Spatial Data Infrastructure
Asia & the Pacific Newsletter

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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.

To subscribe to SDI-AP use this link. Back issues of the newsletter are at the GSDI website.
You can also sign up for GSDI News List to receive alerts of special news and announcements as well as notification of new issues of the SDI-AP newsletter. To subscribe and access archives of thematic or regional discussion lists please visit.

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Message from the editors

Welcome to the November 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 send us the materials by the 25th of the each month for your contribution to be included in the next newsletter.

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

Contributions

Thank you to the following people and organisations for their contributions to this issue: Baek Wonkug for news feeds, Sean Lin 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.

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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.

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SDI News, Links, Papers, Presentations

Goodchild Frames the Future of a Digital Earth

Dr. Michael Goodchild gave the keynote address this morning at URISA's 50th annual conference in Portland. With the topic of the future of Digital Earth, Goodchild started by looking back at Al Gore's speech of Jan. 31, 1998, which first presented the term. That visionary speech about a virtual reality where we can go to a museum and zoom down to layers of information, going forward and back in time was very compelling, a full seven years before Google Earth was launched. It's useful to go back to that point as it framed the future of what we do, and provides a meaningful check of where we are as an industry.
Source: Sensors & Systems

SDI Cookbook update

The SDI Cookbook, in its wiki version, now has an updated Chapter 10 to reflect the latest slate of standards and popular version numbers. We seek contributing editors for the other Chapters to also bring them up-to-date. About three months prior to the next GSDI Conference we will seek to affix a date and snapshot the Cookbook into a "SDI Cookbook 2013" PDF version. By saving a PDF and giving it a date of publication, it will clarify the reference and citation of the document and provide a time context.
If you are interested in helping update any of the chapters, please contact Douglas Nebert.

Sydney Opera House to be scanned for future generations

The Sydney Opera House is to be digitally mapped for posterity by a Scottish team.
The distinct Australian building will become the fourth international site to be tackled as part of the Scottish Ten project which will eventually cover five Scottish world heritage sites and five in other parts of the world.
…
The project brings together Historic Scotland and experts in 3D scanning from Glasgow School of Art's Digital Design Studio, as well as California-based digital heritage organisation CyArk.
Source: Scots TV

Big data to create 4.4 million jobs by 2015

In the next three years, big data is expected to create 4.4 million IT jobs globally, of which 1.9 million will be in the US, but there is not enough talent in the industry, according to a study by research and analyst firm Gartner.
Global IT spending is forecasted to surpass USD 3.7 trillion in 2013, a 3.8 per cent increase from the 2012 projected spending of USD 3.6 trillion, according to the study. Big data is a collection of large and complex data which is difficult to process using on-hand database management tools.
Source: Geospatial World Weekly

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This month's "Spotlight" feature is from the CSDILA Research Fellow Serryn Eagleson (and the newsletter's Editor) who is also the Manager of the AURIN and ANDS projects.

AURIN & ANDS – North West Metropolitan Region of Melbourne Data Access, Integration and Interrogation and Demonstrator Projects

Background

The purpose of this project is to facilitate access to a myriad of data sets for the Melbourne North West corridor. This data test bed will provide access to a number of datasets to researchers via the AURIN portal. Such unprecedented data access will enable world-class research that will be focused toward addressing the key policy issues in the North West region of Melbourne, as identified by the *North and West Metropolitan Regional Management Forum*. The project is

AURIN & ANDS
NORTH WEST METROPOLITAN REGION OF MELBOURNE DATA ACCESS, INTEGRATION AND INTERROGATION AND DEMONSTRATOR PROJECTS

to be conducted through the Centre for Spatial Data Infrastructure and Land Administration (**CSDILA**) at the University of Melbourne and involves three faculties across the University of Melbourne. The aim of the project is to demonstrate the benefit of providing open access of government datasets to researchers, planners and policy makers **i**n dealing with problems of space, place, and liveability.

The value of the project will be demonstrated through four demonstrator projects which cover four of the most pressing issues facing the North West Melbourne Region they are: built environment and health, housing affordability, economic productivity, and transport and sustainability. The outcomes of each demonstrator project are described below:

Demonstrator 1: Walkability Demonstrator Outcomes

Production of agent based pedestrian catchment modeller delivered via web based mapping tool. Includes scenario testing functionality delivered via a graphical user interface. Static outputs from modelling using "Ped-Catch" tool within the Arden MacAulay and Melton areas, to assess relationships between neighbourhood walkability, railway stations and school sites. These dynamic and static products will be delivered via the AURIN portal to government stakeholders. Reporting and academic publications will conclude findings from the static and dynamic outputs as well as the process of delivery via the AURIN portal.

Demonstrator 2: Employment Demonstrator Outcomes

Production of gravity and cluster method based web mapping tool. This tool will use gravity and clustering methodologies to understand the formation of overall sector-specific job clusters. Data will be drawn from the ABS journey to work and Department of Transport (Victoria). It will provide an evidence-based data source to better understand clusters, commuter and firm response to clustering policies, and ultimately clustering dynamics (commute changes and job growth. Outcomes from this project will be made available to stakeholders in State government and available via the AURIN portal.

Demonstrator 3: Housing Affordability Demonstrator Outcomes

Production dynamic web mapping application aimed at generating a Residential Development Potential Index (RDPI) for the North West Melbourne Region. Tools developed for further reporting on this RDPI will include reporting and analysis outcomes. Analysis tools include: econometric, land as a function of housing affordability, urban intensification, housing development, change of use, spatial analysis and analysis of development approvals.

Demonstrator 4: Health Demonstrator Outcomes

Production of a dynamic ecological web mapping tool to combine diabetes and disadvantage indicators providing "heat map" of concentrations of combined need. The tool will compare the outputs from first tool to the

distribution of diabetes and primary health care services. These tools will be made available via the AURIN portal and the metadata made available via the RDA. The tool aims to identify areas of particular vulnerability and combine these outputs with social and physical infrastructure data based on CASE-D Study data. Reporting and academic outputs will conclude the program which aims to highlight the importance of data integration in interrogating any apparent associations between data sets. These results will be presented to Medicare Locals, scientific conferences and other key stakeholder groups. All outputs will be made available via the AURIN portal.

Figure 1. The structure of the data integration project
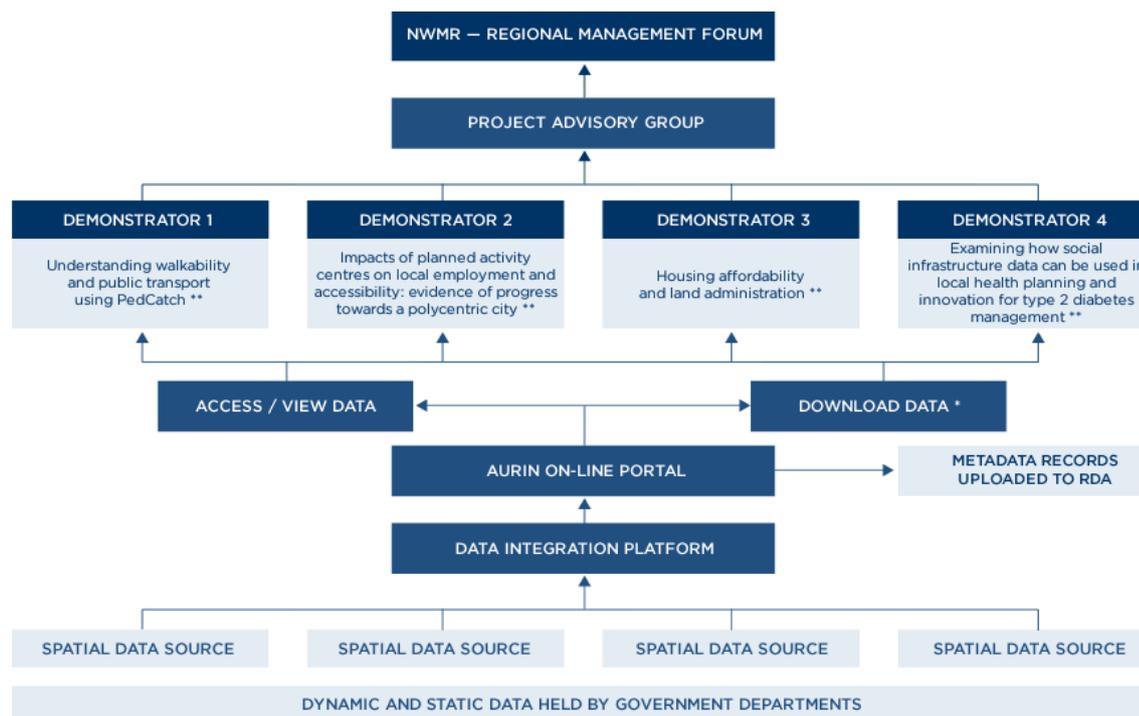
The project Team is hosting a Blog which contains the latest information related to the project. http://blogs.unimelb.edu.au/aurinands/

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

GIS Tools, Software, Data

Superstorm Sandy Seen In a Beautiful Map of Pure Wind

These ethereal overheads of the United States as it welcomed Hurricane Sandy at 10:15 p.m. Monday show surface-wind circulation and speeds, with brighter whites indication faster gusts. Yes, that is the eye of the storm below Philadelphia, about two hours after it made landfall near Atlantic City and began what will probably be a record-setting marathon of mayhem, flooding New York's train system and shutting down governments and schools for the second day in a row.
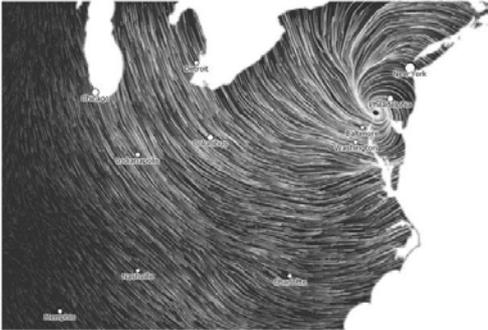
The map was programmed by a team at HINT.FM, who update it with hourly data readings from the National Digital Forecast Database. They seem to be boosters for wind power, writing: "An invisible, ancient source of energy surrounds us—energy that powered the first explorations of the world, and that may be a key to the future. This map shows you the delicate tracery of wind flowing over the US."
Source: The Atlantic "Cities" Maps

The 2011 Report That Predicted New York's Subway Flooding Disaster

Last fall, as part of a massive report on climate change in New York, a research team led by Klaus Jacob of Columbia University drafted a case study that estimated the effects of a 100-year storm on the city's transportation infrastructure. Considering MTA Chairman Joseph Lhota's comments today that Hurricane Sandy's impact on the subway was "worse than the worst case scenario," it seems pretty safe to put Sandy in the 100-year category. In that case, assuming the rest of the report holds true, the subway system could be looking at a recovery time of several weeks, with residual effects lasting for months and years.

The researchers modeled a potential 100-year storm that consisted of either a category 1 or 2 hurricane hitting nearby, or a severe nor'easter that coincided with high tide. (As we know now, Sandy was a hybrid of all three events.) The models predicted complete flooding of several tunnels after such an event, including all the tunnels in the East River:
Source: The Atlantic "Cities"

Antarctica like you've never seen it before
Source: LocalWiki.org

New flood guide for Australia

An agreement has been signed between Geoscience Australia and Engineers Australia to complete a revision of the Australian Rainfall and Runoff guide. The agreement forms part of a four-year programme to increase the quality, consistency and accessibility of flood risk information in response to the Natural Disaster Insurance Review.
Source: PS News and Geospatial World Weekly

Dangermond's GIS Pro Closing Keynote Presents Professional Challenge and Opportunity
Written By Matt Ball

Jack Dangermond, founder and president of Esri, gave the closing keynote of the Urban and Regional Information System Association (URISA) GIS Pro Conference in Portland today(October 4). Having attended the event since 1968, he shared how the association shaped his thinking and the creation of GIS. The first 50 years of URISA have been about creating a forum for sharing ideas, learning and building friendships. The organization has been an important place where GIS has defined itself. It has also supported many interests, nurtured ideas, and where some of those ideas have died.

It has been an association that evolved over different generations of technology. When we started it was the mainframe world of handmade software. Our field radically expanded when it became more accessible with workstations and desktops. Our users have gone up in order of magnitude with every stage. Now it's about to change radically, and what does that mean for the association?

GIS is so compelling now because maps communicate; they integrate and create a means for collaboration; with spatial analysis we create understanding; geodesign promises a better future; and new technology is extending GIS into a platform accessible broadly on any device. These functions are what's needed and wanted, because we require greater understanding and efficiency. We are living way beyond our means on our

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planet, where we are over the line in our impact on the world. GIS provides a kernel for making the world a better place.

GIS is leading to geodesign where we integrate science and design with the conscious creation of the future. We are all designers of the future, where it's not about the data but about bringing data together to understand. We design strategies, businesses use location and create designs for decision making. Geodesign is both a new and old field, where we look at different alternatives for decision making. The more we formalize this frontier, the more our data will leverage what's needed and wanted to create a sustainable world.

The groundings coming from URISA laid down a fabric of understanding. It was the place for early GIS projects and systems to be presented, where we came to understand planning and systems. We worked through user needs and design process. We understood what people need and want, what data we need to have, and the pattern of GIS systems evolved.

Through studies on city after city, it became clear that all cities do the same thing, and a framework of geospatial functions that all require geospatial thinking emerged. Generic tools and workflows - buffers, routing, search, etc. - feeds different workflows to manage geographic data that form the base maps for decision making. Data models ringed with GIS tools, became the pattern.

The cloud platform is combining technologies that are making the world come alive. GIS is at a major turning point that deals with cheaper, easier and faster technology. GIS in this environment turns into a platform for an entire organization. Google Earth became such a big deal, because it's cloud based, accessible, and easy to use. Now with accessibility, and no longer hard integration issues, it's unlocking a whole new potential.

This platform is leveraging multiple trends, re-imagining what GIS is. We will change, who we serve will change, and the responsibilities of the GIS analyst will change. We don't have to fear this, it means integrating geographic knowledge into everything. Geography as a science is going to become pervasive that integrates all types of geospatial information. This is good, because if we have a chance of making it as a species, we need to bring spatial awareness into how we behave.

Web maps make this information available in simple forms on any device in catalogs where it is easy to discover what you want. The maps provide a window into information where analytics can be built in as services. The new medium replaces or is additive to the traditional SQL database. Supporting visualization, query, editing and analysis. It's like Facebook for geography -- people are sharing and creating new experiences. The Web Map means No GIS. We can look at our GIS from any device anywhere, just like we look at our e-mail.

The experience allows for the breakdown between groups to unlock data. It will open up our world with enabling technology and tools with a new generation of collaboration and sharing. People are getting on board because the openness means we can mine, mashup, and map the data with ease. Everything that we created earlier has been hard with the need for agreements on data models, and formal arrangements. Now with the cloud the integration is easy and everyone can make maps.

The future is a hundred fold increase in how maps will be used with billions of people using the technology. It should be everyone. There will be more integration into policy, business intelligence and design. Place-based approaches will be easy instead of awkward. We will have greater citizen engagement with more open government.

While the technology is evolving, data and technology aren't enough. People will promote and create this next level of engagement, and URISA will continue to provide the point for discussion on how to share and understand what works.
Source: Sensors & Systems

Indian state to map underground water level

For the first time in the country, work is on to map the groundwater level in Rajasthan through Geographic Information System (GIS). The data would help one to trace the entire history of groundwater in an area. Users will be able to determine an area's groundwater level, the fluoride content, quantity of nitrogen, if the water is saline or sweet, all at a click of the mouse.
Source: Times of India and Geospatial World Weekly

India: government data portal set for take-off

Government portal data.gov.in, which will be used to share official data with the public, is set to be fully functional soon.Now in beta or testing phase, the site has technically gone "beyond it," and full-fledged data uploading could begin a couple of weeks after an official workshop scheduled for next month, CEO of the National Spatial Data Infrastructure R. Siva Kumar told The Hindu .

With this, India joins the rank of a growing number of nations that plan to use open data as a tool to promote transparency and efficiency in government.

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The National Data Sharing and Accessibility Policy (NDSAP), which provides the framework for official data-sharing, will apply to all "non-classified data collected using public funds held by various Ministries/ Departments /Subordinate offices." The NDSAP is intended to open up public access to such data "through established procedures and defined norms."

World's Oldest Printed Maps at the Royal BC Museum

The Royal B.C. Museum, has just scored a really cool exhibition ("Envisioning The World: The First Printed Maps, 1472-1700″) open to all visitors of the facility. On loan from Sonoma California, The Envisioning Our World exhibition brings us some of the earliest known printed maps in the World! The collection, ranging from 1472-1700 in period, is an impressive display of 30 maps that made us sit back and say "Wow". The exhibition includes the first world map ever printed and a simple woodprint from around 150 A.D.
Source: Anything Geospatial GISuser Blog by @gletham

The Developing World Drives Satellite-based Earth Observation Growth

According to Euroconsult's latest report on Satellite-based Earth Observation markets, the commercial markets for satellite imagery in the developing world are driving strong growth. While the growth slowed considerably in 2011, with just 6% compared with an annual growth of more than 20% from 2006 to 2010, it's the markets of South-East Asia, Latin American and Russia that are largely driving growth.
Source: Asian Surveying & Mapping and EuroConsult

SUNRISE & SUNSET PHOTO CALCULATOR

Planning when to be on location for the right light can make a tremendous difference in your photography. The following daylight calculator can be used for guidance.
ALSO - MOON & NIGHT PHOTO CALCULATOR
Source: Cambridge in Colour: a learning community for photographers

ESCAP launches initiative to use space technology for disaster management

The UN Economic and Social Commission for Asia and Pacific (ESCAP) has announced the launch of a five-year initiative to improve disaster risk reduction (DRR) and management, as well as to minimize the environmental costs of regional economic growth. The announcement came on the first day of UN World Space Week, observed from 4-10 October 2012.
The initiative, titled "Asia-Pacific Years of Action for Applications of Space Technology and the Geographic Information System for Disaster Risk Reduction and Sustainable Development 2012-2017," will increase relevant activities at the national, sub-regional and regional levels, while building on efforts to strengthen regional cooperation in applications of space technology and geographic information system (GIS).
ESCAP notes that it is planning two intergovernmental meetings to prepare a five-year Plan of Action to guide Asia-Pacific countries in the application of these high-end technologies in DRR. The annual Intergovernmental Consultative Committee on the long-standing Regional Space Applications Programme for Sustainable Development in Asia and the Pacific (RESAP) which will take place in November 2012, and aims to support least developed (LDCs), land-locked developing (LLDCs) and Pacific island developing countries to build human resource capacity in the use of space applications for DRR. In December 2012, in collaboration with GeoInformatics and Space Technology Development Agency (GISTDA) of Thailand, ESCAP will convene an intergovernmental meeting in Bangkok, Thailand.

Tracking Indian trains in real-time

Indian Railways have launched online application RailRadar, where one can find the exact geographical location of about 6,500 trains on a Google map on real-time basis. Trains running on time are displayed in blue while those running late are shown in red. Clicking on a train shows the status of the train and also the route.
Source: The Hindu and Geospatial World Weekly "Image of the week"

Sri Lanka: Central Environmental Authority environmental data bank

The Central Environmental Authority (CEA) developed an environmental data bank including environmental and industrial information with their geographical distribution and location for the first time in Sri Lanka.
An advanced technological tool known as Geographic Information System (GIS) has been used in processing the data enabling to obtain descriptive and analytical data and maps. In addition to the data collected from regional CEA officers, it has also included data received from Wildlife, Forest Conservation, Census and

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Statistics, Survey and Archaeological Departments, National Building Research Organization and various other institutions. The data can be sorted according to provinces, districts, Divisional Secretariats and Grama Niladari Divisions.

First underwater map of Antarctica developed

For the first time, scientists have developed a 3D map of the surface beneath the sea ice in eastern Antarctica. The map will help reveal the amount of ice in the region, which is important for understanding how climate change is affecting Antarctica.

The Australian researchers, on a two-month voyage to the region on the Australian Antarctic Division's icebreaker Aurora Australis, used helicopters and a special, autonomous underwater vehicle (AUV) to produce a map of both the top and underside of the extensive sea ice, finding peaks and valleys that resemble land topography. This data is a valuable addition, because although satellites can keep tabs on the amount of ice cover, they aren't good at measuring the ice's thickness or volume — information this new 3D map provides.
Source: Live Science and Geospatial World Weekly

GIS: Just a Tool: Myth #3: Getting Current Job Data on a Map is Too Difficult by Stephen C. Blaskey

Now that one third of the GIS System has been built it is now time to implement the rest of the system, the Mapping Engine and the Linkage. Building the Mapping Engine is going to take some exploration on the part is the GIS System developer, as the developer will have to search all available data sources and collect different data sets that will "Fill in the Picture" of the mapping interface. Building the linkage will require an analysis of the collected datasets for an appropriate method to bring the Database together with the Mapping Engine.

GIS: Just a Tool—Myth #2: Building a GIS System Takes Too Long by Stephen C. Blaskey

The myth that it would take too long to build and implement a GIS system for the Surveying Business to see any real benefit is based mainly in the idea that the Surveying Business must change the way the business is handled to fit with the GIS. Every Surveying business is managed in a different way, which provides a problem for the existing GIS industry; so they try to develop a "magic bullet" that handles all of the needs of every Surveying Business. Trying to provide a pre-built solution and expect the entire Surveying Industry to fall into rank has caused backlash and resistance to the implementation of GIS.
Source: The American Surveyor

Infographic and Analysis of Global Climate Change from USGS, Jan-Sept 2012
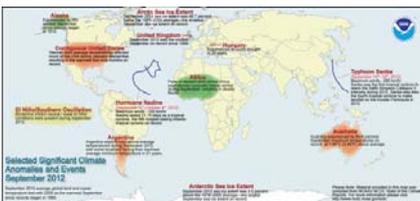
There's no doubt that we're seeing dramatic change in climate in a relatively short time and also an apparently related rise in extreme climatic events and extreme weather – Hurricane / TS Sandy is but one reminder of this unfortunately. Recently, the USGS reported on some amazing Jan-Sept 2012 climatic events along with some alarming research and accompanying figures.
Source: Anything Geospatial GISUser blog

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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 it out: software helps unpick housing managers' problems

Using maps to understand data can free up land for development, engage tenants and tackle fuel poverty.
Source: The Guardian and Geospatial World Weekly

Aerial Images: 'The Next Best Thing to a Time Machine'

The state of Connecticut boasts a historical snapshot that few parts of the country can match of life before World War II, before the Interstate Highway System, before the advent of suburbia as we know it. Back in 1934, Connecticut completed an aerial survey of every corner of state

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land, a process that produced thousands of black-and-white, 9-by-9-inch public photographs of Depression-era farmland and pre-car-crazed towns. At the time, no other state had done this.

The images have since been digitized and stitched together. And they are at their most fascinating when paired against our modern equivalent: Google satellite imagery taken some eight decades later. A project between Trinity College and the University of Connecticut Libraries, Map and Geographic Information Center (more appropriately: MAGIC) offers us a chance to trace this sweeping story of change.
Source: The Atlantic "Cities"

ESA deploys first orbital debris test radar in Spain
A new radar designed to test methods for finding orbital debris that can be hazardous to space navigation has been installed in Spain. The radar will be used to develop future debris warning services, helping boost safety for European satellite operators.
Source: European Space Agency and Geospatial World Weekly

Esri Severe Weather Map Tracks Hurricane Sandy
Esri has a fine story map to inform users of severe weather updates, projected storm paths, and social media posts of interest. The latest map helps the user track hurricane Sandy
Source: Anything Geospatial GISuser Blog and Esri Public Information Map

USA: Army Corps Uses GIS to Improve Efficiency
Combining visual communication with access to information and analysis is helping transform the way the U.S. Army Corps of Engineers Galveston District is managing its assets, serving the public and communicating with partner agencies – thanks to Geographic Information Systems technology, better known as GIS.
Source: Dredging Today and Geospatial World Weekly

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Articles

Digital Earth from vision to practice: making sense of citizen-generated content
International Journal of Digital Earth, Volume 5, Issue 5, 2012
Abstract
The vision of Digital Earth (DE) put recently forward under the auspices of the International Society for DE extends the paradigm of spatial data infrastructures by advocating an interactive and dynamic framework based on near-to-real time information from sensors and citizens. This paper contributes to developing that vision and reports the results of a two-year research project exploring the extent to which it is possible to extract information useful for policy and science from the large volumes of messages and photos being posted daily through social networks. Given the noted concerns about the quality of such data in relation to that provided by authoritative sources, the research has developed a semi-automatic workflow to assess the fitness for purpose of data extracted from Twitter and Flickr, and compared them to that coming from official sources, using forest fires as a case study. The findings indicate that we were able to detect accurately six of eight major fires in France in the summer of 2011, with another four detected by the social networks but not reported by our official source, the European Forest Fire Information Service. These findings and the lessons learned in handling the very large volumes of unstructured data in multiple languages discussed in this study provide useful insights into the value of social network data for policy and science, and contribute to advancing the vision of DE.
Keywords: Digital Earth, social networks, volunteered geographic information, data quality

Accuracy, Precision and all That Jazz by Lewis Graham [First in a series addressing the issue]
I recently attended a Transportation Research Board subcommittee meeting where we were lamenting the fact that data that looked "real" (such as imagery and high density LIDAR data) lead the observer to make erroneous conclusions about its accuracy. This led the discussion in the direction of what is accuracy, anyway, and how can we convey these ideas to folks who do not normally deal in this arena? Thus, this inaugural Random Points column will address some of the terminology surrounding accuracy and precision.
Source: LiDAR News

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Exploring the application of volunteered geographic information to catchment management: a survey approach by D. R. Paudyal, K. McDougall & A. Apana
*ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume I-4, 2012*
XXII ISPRS Congress, 25 August – 01 September 2012, Melbourne, Australia

Abstract:
The participation and engagement of grass-root level community groups and citizens for natural resource management has a long history. With recent developments in ICT tools and spatial technology, these groups are seeking a new opportunity to manage natural resource data. There are lot of spatial information collected/generated by landcare groups, land holders and other community groups at the grass-root level through their volunteer initiatives. State government organisations are also interested in gaining access to this spatial data/information and engaging these groups to collect spatial information under their mapping programs. The aim of this paper is to explore the possible utilisation of volunteered geographic information (VGI) for catchment management activities. This research paper discusses the importance of spatial information and spatial data infrastructure (SDI) for catchment management and the emergence of VGI. A conceptual framework has been developed to illustrate how these emerging spatial information applications and various community volunteer activities can contribute to a more inclusive spatial data infrastructure (SDI) development at local level. A survey of 56 regional NRM bodies in Australia was utilised to explore the current community-driven volunteer initiatives for NRM activities and the potential of utilisation of VGI initiatives for NRM decision making process. This research paper concludes that VGI activities have great potential to contribute to SDI development at the community level to achieve better natural resource management (NRM) outcomes.

Key words:
Volunteered Geographic Information, Spatial Information, Spatial Data Infrastructure, User-generated Content, Natural Resource Management, Catchment Management
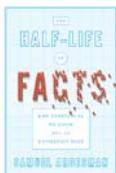
The Role of Place in Discovery and Innovation by Richard Florida
The author interviews Samuel Arbesman, author of *The Half-Life of Facts*
Entrepreneurship and innovation do not appear in a vacuum; they appear in certain places. Geography and clustering play a clear role. We certainly all know this intuitively: whatever the reason, Silicon Valley's primacy in entrepreneurship and innovation is world-renowned, while we don't imagine many people go to Anchorage to start a company.
Source: The Atlantic "Cities" website

OGC Web Feature and Coverage Services performance testing: towards an efficient access to geospatial data by Giuliani, Dubois, Lacroix
Journal of Spatial Information Science (JOSIS), **paper under review**
Abstract: OGC Web Feature Service (WFS) and Web Coverage Service (WCS) specifications allow an interoperable access to distributed geospatial data made available through Spatial Data Infrastructures (SDIs). To ensure that a service is sufficiently responsive to fulfill users' expectations and requirements, performance of services must be measured and monitored to track latencies, bottlenecks and errors that may negatively influence its overall quality. Despite the importance of data retrieval and access, only little research has been published on this topic and mostly concentrates on the usability of services when integrating distributed data sources.
Considering these issues, this paper (1) presents an open approach to measure the performance of different WFS and WCS services provided by various software implementations and (2) provides some guidance to data providers looking to improve the quality of their services. Our results show that performances of tested implementations are generally satisfactory and memory tuning/data and storage optimization are essential factors to handle to increase efficiency and reliability of services.
Keywords: Quality of Service, performance, WFS, WCS, benchmarking.

Geographic History Enjoys a Renaissance by Adam Gopnik
Two new books meant for a popular audience lay out this geographic turn in eloquent and encyclopedic form, though with two different purposes: Robert D. Kaplan's "The Revenge of Geography" (Random House) is mostly predictive [see "Books & Journals" below], while "Why Geography Matters: More Than Ever" (Oxford), by Harm de Blij, a professor at Michigan State, is essentially retrospective. De Blij wants students to study more geography; Kaplan wants journalists to think first of all about terrain. Kaplan's book can be summed up in a single phrase from Ambrose Bierce: "War is God's way of teaching Americans geography." In particular, Kaplan insists, the Iraq war was a way of teaching neoconservatives to pay attention to terrain. That war, of which he

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was an enthusiast, was a catastrophe, he now admits, and he lays the blame for that on a failure to pay attention to the lay of the land.
Source: New Yorker magazine

ROMNOGRAPHY: SYRIA'S MARCH TO THE SEA by Adam Gopnik
US Presidential candidate's ignorance of middle east geography.
Source: New Yorker magazine blog

The Changing Role of the Surveyor by Matt Ball
The role of the surveyor has been modified by new measurement technology throughout history, but the move to digital has brought the most profound adjustments to fieldwork. The disruptive technologies begin in 1984 with GPS, extend to RTK in 1993, LIDAR in 2000, machine control, and now unmanned aerial systems (UAS). Each of these technologies has changed how measurement has been obtained, and how readily measurements can be collected.
…
One contributor to this shifting role is the ubiquity of GPS receivers, because they are in every smartphone. The consumer use of the technology for navigation has increased awareness and interest. The expectation is for more and more accurate map data. As a result, the interest in more accuracy is driving opportunities for professionals.
Source: Asian Surveying & Mapping

Determining site suitability of evacuation shelters using GIS by Junglan Yang, Yongjin Joo and Chulmin Jun
Introduction
Every year, countries around the globe, including Korea, are undergoing enormous human and property damages resulting from natural disasters such as earthquakes, droughts, floods and artificial disasters like fires, explosions and building collapses. When a fire or disaster occurs, what should be taken into consideration most seriously is evacuation of people and in this regard emergency evacuation shelters become an important thing. Moreover, knowing precise locations of designated emergency evacuation shelters is one of the most crucial measures for evacuation when an emergency occurs. However, the most fundamental problem in relation to the occurrence of a disaster or calamity, is that evacuees are lacking in their understanding of preventing and coping with such disaster or of recovering damages. In order to resolve such problems, efficient and swift management and heightening of citizens' awareness of disasters and calamities is required.
Furthermore, whether emergency evacuation shelters are facilities established in accordance with appropriate standards are ambiguous in many aspects and although there have been some studies of their appropriateness, those aimed at providing precise standards are still being made. At present, the need for criteria to evaluate their appropriateness in order to judge whether emergency evacuation shelters are facilities established in accordance with appropriate standards and whether they need complementation has also emerged. To this end, this study first reviewed previous research on standard elements for emergency evacuation shelters and presented elements enabling quantitative assessment. Second, this study established GIS database with variables produced from the standard elements designed using previous research results. Third, in order to consider the importance of elements to plan emergency evacuation shelters, this study applied AHP, thereby presenting standard elements to evaluate and estimating their relevant importance and priorities. Lastly, this study made a new suggestion through the analysis result by applying the standard elements to the area examined.
Source: Geospatial World Weekly

Principles of 5D modelling by Peter van Oosterom and Jantien Stoter
Abstract
This paper proposes an approach for data modelling in five dimensions. Apart from three dimensions for geometrical representation and a fourth dimension for time, we identify scale as fifth dimensional characteristic. Considering scale as an extra dimension of geographic information, fully integrated with the other dimensions, is new. Through a formal definition of geographic data in a conceptual 5D continuum, the data can be handled by one integrated approach assuring consistency across scale and time dimensions. Because the approach is new and challenging, we choose to step-wise studying several combinations of the five dimensions, ultimately resulting in the optimal 5D model. We also propose to apply mathematical theories on multidimensional modelling to well established principles of multidimensional modelling in the geo-information domain. The result

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is a conceptual full partition of the 3Dspace+time+scale space (i.e. no overlaps, no gaps) to be realised in a 5D data model implemented in a Database Management System.
Source: Geospatial World Weekly

The Longest Line by Albert "Skip" Theberge, Jr
Among the epic projects undertaken by the United States Coast and Geodetic Survey was the survey of the 39th Parallel, the first arc of triangulation to span the continent. This work was begun in 1871 and not completed for nearly thirty years. Near the western terminus of the 39th Parallel Survey, and peripheral to the main scheme triangulation, is the great strato-volcano Mt. Shasta near the southern end of the Cascade Mountains. It rises to an elevation of 14,179 feet above sea level and is at the northern end of the Sacramento Valley of California. It is believed that it was named by early Russian settlers from a word meaning white or pure, a reference to its nearly year-round snow-clad appearance. Although at Latitude 41.4 North, because of its great elevation and prominence as a landmark, the United States Coast and Geodetic Survey (C&GS) chose to determine the position of this great peak.
Source: The American Surveyor

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Books and Journals (including Videos and Web publications)

Varanka, D.E., 2012, *Introduction to Geospatial Semantics and Technology Workshop Handbook*
U.S. Geological Survey Open-File Report, 2012–1109, 107 p.
Abstract
The workshop is a tutorial on introductory geospatial semantics with hands-on exercises using standard Web browsers. The workshop is divided into two sections, general semantics on the Web and specific examples of geospatial semantics using data from The National Map of the U.S. Geological Survey and the Open Ontology Repository. The general semantics section includes information and access to publicly available semantic archives. The specific session includes information on geospatial semantics with access to semantically enhanced data for hydrography, transportation, boundaries, and names. The Open Ontology Repository offers open-source ontologies for public use.

Next Generation Gigital Earth
A paper entitled "Next-Generation Digital Earth" was published in the Proceedings of the National Academy of Sciences of the United States of America (PNAS) on 21 June 2012. The paper, meant to be an update of the Digital Earth vision given by Al Gore over ten years ago, reviews progress in Digital Earth scientific discovery, analyses current work, and forecasts future developments.

Author Robert Kaplan explains why geography matters by Michael Posner of The Globe and Mail
Robert Kaplan is no Luddite. "I accept the social media revolution – that technology has collapsed distance," he says. "But the map still matters." In fact, the national correspondent for Atlantic Monthly argues that modern communications "makes geography more precious, rather than irrelevant."
He revoked his endorsement of the 2003 invasion of Iraq largely because he felt Washington failed to appreciate the impact of geography, and now has written *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate.*
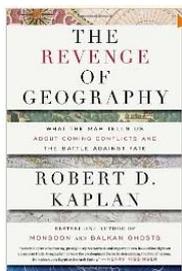
Here he gives The Globe and Mail's Michael Posner five examples of global flashpoints that make more sense when seen through the prism of geography.

1. Israel versus Iran   **2. Islamization**   **3. China rising**
4. India-Pakistan   **5. Putin's paranoia**   **And Canada?**

SDI Cookbook update
The SDI Cookbook, in its wiki version, now has an updated Chapter 10 to reflect the latest slate of standards and popular version numbers. We seek contributing editors for the other Chapters to also bring them up-to-date. About three months prior to the next GSDI Conference we will seek to affix a date and snapshot the Cookbook into a "SDI Cookbook 2013" PDF version. By saving a PDF and giving it a date of publication, it will clarify the

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reference and citation of the document and provide a time context.
If you are interested in helping update any of the chapters, please contact Douglas Nebert.

NewGeography website

Mapping London blog

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 journal'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:

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

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

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 - August, 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 19 (September 2012 Newsletter)

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LiDAR News magazine (Vol 2, No 5, Fall 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 (August 29)

My Co-ordinates e-zine – October issue (PDF)

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Just for Fun!

Why Losing Google Maps on the iPhone Is a Good Thing
Apple's decision to prune Google Maps from the iPhone to make way for the homegrown alternative, Apple Maps—which lacks data on buses or trains, among other flaws—has sparked the particular anger of public transportation advocates. But while inconvenienced, transit tech enthusiasts like George Aye (currently at work on a new, Chicago-specific transit app) also recognize the potential silver lining in the wake of Google Maps' departure from the iPhone: an opening for smaller, place-based transit apps to catch on, innovate, and court users on the more than100 million devices that have already switched over to iOS 6 since it was released a little over a week ago.
Source: *The Atlantic* "Cities"

APPLE ADVISES MAPS USERS NOT TO GO ANYWHERE by *Andy Borowitz* [**WARNING** – satire/parody]
Even as he apologized, Mr. Cook downplayed the number of Apple customers affected by the Maps glitch: "This only impacts Apple customers who have someplace to go. From what we can tell, most of our customers just go back and forth to the Apple Store and that's pretty much it."
Source: The *New Yorker*'s Borowitz Report

The Geography of Corn Mazes – Wow Washington State!
The writer is not really much of a corn maze fan, however, he does really dig maps, so he had to give this maze in Washington State 2 thumbs up – definitely a Geographer's dream! The maze in Snohomish County, Washington is shaped like the State of Washington, complete with major roads, rivers, and major landmarks like the Space Needle and Mt. Saint Helens… impressive!
Source: AnyGeo blog

The Gender Psychology of Losing Your Car in a Parking Lot
The researchers, who've published their findings in the journal *Applied Cognitive Psychology*, snagged 115 shoppers on their way out of a gardening and construction mall (we think this is Netherlandish for a Home Depot). They then spent about 10 minutes interviewing the drivers about their general parking-related forgetfulness, where they thought they had parked that day on a map, how far away they estimated the spot to be, and what kinds of tricks they used to remember the

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location. The researchers then followed these people back to their cars (literally, this was one of the questions in the interview: "Can we follow you to your car?").
Source: The Atlantic "Cities"

Netherlands - Heated Bike Lanes
Towns in the Netherlands are hoping to pilot-test *heated* bike lanes, or geothermal infrastructure at 20,000-40,000 euros a kilometer that would melt the snow and ice from your morning commute.

> The man behind the proposal, Marcel Boerefijn, said there would be savings from fewer accidents, less salt needed to grit roads and reduced car expenses. Mr Boerefijn said it was possible that the final net cost would be less than putting straw down on the paths.

Source: The Atlantic "Cities"

Entertaining Video - Durham's Bridge of Death Will Decapitate Any Tall Truck
For years, a North Carolina man has documented an 11-foot-8-inch-tall bridge's amazingly destructive effect on passing traffic.
Source: The Atlantic "Cities"

What Really Happens When a City Makes Its Transit System Free?
New Zealand - The Case for Bus Transfers
Source: The Atlantic "Cities"
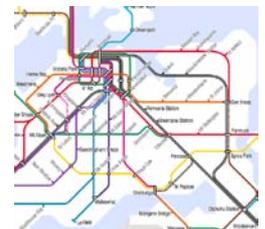
Google Street View Tackles the Grand Canyon - Pedestrian back-pack
We're all familiar with the Google Street View cars at this point (and their Nokia cousins).

They go buzzing around cities capturing data from the physical world. But there are places they cannot go, places that Google would really like to have imagery of, for example, say, the Grand Canyon.

And so, Google being Google, they hacked together a solution: a backpack topped with the camera orb we know from the company's cars. The Trekker, as they call this new gear, is controlled via an (Android, obviously) phone and captures imagery automatically.
Source: Google blog and The Atlantic "Cities" and the LA Times

Got truly and outstandingly lost recently? Enjoy the feeling while you can, for it's becoming an increasingly difficult task.

It is now hard for most people aged below 25 to remember a time when we used maps that folded (or at least maps that came folded from a shop, and never folded quite so well again). And it is a sobering thought that our most influential maps are now in the hands of a very new breed of cartographers.
Source: BBC and Geospatial World Weekly

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Training Opportunities

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free GNSS Remote Sensing workshop, Sydney
At the UNSW Australian Centre for Space Engineering Research and the School of Surveying and Geospatial Engineering we are interested in positioning for all sorts of applications; traditionally to locate and re-locate historical land boundaries, for large engineering infrastructure development, to control mining operations, for undersea floor location and oil and gas exploration. In the last 20 years, satellite positioning has revolutionised the way surveyors and spatial information professionals provide position.
Hear about where remote sensing is going at this free Global Navigation Satellite System (GNSS) Remote Sensing (RS) workshop.
 When: Wednesday, 5th December 2012
Where: M17 Lecture Theatre, UNSW Kensington, Sydney, Australia
Costs: Free to attend
Thanks to Ross Johnson for bringing this to our attention

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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

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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

OPEN GEOSPATIAL CONSORTIUM Workshop - Australia and New Zealand Forum
Mon 19th Nov 2012 - Canberra
PSMA Offices, Level 2, 113 Canberra Ave, Griffith, ACT 2603. CONTACT

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.

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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.

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**

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Conference Proceedings

The 4th Digital Earth Summit Concludes in Wellington, New Zealand

The fourth bi-annual Digital Earth Summit was held in Wellington, New Zealand from Sept. 2-4, as one in a series of summits organized by the International Society for Digital Earth (ISDE). The summit with the theme "Digital Earth and Technology" was co-hosted by Wellington City Council and Land Information New Zealand. There were three streams that included the digital environment, resilient cities, and growing up digital. There were 15 keynote speeches and 75 presentations, attracting around 200 delegates from more than 20 countries.

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

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

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Conferences, Events

For upcoming events of global or major international interest, please visit the upcoming conference list 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
November 2012		
13–5 November	UNSW, Sydney, Australia	**3rd International Conference on Indoor Positioning and Indoor Navigation (IPIN)** Contact
19–22 November	London, UK	**World Congress on Sustainable Technologies (WCST-2012)** Technical Co-Sponsored by IEEE UK/RI Section Paper Submission: To submit a paper, please visit.

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		Important Dates:
		Full Paper Submission Date: September 20, 2012
		Extended Abstract (Work in Progress) Submission Date:
		     September 30, 2012
		Proposal for Workshops and Tutorials: August 31,
		Notification of Workshop and Tutorial Acceptance: September 10,
		Proposal for Industrial Presentation / Special Track: August 31,
		Notification of Abstract Acceptance/Rejection: October 10,
		Notification of Industrial Presentation / Special Track Acceptance:
		     September 10,
		Notification of Paper Acceptance/Rejection: October 01,
		Camera Ready Extended Abstract Due: October 19,
		Camera Ready Paper Due: October 19,
		Early Registration Deadline: August 01, 2012 - October 15, 2012
		Late Registration Deadline: October 16, 2012 - November 01, 2012
		Conference Dates: November 19-22, 2012.

20-3 November	Canberra, Australia	**spatial@gov® Conference and Exhibition 2012** Call for Papers - Deadline for Submissions: 5pm Tuesday 7th August 2012 - Contact
26-30 November **"NEW"**	Pattaya, Thailand	**The 33rd ACRS (Asian Conference On Remote Sensing):** AIMING SMART SPACE SENSING The Conference is organized by Geo-Informatics and Space Technology Development Agency (GISTDA), Ministry of Science and Technology (MOST) and the Asian Association on Remote Sensing (AARS).
27-30 November	Suva, Fiji	**2012 Pacific GIS & RS Conference** **Abstract deadline:** September 30, 2012 Flyer The theme for this year is "Mapping Pacific Resources", which is timely as the recently concluded Rio +20 United Nations conference noted the relevance of global mapping and recognised the value of reliable geospatial information for sustainable development and decision-making. The global conference further recognised the need to support developing countries in their efforts to collect resource and environmental data. As with previous Pacific GIS & RS conferences, there are no fees levied for those wishing to attend, and the conference is funded entirely by donations from regional organisations, technology vendors and international agencies. This year,Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH will support the Conference. GIZ will sponsor selected presenters from Tonga, Vanuatu and Solomon Islands to participate in the conference. To qualify, the presented topic should be related to forestry, agriculture or environmental application of GIS/RS, which is automatically linked to climate Change thematic.The deadline for abstract submission is 30th September, and final selection would require additional submission of the actual presentation upon request. For further information and registration.
28-30 November	Valencia, Spain	**8th 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.

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December 2012		
8-12 December **"NEW"**	Jeddah, Saudi Arabia	**ISOTC211 Plenary and Working Group meeting 2012** Last date for abstract submission: <u>14 October 2012</u> ISO/Technical Committee 211 Geographic information/Geomatics is responsible for the International Organization for Standardization (ISO) geographic information series of standards. These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring, processing, analyzing, accessing, presenting and transferring such data in digital/electronic form between different users, systems and locations. The ISOTC211 Plenary and WG meeting will include a workshop for three days (8-10 December 2012). This workshop will give opportunities for geospatial users, policy-makers, technology providers, researchers, academicians and students, to present their case studies, research work and technical papers to wider audience in the region. To draw maximum benefit out of this opportunity, the organizers invite you to participate actively in this conference and submit abstracts on the following themes: **First Day Topics:** Challenges in creating a unified national framework data sets Geospatial framework for the coastal zone Geospatial data modeling specifications Geo Portals and registries for geospatial data Geospatial data management and sharing policies Data acquisition sensors (LiDAR, Digital cameras, GPS and INS) **Second Day Topics:** Open Source GI application use cases: Government, Participatory GIS, Location based services, Health, Energy, Water, Climate change etc… NSDI (NCGIS) Implementation: Legislative measures, coordination and organizational models, data policy and the currency of the data eGovernment initiatives - Integration of geospatial services into e-services Capacity building and skill requirements for geospatial environment Education and awareness raising Universities participation on innovation and research **Third Day Topics:** (Standards in Action). The third day will be devoted for standards in action, which will include the following subjects: Geospatial data producers Geospatial Data Users NSDI (National Spatial Data Infrastructure) Towards sustain SDI strategy
9-10 December	Kuala Lumpur, Malaysia	**Asia Oceania Regional Workshop on GNSS** Contact
11-14 December **"NEW"**	Kuala Lumpur, Malaysia	**19th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-19)** Theme: Enriching the quality of life through innovative space programs. Contact: aprsaf19@aprsaf.org….or FAX:+81-3-6266-6908
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

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Asia & the Pacific Newsletter

March 2013		
18-9 March	Singapore	**1st Annual International Conference on ACE:** **Call For Papers 2013** IMPORTANT DATES Full Paper Submission Deadline:23rd November 2012Author Notification:7th December 2012Final Paper (Camera-Ready) Submission Deadline:31st December 2012 Early Bird Registration Deadline:18th January 2013 Late Registration Deadline:13th February Contact
25-7 March **"NEW"**	Amman, Jordan	**Spatial Data infrastructures Middle East, 2013** In the Middle East the development of geographic information systems and their function has been rapid. Governments have over the past decade realised the need to be able to access and use the vast amounts of data collected on a daily basis. Whilst individual departments or agencies posses the tools to analyse, utilise and disseminate information this can leave gaps at a governmental or even national level. Benefits of attending the Spatial Data Infrastructure Middle East Conference, organized with the support of Royal Jordanian Geographic Center: - Explore Geographic Information Systems and how your specific organisation can benefit from a unified and achievable plan - Discuss future SDI development plans with senior Government decision makers - Discover end-users GIS and geospatial requirements and solutions being considered - Find out the challenges faced in building an SDI and how to overcome them - Hear about how government department interoperability can be improved through the development of an SDI - Learn about the latest technologies available and which is the best fit for your SDI plans
April 2013		
15-9 April	Canberra, Australia	**Surveying & Spatial Sciences Conference 2013** *Call for Papers extended to 6 October 2012*
22-26 April	Beijing, China	**35th International Symposium on Remote Sensing of Environment (ISRSE35)** *The papers included in the 35th International Symposium on Remote Sensing of Environment proceedings will be published by IOP Publishing Ltd., UK. The proceedings are available through the IOP Conference Series: Earth and Environmental Science. All published papers will be indexed by EI Compendex.* *Authors interested in the themes and topics of ISRSE35 are welcome to submit their original manuscripts. Submissions to ISRSE35 will be peer-reviewed to ensure high-quality scientific content and well-written English, in accordance with the Peer Review Policy for the IOP Conference Series.* **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

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		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		
6-10 May	Abuja, Nigeria	The **FIG Working Week** The Working Week will bring surveyors and land professionals from all over the world together to meet while specific focus will be given to Africa. The conference is organised jointly by **FIG** and the **Nigerian Institution of Surveyors, NIS**, one of the three FIG member associations in Nigeria.
13-6 May	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. Abstract Guidelines for authors. **DEADLINE:** 2 February 2013
November 2013		
4-8 November	Addis Ababa, Ethiopia	**GSDI 14 and AfricaGIS 2013:** The GSDI Association, EIS-Africa, the International Geospatial

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		Society, and the United Nations Economic Commission for Africa (UNECA) are pleased to announce a close partnership in offering the joint GSDI 14 World Conference and AfricaGIS 2013 Conference. The theme of the conference is **Spatially Enabling Africa in Support of Economic Development and Poverty Reduction**.
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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