

IGARSS 2010

Honolulu

July 25 - 30

*Remote Sensing: Global Vision
for Local Action*

Preliminary Call for Papers



IEEE



General Co-Chairs' Welcome

On behalf of the IEEE Geoscience and Remote Sensing Society and the IGARSS 2010 Organizing Committee, we are pleased to invite you to Honolulu for IGARSS 2010. We are thrilled to be returning to Hawaii to host IGARSS on its 30th anniversary! In the true spirit of an international event, we will continue our tradition of gathering world-class scientists, engineers, and educators engaged in the fields of geosciences and remote sensing from around the world. We anticipate well over one thousand participants to enjoy a week of technical sessions, tutorials, exhibits and social activities.

For this 30th anniversary IGARSS we will celebrate our accomplishments over three decades of leadership in remote sensing instrumentation, techniques, and applications development. But perhaps more importantly we will look ahead to the future of our field with some fresh approaches and perspectives through our conference theme: ***Remote Sensing: Global Vision for Local Action***. One such activity will be embodied in our plenary session, which will focus on the emerging field of Community Remote Sensing. We hope this plenary session, along with special tutorials and technical sessions, will inspire and excite our community for what is possible in the coming decade. We look forward to seeing you in Honolulu in July 2010!

Karen St.Germain and Paul Smits
General Co-Chairs

Sponsoring Society

The IEEE Geoscience and Remote Sensing Society (GRSS) is pleased to sponsor the 30th International Geoscience and Remote Sensing Symposium (IGARSS) in Honolulu, Hawaii, USA. IGARSS is the premier international symposium on remote sensing. Held annually in world-wide venues, this prestigious meeting has become an international focus for remote sensing theory, programs, applications and state-of-the-art technology. As a professional society, IEEE GRSS seeks to advance geoscience and remote sensing science and technology through scientific, technical and educational activities. The Society strives to promote a high level of technical excellence among its members by exchange of information through conferences, symposia, meetings, workshops, publications and through its committees to provide for the needs of its members.

IEEE GRSS Membership

Membership in the IEEE GRSS is open to professionals and students with varying degrees of academic accomplishment and work experience. Student memberships in any IEEE society are extremely economical, and the benefits are the same as regular members. For professionals interested only in the benefits of GRSS, affiliate membership meets the need. Regular memberships in IEEE provide additional benefits including the option to belong to more than one society and receive IEEE benefits such as *IEEE Spectrum* and insurance or credit cards offered through the organization. Regular members are also eligible for Senior Membership in the IEEE GRSS after a short period of professional experience in the field. Please visit the newly updated IEEE GRSS website: <http://www.grss-ieee.org> to explore details of qualifications and membership opportunities.

Student Activities

Undergraduate and graduate students are particularly encouraged to present and or participate in the conference. Throughout the years, the conference has been a venue of interaction with professionals and employers and a stepping stone in building a career in Geosciences and Remote Sensing. IGARSS 2010 plans to expand the professional development opportunities by organizing a number of student focused activities including networking and mentoring events. The conference also provides opportunities to apply for partial travel support and participate in a student paper competition (described below). It is also anticipated that volunteer possibilities that will include a waiver of the registration fee will be available.

Student Prize Paper Competition

All IEEE student members are invited and encouraged to enter the IGARSS Student Prize Paper Competition. Ten finalists will be selected by a committee to present their papers during a special session at the symposium in Honolulu. All finalists will be offered partial travel support funding. Three prizes will be presented: First Prize (Mikio Takagi Student Prize) US\$ 500.00, Second Prize US\$ 300.00, Third Prize US\$ 200.00, plus certificates for each. Following the special session at IGARSS, a complimentary ticket to the GRSS Annual Awards Banquet will be given to all ten finalists. Please refer to the instructions that will be soon available on the Student Prize Paper page of the symposium website to submit the full paper and travel support application to the competition committee.

The Community Remote Sensing Project

The Organizing Committee of the 2010 IEEE International Geoscience and Remote Sensing Symposium (IGARSS) requests your participation in a novel project exploring the emerging field of community remote sensing.

The Earth information needs of our society are vast. Until now, we have relied on government-sponsored satellites and observing systems as the foundation for this information. The rapid emergence of citizen science and social networks introduces an exciting new means for augmenting this knowledge.

IGARSS 2010 will spotlight this emerging field with a plenary session entirely dedicated to the topic, supporting the conference theme ***Remote Sensing: Global Vision for Local Action***. During the year leading up to the plenary, the Organizing Committee will identify and highlight existing projects that embody the plenary theme. Participating projects will be selected for their promise to create either new knowledge or new technologies associated with community remote sensing and will be announced beginning this July at IGARSS 2009 (<http://www.igarss09.org/>) in Cape Town. Progress on the projects will be tracked throughout the year on the conference website, and their results will be presented during the IGARSS 2010 plenary session. Ongoing publicity associated with the participating projects will be supported, and connections to related charitable organizations will be promoted. Plenary speakers will be selected from major organizations that reflect public sector, private sector, academia, and NGO perspectives on community remote sensing.

If you are working in this area, your participation in the Collaboration will benefit both your project and the greater community. Further information, including a detailed description of the Collaboration, can be obtained from the Conference Plenary Chair Bill Gail (wb.gail@comcast.net, 1.303.513.5474). Limited funding may be available to help support selected projects.

Abstract Submission

Participation in IGARSS is open to all individuals interested in or working in the fields of geoscience and remote sensing. Abstracts received by the deadline will be considered for program placement under the standard peer review process. Late abstracts cannot be accepted due to the large number of submissions and short review schedule. The IEEE IGARSS 2010 Technical Program Committee will organize all accepted abstracts into either oral or interactive poster sessions based upon their potential contribution to the symposium and the composition of high-quality sessions. Session Co-chairs will be appointed as early as possible to help TPC setting the highest quality for oral and interactive sessions. Only accepted papers that are registered and presented at the symposium in Honolulu will be published in the symposium proceedings and be assigned an IEEE GRSS publication reference. The list of specialty projects and themes associated with community remote sensing will be soon available on the symposium website. The traditional IGARSS Topic List is available on the next page.

Publication of Abstracts and Proceedings

- Electronic media containing all accepted IGARSS 2010 abstracts will be distributed to registered attendees at the registration desk.
- Authors of accepted papers will have an opportunity to revise their abstracts for inclusion on the electronic media until May 7, 2010.
- The electronic system will enable full proceedings papers to be accepted until July 2, 2010.
- Full papers will be made available to all attendees after the Symposium. Attendees may elect to receive a DVD through the mail, or be given access to a private website.
- Only papers that are presented at the symposium by one of the listed authors, registered for the Symposium, will appear in the proceedings. IEEE and IGARSS reserves the right to exclude a paper from distribution after the conference (e.g., removal from IEEE Xplore) if the paper is not presented at the conference

Abstract Submission Instructions

Abstract deadline is December 11, 2009 for both contributed and invited submissions.

- Log in to <http://www.igarss2010.org> to submit abstracts (only online submissions will be accepted for review).
- Instructions for formatting and submitting your abstract will be provided in the Paper Kit at <http://www.igarss2010.org>
- The minimum page limit for all abstracts is two single sided pages. The maximum page limit is 4 pages. Use Times New Roman font, 11 or 12 point, 1.5 line spacing.
- Abstracts should state clearly and concisely the problem, methodology used and central conclusions, and may include figures and graphs.
- Abstracts must include a bibliography to help reviewers place the contributions of the work into context.
- A maximum of **two** abstracts may be submitted by each presenting author, including both general and invited sessions. **Please note this is a change in policy from previous years.**

Invited Session Proposals

Interested conveners may propose an invited session, **with a tutorial lecture and up to 8 additional research papers**. Only a limited number of sessions will be accepted and should refer to

- activities of the GRSS Technical Committees;
- cutting edge research topics, missions, novel sensors or techniques.

The invited session proposal deadline is September 14, 2009. More details on submitting proposals will be soon available on the symposium website.

Tutorial Proposals

IGARSS 2010 invites proposals for tutorial sessions to be held on July 25, 2010. Half-day and full-day tutorials will focus on a variety of topics with a wide appeal to the geoscience and remote sensing community. Interested instructors should submit the following information by November 30, 2009:

- Course title
- Preference for half-day or full-day session
- Course outline and 250-word summary
- Instructor bio

Notification of accepted proposals will be made on or before February 28, 2010. More details on submitting proposals will be soon available on the symposium website.

Topic List

Land	
L1	Land Use and Land Cover Change
L2	Soils and Soil Moisture
L3	Forests and Vegetation
L4	Wetlands and Inland Waters
L5	Agroecosystems
Oceans	
O1	Ocean Biology (Color) and Water Quality
O2	Ocean Surface Winds and Currents
O3	Ocean Temperature and Salinity
O4	Ocean Altimetry
Atmosphere	
M1	Precipitation and Clouds
M2	Numerical Weather Prediction and Data Assimilation
M3	Atmospheric Sounding
M4	Aerosols and Atmospheric Chemistry
Cryosphere	
C1	Land Ice and Snow
C2	Sea Ice
Analysis Techniques	
T1	Image Processing Techniques
T2	Data Assimilation and Inverse Problems
T3	Classification and Data Mining Techniques
T4	Geographic Information Science

Applications	
A1	Human Health and Landscape Epidemiology
A2	Urban and Built Environment
A3	Coastal and Wetlands
A4	Geology and Solid Earth
A5	Pollution and Contamination
A6	Unexploded Ordnance and Landmine Remediation
A7	Other
Electromagnetics and Radiative Transfer	
E1	Microwave Scattering and Propagation
E2	Optical and Infrared Modeling
Sensors and Platforms	
S1	SAR Instruments, Missions and Calibration
S2	SAR Processing
S3	Active Microwave
S4	Radiometer Instruments and Calibration
S5	Lidar Sensors
S6	Passive Optical and Hyperspectral Sensors
S7	UAV and Airborne Platforms
S8	Other
Education and Policy	
P1	Data Management and Systems
P2	Remote Sensing Data and Policy Decisions
P3	Education and Remote Sensing

Venue

The Hilton Hawaiian Village® offers the perfect mix of exceptional resort accommodations and classic Hawaiian hospitality. Discover over 90 shops and boutiques and a diverse, international selection of restaurants. The resort's beachfront Super Pool is the largest on the island and on Friday night it becomes the stage for a celebration of Hawaiian culture and entertainment, ending with a spectacular fireworks show.

Resort Facts

- 22 acres of oceanfront paradise
- Unique "Village" destination resort concept
- 5 pools including Waikiki's largest Super Pool, and separate pools at Ali'i Tower® and Kalia Tower®
- Diverse dining options with 20 restaurants and lounges
- Exclusive Ali'i Tower featuring concierge and private facilities
- Exotic wildlife and botanical gardens
- Romantic seaside sunsets
- Mandara Spa
- Rainbow Express Keiki Club children's program
- Daily activities ranging from Hula lessons to wildlife feedings

Deadlines

Invited Session Proposal Deadline	September 14, 2009
Invited Session Notification	November 9, 2009
Abstract Submission System On-line	November 13, 2009
Tutorial Proposal Deadline	November 30, 2009
Abstract Deadline	December 11, 2009
Travel Support Application Deadline	December 11, 2009
Student Paper Competition Deadline	December 11, 2009
Tutorial Notification	February 28, 2010
Abstract Status Available On-line	March 26, 2010
Registration Opens	March 26, 2010
Deadline for Revisions to Accepted Abstracts	May 7, 2010
Publishing Author Registration Deadline	May 7, 2010
Early Registration Deadline	June 4, 2010
Hotel Reservation Deadline	July 2, 2010
Online Registration Deadline	July 9, 2010
Full Paper Submission Deadline	July 9, 2010
IGARSS'10 Conference	July 26-30, 2010

For more information and updates, please visit:

www.IGARSS2010.org