

\*\* Remote Sensing News for and About the Private Sector \*\*

*The Quarterly Newsletter of the IEEE-GRSS Private Sector Liaison Group*

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GRSS website: <http://www.grss-ieee.org>

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<http://quickplace.altarum.org/grssindustry> (User ID - Industry,  
Password - GRSS)

IN THIS ISSUE - December 22, 2005 - Issue #5

- > 1. THE NEW GEOSPATIAL WORLD - brief editorial on the imminent Internet revolution
- > 2. IGARSS 2006 COMING TO DENVER - plan now!
- > 3. NRC DECADAL SURVEY OF EARTH SCIENCE AND APPLICATIONS - the community voice
- > 4. GEOSS IS HAPPENING - and IEEE is contributing
- > 5. ALLIANCE FOR EARTH OBSERVATIONS - building industry roles in GEOSS
- > 6. LANDSAT WOES - critical remote sensing system at risk
- > 7. OTHER BUSINESS OPPORTUNITIES - don't lose out
- > 8. COMPANY NEWS - what companies are up to
- > 9. EVENTS AND EVENT CALENDARS - upcoming conferences, meetings, and events

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\*\* 1. THE NEW GEOSPATIAL WORLD

It is difficult today to walk down the street without hearing some comment about Google Earth - and the other contenders in this emerging field of "consumer geospatial" (Microsoft Virtual Earth and Yahoo) are not far behind Google. The Internet is a multi-faceted transformational technology. For those of us in the geospatial field, the transformation is just beginning. The companies that provide Internet search portals have come to recognize a simple concept: information relevant to our everyday lives can be naturally organized,

and effectively searched, in a geospatial context. For the billions of consumers using the Internet, this is powerful stuff. Bill Gates' vision of the "geospatial" Internet was unveiled this October during his 50<sup>th</sup> birthday speech in London: "You'll be walking around in downtown London and be able to see the shops, the stores, see what the traffic is like. Walk in a shop and navigate the merchandise. Not in the flat, 2D interface that we have on the web today, but in a virtual reality walkthrough." Where will the information and engineering tools come from to accomplish this? From us. From the "geospatial scientists" who find new ways of looking at the Earth. From the "geospatial engineers" who establish the standards and processes by which the information is produced and distributed. And from a new breed of organizations and individuals, the "geospatial carpenters", who apply the engineering processes to routinely generate a wide range of geospatial information. This new geospatial world will change our personal and professional lives. The science and engineering of the "built" environment - how buildings and human infrastructure are organized, how they evolve, and their interaction with the "natural" environment - will receive greater attention. Datasets will be referenced by the information they provide, not the sensors that created them. Spatial scales will merge, coupling global and local information transparently. A decade from now, people will be using geospatial information in ways that are hard to imagine today. And we will play a central role in that transformation.

\*\* 2. IGARSS 2006 COMING TO DENVER

IGARSS 2006 is being held July 31 to August 4 in Denver, Colorado USA (<http://www.igarss06.org>). The theme this year is "Remote Sensing: A Natural Global Partnership". For those who have attended previously, you know that IGARSS is the premier remote sensing conference for bringing together government, academia, and industry. Historic attendance has been running about 1500. A variety of tutorial sessions are planned with interest to the private sector. The exhibitors this year will receive increased attention - for questions about exhibiting, please contact Lisa Ostendorf directly ([ieeegrss@adelphia.net](mailto:ieeegrss@adelphia.net), +1.540.658.1676). See you there.

\*\* 3. NRC DECADAL SURVEY OF EARTH SCIENCE AND APPLICATIONS

The National Research Council (NRC) two-year decadal survey of earth science and applications titled "Earth Science and Applications from Space: A Community Assessment and Strategy for the Future" continues to progress toward an early 2007 report release date. The Executive Committee and seven theme panels have been meeting with the objective of producing a prioritized list of missions and supporting observations to guide the Earth science and operational community through the year 2020 and longer. Two town hall meetings will allow the community to gain insight into this process: AGU (Dec 6, 7:30 PM) and AMS (Jan 30, 9:15 AM). More information, including a copy of the April 2005

preliminary report, can be obtained at  
<http://qp.nas.edu/decadalsurvey>.

#### \*\* 4. GEOSS IS HAPPENING

The 60-nation Global Earth Observing System of Systems (GEOSS) is now moving to the implementation phase. The plan for 2006, the first full year of operations, establishes priority for a decade of development and societal benefits, focusing on both formulation of the initial GEOSS infrastructure and creation of pilot studies for the societal benefit objectives. The current draft plan is available on the GRSS web site ([www.grss-ieee.org/geoss](http://www.grss-ieee.org/geoss)). In June, Dr. Jose Achache was appointed executive director of the GEO secretariat, the governing body for GEOSS. The latest GEO meeting was held December 14 and 15 in Geneva. Through GRSS, IEEE has taken a significant role in support of GEOSS, establishing the IEEE Committee on Earth Observations (ICEO) with working groups on architecture and data, outreach, user applications, and science and technology. Experts from IEEE and other organizations are collaborating with ICEO to support GEOSS, focusing initially on the system of systems architecture, standards, and earth observation applications. In 2005, IEEE organized a series of workshops on "The User and the GEOSS Architecture". The first two were held in Seoul and Pretoria. Future workshops are being considered for China, the US, and Europe. For further information on these IEEE activities, contact the GRSS President, Al Gasiewski (Al.Gasiewski@noaa.gov), or the ICEO Chair, Jay Pearlman (jay.pearlman@boeing.com).

#### \*\* 5. ALLIANCE FOR EARTH OBSERVATIONS

The Alliance for Earth Observations is a private sector organization focused on building awareness and support for GEOSS and the important role that the private sector must play in its development and implementation. The Alliance held a workshop October 27-28 in DC titled "Earth Observation System Architecture: Enabling an Entrepreneurial Environment" with the President's Science Advisor, Dr. John Marburger, as chair. The purpose was to actively engage the private sector in GEOSS planning and development. The results of the workshop were also recently presented to the US GEO organization. For more information on the Alliance (including the recent workshop and presentation to USGEO), visit <http://www.strategies.org/Alliance>.

#### \*\* 6. LANDSAT WOES

The Landsat program, a foundation of the geospatial information community, continues to be troubled. Landsat 5, launched in 1984 and well past its design life, began experiencing problems with its solar array in November. Landsat 7 has been suffering from scan line corrector problems for several years, limiting its ability to provide

quality data. Responsibility for Landsat is shared by several agencies within the government, and plans for the next generation have suffered from fits and starts. The 2002 plan for an industry-led Landsat Data Continuity Mission (LDCM) was dropped when no proposal acceptable to NASA was received. In 2004, the President's Science Advisor directed that Landsat would be integrated onto the NPOESS satellites. Today, the NPOESS decision is being reconsidered for technical and budgetary reasons. The Landsat program is in limbo, yet the need to replace the current satellites remains as strong as ever.

\*\* 7. OTHER BUSINESS OPPORTUNITIES

A quick reminder of items mentioned in previous newsletters:

- The monthly "GRS Newsletter" publishes corporate profiles.
- The GRSS technical committees accept volunteers (<http://www.grss-ieee.org>).
- Short contributions of news or other items for this newsletter will be accepted.

\*\* 8. COMPANY NEWS

(This space is available to briefly advertise company news or events at no cost. Please submit 1-4 sentence requests to the editor with lead time appropriate for a quarterly periodical.)

> RAYTHEON COMPANY has achieved a significant NPOESS (National Polar Orbiting Operational Environmental Satellite System) program milestone by successfully completing its development and factory acceptance test of the company's Command, Control, and Communications Segment (C3S) in support of the NPOESS Preparatory Project (NPP). The segment plays the key role of managing and controlling all of the space and ground assets of the nation's next-generation meteorological satellite system. The three-year development program was completed on schedule, and produced over 1.7 million lines of software and 40 racks of hardware. Installation is on-going at four key operational sites: The NOAA Satellite Operations Facility, the Svalsat Ground Station in Svalbard Norway, the TDRSS ground station at White Sands in New Mexico, and the Offut Air Force Base, Nebraska.

> ESRI announces that its new ESRI Image Server offers a new approach to storing, managing, processing and distributing geospatial data. The ESRI Image Server provides fast access and visualization of large quantities

of file-based imagery, processed on-the-fly and on demand. Large mapping and imagery data management companies will find immediate benefit from this product. ESRI Image Server will operate on Windows servers and is expected to be available in the first half of 2006.

\*\* 9. EVENTS AND EVENT CALENDARS

5- 9 Dec American Geophysical Union, San Francisco, CO,  
<http://www.agu.org/meetings/fm05/>

14-15 Dec GEOSS Secretariat Meeting, Geneva

9-11 Jan NRC Decadal Survey Ex Comm Meeting, DC,  
<http://gp.nas.edu/decadalsurvey>

27-31 Jan MAPPS Winter Meeting, Cabo San Lucas, Mexico,  
<http://www.mapps.org>

29- 2 Jan American Meteorological Society, Atlanta, GA,  
<http://www.ametsoc.org/meet/annual/>

9-10 Feb US Commercial Remote Sensing, DC,  
[www.srinstitute.com/cf327](http://www.srinstitute.com/cf327)

23-24 Feb Intergeo East, Belgrade, Serbia and Montenegro,  
<http://www.intergeo-east.com>

28- 3 Feb Mtg on Mw Rdiometry & Rem Sens App, San Juan, Puerto Rico,  
<http://www.microrad06.org>

14-15 Mar AAS Goddard Symposium, Greenbelt, MD,  
<http://www.astronautical.org>

3- 6 Apr Space Foundation, Colorado Springs, CO,  
<http://www.spacefoundation.org>

16-18 May Europ Conf on SAR, Dresden, Germany,  
<http://www.dlr.de/hr/eusar2006>

Institute of Electrical and Electronic Engineers (IEEE)

<http://www.ieee.org>

American Geophysical Union (AGU)

<http://www.agu.org>

American Meteorological Society (AMS) Conferences, Meetings, and Symposia

<http://www.ametsoc.org/>

American Society for Photogrammetry and Remote Sensing (ASPRS)

<http://www.asprs.org/>

International Society for Photogrammetry and Remote Sensing (ISPRS)

<http://www.isprs.org/>

SPIE - The International Society for Optical Engineering

<http://www.spie.org>

MAPPS - Management Association for Private Photogrammetric Surveyors

<http://www.mapps.org>

United Nations Environment Program (UNEP) Conferences and Meetings

<http://www.unep.org/Documents/Default.asp?DocumentID=303>

Earth Observing System (EOS) Science and Global Change Calendars

<http://eospsso.gsfc.nasa.gov/calendars/index.php>

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The IEEE Geoscience and Remote Sensing Society (GRSS) Private Sector Liaison Group was formed in 2002 to increase collaboration between the private sector, academia, and government in the remote sensing field. The readership of this newsletter now exceeds 700 people from companies associated with remote sensing, as well as government agencies, international space agencies, professional organizations, non-government organizations, OMB, and Congressional staff. We in the private sector want to help keep our colleagues informed of the activities and capabilities of the private sector - and the role that the IEEE Geoscience and Remote Sensing Society (GRSS) plays in supporting and promoting these activities. Should you need further information about the Private Sector Group, require that contact information for you or your organization be updated, or request to be removed from the list, please contact Bill Gail (bill.gail@vexcel.com).