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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) which is available in both English and Chinese language versions. 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 synchronising these 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.





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Message from the editors

Welcome to the August issue of the newsletter for the year 2012.

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 <u>send us</u> the materials by the 25th of the each month for your contribution to be included in the next newsletter.

Malcolm Park and Serryn Eagleson (<u>Editors</u>), at the <u>Centre for Spatial Data Infrastructures and Land Administration</u>, The University of Melbourne.

Contributions

Thank you to the following people and organisations for their contributions to this issue: Baek Wonkug for news feeds, Jeremy Shen and Bruce Lan and colleagues for the Chinese translation as well as Shivani Lal, *GIS Development*, *GeoSpatial World* and *Asia Surveying & Mapping* magazine for directly contributing to the newsletter.



GSDI News

International Geospatial Society (IGS) Free Memberships

At its recent meeting, the GSDI Board of Directors passed a motion that allows individuals in low and very low income nations to join the International Geospatial Society (IGS) by providing specific information of value to the global community in lieu of annual cash dues. To join, simply add your professional profile to the growing interconnected network of geospatial specialists across the globe. Benefits of membership in IGS are listed at http://www.igeoss.org/benefits. For further information, contact Harlan Onsrud, Executive Director, GSDI Association.

2009-12 Chair awarded GSDI President's Medal



University of Melbourne Head of the Department of Infrastructure Engineering, Professor Abbas Rajabifard, has been awarded the Global Spatial Data Infrastructure Association's (GSDI) President's Medal at the 2012 Global Spatial Conference in Quebec City, Canada. The medal recognises his contribution to GSDI and in particular, his chairmanship from 2009-2012

Professor Rajabifard said it was a great honour to receive the medal.

Source: University of Melbourne eNews

Ethiopia: Establishment of Environmental Geoportal (metadata and catalog services) with Open source Solutions

Project Progress Report (May 2012) Submitted to - Global Spatial Data Infrastructure Association (GSDI) Primary Contact: Horn of Africa Regional Environment Centre and Network (HoAREC/N); Melakeneh Gelet The main objective of this report is to provide progress information about the process, activities, and accomplishment of the geoportal project for the main funder (GSDI) and host organization (HoAREC/N). The main aim of this geoportal is to organize the fragmented geo environmental data of the region owned by different programmes and to enable these data accessed and shared with other organizations. This prototype geoportal still in trial and development stages; the service of HoA-REC/N geoportal, is hosted on the domain name under the Resources main menu. The service is working on HoA-REC/N's web server and is expected to be operating in its full capacity while feedback is collected and incorporated.

The Horn of Africa Regional Environment Centre and Network (HoA-REC/N) focuses on environmental concerns and sustainable development options within the Horn of Africa. The Centre is an autonomous institution under Addis Ababa University. It facilitates, strengthens and advocates for initiatives related to environmental conservation and natural resource management.

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SDI News, Links, Papers, Presentations

"Metadata and Spatial Data Infrastructures" Full Day Workshop - Canberra, ACT

Workshop goals:

- Discuss management of SDI and demonstrate use of metadata in the data catalogues that support spatial data infrastructures
- Presentations on the use and application of metadata in small and large organisations
- Review metadata standards
- Demonstration by vendors of SDI and Metadata software, and how they meet ISO / ANZLIC standards and integrate with state and national spatial data catalogues

Date: Thursday, 16 August 2012

Time: 9.00am to 4:45pm

Venue: Canberra Institute of Technology (CIT)

Cost: SSSI Member / Alliance Rate: \$A50.00, Non-member: \$A80.00

Registration: http://www.sssi.org.au/Events/Metadata-and-Spatial-Data-Infrastructure/eid/462.html

Surveying & Spatial Sciences Insitute (SSSI) NSW & ACT Chapters



Assessing the development of Ethiopian national SDI by Dessalegn Obsi Gemeda

A thesis submitted in partial fulfilment of the degree of Master of Science at Wageningen University and Research Centre, The Netherlands

Abstract:

Spatial Data Infrastructure plays significant role for the development of a nation. It contributes to sustainable development of a country through facilitating spatial data sharing and utilization among all levels of stakeholders. Thus, conducting SDI assessment is essential to guide its development, to monitor and improve its quality and to provide evidence of accountability for all stakeholders. Knowledge of the development status of SDI of a country is crucial to increase the accountability and development of spatial data information. In Ethiopia, there are many governmental organizations that produce spatial data to fulfill the need of geo-information in various sectors. However, the overall development status of the SDI in Ethiopia is not well known. The objective of this study is to assess the development and milestones of Ethiopian National Spatial Data Infrastructure (ENSDI).

The assessment of the status of ENSDI is done by using the four multi-view assessment framework approaches; SDI-readiness, Modified state of play, Clearinghouse suitability index and Organizational approaches. The assessment of the milestones in the development of ENSDI is done using document analysis and interview with key stakeholders. Both assessment of status and milestones of the development of ENSDI involve questionnaire survey, interview and document analysis as data collection tool. Data analysis was done on the four assessment approach.

The result of multi-view assessment shows that, shortage of digital data, lack of open-source data, lack of SDI awareness, and unavailability of environmental dataset policy are the major weak aspects of the ENSDI. Moreover, the technology components and data quality standards of the NSDI are very low. This is mainly due to lack of awareness among stakeholders on ESDI, low technological development, human capital, SDI culture, shortage of digital data and poor coordination of various institution in data production and exchange. On the other hand, clear mission and vision, collaboration with International donors are strong aspects of the NSDI. The major milestones that initiated NSDI development in Ethiopia are the establishment of GIS education, ENRAMED database, National Clearinghouse, GIS Society of Ethiopia and Ethiopian Geospatial Metadata Clearinghouse Node.

The research identifies awareness creation for SDI, increasing ICT technology in the country, developing SDI curriculum in higher education, creation of open source data, converting analogue data to digital data, increasing cooperation of various institution in data sharing and provision, and developing data quality control procedures as the major areas of interest for NSDI secretariat to do.

Keywords: SDI, NSDI, ENSDI, development, assessment, milestones, multi-view assessment framework.

UAE: phase two of a multi-phase NSDI project

The United Arab Emirates National Emergency, Crisis and Disaster Management Agency (NCEMA) has awarded a contract to GeoDecisions (Harrisburg, PA) for phase two of a multi-phase National Spatial Data Infrastructure (NSDI) project. NCEMA will fund a one-year expansion of the country's NSDI during its current operational phase.

This second phase of the NDSI project encompasses an expansion of the NSDI architecture and governance structure. GeoDecisions will provide NCEMA with support for governance plan adoption, data sharing and management policies for the stakeholder agencies, and enhancements to, and training for, the NSDI web portal. A significant amount of spatial data integration and an outreach and awareness campaign also are part of the initiative. An embedded, onsite team in Abu Dhabi and a project execution team in the U.S. are supporting the project.

"The NSDI provides NCEMA with the technology architecture necessary to facilitate the rapid collection and integration of spatial data sets from various agencies throughout the United Arab Emirates," said Kevin J. Switala, GISP, vice president of GeoDecisions based in the Philadelphia, Pa., office. "These capabilities will allow government agencies throughout the country, responsible for coordinating national level emergency response efforts, to utilize for the first time nationwide spatial data sets, enhancing their emergency planning and management decision making."

See also: <u>UAE: Design and Development of NSDI for Federal Government</u> (May 2012), <u>GeoDecisions Awarded Spatial Data Infrastructure Project in United Arab Emirates</u> (May 2011), and <u>National Emergency and Crisis Management Authority – Abu Dhabi</u>



SDI Spotlight



This month's "Spotlight" feature is from Hamed Olfat who is a PhD candidate and member of the Centre for Spatial Data Infrastructures and Land Administration (CSDILA) within the Department of Infrastructure Engineering at the University of Melbourne. Hamed's main focus is on "Spatial Metadata Automation" research project which is currently under investigation by the researchers at CSDILA. In fact, this "Spotlight" feature is an update to the ones he previously published in December 2009 (Vol.6, No.12) and October 2011 (Vol.8, No.10).



Design and Development of a 'Process-based Spatial Metadata Creation Approach'





Introduction

Metadata describes different aspects of the dataset such as identification, quality, citation, extent, constraints, etc. Therefore, ideally metadata should be part of a spatial dataset and its values should be generated and updated with any change in the dataset from very first stages of the dataset lifecycle. Producing metadata afterwards is difficult and may be laborious task.

However, a process separate from the spatial data lifecycle has typically been considered to generate and update the metadata. The metadata created in this way is entirely dependent on its author's knowledge of the dataset. Even if the metadata generation and updating are rooted in dataset extraction (product-based metadata creation approach which is based on extracting metadata from dataset), many required metadata values will be missing unless they are authored manually.

Therefore, in this research a process-based approach was designed and developed which aims at creating metadata parallel to spatial data lifecycle. This approach not only identifies the metadata elements that should be created in any step of the data lifecycle, but also aids the organizations to determine the responsible party for generating metadata values in any step of this lifecycle.

Process-based Spatial Metadata Creation Approach

The prerequisite to design such an approach was an overall spatial data lifecycle. This lifecycle was designed based on the 'Information Lifecycle' recommended by the Australian Government Information Interoperability Framework which includes different steps consisting of planning, creation/collection, organization/storage, access, using, maintenance, re-using and sharing the information. However, according to the nature of 'information' in this research, which is 'spatial data', the information lifecycle was modified and an overall lifecycle which also covered the whole 'information lifecycle' was designed including data 'Collection', dataset 'Creation', 'Storage', 'Publish', 'Discovery', 'Access and Retrieval', 'Utilization', 'Maintenance', and 'Planning and Policy Making' steps.

The first step of the lifecycle would be collecting the spatial and non-spatial data to create the dataset. The related data to create the spatial datasets could be collected through different methods depending on the planning decisions in terms of users' needs, the purpose of collection, the required quality, scale, extent, etc. Following the data collection, different activities such as standardization, aggregation and quality assurance would be undertaken to create the spatial dataset.

Once the dataset is created, it would be stored in the database. Later, the stored dataset would be published to a networked environment to be shared among the end users. The users would be also provided with the facilities to discover the existing and shared datasets as well as to access and retrieve the appropriate ones for their needs. The data catalogue system plays a critical role here. As soon as the dataset is retrieved by the user, it would be utilized in relevant spatial activities. According to the dynamic nature of changes to datasets which usually occur in short time frames, an effective maintenance process was considered in the spatial data lifecycle as well.

Finally, according to different policies required in each step of the data lifecycle, a planning and policy making process was also considered as an ongoing procedure which is parallel to other steps. In this procedure, different planning activities to gather data, create dataset, publish data, update data as well as policies



regarding spatial dataset/metadata distribution, responsibilities, rights, restrictions, standards, languages, extensions etc. would be made.

However, according to the variety of organizations dealing with spatial data around the world which have their own specific approaches, this lifecycle would not be wholly identical and could be optimized based on the current activities and responsibilities in different organizations.

Once the lifecycle was designed, the ISO 19115:2003 metadata elements which are expected to be created in each step were identified. Having explored the ISO 19115:2003 Standard, it was realized that the values regarding metadata elements could not be completely achieved unless they were created within different steps of spatial data lifecycle. In other words, all the metadata elements cannot be generated at the same time, because the metadata author is usually not familiar with the whole process of data lifecycle and needs additional information and details related to different steps of this lifecycle to generate or update metadata. For example, the values regarding dataset identification, quality and content should be created during the 'data collection' and 'dataset creation' processes, or the values regarding dataset restrictions and responsibilities are the values that should be created under a 'planning and policy making' process.

According to the results of metadata elements allocation to spatial data lifecycle steps, the highest number of metadata elements should be generated during the spatial dataset creation step. Planning and policy making, data collection, dataset publishing, maintenance, utilization, discovery, access and retrieval are respectively the next steps with the highest number of elements.

In order to prove the concept, the process-based metadata creation approach was implemented within the GeoNetwork opensource as a prototype system (a new add-on).

More Information

Here is a list of publications related to this research project:

- Olfat, H., Kalantari, M., Rajabifard, A., Senot, H., and Williamson, I.P., 2012. <u>A GML-based Approach to Automate Spatial Metadata Automation</u>. *International Journal of Geographical Information Science* (IJGIS), DOI:10.1080/13658816.2012.678853.
- Olfat, H., Kalantari, M., Rajabifard, A., and Williamson, I.P., 2012. <u>Towards a Foundation for Spatial Metadata Automation</u>. *Journal of Spatial Science*, 57(1), pp. 65-81.
- Olfat, H., Kalantari, M., Rajabifard, A., Senot, H., and Williamson, I.P., 2012. <u>Spatial Metadata Automation: A Key to Spatially Enabling Platform</u>. *International Journal of Spatial Data Infrastructures Research (IJSDIR)*, Vol. 7, pp. 173-195.
- Olfat, H., Kalantari, M., Rajabifard, A., Williamson, I. P., Pettit, C., and Williams, S. (2010). <u>Exploring the Key Areas of Spatial Metadata Automation Research in Australia</u>. Refereed Paper presented at the GSDI-12 World Conference, Garden city, Singapore, 19-22 October.
- Kalantari, M., Olfat, H., and Rajabifard, A. (2010). <u>Automatic Metadata Enrichment: Reducing Spatial Metadata Creation Burden through Spatial Folksonomies</u>. In A. Rajabifard, J. Crompvoets, M. Kalantari and B. Kok (Eds.), <u>Spatially Enabling Society</u> (pp. 119-129): Luven University Press.
- Olfat, H., Rajabifard, A., and Kalantari, M. (2010). <u>A synchronisation approach to automate spatial metadata updating process</u>. Coordinates Magazine, Vol. VI, Issue 3, pp. 27-32, March 2010.
- Olfat, H., Rajabifard, A., and Kalantari, M. (2010). <u>Automatic Spatial Metadata Update: a New</u>
 <u>Approach</u>. Refereed Paper presented at the XXIV FIG International Congress 2010, Sydney, Australia.
- Kalantari, M., Rajabifard, A., and Olfat, H. (2009). <u>Spatial Metadata Automation: A New Approach</u>.
 Refereed Paper presented at the Spatial Science Conference 2009 (SSC2009), Adelaide, Australia.
- Rajabifard, A., Kalantari, M., and Binns, A. (2009). <u>SDI and Metadata Entry and Updating Tools</u>. In B. v. Loenen, J. W. J. Besemer and J. A. Zevenbergen (Eds.), SDI Convergence. Research, Emerging Trends, and Critical Assessment (pp. 121-136). Delft.

The editors remind our subscribers and readers that we welcome contributions for the *Spotlight* feature.

GIS Tools, Software, Data

China Crowdmaps Pedestrian and Cyclist Problem Areas

The government wants to know where sidewalks and bike lanes are insufficient, and they've turned to the Chinese people to tell them. A new crowdsourcing website seeks to tap into the wisdom of Chinese pedestrians and cyclists to identify areas in need of repair or improvement in Beijing. Developed by Beijing Transport Research Center and the World Bank, the website is aimed at helping transportation planners in the municipal Back to contents



government to know how roads and sidewalks are being used by the public, and where changes may be needed.

Source: Atlantic "Cities"

Philippine police embraces GIS-based crime analysis tool

The La Trinidad Municipal Police Station, Philippines, received a computerised GIS-based tool which would help in crime analysis and provide better crime solutions. The tool is designed to capture, store, manipulate, analyse, manage, and present all types of geographical data. It is a tool for mapping geospatial features such as parcels of land, buildings and roads. It will then connect this data to existing databases, thus providing intelligence which will help in analysing different features.

Source: Geospatial World

Asia-Pacific GIS Market Analysis

TechNavio's analysts forecast the Geographical Information Systems (GIS) market in the APAC region to grow at a CAGR of 7.8 percent over the period 2011-2015. One of the key factors contributing to this market growth is increasing investment in GIS by the Public sector. The GIS market in the APAC region has also been witnessing that many vendors have started to offer enterprise GIS applications. However, the increasing threat of low-cost vendors could pose a challenge to the growth of this market.

TechNavio's report, the *Geographical Information Systems Market in the APAC Region 2011-2015*, has been prepared based on an in-depth analysis of the market with inputs from industry experts. The report focuses on the APAC region; it also covers the Geographical Information Systems market in the APAC region landscape and its growth prospects in the coming years. The report also includes a discussion of the key vendors operating in this market.

OGC Australia & New Zealand Forum announced

The Open Geospatial Consortium (OGC) announced that OGC members in the Australia & New Zealand (ANZ) region, with the assistance of the Australian and New Zealand Land Information Council (ANZLIC), recently chartered an Australia & New Zealand (ANZ) Forum to support regional coordination and communication regarding geospatial standardisation activities.

The Forum's industry, government, academic and research organisations will support the OGC's outreach and education efforts regionally. Like the OGC's nine other national and world region organisations, the ANZ Forum will also identify regionally important interoperability requirements and communicate these into the OGC's international standards development and interoperability test bed process.

ANZ Forum members are committed to the use of the open standards defined by the Open Geospatial Consortium (OGC) and the members will work with other relevant industry, government and international standards bodies to achieve the OGC's vision.

The ANZ Forum's charter members are:

- -- Australian Bureau of Meteorology
- -- Australian Bureau of Statistics
- -- Australian Department of Defence
- -- Australian Ocean Data Centre Joint Facility
- -- CSIRO
- -- Department of Natural Resources and Mines (QLD)
- -- Department of Primary Industries (VIC)
- -- Department of Sustainability and Environment (VIC)
- -- Geoscience Australia
- -- Gosford City Council (NSW)
- -- La Trobe University
- -- Land and Property Information Division, Department of Finance and Services (NSW)
- -- Land Information New Zealand (LINZ)
- -- Landcare Research New Zealand Ltd
- -- Landgate (WA)
- -- Lisasoft Pty Ltd
- -- Mercury Project Solutions
- -- National Institute of Water and Atmospheric Research (NZ)
- -- Office of Spatial Policy (OSP), Department of Resources, Energy & Tourism
- -- PSMA Australia Ltd
- -- Robert Starling



- -- Sparx Systems
- -- University of Melbourne

The Forum will be open to all OGC member organisations residing or conducting business in the ANZ region. Non-OGC members are also welcome to participate as observers.

The OGC is an international consortium of more than 450 companies, government agencies, research organisations, and universities participating in a consensus process to develop publicly available geospatial standards. OGC(R) Standards support interoperable solutions that "geo-enable" the web, wireless and location-based services, and mainstream IT. OGC Standards empower technology developers to make geospatial information and services accessible and useful with any application that needs to be geospatially enabled. Visit the OGC website.

Geographers envision 'Next-generation digital Earth'

Michael Goodchild envisions the next-generation of digital Earth as being more "local instead of global". Things that happen to be important to those who live in the area should be part of the area's maps, according to Goodchild, though they may not be the standard political or topographic fare of the traditional globe. "There's more of a social perspective now, and less emphasis on permanent objects," Goodchild wrote in paper titled, 'Next-generation Digital Earth'. The paper was published in Proceedings of the National Academy of Sciences. The paper is co-authored by several geographers including Goodchild.

Source: Geospatial World

Visualizing the New York Subway System's 'Data Exhaust'



In 2011, MetroCards were swiped through the turnstiles of the New York City subway system 1.6 billion times. Each swipe was, itself, a data point, and it came connected to myriad others about the day of the week, the subway stop, the identity of the rider. Did the commuter have a student MetroCard, or a senior citizen one? What about a seven-day pass, or a 30-day one?

As a sheer byproduct of moving so many people around the city, the New York Metropolitan Transit Authority constantly churns out information like this. And, thanks

to the rapidly expanding movement for open data, it's now available to the public – if we can just begin to figure out what to do with it.

Source: The Atlantic "Cities"

Combining Mobile Mapping Scans with UAV Images for 3D City Modeling in Singapore

The Singapore ETH Centre-Future Cities Laboratory (SEC-FCL) has commissioned a mission to laser-scan the campus of the National University of Singapore (NUS) with a mobile mapping system (MMS), and as a result a unique multi-source 3D dataset was generated, providing new algorithmic and procedural approaches to 3D city modeling. In three hours of mobile scanning, 16.7 km of roads were captured, consisting of 154 GB of point clouds, with 8,166 video street images at 34 GB. This MMS data will be added to the already existing 800 aerial images produced with a UAV(octocopter) in February 2012. The final aim is to produce a very high resolution 3D model of the NUS campus.

Source: Asian Surveying & Mapping

RMIT & JAXA joint venture

Australian technical university, RMIT has reached an agreement with the Japanese Space Agency (JAXA) to develop a new global satellite navigation system. Under the agreement, JAXA will loan two GNSS receivers to RMIT to conduct the Multi-GNSS Joint Experiment in the Asia-Oceania Multi-GNSS Demonstration Campaign. A series of evaluation activities will be conducted over a period of five years.

The receivers will be located at the Bundoora campus, in a permanent GNSS tracking station being built by the School of Mathematical and Geospatial Sciences.

Source: Geospatial World Weekly and the Register

India to Use Satellite Imagery to Review Capital Region Planning

The National Capital Region Planning Board (NCRPB) in India is undertaking a detailed study to assess whether towns in the region have adhered to their master plans. They have signed a memorandum with the National Remote Sensing Centre (NRCS) to use satellite imagery to determine if the master plans match ongoing development, as well as to use the collected information to administer changes to long-term planning goals. Source: Asian Surveying & Mapping





Locals groups to map Taiwan's coastline

The first map to ecologically chart Taiwan's coastal areas will be completed by January 2013, local environmental groups announced at an event to mark World Oceans Day. The map will help address the public's lack of marine knowledge.

Source: Geospatial World

qvSIG Association & i3Geo.

i3Geo and gvSIG join forces. With this agreement there's an approach to collaborate in a model level. We expect to grow in the technical, economic and organizational parts through the collaboration between projects that bet on open source as fundamental base for technological independence, that understand the software as a means and not as an end. At the free geomatics area, i3Geo is without doubt the reference of technology with Latin American origin. i3Geo was created by the Environment Ministry (MMA) in Brazil, in the context of the implementation of the National Information System about Environment (SINIMA). Its license was changed to GPL in 2006, and it became a part of the Brazilian Public Software Portal (PSPB). Source: gvSIG News Office



New Zealand County Launches GIS Mapping Viewer

Hamilton City Council's website just added a new map function that allows visitors to find information on properties with just a few clicks of a mouse. The free GIS Mapping Viewer was launched July as the latest in a suite of e-services available at the city.

Source: Asian Surveying & Mapping and Hamilton City Council website

OGC seeks comments on GeoServices REST API candidate standard

The Open Geospatial Consortium (OGC®) seeks public comment on the candidate OGC GeoServices REST API standard. The GeoServices REST Application Programming Interface (API) provides a standard way for web clients to communicate with geospatial technologies, such as Geographic Information System (GIS) servers, based on Representational State Transfer (REST) principles.

The candidate OGC GeoServices REST API standard documents are available for review and comment.

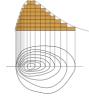
The closing date for comments will be 18 August 2012.

Contact: info@opengeospatial.org

[1] Using custom projections with TileCache, Mapnik and Leaflet

[2] Creating contour lines with GDAL and Mapnik

Source: Thematic Mapping blog



Google brings 3-D Maps To iOS



With iOS 6, Apple is looking to replace Google Maps with their own Cupertino solution that also provides 3-D maps of cities across the globe. Google isn't going down without a fight though, so they just updated their Google Earth app for iOS to include 3-D maps before people get comfy with Apple's Flyover solution in iOS 6. Some Android phones have had Google's 3-D maps since June, but the amount of cities rendered in 3-D is currently limited to only 14 regions. Right now users can get flyover type views of Los Angeles, San Francisco, Boston, and a few other areas.

Google plans to have coverage for over 300 million people globally by the end of 2012, which really isn't that much when you consider that large metropolitan areas can account for about 10million people each. Still, it's a great start and Google will continue to quickly add cities over time, just like they have with their Google StreetView feature.

Rendering the polygons of Google's 3D maps takes a lot of horsepower, so the feature will only be available to iPhone 4S users. Other iPhones running iOS 4.2 will get all the other new features in the app update.

In an interview with CNET about the 3D Maps update, Google's Geo Team Product Manager, Peter Birch said

"We love maps here, and we are really trying to build the best, and most useful and comprehensive maps that we can, and to make that available to our users wherever they are."





However, there's no official word yet on whether or not Google plans to release a separate iOS Google Maps app once iOS 6 is released and Google's Maps are replaced with Apple's own solution.

Source: CNet, Google Lat-Long blog, and Cult of Mac

Australia to publish live, free, satellite images

Australia will publish images captured by soon-to-launch satellite Landsat 8 online, in close to real time, for free. Landsat 8 will launch in early 2013 and is expected to be fully operational by May or June of that year. Once the bird begins beaming back images, Geoscience Australia (GA) will publish them online under the Creative Commons Attribution 3.0 Australia licence.

Source: The Register (UK)

Google Raises the Maps Bar

Google just introduced a series of updated maps for 11 countries, with added information on things like ferry routes, parks, landmarks, and the layouts of universities and airports. It's a nice achievement. What is really interesting is how Google did it, and what kind of signal they are sending to other tech companies getting into mobile maps, like Apple, Microsoft and Amazon.

Google added much of the information through in-house information sources, through a project it calls "Ground Truth." The idea is that if Google can own the geographic data, instead of purchasing it from others, it can produce maps that are more reliable.

... Google also counts on input from other humans, including ... "hundreds of thousands of users providing corrections to our information."

Source: NY Times

Google Street View Goes to Antarctica

Though Google first grabbed panoramic Street View images of Antarctica back in 2010, the search giant recently returned to the world's least-populated continent to capture historic sites such as the South Pole and the insides of buildings that have battled the elements for more than a century.

ALSO The Value of Google Earth's Antarctic Expedition

Source: Time

A Satellite View of City Growth, in GIFs

NASA's Landsat satellite system has been orbiting and taking pictures of the earth since 1972. In honor of its 40th birthday, NASA and the U.S. Geological Survey have released a cool set of images showing how 11 world cities have changed over that time. The site features two overlaid images of each city from different years dating back to the 1970s, with a cool slider bar to let you see how each city has changed. To make the drastic changes of time even more apparent, *The Atlantic* has made some animated GIFs of those images.





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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.

Mapping Earthquakes

AN AMAZING map plotting every earthquake of magnitude 4.0 or above in more than a century dramatically visualises the Ring of Fire and other quake hotspots.

In vibrant fluoro green, the map pinpoints the dynamic contact points where continental tectonic plates grind underneath each other, raising mountain ranges and causing the biggest earthquakes on the planet. Surce: HeraldSun





Why You Should Be Skeptical of Statistics on City vs. Suburban Population Growth

Take the shifts in metropolitan Atlanta. According to the Census, the downtown area grew at 2.4 percent while the suburbs grew at only 1.3 percent — a clear relative gain for the city. But the suburbs are much more populated to begin with, King reminds us. That means only 10,135 more people settled in the city, while 63,226 more settled in suburbia. In absolute terms, just 14 percent of metro Atlanta growth occurred downtown.

Source: The Atlantic

Summer in American Cities

A ridge of high pressure has brought stifling hotness to the country: in this NOAA map of July 3 to July 7 maximum temperatures, dull orange is 100 degree heat and the brightest orange is 109.

Source: The Atlantic



Russian drones can see obstacles



Russia may equip its drones with the so-called "technical vision" device that enables them to see and avoid obstacles, detect small-size objects and assess their potential danger.

The system was created by a team of engineers at the Luch designer bureau,

who say that it has no analogues in the world. Installed onboard unmanned aircraft, it gives them capabilities that no other existing system can give, the bureau's deputy chief designer

Yevgeny Andriyevsky told the Voice of Russia:

"Drones fitted with such a system can do what none of the existing analogues is able to do. They can fly at the lowest possible altitudes over zones with tall buildings and over rugged terrain of which there are no reliable maps and where a flight planning error might lead to the loss of the plane."

Source: The Voice of Russia



London's 2012 Olympic Stadium. The games will begin on July 27

Source: Geospatial World Weekly "Image of the Week" [GeoEye satellite image]

Google Earth Reveals How Predator-Prey Behavior In Coral Reefs Can Be Seen From Space



The image was taken with the GeoEye satellite and reveals marine animal behavior that would otherwise be difficult for scientists to witness. But in a paper published by *Scientific Reports*, researchers were able to witness how marine animals and their predators interact by studying the feeding patterns of herbivores.

Source: TreeHugger.com

Satellites Reveal Dramatic Summer Ice Melt in Greenland

Source: Scientific American

The memory palace

Picture some location you know well, such as the rooms in your house or the streets in your neighborhood. Now suppose you have to memorize a list of groceries. Start at the beginning of your location and walk forward, placing items at well-known landmarks as you go. Maybe you place a carton of milk at the foot of your stairs, a dozen eggs at the top, and a pile of apples next to the pillow on your couch. This technique is described well in *Moonwalking with Einstein: The Art and Science of Remembering Everything*, by Joshua Foer. The idea behind the memory palace is that we have an innate knack for remembering spatial layouts – supported by brain scans showing that spatial learning parts of the brain are used by people who win memory contests. Source: Scientific American



Articles

GIS—Just a Tool: Common Misconceptions by Stephen C. Blaskey

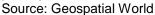
GIS is a powerful tool that is currently being underutilized by land surveyors. This underutilization is costing the surveying industry time during the business day, which equates to wasted money. I am not here to preach that GIS will save the universe from all which is evil. This approach has been used by the existing proponents of GIS with little effect. In my view, GIS is simply a hammer, and if you need to drive nails a hammer is a great tool, but if you are cutting lumber a hammer is useless. The biggest fallacy of the existing users and proponents of GIS is thinking that the professional surveying industry needs to change the way that they conduct business in order to fit into a GIS world. Surveying has been practiced for thousands of years and changing the way that surveying is conducted all because of the invention of a new hammer is crazy. GIS is simply a tool for the professional surveyor to be more efficient, not a new way of doing business.

Source: The American Surveyor



Impact of climate change on rice production in Vietnam

Agriculture is highly dependent on natural condition (climate, soil, water), specifically in tropical regions, with many of the poorest countries, climate change impacts on agricultural productivity are expected to be particularly harmful and to be difficult in poverty reduction





Is there evil inherent in mapping the world online?

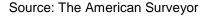
Time and again, we've seen the sensitivity of countries to online maps that depict a country's boundaries or claims contrary to their own beliefs. This is an age-old problem dating back to the very first maps, but the global access to a single online map, and the weight that specific online mapping sites carry, lead to a heightened sense of injustice. Just a week ago, Iran said that it would sue Google over dropping the name 'Persian Gulf' in Google Maps. The fact that the name no longer appears in the body of water between Iran and the Arabian Peninsula is an issue to Iran, because that's the name they've used while other Arab states call it the Arabian Gulf. Leaving it blank skirts the conflict, but also serves to illustrate the impossible neutrality of some mapping issues.

Source: Sensors & Systems

3D Documentation in the Restoration of Historic Buildings

Structural changes to historic buildings depend on the precise recording of existing conditions – an ideal application for modern 3D laser scanners.

The church of St. Michael the Archangel (1735) stands in the centre of Borgo di Terzo, near Bergamo, Italy. Cracks were clearly visible in the front elevation masonry, indicating serious building damage. Due to its irregular architecture, the church – like all historic buildings – required a precise analysis of existing conditions as a basis for the renovation work.





How the New iPhone Will Expose Cities Lagging on Open Data

As you probably know by now, Apple is planning to ditch Google Maps when it releases the newest version of the iPhone later this year (a pandemonious event that could come as soon as next month, according to the latest rumors). The company announced back in June plans to produce its own mapping software. This is big news for cartography geeks, but it comes with a catch. Without Google Maps, the new Apple operating system won't include the transit navigation capability that Google has worked with cities to pioneer over the last seven years.

Apple's in-house software, in other words, will be able to tell you how to get from LaGuardia to Yankee Stadium by car, but not by public transit.

Source: The Atlantic "Cities"



Books and Journals (including Videos and Web publications)



Implications of Geographic Adjustment for Access, Quality, and Efficiency of Care

by the Committee on Geographic Adjustment Factors in Medicare payment



The Medicare program provides health coverage for more than 47 million Americans, including 39 million people aged 65 and older and 8 million people with disabilities. Although Medicare is a national program, it adjusts fee-for-service payments to Medicare providers for geographic differences in the costs of providing care. Payments in high-cost areas are increased relative to the national average, and payments in low-cost areas are reduced. Medicare spending reached

\$525 billion a year in 2010, so there is considerable interest in ensuring that payments are accurate in different parts of the country.

Want to Understand Climate Change? Try This Simple Book

Global Weirdness: Severe Storms, Heat Waves, Relentless Drought, Rising Seas and the Weather of the Future (Pantheon Books; \$22.95).

The 200-page, small format book is a collection of 60 very short chapters—two to three pages each—that explain in straightforward terms a litany of typical questions, statements and misunderstandings about climate change that we hear again and again. The topics are organized into four sections:

- What the science says
- What's actually happening
- What's likely to happen in the future
- · Can we avoid the risks of climate change?

As such, the book is a handy desk-side reference for anyone who occasionally becomes boggled by these topics, or is in the position of having to teach or explain them to others, whether students, colleagues or the media. Some sample chapters:

- The atmosphere now holds a record amount of CO2—unless you go back half a million years.
- Want an exact number for how warm it will get? Sorry, scientists don't have one.
- Climate change can be bad for your health.
- · Droughts will probably come more often.
- If we made it easier for plants and animals to relocate, we might prevent some species from going extinct. The book's author is <u>Climate Central</u>, a nonprofit, non-partisan science and journalism organization. It was actually written by freelance science writer Emily Elert and Climate Central's senior science writer, Michael D. Lemonick. The organization's staff scientists reviewed the text, as did some outside scientists.

One aspects of the book is a bit frustrating. It doesn't provide a list of the 60 chapters anywhere, which would be very helpful in dipping back inside later when you're trying to remember where that chapter was about extreme weather. And there's no index, so you won't find topics that way either. Maybe the publishers didn't want the book to be categorized as "reference" (not that there's anything wrong with that!).

Regardless, the book is a breath of fresh air: Just the facts, efficient and easy to understand. It'll be within arm's reach of my own desk.

Source: Scientific American blog (reviewed by Mark Fischetti, senior editor at Scientific American)

Call for Papers: A special issue on geospatial analysis of volunteered geographic information with Computers, Environment and Urban Systems

Volunteered geographic information (VGI)

Submission

Original papers with a length of 6000-7000 words are welcome. To submit your paper, please follow the <u>journal</u>'s Guide for Authors. We encourage authors to consider the option of supplementary data including raw data, derived data and source codes; we particularly encourage authors to pack your supplementary data in such a manner that interested readers can easily replicate your results. Authors must select "Special Issue" while they reach the "Article Type" step in the submission process, and identify the "geospatial analysis of VGI" special issue in their cover letter. First-time users must register themselves as Author.

Important dates:

Paper submission due: 30 December 2012 Acceptance notification: 30 May 2013

Publication: 30 August 2013 **Editors for the special issue:**

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Global

Weirdness

Drought, Rising Seas, and the Weather of the Future

Climate

Central



Bin Jiang, Department of Technology and Built Environment, Division of Geomatics, University of Gävle, Sweden

<u>Jean-Claude Thill</u>, Department of Geography and Earth Sciences, University of North Carolina at Charlotte, USA

CALL for PAPERS Special Issue "Spatial Data Infrastructures, Cyberinfrastructure, and e-Science for GIScience"

A special issue of ISPRS International Journal of Geo-Information (ISSN 2220-9964).

Deadline for manuscript submissions: 30 September 2012

Recent developments in geospatial and related technologies are having profound impacts on the field of geographic information science. This special issue takes stock of these impacts through contributions from leading GIScientists working at this scientific-technological interface. An overriding goal of this special issue will be to bring much needed clarity to the broadly defined and rapidly evolving areas of SDI, cyberinfrastructure, and e-Science to provide focus and guidance to GIScientists who want to make use of stirring new developments in Information and Communication Technology such as high speed networks, high performance computing, and distributed collaborative environments.



Infrastructure 100: World Cities Edition

KPMG's Global Infrastructure Practice is pleased to present the much-anticipated second edition of the Infrastructure 100. Released at the recent World Cities Summit in Singapore, the Infrastructure 100: World Cities Edition provides insight into the infrastructure projects that make great cities, with a particular focus on the innovations that make them 'Cities of the Future' – places

where people want to live and do business. Includes <u>link to download PDF</u> version of Report.

FIG Publication No. 58: Spatially Enabled Society

Joint publication of FIG-Task Force on Spatially Enabled Society in cooperation with GSDI Association and with the support of Working Group 3 of the PCGIAP.



Book on CD - From Plane Table Topography to Photogrammetry by Abraham Anson

I've had many many people ask me over the years how the USGS made its early-day maps. This month's lead cover feature is a pleasant blast from the past, plane tables and alidades. Few today would dispute the fact that total stations and data collectors are a requirement for topo surveys, but there was something nice about the sense of accomplishment gained from the plane table operator bringing back a map when he returned to the office.

Much respect is due to those "artists" who could see and understand what they were mapping, and they didn't encounter any hiccups with the TIN software. The present-day software is great, but the early versions occasionally allowed contours to cross. Added to this is the fact that the USGS made extensive use of this type of gear first for creating maps, and later for checking aerially-derived maps. The late ASPRS historian and former USGS plane table man, Abe Anson, wrote a eBook about all this that's available for \$15 here. Marc Cheves, PS, Editor, *The American Surveyor*

Assessing the development of Ethiopian national SDI by Dessalegn Obsi Gemeda

A thesis submitted in partial fulfilment of the degree of Master of Science at Wageningen University and Research Centre, The Netherlands

Abstract:

Spatial Data Infrastructure plays significant role for the development of a nation. It contributes to sustainable development of a country through facilitating spatial data sharing and utilization among all levels of stakeholders. Thus, conducting SDI assessment is essential to guide its development, to monitor and improve its quality and to provide evidence of accountability for all stakeholders. Knowledge of the development status of SDI of a country is crucial to increase the accountability and development of spatial data information. In Ethiopia, there are many governmental organizations that produce spatial data to fulfill the need of geo-information in various sectors. However, the overall development status of the SDI in Ethiopia is not well known. The objective of this study is to assess the development and milestones of Ethiopian National Spatial Data Infrastructure (ENSDI).

The assessment of the status of ENSDI is done by using the four multi-view assessment framework approaches; SDI-readiness, Modified state of play, Clearinghouse suitability index and Organizational



approaches. The assessment of the milestones in the development of ENSDI is done using document analysis and interview with key stakeholders. Both assessment of status and milestones of the development of ENSDI involve questionnaire survey, interview and document analysis as data collection tool. Data analysis was done on the four assessment approach.

The result of multi-view assessment shows that, shortage of digital data, lack of open-source data, lack of SDI awareness, and unavailability of environmental dataset policy are the major weak aspects of the ENSDI. Moreover, the technology components and data quality standards of the NSDI are very low. This is mainly due to lack of awareness among stakeholders on ESDI, low technological development, human capital, SDI culture, shortage of digital data and poor coordination of various institution in data production and exchange. On the other hand, clear mission and vision, collaboration with International donors are strong aspects of the NSDI. The major milestones that initiated NSDI development in Ethiopia are the establishment of GIS education, ENRAMED database, National Clearinghouse, GIS Society of Ethiopia and Ethiopian Geospatial Metadata Clearinghouse Node.

The research identifies awareness creation for SDI, increasing ICT technology in the country, developing SDI curriculum in higher education, creation of open source data, converting analogue data to digital data, increasing cooperation of various institution in data sharing and provision, and developing data quality control procedures as the major areas of interest for NSDI secretariat to do.

Keywords: SDI, NSDI, ENSDI, development, assessment, milestones, multi-view assessment framework.

Borderlines blog from the New York Times

Countries are defined by the lines that divide them. But how are those lines decided — and why are some of them so strange? Borderlines explores the stories behind the global map, one line at a time. by Frank Jacobs

Frank Jacobs is a London-based author and blogger. He writes about cartography, but only the interesting bits. His other blog is Strange Maps

Thematic Mapping blog

Terrain mapping with Mapnik

Blog of Ragnvald Larsen, geographer

Geographer working with maps at the Norwegian Directorate for Nature Management. Part of his job is to contribute to development aid projects.

International Society for Digital Earth - May, 2012 Newsletter

Thoughts on the Geospatial industry, Open Standards and Open Source Cameron Shorter's blog

New Zealand - SDI Cookbook Chapter 6 - Government and Industry, moving forward.

Carnival Of The Geospatialists #3 - Musings and Down-Right Cool Things Shared by the Geo Faithful

Open Planet 5, the magazine published for the International gvSIG Conference is now available in electronic format

SDI Magazine

Mother Pelican: A Journal of Sustainable Human Development

The January 2012 issue has been posted:

LiDAR News, Vol 2, No 15 (July 2012)

Think Quarterly - Google's new on-line magazine

Coordinates monthly magazine - PDF (June 2012)

SERVIR-Africa community news

GISuser - GIS and Geospatial Technology News



National Geographic website

The Atlantic Cities website including Maps

Professional Surveyor magazine

The American Surveyor newsletter (July 11)

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Just for Fun!



Amid GPS boom, Paper maps & nostalgia finds a place

Paper maps offer an experience that dead batteries and unreliable service connections cannot. Simpler times are something everyone yearns for. And maybe looking at a map takes you back. The technology is neat, but on a personal level, there's a sense of nostalgia when you look at the paper map. A lot of people are yearning for simpler times.

Source: SeattlePi

Why Americans and Europeans Give Directions Differently

One of the charms of Europe is the irregular geography of its city streets. Meanwhile across the Atlantic many major American cities follow a fairly rigid (albeit intuitive) grid system. The local differences echo the broader approaches to land division there and here. While many boundaries in the Old World conform to the curves of nature, places in the United States generally follow a rectangular system imposed, in large part, by the Public Land Survey.

It stands to reason that these different environments would leave distinct impressions on their respective residents. If the place you live in looks like a map, logic suggests you'll start to discuss it like one. Likewise, if the place you live in has a unique layout, you'll need more precise identifiers to describe it.

That's the idea at the heart of a study set to appear in an upcoming issue of the <u>Journal of Environmental Psychology</u>.

Source: The Atlantic "Cities"

Why Washington DC is more "friendly" to non-owners of cars



In the past decade, the District of Columbia has become an uncommonly great place to live without owning a car.

It was pretty decent before then, to be fair. Between the Metrorail and public bus systems, the city's relatively compact geography, and an unusually high ratio of taxicabs per person (an estimated 12 per 1,000 residents, compared to Chicago's 2.6 or New York's 1.6 per 1,000 residents), car-less D.C. residents have been able to get by fairly well for some time.

Car-sharing giant Zipcar came to town in the early part of the last decade, and living here without a car got even better. The innovative Circulator bus system launched in 2005. Then came roughly 50 miles of new bike lanes and

hundreds of bike racks installed all over the city. The very first bike-sharing system in the U.S. launched in D.C. in 2008, which later expanded to become the largest and most successful such program in the country. The last year alone has seen the app-based Towncar-on-demand service Uber and the park-at-your-destination carsharing start-up Car2Go expand into Washington, too.

The proliferation of transportation alternatives in D.C. has been fantastic for residents who don't necessarily want to rely on a personal vehicle and enjoy having so many choices. Source: The Atlantic "Cities"

BUT SEE James Fallows's take < www.theatlantic.com/technology/archive/2012/07/uber-vs-washington-dc-this-is-insane/259614/ > on the city's taxicab industry's attempt to stymie the app-based Towncar-on-demand service Uber and his update < https://www.theatlantic.com/technology/archive/2012/07/bonanza-of-extra-reading-on-the-uber-in-dc-saga/259671/ >. For an an earlier item explaining why the city's taxicabs are failing to



service the city < http://www.theatlantic.com/magazine/archive/2012/05/why-you-can-8217-t-get-a-taxi/8942/ (all from the Atlantic).

New shape for Queensland

Queensland celebrated 150 years since its border was changed. During the 1850s Queensland's Western Border was a straight line. On the 21st of June 1862 much of North West Queensland became part of the state, in a decision made by surveyor-general AC Gregory.

Source: ABC Radio audio file

The Phantom Island of Brazil

Brazil, also known by the name Hy-Brasil, was a small, mist-shrouded island in the North Atlantic, not too far off Ireland's west coast.

Only, Hy-Brasil never existed. Shown here on a Mercator map dating from 1623, it was one of many phantom islands that haunted marine cartography, sometimes for centuries, before more accurate observational techniques (and ultimately satellite photography) eliminated them all.

Source: Frank Jacobs's Strange Maps blog



Neither the Maya Calendar--nor the World--Ends on December 21, 2012



This year's doomsday angst owes much to public ignorance about pre-Columbian civilizations.

If you have not been paying attention to doomsayers or John Cusack movies, December 21, 2012, is the day that many say the Maya predicted the world would end. <u>Internet</u> stories regularly detail the Maya calendars although displaying the Aztec Stone of the Sun (including one, we regret, that was published on *Scientific American Online*). Looking at the reality of ancient Mesoamerica, it quickly becomes clear that much of the uproar rose out of a confusion of two distinct cultures that lived 500 years apart.

Source: Scientific American

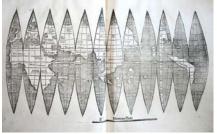
'America's birth certificate' found

Researchers in Germany have unveiled a newly discovered copy of a map known as 'America's birth certificate'. The 500-year-old map by famous cartographer Martin Waldseemuller is the first to name the New World as America. The 38 centimetre by 27.5-centimetre sheet is one of only five known copies of the map by Waldseemueller.

The new map is smaller than the version which is held in Washington DC, US, and dates from 1507 and is divided into 12 segments which taper to a point at each end, which when folded together form a small globe.

Waldseemueller believed that Italian explorer Amerigo Vespucci, rather than Christopher Columbus, was the first European to discover America and named the continent after him.

Source: Science Daily and Geospatial World "Image of the Week"

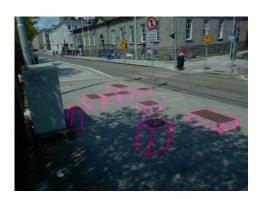


3-D Visualisation - Turning Dublin Into One Big Gymnasium

If M.C. Escher designed a gym, it might look a little something like this. Track-and-field lanes that run up 90-degree walls, a soccer field climbing a staircase, a "hopscotch without hope" that tries to get players entangled in a metal gate – all these surreal exercise markings were on display recently in Dublin, no doubt leading to at least a couple instances of late-night buffoonery that ended up with people smashing into a wall.

Is this "3D Platform" where you're supposed to stand after winning Bronze for surviving this series of traps?

Source: The Atlantic "Cities"





An Atlas for the Blind



One such innovative detour has been the invention of Braille, a raised type enabling those without sight to identify letters on the page, and enjoy reading just like everyone else. Somehow, it never struck me that this translation of the inked word to a tactile script would also be possible for that other information medium of the printed page - maps. In fact, as these images prove, maps composed of raised lines and dots were in use almost as early as the invention of Braille itself. The link between blindness and cartography makes more sense than one might think: spatial awareness - knowing where things are without necessarily seeing them - is a trait overdeveloped in blind people, making them especially sensitive to the geo-distributive aspect of maps.

Source: Frank Jacobs's Strange Maps blog

The Fun Is Real But the Beach Is Not

Urban beaches offer the pleasures of the seaside without the cost of getting there. What makes a beach a beach? In some cases, throwing a little sand on the sidewalk does the trick. In the last couple decades, cities around the world have been creating "urban beaches," temporary or permanent parks that offer the pleasures of the seaside without the cost of getting there. Generally, they feature sand, reclining chairs, and a more casual dress code than your average park. Some have sand-castle contests, dance lessons, cocktails, volleyball, concerts and more. Check out these seven urban beaches from around the world.

Source: The Atlantic "Cities"

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Training Opportunities

"Metadata and Spatial Data Infrastructures" Full Day Workshop - Canberra, ACT

Workshop goals:

- Discuss management of SDI and demonstrate use of metadata in the data catalogues that support spatial data infrastructures
- Presentations on the use and application of metadata in small and large organisations
- Review metadata standards
- Demonstration by vendors of SDI and Metadata software, and how they meet ISO / ANZLIC standards and integrate with state and national spatial data catalogues

Date: Thursday, 16 August 2012

Time: 9.00am to 4:45pm

Venue: Canberra Institute of Technology (CIT)

Cost: SSSI Member / Alliance Rate: \$A50.00, Non-member: \$A80.00

Registration: http://www.sssi.org.au/Events/Metadata-and-Spatial-Data-Infrastructure/eid/462.html

Surveying & Spatial Sciences Insitute (SSSI) NSW & ACT Chapters

3D Laser Mapping Launches Australian Training Programm 22-24th August 2012

Mantra on Little Bourke Conference Centre, Melbourne, Australia

Announcing the Terrasolid User Conference for new and existing users of Terrasolid Software.

Attendees are required to provide their own laptop preferably with 4GB RAM and Windows 64 bit version and 20GB of available hard drive space. It is recommended that MicroStation V8, V8i, V8i SS3 or Bentley Map PowerView is installed and licensed, although installations and licenses for MicroStation V8i and Map PowerView will be available where needed. Installations and licenses of the latest Terrasolid software will be issued to all attendees.

The training fee is \$175 AUD/day/attendee or \$450 AUD/3 days/attendee.

A discount of 10% will be applied for 3 or more attendees from the same company.

The above costs include lunch on each day and the social event on Day 2.



Accomodation must be arranged by each attendee.

If you would like to attend the event, please complete the booking form below and send it back to us via email at info@3dlasermapping.com

This e-mail address is being protected from spambots. You need JavaScript enabled to view it. If you have any questions, please contact Iain Bramwell, General Manager 3D Laser Mapping in Perth on +61 (08) 9261 7703.

GIS Class at Kruger National Park

Juniper GIS is offering a five and a-half day conservation oriented GIS class at the South Africa Wildlife College, near Kruger National Park, **October 28 - November 3, 2012**. The cost is \$575 USD, including lodging and all meals if you sign up before September 1. This class is confirmed, but there are still a few seats available.

<u>Indepth Research Services (IRES) e August - September 2012 Training workshops</u> to be conducted in Nairobi, Kenya.

The training courses are mapped against current industry Standards, and are constantly updated and reviewed to reflect the latest industry developments and techniques.

- Use of GIS and Remote Sensing in Food Security Analysis (30th July 3rd August 2012)
- Data Management, Analysis, and Graphics using STATA(21st 24th August 2012)
- Information Systems and Social Media for Disaster and Humanitarian Relief (27th 31st August 2012)
- Use of GIS and Remote Sensing in Disaster Risk Management (10th 14th September 2012)
- Data Management and Analysis for Monitoring and Evaluation (M & E) in Development Programmes (17th 21st September 2012)
- Use of GIS and Remote Sensing in Climate Change Analysis and Adaption (24th 28th September 2012)
- Processing & Analysis of Data for Surveys/Assessments (Methodology and Software) (1st 5th October 2012)

To participate in any of these workshops, register online.

Course Spotlight: Master of Spatial Information Science

The University of Melbourne Course Spotlight: Master of Spatial Information Science

Spatial information is an essential and indispensable part of any economy's infrastructure. It is needed in all walks of life and on many scales, with applications in land tenure systems, environmental modelling, food production, disaster management, climate change modelling, engineering, architecture and urban planning. Current industry shortfalls in spatial information practitioners combined with a growing demand in Australia and internationally, ensure graduates a range of well-paid job opportunities.

Find out more about the Master of Spatial Information Science, as well as our scholarship opportunities.

Learn to Use HTML5 with Esri ArcGIS

Get a brief introduction to HTML5 and learn how to use HTML5 technologies with the ArcGIS API for JavaScript and ArcGIS Online.

Source: GIS User and ESRI

Large-Scale 3D Laser Scanning: The Complete Process

Don't worry if you missed the live webinar, "Large-Scale 3D Laser Scanning: The Complete Process". It's now available online for you to watch any time!

e-Learning for the Open Geospatial Community

We are pleased to inform that the course repository for the ELOGeo (An e-Learning Framework for Using Geospatial Open Data, Open Source and Open Standards) project is ready.

ELOGeo is a JISC-funded project based at the Centre for Geospatial Science, the University of Nottingham in partnership with the Mimas Centre of Excellence at the University of Manchester. ELOGeo main collaborators are Open Source Geospatial Foundation, Open Geospatial Consortium (OGC), Ordnance Survey, Open Nottingham, International Cartographic Association (ICA) and gvSIG Association.

More details of ELOGeo.

gvSIG Training platform opens with a first course for gvSIG users

The gvSIG Association tries to increase its learning offer through online courses, publishing a new learning platform: gvSIG Training. In parallel, the gvSIG Association launches its official certification program.



It's a step forward in the training processes in free geomatic, creating an online training centre, that contributes to the spreading as well as to the sustainability of the gvSIG project. Training without geographic barriers, and with the best professionals.

In this platform, you will find courses in several languages to learn to use the different applications of the gvSIG project, in a user level as well as in a developer one. The courses list will be extended gradually with different gvSIG and free geomatic specialization courses (databases, map servers...), with the objective of covering the different needs of the Community.

The courses offered by gvSIG Training are part of the training routes that are required to obtain the gvSIG official certification.

For further information:

- gvSIG Training: < http://gvsig-training.com/>
- gvSIG Certifications: http://www.gvsig.com/services/certification

GIS Courses by Distance Education

NSW Riverina Tafe

The courses listed below are all full Geographic Information Systems courses which can be studied over a number of semesters by distance study pathways.

Certificate III in Spatial Information Services (GIS)

Certificate IV in Spatial Information Services (GIS)

Diploma of Spatial Information Services (GIS)

Source: NSW River

Participatory Spatial Information Management and Communication Training Kit now available on-line

Co-published by CTA and IFAD in English and Spanish, the Training Kit is a unique product that can be tailored to meet user needs, ensuring that employees get the best training available on Participatory Spatial Information Management and Communication.

The online version was launched at the beginning of March 2011. The DVD version was launched in December 2010. The Training Kit contains 15 Modules, each presented through a series of Units. Modules cover the entire spectrum of good developmental practice – from mobilising communities to developing a communication strategy based on the outcome of participatory mapping activities. The Modules touch on topics such as the fundamentals of training, ethics and community groundwork and processes as well as the more technical low-, mid- and high-tech participatory mapping methods.

Users decide what they want to cover and when. The product has been developed using the Multimedia Training Kit (MMTK) approach – which allows you to pick and choose those Modules, Units and components that best suit your particular requirements and develop a curriculum to suit your specific needs.

Publishers: Technical Centre for Agricultural and Rural Co-operation ACP-EU (CTA), Wageningen, The Netherlands and International Fund for Agricultural Development (IFAD), Rome, Italy

Source: The Centre for Agricultural and Rural Cooperation

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Funding Opportunities, Awards, Grants

APN 2012 Calls for Proposals

The Asia-Pacific Network for Global Change (APN) has announced a call for proposals for funding from April 2013. The proposals can be submitted under two separate programmes:

- 1) regional global change research (ARCP Programme); and
- 2) scientific capacity development (CAPaBLE Programme).

Deadline for Advisory Service (Voluntary). Submission of Letter of Intent: Sunday 1 July 2012, midnight (24:00) – Japanese Standard Time

Deadline for Stage 1. Submission of Summary Proposal (Compulsory, template for ARCP; for CAPaBLE): Sunday 12 August 2012, midnight (24:00) – Japanese Standard Time

52°North 2012 Student Innovation Prize Competition

The prize awards an innovation which best demonstrates/describes the practical application of new technology/ideas in the field of Geoinformatics. Key factors are innovative quality, feasibility, practical use and market relevance. The innovation prize aims to stimulate students and student entrepreneurs to generate and Back to contents



implement innovative ideas and concepts in the geospatial domain.

This year's 52°North Student Innovation Prize for Geoinformatics is endowed with 5000,- EUR.

Applicants can be students, student entrepreneurs, student research teams. Each individual must be enrolled as a BSc, an MSc or a Diploma student and must NOT own a degree in either geoinformatics, informatics or a related field.

Application deadline: August 31, 2012.

The innovation prize is sponsored by 52°North GmbH, con terra GmbH, Esri Deutschland GmbH, the Institute for Geoinformatics at the University of Muenster and the Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente. These institutions work together under the banner of the 52°North Open Source Initiative to promote research and education in the field of Geoinformatics.

Ideas Challenge

The Ideas Challenge is at the core of the GMES Masters competition. It invites students, entrepreneurs, start-up companies and SMEs to submit their ideas for an innovative commercial use of GMES to a secure online database on the GMES Masters website. The best idea for a commercially viable business idea using GMES data will be rewarded. The winner will be rewarded with a cash prize of EUR 10,000 as well as the chance to get his idea further developed in one of the six ESA Business Incubation Centres (BICs). The incubation package has a value of up to EUR 60,000.

ESA App Challenge

The European Space Agency (ESA) will award the ESA App Challenge to the best application idea for the usage of GMES on mobile phones. Proposals shall address one or more GMES main thematic areas (land, marine environment, atmosphere, climate change, emergency management). ESA is looking for ideas that can be implemented quickly into a profitable business. The application should consist of a base app containing info and news on GMES, as well as one or more specific content modules that provide relevant location-based data to users in real time. The winner will be considered for support by one of the six European Space Agency's Business Incubation Centres (ESA BICs) across Europe (value up to EUR 60,000).

European Space Imaging High-Res Challenge

European Space Imaging (EUSI) is Europe's leading provider of Very High-Resolution (VHR) satellite data. EUSI will award the best application idea using the most advanced VHR satellite data. Application ideas which are easily implementable, sustainable, cut costs and create efficiencies are of high interest. Participants are required to submit detailed application ideas including business concepts. The winner will be awarded a data package of EUSI satellite data worth up to EUR 20,000 for use in further developing the winning application.

DLR Environmental Challenge

DLR is looking for new applications in Earth observation, especially proposals addressing the mapping of the environment and climate. Ideas for using Earth observation to manage sustainable supplies of energy are also welcome. In addition to any kind of non-satellite geoinformation, proposals should be based on existing or imminent Earth observation satellite data that is available either for free or under commercial terms. The product or service generated from the idea should support either professionals from organisations and companies in environmental assessment, or the general public and consumer-oriented markets. Both regional and global applications and services are possible. Innovative ways to link the service with users are especially encouraged. The ideas should also describe a realistic scenario for their implementation involving either the general public or commercial benefits. The winner(s) will receive a voucher for a workshop or initial coaching according to what further realisation of the idea requires.

Best Service Challenge

The Best Service Challenge invites service providers to upload profiles of their existing services within the main thematic areas of GMES to the GMES Masters competition website. The Best Service Challenge aims at increasing the awareness of existing Earth Monitoring Services and their benefits to European citizens. The winner of the Best Service Challenge will benefit from a substantial satellite data quota made available with financial support by the European Commission.

GMES Masters 2012 call for proposals

The GMES Masters rewards on an annual basis the best ideas for services, business cases and applications based on GMES data, with the aim to foster product development and entrepreneurship in Europe. Initiated by the European Space Agency (ESA), the Bavarian Ministry of Economy, the German Aerospace Center (DLR)



and T-Systems, and supported by the European Commission and European Space Imaging GmbH, the GMES Masters 2012 will call for proposals between 1 June and 16 September 2012 in six categories.

T-Systems Cloud Computing Challenge

T-Systems will award the prize for its Cloud Computing Challenge to the best GMES application or service idea that will make use of the cloud computing model Infrastructure-as-a-Service (IaaS) to provide Earth observation data on demand via user-oriented web portal or mobile devices. T-Systems will assist the winner in getting the awarded project off the ground. They will support the winner to realise an innovation project, which could lead to a long-term partnership.

Challenge to spur the geospatial industry

The Singapore Land Authority has launched OneMap Challenge that seeks to promote the development of innovative map-based desktop and mobile applications by businesses and the community.

The OneMap Challenge provides a platform for application developers to showcase their creativity through the apps they develop to an increasingly tech-savvy population and enterprises, including those represented by the Association of Small and Medium Enterprises (ASME) which is one of the competition promotion partners. The Challenge also aims to facilitate collaborations between potential business partners for creating location-based apps that are useful for business enterprises and the general community.

With two top prizes of \$20,000 cash each and other attractive prizes up for grabs, the OneMap Challenge is divided into two categories – Web Applications for applications that run on web browsers and Mobile Applications for those that run on smart phones, tablets and other portable devices.

Visit http://www.sla.gov.sg/OneMapChallenge to learn more about OneMap Challenge and check out the OneMap Facebook page at www.facebook.com/OneMap.

Source: Geospatial World and SLA press release

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Employment Opportunities

'Surveyors are getting lucrative offers in Vietnam'

Viet Nam government is investing approximately USD 60 million in cadastral mapping. Prof. Dr. Dang Hung Vo explains what it means for surveyors.

Source: Geospatial Wworld

GIS Job Board Launches New Website: www.gisjobboard.com

New Site Provides Employers and Job Seekers Tools to Post and Search Jobs and Resumes in the GIS and Geospatial Disciplines

GIS Job Board has launched a new website specifically dedicated to GIS and other geospatial disciplines. The new site makes it simple for employers and job seekers to post and search for jobs and resumes. The site was created to serve the growing needs of the GIS community and help with recruiting and job seeking efforts.

Visitors also have the option to view the site in a different language if they choose, making it easier for them to have access to the content

Registered users can receive jobs or resumes by email. They can also flag jobs and resumes as well as save searches, setup resume alerts, and save resumes and jobs. Users have the capability of private messaging other users in case they ever want to communicate with someone.

For more information about GIS Job Board, please visit their website at www.gisjobboard.com



Conference Proceedings



FIG Working Week 2012 Rome May 6 – 10, 2012 Technical Program and Proceedings

GSDI 13 QUEBEC CONFERENCE A HUGE SUCCESS

May 14 – 7. 2012

A limited-edition book of selected papers "Spatially Enabling Government, Industry and Citizens: Research and Development Perspectives" was provided free of charge to all conference registrants. Abstracts and Papers from the Conference may also be downloaded from the GSDI Association's website.

7th International Conference on 3D Geoinformation, 16-17 May 2012, Québec, Canada

Report on GI Science and Remote Sensing for Climate Change Studies Workshop

Kumaun University SSJ Campus Almora, India from 1-3 March 2012.

Malaysia Geospatial Forum 2012

Day 1 (March 6), Day 2 (March 7), Plenary showcases g-tech in nation building

Possibility or a dream? Spatially Enabled Geovernment and Societies

Geospatial experts from different background and part of the world share their views on Spatially Enabled Government and Society (SEGS) at UNRCC-PCGIAP International Symposium organized by Department of Surveying and Mapping Malaysia during 15 – 16 February at Kuala Lumpur, Malaysia. They highlight pertinent issues, challenges and suggest way forward to achieve the goal

Timor Leste (East Timor) – environmental data review workshop

The 6th of March as part of the Norwegian Petroleum Assistance Program together with DNMA I contributed to a workshop to be held at the Arbiru Hotel in Dili, Timor Leste. The intended outcome was to contribute to a process for establishing better handling of environmental data. The workshop was opened by his Excellency Sr. Abilio de Deus de Jesus Lima, State Secretary for the Environment.

Iraq Spatial Data Infrastructure workshop completed

In mid-February 2012, over 25 persons representing 13 national and regional government organizations assembled in Erbil in the north of Iraq for an intensive three-day exchange to explore concepts and ideas towards the establishment of a National Spatial Data Infrastructure for Iraq.

The workshop was conducted under the auspices of the Prime Minister Advisory Committee (PMAC), and supported by the United States Geologic Survey (USGS).

Staff from the GPC Group facilitated the workshop, bringing experience and insights regarding the implementation of GIS federations and Spatial Data Infrastructure (SDI) in other countries and regions around the world.

Open Planet 5, the magazine published for the <u>International gvSIG Conference</u> is now available in electronic format

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Conferences, Events

For upcoming events of global or major international interest, please visit the <u>upcoming conference list</u> on the GSDI website – as this conference list will be reserved for conferences within or with specific interest to the Asia Pacific Region.

The editors welcome news of conferences & events from the newsletter subscribers



Call for Expression of Interest to host AARSE 2014 and future Conferences

Call for Expression of Interest to host the 10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE) in October 2014 and future Conferences. The 9th conference will be held in Morocco in October 2012.

Date	Location	Event		
August 2012				
6 – 8 August	Melbourne, Australia	GITA 2012 – GITA 17th Annual Geospatial Solutions Conference "From Fundamentals to the Future – Managing Assets Spatially" Important dates		
		30 March 2012 Abstract submission closes		
		late April 2012 Authors notified of initial acceptance or otherwise; successful authors invited to submit a full paper		
		5 March 2012 Registration opens		
		31 May 2012 Deadline for authors to register for the meeting		
		Contact		
25 August – 1 September	Melbourne, Australia	XXII International Society for Photogrammetry & Remote Sensing Congress Email: isprs2012@icms.com.au		
29 – 31 August	Auckland,	GeoCart'2012		
"NEW"	New Zealand	The sixth National Cartographic Conference GeoCart'2012 and the second ICA Regional Symposium on Cartography for Australasia and Oceania will convene in Auckland, 29-31 August 2012. It will be held at the outstanding facilities of The University of Auckland in the City of Sails - Auckland, New Zealand.		
September				
2012				
2-4 September	Wellington, New Zealand	The 4th Digital Earth Summit focusing on "Natural Disasters" Call for Papers (Deadline for abstracts submission:15 June 2012)		
4-5 September		FOURTH OPEN SOURCE GIS CONFERENCE - OSGIS 2012 Nottingham Geospatial Institute, University of Nottingham OSGIS 2012		
6-8 September	Tokyo, Japan	2012 International Conference for OpenStreetMap (OSM) State of the Map 2012 (SoTM12)		
9-14 September	Ticino, Switzerland	The NCCR Climate Summer School, 2012 The NCCR Climate, Switzerland's Centre of Excellence in Climate and Climate Impact Research, invites young scientists to join leading climate researchers in a scenic southern Swiss Alpine setting on the occasion of the 11th International NCCR Climate Summer School 2012. Deadline for applications: closed. Successful applicants will be notified in February 2012. Detailed information and the application form are available at http://www.nccr-climate.unibe.ch/summer_school/2012/ . Contact: University of Bern, NCCR Climate Management Centre, Zähringerstrasse 25, CH-3012 Bern, Switzerland, mailto: nccr-climate@oeschger.unibe.ch Telephone +41 31 631 31 45, Telefax +41 31 631 43 38.		
17–9 September	Hanoi, Vietnam	11th Asia Geospatial Forum Abstract submission deadline 16 July, 2012 Contact		
18-21	Kashi, Xinjiang,	The International Symposium on Earth Observation for Arid		
September	China	and Semi-Arid Environments (ISEO 2012) with the theme of "Earth Observation Illuminating Central Asia".		
20-1 September	Ulaanbaatar, Mongolia	Asia GIS 2012 International Conference Abstract submission deadline: July 16, 2012		



October 2012				
2-4 October –	Gauteng,	Call for papers for the peer-reviewed academic track of GISSA		
2-4 October –	South Africa	Ukubuzana 2012		
	South Airica	Conference theme: 'An African Dialogue: Geomatics for		
		Infrastructure Development and Service Delivery		
		Authors are invited to submit full-text academic papers, approximately 5000 words in length and relevant to the themes		
		subject matter of the conference, for the peer-reviewed academic		
		track at the GISSA Ukubuzana 2012 conference.		
		Important dates		
		• 30 June 2012: Submission of full papers for peer-review for		
		academic track		
		13 August 2012: Notification of acceptance of papers for		
		academic track		
		• 10 September 2012: Submission of revised peer-reviewed full		
		papers for academic track		
		• 17 September 2012: Registration of presenters of accepted		
		papers for academic track		
		• 25 September 2012: Submission of PowerPoint presentations for conference CD		
		• 2-4 October 2012: GISSA Ukubuzana 2012 in Kempton Park,		
		Gauteng, South Africa		
		Instructions to authors of peer-reviewed academic papers.		
		Conference brochure (1 MB pdf)		
16-20 October	Ho Chi Minh City,	GIS-IDEAS 2012 International Conference, 2012		
	Vietnam	The International Conference on GeoInformatics for Spatial-		
"NEW"		Infrastructure Development in Earth & Allied Sciences (GIS-IDEAS)		
		is jointly organized by Japan-Vietnam Geoinformatics Consortium		
		(JVGC), Ho Chi Minh City University of Technology (HCMUT) and		
		Ho Chi Minh City Institute of Resources Geography (HCMIRG), and		
		will be held at HCMUT.		
24-26 October	Beijing	The 4th International Conference on Remote Sensing in		
		Archaeology (ICRSA4) with the theme: "New Era of Earth		
20 Octobor	El ladida	Observation on Natural and Cultural Heritage".		
29 October – 2 November	El Jadida, Morocco	10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE)		
29 October –	El Jadida,	AARSE 2012 Conference: Call for Side-event Workshops		
2 November	Morocco	As you might be aware the AARSE 2012 Conference will take place		
2 NOVCIIIDCI		from October 29 to November 2, 2012 in El Jadida, Morocco. This		
		9th holding of the AARSE Conference represents a major event in		
		the long series of internationally recognized AARSE conferences.		
		Note: Please be aware that the following policy of the AARSE		
		Executive Council on workshops organized by other parties applies:		
		- Organizers of a pre-/concurrent-/post-conference workshop must		
		pay a fixed amount of €3000 to cover expenses for projector,		
		venue, writing materials and microphone. Anything extra is to be		
		borne by the workshop organizer. However, organizers of a pre-		
		/concurrent-/post-conference workshop who pay the conference		
		registration fee for 8 of their participants, 2 months prior to the		
		conference date, pay a fixed amount of €1500 to cover costs of projector, venue, writing materials and microphone.		
		Abstract submission CLOSED 30 April 2012		
		AARSE AWARDS - All presenters are invited and encouraged to		
		enter the AARSE award-winning competition for best paper		
		presentation and best poster. IEEE GRSS/AARSE TRAVEL FELLOWSHIPS - To support travel		
		costs, accommodation and registration fees to attend conferences		
	1	Costs, accommodation and registration rees to attend conferences		



29 October – 2 November "NEW"	Bangkok, Thailand	of the two societies in the field of Earth observation by remote sensing. The beneficiaries of these conference fellowships shall be African scientists or students who have their paper accepted for oral or poster presentation at the AARSE biennial conference. 19th United Nations Regional Cartographic Conference for Asia and the Pacific The primary objective of the Conference is to provide a regional forum where government officials, scientists and experts from Asia and the Pacific and other regions meet to address the common needs, problems and experiences in the interrelated fields of surveying, geography, cartography and mapping, hydrography, remote sensing, land/sea and geographical information systems and environmental protection, including educational and training aspects, scientific and technological requirements, implementation	
November		issues and benefits.	
2012			
20-2 November	Canberra, Australia	spatial@gov® Conference and Exhibition 2012 Call for Papers - Deadline for Submissions: 5pm Tuesday 7th August 2012 - Contact	
28-30 November "NEW"	Valencia, Spain	Bth International gvSIG Conference "Making the Future: Technology, Solidarity and Business". Call for papers is now open. As of today communication proposals can be sent to the email address; they will be evaluated by the scientific committee as to their inclusion in the conference program. There are two types of communication: paper or poster. Information regarding to regulations on communication presentations can be found in the Communications section. Abstracts will be accepted until September 28th. Organizations interested in collaborating in the event can find information in the section: How to collaborate.	
February 2013			
11-3 February	Denver, USA	International LiDAR Mapping Forum (ILMF) Call for Papers and invites any interested parties to submit their abstracts by September 28, 2012 online. Contact	
April 2013			
22-26 April	Beijing, China 35th International Symposium in Remote Stretting of Environment International Symposium in Remote Stretting of Environment International Stretting International Internat	35th International Symposium on Remote Sensing of Environment (ISRSE35) ABSTRACT SUBMISSION Interested contributors should submit a summary of the paper they propose for presentation. • All submissions should be in English. • Abstracts should reach the Technical Programme Committee no later than 30 September 2012. • Notification of paper acceptance will be made by 10 December 2012. • Each presenting author will be required to register and pay by the author registration deadline on Monday, 25 February 2013, to ensure their abstract is included in the final programme. • Please submit abstracts through the Abstract Submission link at http://www.isrse35.org • All abstracts must be submitted online. IMPORTANT DATES: Registration Opens: Monday, 10 September 2012 Abstract Submission Deadline: Sunday, 30 September 2012 Workshop Submission Deadline: Tuesday, 30 October 2012 Acceptance Notification Monday, 10 December 2012	



		Early-bird Registration Deadline: Friday, 25 January 2013 Final Paper Deadline: Friday, 15 February 2013 Author Registration Deadline: Monday, 25 February 2013 Standard Registration Deadline Monday, 15 April 2013 Contact detail: ISRSE35 Secretariat E-Mail: isrse35@ceode.ac.cn Tel: +86 10 8217 8969 Fax: +86 10 8217 8968 Website: www.isrse35.org Address: Center for Earth Observation and Digital Earth, CAS No. 9 Dengzhuang South Road, Haidian District, Beijing 100094, P.R. China		
May 2013				
13-6 May "NEW"	Rotterdam, The Netherlands	Geospatial World Forum is a conference cum exhibition which has always invoked the geospatial community with its relevant and thought-provoking themes. This year, the conference which is		
		scheduled from 13-16 May 2013 at Beurs World Trade Center, Rotterdam, The Netherlands aims at increasing our understanding of the concept of Monetising the value added by geospatial industry so far with its theme "Monetising Geospatial Value and Practices". Please submit your abstracts. For queries.		
		Important Dates -		
		Abstract Submission	15 October 2012	
		Abstract Acceptance/Non Acceptance Notification	04 November 2012	
		Speaker Registration	15 December 2012	
August 2013				
26-29 August	Kuching, Sarawak, Malaysia	The 8th International Symposium on Digital Earth (ISDE8) with the theme of "Transforming Knowledge into Sustainable Practice" will be held in Kuching, Sarawak, Malaysia.		
2014				
	Malaysia	Malaysia will be hosting the (International Federation of Surveyors) FIG Congress in 2014. The decision was taken at the recently concluded FIG Congress 2010 in Sydney, Australia.		

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