

Registration

6:30 am to 5:00 pm
Level Four — Westin Ottawa Hotel

Presenters Room

8:00 am to 5:00 pm
Room: New Brunswick

Conference within a Conference

Great Lakes Regional Data Exchange

8:00 am to 5:00 pm
Room: Provinces

See page 4 for more information.

ASPRS Business Meeting

Board of Directors

8:00 am to 5:00 pm
Room: Les Saisons

Continuing Education Units (CEUs)

ASPRS, in conjunction with the University of Maryland, College Park, is pleased to offer ASPRS 2007 Specialty Conference workshop attendees the opportunity to earn Continuing Education Credits (CEUs). Attendees of ASPRS-sponsored workshops are eligible for CEUs if they attend any of the ASPRS-sponsored workshops, register on site for CEUs, and pay the processing fee of \$25 USD. For each workshop attended, one CEU for every 10 hours of eligible sessions attended is awarded to CEU registrants. (Full day workshops are eight (8) hours and receive 0.8 CEUs. Half day workshops are four (4) hours and receive 0.4 CEUs). Registration forms will be distributed during the workshops. Forms and payment are accepted on site at the Conference Registration Desk.

CEU participants will receive a certificate of completion awarded by the University of Maryland, College Park, approximately six weeks after the conference.

Please note: CEU's are awarded to ASPRS-sponsored workshop attendees **only**. CRSS workshops, Technical Sessions, General Sessions, Poster Sessions, or any other scheduled special event at this conference are not eligible for CEUs.

WS#1 — ASPRS

Preparing For ASPRS Certification

Professor Robert Burtch, *Ferris State University, USA*
Rakesh Malhotra, *North Carolina Central University, USA*

8:00 am to 5:00 pm, CEU .8
Room: British Columbia

INTERMEDIATE Workshop: Assumes participants have subject knowledge and are serious about taking the Certification Exam.

The purpose of this workshop is to prepare individuals who are planning to sit for the ASPRS Certification exams as a Certified Photogrammetrist or Certified Mapping Scientist in either Remote Sensing or GIS. The workshop will begin by explaining the purpose and form of the exam. It will then identify key topical areas that an applicant should be aware of prior to taking the exam. Topics will start with a review of the basic concepts and sample questions to show how they will be tested for on the exam. Finally, the workshop will try to identify resources in which exam takers should be aware of and study from in their preparation for the examination.

WS#2 — ASPRS

Emerging Technologies in Photogrammetry and Remote Sensing

Mike Renslow, *Renslow Mapping Services, USA*
Claire Kiedrowski, *KAPPA Mapping, Inc., USA*

8:00 am to 5:00 pm, CEU .8
Room: Ontario

INTERMEDIATE Workshop: This workshop provides an overview of emerging technologies and their impact on photogrammetry and remote sensing methodologies. The advance towards full digital mapping from start to finish, and the capacity to capture very large amounts of data supported by rapid processing and software will alter the way maps and imagery are produced in the near future. At the same time, active sensors, hand-held data collection devices, and feature extraction are changing fundamental mapping procedures and the way data is supplied to GIS.

Participants will receive an overview of the systems, technologies, and impacts on mapping in the next two to three years, as well as, the institutional issues involved in implementation.

WS#3 — CRSS

Practical Radar Polarimetry: Theory and Applications

Gordon Staples, *MDA Corporation, Canada*
Daniel DeLisle, *Canadian Space Agency, Canada*

8:00 am to 5:00 pm
Room: Alberta

INTERMEDIATE Workshop: Although the workshop will include a brief introduction to SAR, some knowledge of SAR and SAR applications will be assumed.

The objective of the workshop is to provide a point-of-entry for the user who is familiar with single channel radar data and applications, but is interested in polarimetric radar theory, analysis, and applications. The workshop will present radar polarimetry from a practical perspective, and to work from single-channel SAR to quad-polarized SAR. The approach is to build on fundamental radar principles, and to then add the various levels of polarimetric information. The workshop will provide an in-depth discussion of wave and scattering polarimetry, and target decomposition techniques. In addition, the advanced features of RADARSAT-2, with a focus on radar polarimetry are discussed. The workshop integrates theory with hands-on computer-based demonstrations. The objective of the demonstrations is to provide experience with the manipulation of quad-polarized data, and to augment the topics presented in the theory. The demonstrations also provide exposure to the various quad-polarized data analysis and visualization algorithms that are available. To compliment the theory section, an overview of polarimetry applications will be presented. The applications will cover many areas including agriculture, defence and security, forestry, geology, hydrology, ice, and marine surveillance.

WORKSHOPS/CURLING EVENT

MONDAY, OCTOBER 29TH

Continued from previous page

WS#4 — CRSS

Preparing for Change in the Geospatial World

Dr. Robert Ryerson, CMS, FASPRS, *Kim Geomatics Corporation, Canada*
E. Ann Blair

8:00 am to 12:00 noon

Room: Manitoba

INTRODUCTORY Management Oriented Workshop

This workshop will examine change management from the unique perspective of the geospatial world. Rapid change has characterized geospatial agencies in government as well as companies operating in the private sector. Whether it is the movement of larger companies into the business, dramatic changes in technology, or major shifts in government policy and funding, change has been coming to the geospatial industry at warp speed. In many cases this change has been a disruptive force – leading to chaos in the market as well as in government agencies attempting to respond to this change. Companies have gone under and government agencies have had their relevance questioned. There are tried and true methods that can be used to approach change to turn the rapidly changing environment from a threat to an opportunity.

Participants will be asked to complete a short optional questionnaire beforehand to allow the workshop team to better address their needs.

WS#5 — ASPRS

Putting It All Together: Integrating Imagery to Derive Information for Decision-making

Russell G. Congalton, *University of New Hampshire, USA*
Michael Palmer, *Sanborn, USA*

1:00 pm to 5:00 pm, CEU .4

Room: Manitoba

INTRODUCTORY WORKSHOP: This workshop is designed for the user who has some remote sensing and spatial data analysis experience but wishes to gain a broader understanding of what is currently available and how to determine which imagery to use for her/his specific needs.

There is an ever-increasing plethora of remotely sensed imagery available for use in spatial data analysis. New satellites with increasing spatial and/or spectral resolution are becoming commonplace. Airborne sensors and digital cameras offer many great opportunities. Advances in lidar and radar make these instruments viable tools today. Choices and confusion abound. This workshop is designed for those who wish to learn more about and appreciate the usefulness of this myriad of remotely sensed systems. It is for those who want to “put it all together” and see which systems or combination of systems provides the answer for their problems. The workshop begins with a presentation of the basic properties of all these remote sensing systems. Once the basics are well understood, several important factors must be considered when integrating the imagery to derive information. These factors include geometric registration, image mosaicing, radiometric correction, and quality control/accuracy assessment. Case studies and application examples will be used to demonstrate the utility (pros and cons) of each image type and to highlight situations where great synergy exists between multiple image sources. Every participant will leave this workshop with a greater appreciation of how to match their spatial analysis needs to the current wealth of remotely sensed imagery.

Social Event

Curling Social

6:00 pm to 10:00 pm
Royal Canadian Navy Curling Club

Hosted by the Canadian Remote Sensing Society – Ottawa Branch

Join us for an evening of fun with one of Canada’s national pastimes. Curling has been a favourite winter social activity in Canada for well over 200 years. The basics are easy to learn, and a quick introduction is generally all one needs to start playing.

We invite you to join us at the Royal Canadian Navy Curling Club. The evening starts at 6:00 pm with complimentary buffet and a cash bar. An introduction to curling with coaches provided by the RCN Club will start at 7:00 pm, games will start soon after and will continue until 10:00 pm. The coaches introduction will go over the basics of throwing and sweeping for beginners, and will discuss the key ideas behind the strategy of the game. The club will remain open until 11:00 pm.

Bus transportation will be provided from the Westin Hotel for those who do not wish to drive. Meet at the Hotel Main Entrance at 5:30 pm for bus transportation. The RCN Curling club is located at the south end of Ottawa’s Little Italy, an excellent place to explore to enliven your taste buds.

Full registration costs \$30USD per person playing, or \$10.00 USD per person for audience attendees (for those who would like to watch the game from the bar and enjoy the buffet). Curlers are expected to wear loose fitting pants and to provide their own footwear (sneakers that have been thoroughly washed and not worn off-the-ice are sufficient). Sliding tape and curling brooms will be provided.

By registering to play you acknowledge that (i) the sport of curling is played on ice and requires physical fitness; (ii) curling ice is slippery underfoot and you could be hurt if you fall; (iii) neither the RCN Curling Club nor the American Society for Photogrammetry & Remote Sensing nor the Canadian Remote Sensing Society can guarantee your safety, and; (iv) you assume all risks associated with participating in this curling event.

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WS#6 — ASPRS

Remote Sensing of Vegetation

Charles Olson, Professor Emeritus, *University of Michigan*, USA

8:00 am to 12:00 noon, CEU .4

Room: Alberta

INTRODUCTORY Workshop: Anyone involved in crop, forest or land-use monitoring, geo-botanical prospecting and/or modeling of energy upwelling from terrestrial features. No prior knowledge of plant morphology or physiology is assumed.

The goal of this workshop is to provide an examination of morphologic and physiologic factors affecting signals upwelling from vegetated areas and their influence on remotely sensed data in the visible, near-IR, middle-IR, thermal and microwave, with emphasis on the interaction of solar radiation with vegetation. No attempt is made to cover the many vegetation algorithms or specialized “vegetation maps” currently available.

WS#7 — ASPRS

Lidar for Terrain Mapping and Forest Studies

Qi Chen, *University of California*, USA

8:00 am to 12:00 noon, CEU .4

Room: Ontario

INTERMEDIATE Workshop

The goal of this workshop is to introduce the basic concepts of lidar, the popular and innovative methods for lidar data processing and information extraction, with a focus on terrain mapping and forest studies. The attendants will learn 1) the principles of lidar systems, 2) the typical lidar systems, sensors, software, data, and applications, 3) the general procedure for processing airborne lidar data, 4) the popular and innovative methods for lidar data filtering and terrain mapping for both urban and vegetated areas, 5) an overview of methods for extracting forest information at the stand and individual-tree levels, 6) an introduction of ground-based lidar, 7) the application of satellite GLAS data for forest mapping, and 8) the remaining challenges of lidar data processing and the advices of finishing your Lidar projects.

WS#8 — ASPRS

3D Display of Imagery, Lidar, GIS and Google Earth: Wall-Sized Stereoscopic Displays for Research, Exploration and Education

Matthew Dunbar, *University of Kansas*, USA
L. Monika Moskal, *University of Washington*, USA

8:00 am to 12:00 noon, CEU .4

Room: Les Saisons

INTRODUCTORY Workshop

The main objectives of the workshop are to introduce the participants to modern large-format stereoscopic display technologies, provide information on how such a system can be purchased or built with easily available projection and computer equipment, and demonstrate how they may be utilized for remote sensing-based research, exploration and education. A wide range of topics related to modern stereoscopic displays will be covered, including the creation of stereo data, sources of existing stereo data, software for displaying stereo data (e.g., WallView, StereoPhoto Maker, StereoMovie Maker, and ArcGIS), and the specific hardware required for stereoscopic viewing. Focused attention will be given to Lidar data display in stereo using free Lidar exploration software (FUSION) and operating Google Earth in stereo using a 3D navigation device. A stereoscopic projection system will be used throughout the workshop and participants will receive a workbook containing a variety of materials related to modern stereoscopic displays along with sample datasets and software on a data CD.

WS#9 — CRSS

Crafting Geospatial Data Policy to Satisfy Multiple Objectives

Dr. Robert Ryerson, CMS, FASPRS, *Kim Geomatics Corporation*, Canada
Dr. Stan Aronoff, *Kim Geomatics Corporation*, Canada

8:00 am to 12:00 noon

Room: Quebec

INTRODUCTORY Policy Oriented Workshop

This workshop will examine critical issues involved in developing policies for the distribution and use of geospatial data. Experience has shown that the way data policies are crafted affects the rate of development of local industry, the quantity and quality of public good activities undertaken using the data, returns and cost implications for the data provider, and the downstream financial returns from the use of geospatial data. Balancing these sometimes competing objectives is challenging. The choices made will depend on the objectives of the organization and the mandate they are charged with fulfilling. In the case of national or government agencies, data policies are most effective when they are in alignment with well-defined objectives for the development of geospatial analysis capabilities that support government policy objectives.

Participants will be asked to complete a short optional questionnaire beforehand to allow the workshop team to better address their needs.

**Canadian Remote Sensing Society
Annual General Meeting**

12:00 noon to 1:00 pm
Room: British Columbia

Agenda

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| 1. Introduction / Call to Order | 5. Expansion of the Membership |
| 2. Report of the CRSS Chair and Executive Committee | 6. Plans and Suggestions for Future Symposia and Workshops |
| 3. Report of the Editor of the <i>Canadian Journal of Remote Sensing</i> | 7. Nomination and Election of Officers |
| 4. Report of the Students Representative | 8. Other Business |
| | 9. Adjournment |

A light lunch will be served.

Open to all CRSS Members