

SDI-AP

# Spatial Data Infrastructure Asia & the Pacific Newsletter

## February 2012

Vol. 9, No. 2

Spatial Data Infrastructure – Asia and the Pacific (SDI-AP) is a free electronic newsletter from the <u>Global Spatial Data Infrastructure Association (GSDI)</u> 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 <u>Permanent Committee on Geographic Information for Asia and the Pacific (PCGIAP</u>), 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 <u>Centre for Spatial Data Infrastructures and Land Administration</u> at the University of Melbourne.



To subscribe to SDI-AP use <u>this link</u>. Back issues of the newsletter are at the <u>GSDI website</u>. You can also sign up for <u>GSDI News List</u> 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 <u>please visit</u>.

### Contents

Message from the editors	1
Contributions	1
GSDI News	2
SDI News, Links, Papers, Presentations	2
SDI Spotlight	3
GIS Tools, Software, Data	5
News from abroad	7
Articles	7
Books and Journals (including Videos and Web publications)	.10
Just for Fun!	.11
Training Opportunities	.12
Funding Opportunities, Awards, Grants	.14
Employment Opportunities	.15
Conference Proceedings	.16
Conferences, Events	

## Message from the editors

Welcome to the second issue of the newsletter for the year 2012. After celebrating the New Year in last month's newsletter, this issue heralds the Chinese New Year – the year of the Dragon.

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 25<sup>th</sup> 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</u> <u>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* 

#### Back to contents



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 <a href="http://www.igeoss.org/benefits">http://www.igeoss.org/benefits</a>. For further information, contact <a href="http://www.igeoss.org/benefits">Harlan Onsrud</a>, Executive Director, GSDI Association.

#### **GSDI 13**

The joint **GSDI World Conference** (GSDI 13), the 14th **GEOIDE Annual Scientific Conference**, the 7th **3DGeoInfo Conference**, and the **Canadian Geomatics Conference 2012** will take place in historic Québec City, Canada at the Québec City Conference Center in the heart of the city. Primary partners in organizing this conference include the GSDI Association and GEOIDE.

#### Back to contents

#### SDI News, Links, Papers, Presentations

#### Mapping social infrastructure for development results and disaster preparedness

**Washington, January 16, 2012** – Today, the <u>World Bank</u> and Google announced an agreement aimed at improving the ability of developing countries to access a web-based community mapping tool and data to help better monitor public services, and improve disaster and humanitarian response efforts. Most developing countries do not have basic local data about where schools, hospitals, or water points are located, and the data they do have is often out of date or incorrect. One way to collect this information is to ask citizens directly, and crowdsource the locations of public infrastructure.

Source: World Bank

#### Rs 750-cr outlay likely for spatial data infrastructure in India

Speaking at the 11th annual meet of National Spatial Data Infrastructure conference, Mr Swarna Subba Rao, Surveyor General of India, said "Since we are moving to the next level of spatial data creation, State level data centres are crucial and a portion of the Plan outlay will be set aside for creating such centres. Karnataka is a leader in these technologies having established the first SDI and State Geo-portal in the country, besides having geospatial data centres in all the districts. I am sure, other states will emulate this." Source: <u>Geospatial Today</u>

#### World Bank and New Zealand fund project to modernise Vietnam's land management

A project sponsored by the World Bank and the Embassy of New Zealand has been developing the most complete and modern land management system for Vietnam Source: VietNamnet.vn and Geospatial World

#### Is There Room for Private Industry and Entrepreneurs in Spatial Data Infrastructure?

This article provides a perspective on the evolving nature of SDI and the role of the public and private sectors. Most events connected with spatial data infrastructure (SDI) related projects and work involve government organisations and institutions. In principle, SDI are still very young and adapting – they have yet to form closer links and governance ties, although many existing projects have had some industry participation. Source: <u>VectorOne</u>

# Using Spatial Data Infrastructures for Monitoring Development Outcomes: A Manual for Developing Countries

The objective of this Manual is to provide a "how to" guide for developing countries on the development of

#### Back to contents



a national strategy for spatial data infrastructure (SDI). This is an ambitious goal given the multitude of cultural, economic and political models that such an SDI must embrace and the rapid technological developments impacting the development more broadly of Geographic Information Systems (GIS). But, given the importance of SDI as an underpinning technology, platform and infrastructure for assisting efficient economic growth, humane social policy and effective environmental programmes, it is one worth striving for. Authors: Zoe Gardner, Mike Jackson, Tim Kelly and Bruce McCormack

#### National Spatial Data Infrastructure: The Case of the Republic of Korea

Spatial Data Infrastructure (SDI) has emerged as a valuable tool for monitoring development outcomes. This report, part of the Spatial Data Infrastructure for Development (SDI4MDGs) project, explores the potential use and long-term sustainability of SDI in achieving Millennium Development Goals in the Republic of Korea Source: InfoDev

#### New Carbon Calculator Helps Put Global Contributions in Perspective

A new geography-oriented interactive <u>Carbon Calculator</u> has been developed by Vizzuality along with the Convention on Biological Diversity, LifeWeb and the United Nations Environment Program – World Conservation Monitoring Center (UNEP-WCMC). The online tool helps put the necessary global contributions into perspective by allowing users to draw an area in the world to see the amount of carbon currently stored there, and to see what could be sequestered there through restoration. Source: Spatial Sustain

#### PCGIAP: Mongolia and Australia national reports

The **PCGIAP** web site announces that national SDI reports have been published for Mongolia and Australia. This <u>national report</u> presented by Director General Ts Gankhuu from Land Affairs, Construction, Geodesy and Cartography of Mongolia at the 17th Permanent Committee on GIS Infrastructure for Asia and the Pacific (<u>PCGIAP</u>) Meeting in Ulaanbaatar, Mongolia, 21-22 July 2011, provided an overview of NSDI status in Mongolia, and included topics related to organizational activities, geodetic and cartographic activities and international cooperation.

Source: SDI Magazine

#### Spatial Analysis Key to Making Sense of Big Data

Large volumes of data are being generated through sensors and the use of more and more computing and monitoring devices. The challenges of big data is that with larger datasets it become more difficult to catalog, store, search, share and analyze all of the information that we are collecting. With the world's data more than doubling every two years, the issues aren't trivial, but fortunately our computing capacity has been keeping up, and approaches to log and simplify all the data inputs are being worked out, with cloud computing providing much-needed capacity.

Source: Asian Surveying & Mapping

#### Back to contents

### **SDI Spotlight**

This month's "Spotlight" feature is from Muyiwa Agunbiade whose research interest is in the areas of land administration, housing provision, security of tenure and slum management in the emerging urban centres especially the mega-cities. He is currently a PhD candidate in the Department of Geomatics, CSDILA, at the University of Melbourne.

# SDI: an essential element in the trilogy of inter-agency integration for housing production

It is observed that adequate and affordable housing could only be produced when land management **policies**, land administration **processes** and spatial data infrastructures (**SDI**) are integrated interactively among agencies. The three components: policies, processes and SDI are referred to herein as the trilogy of integration to facilitate land delivery for housing. This is structured within the overall land governance framework. To make correct choices about housing production, this trio should be considered interactively as a chain of events because of their inter-relationship and inter-dependence. To note that a chain is only as strong





as its weakest link is axiomatic. It is thus important to develop a tool to identify the weak links and thus seek to strengthen any identified weak points.

#### Integration assessment framework

To identify the weak links, the integration assessment framework was developed. The framework, as a tool, provides a platform to assess the interaction of land administration processes and the collaboration of agencies in the management of land for housing production.

The major elements of the framework are the measurement variables. These evolved from the interactive combination of the three components and include: economic, environmental, and social policy considerations. The measurement variables also include institutional processes and capacity that affect capacity building, communication, organizational structure, resources, commitments, and responsibility between agencies. Most importantly, the data management and services that impact data creation, coordination and information flow, storage and maintenance, technology and technical issues, the funding/pricing model, dissemination, and use.

#### Implementing the integration assessment tool

Making informed decisions is about having access to adequate and reliable data such that decisions are informed by evidence. Inherent in the assessment tool are the abilities to use data to: clarify integration objectives; identify current and future integration areas and benefits, determine the current level of integration across agencies and between different levels of government; and finally assist, in identifying specific areas for improvement.

#### Findings from the case studies and the development of an inter-agency integration model

Drawing from the case study areas (Australia and Nigeria) an inter-agency integration model was developed. The starting point was the interactive understanding of the three components and the implications for the development of a functional SDI. This helps to gain an improved understanding of how data and information contribute to effective decisions in what is now described as evidence-informed policy. The modeling and visualization capability of spatial data provide means of testing alternatives and turning data into information, and subsequently into knowledge.

It was also recognised that it is important to frame policies within the jurisdictional context. This underscores the need for interaction between jurisdictions especially between different levels of government within a national jurisdiction. It is important therefore to understand the agencies' functions in what is now described as *policy* based processes.

In addition, it was recognised that the type of data infrastructure required is directly linked with institutional processes. In this regard the realization of data needs is important in what is now described as process driven data.

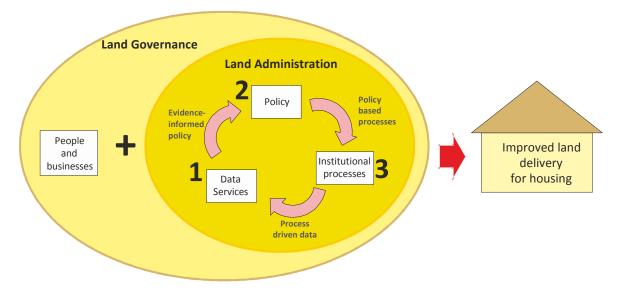


Figure 1: Inter-agency Integration Model



Overall, it is recommended that managing land for housing production should follow the principles of good land governance that is spatially enabled. Within this framework, policy is informed by data and evidence, land administration processes are based on policy while data infrastructures are driven by land administration processes. The core of this principle is illustrated in Figure 1.

#### **More Information**

For more information about this research project, please visit: <u>http://blogs.unimelb.edu.au/nimli/author/csdila/</u>

- Agunbiade, M., Rajabifard, A., and Bennett, R. (2011), "Land Administration for Housing Production: Drivers, Concepts, and Analytical Tools", paper presented at the FIG Working Week 2011 Conference.
- Wallace, J., Marwick, B., Bennett, R., Rajabifard, A., Williamson I., Tambuwala, N., Potts, K., *Agunbiade, M.* (2010). "Spatially Enabling Land Administration: Drivers, Initiatives and Future Directions for Australia"

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

#### Back to contents

## **GIS Tools, Software, Data**

#### Earthquake List for Map of Asia Region

This website provides a list of the earthquakes located by the USGS and <u>contributing networks</u> for the <u>Map of</u> <u>Asia Region</u>. Most recent events are at the top. (Some early events may be obscured by later ones on the map.) Click on the date portion of an earthquake record in the list for more information. Source: USGS

#### Twin satellites buzz around man in the moon

Two new satellites are now in orbit around the moon, and they could reveal whether our moon ate a sibling many moons ago.

The GRAIL probes, which launched together in September, separately went into orbit on 31 December and 1 January.

They are designed to produce the most detailed map ever made of the lunar gravitational field, which is lumpy thanks to mountains, craters, lava flows, and larger irregularities – the moon's far side is much more mountainous than its near side, for example.



#### 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.

Source: Geospatial World and <u>SLA press release</u>

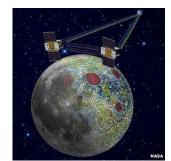
#### Using Landsat data can help us track trends in key resources

Expanding demand from a growing world population — now numbered at more than 7 billion — exerts unprecedented pressure on global resources, especially forests, water, and agriculture.

To support a world population expected to reach 8 billion as soon as 2025, decision makers need tools and information to monitor and protect these crucial resources.

Remote-sensing satellites help scientists to observe our world beyond the power of human sight, to monitor changes, and to detect critical trends in the conditions of natural resources.

#### Back to contents





Source: GISuser

<u>Wall-to-wall carbon storage map helps developing nations track deforestation and report on emissions</u> A <u>study published in *Nature Climate Change* (29 January 2012) finds that tropical vegetation contains 21 percent more carbon than previous studies had suggested. Using a combination of remote sensing and field data, scientists from Woods Hole Research Center (WHRC), Boston University, and the University of Maryland were able to produce the first "wall-to-wall" map (with a spatial resolution of 500 m x 500 m) of carbon storage of forests, shrublands, and savannas in the tropics of Africa, Asia, and South America. Colors on the map represent the amount of carbon density stored in the vegetation in a continuum fashion (Figure 1). Reliable estimates of carbon storage are critical to understanding the amount of carbon released into the atmosphere by changes in land cover and land use.</u>

Source: GISUser and Woods Hole Research Centre

#### Well, here ya go, a free theodolite! - Freebie app for iPod,iPhone, & iPad



Theodolite Free trumps its mechanical namesake by using GPS positioning along with your iPhone's sensors to give you your position, bearing, inclination, and altitude. Use it and a bit of trigonometry to deduce distances, heights, vectors and more. It's accurate and just plain cool looking.



Use it in conjunction with a real compass or the one built into your iPhone to relate your map position to your current whereabouts. You can then see how the map interprets terrain features, giving you a bit more confidence in knowing exactly where you are and what's around you.

There's a US\$4.00 upgrade that gets rid of ads and gives you added features, but you can get by with the freebie.

Source: MacObserver and Hunter Research and Technology, LLC



#### South Pacific Island of Samoa Changes International Dateline

In December, 2011 the tiny Island nation of Samoa decided they were on the wrong side of the dateline... so they changed it!

An interesting mapping story that you may not have heard about over the New Year as Samoa decided last year that they were on the wrong side of the International dateline. Indeed a good move for Samoa as when you take into account their relationship with Australia they were essentially missing out on 2 full days of business due to their geographical placement relative to the dateline. In a bold move, and

unfortunate for those who celebrate their birthday on Dec 30th, Samoa made the change in 2011 and Samoans went to bed Dec 29, 2011 and woke up the following morning on December 31, the same day as their mates in Australia!

Source: GISUser and BBC News

#### Geospatial World "Image of the week"

When the Nazis left Treblinka in 1943 they thought they had destroyed it. They had knocked down the buildings and levelled the earth. But if they thought they had removed all evidence of their crime, they hadn't. For a forensic archaeologist, there is a vast amount to study.

Source: Geospatial World (January 30, 2011) and BBC News

#### **Drones Aid Surveyors with Important Perspective**



There are many aerial mapping applications where the cost of an aircraft, and the small land size of a project, make hiring an aerial mapping firm impractical. The view from above is a valuable input however, and small radio controlled aircraft that carry high-resolution cameras and GPS receivers are increasingly finding their way into the surveyor's tool kit. The capable aerial imagery platform, with its low weight and low operational costs, is set to provide entirely new perspectives about changes in

the landscape. Source: Asian Surveying & Mapping

Back to contents SDI-Asia/Pacific Newsletter



#### News from abroad

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

#### UK - Government Funding for 3D Laser Mapping of Motorway Crashes

3D Laser Mapping is set to revolutionise the investigation of motorway collisions following the award of GBP 2.7 million (USD 4.2 million) by the Department of Transport. The funding will enable 27 police forces across England to purchase 3D laser scanners - used to collect highly detailed, 3D images of crash sites up to 50 percent faster than traditional survey techniques. 3D Laser Mapping has established itself as the primary supplier of laser scanning technology for collision investigation.



#### SEE ALSO - UK government awards police forces £2.7 million to tackle motorway closures

The technology saves time by quickly making a 3D image of the whole crash site, rather than investigators painstakingly surveying multiple sections of a scene. This digital image of the site can then be viewed on a computer screen remotely allowing investigators to take measurements of where vehicles are in relation to each other and examine other important evidence.

The wider roll-out of 3D laser scanning technology is part of a Government-led initiative known as 'CLEAR'. This initiative is delivering an action plan aimed at reducing delays caused by incidents in order to keep traffic moving - a vital element in securing the UK's prosperity.

Source for both items: LiDAR News

## Google Politics and Election 2012 Maps, Results, G+ and more

and Google maps, Google earth, Web 2.0 Map Resources

For those looking to follow the 2012 US Election, look no further than Google and the Google Election Results map and data resource

Google Politics and elections is in full steam with live data feeds currently being provided at the time of writing (Jan 3, 2012) this story.

The resource provides a map with election results along with results shown by candidate. Users will also find pointers to supporting resources provided by Google including a dedicated G+ account for the election, Youtube on politics videos, the 2012 US election calendar (Google Calendar) showing important dates, and a US election toolkit with a number of interesting tools - <u>http://www.google.com/elections/toolkit</u> Check out the Google Election map and results at <u>http://www.google.com/elections/ed/us/results</u> Source: GISuser

#### Supreme Court: Warrants needed in GPS tracking – United States

The Supreme Court on Monday unanimously restricted the police's ability to use a GPS device to track criminal suspects in a first test of how privacy rights will be protected in the digital age.

The court rejected the government's view that long-term surveillance of a suspect by GPS tracking is no different than traditional, low-tech forms of monitoring. But its decision was nuanced and incremental, leaving open the larger questions of how government may use the information generated by modern technology for surveillance purposes.

Source: Washington Post

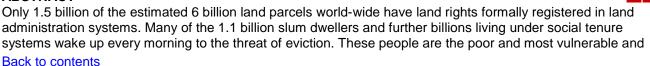
See **Articles** for two NY Times opinion pieces discussing the ramifications of this legal judgment. <u>Private Snoops Find GPS Trail Legal to Follow</u> and <u>Privacy</u>, <u>Technology And Law</u>

Back to contents

Articles

FIG Article of the Month – December 2011 - Crowdsourcing by Robin McLaren

"Crowdsourcing Support of Land Administration – A Partnership Approach" ABSTRACT





have reduced forms of security of tenure; they are trapped in poverty. Increasing global population and the rush to urbanisation is only going to turn this gap into a chasm.

This paper explores one potential solution to the security of tenure gap through establishing a partnership between land professionals and citizens that would encourage and support citizens to directly capture and maintain information about their land rights. The paper presents a vision of how this might be implemented and investigates how the risks associated with this collaborative approach could be managed. http://www.fig.net/pub/monthly\_articles/december\_2011/december\_2011\_mclaren.html

#### A European perspective on Digital Earth by Dr Alessandro Annoni, Dr Max Craglia, M. Ehlers et al Abstract

The purpose of this paper is to contribute to the definition of a European perspective on Digital Earth (DE), identify some actions that can contribute to raise the awareness of DE in the European context and thus strengthen the European contribution to the International Society for Digital Earth (ISDE). The paper identifies opportunities and synergies with the current policy priorities in Europe (Europe 2020, Innovation Union and Digital Agenda) and highlights a number of key areas to advance the development of DE from a European perspective: (1) integrating scientific research into DE; (2) exploiting the Observation Web with human-centred sensing; and (3) governance, including the establishment of stronger linkages across the European landscape of funding streams and initiatives. The paper is offered also as a contribution to the development of this new vision of DE to be presented at the next International DE Conference in Perth, Australia, in August 2011. The global recognition of this new vision will then reinforce the European component and build a positive feedback loop for the further implementation of DE across the globe.

#### Spatial cloud computing: how can the geospatial sciences use and help shape cloud computing by

Chaowei Yang, Michael Goodchild, Qunying Huang, Doug Nebert, Robert Raskin, Yan Xu, Myra Bambacus & **Daniel Fay** 

#### **ABSTRACT:**

The geospatial sciences face grand information technology (IT) challenges in the twenty-first century: data intensity, computing intensity, concurrent access intensity and spatiotemporal intensity. These challenges require the readiness of a computing infrastructure that can: (1) better support discovery, access and utilization of data and data processing so as to relieve scientists and engineers of IT tasks and focus on scientific discoveries; (2) provide real-time IT resources to enable real-time applications, such as emergency response; (3) deal with access spikes; and (4) provide more reliable and scalable service for massive numbers of concurrent users to advance public knowledge. The emergence of cloud computing provides a potential solution with an elastic, on-demand computing platform to integrate - observation systems, parameter extracting algorithms, phenomena simulations, analytical visualization and decision support, and to provide social impact and user feedback - the essential elements of the geospatial sciences. We discuss the utilization of cloud computing to support the intensities of geospatial sciences by reporting from our investigations on how cloud computing could enable the geospatial sciences and how spatiotemporal principles, the kernel of the geospatial sciences, could be utilized to ensure the benefits of cloud computing. Four research examples are presented to analyze how to: (1) search, access and utilize geospatial data; (2) configure computing infrastructure to enable the computability of intensive simulation models; (3) disseminate and utilize research results for massive numbers of concurrent users; and (4) adopt spatiotemporal principles to support spatiotemporal intensive applications. The paper concludes with a discussion of opportunities and challenges for spatial cloud computing (SCC).

Sensors, empowerment, and accountability: a Digital Earth view from East Africa by Yola Georgiadou, Benson Bana, Robert Becht, Robert Hoppe, Justinian Ikingura, Menno-Jan Kraak, Kate Lance, Rob Lemmens, Juma Hemed Lungo, Michael McCall, Gianluca Miscione & Jeroen Verplanke

#### **ABSTRACT:**

Several innovative 'participatory sensing' initiatives are under way in East Africa. They can be seen as local manifestations of the global notion of Digital Earth. The initiatives aim to amplify the voice of ordinary citizens, improve citizens' capacity to directly influence public service delivery and hold local government accountable. The popularity of these innovations is, among other things, a local reaction to the partial failure of the millennium development goals (MDGs) to deliver accurate statistics on public services in Africa. Empowered citizens, with access to standard mobile phones, can 'sense' via text messages and report failures in the delivery of local government services. The public disclosure of these reports on the web and other mass media may pressure local authorities to take remedial action. In this paper, we outline the potential and research challenges of a 'participatory sensing' platform, which we call a 'human sensor web.' Digital Africa's first priority could be to



harness continent-wide and national data as well as local information resources, collected by citizens, in order to monitor, measure and forecast MDGs.

# Digital Earth 2020: towards the vision for the next decade by Max Craglia, Kees de Bie et al ABSTRACT:

This position paper is the outcome of a brainstorming workshop organised by the International Society for Digital Earth (ISDE) in Beijing in March 2011. It argues that the vision of Digital Earth (DE) put forward by Vice-President AI Gore 13 years ago needs to be re-evaluated in the light of the many developments in the fields of information technology, data infrastructures and earth observation that have taken place since. The paper identifies the main policy, scientific and societal drivers for the development of DE and illustrates the multi-faceted nature of a new vision of DE grounding it with a few examples of potential applications. Because no single organisation can on its own develop all the aspects of DE, it is essential to develop a series of collaborations at the global level to turn the vision outlined in this paper into reality.

#### Private Snoops Find GPS Trail Legal to Follow by Eric Eckholm (New York Times)

In the absence of legislation in most states, putting a GPS device on a spouse's car, or hiring an investigator to do so, is widely considered to be legal if the person placing it shares ownership of the car. But some privacy experts question this standard, and there is little to stop a jealous suitor, or an abusive man trying to prevent a battered woman from escaping, from doing the same.

GPS trackers are increasingly being cited in cases of criminal stalking and civil violations of privacy.

#### Privacy, Technology And Law by Barry Friedman (New York Times)

Perhaps too quickly. the recent US Supreme Court decision, along with other recent decisions, may turn the Fourth Amendment into a ticking time bomb, set to self-destruct — and soon — in the face of rapidly emerging technology.

Dog sniffs. Heat sensors. Helicopter flyovers. Are these "searches" within the meaning of the Fourth Amendment? The court has struggled with these questions over the years.

# Estimated carbon dioxide emissions from tropical deforestation improved by carbon-density maps by A. Baccinil, S. 1. Goetzl, W. S. Walker et al.

#### **ABSTRACT:**

Deforestation contributes 6-1755 of global anthropogenic C02 emissions to the atmosphere1. Large uncertainties in emission estimates arise from inadequate data on the carbon density of forests2 and the regional rates of deforestation. Consequently there is an urgent need for improved data sets that characterize the global distribution of aboveground biomass, especially in the tropics. Here we use multi-sensor satellite data to estimate aboveground live woody vegetation carbon density for pan-tropical ecosystems with unprecedented accuracy and spatial resolution. Results indicate that the total amount of carbon held in tropical woody vegetation is 228.7 PgC, which is 21% higher than the amount reported in the Global Forest Resources Assessment 2010 (ref. 3). At the national level, Brazil and Indonesia contain 35% of the total carbon stored in tropical forests and produce the largest emissions from forest loss. Combining estimates of aboveground carbon stocks with regional deforestation rates4 we estimate the total net emission of carbon from tropical deforestation and land use to be 1.0PgCyr-' over the period 2000-2010-based on the carbon bookkeeping model. These new data sets of aboveground carbon stocks will enable tropical nations to meet their emissions reporting requirements (that is, United Nations Framework Convention on Climate Change Tier 3) with greater accuracy.

# Airborne LiDAR for Obstruction Mapping: Enabling Flight Safety by Bill Gutelius Introduction

As laser scanning has evolved and matured, it has increasingly become a new and eventually necessary tool in many industries. One area that has benefitted from the application of laser scanning is aviation safety. Airborne LIDAR (Light Detection And Ranging) is used to detect and map obstacles that intrude into the airspace through which aircraft fly (Figure 1). Ground-based LIDAR (mobile and static scanning systems) technology also has recently been used to map/image ground objects such as taxiway signage, lighting fixtures, weather and communications structures, aids to navigation (NAVAIDS) and other manmade and natural features on and immediately adjacent to the airport. Additionally, there is growing use of mobile and static scanners to image and map airport infrastructure such as the interior and exterior of airport terminals as well as apron, baggage-handling and other ancillary structural features found at an airfield.

The application of airborne LIDAR to obstacle detection and mapping provides critical information for flight



safety as the FAA uses the information to make decisions about flight procedures at and around the airfield. In addition to mapping obstructions, airborne LIDAR utilization provides the airport operator and the FAA with detailed data for input to airport layout plans (ALP) and geographic information systems (GIS). The FAA sets out a guide for contractors and sponsors looking to fulfill the requirements for these surveys and data collection: Guide to Airport Surveys. Source: LiDAR News

#### D4AR-4 Dimensional Augmented Reality by Mani Golparvar-Fard

Imagine you are sitting at your office and would like to conduct a walk-through on your job site, but you are hundreds of miles away. Using a new D4AR--4 dimensional augmented reality--modeling technology, you can make a phone call to your construction site and ask your superintendents and field engineers to walk around the site, take photos and send them back to you. Then you can automatically reconstruct actual 3D point cloud model of the site using these photos and register the resulting point cloud model and photos with your Building Information Models. Using the D4AR models, you would be able to remotely walk through the site and study both the actual and expected status of your project. You can remotely monitor progress, productivity, safety and quality, perform geometrical measurements, or even analyze site logistics.

First In Last Out: The surveyor acts as maestro in getting a coal mine up and running. (Part 1 and Part 2)

Underground mine surveying Source: Professional Surveyor magazine

#### Back to contents

## Books and Journals (including Videos and Web publications)

#### Esri Releases National Geographic World Basemap

Highly Detailed Basemap Accessible via ArcGIS Online

#### **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.

International Society for Digital Earth - December, 2011 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 3 (February 2012)

Think Quarterly – Google's new on-line magazine

<u>Coordinates</u> monthly magazine (January 2012)



**GISuser - GIS and Geospatial Technology News** 

National geographic website

The Atlantic Cities website

Professional Surveyor magazine

Back to contents

### Just for Fun!

#### Laser Scanner helps recreate the Wright Brothers first flight

In 2000 the Direct Dimensions company had been approached by the Wright Experience, a Virginia-based company that rebuilds historical airplanes, about recreating the first Wright Brother's plane for the upcoming centennial celebration in 2003. This project would of course require an exact reproduction of the two propellers, now very famous historic and cultural artifacts on public display separately in two major U.S.



museums – The Smithsonian Air & Space Museum in Washington, DC and the Wright Bros. National Park in Kitty Hawk, NC.

Source: LiDAR News

#### The World's Most Exclusive Condominium

... a rare example of that curious border arrangement: a condominium. A condominium is a territory jointly administered by two or more countries, often (but not necessarily) a territory on the common border between the parties involved. As one might surmise, such an arrangement depends on the benevolent cooperation of all parties involved — and indeed, historically, most condominiums have not survived very long. Source: NY Times "Borderlines" blog

Source. INT Times Bordenines blog

#### Well, here ya go, a free theodolite! - Freebie app for iPod,iPhone, & iPad



Theodolite Free trumps its mechanical namesake by using GPS positioning along with your iPhone's sensors to give you your position, bearing, inclination, and altitude. Use it and a bit of trigonometry to deduce distances, heights, vectors

and more. It's accurate and just plain cool looking. Use it in conjunction with a real compass or the one built into your iPhone to relate your map position to your current

whereabouts. You can then see how the map interprets terrain features, giving you a bit more confidence in knowing exactly where you are and what's around you.

There's a US\$4.00 upgrade that gets rid of ads and gives you added features, but you can get by with the freebie.

Source: MacObserver and Hunter Research and Technology, LLC

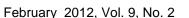
#### South Pacific Island of Samoa Changes International Dateline

In December, 2011 the tiny Island nation of Samoa decided they were on the wrong side of the dateline... so they changed it!

An interesting mapping story that you may not have heard about over the New Year as Samoa decided last year that they were on the wrong side of the International dateline. Indeed a good move for Samoa as when you take into account their relationship with

Australia they were essentially missing out on 2 full days of business due to their geographical placement relative to the dateline. In a bold move, and unfortunate for those who celebrate their birthday on Dec 30th,

#### Back to contents



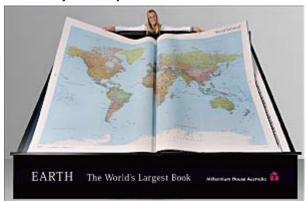


Samoa made the change in 2011 and Samoans went to bed Dec 29, 2011 and woke up the following morning on December 31, the same day as their mates in Australia! Source: GISUser and <u>BBC News</u>

#### The World's Largest Atlas- 128 Pages of Awe Inspiring Craftsmanship

Ever wondered about the world's largest atlas? The gigantic Earth Platinum is the world's largest atlas and is brought to you by Millenium House, Australia. This atlas apart from being the world's largest atlas to ever be printed or published is also the worlds finest.

Standing at a colossal 6 feet by 9 feet tall and weighing 120kgs the amount of data provided in the Earth Platinum is so large and extensive that a book of this size was necessary to do it justice. This massive atlas has 128 breath taking pages filled with



state of the art cartography, photography, oceanography, geography and a lot more. Giving testament to how massive the Earth Platinum is the fact that many islands can far the first time over the second



for the first time ever be seen at a reasonable size in relation to the nearest continent. This has been considered keeping in mind the fact that it is not easy to get a sense of scale of our planet. This is the closest a book can go to achieve that- a remarkable achievement indeed! Source: Headlines, India

See also Wikipedia and ESRI News

#### Back to contents

## **Training Opportunities**

#### Free Course: Bringing Data to Life with Google Fusion Tables

On Monday, January 9th we will be releasing a free self-paced, web based, e-learning course entitled: Bringing Data to Life with Google Fusion Tables

Part 1 of this course will be released on Monday. Part 2: Programming the Google Fusion Tables API will be released later this year. Both parts will remain available.

An interesting training opportunity is coming up with a free course on Google Fusion Tables. Some details from Eric at GeospatialTraining - Part 1 of this course will be released on Monday. Part 2: Programming the Google Fusion Tables API will be released later this year. All lectures for this course will be pre-recorded and available at your convenience. Exercises are also provided to reinforce the concepts you learn in lecture. **To register, go** to <u>http://bit.ly/gufusion01</u> and click the link for the Bringing Data to Life with Google Fusion Tables link All lectures for this course will be pre-recorded and available at your convenience. Exercises are also provided to reinforce the concepts you learn in lecture to reinforce the concepts you learn in lecture.

In this course you will learn how to use the Google Fusion Tables platform to:

Find and map public data sets including demographics, census, environmental, and much more Upload data to secure, hosted tables Create visualizations of your data including maps, charts, and graphs Symbolize your data Create heat maps from point data Create thematic maps Geocode addresses Export data to KML or delimited files Embed maps and other visualizations in web pages Share your data with others

Merge your data with other data sets

Anyone can join this course.

To register, go to <a href="http://bit.ly/gufusion01">http://bit.ly/gufusion01</a> and click the link for the Bringing Data to Life with Google Fusion Tables link

#### Back to contents



#### 11th NCCR Climate Summer School, 9-14 September 2012, Ticino, Switzerland

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.

The Summer School is focusing on the theme "the water cycle in a changing climate". This theme has been chosen due to its paramount importance in terms of both scientific challenges and pressing societal concerns. The specific topics to be addressed include:

- Observed variations of the water cycle.
- Physical processes governing the hydrological response to climate change,
- Scenarios of the water cycle in a changing climate,
- Anticipated impacts.

The Summer School invites young researchers from all fields of climate research. The courses cover a broad spectrum of climate and climate impact research issues and foster cross-disciplinary links. Each topic includes keynote plenary lectures and workshops with in-depth discussion in smaller groups. All summer school participants present a poster of their research and there will be ample opportunity for discussion.

The Summer School is open to young researchers (PhD students and Post-Docs) worldwide. Participation is highly competitive and will be limited to a maximum of 70. The registration fee (1400 CHF) includes half board accommodation, excursion and teaching material. A small number of grants will be available for students from developing countries (i.e. non-OECD countries).

**Deadline for applications:** <u>now passed</u>. 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: <<u>nccr-climate@oeschger.unibe.ch</u>>

Telephone +41 31 631 31 45, Telefax +41 31 631 43 38.

#### 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: <<u>http://gvsig-training.com/</u>>

- 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.

<u>Certificate III in Spatial Information Services (GIS)</u> <u>Certificate IV in Spatial Information Services (GIS)</u> <u>Diploma of Spatial Information Services (GIS)</u> 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

#### Apple Textbooks - A Geospatial Future?

January saw Apple announce a new initiative that would bring the iBook more closely to the world of education and student use. At the same time, the company announced a new iTunes App that would enable users to directly interact with iPods, iPads and iMacs to develop and collaborate more closely. The interactive capabilities, ease of collaboration and creation of educational materials could hold great promise for the geospatial and geomatic audience, particularly students.

Source: Asian Surveying & Mapping

#### Back to contents

## Funding Opportunities, Awards, Grants

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

Source: Geospatial World and SLA press release



## **Employment Opportunities**

Spatial Data Infrastructure specialist for Integrated Environmental and Coastal ecosystem Management (INCAM), Lebanon. One-year position to be filled immediately Gross salary: 2500 €/month

The SDI specialist will contribute to the INCAM project (<u>www.incam-cnrs.eu</u>) which aims at enhancing Lebanon's capacity for key environmental issues, based on a regional approach. Collection of existing research data is needed to reflect the present conditions and status of natural resources and to identify gaps in environmental assessment capacities in the intensively developed Lebanese coastal zones. Along with this need come the requirements for better standardization, organization, management and sharing of increased production and use of GIS data. The project develops a Spatial Data Infrastructures (SDIs) approach, implying technology, standards, and policies to acquire, process, store, distribute, and improve use of geospatial data for Lebanon. The leading organization is CNRS-Lebanon and the others two partners are the Mediterranean Agronomic Institute of Bari (IAM-B), Italy and the Institut de Recherche pour le Développement (IRD) of Toulouse, France.

#### Contact:

Applications (CV + cover letter) should be submitted to : laurent.drapeau@cesbio.cnes.fr Source and further information <u>Cesbio</u>

#### Post-Doctoral Position for DataONE Provenance and Scientific Workflows Working Group

The Data Observation Network for Earth (<u>DataONE</u>) is recruiting a post-doctoral associate to work with the Provenance and Scientific Workflows Working Group of DataONE. This is a full-time, 12–month position initially for one year, but renewable pending progress and availability of funds. Applications will be accepted starting immediately and will be accepted until the position is filled.

The post-doc will be mentored and supervised by the DataONE PI, Dr. William Michener (UNM, USA), DataONE/ProvWG leads Dr. Bertram Ludaescher (UC Davis, USA), and Dr. Paolo Missier (U Newcastle, UK). Interested candidates should send a CV, a brief statement of interest in this position, and a list 3 references and their contact information to both <u>Bertram Ludaescher</u> and <u>Rebecca Koskela</u> (Executive Director of DataONE), DataONE, University of New Mexico, 1312 Basehart Drive SE, MSC04 2815, Albuquerque, NM 87106. Inquiries for further information about the position are welcome. Salary and benefits for this position are competitive and commensurate with the applicant's qualifications and experience.

#### Source: DataOne

### GIS Job Board Launches New Website: <u>www.gisjobboard.com</u>

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**

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

## 2nd International Workshop on 3D Cadastres organized by FIG,

EuroSDR and TU Delft

(16-18 November 2011, Delft, The Netherlands). Papers & Presentations available <u>here</u>



#### Seminar on Hyperspectral Earth Observation Convened in Beijing

On 1–2 December, 2011, the High Level Seminar on Hyperspectral Earth Observation convened in Beijing. Nearly 200 Chinese experts, graduate students and industry representatives in fields related to imaging spectroscopy attended the seminar. The seminar was divided into three parts: a review of the latest developments in hyperspectral Earth observation, imaging spectrometry technology, hyperspectral data processing and its applications. See <u>also</u>.

#### Back to contents

## 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
February 2012		
7 – 9 February	Gurgoan, India	India Geospatial Forum Award to encourage young geospatial scientists To encourage young researchers working in the areas of geospatial science and technologies, Rachapudi Kamakshi Memorial Trust has instituted the Rachapudi Kamakshi Memorial Gold Medal for 'Young Geospatial Scientist <sup>™</sup> .' The award, consisting of a gold medal, citation plaque and a certificate of merit, will be awarded annually during the biggest congregation of geospatial community in the country, India Geospatial Forum (previously known as 'Map India') during 8-9 February 2012.
15 – 16 February "NEW"	Kuala Lumpur, Malaysia.	UNRCC-PCGIAP International Symposium on Spatially Enabled Government and Society Theme: Towards Spatial Maturity
March 2012		
21-3 March	Darwin, AUSTRALIA	NT Spatial 2012: Northern Exposure "Science and Applications" Important dates: Registrations open 1 December 2011 Registrations close 16 March 2012 Presentations & Papers (optional) due 19 March 2012 Pre-Conference workshops (optional) 21 March 2012



		Sponsors trade display22 March 2012Conference start22 March 2012NT Spatial & Awards Dinner22 March 2012Final day of conference23 March 2012Contact
April 2012 11 - 13 April	Lancaster, UK	Call for Papers, GISRUK2012, Lancaster University, 2012 We are pleased to invite you to submit short (~1500 word) papers for the 20th annual GIS Research UK conference (GISRUK). We welcome papers covering all aspects of theoretical and applied GIS research, particularly those within the following themes: • Environmental Geoinformatics • Open-Source GI • Web2.0 • Qualitative GIS • Spatial Ecology • Health • Emergency Response • Landscape Visualisation • Geospatial Semantics • Location-Based Services • Remote Sensing and Photogrammetry <b>The closing date for submissions is 25th November 2011</b> . All papers will be subject to peer review with accepted papers allocated to oral and poster sessions accordingly. Conference proceedings including all papers accepted for oral and poster presentation will be made available as a free e-book (with ISBN) and as hardcopy for purchase via http://www.lulu.com. The conference will be proceeded by a Open Source GeoSpatial software workshop and a Young Researchers Forum commencing on Tuesday 10th April 2012. The keynote speakers for the conference will be: • Pete Atkinson, University of Southampton, UK • Mei-Po Kwan, Ohio State University, USA • Tyler Mitchell, Executive Director, OSGeo, USA For more information and submission details please visit the conference website: http://www.lancs.ac.uk/gisruk2012@lancs.ac.uk} . We look forward to receiving your
23 – 27 April	Amsterdam, The Netherlands	submissions and welcoming you to Lancaster in 2012.         GEOSPATIAL         WORLD         FORUM         Geospatial World Forum         Theme: Geospatial Industry & World Economy
May 2012		
7-9 May "NEW"	Rio de Janeiro, BRAZIL	4th International Conference on GEographic Object Based Image Analysis 2012 – GEOBIA 2012
13-17 May	Quebec City, Canada	<ul> <li>2012 Joint World Conference</li> <li><u>GSDI 13</u> and <u>Canadian Geomatics Conference (CCC)</u></li> <li>hosted by <u>GEOIDE</u> Network</li> <li>GSDI 13 invites presentations/papers covering the full range of practice, development and research experiences that advance the practice and theory of spatial data infrastructure development and spatial enablement of society. GSDI 13 will support three primary forms of publication:</li> <li>(1) a normal conference proceedings with abstracts and full articles (non-refereed and refereed), published on a USB drive or CD and archived on the web,</li> </ul>



16-17 May "NEW" 21-3 May	Quebec, CANADA Prague, Czech Republic	<ul> <li>(2) a pre-conference published book of fully refereed articles titled "Spatially Enabling Government, Industry and Citizens: Research and Development Perspectives" to be distributed to all conference participants and archived on the web, and</li> <li>(3) a post-conference special edition of the International Journal of Spatial Data Infrastructures Research (IJSDIR) with full articles selected from the proceedings and then fully refereed and revised after the conference.</li> <li>In addition, two separate calls arising from the joint conference are being issued for chapter submissions to two additional books:</li> <li>(1) "The Added Value of Scientific Networking: GEOIDE Network Experiences" to be distributed to all conference participants (Call for chapters at <a href="http://www.geoide.ulaval.ca/call-for-chapters.aspx">http://www.geoide.ulaval.ca/call-for-chapters.aspx</a>), and</li> <li>(2) "3DGeo Info Conference Proceedings" (Springer) to be mailed after the conference to all 3DGeo Conference participants which will be a single track on Wednesday and Thursday (Call at http://www.3dgeoinfo2012.ulaval.ca/?page_id=48).</li> <li>IMPORTANT LINKS</li> <li>Conference Website: <a href="http://www.gsdi.org/gsdi13">http://www.gsdi.org/gsdi13</a> Past GSDI World Conference Proceedings: <a href="http://www.gsdi.org/gsdi13">http://www.gsdi.org/gsdi13</a> Past open access Books affiliated with the conference.</li> <li>Proceedings: <a href="http://www.gsdi.org/gsdi13/dates.html">http://www.gsdi.org/gsdi13/dates.html</a> Other Important Dates: <a href="http://www.gsdi.org/gsdi13/dates.html">http://www.gsdi.org/gsdi13/dates.html</a> </li> <li><b>FOSS4G-CEE &amp; Geoinformatics</b> Important dates:</li> </ul>
	Czech Republic	Iniportant dates.1.1.2012Call for papers & workshops1.2.2012Workshop submission deadline1.3.2012Papers submission deadline15.2.2012Confirmation of accepted workshops15.3.2012Confirmation of accepted papers1.4.2012Early bird registration deadline
23-4 May	Taza, Morocco	International conference of GIS users, Taza GIS-Days 2012" The Taza-GIS-Days symposium is being organized by the Laboratory Natural Ressources and Environment of the Polydisciplinary Faculty of Taza in collaboration with the Sidi Mohamed Ben Abdellah University, Fez. Participants will have the opportunity to learn about GIS through a series of presentations, exhibitions and practical exercises presented by a distinguished group of professionals. <b>Topics:</b> Development and Planning, Archaeology and History, Environment, Water Resources Management, Remote sensing, Photogrammetry, GPS, Natural Hazards, Mapping and Geology, Web application, GIS and Open Sources, Geolocation and Network Interoperability and Standards OGC Deadline for abstracts submission: February 29, 2012 <u>Contact</u>
June 2012		
3-5 June	Kuala Terengganu, Malaysia	The International Conference on Informatics & Applications (ICIA2012) The proposed conference on the above theme will be held at University Sultan Zainal Abidin, Kuala Terengganu, Malaysia, From June 3-5, 2012 which aims to enable researchers build connections between different digital applications.



		Important Dates
		======================================
4-7 June	Las Vegas	Hexagon 2012 conference.
15-17 June	Hong Kong	20th International Conference on GeoInformatics (GeoInformatics 2012) Abstract/Paper submission deadline: 15 November 2011 In response to the increasing concerns on global changes and natural disasters, the 2012 conference theme is "Global Change, Adaptation and Risk Management". Earthquakes, floods, droughts, pollutions and many other natural and man-made disasters are severe threats to the mankind. Geoinformatic technologies shall play an essential roles to mitigate damages of the disasters. This conference will provide an excellent opportunity for professionals and students in the geographic information science area to exchange innovative ideas, discover cutting-edge technologies, and present inspiring applications. Meanwhile, 2012 will be the 20th Anniversary of the International Association of Chinese Professionals in Geographic Information Sciences (CPGIS, <u>http://cpgis.org/</u> ) and its Annual Conference (the GeoInformatics professionals and scholars all around the world, review and celebrate our accomplishments and to develop our vision for the next 20 years.
25-30 June	Istanbul, Turkey	World GIS Summit "The World GIS Summit" has been postponed to June 25-30, 2012."
July 2012		
8-11 July	Brisbane, Australia	2012 Brisbane International Geospatial Forum
23-27 July	San Diego, USA	<ul> <li>Esri International User Conference</li> <li>Now Accepting Presentation Submissions</li> <li>Participation from the GIS community makes the Esri International User Conference (Esri UC) &lt; http://www.esri.com/events/user- conference/index.html &gt; much more than just another technology user conference. It's a place to collaborate with your colleagues and get inspired by their work.</li> <li>What do you know that could help others make the most of ArcGIS? Here's your chance to share tips, strategies, and accomplishments with fellow GIS professionals. Both new and seasoned ArcGIS users are encouraged to submit presentation abstracts for consideration. Of particular interest are proposals related to:</li> <li>Applying ArcGIS to new problems in innovative ways</li> </ul>
		<ul> <li>Leveraging new capabilities of ArcGIS 10</li> <li>Extending your GIS to a broader audience through web and mobile applications</li> <li>Driving GIS advancements in your industry</li> <li>Collaborating inside and outside your organization to increase efficiency, share data, and maximize geospatial resources Review the session topics to see how your contribution can fit into this year's agenda.</li> <li>Abstract submission deadline: passed.</li> </ul>



25 August – 1 September	Melbourne, Australia	XXII International Society for Photogrammetry & Remote           Sensing Congress           Email: isprs2012@icms.com.au
September 2012		
2-5 September "NEW"	Wellington, New Zealand	The 4th Digital Earth Summit focusing on "Natural Disasters"
6-8 September "NEW"	Tokyo, Japan	2012 International Conference for OpenStreetMap (OSM) State of the Map 2012 (SoTM12)
9-14 September	Ticino, Switzerland	<ul> <li>11th 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. The Summer School is focusing on the theme "the water cycle in a changing climate". This theme has been chosen due to its paramount importance in terms of both scientific challenges and pressing societal concerns. The specific topics to be addressed include: <ul> <li>Observed variations of the water cycle.</li> <li>Physical processes governing the hydrological response to climate change,</li> <li>Scenarios of the water cycle in a changing climate,</li> <li>Anticipated impacts.</li> </ul> </li> <li>The Summer School invites young researchers from all fields of climate research. The courses cover a broad spectrum of climate and climate impact research issues and foster cross-disciplinary links. Each topic includes keynote plenary lectures and workshops with in-depth discussion in smaller groups. All summer school participants present a poster of their research and there will be ample opportunity for discussion. The Summer School is open to young researchers (PhD students and Post-Docs) worldwide. Participation is highly competitive and will be limited to a maximum of 70. The registration fee (1400 CHF) includes half board accommodation, excursion and teaching material. A small number of grants will be available for students from developing countries (i.e. non-OECD countries). Deadline for applications: closed. Successful applicants will be notified in February 2012. Detailed information and the application form are available at &lt;<u>http://www.nccr-climate.unibe.ch/summer_school/2012/&gt;&gt;</u>. Contact: University of Bern, NCCR Climate Management Centre, Zähringerstrasse 25, CH-3012 Bern, Switzerland, mailto: &lt;<u>nccr-climate@oeschger.unibe.ch/summer_school/2012/&gt;&gt;</u>. </li></ul>
October 2012	Morocco	10th biennial International Conference of the African
2014		Association of Remote Sensing of the Environment (AARSE)
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.



To subscribe to SDI-AP, please do so <u>online</u>. To contact please <u>email</u> the editors. <u>Global Spatial Data Infrastructure Association</u>.

Please mention SDI-AP as a source of information in any correspondence you may have about items in this issue.

**DISCLAIMER:** The Editor and Web Host will not be held liable for any errors, mistakes, misprints or incorrect information.

Copyright © 2011. All rights reserved.

