td>
<td>Technical Sessions — 1 to 11</td>
<td>varies, see description</td>
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<tr>
<td>9:30 AM to 11:00 AM</td>
<td>Poster Presentation I</td>
<td>203 A</td>
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<tr>
<td>10:00 AM to 7:00 PM</td>
<td>Exhibit Hall Opens</td>
<td>Exhibit Hall 301 C</td>
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<tr>
<td>11:15 AM to 12:15 PM</td>
<td>Hot Topics</td>
<td>varies, see description</td>
<td></td>
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<tr>
<td>12:15 PM to 1:30 PM</td>
<td>22nd Annual Awards Luncheon &amp; 77th Installation of ASPRS Officers</td>
<td>Ballroom 104 D</td>
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</tr>
<tr>
<td>1:30 PM to 3:00 PM</td>
<td>Technical Sessions — 12 to 21</td>
<td>varies, see description</td>
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<tr>
<td>1:30 PM to 3:00 PM</td>
<td>Poster Presentation II</td>
<td>203 A</td>
<td></td>
</tr>
<tr>
<td>2:30 PM to 3:30 PM</td>
<td>Student &amp; Young Professionals Event — Exhibit Hall Guided Tour for Students</td>
<td>Exhibit Hall 301 C</td>
<td></td>
</tr>
<tr>
<td>3:30 PM to 5:00 PM</td>
<td>Technical Sessions — 22 to 30</td>
<td>varies, see description</td>
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<tr>
<td>3:30 PM to 5:00 PM</td>
<td>Poster Presentation III</td>
<td>203 A</td>
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<tr>
<td>5:30 PM to 7:00 PM</td>
<td>Exhibitors’ Welcome Reception</td>
<td>Exhibit Hall 301 C</td>
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<tr>
<td>7:00 PM</td>
<td>Espionage for a Great Cause</td>
<td>Offsite</td>
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</tbody>
</table>

The National Geospatial-Intelligence Agency (NGA) has organized a special unclassified track to run on Tuesday and Wednesday during the technical sessions. There are four special sessions, each followed by an open discussion session, in order for NGA to get important information and feedback from attendees. Those attendees interested in participating are encouraged to attend.
Registration Desk Open
7:00 AM to 5:45 PM
Mezzanine Level Atrium, near the Hyatt Regency Hotel Skywalk

Posters Open
7:00 AM to 7:00 PM, Room: Exhibit Hall 301 C

Technical Program — Keynote Address
8:00 AM to 9:15 AM, Ballroom 104 D

Mayoral Welcome
Milwaukee Mayor Tom Barrett

PBS Premier of “The Geospatial Revolution”
ASPRS will premiere Episode 4 of the Geospatial Revolution film by Penn State Public Broadcasting. The episode explores our interconnected planet, Map Kibera, disease tracking, and the benefits and challenges of using predictive technologies for cultural, agricultural, and environmental issues.

The Open Source Geospatial Revolution
Paul Ramsey is the co-founder and visionary behind the open source spatial database system called PostGIS. PostGIS is used around the world for business, government and academia. Paul is also a member of the Open Source Geospatial Foundation.

The concept of Open Source and free sharing of technological information existed long before computers. Open Source can pertain to businesses as well as to computers, software and technology. Early instances of open source and free software include IBM’s source releases of its operating systems and other programs in the 1950s and 1960s to facilitate the growth of software development. Today, Google and Amazon run on open source. At this conference, you will see the National Geospatial-intelligence Agency leading a session on open source motion imagery.

Paul’s talk will cover open source technologies available for remote sensing and geospatial organizations including approaches for adoption and implementation. Come with an open mind and get ready to lead the next geospatial revolution.

Awards Presentations
Honorary Members
Photogrammetric (Fairchild) Award
Robert N. Colwell Memorial Fellowship
Career Interview Room Open
8:00 AM to 5:00 PM, Room: 201 D
Prospective employers may use this room to conduct onsite interviews. Please reserve a timeslot through the sign-in sheet posted outside the room.

Technical Program
9:30 AM to 11:00 AM

-1-
Hyperspectral and Photogrammetric Data
Moderator: Aaron Swanson, Northrop Grumman Aerospace Systems
Room: 201 A
Investigating the Utility of Wavelet Transforms for Inverting a 3-D Radiative Transfer Model using Airborne Hyperspectral Data to Retrieve Forest LAI
Asim Banskota, Virginia Tech
Randolph Wynne, Valerie Thomas, Jean Philippe Gastellu-Etchegorry, Shawn Serbin, and Philip Townsend
Description of the Second Generation Hyperspectral Airborne Terrestrial Imager (HATI)
Aaron Swanson, Northrop Grumman Aerospace Systems
Stephanie Sandor-Leahey, Miguel Figuroa, and Mark Folkman
Photogrammetric Triangulation of 3D Cubic Splines
Keith Blonquist, Lidar Pacific Corporation
Robert T. Pack
Automatic Aerial Triangulation of Vertical and Oblique Images
Yandong Wang, Pictometry

-2-
Using Lidar to Map Features
Moderator: James Young, Aero-Metric, Inc.
Room: 201 B
Mapping Solar Potential Obstructions using Lidar Data
Krista Amolins, University of New Brunswick, Canada
David Coleman, Yun Zhang, and Peter Dare
Innovation in Lidar Feature Extraction
James Young, Aero-Metric, Inc.
Building Footprints Extraction of Dense Residential Area from Lidar Data
KyoHyouk Kim, Purdue University
Jie Shan
Building Roof Contour Extraction from Lidar Data
Aluir Dal Poz, Sao Paulo State University, Brazil
Edineia Galvanin

-3-
Deriving Tools to Automate Analysis
Moderator: Hongwei Zhu, ESRI
Room: 202 B
Automated Image Georeferencing in ArcMap
Hongwei Zhu, ESRI
Peng Gao, Xiuguang Zhou, and Qian Liu
On the Utility of Models for Time-sensitive Remote Sensing
Christopher Lippitt, San Diego State University/UCSB
An Automated Method to Estimate In-flight Image Quality Parameters from High Spatial Resolution Imagery
Mary Pagnutti, Innovative Imaging and Research
Robert Ryan
Automated Object Height Retrieval from Lidar to Develop Complex Urban Scenario
Abduwasit Ghulam, Saint Louis University

ASPRS CONFERENCE SCHEDULE

<table>
<thead>
<tr>
<th>Conference</th>
<th>Location</th>
<th>Date</th>
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<tbody>
<tr>
<td>ASPRS 2011 Fall Pecora Conference</td>
<td>Hilton Washington Dulles Airport Hotel</td>
<td>November 14-17, 2011</td>
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<tr>
<td>ASPRS 2012 Annual Conference</td>
<td>Sacramento Convention Center</td>
<td>March 19-23, 2012</td>
</tr>
<tr>
<td>ASPRS/MAPPS 2012 Fall Conference</td>
<td>Marriott Tampa Bay Waterside Hotel</td>
<td>October 29-November 1, 2012</td>
</tr>
</tbody>
</table>
Monitoring Forest Conditions
Moderator: Chris Aldridge, Continental Mapping Consultants, Inc.
Room: 202 A
Using Object-oriented Classification to Map Forest Community Types
Meghan MacLean, University of New Hampshire
Russell Congalton
A Geospatial Assessment of Mountain Pine Beetle Infestations and Their Effect on Forest Health in Okanogan-Wenatchee National Forest
Evan Johnson, DEVELOP
Andrew Nguyen, Evan Johnson, Emily Williams, and Stephanie Tsai
Spectral Analysis of Scotch Pine Infested by Sirex noctilio
Lindi Quackenbush, SUNY ESF
Nishan Bhattarai, Laura Calandra, Jungho Im, and Stephen Teale
Separating the Condition of Mangroves Within a Degraded Forest of the Mexican Pacific using Laboratory Hyperspectral Remote Sensing Techniques
Chunhua Zhang, East Tennessee State University
John M. Kovacs, Yali Liu, Francisco Flores-Verdugo, and Francisco Florest-De-Santiago

Assessing Environmental Dynamics
Moderator: Doug Fuller, Aero-Metric
Room: 203 B
Assessing Remotely Sensed Techniques for Measuring Vegetation Phenology
Jonathan Thayn, Illinois State University
Vegetation Dynamics and Land Cover Change Trajectories Analysis for Understanding Environmental Implication in Lower Missouri River Area
Yuyan Chen, St. Louis University
Abduwasit Ghulam and Ana Londono
Analysis of Mass Balance Change in Imja Glacier of Nepal using Remote Sensing Techniques
Kabindra Joshi, Mississippi State University
Shrinidhi Ambinakudige
Assessing Available Woody Plant Biomass on Rangelands with Ground-based Lidar
Nian-Wei Ku, Texas A&M University
Sorin Popescu
Development of a Suitable Classification Scheme for Plant Communities in Groundwater-dependent Ecosystems, Ashley National Forest, Uinta Mountains, Utah
Michael Hernandez, Weber State University
James Arnold, Sonya Welsh, Lee Bartholomew, Richard Ford, Marek Matyjasik, and Darlene Koerner

Multi-temporal Land Cover Classification of the Konya Basin, South-central Turkey, Based on a LANDSAT TM-derived NDVI/NDMI Time Series
Marc Mayes, Center for Sustainability and the Global Environment (SAGE), University of Wisconsin-Madison
Mutlu Ozdogan and Erika Marin-Spiotta

Assessment of Spatial Metrics to Determine Rangeland Degradation
Chandra Holifield Collins, USDA-ARS
Rae-Landa Gomez-Pond, Riaz Hedayati, Mark Kautz, and Jeffery Stone

Identification and Mapping Wetland and Riparian Vegetation: Test of Hyperspectral Remote Sensing in Fennessey Ranch, Texas
Xuelian Meng, The Ohio State University
Onur Karahayit, Rongxing Li, Wei Wang, Xuelian Meng, Larry Matthies, Raymond Arvidson, Steve Squyres, and the MER Science Team

A Comparative Study of a Proposed Semi-automated Methodology and Community Remote Sensing of the 2010 Haiti Earthquake Damage
Christopher Clasen, University College London, England
Tiziana Rossetto and Beverley Adams

Spectral Identification of Wild Rice (Zizania palustris L.) using Local Indigenous Knowledge and Satellite Multispectral Imagery
Michael Price, College of Forestry and Conservation

Identifying Trees in an Urban Landscape using Small-footprint Discrete-return Imaging Lidar
Randolph H. Wynne, Virginia Tech
Rupesh Shrestha

Exhibit Hall Opens
10:00 AM to 7:00 PM, Exhibit Hall 301 C

Beverage Break
11:00 AM to 11:15 AM, Exhibit Hall 301 C
Sponsored by Aero-Metric, Inc.
Hot Topics
11:15 AM to 12:15 PM

These one-hour HOT TOPIC discussion groups, hosted by ASPRS Divisions and Committees, are a high point of every conference. This is an opportunity for all attendees to weigh in with their thoughts on the issues being discussed.

Mobile Mapping Committee
Sponsored by PAD
Room: 201 A

This subcommittee of the Photogrammetric Applications Division (PAD) focuses on Mobile Mapping Systems technology and applications. A Mobile Mapping System (MMS) is an integrated system of sensors (e.g. laser scanners, digital cameras, position/orientation resolvers, pavement sensors, ground penetrating radar and so forth) that collect multi-sensor data while the platform (land or water vehicle) is in motion. If you’re interested in this topic, come and give your input regarding the application of this growing technology.

Going to the “Mat” over Metadata. FGDC and NAP Metadata Standards, when are they too much or too little?
Sponsored by GISD
Room: 201 B

Writing Metadata is one of the most hated tasks in the geospatial community. Why is it necessary and how much is needed? What format is correct and who says which format is the “standard” for everyone? Bring your thoughts and opinions and come and discuss metadata. It should be a very lively “hot topic”.

“3D GIS and the Topology of Time: Sharing Thoughts”
Room: 202 A

3D graphics used in entertainment, architecture, engineering, and molecular biology continues to improve. Visualizing geospatial information with those techniques has similarly advanced our human understanding of all aspects of geography, whether at the city planning or the earth observing levels. Beyond visualization, however, a robust 3D GIS approach, which incorporates both spatial and temporal topology, could enable more reliable, complete, and timely computer-aided analysis in spatial decision-making. Join us to discuss status of any work underway in this promising arena.

Breaking the 85% Barrier
Sponsored by RSAD
Room: 202 B

Despite roughly 35 years of new classification algorithms and improved approaches, it is rare to find statistically valid land cover classification studies with peer-reviewed accuracy estimates that exceed 85%. Join us to discuss the reasons we cannot consistently break the “85% barrier” and discuss potential ways we might do so in the future.

The Future of Sensor Calibration and Quality Assurance
Sponsored by the USGS Remote Sensing Technologies Project
Room: 202 D

Come and discuss these important questions: Can I still calibrate my film camera? What are the calibration requirements for digital sensors? Are there standard processes for digital imagery evaluation? How can I test and evaluate my sensor? What about elevation data quality?

NGA Special Session IA — Open Source Motion Imagery
Moderator: Dr. Young Suk Sull, NGA, and Dr. Marc Boysworth, NGA
11:15 AM to 12:15 PM, Room: 202 C

Open Discussion on this topic from the previous session.
22nd Annual Awards Luncheon & 77th Installation of ASPRS Officers  
12:15 PM to 1:30 PM, Ballroom 104 D  
Plan to join your colleagues at this year’s luncheon to honor current award recipients and participate in the installation of the 77th slate of ASPRS Officers.  
The award winners will be given special honor and the annual business meeting of the Society will include installation of the new ASPRS Officers. Carolyn Merry, retiring ASPRS President, will give a summation of the past year’s events.  
Tickets for this Luncheon are required and are separate from the conference registration. Tickets may be purchased from the Conference Registration Desk, no later than 2:00 PM, Monday, May 2nd.  
On site ticket purchases are limited to availability. Limited seating in the rear of the room is available at no cost for conference registrants wishing to attend the ceremonies only.

Technical Sessions  
1:30 PM to 3:00 PM

-13-  
Special Session – Oil Impact Assessment using Remote Sensing  
Moderator: Bruce Davis, Department of Homeland Security  
Room: 201 B  
The Deepwater Horizon oil spill affected a wide range of habitat including open ocean, estuarine areas, beaches, and wetlands. During the response to map and quantify the extent of oil impact a variety of sensor systems were used to investigate these phenomena. This special session will have presentations from teams that acquired data using the ASPECT Thermal Line Scanner, the NASA AVIRIS Imaging Spectrometer, and the NASA UAVSAR L Band Synthetic Aperture RADAR instrument. These presentations will focus on distinct advantages offered by the particular sensor, the mission operation, use by response agencies, and results of data analysis to date.

Surface Oil Detection Using Multiple Wavelengths in the Long Wave Infrared Spectral Region  
Robert Kroutil, EPA ASPECT Program  
High Resolution Imaging for Oil Impact Assessment: The NASA UAVSAR Gulf Oil Spill Campaign  
Cathleen Jones, NASA Jet Propulsion Laboratory  
The Application of Imaging Spectroscopy in Response to the Gulf Oil Spill: Results from the NASA AVIRIS Sensor Team  
Susan Ustin, University of California Davis Center for Spatial Technologies and Remote Sensing

-12-  
NGA Special Session IIA - Geospatial Visual Analytics  
Moderator: Dr. Ashley Holt, NGA and Dr. Beth Sweet, NGA  
Room: 202 C  
Exploring the Human Dimension of Geospatial Intelligence and Terrorism with Geography and Geographic Information Science (GISc)  
Richard M. Medina, ORNL  
George F. Hepner, University of Utah  
GeoSketch  
Tracey Hammond, Texas A&M University  
Danielle Cummings  
Integrated Benthic Habitat Mapping of Buck Island Reef National Monument  
Sam Tormey, NOAA  
Bridging the Semantic Gap Using Evolutionary Computation  
Henrique Momm, University of Mississippi  
Greg Easson

-14-  
Topics in Digital Photogrammetric Technologies  
Moderator: Sally Gehr, Aero-Metric  
Room: 202 E  
3D Images and Their Applications  
Zheng Wang, Global Geospatial Technologies, LLC  
Wide Coverage in High Resolution - Considerations, Applications and Case Studies  
Erez Shor, VisionMap  
Digital Photogrammetry Grid — DPGrid and its Application  
Jianqing Zhang, Wuhan University, China  
Zuxun Zhang, Yongjun Zhang, Yansong Duan, and Tao Ke  
Reliable 3D Topographic Mapping using Unmanned Ariel Vehicle (UAV) Systems  
Ahmed Elaksher, St. Cloud State University  
Chunsun Zhang
-15-
Lidar Data Specifications and Product Characterizations
Moderator: Barry Budzowski, Wilson & Company
Room: 202 B
The Role of Surface Complexity in Airborne Lidar Product Error Characterization
Charles Toth, The Ohio State University
Lidar Density and Spacing Specification
Michael Naus, Fugro Horizons Inc.
Verification Technologies for Co-collected Lidar and Orthophoto Products
Charles O’Hara, Spatial Information Solutions
Karen Schuckman, Rodrigo Nobrega, Bijay Shrestha, Bobby Tuck, and Matt Doty
A Comparison of Laser Scanners for Mobile Mapping Applications
Craig Glennie, The University of Houston
Jerry Dueitt

-16-
Satellite Data Collection and Calibration
Moderator: Chris Gross, Continental Mapping Consultants
Room: 202 D
The Monoscopic and Stereo Geolocation Accuracy of the DigitalGlobe Satellite Constellation
Byron Smiley, DigitalGlobe
Radiometric Calibration of GeoEye-1
Phillip Downen, GeoEye, Inc.
Nancy Podger
Modeling the Optimal Remote Sensing Satellite Collection Opportunities for Large Disaster Areas
Shufan Liu, University of South Carolina
Michael E. Hodgson
An Accuracy Study on Airborne Lidar for DoT Applications
John Schmitt, BAE Systems
Ricardo Passini

-17-
Advanced Remote Sensing Techniques and Analysis I
Moderator: Meghan MacLean, University of New Hampshire
Room: 203 D
An Assessment of Lidar Data for Enhancing Automated Land Cover Classifications using Aerial Photographs for Pool 5 of the Upper Mississippi River
Cynthia Berlin, University of Wisconsin - La Crosse
Jennifer Dieck
Application of Logistic Regression Modeling to Validate and Enhance Invasive Species Detection in Remote Sensing
Jason Tallant, Eastern Michigan University
William Welsh
NASA Ames Research Center Climate Change Effects and Adaptation Research: Hind- and Forecasting Flood Risk of NASA Ames Research Center using the Basins Model
Ariana Gonzales, DEVELOP
Object-based Land Cover Classification of Urban Areas using VHR Imagery and Photogrammetrically Derived DSM
Bahram Salehi, University of New Brunswick, Canada
Yun Zhang and Ming Zhong
-18-
Remote Sensing Applications for Ecosystem Characterization and Modeling
Moderator: Xiaoliang Meng, Eastern Michigan University
Room: 202 A

Carol Mladinich, U.S. Geological Survey
Stacy Curry, Gergo Szanko, and Dean Anderson

Remote Sensing and Modeling for Monitoring, Reporting and Forecasting Ecological Conditions of Protected Lands Along the Appalachian Trail
Y.Q. Wang, University of Rhode Island
Rama Nemani, Fred Dieffenbach, Ken Stolte, Glenn Holcomb, Matt Robinson, Casey Reese, Marcia McNiff, Roland Duhaime, Hiro Hashimoto, Geri Tierney, Brian Mitchell, Pete August, Peter Paton, and Chuck LaBash

Determining Driving Factors of Grassland Degradation through Image Analysis — A Case Study in Xilin River Basin, Inner Mongolia
Xiaoliang Meng, Eastern Michigan University
Yichun Xie

Using Remote Sensing Techniques and GIS to Detect Changes in Turf and Tree Canopy in the Urban Area of Las Vegas Valley, Nevada
Judith Brandt, Southern Nevada Water Authority

-19-
Satellite Applications I
Moderator: David Johnson, USDA/National Agricultural Statistics Service
Room: 201 A

Feasibility of Spatial Resolution and Herbaceous Category Improvements to the Cropland Data Layer
David Johnson, USDA/National Agricultural Statistics Service

Techniques of Detecting and Delineating Archaeological Site Destruction using High Resolution Satellite Imagery: An Iraq Case Study
Benjamin Richason, III, St. Cloud State University

Creating and using Very High Density Point Clouds Derived from ADS Imagery
Stephan Gehrke, North West Geomatics

Investigating the Lake Patzcuaro Basin, Mexico, using ALOS PRISM and AVNIR
Stephen Leisz, Colorado State University

-20-
Special Session: Natural/Human Responses of Global Climate Change II
Moderator: Jingjuan Liao, Chinese Academy of Sciences, China
Room: 203 C

Relative Abundances of C3 and C4 Grasses in North American Great Plains: Their Responses to Climate Change
Cuizhen Wang, University of Missouri

Mapping Grasslands in the Great Plains and their Spatio-temporal Variations Responding to Climate Change
Qing Chang, University of Missouri

Comparison of the MODIS-derived Drought Indices for Drought Monitoring in Southwest and North China
Li Zhang, Chinese Academy of Sciences, China
Li-gai Bai and Qin Yan

Spatial and Temporal Dynamics of Inner Mongolian Grasslands from MODIS NDVI Time Series
Li Zhang, Chinese Academy of Sciences, China
Linlin Lu and Huadong Guo

Milwaukee Art Museum: During your visit to Milwaukee be sure to squeeze in a visit to the Milwaukee Art Museum, Wisconsin’s premier destination for art and culture. The Art Museum is an architectural landmark, comprised of three buildings designed by three legendary architects: Eero Saarinen, David Kahler and Santiago Calatrava.

The museum is open Tuesday thru Sunday 10 a.m. to 5 p.m. and Thursday until 8 p.m. Admission is $12 for Adults, $10 for Students, Seniors and Active Military. A short cab ride to the Lake Michigan shoreline area will provide you with an architectural treat to remember. The museum is located one mile east of the Convention Center on the shore of Lake Michigan at 700 N. Art Museum Drive, Milwaukee, WI 53202. The phone number is (414) 224-3200.
Technical Program

Tuesday, May 3rd

Poster Presentation II
1:30 PM to 3:00 PM
Moderator: Jie Shan, Purdue University
Room: 203 A

NEW for 2011 - Oral Poster Presentation Sessions! In addition to the technical paper presentations, on Tuesday, May 3rd, Poster Presenters will also be discussing their information. Take this opportunity to hear directly from the Poster Presenters in a classroom environment. Hear about the research, development and hard work that each person has done in order to present this year. Poster Presentations are designed to showcase a variety of remote sensing and geospatial applications from around the world. Posters will also be on display from Tuesday, May 3rd at 8:00 AM until Thursday, May 5th at 11:00 AM. Don’t miss this wonderful opportunity.

**Character Maps from Close Range Multispectral Images**
Ming-Chih Hung, Northwest Missouri State University
Yi-Hwa Wu

**Tsunami Risk Assessment using Geomatics in Fujairah, UAE**
Khameis AlAbdouli, Florida State University

**Evaluating the Restoring Conditions for Those Areas Visited with Natural Disasters Employing Landsat-7 ETM+ Thermal Infrared Data**
Yishuo Huang, Chaoyang University of Technology, Taiwan
Chih-Peng Yu and Shang-Yuh Lin

**Mapping Evapotranspiration for Water Administration in Idaho**
William Kramber, Idaho Department of Water Resources
Anthony Morse and Richard Allen

**Regional Differences of Post-Soviet Forest Disturbance in Temperate European Russia**
Matthias Baumann, University of Wisconsin-Madison
Mutlu Ozdogan, Volker Radeloff, Tobias Kuemmerle, Kelly Wendland, and Elena Esipova

**Bridging the Gap between NASA Hydrological Data and the Geospatial Community**
Hualan Rui, Goddard Earth Sciences Data and Information Services Center (DISC), NASA
Bill Teng, David Mocko, Hiroko Beaudoin, Bruce Vollmer, Mark Gray, Joe Nigro, David Maidment, and Rick Hooper

**Remote Sensing to Detect Expansion of Irrigation in Xinjiang, NW China**
Yang Yang, University of Wisconsin-Madison
Mutlu Ozdogan

**Automated Characterization of Urban Expansion in Complex Landscapes in China using Dense Temporal Stacks of Landsat Data**
Zhiwei Ye, University of Wisconsin-Madison
Annemarie Schneider

**Remote Sensing of Tillage Practices using Multi-temporal Landsat Imagery**
Baojuan Zheng, Virginia Tech
James B. Campbell

**Robust Direct Georeferencing to Support Geospatial-intelligence Analysis**
Jaehong Oh, The Ohio State University
Charles Toth and Dorota Grejner-Brzezinska

**Using Lidar to Show Changes in Coastal Geomorphology**
William Robertson, Florida International University

**Automating the Correction of USGS Digital Elevation Models using Fourier Analysis and the Mean Profile Filter**
Yusuf Siddiqui, I-Cubed

Student & Young Professionals Events
*Courtesy of the ASPRS Student Advisory Committee (SAC)*

Just a reminder for you not to miss the Exhibit Hall Guided Tour from 2:30 pm to 3:30 pm as well as the Exhibitors’ Reception from 5:30 pm to 7:00 pm where you can meet with the representatives from the most influential companies in the geospatial industry. We will let you refresh in your rooms until 7:30 pm when we will meet in the lobby again and try to find our way toward The Safe House. We will keep the mystery of this place here and encounter the adventure together. An intriguing place with great food and atmosphere should come as a reward for a busy day at the conference.

**Exhibit Hall Guided Tour for Students**
2:30 PM to 3:30 PM

The ASPRS Sustaining Members Council is hosting a guided tour of the exhibit hall for students. This is your opportunity to meet the exhibitors, up close and personal. Exhibit halls can be intimidating, but not after this personal tour. See you there.

**Beverage Break**
3:00 PM to 3:30 PM, Exhibit Hall 301 C
*Sponsored by Aero-Metric, Inc.*
Technical Sessions
3:30 PM to 5:00 PM

-22-
NGA Special Session IIB - Geospatial Visual Analytics
Moderator: Dr. Ashley Holt, NGA
Room: 202 C
Open Discussion on this topic from the previous session.

-23-
PDAD Special Session I — Airborne Digital Mapping Camera Systems: Manufacturer’s Perspective
Moderator: Brian Huberty, USFWS and Greg Stensaas, U.S. Geological Survey
Room: 203 C
This is a follow-on session to the traditional panel session hosted at ASPRS for many years. The session is designed to show and discuss digital mapping camera manufacturers’ technology from around the world. Each representative will give a short presentation followed by a question and answer session with the audience. The goal is to provide a dynamic forum to address current systems and future developments in this important and rapidly evolving mapping technology. System vendors will highlight their specific technologies in order to meet the demand for aerial digital mapping images for specific markets.
Panelists
Digital Camera Manufacturers

Integrated Spatial Sensors and Technologies I
Moderator: Eugene Levin, Michigan Tech University
Room: 203 B
Photogrammetric Small UAV in Geospatial Research and Education at Michigan Tech University
Eugene Levin, Michigan Tech University
Stephen Curelli
Sensing Position by Combining Photogrammetry and Optical Pattern Projection
Benrui Zheng, University of North Carolina - Charlotte
Brigid Mullany, Edward Morse, and Angela Davies
Conceptual Design of a Pedestrian Navigation System Supported by Star Tracking Techniques
Shaojun He, The Ohio State University
Rongxing Li and Alper Yilmaz
Advances in Thermal Remote Sensing Applications and Operation as a Photogrammetric Tool
Eatay Shechter, Icaros, Inc.

Remote Sensing Applications for Agriculture
Moderator: Claire Boryan, USDA/National Agricultural Statistics Service
Room: 202 E
Change in California’s Central Valley Farmland Between 2007 and 2009
Audra Zakzeski, USDA/National Agricultural Statistics Service
Remote Sensing of Barley Crop Stressed with Carbon-dioxide and Herbicide
Sani Yahaya, University of Nottingham, England
M.D Steven and G.Foody
Update on 2010 Cropland Statistical Mapping Efforts
Rick Mueller, USDA/National Agricultural Statistics Service
Crop Identification Based on Crop Phenological Information
Claire Boryan, USDA/National Agricultural Statistics Service
Liping Di

Discovery World
— Milwaukee’s largest museum dedicated to science, situated along the lake front. Experience the high-tech, hands-on exhibits, salt water and freshwater aquariums, as well as touch tanks and digital theaters. A double-helix staircase wraps around the 40-foot kinetic sculpture of a human genome. A wonderful day for kids and adults can be had at Discovery World. The museum is located one mile east for the Convention Center just south of the Art Museum on the shore of Lake Michigan. Just a short cab ride away.
-26-
Assessing the Accuracies of Spatial Data
Moderator: Ron Schonegg, Continental Mapping Consultants
Room: 203 D
Ground Control 101
Brant Howard, Compass Data Inc.
Locomotion Analysis and Estimation of Data Quality using Inertial Sensors for the Purpose of Vision-aided Inertial Navigation
Boris Skopljak, The Ohio State University
Alper Yilmaz and Rongxing Li
The Relative Geolocation Accuracy of WV02: On-orbit Calibration and Long Term Stability
Byron Smiley, DigitalGlobe
A Spatial Analysis of Rural Entrepreneurial Success
Steven Steinberg, Humboldt State University
Jason Barnes and Sheila Lakshmi Steinberg

-27-
Advanced Remote Sensing Techniques and Analysis II
Moderator: Meghan MacLean, University of New Hampshire
Room: 202 D
Texture Region Extraction from Multispectral and Hyperspectral Images by Classifying Local Spectral Histograms
Jiangye Yuan, The Ohio State University
DeLiang Wang, Jung-Kuan Liu, Lin Yan, and Rongxing Li
Can Soil Respiration be Estimated using Remote Sensing?
Randolph H. Wynne, Virginia Polytechnic Institute and State University
Valquiria Quirino, John R. Seiler, and Valerie A. Thomas,
WorldView-2 Image Exploitation using ERDAS eATE and IMAGINE Objective
Brian Kloer, ERDAS, Inc.
Object-based Delineation of Urban Neighborhoods of Accra, Ghana from QuickBird Imagery
Douglas Stow, San Diego State University
Christopher Lippitt, Sory Toure, Lloyd Coulter, and John Weeks

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Remote Sensing Applications for Environmental Monitoring
Moderator: Colin Brooks, Michigan Tech Research Institute
Room: 202 B
Detecting Pine Fertilization Response from a Synthetic Landsat VI Chronosequence
Christine Blinn, Virginia Tech
Randolph Wynne, Thomas Fox, and Robert Sypert
Modeling Sediment Deposition for Predicting Marsh Habitat Development
Tyler Ketron, DEVELOP
Amber Kuss, Tyler Ketron, Alex Remar, and Vivek Choksi
Mapping and Monitoring the Extent of Cladophora Algae in the Great Lakes using Multi-resolution, Multi-temporal Satellite Imagery
Colin Brooks, Michigan Tech Research Institute
Robert Shuchman, Michael Sayers, Martin Auer, Guy Meadows, and Aaron Dayton
Seagrass Health Modeling and Prediction with NASA Science Data
Harold Robinson, University of Mississippi
Greg Easson, Marc Slattery, Daniel Anderson, Robert DeCurtins, Slawomir Blonski, and Lauren Underwood

-29-
Innovative Methods of Geospatial Data Processing
Moderator: Barry Haack, George Mason University
Room: 202 A
The Modeling of Fire Regime Condition Class for Eastern Alaska
John Koltun, Geographic Resource Solutions
Barry Haack, George Mason University
Examining Spatial-temporal Effects of Urban Environmental Variables on the Dissemination of West Nile Virus: A Case Study of Los Angeles, California, USA
Hua Liu, Old Dominion University
Qihao Weng
Healthscapes: A New Web Platform for Global Environmental Health Research
Nicholas Preston, University of Wisconsin – Madison
**Analysis of Lidar Waveforms**
Moderator: James Young, *Aero-Metric, Inc.*
Room: 201 B

**Classifying Compressed Lidar Waveform Data**
Charles Toth, *The Ohio State University*

**Creating a More Accurate Pseudo-waveform: Integration of Spatially Coincident Airborne and Terrestrial Lidar Data**
Ryan Sheridan, *Texas A&M*
Dorota Brzezinska

**A Novel Decomposition Method Based on Evolution Algorithm for LVIS Waveform Data**
Wei Zhuang, *SUNY ESF*
Giorgos Mountrakis

**Combined Segmentation of Lidar Point Cloud and Registered Images**
Xiangyun Hu, *Wuhan University, China*
Junfeng Zhu and Lizhi Ye

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**Poster Presentation III**
3:30 PM to 5:00 PM
Moderator: Mary Balogh, *U.S. Fish & Wildlife Service*
Room: 203 A

NEW for 2011 - Oral Poster Presentation Sessions! In addition to the technical paper presentations, on Tuesday, May 3rd, Poster Presenters will also be discussing their information. Take this opportunity to hear directly from the Poster Presenters in a classroom environment. Hear about the research, development and hard work that each person has done in order to present this year. Poster Presentations are designed to showcase a variety of remote sensing and geospatial applications from around the world. Posters will also be on display from Tuesday, May 3rd at 8:00 AM until Thursday, May 5th at 11:00 AM. Don’t miss this wonderful opportunity.

**Analysis of Temperatures Distribution of Forest Type Class using Landsat Imagery**
Joon Kyu Park, *Seoil University, South Korea*
Hee CheonYun

**On-orbit Geolocation Accuracy Performance of the GeoEye-1 High Resolution Imaging Satellite**
David Mulawa, *GeoEye*
Aaron Cole

**Object-based Classification of an Urban Area through a Combination of Aerial Image and Airborne Lidar Data**
Yongminu Kim, *Seoul National University*
Youkyung Han, Younggi Byun, Jaewan Choi, Dongyeob Han, and Yongil Kim
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Espionage for a Great Cause
7:00 PM
Safe House Nightclub, 779 North Front Street, Milwaukee

Following the Exhibitor’s Reception on Tuesday May 3rd, join the Western Great Lakes Region at the Safe House Nightclub. A short six block walk from the Frontier Airlines Center, the Safe House is a spy-themed venue filled with secret walls, doors, passages, illusions, intrigue and adventure. Aside from the entertaining and amusing setting, there will be instructional blackjack for prizes and a raffle with all proceeds to go toward the Western Great Lakes Region Student Fund. Hope you can join us for a fun-filled evening of espionage for a great cause! For more information on the Safe House, visit www.safe-house.com.

New Titles for 2011

SAVE 15-50%
Come See Us at Booth #318

Dispatches from the Intersection of GIS and Society GIS in Action
This series covers the disciplinary intersections that happen when GIS is used to solve or manage real issues in society. We are looking for authors to contribute volumes to this series. Please send proposals to series editor Professor Allan Brimicombe, Center for Geo-Information Studies, University of East London, UK. aj.brimicombe@uel.ac.uk

Define Climate Change for Spaceship Earth
Earth Observation of Global Changes
This series documents essential climate change variables as defined by the Global Climate Observing System (GCOS) program as well as other variables of planetary impact. If you are interested in publishing in this area, please send proposals to series editor Professor Emilio Chuvieco, University of Alcala, Spain. Emilio.chuvieco@uah.es

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