

SDI-AP

February 2009

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Spatial Data Infrastructure – Asia and the Pacific (SDI-AP) is a free electronic newsletter from the [Global Spatial Data Infrastructure Association \(GSDI\)](#). The newsletter is produced for people interested in Spatial Data Infrastructure, GIS, remote sensing, and geospatial data issues in Asia and the Pacific. It aims to raise awareness and provide useful information to strengthen SDI initiatives and support the synchronisation of activities across the region. Support for the newsletter is also provided by the [Permanent Committee on Geographic Information for Asia and the Pacific \(PCGIAP\)](#), a regional forum to enhance cooperation in the development of a regional geographic information infrastructure. The newsletter is currently being produced for GSDI by the [Centre for Spatial Data Infrastructures and Land Administration](#) at the University of Melbourne.



To subscribe to SDI-AP, please go to: <http://www.gsdi.org/newslist/gsdisubscribe.asp>. Back issues of the newsletter are at the GSDI website: <http://www.gsdi.org/newsletters.asp>. You can also sign up for [GSDI News List](#) to receive alerts of special news and announcements as well as notification of new issues of the SDI-AP newsletter. To subscribe to, and access archives of, thematic or regional discussion lists please visit <http://www.gsdi.org/discussionlists.asp>.

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## Message from the editor

Welcome to the February edition of the newsletter. This month we would like to welcome Baek Wonkug as a new addition to the editorial team. Baek works for the Ministry of Land, Transport and Maritime Affairs (<http://english.mltm.go.kr/intro.do>), Republic of Korea. Currently Baek is working as a GSDI associate at the FGDC in the US. Baek's interests include developing GIS systems, constructing National, Global SDIs and potentially 3-dimensional SDIs. Also this month we are pleased to welcome the New Year - again! – the Lunar Year of the Ox.

This month the SDI spotlight focuses on the development of an SDI for Health. This project aims to spatially enable health data across two regional shires in regional Victoria, Australia (Mitchell and Murrindindi) to support evidence-based planning and decision making for the providers of health services in the area.

If you have news or information related to SDI, GIS, RS or spatial data that you would like to share with the community (e.g. workshop announcements, publications, reports, websites of interest etc.), kindly send us the

materials by the **25<sup>th</sup> of the each month** to [sdi-ap@gsdi.org](mailto:sdi-ap@gsdi.org), for your contribution to be included in the next newsletter.

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[http://www.geom.unimelb.edu.au/research/SDI\\_research/index.html](http://www.geom.unimelb.edu.au/research/SDI_research/index.html)

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## Contributions

Thank you to the following people and organisations for their contributions to this issue:

Paul Box and Kate Lance for news feeds, Jeremy Huang and Jeremy Shen from the Ministry of the Interior, Taiwan for the Chinese translation, and Shivani Lal, *GIS Development* and *Asia Surveying Mapping Magazine* for directly feeding into the newsletter.

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## SDI News, Links, Papers, Presentations

### Resolutions from the ISO/TC 211 27th Plenary, held in Tsukuba, Japan

<http://www.isotc211.org/Resolutions/resolutn.htm#M27>

ISO/TC 211 resolution 446 was passed for the formation of an ad hoc working group on SDI. The wording of resolution 446 included:

- ISO/TC 211 recognizes the importance of standards for SDI and resolves to establish an ad hoc group to prepare a workshop.
- ISO/TC 211 welcomes and accepts the chairperson nomination from Saudi Arabia.
- ISO/TC 211 welcomes the offer from other countries and members to participate.
- ISO/TC 211 instructs the Secretariat to circulate a call immediately for further nominations and confirmation of nominated persons with a deadline of January 31, 2009.

Contact: [henrytom@verizon.net](mailto:henrytom@verizon.net), [hans.knoop@gmx.de](mailto:hans.knoop@gmx.de).

The next ISO plenary – the 28th ISO/TC 211 Plenary – will be held 25-29 May 2009 in Molde, Norway.

<http://www.isotc211.org/calendar.htm>

### What message are we sending to senior level decision makers about the importance and value of Spatial Data Infrastructure - SDI - if we keep misrepresenting what SDI is or is all about?

A provocative essay in the current issue of Geoconnexion [http://www.geoconnexion.com/burning\\_issue\\_int.php](http://www.geoconnexion.com/burning_issue_int.php) by Roger Longhorn.

### National Geospatial Data Regulatory Authority Bill (India)

Delivering the inaugural speech at the **8th National Spatial Data Infrastructure (NSDI)**, Union Minister for Science and Technology and Earth Sciences, Mr Kapil Sibal, informed that the Government is in the process of formulating a legislation on sharing of geospatial data amongst different agencies - public and private. A bill in this regard, the *National Geospatial Data Regulatory Authority Bill*, is to be introduced in the next session of Parliament and is likely to be cleared by the Cabinet by February 2009.

Emphasising the critical role of geospatial technologies in a nation's internal security, Mr Sibal took up the case of recent terror attacks in Mumbai and expressed that with the help of 3-D technology it would have been possible to know the exact location of each room in the ill-fated Taj and Trident hotels. Pointing to restrictions on conducting flights and delays in permissions granted, he admitted that bureaucratic hassles, most of the times, impede technological growth. "We should disabuse our minds and should be proactive rather than restrictive and reactive" he opined.

**See also:** "Cabinet Approval For National Geospatial Data Regulatory Authority Bill Likely By February 2009: Sibal" <<http://www.webnewswire.com/node/447495>> and "Geospatial data regulatory Bill may be cleared by February" <<http://www.thehindubusinessline.com/2008/12/23/stories/2008122352000500.htm>>

Source: GIS in Education Blog: <http://www.educationgis.com/2008/12/8th-national-spatial-data.html>  
 & Kate Lance

### The value of the geospatial industry in India

An Indian geospatial magazine in April 2008 released a survey demonstrating how, although still adolescent, the Indian geospatial industry showed immense potential. The survey pegged the overall 2006-07 worth of the industry within India at Rs6830 million (USD139,50 million), with the services segment contributing 51%. Minister for Science and Technology and Earth Sciences Kapil Sibal was moved to declare that the industry would outperform the country's IT and telecoms boom

Source: GIM International [http://www.gim-international.com/issues/articles/id1231-Indias\\_Leapfrog\\_Geospatial\\_Industry.html](http://www.gim-international.com/issues/articles/id1231-Indias_Leapfrog_Geospatial_Industry.html)

### Presentations from ISO TC211 Workshop on Standards in Action,

held in Tsukuba, Japan (3 December 2008) are available from:

<http://www.isotc211.org/WorkshopTsukuba/Workshop-Tsukuba.htm> and include:

- Present status of NSDI policy of Japan (80 MB) - Mr. Shoichi Oki  
[http://www.isotc211.org/WorkshopTsukuba/Presentations/Shoichi\\_Oki.ppt](http://www.isotc211.org/WorkshopTsukuba/Presentations/Shoichi_Oki.ppt),
- Japan vision for geospatial information service innovation and demand for standardization - Professor Ryosuke Shibasaki  
[http://www.isotc211.org/WorkshopTsukuba/Presentations/Ryosuke\\_Shibasaki/Ryosuke\\_Shibasaki.pdf](http://www.isotc211.org/WorkshopTsukuba/Presentations/Ryosuke_Shibasaki/Ryosuke_Shibasaki.pdf)
- Russian version of the ISO/TC 211 multi-lingual glossary of terms - Aleksandrov, Maksimova, and Yakovleva  
[http://www.isotc211.org/WorkshopTsukuba/Presentations/Raisa\\_Yakovleva.pdf](http://www.isotc211.org/WorkshopTsukuba/Presentations/Raisa_Yakovleva.pdf)
- Considering standards for specifications of Global Map (version 2) - Kajikawa and Nagayama  
[http://www.isotc211.org/WorkshopTsukuba/Presentations/Shozo\\_Kajikawa.pdf](http://www.isotc211.org/WorkshopTsukuba/Presentations/Shozo_Kajikawa.pdf)
- Standardization of Location Data Representation in Robotics - Mr. Shuichi Nishio
- Advisory Group on Outreach: Programme of Work - Mr. Henry Tom

Source: Kate Lance

### Gaza mapping initiatives

As the situation continues to deteriorate in Gaza there is a great need for better maps of the crisis situation for use by relief agencies and other people on the ground. One of the initiatives towards disseminating of information is **OpenStreetMap (OSM)**. This project that aims to create a free editable map of the world using GPS devices, aerial photography and other free sources, has started collating information. They are looking for people familiar with Gaza's street names, features etc. to enhance the bare geometries of the current OSM map. If you know the area or have contacts in the region please get in contact with OSM which is using a wiki to co-ordinate the work.



Several U.N. agencies are also providing information. UN **OCHA Occupied Palestinian Territory (UNOCHA oPt)** are in addition to the production of humanitarian situation reports supplementing them with overview maps. **UNOSAT** also has created and continues to update a Gaza crisis map which depicts the reported attack by Israeli and Hamas forces (25 Dec 2008 - 5 Jan 2009).

The New York Times has also created a map which includes timelines of the latest attacks by Israeli air forces and Hamas.

Source : <http://www.alertnet.org> and **GIS Development**  
[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_bfmdltruein](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_bfmdltruein)

### Space-based data to reduce disaster risk in Asia

The use of space-based information and services to help reduce the risk of disasters in the Asia-Pacific region received a boost with a collaboration agreement between the Japan Aerospace Exploration Agency (JAXA) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). At a ceremony held during the 15th meeting of the Asia-Pacific Regional Space Agency Forum (APRSAF-15), on 12 December 2008, in Ha Long Bay, Viet Nam, representatives of the two organizations signed a Memorandum of Understanding which will see them expand their cooperation and collaboration in promoting the use of space-based information and services – such as satellite imagery, remote sensing and satellite-based communications – for disaster risk reduction and disaster management in Asia and the Pacific.

SOURCE: Geoconnexion [http://www.geoconnexion.com/geo\\_news\\_article/Space-based-data-to-reduce-disaster-risk-in-Asia/4965](http://www.geoconnexion.com/geo_news_article/Space-based-data-to-reduce-disaster-risk-in-Asia/4965)

### **On-Farm Profitability of Remote Sensing in Agriculture**

By Frank Tenkorang and James Lowenberg-DeBoer (2008) "On-Farm Profitability of Remote Sensing in Agriculture", *Journal of Terrestrial Observation*: Vol. 1: No. 1, Article 6  
<http://docs.lib.psu.edu/jto/vol1/iss1/art6>

Remote sensing is used in agriculture to guide application of fertilizer, pesticides and other farm inputs. Its application in agriculture is well documented. However, evidence of profitability to farmers remains fuzzy. The objective of this study is to summarize publicly available information on the economic benefits of remote sensing in agriculture. Out of the hundreds of agricultural remote sensing documents reviewed only a few reported economic benefit estimates. Many of those documents do not provide details on how the economic benefit was estimated. Clues in the reports and the fact that the numbers are often much larger than those for detailed studies suggest that the studies not reporting details are often reporting gross benefits without deducting the associated cost. Standardizing budgeting methods and using the reported changes in yield and input application in 12 studies, remote sensing is estimated to have the potential to improve average farm profits by about \$31.74/ha. Most of the studies based profit estimates on a single crop season of data. Key improvements needed for studies of the economics of remote sensing for field crops include: detailed reporting of budget assumptions, multiple year data sets in the same fields, and replication of studies of the same technology in different states.

### **Assessing natural disaster risk in the Asia-Pacific region**

Improving our understanding of the frequency, location and magnitude of sudden onset natural disasters will help the Australian Government and AusAID plan and prepare for natural disaster response (for example, through the strategic placement of emergency supplies). Recognising the impact of disasters on the progress of development, the Australian Government decided in 2007 to enhance the humanitarian response, preparedness and capacity of partner governments. As part of this strategic approach, Geoscience Australia's Natural Hazard Impacts Project conducted a broad hazard risk assessment of the Asia-Pacific region for AusAID. The assessment included earthquake, volcanic eruption, tsunami, cyclone, flood, landslide and wildfire hazards, with particular attention given to countries the Australian Government considered to be high priority, of interest or of secondary focus.

SOURCE: Kate Lance & GeoScience, Australia [http://www.ga.gov.au/image\\_cache/GA11300.pdf](http://www.ga.gov.au/image_cache/GA11300.pdf)

### **Maldives National Geographic Information System - Maldives Environmental Management Project**

A recent consultancy notice (now closed) indicated that the Government of the Republic of Maldives has received a credit from the International Development Association (IDA) towards the cost of Maldives Environmental Management Project, and intends to apply part of the proceeds under the contract for the services of a GIS Specialist to develop a National Geographic Information System (NGIS). The consultant will, under the supervision of the Section Head of the Spatial Planning Unit or his designate, have overall responsibility for developing a:

- a comprehensive National Strategic GIS Framework consisting of: (i) a National Strategic GIS Framework document, and (ii) a System Design Report; and
- an Implementation Plan that describes the actions that will be undertaken to deliver the National Strategic GIS Framework over a period of five (5) years.

<http://www.dgmarket.com/eproc/np-notice.do?noticeId=3367249>

<http://web.worldbank.org/external/projects/main?pagePK=64312881&piPK=64302848&theSitePK=40941&Projectid=P108078>

### **Chinese version of "Google Earth"**

The State Bureau of Surveying and Mapping (SBSM) launched a programme to set up a service platform on national geographic information for the general public. The move, disclosed at a national conference for directors of surveying and mapping bureaus recently held, marks fundamental changes in China's traditional services to supply basic geographic information. Upon completion, the programme will provide comprehensive online geographic information services similar to "Google Earth" and "Google Maps" to all types of institutions and to the general public.

Source : <http://english.people.com.cn> and GIS News

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_ywgokbsfdj&Ezine=jan1909&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_ywgokbsfdj&Ezine=jan1909&section=News)

### China to have global satellite navigation system by 2015

China plans to develop its own independent global satellite navigation system by 2015. Named, Beidou, the system will have both military as well as civil applications that will arm Chinese aircraft and satellite systems. China plans to send 10 navigation satellites into the space between 2009 and 2010 for the purpose, said Zhang Xiaojin, director of aeronautics department with China Aerospace Science.

Source : *The Hindu News Update Service* <http://www.hindu.com>

**the 4th gvSIG Conference** presentations, posters and articles are now available

- [1] <http://www.jornadasgvsig.gva.es/inql/ponencias/>
- [2] <http://www.gvsig.gva.es/index.php?id=2062&L=0&K=1&A=&L=2>
- [3] <http://www.gvsig.gva.es/index.php?id=2075&L=2>
- [4] <http://www.gvsig.gva.es/index.php?id=2097&L=0&K=1&L=2>

### South African ECLIPSE URLs ( from January 26):

[>](http://eclipse.gsfc.nasa.gov/OH/OH2009.html) & < [>](http://www.astronomy2009.org.za/moonshadow)

Source: Kate Lance

### What are some of the ways that geospatial technology helps assess and mitigate risk?

- article by Matt Ball of V1 magazine

<http://www.vector1media.com/dialogue/perspectives/what-are-some-of-the-ways-that-geospatial-technology-helps-assess-and-mitigate-risk?/>

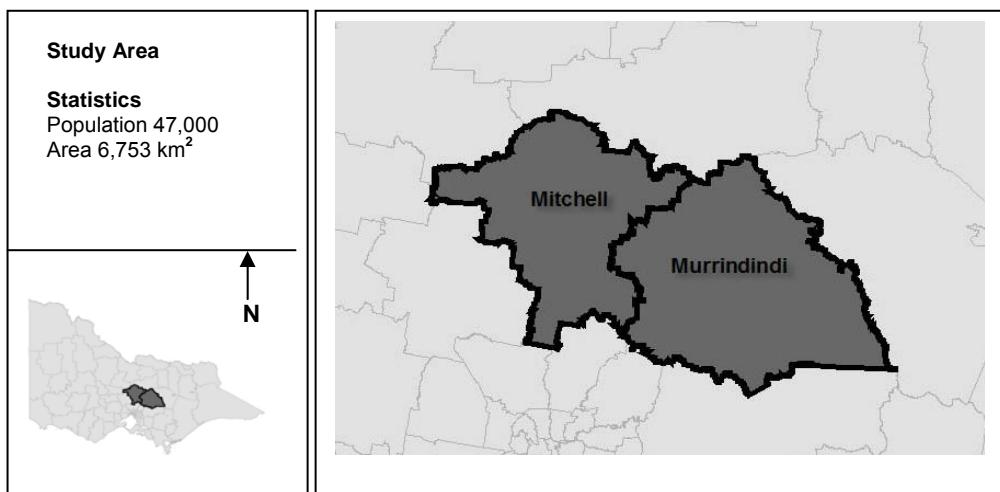
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## SDI Spotlight

The editors are actively soliciting contributions to the monthly “SDI Spotlight” feature for future issues.

### Spatially Enabling Health Data in the Mitchell and Murrindindi Shires

Increasingly health professionals are under pressure to ‘know’ where and when to place resources and to predict health clusters before they become widely apparent. Research conducted by a multidisciplinary team of researchers from the University of Melbourne, Centre for Spatial Data Infrastructures and Land Administration and the Lower Hume Partnership (LHPCP) program have been combined to develop a platform for spatially enabling health across the shires of Mitchell and Murrindindi in regional Victoria (Figure 1).



**Figure 1: Study Area**

The idea for the project started when the LHPCP were thinking of developing a “health precinct” in the town of Seymour, they quickly realised that there were a number of health facilities in the region, however they did necessarily know the location and variety of services in the region. They also realised that there is a vast number of datasets being collected and archived by district nurses, hospitals, government agencies and allied health professionals in the region. The number of different healthcare services in the region is many and varied including; demographic characteristics, hospital locations, disability services, maternal and child health, hospitals, dentists, mental health, disability services etc.

To ensure that the project met the needs of service providers in the region, consultations were held with members of the LHPCP, including Seymour Hospital (SH), Kilmore Hospital (KH), Mitchell Community Health Services (MCHS), , and Mitchell and Murrindindi Shires, together with representatives of the Department of Human Services (DHS) and University of Melbourne Department of Rural Health.

The project has aimed to develop a platform for combining public health, hospital, census and geographic data on demographic and economic characteristics, health indices, transport infrastructure, geographic boundaries and environmental features of the two shires Mitchell and Murrindindi. By creating this platform the project provides visibility of the services available as well as gaps where services are not available and thus can be used as a valuable tool for a range of applications, including:

- advocating for local services in the region,
- investigating access to health services by different segments of the population,
- mapping burden of disease characteristics to better target health services,
- forecasting service needs,
- analysing effectiveness of current services or programs,
- establishing different health service scenarios and testing them with different demographic and development forecasts,
- researching barriers to healthcare, and
- empowering people in the community to be informed on the services available in their local area.

Additionally, in order to support this platform, the project introduces the concept of Spatial Data Infrastructure (SDI) as a mechanism for the efficient and effective management of the large quantities of data collected or needed in the health sector and the ongoing development and exchange of information resources among collaborating stakeholders.

Further information on this project is available from the project website:  
[www.sli.unimelb.edu.au/SDIResearch/LHCP](http://www.sli.unimelb.edu.au/SDIResearch/LHCP). The primary aim of the website is to communicate progress, no confidential data will be made available on the website.

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## GIS Tools, Software, Data

**China to post 3D digital version of Great Wall online** China will create a three-dimensional digital version of the surviving sections of the Great Wall, which the public will be able to view online, the State Bureau of Surveying and Mapping told Xinhua Thursday. The digital version will be constructed from data obtained through a near-finished photographic mapping of the sections in nine provinces, autonomous regions and municipalities in northern China, the bureau said.

SOURCE: China View News [http://news.xinhuanet.com/english/2009-01/15/content\\_10662715.htm](http://news.xinhuanet.com/english/2009-01/15/content_10662715.htm) and GIS News [http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_arvomjhedk&Ezine=jan1909&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_arvomjhedk&Ezine=jan1909&section=News)

### Landgate innovative tools for carbon accounting

A ground-breaking suite of online Carbon Accounting tools for forest carbon sink projects is being developed by Landgate, Western Australia's Land Information Authority.

(Source: [http://www.geoconnexion.com/geo\\_news\\_article/Landgate-innovative-tools-for-carbon-accounting-4766](http://www.geoconnexion.com/geo_news_article/Landgate-innovative-tools-for-carbon-accounting-4766))

**OGC launches Empire Challenge pilot effort**

The Open Geospatial Consortium (OGC) is seeking researchers from government agencies, private industry and academia to participate in a pilot programme to examine the suitability and performance of OGC Sensor Web Enablement and OGC Web Services standards for providing open management of and access to sensors of various types. Proposals were due to OGC by Jan. 14, 2009. Technology deployments will be complete by July 17, 2009, followed immediately by a two-week demonstration phase.

Source: <http://www.gcn.com> and *GIS Development*

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_ligzcmwsyv&Ezine=jan0509&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_ligzcmwsyv&Ezine=jan0509&section=News)

**Satellite will show how the earth 'breathes'**

The Greenhouse Gases Observing Satellite (GOSAT) has been created in Japan to monitor emissions from around the planet from space and it is hoped the data it provides will help in the fight against global warming.

SOURCE: Telegraph (UK) <http://www.telegraph.co.uk/earth/environment/globalwarming/4110714/Satellite-will-show-how-the-earth-breathes.html>

**Dynamic land cover mapping from space**

Geoscience Australia currently uses Earth observation satellites to capture environmental information over the entire Australian continent. The satellites used, including Landsat, the Advanced Land Observing System, and Resourcesat-1, are operated by the United States, Japan and India respectively. Geoscience Australia now holds an archive of satellite observations, over the last 30 years, which supports several nationally significant environmental initiatives. These include the National Carbon Accounting System for the federal Department of Climate Change and the Statewide Landcover and Trees Study (SLATS) by the Queensland Department of Natural Resources and Water.

Traditionally, Geoscience Australia receives raw telemetry data from satellites, archives the raw data on computer tapes and processes selected images on-demand. These images cannot be directly compared over time because the effects of the atmosphere and the sun illumination angle differ between images. Although this mode of operation satisfied expert users of remotely sensed imagery, it is now apparent that the changing needs of government can be more effectively satisfied by further processing of the data. This would require a single calibrated measure of the reflectance of the Earth's surface over the last three decades. Early trials indicate that this would be very useful information for tackling national problems such as water management, environmental responses to climate change, as well as provide data for national environment reporting.

Under this new approach, remote sensing images are firstly converted to measures of surface reflectance.

Analysis of the changes in surface reflectance over time yields a number of useful biophysical parameters (or land cover features such as water and vegetation). These are statistics which capture the patterns of change or biophysical dynamics of the landscape, and ultimately allow the cover of the land to be mapped, classified and studied as a dynamic system.

Source: AusGeo News (December 2008) Issue No. 92

<http://www.ga.gov.au/ausgeonews/ausgeonews200812/landcover.jsp>

**Australian landslide database - single point of access to landslide information**

Geoscience Australia recently tested an information management technique to allow its landslide data to be presented simultaneously with landslide information available from several other agencies in Australia. The result is the Australian Landslide Database (ALD), a 'virtual' database which brings information across databases together and gives users the latest landslide data. The database is a spatial index of the available information about landslide events in Australia and provides a range of information related to an event, including its causes and consequences.

Source: AusGeo News (December 2008) Issue No. 92

<http://www.ga.gov.au/ausgeonews/ausgeonews200812/landslide.jsp>

**Digital Maps To Aid Indian Farmers**

In a move aimed at preventing land disputes among farmers, the Uttar Pradesh government in India is using satellite imagery to update its existing land maps and produce digital records. It has asked the Remote Sensing Application Centre (RSAC) to generate satellite imagery of the region for comparison with paper records. Lack of digital land records causes significant hardship for farmers in the region, who cannot obtain duplicate papers or maps of their land when paper records are destroyed or decayed, a senior planning department official told *The Times of India*. This often leads to land disputes.

SOURCE: [Times of India](#)

### New rainforest mapping technology

A lack of technology needed to explore and monitor vast regions of tropical rain forest has been a critical bottleneck for Earth scientists, conservationists, and forest managers. As a result, there is a limited understanding of the composition and function of these forests and how they are responding to clearing, invasive plants, climate change, and other threats. Gregory Asner and his team at the Carnegie Institution's Department of Global Ecology recently created a new approach, part of the Carnegie Spectranomics Project, which can determine the chemical and structural properties and even the diversity of species in unprecedented detail over broad swaths of rain forests from aircraft. In a commitment to support this new science of airborne forest ecology, the Gordon and Betty Moore Foundation has awarded Asner a \$5.2-million grant to advance the instrument technology required to make rain forest exploration and monitoring a reality.

Source: <http://www.eurekalert.org> and GIS Development

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_qigbsldwcm](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_qigbsldwcm)

### Pirates are being watched from space

Piracy at sea evolved along with the maritime trade. Disjoined attempts of different countries aimed at curbing pirates do not yield desired effect though up-to-date techniques of satellite imagery of Earth from space allow receiving remotely detailed information on activities and infrastructure of pirate groups.

The Israeli company-operator ImageSat International N.V. has utilised highly-detailed small satellite EROS B to receive a series of images with spatial resolution of up to 0.7 m featuring the area offshore Somalia where vessels seized by pirates are clearly seen. The company ImageSat Int. provided ScanEx RDC with satellite images showing villages and bases of pirates on the coast of Somalia, moorings of their speedboats and motorboats.

The capabilities of the up-to-date EROS B satellite hardware allow detection of the entire infrastructure of the Somali pirates. But the situation with the pirates reflects the paradox of our times: enormous technical capabilities are not utilized for finding solutions to regional political and economic issues.

**See also:** <http://gisdevelopment.net/ezine/weekly/imgoftheweekjan0509.htm> [Satellite image]

Source : <http://www.scanex.com> and GIS News

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_wcpaogjrqe&Ezine=jan0509&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_wcpaogjrqe&Ezine=jan0509&section=News)

### Clustering Solution for Google Maps

Mapeed is a new clustering plug-in solution that has just been launched for Google Maps. Based on a new generation of algorithms Mapeed can compute and display 50,000 markers on a map in a very short time.

Source: [Google Maps Mania](http://www.mapeed.com/) by Keir Clarke (<http://www.mapeed.com/>)



### Climate Change Integration Plugfest (CCIP) to be launched at the FOSS4G conference

OGC, Australian Bureau of Meteorology (BOM) and the Open Source Geospatial Foundation (OSGeo) have announced a Climate Change Integration Plugfest (CCIP) to be launched at the FOSS4G conference, 20-23 October 2009 <<http://2009.foss4g.org>>.

Companies or individuals interested in sponsoring or participating in the Climate Change Integration Plugfest should contact Greg Buehler <<mailto:gbuehler@opengeospatial.org>>

Source: Kate Lance

### Surveying the Vietnamese Border

In December, Xu Deming, the director general of the State Bureau of Surveying and Mapping in Beijing led a study group of senior executives to inspect a survey site and visit surveyors working on the Sino-Viet border. The surveyors have erected 665 boundary tablets in Yunnan province to mark the land boundary between the two countries.

Source: <http://www.asmmag.com/news/surveying-the-vietnamese-border>

### GeoEye Imagery for Singapore's CRISP

The Centre for Remote Imaging, Sensing and Processing at the National University of Singapore has signed a new agreement with GeoEye in the US to cover GeoEye-1, which was launched in September. CRISP already has a seven year old agreement with GeoEye covering reception of data from the older Ikonos satellite.

<http://www.asmmag.com/news/geoeye-imagery-for-singapore-s-crisp>

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## News from abroad

"This section has been included to highlight some of the developments happening outside the region which demonstrate SDI in action.

### Global Land Cover Map Now Online

The European Space Agency's global land cover map – which the agency says is 10 times sharper than any previous global satellite map – is now available online. It is the highest resolution, completely validated land cover map ever released, says the agency.

SOURCE: Asian Survey & Mapping <http://www.asmmag.com/news/global-land-cover-map-now-online> and some high resolution graphics may be downloaded from the European Space Agency's website: [http://www.esa.int/esaEO/SEMXB7TGOF\\_index\\_0.html](http://www.esa.int/esaEO/SEMXB7TGOF_index_0.html)

### New maps throw light on town's resources

To understand the significance of the town's land and its resources, the municipal authorities of Wilton plotted various categories of natural resources pertaining to the town into a series of maps. Those maps have then been combined in various ways into three "analysis maps," containing several layers of information.

The five individual maps are:

- A map compiled from aerial photography made by the U.S. Department of Agriculture earlier this year. McGraw said similar maps from 1998 and 2003 are available for comparison.
- A map of historic and cultural resources compiled from various town sources.
- A farm and forest map highlighting good soils and open lands. Agricultural lands also include "scenic viewsheds."
- A map of wildlife habitats showing "unfragmented lands" – those areas that are not crossed by roads or other man-made features, which are critical for wildlife corridors. McGraw used the resources of the state Fish and Game Department, including their new Wildlife Action Plan, to create this map.
- A water resources map that includes setbacks and buffers, wellhead protection areas and potentially contaminated areas. Information for this map was provided in part by the Department of Environmental Services.

The analysis maps – combinations of the other maps – showed where more than one resource is located in the same place, giving the land a higher importance. One of the analysis maps shows the separate parcels with map and lot numbers, and how the other maps overlay them.

Source : <http://www.nashuatelegraph.com> and G/S News

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_okqctvjmpw&Ezine=jan1209&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_okqctvjmpw&Ezine=jan1209&section=News)

### Making Digital Maps More Current And Accurate

European researchers have designed an innovative new system to help keep motorists on the right track by constantly updating their digital maps and fixing anomalies and errors. Now the partners are mapping the best route to market.

SOURCE: *Science Daily* <http://www.sciencedaily.com/releases/2008/12/081227205651.htm>

### The year in maps

A cartography boom offers new ways to see the world

SOURCE: *Boston Globe* [http://www.bostonglobe.com/ideas/articles/2008/12/28/the\\_year\\_in\\_maps/](http://www.bostonglobe.com/ideas/articles/2008/12/28/the_year_in_maps/)

### Wind map opens way for clean energy

The winds of change are starting to spin faster for the country's fledgling clean energy industry, with work about to start on the first comprehensive wind resources map of the South African coastline. Source: *Mercury (Zaire)* [http://www.iol.co.za/index.php?set\\_id=1&click\\_id=31&art\\_id=vn20090107070633294C230630](http://www.iol.co.za/index.php?set_id=1&click_id=31&art_id=vn20090107070633294C230630)

### Amazon Deforestation Trend On The Increase

Deforestation in Brazil's Amazon forests has flipped from a decreasing to an increasing trend, according to new annual figures recently released by the country's space agency INPE.

Source: *V1 Magazine*

<http://www.vector1media.com/headlines/headlines/amazon-deforestation-trend-on-the-increase/>

## New Satellite Data Reveal Impact of Olympic Pollution Controls [This article originally [appeared](#) on NASA's website.]

Chinese government regulators had clearer skies and easier breathing in mind in the summer of 2008 when they temporarily shuttered some factories and banished many cars in a pre-Olympic sprint to clean up Beijing's air. And that's what they got.

They were not necessarily planning for something else: an unprecedented experiment using satellites to measure the impact of air pollution controls. Taking advantage of the opportunity, NASA researchers have since analyzed data from NASA's Aura and Terra satellites that show how key pollutants responded to the Olympic restrictions.

Some scientists have questioned whether Beijing's highly publicized air quality restrictions actually had an impact. This new data shows clearly that they did. "After the authorities lifted the traffic restrictions, the levels of these pollutants shot right back up," atmospheric scientist Jacquelyn Witte noted.

Source: New Directions [http://www.directionsmag.com/article.php?article\\_id=2984&trv=1](http://www.directionsmag.com/article.php?article_id=2984&trv=1)

## **[Eightmaps.com](#) and too much information Questions on privacy?**

At issue is [Eightmaps.com](#), a website put up by opponents of Prop 8, the California ballot initiative that overturned the state supreme court's legalization of gay marriage. The site's owners -- who, tellingly, are anonymous -- have taken publicly available information about people who gave to the Prop 8 campaign, and combined it with Google maps. Result: an electronic map to the homes of everyone who gave money to the campaign to overturn gay marriage.

The author thinks this is a terrible development, and here's why. Given that there has been harrassment by gay radicals of people who supported Prop 8, it is potentially dangerous that it's now easy to find your way to the homes of these donors -- even small donors. Think of it this way: what if a radical fundamentalist group gathered the names and home addresses of donors to pro-gay causes, and created an online map to their homes? Or what if anti-abortion radicals created a map to the homes of Planned Parenthood donors? Is that really the way we want to go in this society? The author does not believe so.

His view is that whatever your cause, to use publicly available information in this way will have a chilling effect on the willingness of ordinary people to participate in the political process. At the moment, he does not believe that donors should be kept anonymous, but predicts that the first time someone gets hurt in their home, whether its over Prop 8 or some other controversial political issue involving geotagging and private addresses, there's going to be a move to privatize donor lists. The author does not disagree.

SOURCE: *Dallas Morning News* blog

<http://dallasmorningviewsblog.dallasnews.com/archives/2009/01/eightmapscom-an.html>

## **National Geospatial Advisory Committee (USA) Report: *The Changing Geospatial Landscape***

The report available from the NGAC website ([pdf](#)). It's a nice overview of the state of things. Might be valuable in connection with the efforts aimed at Congress. For those connecting dots: Anne Hale Miglarese is NGAC Chairperson and a co-author of the white paper titled *A Proposal for National Economic Recovery*.

From the report:

The committee has developed this white paper to describe the changes and advancements the community has witnessed over the past three-plus decades and to set a context from which in part we will base our future deliberations. While this paper is not meant to be all-inclusive in chronicling the growth of the industry, we do believe it captures the major milestones and identifies several of the major issues that lie ahead. We encourage the reader of interest to follow our deliberations and progress at [www.fgdc.gov/ngac](http://www.fgdc.gov/ngac) .

Source: *Directions Magazine* blog

<http://apb.directionsmag.com/archives/5257-NGAC-Report-The-Changing-Geospatial-Landscape.html>

## **Crime Mapping Wave**, article by Adena Schutzborg of *Directions Magazine*

If you look at the media's coverage of GIS and online mapping in the past month or two you'll see a crime wave. No, there's not necessarily more crime everywhere (though in many areas, it is up); there are just more crime maps online and more discussions about them. Here in the U.S. it seems a great many small towns, counties and large cities have, or will have, some type of online crime map in the coming months. .... England and Wales launched an effort last summer to get all the police areas (43 in total) to provide online maps. The job was [completed](#) in the first week of January 2009.

Crime mapping seems to have more energy, more innovation and perhaps more connection to the citizenry than other public sector mapping efforts in recent memory. There's more buzz, more skepticism, more concern,

more interest in the maps (though not necessarily in the technology behind them) than ... when EPA's *EnviroMapper* or KnowledgePlex's *DataPlace* came on the scene. State websites, which tend to offer great data resources (the [MassGIS](#) and the new [Montana GIS](#) portal, to name two), get buzz in the GIS community but typically don't set the public's interest aflame.

Complete article at: [http://www.directionsmag.com/article.php?article\\_id=2986](http://www.directionsmag.com/article.php?article_id=2986)

## MR. SUBWAY

New York's Subway Map

Source: "Talk of the Town" column from the *New Yorker* magazine (January 19, 2009)  
[http://www.newyorker.com/talk/2009/01/19/090119ta\\_talk\\_wilkinson](http://www.newyorker.com/talk/2009/01/19/090119ta_talk_wilkinson)

## DMCii's satellite imagery used for precision agriculture

Canadian precision agriculture supplier and consultancy DynAgra has completed its first precision agriculture campaign using DMCii satellite imagery to provide sophisticated agronomic tools to its customers. DynAgra tasked DMCii with acquiring multi-spectral imagery of agricultural plots in the province of Alberta. DMCii provided the imagery in an orthorectified format that could be used immediately in their GIS applications.

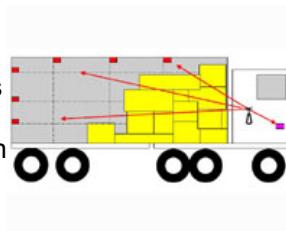
Source: [http://www.ballard.co.uk/press\\_releases/company\\_releases.aspx](http://www.ballard.co.uk/press_releases/company_releases.aspx) and GIS News

[http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N\\_fhokpxemt&Ezine=jan1909&section=News](http://www.gisdevelopment.net/news/viewn.asp?id=GIS:N_fhokpxemt&Ezine=jan1909&section=News)

## Russian seas monitoring project complete

ScanEx RDC specialists have recently completed a programme of satellite radar monitoring for the Russian EMERCOM (Ministry of Emergencies), aimed at ship navigation assessment and detection of oil spills on the surface of the five Russian seas (Barents, Okhotsk, Japan, Caspian and Black seas). The programme was named Five Russian Seas Monitoring Project.

Source : <http://www.scanex.com>



## Satellite Helps Make Transportation Of Dangerous Waste Safer

A new tracking system is making use of satellite navigation data to ensure safe roads in Europe. Developed by an Italian company in the Italian Lombardy region, the system monitors daily the displacement of 200 containers carrying industrial waste on 100 trucks.

Source:[http://www.gpsdaily.com/reports/Satellite\\_Helps\\_Make\\_Transportation\\_Of\\_Dangerous\\_Waste\\_Safer\\_999.html](http://www.gpsdaily.com/reports/Satellite_Helps_Make_Transportation_Of_Dangerous_Waste_Safer_999.html)

## Knoxville Area Experiences "Sea-Change" in Migrating to a Web-centric GIS

In the 1980s, the city of Knoxville, TN, Knoxville County and the Knoxville Utilities Board (KUB) envisioned a GIS that would enable the maintenance and sharing of complex data sets. The ideal GIS would tie all of their organizations together and give them access to a common digital base map, minimizing the data duplication process, streamlining updates and informing the decision making process to a higher degree. But that was decades before we had all the GIS and networking and Web tools of today. KGIS went live in 1985 and is considered the first multi-participant municipal GIS. This article reveals the system's historical importance and how it has managed to stay vibrant and innovative until today.

Source: complete article available at [Directions Magazine](#)

## Spatial view of President Obama's inaugural celebration

Barak Obama's inaugural celebration was seen from space. It's a testament to an industry that is changing the way we plan our cities, monitor our environment and an infinite number of ways business gets done. At 11:19 a.m.(US EST) January 20, 2009, GeoEye-1, the world's highest resolution commercial Earth-imaging satellite, was positioned over the Washington D.C. Mall capturing an image of the celebration. The image was taken by GeoEye-1 as it orbited 423 miles above the Mall and 200 miles west of D.C., moving at 17,000 mph or about 4 miles per second. GeoEye is making the imagery available at no cost. It is downloadable from the Company's Web site at [www.geoeye.com](http://www.geoeye.com) under Featured Images. It may be used as long as there is a clear and distinct photo credit of: "GeoEye Satellite Image."

Source: GeoEye Press Release

**Planet Earth URL:** <http://planetearth.nerc.ac.uk/>

**More Accurate FEMA Flood Maps Would Help Avoid Losses**

Significant loss of life, destroyed property and businesses, and repairs to infrastructure could be avoided by replacing Federal Emergency Management Agency flood maps with ones that contain high-accuracy and high-resolution land surface elevation data, says a new report from the National Research Council. The benefits of more accurate flood maps will outweigh the costs, mainly because insurance premiums and building restrictions would better match the actual flood risks.

Source: V1 Magazine <http://www.vector1media.com/top-stories/corporate-news/more-accurate-fema-flood-maps-would-help-avoid-losses-/>

### Geospatial Infrastructure Transformation - Leadership

Good government should be providing roads, schools, bridges and other infrastructure every day. Somewhere along the line we let government do other things. We changed priorities, looked away or demanded less, allowing infrastructure and the services that help us to lead to become dated, worn and inadequate.

More at SOURCE: V1 Magazine <http://vector1media.com/vectorone/?p=1872>

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## Books and Journals

### **Special Issue: Marine and Coastal GIS for Geomorphology, Habitat Mapping, and Marine Reserves**

*Marine Geodesy*: Volume 31 Issue 4

This new issue contains the following articles:

“Introduction to the Special Issue”, “Geomorphometric Patterns of Nassau Grouper (Epinephelus striatus) Spawning Aggregation Sites in the Cayman Islands”, “Determining the Influence of Seascapes Structure on Coral Reef Fishes in Hawaii Using a Geospatial Approach”, “Benthic Features as a Determinant for Fish Biomass in Gray’s Reef National Marine Sanctuary”, “Automated Derivation of Bathymetric Information from Multi-Spectral Satellite Imagery Using a Non-Linear Inversion Model”, “Derivation and Integration of Shallow-Water Bathymetry: Implications for Coastal Terrain Modeling and Subsequent Analyses”, “An ArcGIS Seabed Characterization Toolbox Developed for Investigating Benthic Habitats”, “Multivariate Prediction of Rockfish Habitat Suitability in Cordell Bank National Marine Sanctuary and Del Monte Shalebeds, California, USA”,  
 SOURCE: Professor “Deepsea Dawn” Wright <<http://dusk.geo.orst.edu>>

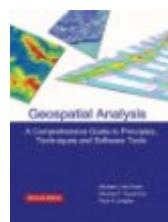
### **[Assessing the Accuracy of Remotely Sensed Data: Principles and Practices, Second Edition](#)**



The field of accuracy assessment of maps derived from remotely sensed data has continued to grow since the first edition of this groundbreaking book published in 1999. As a result, this much-anticipated new edition was significantly expanded and enhanced to reflect growth in the field. This revision includes four new chapters on such topics as positional accuracy and using accuracy assessment as an intermediate step in image classification. Additionally, the authors devote an entire chapter to the fuzzy accuracy assessment process and include a 16-page color insert. A new case study represents current complications and issues of interest, while a new order of chapters makes the presentation more effective. From CRC, 2008.

### **[Geospatial Analysis: A Comprehensive Guide to Principles, Techniques and Software Tools](#)**

This second edition of the widely acclaimed "Geospatial Analysis" guide has been updated and extended to include a major new chapter on Geocomputational Methods. It addresses the full spectrum of analytical techniques that are provided within modern Geographic Information Systems (GIS) and related geospatial software products. It is broad in its treatment of concepts and methods and representative in terms of the software that people actually use. Topics covered include: the principal concepts of geospatial analysis, their origins and methodological context; core components of geospatial analysis, including distance and directional analysis, geometrical processing, map algebra, and grid models; basic methods of exploratory spatial data analysis (ESDA) and spatial statistics, including spatial autocorrelation and spatial regression; surface analysis, including surface form analysis, gridding and interpolation methods; network and locational analysis, including shortest path calculation, traveling salesman problems; facility location and arc routing; Geocomputational methods, including Cellular automata, Agent Based Modelling, Neural Networks and Genetic Algorithms. From Troubador Publishing Ltd, 2008.



Two recent satellite gravity PhD theses from candidates at Delft UT have been published and may be purchased in hard copy <<http://www.ncg.knaw.nl/eng/publications/general.html>> or are available for download. They are:

**Global gravity field recovery from satellite-to-satellite tracking data with the acceleration approach**  
by Xianglin Liu, Publications on Geodesy 68, Delft, 2008. 248 pages. ISBN: 978 90 6132 309 6. € 14,00  
<http://www.ncg.knaw.nl/Publicaties/Geodesy/pdf/68Liu.pdf>

and

**Functional and stochastic modelling of satellite gravity data**  
by Jasper van Loon, Publications on Geodesy 67, Delft, 2008. 248 pages. ISBN: 978 90 6132 307 5. € 15,00  
<http://www.ncg.knaw.nl/Publicaties/Geodesy/pdf/67VanLoon.pdf>

#### **Bentley Publishes Digital and Print Versions of *The Year in Infrastructure 2008***

Bentley Systems today announced that "The Year in Infrastructure 2008" is available in digital and print versions. This 192-page yearbook highlights the extraordinary work of Bentley users improving the world's infrastructure and the quality of life for us all.

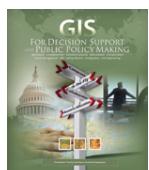
To view "The Year in Infrastructure 2008" in a digital format, visit [www.bentley.com/YearInInfrastructure](http://www.bentley.com/YearInInfrastructure). Searches can be conducted by year and/or through terms, titles, or keywords to find projects of special interest. To request print copies, contact [bewards@bentley.com](mailto:bewards@bentley.com).

#### **European Environment Agency report on Transport**

Transport's carbon footprint is a major obstacle to achieving a sustainable, low-carbon economy in Europe. A new report by the European Environment Agency (EEA) urges policy makers to take a fresh approach to address the spiralling growth of transport, supporting "realistic" measures that include pricing schemes for unsustainable mobility and improving citizens' awareness about the environmental consequences of their shopping basket and travel choices.

The report '[Beyond transport policy - exploring and managing the external drivers of transport demand](#)' compiles case studies from the agricultural, business, leisure and educational sector and provides possible responses to reduce greenhouse gas emissions through more effective transport planning.

#### **ESRI book highlights role of GIS in governance**



*GIS for Decision Support and Public Policy Making*, a new book from ESRI Press, describes how GIS technology can help streamline these operations and deliver smart solutions that save time and money. The book also shows how GIS can be integrated into many other aspects of governing and policy making such as planning for residential development, revitalising neighborhoods, and updating emergency management plans.

<http://gis.esri.com/esripress/display/index.cfm?fuseaction=display&websiteID=155&moduleID=0>

#### **The SAGE Handbook of Spatial Analysis**

The widespread use of Geographical Information Systems (GIS) has significantly increased the demand for knowledge about spatial analytical techniques across a range of disciplines. As growing numbers of researchers realize they are dealing with spatial data, the demand for specialized statistical and mathematical methods designed to deal with spatial data is undergoing a rapid increase. Responding to this demand, The SAGE Handbook of Spatial Analysis is a comprehensive and authoritative discussion of issues and techniques in the field of spatial data analysis. From Sage Publications Ltd, 2009.

#### **Urban Atlas: Europe's eye in the sky provides cities with tools for smart development**

This year, for the first time, 185 cities from all 27 EU Member States, will benefit from the "Urban Atlas", which has been produced by the European Commission and Member States with the support of European space technology. Compiled from thousands of satellite photographs, the Urban Atlas provides detailed and cost-effective digital mapping, ensuring that city planners have the most up-to-date and accurate data available on land use and land cover. The Urban Atlas will enable urban planners to better assess risks and opportunities, ranging from threat of flooding and impact of climate change, to identifying new infrastructure and public transport needs. All cities in the EU will be covered by the Urban Atlas by 2011.

Due to economies of scale, the mapping cost of EUR 2.45 per square km yields at least a tenfold reduction of costs compared to other mapping methodologies. The Urban Atlas maps provide a pan-European classification

of city zones, allowing for comparable information on density of residential areas, commercial and industrial zones, extent of green areas, exposure to flood risks and monitoring of urban sprawl which is important for public transport planning in suburban areas.

The first edition of the Urban Atlas will be delivered in 2009 to 185 cities. The Urban Atlas covers all EU capitals and a large sample of large and medium-sized cities participating in the European Urban Audit, a data collection covering over 300 cities in the EU. Future editions of the Urban Atlas are planned in 3-5 year intervals, to complement the Urban Audit exercise. The Urban Audit is co-financed by the European Commission and managed in close consultation with National Statistical Institutes in all EU Member States.

More information: [http://ec.europa.eu/gmes/index\\_en.htm](http://ec.europa.eu/gmes/index_en.htm)

Source: Europa Press Release

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/65&format=HTML&aged=0&language=EN&guiLanguage=en>

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## Just for Fun !

### Location Science is not always High Tech !

'Stupid' bank robber leaves pay slip behind: A 40-year-old Chicago area man allegedly robbed a Chicago bank on Friday using a threatening note written on the back of his own pay slip, which was printed with his name and home address.

SOURCE: <http://www.theage.com.au/world/stupid-bank-robber-leaves-pay-slip-behind-20081230-76xb.html>

### UK's "AAA" Reports Most Members Carry Print Atlas Along with SatNav

A survey of more than 7,000 AA (UK's [Automobile Association](#)) reveals:

- 75% of the sat-nav owners still carried a road atlas and 22% agreed their sat-nav sometimes distracts them when driving.
- 61% said their sat-nav had stopped them from getting lost while 44% use it frequently, while 30% said their sat-nav had taken them to the wrong destinations
- men (47%) were more likely to have them than women (30%), with 18-24 year olds the age group most likely (43%).
- [Press Association](#) (UK's AP)

SOURCE: *Directions Magazine*

Further to the item < [Worldwide Flight Patterns in 24-hours](#) > in last month's "Just for Fun!", [Ethan Zuckerman](#) further comments in [Mapping: Infrastructure and Flow](#)

"[Watching the Growth of Walmart Across America](#)" is a time sequence map showing the spread of Walmart stores from small beginnings in 1964 to the present day. The map below represents Walmart stores in 1984, when there were 633 stores, compared to today's 3,176.

Source: *Directions Magazine*

<http://www.directionsmagazine.net/newsletters.archive/index.php?ID=1293>

And <http://projects.flowingdata.com/walmart/>



[Editors' Note: <http://flowingdata.com/> is an interesting website WRT data visualization] For example, the site has just nominated this BBC TV "Britain from Above" series as its best data visualization project for 2008.



When I first caught a glimpse of a clip from [Britain from Above](#), I was immediately impressed, and it only left me wanting more. It was a special series on the BBC with beautiful visuals produced by [422 South](#). GPS traces from taxi cabs and airline flights scurried to locations; telephone communications glowed in the sky; ground lights twinkled as if the roles of sky and earth were switched; and internet traffic burst from computer to computer. With all that data on display, patterns emerged - zero air traffic in no-fly zones and taxis taking alternate routes to avoid heavy traffic.

## **Map that Smell**

A Japanese website called [Nioibu](#) has a Google mashup aimed at mapping and describing smells throughout the world. The aim is to pinpoint distinct odors throughout the world, and the creators dream of a day when the computer will mimic the smell of the item at a click of the mouse.

Source: [V1 magazine](#)

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## Training Opportunities

**National Remote Sensing Centre (NRSC) (Department of Space, Government of India)** offers training course to resource scientists and technologists in various disciplines of application.

-- Introduction to GIS and its Applications (4 week course), March 2-27, 2009

NRSC recently was formed as a new agency, using people and assets from the old National Remote Sensing Agency run by the Department of Space. The move was announced on 1 September 2008. The NRSC will be one of the centres of the Indian Space Research Organisation.

Further information is available from: <http://www.nrsc.gov.in/training/trainingnrsc.html>

### **Workshop on "Developing an Agricultural Monitoring System of Systems,"**

**"NEW"** 11-12 February 2009, Beijing, China

The overall aim of this workshop is to provide a forum for exchange of experience and discussion of the necessary components of an Agricultural Monitoring System of Systems that would improve agricultural risk management, agricultural monitoring and food security; the best practices for operational agricultural monitoring; the policy issues associated with the sharing of data and information; and how China could develop a program of international collaboration on agricultural risk management and monitoring.

The workshop has the following specific objectives:

To review and refine the observational requirements for the Agricultural Monitoring (GEOSS Task AG 07 03) and Agricultural Risk Management (GEOSS Task AG0702), identifying the components of an Agricultural Monitoring System of Systems for the delivery of forecast and crop production related information and identify what improvements are needed.

To review and document the best practices and procedures for agricultural risk management and monitoring; To review the existing data and product policies and the data policy conditions necessary for the development of an effective system of systems;

To identify the way forward, collaborations and partnerships between the earth observation community and the agricultural monitoring community of practice to achieve the goals of the GEOSS Agricultural Risk Management (AG 07 02) and Agricultural Monitoring (AG 07 03) Tasks. <http://www.cropwatch.com.cn/agrworkshop/>

### **Pre-Conference WORKSHOPS at the 2<sup>nd</sup> International Conference on Earth Observation for Global Changes (EOGC2009)** 25-29 May 2009, Chengdu, China <http://www.eogc2009.com.cn/>

Pre-Conference workshops include:

W1: Satellite Observation of Biomass Burning

W2: Remote Sensing of the Coastal Ecosystems

W3: Land-cover Classification using High-resolution Satellite Images

### **3D Workshop**

The third 3D-Arch workshop on 3D Virtual Reconstruction and Visualisation of Complex Architectures will be held in Italy, 25-28 February 2009. Topics for the workshop include image and range-based 3D modelling of complex sites and architectures. It will also cover data registration and integration, and automated modelling techniques. <http://www.3d-arch.org/>

### **International Workshop of Experts on Global Environmental Change in sub-Saharan Africa**

The ICSU Regional Office for Africa (ICSU ROA), in collaboration with the National Research Foundation (NRF) and its partners is organizing an international workshop of experts on Global Environmental Change (including Climate Change and Adaptation) in sub-Saharan Africa. The workshop will be held in Pretoria, South Africa, on

9-11 February 2009.

The workshop is open to researchers and policy-makers in public and private institutions and organizations (government, academia, industry, UN-agencies and NGOs) who are interested in contributing to the implementation of the ICSU ROA science plan on Global Environmental Change (including Climate Change and Adaptation) in sub-Saharan Africa.

The workshop will focus on the following themes

- Project GC01: Land Degradation, Biodiversity Loss and Human Well-being in Africa.
- Project GC02: Climate change and its impact on rainfall in Africa.
- Project GC03: Resilience of Food Supply Systems.
- Project GC04: Water Resources and their Governance.
- Project GC05: Atmospheric Composition Change.
- Project GC06: Africa's Oceanographic Uniqueness

The programme will comprise of a limited number of keynote lectures and a poster session, with more time allocated to group discussions on preparation of research projects. Participants wishing to present posters are requested to submit their abstracts to the ICSU ROA secretariat before 19 December 2008.

See call for participation: [http://www.icsu-africa.org/docs/iwegec\\_call.pdf](http://www.icsu-africa.org/docs/iwegec_call.pdf)

## Fourth International Workshop on "Geographical Analysis, Urban Modeling, Spatial Statistics" (GEOG-AN-MOD 09)

<http://www.lisut.org/workshop/GEOG-AN-MOD09/><<http://www.lisut.org/workshop/GEOG-AN-MOD09/>>

in conjunction with

## The 2009 International Conference on Computational Science and its Applications (ICCSA 2009)

"**NEW**" June 29th to July 2rd, 2009

Kyung Hee University-Global Campus, Yongin (Korea)

### Important dates

- 16 February 2009: Deadline for full paper submission  
24 March 2009: Notification of acceptance  
12 April 2009: Deadline for Camera Ready Papers  
June 29 - July 2, 2009: ICCSA 2009 Conference.

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

**The Center for International Earth Science Information Network (CIESIN)** of The Earth Institute at Columbia University is now accepting applications for participation in a five-day training workshop in geospatial data analysis techniques for population and demographic research focused on attaining the Millennium Development Goals and sustainable development. Up to ten participants will be selected to attend the workshop. All workshop fees, travel, lodging will be covered for the selected participants along with a small per diem to cover meals. The potential applicant pool is global.

For consideration, please complete the application form, attaching all application materials, and send to the address listed on the application. Please note: email submissions are preferred.

The application may be downloaded at <http://m1e.net/c?83738693-KuhSKdD5SHmkQ%403929089-G5izeOzNmiTzq>

Deadline for applications is Monday, February 23, 2009. Decisions will be announced on March 2, 2009.

This Workshop is made possible from a grant from the International Union for the Scientific Study of the Population (IUSSP)

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## Funding Opportunities, Awards, Grants

### The 8th Geospatial Solutions Applications Contest

Enter the Geospatial Solutions Applications Contest for your chance to win GeoExpress Tools software from LizardTech, a GPS Bluelogger with XMap 5.2 Professional software from DeLorme, or an ERDAS TITAN GeoHub!

Plus, top entries will be published on the *Geospatial Solutions* Web site. To enter submit a 500-word (approx) description of your innovative or cost-effective application of geospatial



technologies, use the form and instructions available from: <http://www.geospatial-solutions.com/applicationsContest>

(Source: Geospatial Solutions)

**NAVTEQ Global LBS Challenge** - Over \$5.25 million in cash and prizes is up for grabs in this year's NAVTEQ Global LBS Challenge, the premier event in the LBS industry. Winners receive unparalleled recognition and marketing exposure to launch their mobile LBS application. Website: [www.LBSChallenge.com](http://www.LBSChallenge.com)  
**APAC registration Deadline February 13, 2009.**

### China Scholarship at UNSW

The China Scholarship Council will award an unspecified number of post doctoral scholarships at the University of New South Wales. The scholarships are for study under Dr Linlin Ge, a world renowned expert in the use of space-based interferometric synthetic aperture radar

Source: Asia Survey Magazine <http://www.asmmag.com/news/Professor%20linlin%20Ge%20scholarship>

### ENRICHMENT GRANTS to attend at the 2<sup>nd</sup> International Conference on Earth Observation for Global Changes (EOGC2009) 25-29 May 2009, Chengdu, China <http://www.eogc2009.com.cn>

A limited number of enrichment grants will be available to provide financial support for attendees from developing countries. Applicants for enrichment funds should write a brief email to [eogc2009@gmail.com](mailto:eogc2009@gmail.com) no later than 15 March, 2009 indicating his/her needs (such as a rough budget) and should:

- reside in developing (ODA) countries or countries in transition (excluding the host country);
- have no or insufficient funds from other sources to support their participation;
- present a paper at the event; and
- include a letter of acceptance of a full paper from the Scientific Committee.

### URISA's 3rd annual student paper competition

The Urban and Regional Information Systems Association (URISA) is sponsoring its third annual student paper competition. The objective of the competition is to challenge undergraduate and postgraduate students to demonstrate development and effective use of information systems in both their field of study and the community. The competition is open to all eligible students but particularly those interested in careers using geographic information systems, information technology, geospatial technology, planning and/or community development.

The deadline for submissions is May 1, 2009.

Source : <http://www.urisa.org>

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## Employment Opportunities

### GeoSpatial Database Consultant

Melbourne, Australia

A leading GIS organisation is looking to hire a driven Geo Spatial Database Consultant. Working in a dynamic, friendly team in an open plan office environment, you will be an integral member of this growing organisation. Currently working with many large scale clients, you will have access to cutting edge technology and will not only sink your teeth into the technical world of this organisation but also provide a key consulting face for clients.

PLEASE NOTE: You must be an Australian resident/citizen or have a valid work visa or work rights for Australia to apply for this role.

Diversiti Pty Ltd

Simone Connell

Phone Number: 03 8629 1164

[simone.connell@diversiti.com.au](mailto:simone.connell@diversiti.com.au)

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## Conferences, Events

### Call for Papers for GSDI 11

Rotterdam, The Netherlands, 15-19 June 2009

- all FULL PAPERS submitted to this joint conference arriving on or before **1 December 2008** will be considered for inclusion in a refereed BOOK to be distributed at the conference or in a refereed SPECIAL ISSUE of the International Journal of Spatial Data Infrastructure Research (IJSDIR) to be published after the conference. Additional full papers received by **1 April 2009** also will be considered for the Special Issue of IJSDIR.

Source: <http://gsdi.org/gsdi11/papers.html>

For upcoming events of global or major international interest, please visit the [upcoming conference list](#) on the GSDI website.

Date	Location	Event
<b>February 2009</b>		
<b>2-4 February</b>	Mainz, Germany	<b>Spatial Information for Sustainable Management of Urban Areas</b> Contact: <a href="http://www.i3mainz.fh-mainz.de/FIG-Workshop/index.html">http://www.i3mainz.fh-mainz.de/FIG-Workshop/index.html</a>
<b>4-6 February</b>	Kyoto, Japan	<b>3rd GEOSS Asia-Pacific Symposium, Kyoto, Japan</b> Website: <a href="http://www.prime-intl.co.jp/geoss/">http://www.prime-intl.co.jp/geoss/</a>
<b>08 – 14 February</b>	Obergurgl, Osterreich [ AUSTRIA ]	<b>15th International Geodetic Week</b> E-mail: <a href="mailto:geodaetischewoche@uibk.ac.at">geodaetischewoche@uibk.ac.at</a> Website: <a href="http://geodesie.uibk.ac.at/obergurgl.html">http://geodesie.uibk.ac.at/obergurgl.html</a>
<b>9 – 11 February</b>	Pretoria, South Africa	<b>International Workshop of Experts on Global Environmental Change (including Climate Change and Adaptation) in sub-Saharan Africa</b> All correspondence should be sent to: ICSU Regional Office for Africa Fax: +27(0)12-481-4273 , Email: <a href="mailto:d.nyanganyura@icsu-africa.org">d.nyanganyura@icsu-africa.org</a> ; <a href="mailto:a.enow@icsu-africa.org">a.enow@icsu-africa.org</a> ; <a href="mailto:b.mahlalela@icsu-africa.org">b.mahlalela@icsu-africa.org</a> ; <a href="mailto:k.potgieter@icsu-africa.org">k.potgieter@icsu-africa.org</a> See EIS-AFRICA website for more information ( <a href="http://www.eis-africa.org">www.eis-africa.org</a> )
<b>9 – 13 February</b>	La Habana, Cuba	<b>Geomatica 2009</b> E-mail: <a href="mailto:informaticahabana@mic.cu">informaticahabana@mic.cu</a> Website: <a href="http://www.informaticahabana.com">www.informaticahabana.com</a>
<b>10-13 February</b> <b>“UPDATED”</b>	Hyderabad, India	<b>Map World Forum 2009</b> Contact: <a href="mailto:info@mapworldforum.org">info@mapworldforum.org</a> . To be held with <b>Geospatial Science Forum 2009</b> Contact: <a href="mailto:giscience@gisdevelopment.net">giscience@gisdevelopment.net</a> Paper Abstract Submission deadline closed Paper abstracts are invited for all technical sessions, seminars, forums and symposiums. Paper abstracts can be submitted online at the conference site <a href="http://www.mapworldforum.org">www.mapworldforum.org</a> . The theme of the conference this year is 'Geospatial Technology for Sustainable Planet Earth'. The <b>Geospatial Developers Forum</b> will be held under the umbrella of Map World Forum 2009 on 12 February 2009 at Hyderabad International Convention Centre (HICC), Hyderabad, Website: <a href="http://www.mapworldforum.org/geodevelopers/programmeoutline.htm">http://www.mapworldforum.org/geodevelopers/programmeoutline.htm</a>
<b>11-13 February</b>	Hyderabad, India	<b>Location Summit 2.0</b> the first Global Summit on Positioning and Navigation scheduled for February 11 – 13, 2009, to be held at Hyderabad International Convention Centre, Hyderabad, India. The theme for the three-day summit is "Towards Collaborative Model" that will bring together the

		<p>pioneers, industry leaders and developers who are setting the direction for the future of location technologies and markets.</p> <p><a href="http://www.locationsummit.com/summit/index.htm">http://www.locationsummit.com/summit/index.htm</a></p> <p>Conference Brochure: <a href="http://www.locationsummit.com/summit/Location_Summit.pdf">http://www.locationsummit.com/summit/Location_Summit.pdf</a></p> <p><b>Important Dates:</b> Abstract submission – 20<sup>th</sup> October, 2008 Acceptance – 5<sup>th</sup> November, 2008 Full Paper – 15<sup>th</sup> December, 2008 Author Registration – 30<sup>th</sup> December, 2008</p>
<b>25-28 February</b>	Trento, Italy	<p><b>3<sup>rd</sup> International Workshop 3D-ARCH 2009</b> <b>3D Virtual Reconstruction and Visualization of Complex Architectures</b> Website: <a href="http://www.3d-arch.org/">http://www.3d-arch.org/</a></p> <p><b>Dates:</b></p> <ul style="list-style-type: none"> <li>• Abstract submission (one page A4): Dec 1st, 2008</li> <li>• Notification of acceptance: Dec 20th, 2008</li> <li>• Deadline for full paper: Jan 30th, 2008</li> </ul>
<b>March 2009</b>		
<b>2-6 March</b>	Tahiti	<p><b>11th Pacific Science Inter-Congress</b> Theme: "Pacific countries and their ocean facing local and global changes". Abstract deadline: October 2008.</p>
<b>8-13 March</b>	Baltimore, Maryland	<p><b>2009 Annual Conference</b> American Society for Photogrammetry &amp; Remote Sensing (ASPRS) <a href="http://www.asprs.org/baltimore09/index.html">http://www.asprs.org/baltimore09/index.html</a></p>
<b>15-22 March</b>	Istanbul, Turkey	<p><b>5th World Water Forum</b> Contact: <a href="mailto:m.giard@worldwatercouncil.org">m.giard@worldwatercouncil.org</a></p>
<b>16 – 19 March</b>	Tel-Aviv, Israel	<p><b>WG VIII/12 6th EARSeL SIG IS Workshop "IMAGING SPECTROSCOPY: Imaging Spectroscopy: Innovative tool for scientific &amp; commercial environmental applications"</b> E-mail: <a href="mailto:bendor@post.tau.ac.il">bendor@post.tau.ac.il</a> Website: <a href="http://www.earsel6th.tau.ac.il">www.earsel6th.tau.ac.il</a></p>
<b>22-27 March</b>	Las Vegas	<p>Join 8,000 geographers, GIS specialists, and environmental scientists for the latest in research, policy, and applications in geography, sustainability, and GIScience during the <b>AAG Annual Meeting</b> in Las Vegas to be held March 22-27, 2009. Visit <a href="http://www.aag.org">http://www.aag.org</a> for additional information.</p>
<b>30 March – 1 April</b>  <b>"NEW"</b>	Denver, Colorado	<p><b>6th ANNUAL CONFERENCE</b> The theme of Spar 2009 is <i>3D Imaging and Positioning for Engineering, Construction and Manufacturing</i>. The event will focus on 3D laser scanning, mobile survey and mapping, lidar, dimensional control, asset management, BIM/CAD/GIS integration and security planning. Website: <a href="http://www.sparllc.com/spar2009.php">http://www.sparllc.com/spar2009.php</a></p>
<b>April 2009</b>		
<b>April 8-9, 2009</b>  <b>"NEW"</b>	Toronto, Canada	<p><b>DMTI Spatial announces registration for Expedition 2009</b> DMTI Spatial (DMTI), provider of solutions for location intelligence, announced that registration is now open for its annual customer and partner conference, Expedition 2009. The Conference is scheduled for, at The King Edward Hotel in Toronto Website: <a href="http://www.dmtispatial.com">http://www.dmtispatial.com</a></p>
<b>14-16 April</b>  <b>"NEW"</b>	Dubai, UAE	<p><b>Map Middle East</b> Website: <a href="http://www.mapmiddleeast.org/">http://www.mapmiddleeast.org/</a></p>
<b>15-17 April</b>  <b>"NEW"</b>	Moscow region	<p><b>III International conference Remote Sensing - the Synergy of High Technologies</b> Website: <a href="http://www.sovzondconference.ru/eng/">http://www.sovzondconference.ru/eng/</a></p>

<b>19 -22 April</b>	Tampa, FL, USA	<p><b>Geospatial Infrastructure Solutions Conference 2009</b>            E-mail: <a href="mailto:info@gita.org">info@gita.org</a>            Website: <a href="http://gita.org">http://gita.org</a></p> <p>The Geospatial Information &amp; Technology Association (GITA) is very pleased to announce that an expanded slate of topics will be covered in more than 100 sessions during GITA's 2009 Geospatial Infrastructure Solutions Conference</p>
<b>May 2009</b>		
<b>3-8 May</b>	Eilat, Israel	<p><b>FIG Working Week and XXXII General Assembly – New Horizons across the Red Sea – Surveyors Key Role in Accelerated Development</b> Contact: <a href="mailto:fig@fig.net">fig@fig.net</a></p>
<b>4-6 May "NEW"</b>	Khobar, Saudi Arabia	<p><b>The Fourth National GIS Symposium in Saudi Arabia</b>            Website: <a href="http://www.saudigis.org/">http://www.saudigis.org/</a></p>
<b>4-8 May</b>	Stresa, Lago Maggiore, Northern Italy	<p><b>33rd ISRSE (The 33rd International Symposium on 'Remote Sensing of the Environment')</b>  <a href="http://isrse-33.jrc.ec.europa.eu/index.php?page=home">http://isrse-33.jrc.ec.europa.eu/index.php?page=home</a></p>
<b>08-11, May</b>	Riyadh, Saudi Arabia	<p><b>Remote Sensing Arabia</b>            Website: <a href="http://www.remotesensingarabia.com">www.remotesensingarabia.com</a></p>
<b>25-29 May</b>	Chengdu, China	<p><b>EOGC2009 (the Second International Conference on Earth Observation for Global Changes)</b>            Website: <a href="http://www.eogc2009.com.cn/">http://www.eogc2009.com.cn/</a>.            The deadline for abstracts closed on 31 December, 2008.            Conference web site: <a href="http://www.eogc2009.com.cn/">http://www.eogc2009.com.cn/</a>            Contact:            Xianfeng Zhang, Ph.D., Conference Secretariat, EOGC2009 Institute of Remote Sensing &amp; GIS, Peking University Beijing 100871, China            Tel: 86-10-62759123            Email: <a href="mailto:xfzhang@pku.edu.cn">xfzhang@pku.edu.cn</a></p>
<b>June 2009</b>		
<b>01 – 04 June</b>	Vancouver, BC, Canada	<p><b>GeoTec Event 2009</b>            E-mail: <a href="mailto:khasstings@geoplace.com">khasstings@geoplace.com</a>            Website: <a href="http://www.geoplace.com">www.geoplace.com</a></p>
<b>2-5 June</b>	Hannover, Germany	<p><b>Call for Papers for the 12th AGILE International Conference</b>            Deadline of pre-conference workshop proposals: November 30, 2008; Deadline for full paper submissions: December 12, 2008; Deadline for short paper and poster submissions: January 16, 2009  <a href="http://www.ikg.uni-hannover.de/agile/">http://www.ikg.uni-hannover.de/agile/</a></p>
<b>15-19 June</b>  Theme: Spatial Data Infrastructure Convergence - Building SDI Bridges to address Global Challenges	Rotterdam, The Netherlands	<p><b>11th International Conference on Global Spatial Data Infrastructure (GSDI 11)</b></p> <p>The first call for papers is published at <a href="http://www.gsdi.org/gsdi11/papers.html">http://www.gsdi.org/gsdi11/papers.html</a>. Please, visit <a href="http://www.gsdi.org/gsdi11">http://www.gsdi.org/gsdi11</a> for more information. If you want to secure your participation in the GSDI 11 World Conference, it is now possible to register here as well!</p> <p><b>DEADLINES:</b> 1 December, 2008 and 1 April, 2009</p> <p>Contact information:            PCO agency GSDI 11 (BlomBerg Instituut/Geonovum)            Esther Stukker, tel. +31 (0)73 - 684 25 25            and e-mail: <a href="mailto:e.stukker@geonovum.nl">e.stukker@geonovum.nl</a></p>
<b>22 June 2009</b>	Centre for Geospatial Science, University of Nottingham, UK	<p><b>CFP - FIRST OPEN SOURCE GIS UK CONFERENCE 2009</b>            Website: <a href="http://www.opensourcegis.org.uk">http://www.opensourcegis.org.uk</a></p> <p>The Centre for Geospatial Science of University of Nottingham, Open Source Geospatial Foundation (UK Chapter), ICA Working Group on Open Source Geospatial Technologies, SOSoRNET and</p>

		<p>Open Knowledge Foundation are organizing the First Open Source GIS UK Conference</p> <p><b>Abstracts</b> (max 500 words) can be submitted to <a href="mailto:Suchith.Anand@nottingham.ac.uk">Suchith.Anand@nottingham.ac.uk</a> before 15 March 2009.</p> <p><b>IMPORTANT DATES:</b></p> <ul style="list-style-type: none"> <li>* Abstracts Submission deadline: 15 February 2009</li> <li>* Notification of acceptance: 15th March 2009</li> <li>* Final papers delivered by: 15 May 2009</li> <li>* OSGEO UK Live Software demo submission deadline: 30 April 2009</li> <li>* Notification of acceptance: 15th May 2009</li> </ul>
<b>29 June – 2 July</b> <b>“NEW”</b>	Yongin, Korea	<p><b>Fourth International Workshop on "Geographical Analysis, Urban Modeling, Spatial Statistics" (GEOG-AN-MOD 09)</b>  <a href="http://www.lisut.org/workshop/GEOG-AN-MOD09/">http://www.lisut.org/workshop/GEOG-AN-MOD09/</a>    in conjunction with</p> <p><b>The 2009 International Conference on Computational Science and its Applications (ICCSA 2009)</b>    June 29th to July 2nd, 2009    Kyung Hee University-Global Campus, Yongin (Korea)  <a href="http://www.iccsa.org/">http://www.iccsa.org/</a></p> <p>*Important dates</p> <ul style="list-style-type: none"> <li>*16 February 2009: Deadline for full paper submission</li> <li>*24 March 2009: Notification of acceptance</li> <li>*12 April 2009: Deadline for Camera Ready Papers</li> <li>*June 29 - July 2, 2009: ICCSA 2009 Conference.</li> </ul>
<b>July 2009</b>		
<b>7-11 July</b>	Cape Town, South Africa	<p><b>2009 IEEE International Geoscience &amp; Remote Sensing Symposium (IGARSS)</b> <a href="http://www.igarss09.org">www.igarss09.org</a></p>
<b>13-14 July</b>	Oxford, UK	<p><b>GEOSENSOR NETWORKS 2009</b>    Website: <a href="http://www.comlab.ox.ac.uk/geosensornetworks/">http://www.comlab.ox.ac.uk/geosensornetworks/</a>    Sponsored by: University of Oxford    Papers to be published by Springer</p> <p><b>IMPORTANT DATES:</b>    Paper Submission: 3 April 2009    Notification of Acceptance: 27 April 2009    Camera Ready Papers Due: 5 May 2009    Conference: 13-14 July 2009</p>
<b>13-17 July</b>	San Diego, CA, USA	<p><b>29<sup>th</sup> ESRI International User Conference</b>    The deadline for abstract submissions has been extended to  <b>November 14, 2008:</b>    Abstracts can be submitted at <a href="http://www.esri.com/ucpapers">www.esri.com/ucpapers</a></p>
<b>13-17 July</b> <b>“NEW”</b>	Cairns, Australia	<p><b>18<sup>th</sup> IMACS WORLD CONGRESS - MODSIM09</b>    International Congress on Modelling &amp; Simulation    “Interfacing Modelling and Simulation with Mathematical and Computational Sciences”    Early Bird Registration closes Friday 13 March 2009    Submission and Acceptance of Abstracts has CLOSED    Final papers submitted Friday 13 March 2009    Websites: <a href="http://www.imacs-modsim-world-congress.org">http://www.imacs-modsim-world-congress.org</a>  <a href="http://www.mssanz.org.au/modsim09">http://www.mssanz.org.au/modsim09</a></p>

July 27-31 <b>“NEW”</b>	Vancouver, Canada	<p><b>GeoWeb2009</b>            GeoWeb 2009 organizers are currently seeking submissions for presentations and workshops at <a href="http://geowebconference.org/papers-workshops">http://geowebconference.org/papers-workshops</a>.            Details: All abstracts must 200 words and be submitted via the online form at <a href="http://geowebconference.org/papers-workshops">http://geowebconference.org/papers-workshops</a> no later than February 27, 2009.            For all questions regarding the submission of abstracts and agendas please contact Julie Eckhart at <a href="mailto:jeckhart@gita.org">jeckhart@gita.org</a>. Complete information on the call for papers process and conference may be obtained at <a href="http://www.geowebconference.org">http://www.geowebconference.org</a>.</p>
<b>August 2009</b>		
4 - 7 August	Bali - Indonesia	<p><b>10th South East Asian Survey Congress (SEASC '09)</b> Hosted by <a href="#">Bakosurtanal</a> (Indonesia's land information agency)            Contact: <a href="mailto:dkirana@bakosurtanal.go.id">dkirana@bakosurtanal.go.id</a></p>
3-14 August	Rio de Janeiro, Brazil	<p><b>XVII General Assembly of the International Astronomical Union</b></p>
27-8 August <b>“NEW”</b>	Bishkek, Kyrgyzstan	<p><b>GISCA '09 Conference (3rd Central Asia GIS)</b>  <b>Call for Papers announced for GISCA'09 Conference</b>            The Kyrgyz State University for Construction, Transportation and Architecture together with the Salzburg University Centre for Geoinformatics have published a call for papers for the forthcoming GISCA (GIS-in-Central-Asia) conference. The conference is being organised on August 27-28, 2009 in Bishkek, Kyrgyzstan with a focus on "GIScience for Environmental and Emergency Management". The GISCA conference aims at building a regional network of GIS experts to stimulate and enhance Geoinformatics applications for the development of regional expertise and qualified human resources.  <b>Submission of contributions:</b>            May 1 - Submission of abstracts (min 500 words)            June 1 - Notification of acceptance            July 1 – Camera-ready copy of full papers (see authoring instructions!)            Aug 1 – Registration for poster exhibit  <b>Pre-conference events:</b>            Aug 14-16 Joint ICA-UNIGIS summer school in Kashgar            Aug 17-23 ICA-led field trip Kashgar-Lhasa return            Aug 24-26 pre-conference summer school and various workshops in Bishkek            Website: <a href="http://www.aca-giscience.org">http://www.aca-giscience.org</a></p>
<b>September 2009</b>		
9-12 September	Beijing, China	<p><b>6th International Symposium on Digital Earth</b>            E-mail: <a href="mailto:ISDE6@ceode.ac.cn">ISDE6@ceode.ac.cn</a>            Website: <a href="http://www.isde6.orgk">http://www.isde6.orgk</a></p>
14-16 September <b>“NEW”</b>	Beijing	<p><b>Emergency Management Conference</b>            The international conference on <b>Geospatial Solutions for Emergency Management</b> (GSEM 2009) is being held in conjunction with the 50th anniversary of the Chinese Academy of Surveying and Mapping. The organisers are calling for papers on themes including data and image fusion, disaster management and new sensors. The deadline for abstracts is 31 March.  <b>WEBSITE:</b> <a href="http://www.gsem2009.org/">http://www.gsem2009.org/</a></p>
21-25 September	Venice, Italy	<p><b>OceanObs '09</b>  <a href="http://oceanoobs09.net/">http://oceanoobs09.net/</a></p>
<b>October 2009</b>		

5-7 October	Westminster, Colorado	More information will be forthcoming but we ask you to "save the date" for the <b>Location Intelligence Conference 2009</b> . We'll be at the Westin Westminster Hotel in Westminster, Colorado, just outside of Denver toward Boulder from Oct. 5-7
19-22 October	Hanoi, Vietnam	<b>7th FIG Regional Conference</b> Conference Website: <a href="http://www.fig.net/vietnam/">http://www.fig.net/vietnam/</a> <i>awaiting Timeline for registration and submission of abstracts, papers, and presentations</i> <b>Electronic submission of papers by June 2009</b>
26-29 October	Kampala Uganda	<b>AFRICAGIS 2009; International Conference</b> Theme of the conference "GEO-SPATIAL INFORMATION AND SUSTAINABLE DEVELOPMENT IN AFRICA; FACING CHALLENGES OF GLOBAL CHANGE" <a href="http://www.africagis2009.org/">http://www.africagis2009.org/</a>
<b>November 2009</b>		
10-12 November <b>"NEW"</b>	St Petersburg, Florida, USA	<b>Fifth National GIS in Transit Conference</b> This biennial conference will focus on the growing role of GIS in supporting planning, service delivery, and decision making in public transit. The Programme Committee will organise an educational programme based upon the abstracts submitted through the Call for Participation. All abstract submissions, received by February 27, 2009, will be reviewed and considered for this conference. The Program Committee encourages abstract submissions in one or more of these four general categories - Applications, Tools, Data, and Management & Policy. Website: <a href="http://www.urisa.org/gis_transit">http://www.urisa.org/gis_transit</a>
15-22 November	Santiago, Chile	<b>XXIV International Cartographic Conference</b> <b>First call for papers:</b> <a href="http://www.icc2009.cl/pdf/First_Call_for_Paper_ICC2009.pdf">http://www.icc2009.cl/pdf/First_Call_for_Paper_ICC2009.pdf</a> <b>Deadline for Abstracts:</b> 16 January, 2009
17-20 November	Denver, USA	<b>7th William T. Pecora Memorial Remote Sensing Symposium</b> E-mail: <a href="mailto:asprs@asprs.org">asprs@asprs.org</a> Website: <a href="http://www.asprs.org/pecora17">www.asprs.org/pecora17</a>
30 November - 2 December	Sydney, Australia (Univ NSW)	<b>GeoComputation 2009</b> <b>Call for Papers</b> <b>The 10th International Conference on GeoComputation</b> URL: <a href="http://www.biodiverse.unsw.edu.au/geocomputation/index.html">http://www.biodiverse.unsw.edu.au/geocomputation/index.html</a> Contributors are invited to submit extended abstracts, which will be reviewed for inclusion in the conference program. See <a href="http://www.biodiverse.unsw.edu.au/geocomputation/index.html">http://www.biodiverse.unsw.edu.au/geocomputation/index.html</a> for more information. The abstracts should be sent as either Word documents or pdf files to <a href="mailto:geocomputation@unsw.edu.au">geocomputation@unsw.edu.au</a> Files larger than 1Mb should be sent as zipped archives. The submission deadline is <b>30 June 2009</b> . Authors will be notified of acceptance/rejection in the end of August 2009. Any questions regarding the submission and publication process should be addressed to <a href="mailto:geocomputation@unsw.edu.au">geocomputation@unsw.edu.au</a>
<b>April 2010</b>		
11-16 April	Sydney, Australia	<b>International Federation of Surveyors (FIG) Congress 2010</b> Contact: <a href="mailto:info@isaust.org.au">info@isaust.org.au.</a>

Date to be announced	Taipei	<b>ASIA GIS 2010 Conference further details to be announced – see: <a href="http://www.asiagis.org/">http://www.asiagis.org/</a></b>
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Please mention SDI-AP as a source of information in correspondence you may have about items in this issue.

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