

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.

If you have news or information related to SDI, GIS, RS or spatial data that you would like to share with the community (e.g. workshop announcements, publications, reports, websites of interest etc.), kindly [send us](#) the materials by the 25<sup>th</sup> of the each month 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:

Kate Lance, and Baek Wonkug for news feeds, Jeremy Shen and Bruce Lan and colleagues for the Chinese translation as well as Shivani Lal, *GIS Development*, *GeoSpatial World* and *Asia Surveying & Mapping* magazine for directly contributing to the newsletter.

## GSDI News

### **International Geospatial Society (IGS) Free Memberships**

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

### **Nominations for Global Citizen Award of the GSDI Association**

The GSDI Association desires to receive nominations to recognize globally an individual who has provided exemplary thought leadership and substantive worldwide contributions in (1) promoting informed and responsible use of geographic information and geospatial technologies for the benefit of society and/or (2) fostering spatial data infrastructure developments that support sustainable social, economic, and environmental systems integrated from local to global scales. Refer to <http://www.gsd.org/globalcitizenaward>

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## SDI News, Links, Papers, Presentations

### **Google Implements Usage Limits on the Google Maps API - no more free lunch**

You had to know the time would come when Google would throw the switch and start the meter running for sites using the Google Maps API. Well, that day is here!

Source: GISUser

### **Asia-Pacific Experiences in Developing Common Frameworks and Methodologies**

Dr Hiroshi Murakami, Professor Abbas Rajabifard, and Mr Greg Scott

Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP)

PCGIAP has established working groups to undertake projects in pursuit of the organization's aims and objectives. At present, most of the activities of PCGIAP and its working groups are directed towards developing and implementing the components of the APSDI. From these activities, this paper focuses on technical abilities, geodetic abilities, and institutional processes, as they are related to the development of common frameworks and methodologies. In order to understand the current regional status of these themes, a questionnaire to all PCGIAP member nations was conducted in September 2011. While the number of responses to the questionnaire is still limited at the time of writing, a preliminary analysis on responses provides some insight into the current status of SDI development of member countries in the region.

Source: <http://ggim.un.org>

### **Nov 15 deadline for Delhi Geographical Spatial Data Infrastructure Act 2011**

NEW DELHI: The government is preparing to implement the Delhi Geographical Spatial Data Infrastructure Act 2011 from November 15. Under the Act, all state departments and civic agencies have to mandatorily access, use and share information on all projects and update Delhi's spatial database.

The database, an interconnected 3D global information system, captures the demographics of the capital and

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utilities like stormwater drains, sewer lines, roads, infrastructure and urban planning projects through secured communication networks.

Source: The Times of India

### [OGC Calls for Sponsors for Major Interoperability Testbed](#)

The Open Geospatial Consortium (OGC®) has issued a call for sponsors of the [OGC Web Services, Phase 9 \(OWS-9\) Testbed](#). The OWS-9 Testbed is run under OGC's Interoperability Program (IP), designed to rapidly develop, test and deliver proven candidate specifications into OGC's Specification Program.

Source: [Opengeospatial](#)

### [Malaysia: Towards spatially enabled society](#)

Geospatial technology in Malaysia is largely driven by the government, both as a user and as a facilitator in supporting initiatives to promote the technology...

Source: Geospatial Wrld

### [Beyond Spatial Enablement](#)

This event will discussed trends, strategies and a vision for a spatially enabled future. Additional themes included, mapping, SDI and land administration strategies to facilitate spatially enabled government. It will also examined progress to date and considered worldwide challenges and new initiatives that the UN and member countries are implementing in support of spatially enabled government and society. The participants were the key stakeholders and decision makers in the inter-related fields of land and spatial information

Presentations from the event are available from the following [links](#).

Source: Centre for Spatial Data Infrastructures and Land Administration

The Centre for Spatial Data Infrastructures and Land Administration has launched a [10 Year celebration video](#)



### [What is Geomatics?](#) by Helen Murray-O'Connor, Dublin Institute of Technology

As the only educational institution offering a BSc (Hons) course in Geomatics (Surveying and Mapping) in the whole of the Republic of Ireland, the Dublin Institute of Technology (DIT) has noted a severe lack of awareness of what Geomatics encompasses both as a discipline and as a potential career. New marketing initiatives, including the use of an animated video on social networking sites, aim to ensure the survival of the course by informing potential Geomatics students about both the profession in general and the specific opportunities at DIT.

Source: GIM International

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## SDI Spotlight



This month's "Spotlight" feature is from **Ali Aien** who commenced his PhD research on 3D Cadastral Data Modelling in 2010 at the Centre for SDIs and Land Administration in the Department of Infrastructure Engineering at the University of Melbourne. His research aims to develop and implement a data model to enable the capture, storage, editing, querying, analysis and support visualisation of 3D land rights, restrictions and responsibilities in cadastre. He also has a bachelor's degree in surveying engineering and a master's degree in GIS engineering.



### Needs for 3D Cadastral Data Modelling



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**Introduction**

The need for more land resulting from population growth, urbanization and industrialization has increased the demand on land use planning and development. To extend the use and functionality of the land, complex infrastructures are being built, both vertically and horizontally and layered or stacked. These three-dimensional (3D) developments affect the interests or RRRs (Rights, Restrictions, and Responsibilities) attached to the underlying land. A 3D cadastre will assist in managing the effects of 3D development on a particular lot or parcel of land.

There are many elements that contribute to developing a 3D cadastre, such as existing 3D property legislation, 3D DBMS, and 3D visualization. However, data modeling is an important element of a successful 3D cadastre. As architectural models of houses and high rise buildings help their users visualize the final product, a 3D cadastre data model supports 3D cadastre users to understand the structure or behavior of the system and have a template that guides them to construct and implement the 3D cadastre.

Many jurisdictions, organizations and software developers have developed their own cadastral data model. Examples of existing data models are Land Administration Domain Model (DIS-ISO 19152, The Netherlands) and ePlan (Intergovernmental Committee on Surveying and Mapping, Australia).

**Research Problem**

The differences between these data models are the result of the authors' different approaches towards cadastrals. However, there is a basic common thread among them. *Current cadastral data models use a 2D land-parcel concept and extend it to support 3D requirements. These data models cannot adequately manage and represent the spatial extent of 3D RRRs.* Most of the current cadastral data models have been influenced by a very broad understanding of 3D cadastral concepts because clarity in what needs to be represented and analysed cadastre needs to be established.

**Research Aim**

This research aims to introduce the first version of a 3D Cadastral Data Model (3DCDM\_Version 1.0) which has been developed to support 3D cadastre. Furthermore, a case study approach will be presented to examine the data model.

**3D Cadastral Data Model (3DCDM)**

The first version of 3D Cadastral Data Model (3DCDM\_Version 1.0) is presented in this section. It is based on the principles of 3D Cadastral Data Modelling, and lessons from the legal property object concept. 3DCDM has seven packages to support the 3D cadastrals. They are 3DCDM\_InterestHolder, 3DCDM\_Propertyobject (PO), 3DCDM\_Geometry, 3DCDM\_Survey, 3DCDM\_SurveyPoints, 3DCDM\_SurveyObsevation, and 3DCDM\_ExternalSources (Figure 1).

3DCDM maintains both legal and physical parts of 3D objects. The data model has wider application than the traditional requirements of cadastral systems: it is also usable in applications such as urban planning and disaster management.

The development of full 3D cadastre will most likely be staged processed, supported by cost/benefit analyses that demonstrate the value of each stage. Further research should therefore also examine approaches to implementation. In conclusion, the model presented here can be seen as part of the processes of development.

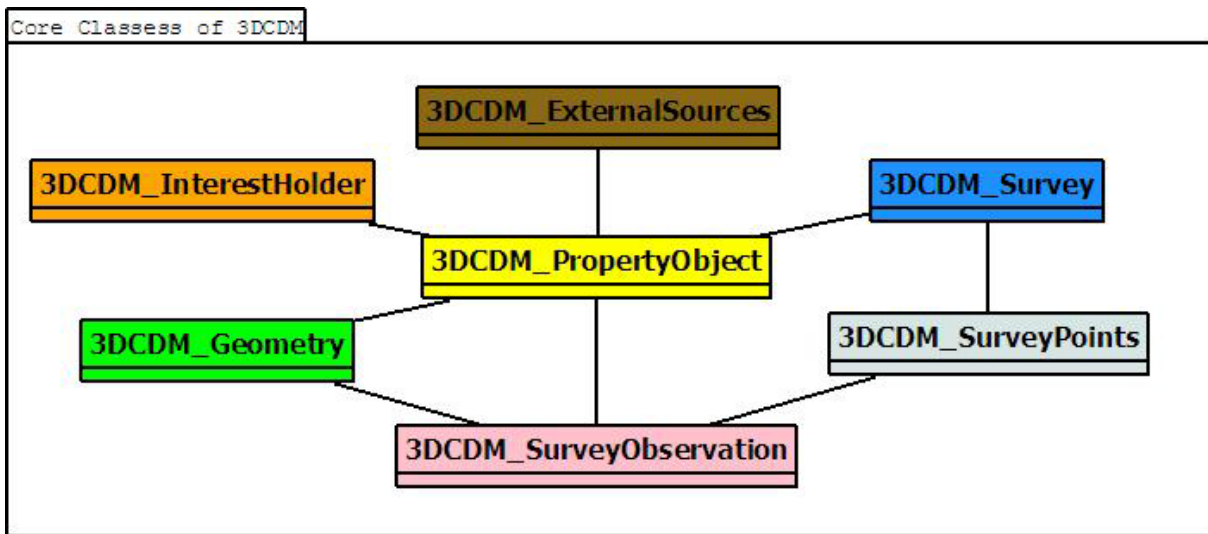


Figure 1: Core classes of 3DCDM

### 3D Cadastre Workshop

Land and Property Management in 3D workshop was launched by the research team in conjunction with the “4th UN Sponsored PCGIAP Land Administration Forum, Collaborative Research Workshop & Ten Year Celebration for the CSDILA” event in Melbourne on Wednesday 5th October 2011. This workshop aimed at discussing latest outcomes of the research project. The research team presented about 3D cadastre concept, 3D data collection methods, 3D cadastral data modelling, 3D cadastre visualisation, legal and institutional aspects of 3D cadastre. This followed by a discussion on possible improvements to the project and future directions. For more information about the event, [please visit](#).

### More Information

For more information about this research project, [please visit](#).

A list of publications related to this research project are:

- Aien, A., Rajabifard, A., Kalantari, M., Williamson, I., (2011). Aspects of 3D Cadastre- A Case Study in Victoria. Paper presented at the FIG Working Week 2011, Marrakech, Morocco.
- Aien, A., Rajabifard, A., Kalantari, M., Williamson, I., (2011). 3D Cadastre in Victoria, Converting Building plans of Subdivision to LandXML. GIM International, 25(8), 16-21.
- Aien, A., Kalantari, M. Rajabifard, A., Williamson, I., Bennett, R., (2011). Advanced Principles of 3D Cadastral Data Modelling, 2<sup>nd</sup> International Workshop on 3D Cadastres, 16-18 November, 2011.

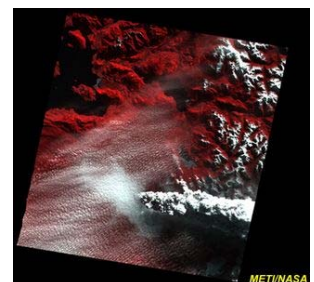
The editors remind our subscribers and readers that we welcome contributions for the *Spotlight* feature.

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## GIS Tools, Software, Data

### [New ASTER global digital elevation model](#)

In 2009 NASA and the Japanese Ministry of Economy, Trade, and Industry (METI) released the [Advanced Spaceborne Thermal Emission and Reflection Radiometer \(ASTER\)](#) global digital elevation model (DEM), which covers about 99% of the Earth's surface. The global DEM was built from 1.5 million individual scene-based [ASTER](#) DEMs. The global DEM is in GeoTIFF format with lat/long coordinates and a 1 arc-second (30 m) grid. It is referenced to the WGS84/EGM96 geoid. Accuracy is estimated to be 20 meters for elevations and 30 meters for horizontal data. The data can be downloaded [here](#)



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Source: Between the Poles

### [Japan to share GIS expertise with British university](#)

Edge Hill University from St Helens, UK, has been awarded a grant from the Daiwa Anglo-Japanese Foundation – a charity that supports closer links between Britain and Japan - to help forge new links with the country and improve learning around GIS.

Source: [Geospatial World](#) and [www.creativeboom.co.uk](http://www.creativeboom.co.uk)

### [International Charter develops geographic tool to provide information about satellite data used for activations](#)

The International Charter for Space and Major Disasters has developed a geographic tool to display footprints and characteristics of satellite data provided in the frame of each activation. This catalogue contains no data but rather metadata describing the images acquired by a range of satellites during Charter activations. The catalogue brings together the metadata from the images used in each activation and provides a user-friendly which allows discovery and browsing of these metadata.

Thanks to Gordon Ojwang for this item

### [New Zealand launches new educational GIS portal](#)

The New Zealand Geospatial Office has launched a new website called the Educational GIS web portal that aims to educate the children studying in the country's high schools about the tremendous importance of GIS (Geographic Information Systems).

Source: Asia Pacific FutureGov & [Geospatial World](#)

### [Hong Kong leverages geospatial tech in 2011 Census](#)

The Hong Kong SAR Government invested approximately USD 67 million for the 2011 population census, including a total of USD 192,000 for the enhancement of the Digital Mapping System (DMS) – a tool developed in order to facilitate pre-census planning work, to streamline field operations during the census period and to disseminate census data by geographical area in a more flexible way.

Source: [Geospatial World](#) & Asia Pacific FutureGov

### [Chinese Navy releases e-navigation chart](#)

The navigation guarantee department of the Chinese Navy Headquarters, China's official hydrographic surveying and mapping organisation, released China's new electronic navigation chart. With this releases, ships sailing in Chinese waters can now say goodbye to paper charts

Source: [Geospatial World](#) & [www.ChinaDaily.com.cn](http://www.ChinaDaily.com.cn)

### [Thailand: Satellite Data Centre for disaster management](#)

The Geo-Informatics and Space Technology Development Agency (GISTDA) and the Ministry of Science and Technology (MOST) has teamed up to establish a Geo-Informatics Operation System and Satellite Data Centre as a response to the problems posed by Thailand's worst flooding in decades.

The data centre will make use of modern Geo-Informatics technology in order for concerned government authorities to make well-informed decisions during times of natural calamities.

The MOST, Hydro and Agro Informatics Institute, Royal Irrigation Department, Department of Disaster Prevention and Mitigation, are among the many agencies that are actively making use of satellite image maps from GISTDA as a significant tool for monitoring the effects of the recent disaster.

The data centre will make use of high resolution satellite imageries such as RADARSAT, which has the capability to penetrate cloud and haze, and optical satellite data such as THEOS, IKONOS, Quickbird, WorldView, and Geoeye, which will be used to evaluate the damaged agricultural and household areas.

Meanwhile, in order to facilitate relief operations, GISTDA has [published online](#) its satellite image maps to disseminate real-time information to the public.

Thanks to Kate Lance for this item

### News from abroad

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

#### [Video - An Introduction to LiDAR](#)

Source: LiDAR News (October 2011) video of the week

#### [Rwanda: Over 3 million plots of land digitised](#)

In a bid to promote proper management of land across the country, the Rwanda Natural Resources Authority (RNRA) has completed the digitalisation of 3.3 million plots. This was disclosed last week by Didier Sagashya, the Deputy Director General in charge of Lands and Mapping at RNRA, during a workshop on Geographic Information System (GIS). The workshop was organised by RNRA in partnership with ITC and Esri.

"The promotion of GIS will enable Rwanda to get the optimal information concerning infrastructure and business planning and this will best position the country to deal with land management issues," Sagashya said. He said that RNRA has also completed digitising land in the three districts within Kigali City and in Kirehe District, saying that the process is on going in other parts of the country.

"This workshop brought together public and private institutions to discuss various issues on GIS data with respect to ICT and the challenges that the private sector still faces to venture into GEO-ICT business," Sagashya said. He highlighted lack of knowledge on the use of GIS among Rwandans, saying that RNRA will carry out training programmes across the country, to ensure that people clearly understand the importance of GIS in national development.

Thanks to Kate Lance for this item

#### [Uganda plans early warning ICT system](#)

Telecoms regulator, the Uganda Communications Commission in collaboration with the International Telecommunications Union are jointly developing an early warning system that will provide public alerts to people in case of disaster prediction, detection and mitigation. According to the UCC executive director Mr. Godfrey Mutabazi, in light of the recent natural and man-made disasters in Uganda, great attention and effort has been directed towards the application of ICTs, hence the need to develop an early warning system. Mutabazi said this last week while handing over 10 satellite phones to the ministry of Disaster Preparedness and Refugees to ease communication as evacuation efforts are still going on in Uganda's Bulambuli district that was affected by mudslide early in the month.

UCC contacted the International Telecommunications Union (ITU) for the emergency communications equipment to assist in the management of relief services. "The ITU through its division of emergency telecommunications has offered Uganda four inmarsat broadband global area network terminals, four iridium satellite telephones and two thuraya satellite telephones with their accessories," said Mutabazi. Uganda's eastern districts do experience massive landslides and floods. The latest were in Bulambuli district where 40 people died and many others were left homeless. Mutabazi indicated the equipment have capacity to use both satellite and GSM (Global System for Mobile Communications) networks, provide accurate Global Positioning System to aid relief. "In some cases, can be used for high speed data in coordinating relief services in the affected districts," he added. Disaster Preparedness Minister Stephen Malinga said the equipment will provide a huge boost in the evacuation services.

Source: East African Business Week

#### [Nigeria's new satellite demonstrates stunning high resolution capability](#)

The first high resolution satellite imagery is today released from NigeriaSat-2, as engineers from the Nigerian space agency (NASRDA) and the satellite's manufacturer Surrey Satellite Technology Ltd (SSTL) continue in the successful commissioning of the new satellite from NASRDA's headquarters in Abuja. Testing of all the systems on-board the satellite has been successfully completed, and calibration of the imaging payloads is ongoing with outstanding results already being produced.

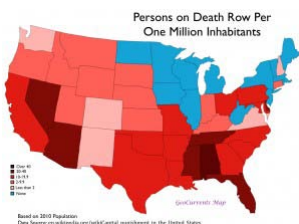
Images are available from <<http://www.sstl.co.uk/media-gallery/images>>.

This press release can be [downloaded](#) as a Word or Pdf document.

Source: Press Release, 28th September 2011

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### [The Geography of the Death Penalty in the United States](#)



Critiques of the death penalty often focus on the United States, one of few democratic countries to impose it. Yet the U.S. government has little to do with the issue, as it is largely a state rather than a federal matter.\* Broadly speaking, the northeast and the upper Midwest have essentially eliminated the practice, while the Southeast and parts of the Southwest impose it regularly. The pattern is of long standing.

Source: GeoCurrents and [Geospatial World Weekly](#)

### [USGS published historical maps on Web](#)

The U.S. Geological Survey (USGS) is nearly halfway through its release of more than 250,000 historical topographic maps in high-resolution electronic format, some of which are more than 100 years old. "Older maps are a historical treasure. This collection is an incredible resource," said Mark DeMulder, director of the National Geospatial Program at the USGS. To date, about 90,000 maps of the [Historical Topographic Map Collection](#) are available at online on the **USGS** website. The remaining 160,000 will be published by year's end. The 3-year project costs about \$1.2 million.

Source: USGS [Thanks to Wonkug Baek for this item]

### [The Houston Area GIS Day](#)

The Houston Area GIS Day is the largest showcase of its kind on how Geographic Information Systems are used in the City of Houston and surrounding areas. The first GIS Day was held on **November 2001** at the University of Houston-Downtown campus. **This year, the GIS Day events will be held on Thursday November 10th for both professionals and students.** Check back often for more information.

Source: [GISUser](#)

### [Scientists develop new method of lunar mapping](#)

Surveying experts at the Hong Kong Polytechnic University (PolyU) developed methodologies for precise mapping of the Moon. They have developed a unique and innovative approach to the creation of accurate 3D models of the lunar surface. It is based-on intensive analysis of the data captured by the Chinese lunar orbiter ChangE-1 and other lunar exploration missions.

Source: [Geospatial World](#) & [www.prweb.com](http://www.prweb.com)

### [Mapping the Age of Humans](#)



This is the age of humans.

At least, that's the argument a number of scientists and scholars are making. They say that the impact of humans on the earth since the early 19th century has been so great, and so irreversible, that it has created a new era similar to the [Pleistocene](#) or [Holocene](#). Nobel Prize winner Paul J. Crutzen even proposed the name Anthropocene, and it's begun to catch on.

Source: The Atlantic Cities [website](#)

[The Atlantic Cities explores the most innovative ideas and pressing issues facing today's global cities and neighborhoods. By bringing together news, analysis, data, and trends, the site is an engaging destination for an increasingly urbanized world.]

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## Articles

### [The Need for Assessing Costs of Inefficient Access to Fundamental Spatial Datasets in Least Developed Countries](#)

**Abstract** - Convincing decision makers to accept and support SDI

Awareness on the benefits of a Spatial Data Infrastructures (SDI) for sustainable development is strategic in convicting Policy Makers and administrators to accept it and support its development. Contemporary formal approaches of raising SDI awareness have not been successful enough to convince decision makers especially in developing countries to accept and support SDI development initiatives. This paper suggests a slight shift from formal approaches used for raising awareness among policy makers which are based on evaluation of

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benefits of SDI. Basing on studies from fields of human psychology and economics, the paper argues that negative information such as the damage caused by failing to put in place an SDI is much more effective in convincing decision makers to accept and support SDI than positive information regarding tangible benefits of SDI. The paper reports on how the ability to evaluate costs that spatial data intensive government organizations incur as a result of inefficient access to fundamental spatial datasets would be an important step towards development of the National Spatial Data infrastructure (NSDI). The paper further identifies and clarifies issues that influence these costs and how such assessments can benefit government organizations.

**Keywords:** Spatial Data, Spatial Data Infrastructure, SDI Assessment, Cost Benefit Analysis

### [Surveying with Google Earth](#) by Thomas G. Davis

Over the past few years, I have become convinced that Google Earth represents an extraordinary opportunity to visualize and communicate survey data, though I too was skeptical of its value as a professional land surveying tool in the beginning. At the time, Metzger + Willard, Inc. (MWI) was making AutoCAD base maps with orthophotos in the vicinity of NGS control stations. Our reasoning was that, equipped with the orthophotos, party chiefs could more quickly find unfamiliar job control, but the amount of time spent in the office to prepare the maps was significant. The first timesaving measure we took was simply to add Google Earth placemarks at control station locations, set the view size for print output, save an image, and print it. Initially, I made static KML maps of NGS control in our ten-county service area with links to datasheets, and then realized that what I really wanted was real-time access to the latest NGS data, not just for datasheets, but also for the placemarks themselves. NGSCS (see "[Visualizing National Geodetic Control Stations in Google Earth](#)," November 2008) was the first tool in the Earth Survey geodetic toolkit. We are currently able view output from NGSCS in Google Maps on an Android smartphone or pad and dispense with printed maps and datasheets altogether.

The second major application in the Earth Survey toolkit was QUADS (see "[USGS Quadrangles in Google Earth](#)," October 2009), which includes USGS orthoimagery, topo maps, and a quadrangle index. The 24k quadrangle map sometimes represents the best available topographic information, and QUADS provides access to thousands of high-resolution, georeferenced PDFs (GeoPDFs), which are now supported by Global Mapper. USGS topos often make a good base map for large-scale planning, permitting, and presentation, or may be required by a permitting body. Merely knowing the 24k quad name can be the key to finding other survey data that is categorized by USGS quadrangle.

The third major application, described in this issue, provides direct access to real-time BLM data, including section geometry and land records. If you work in a public land state, I do not need to emphasize the importance of the PLSS. For others, I hope that the topic may be of historical or academic interest.

Source: The American Surveyor

### [Land Information Management in Uganda: Current Status](#) by L. M. Wabineno, M. Musinguzi, P. Ekbäck

**Abstract:** This paper presents the current status of land information management system in Uganda, the different problems faced with the system and the practical solutions to the problems. Land is the basic element of development and more especially in developing countries such as Uganda. A good land administration system is a prerequisite for proper land management and information about parcels of land is the basis on which a good land administration and land information system can be built. In this review, issues and problems pertaining to land information management in Uganda are examined. The roles of various stakeholders, the nature and format of the information are discussed and how handling of this information has affected land administration in Uganda. Furthermore, the various efforts being taken by the government of Uganda in addressing land administration problems are highlighted. Finally, possible solutions to the land information handling problems in Uganda are proposed.

**Keywords:** Land Information Management, Land Registration, Land Information System

### [Spatial Data Infrastructure - The Missing Piece in Zimbabwe's Economic Recovery Plan](#) by Shoko & Njike

**Abstract:** Africa as a continent and more specifically Zimbabwe as a country, faces several developmental issues which research has shown can be managed and minimized through open access to spatial data. Spatial Data Infrastructure (SDI) helps in the efficient use, management, manipulation and dissemination of spatial data for the benefit of communities and nations. Research results on evaluating implementation challenges have indicated that SDI is not yet at an acceptable level in most developing countries whose economies are weak. This paper reviews the economic policies employed in pre and post recession Zimbabwe and relates these to the financial benefits that an SDI can bring if viewed as a missing link in recovery policies. Zimbabwean economy is today characterized with high import indexes, poor health, education and sanitation systems. Her current economic plan focuses on increased investment, reduced fiscal expenditure and improved humanitarian standards. This paper motivates SDI as a powerful tool that Zimbabwe needs to attract investors and complete

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the thrust of her recovery plan. Most of the issues addressed in economic policies have a spatial component which SDI can easily manage. Key stakeholders in the economic recovery equation such as investors require open access to information to build confidence for decision making. The paper concludes by proposing SDI as a catalyst that was missing in facilitating economic restoration. It proposes a direct link between SDI implementation and economic growth using the Zimbabwe case. SDI is often an abstract issue in developing nations in the sense that decision makers fail to appreciate how it can improve the livelihood of ordinary citizens often because it is marketed under a highly scientific banner. Tying SDI to economic benefit creates a new language of discussion for its support and motivates its implementation in developing nations like Zimbabwe. Keywords: Economy, Value, Developing, Geo-spatial, Stakeholders, Implementation

[Environmental sensitivity mapping for shoreline management planning](#) by Tania Golingi & Annie Ong Hui Nee

The requirement for shoreline management planning is recognised around the world and in particular in developing nations where development has resulted in mounting resource utilisation pressures along the countries' shorelines and coastal areas. Integrated shoreline management planning must take into account the often conflicting goals of development or resource exploitation versus conservation of sensitive habitats and sustainable resource exploitation. A spatially anchored description of the existing environment and the issues faced along each discrete stretch of shoreline is thus the basis of shoreline management planning. Geospatial tools have been instrumental in informing shoreline management strategies due to the ability to integrate and synthesise information on sensitivities, vulnerabilities and opportunities along the coast. This article provides examples where such GIS methods have been used to produce environmental sensitivity mapping for the purposes of integrated shoreline management and discusses the data requirements and limitations of data availability and accuracy experienced. The examples given in this article include case studies from Malaysia, namely the Labuan and Melaka State Integrated Shoreline Management Plans, and on a more regional level, the Shoreline Management Strategy for Kenya.

Source: GeoSpatial World

[Assessment of GIS Data Interoperability in Uganda](#)

Article under Review for the International Journal of Spatial Data Infrastructures Research

### **ABSTRACT**

In this paper, the authors present and discuss the data interoperability issues that are considered to place the greatest limitation to the utilization of GIS Technology in Uganda and other similar developing countries. Semantic similarity assessment and geometrical integration assessment are applied to spatial datasets from the major providers of spatial data in Uganda. The major semantic issues are identified as either those originating from different approaches to spatial feature development by institutions, or using 'equivalent' spatial data in models that were designed for other environments. Geometrical Integration issues are identified as variations in scale, projections and local adjustments, to generic spatial reference systems and variations in approaches to seamless mapping for UTM projection in Uganda. Documentation of data and legislation on SDI are recommended as key solutions to the interoperability issues in Uganda.

**Keywords:** GIS, Interoperability, Semantic, Uganda, SDI, Data Integration

[New approach to land valuation in Vietnam](#) by Tran Trong Duc & Nguyen The Bach

### **Introduction**

Land is a special commodity, establishing and issuing land price is an activity prescribed by Vietnamese Land Law 2003. Every year, on January 1, the provincial/municipal governments issue land price regulations. Land prices as set in these regulations form the basis for calculation of financial charges, fees and any other financial obligations concerning uses of land. Land prices are separately regulated for urban and rural regions. In each region, land prices are set specifically for each main street and then for areas around that street depending on positioning levels. Determination of positioning level of a land parcel depends on its spatial relationships with its surrounding streets.

In other countries, land valuation is based-on GIS software by the concerning government body. On the other hand, in Vietnam, while the number of land parcels to be managed and priced by an administration unit is huge, its staffs carry out the task manually using print or digital cadastral maps with reference to land price tables issued by the government. It happens due to the lack of application software which can automatically determine the price of a particular land parcel by analysing its location and its complex spatial relationships with its surrounding network of streets and alleys. The current situation thus presents great difficulty for staffs.

To deal with this problem, specifications in related regulations as well as the method used to assign positioning levels and determine land value have been investigated and analysed, then based on the understanding of

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these practices a computational model is designed. Based-on this design and using ArcGIS Engine Developer Kit and VB.NET programming language, a software for managing and valuing land parcels has been developed. The software is tested for land parcels of Long Thanh District in Dong Nai Province of Viet Nam.  
Source: Geospatial World

[High-Precision VFX](#) by Christine L. Grahl

The push to achieve ever-more-stunning visual effects in films and video games is creating new opportunities for surveyors and other spatial data management experts.  
Source: Point of Beginning

[Traversing the law: The Surveying Body of Knowledge](#) by Jeffery N. Lucas

A small and relatively obscure session was held at the 2011 Survey Summit in San Diego on the "Surveying Body of Knowledge." I stumbled across the session quite by accident and thought I would sit in and hear what was being said. The experience was both enlightening and unsettling.  
Source: Point of Beginning

[Land Surveying: The Lost Profession](#)

In my 35-year tenure as a land surveyor working around the world and conducting seminars and courses, I've found that many surveyors do not know the genesis of our profession. Yet, knowledge of our profession's history is crucial to ensuring its future.

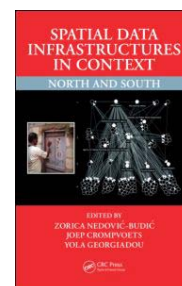
Source: Professional Surveyor Magazine

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

[Spatial Data Infrastructures in Context - North and South](#)

Discusses both technological and non-technological obstacles, policies and mechanisms with respect to the implementation of spatial data infrastructures (SDI). With an emphasis on non-technology issues such including legal, policy, copyright, liability and compatibility factors, the editors provide a wealth of information aimed at improving access, interoperability and affordability with reference to SDI. This book contains content that is applicable to both public and private participants.

Source: Vector One Media



[Thoughts on the Geospatial industry, Open Standards and Open Source](#) Cameron Shorter's blog

[SDI Magazine](#)

[Mother Pelican: A Journal of Sustainable Human Development](#)

The August 2011 issue has been posted:

[LiDAR News, Vol 1, No 18 \(October 2011\)](#)

[Think Quarterly](#) – Google's new on-line magazine

[Coordinates](#) monthly magazine

[SERVIR-Africa community news](#)

[The American Surveyor newsletter](#) (20 July)

[GISuser - GIS and Geospatial Technology News](#)

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## Just for Fun!



### [The Amazing 'Throwable Panoramic Ball Camera'](#)

[Jonas Pfeil](#), a student at the Technical University of Berlin, noticed that there was no easy way to take a complete spherical, panoramic photograph. Even if you had enough cameras and the right software, you would still have the problem of a tripod or camera mount



blocking one angle. The solution? A rubber ball camera -- just toss it in the air.

Source: The Atlantic magazine

### [The Esri Occupy Wall Street Social Media Map](#)

Once again, Esri has published another interesting Social news map, this time touching on the topic of Occupy Wall Street. Recall the social news maps from Esri use Esri WMS technology to scrape popular social media streams (youtube, Flickr, Twitter) and share the geo-located news tips on a friendly map interface.

See the map online [HERE](#)

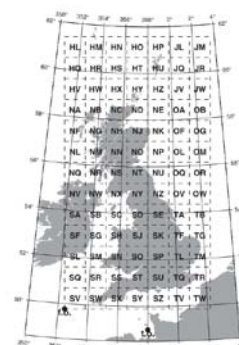
Source: GISUser

### [Converting British National Grid to Latitude and Longitude](#) by Hannah Fry

[the author] recently started to deal with a lot of geographical data in [her] research and [began]n to realise it is difficult to go to long without stumbling across the sticky world of map projections – something [she] knew almost nothing about a year ago.

There is a nice blog post explaining the background by [James Cheshire](#) which [she does not] attempt to reproduce, but explanations aside, [she] found [herself] today trying to convert a long list of British National grid coordinates into Latitude and Longitude.

Source: Hannah Fry's homepage and [Geospatial World Weekly](#)



### [This Is Probably as Close as You'll Get to Being an Astronaut](#)

[NASA](#) recently released [these spectacular time-lapse videos of Earth](#), created from thousands of photographs taken by astronauts on board the [International Space Station](#). We've edited together the highlights, which include soaring over the Mediterranean, North America, the Middle East, and Africa. Keep an eye out for the red and green [aurora borealis and australis](#) over the poles, as well as bursts of lighting in the clouds.

Source: The Atlantic magazine

### [Lytro's Camera Shoots First, Focuses Later](#)

With Lytro's camera, you can focus on any point in an image taken with a Lytro after you've shot the picture.

Source: New York Times

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## Training Opportunities

### [Spatial Data Infrastructures \(SDI\), latest trends and research](#)

**Venue:** Leuven, Belgium

**Dates:** 7th to 11th November 2011 (Previously scheduled for July)

**Seminar website** [http://www.spatialist.be/eng/act/20111107\\_SDIseminar.html](http://www.spatialist.be/eng/act/20111107_SDIseminar.html)

### [National Water Information Briefings](#) Free registration

For those interested in Bureau of Meteorology's (BoM) "Hydrological Geospatial Fabric project", a series of briefings and workshops will be held in Australian capital cities this November. The Geofabric enables mapping and modelling of important hydrological features by the BoM such as rivers, lakes, reservoirs, dams, canals and catchments.

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### **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:** 20 December 2011. 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/](http://www.nccr-climate.unibe.ch/summer_school/2012/)>.

Contact: University of Bern, NCCR Climate Management Centre, Zähringerstrasse 25, CH-3012 Bern, Switzerland, mailto: <[nccr-climate@oeschger.unibe.ch](mailto:nccr-climate@oeschger.unibe.ch)>

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: <<http://gvSIG-training.com/>>

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



### GIS Courses by Distance Education

#### NSW Riverina Tafe

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

[Certificate III in Spatial Information Services \(GIS\)](#)

[Certificate IV in Spatial Information Services \(GIS\)](#)

[Diploma of Spatial Information Services \(GIS\)](#)

Source: [NSW River](#)

### [Participatory Spatial Information Management and Communication Training Kit now available on-line](#)

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

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

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

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

Source: [The Centre for Agricultural and Rural Cooperation](#)

## Funding Opportunities, Awards, Grants

### [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™'. 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.

Source: Geospatial World Weekly

### [Foreign Scholar Travel Award](#)

#### **U.S.- IALE Foreign Scholar Travel Award**

#### **27th Annual Symposium - Informing Decisions in a Changing World,**

Newport, Rhode Island, April 8 - 12, 2012

#### PURPOSE

The United States Regional Association of the International Association for Landscape Ecology (US-IALE) has a program to support attendance at the annual meeting by landscape ecologists from foreign countries and to foster international exchange about advances in landscape ecology.

#### THE AWARD

The award recipients will receive US \$1,200 at the Annual Meeting. It is the recipients' responsibility to make all transportation arrangements and cover all transportation and lodging costs associated with participating in the meeting.

#### ELIGIBILITY

1. Applicants are NOT eligible if:

the applicant is a citizen or current resident of the United States or Canada,

the applicant is a citizen of a G7 country (France, US, Britain, Germany, Japan, Italy),

the applicant (of any nationality) is currently studying in the United States or Canada,

the applicant (of any nationality) received a Master's or Doctorate at an institution in the United States or Canada,

previous recipients are also ineligible.

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2. Applicants must submit an abstract for a paper or poster presentation at the 2012 conference. You must submit your abstract to the conference organizers by **16 December 2011**.

### SELECTION CRITERIA

1. Scientific merit and application to landscape ecology. We will favor applicants who demonstrate that their research (i) advances the scientific basis of landscape ecology, and/or (ii) the application of landscape ecology for natural resource protection or management. New and established landscape ecologists are encouraged to apply.
2. Financial need. Applicants must have demonstrated financial need and show that without FTSA support, they would not be able to attend the Conference. Applicants currently studying or residing in G7 countries must demonstrate the extent to which they have pursued travel funding from their host institution.
3. Professional development. Applicants must demonstrate that attending the US-IALE Conference will represent a significant professional opportunity for developing their expertise in landscape ecology and establishing working relationships with landscape ecologists from other countries. We may favor applicants in earlier career stages.
4. Geographical representation. Selection may be made to maximize the number of countries and regions represented.
5. Clarity of English and expression.

### HOW TO APPLY

All application materials must be in English.

Incomplete applications will not be reviewed. A complete application contains the following:

1. Name, Institution, Email address, Postal Address, Citizenship.
2. Curriculum vitae (maximum 4 pages).
3. Title and abstract of the paper or poster you will present at the Conference. The abstract should also be independently submitted to the conference organizers.
4. A summary of your research (750 words maximum) explaining how your research extends the scientific basis or application of landscape ecology (see Selection Criteria listed above).
5. Statement on what you hope to gain professionally from attending the US-IALE Conference (200 words maximum).
6. An explanation (200 words maximum) of why you need financial assistance to attend the conference (see Selection Criteria listed above).

Submit your abstract to the conference organizers by **16 December 2011** at the conference website.

**Submit your FSTA application materials to the address below by 16 December 2011.**

Submit FSTA application materials by email to: <[ddonnerwright@fs.fed.us](mailto:ddonnerwright@fs.fed.us)> , or by post (please include electronic copy) to Deahn Donner, Northern Research Station, Institute for Applied Ecosystem Studies, 5985 County K, Rhinelander, WI 54501

Acceptable formats include Microsoft Word, Wordperfect, Rich Text Format and Adobe Acrobat (pdf). Please put all materials into a single file with your last name included in the filename (e.g., Donner\_FSTA\_2012).

Files will be returned if materials are not combined into a single file.

Awards will be announced on or before 13 January 2012.

### MORE INFORMATION

U.S. IALE: <<http://www.usiale.org/>>

2012 Annual Conference: <<http://www.usiale.org/newport2012/>>

Other questions -- email us at <[ddonnerwright@fs.fed.us](mailto:ddonnerwright@fs.fed.us)>

U.S. - IALE FOREIGN SCHOLAR TRAVEL AWARD COMMITTEE

Members: Deahn Donner (Committee Chair, US Forest Service), Kathy Vigness-Raposa (Committee Co-Chair, Marine Acoustics), Sam Riffell (Mississippi State University), John Bissonette (Utah State University), Robert Corry (University of Guelph), Nancy McIntyre (Texas Tech University), Martin Simard (University of Wisconsin).

Email: <[kathleen.vigness@marineacoustics.com](mailto:kathleen.vigness@marineacoustics.com)>

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## Employment Opportunities

[Post Doc Soil Scientist/Ecologist, World Agroforestry Centre, Abidjan, Côte d'Ivoire](#)

**Deadline:** November 4, 2011

ICRAF has developed methods for landscape level measurement and mapping of vegetation and soil health

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using a combination of remote sensing, systematic field survey and new photon-based soil analytical techniques. The results are used to help target sustainable land management and agroforestry interventions, provide a baseline on ecological conditions, and monitor intervention impacts on the natural resource base. ICRAF is already applying these methods under the Africa Soil Information Service ([www.africasoils.net](http://www.africasoils.net)), and in a number of development projects.

In collaboration with Mars Inc we are designing a land health surveillance system to help steer interventions in the smallholder cocoa sector in Côte d'Ivoire in partnership with the national programmes. The surveillance system will develop baselines and monitor soil and plant nutritional and pest/disease aspects, soil hydraulic properties, plant productivity, and biodiversity.

In collaboration with ICRAF scientists and national partners, the successful candidate, who will be based in Abidjan with frequent visits to the field sites, will contribute to the following:

- Design and implementation of a land health surveillance system for a sustainable cocoa production project in Côte d'Ivoire.
- Analysis and interpretation of spatial surveillance data on vegetation, soils, cocoa production, pests and diseases.
- Spatial prediction and mapping of results through statistical modelling in relation to satellite and GIS data.
- Reports giving recommendations on soil and plant management options.
- Scientific articles on the approaches and results.
- Capacity strengthening of national partners in the above.

The successful applicant will have:

- A PhD in natural sciences
- Field experience in tropical developing countries
- Experience with large ecological data sets and database management
- Sound publication record
- Sound knowledge of soil science, agronomy and terrestrial ecology
- Strong quantitative and statistical skills in multivariate and multilevel modelling
- Experience with GIS and remote sensing
- High proficiency in both English and French.

Knowledge of R and Knime, and experience in cocoa agronomy will be an added advantage.

### **[Geoinformatics Senior Scientist, World Agroforestry Centre, Nairobi, Kenya](#)**

**Deadline:** November 30, 2011

If you can provide scientific leadership of geoinformatics research and lead a new Geoinformatics Unit into a global centre of excellence to support implementation of the Centre's research agenda, then you are the person we are looking for. The position will be based in Nairobi, Kenya, and may require travel to international locations.

You will be required to:

- Provide scientific leadership and coordination of geoinformatics research in the World Agroforestry Centre, especially in the context of the Centre's contributions to the CGIAR Research Programme CRP6 on Forests, Trees and Agroforestry, CRP5 on Water, Land and Ecosystems and other CRPs. Emphasis will be on spatio-temporal research on agroforestry in the context of natural resource management, climate change, and human well-being.
- Head the Centre's Geoinformatics Unit in support of the above programmes and build up its pan-tropical regional nodes. This will include establishing the Unit as a global centre of excellence and further development of a strategy and business plan for the Unit. The Unit will also closely link to the Centre's Research Methods Group and Soil-Plant Spectral Diagnostics Laboratory.
- Oversee the development of a comprehensive modelling, visualization and dissemination framework for monitoring and mapping local to continental environmental conditions in CGIAR regions, with initial emphasis on Africa.
- Contribute to the development of agro-ecological spatio-temporal databases of land and water health and human well-being metrics across CGIAR sites and regions, and contribute to the design of a pan-tropical network of sentinel sites and landscapes for long-term monitoring of natural resources and human well-being.
- Contribute to the development and capacity building of regional geoinformatics hubs in CGIAR regions and produce training materials to assist staff and stakeholders in use of the Centre's spatial data platform.
- Lead the development of information products based on sound scientific workflows and spatial models, including linking remote sensing and GIS data with systematic ground survey data on land condition and soil spectral libraries; including in the context of the Africa Soil Information Service, and mapping of trees and ecosystem services in agricultural landscapes.

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- Publish results in journal articles, assessment reports, electronic atlases and web-based forms.
- Lead and participate in funding proposals to extend the above areas of research and build up the geo-informatics unit into a sustainable business model.
- Develop external collaborative links and projects with centres of excellence in the area of geo-informatics for natural resources management and represent the Centre at major geo-informatics fora.

You should have:

- A PhD in landscape ecology, natural resource management or equivalent.
- At least 15 years postgraduate experience in application of geo-informatics in natural resource management research, including tropical experience.
- Leadership of geo-informatics units and scientist-technician teams
- Experience in proposal development and fundraising.
- Ability to communicate effectively with stakeholders, including local and national institutions, private sector and policy makers.
- Good publication record in application of geo-informatics to natural resource management.
- Excellent verbal and written English skills, and knowledge of another language commonly used in Africa, Asia or Latin America is an advantage
- Extensive knowledge of the linkages between land and water management, land use change, ecosystem services, and human well-being in the tropics.
- Comprehensive understanding of the agricultural research-development continuum in the tropics.
- Advanced geo-informatics knowledge and skills, including remote sensing, geographical information systems, database management, and georeferenced ground survey.
- Advanced statistical analysis skills in multivariate and spatio-temporal analysis of geographic, ecological and socioeconomic data.
- Programming skills in a range of languages and excellent working knowledge of programmes such as R, GRASS, TNTMips, QGIS and OpenLayers.
- Excellent leadership, management and communication skills in multicultural settings.
- Knowledge of Bayesian statistical modelling and forecasting models, experience with field and lab-based spectrometry and previous experience in the CGIAR system will be distinct advantages.

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### Conference Proceedings

#### [Sino-African High-Level Seminar on Drought Risk Reduction](#) – (24-6 September, 2011)

##### **Africa and China step up cooperation on drought risk**

From 24 to 26 September 2011 over 40 officials from China, African countries and the United Nations took part in a three-day “Sino-African High-Level Seminar on Drought Risk Reduction” which is calling for drought risk reduction to be on the agenda of the next year’s Sino-African Summit for Development Cooperation. Delegates at the seminar also included heads of national meteorological services, disaster managers, national DRR (disaster risk reduction) coordinators and academics and scientists from China and 11 African countries, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Niger, Nigeria, Sudan, Tanzania, Uganda and Zimbabwe. Participants shared knowledge and scientific approaches, practical methods in drought monitoring, early warning and management of agricultural drought. For further information contact: [Shirish Ravan](#).

#### [Webcast presentations of Open Source GIS Conference 2011](#)

The webcasts of presentations of Open Source GIS 2011 Conference (OSGIS 2011) including the plenary presentations from OGC-OSGeo Interoperability day are now available.

#### [INSPIRE 2011 Conference Report](#)

27 June – 2 July, Edinburgh, UK



#### [2011 Esri Asia Pacific User Conference Proceedings](#)

#### [ISDE Working Group Meeting on Digital Earth Vision to 2020](#)

In March 2011, the International Society for Digital Earth held a working group meeting in Beijing on a Digital Earth Vision to 2020. The meeting brought together a diverse group of experts in an attempt to imagine how

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Digital Earth might evolve over the next decade. The Vision to 2020 is an updated reevaluation of the Digital Earth concept presented by Al Gore in 1998. This new vision takes into account the advances in technology made so far in the 21st century, considers changes in society and the ways people interact with technology, and anticipates the drivers that will affect future development.

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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
<b>November 2011</b>		
<b>7 – 11 November</b>	Abuja, Nigeria	<p><b><a href="#">AfricaGIS 2011: A Geospatial Technology Revolution in Africa</a></b>            Sub-themes:</p> <ul style="list-style-type: none"> <li>· Spatially-enabled Governance;</li> <li>· Enterprise GIS and Land Administration: the building blocks of sustainable development ;</li> <li>· New Trends: crowd-sourcing, volunteered geographic information (VGI), and web services in the cloud;</li> <li>· Business Geographic's: the geospatial advantage</li> </ul> <p>Please submit your abstracts to <a href="mailto:secretariat@eis-africa.org">secretariat@eis-africa.org</a> immediately.</p>
<b>14 – 16 November</b>	Kuala Lumpur, Malaysia	<p><b><a href="#">The International Conference on Informatics Engineering &amp; Information Science (ICIEIS2011)</a></b> <a href="#">Contact</a>            University Technology Malaysia, Malaysia            Nov. 14-16, 2011</p> <p>All the papers will be reviewed and the accepted papers in the conference will be published in the <i>Communications in Computer and Information Science</i> (CCIS) of Springer Lecture Notes Series (<a href="http://www.springer.com/series/7899">www.springer.com/series/7899</a>), and will be indexed in many global databases including ISI Proceedings and Scopus. In addition, selected papers after complete modification and revision will be published in the special issues journals.</p> <p>Researchers are encouraged to submit their work electronically. Submitted paper should not exceed 15 pages, including illustrations. Papers should be submitted electronically. All papers will be fully refereed by a minimum of two specialized referees. Before final acceptance, all referees comments must be considered.</p> <p><b>Important Dates</b>            =====</p> <p>Submission Date : Aug. 1, 2011            Notification of acceptance: Aug. 20, 2011            Camera Ready submission : Aug. 30, 2011</p>


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		Registration : Aug. 30, 2011 Conference dates : Nov. 14-16, 2011
<b>14 – 16 November</b>	Madrid, Spain	<a href="#"><u>ICERI2011, the International Conference of Education, Research and Innovation</u></a> <b>Abstract submission:</b> 14th July 2011 <b>Acceptance notification:</b> 1st September 2011 <b>Final Paper submission:</b> 29th September 2011
<b>14 – 18 November</b>	Pretoria, South Africa	<a href="#"><u>ISO/TC 211 Plenary</u></a> 33rd ISO/TC 211 Plenary and associated meetings ISO/TC 211 Geographic information/Geomatics is responsible for the 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.
<b>14 – 18 November</b>	Santiago, Chile	<a href="#"><u>UGI 2001 International Geographic Union “Regional Geographic Conference”</u></a> <a href="#"><u>Contact</u></a> <a href="#"><u>Brochure &amp; Call for Papers</u></a>
<b>15 – 16 November</b>	Seoul, Korea	Esri Korea, Inc. is proud to host the <a href="#"><u>7th Esri Asia Pacific User Conference</u></a>
<b>15 – 17 November</b>	Canberra, Australia	<a href="#"><u>Spatial@Gov Conference &amp; Exhibition 2011</u></a>
<b>21 – 24 November</b>	Jakarta, Indonesia	<a href="#"><u>World Delta World Summit</u></a>
<b>21 – 25 November</b>	Wellington, New Zealand	<a href="#"><u>Surveying &amp; Spatial Sciences Conference 2011</u></a>
<b>22 – 25 November</b>	Beijing	<a href="#"><u>United Nations International Conference on Space-based Technologies for Disaster Risk Management [UN SPIDER]</u></a> - Applications from interested professionals, experts and decision-makers are now being accepted. Please visit the Conference webpage and register for this event. The deadline for receiving applications: <b>30 September 2011</b> . Please note that incomplete applications as well as applications received after the deadline will not be considered so you are requested to take the time to complete all the necessary steps and complete all the required information, particularly if you need <b>funding support</b> . The event expects 200 disaster risk management and space-technology experts to participate in Beijing. For specific contributions to the proposed themes/sessions, for proposing a topic for technical presentation and for proposing to provide sponsorship to the event, please contact <a href="#"><u>Mr. Shirish Ravan</u></a> and/or <a href="#"><u>Ms. Li Suju</u></a> . For further information, contact: <a href="#"><u>David Stevens</u></a> , Programme Coordinator, [UN-SPIDER] United Nations Office for Outer Space Affairs.
<b>29 November – 2 December</b>	University of Melbourne, AUSTRALIA	<a href="#"><u>The State of Australian Cities</u></a> <b>Key Dates</b> Final papers due <b>31 OCT 2011</b>
<b>29 November – 2 December</b>	Suva, Fiji	<a href="#"><u>Pacific GIS&amp;RS Conference 2011</u></a> <a href="#"><u>Contact</u></a> Since the first Pacific GIS&RS Conference in 1999, this annual event has attracted a lot of participants from as far as the Americas to the sunny islands most of us call home. Each year the range of GIS&RS technologies presented cover an array of applications including the management of resources of the small island Pacific

		<p>nations. Shallow water bathymetry derived from satellite imagery, forest function maps to identify areas for to be protected, areas identified for developments in flood zones are some of the applications where the development of GIS&amp;RS in the region have been applied in various sectors. As with previous conferences, there are no fees levied for those wishing to attend. Donations however are graciously accepted. This year's theme is Data Sharing, Better Mapping!</p> <p><b>Send presentation title by 15 September 2011.</b>  <b>Abstracts due by 2 November 2011.</b></p>
<b>December 2011</b>		
<b>5 - 7 December</b>	Hue City, Vietnam	<p><a href="#"><u><b>The 9th International Conference on Advances in Mobile Computing and Multimedia (MoMM2011)</b></u></a>          15 July 2011: Full Papers (8 pages), Short papers, Demos and work in progress (5 pages)          15 September 2011: Acceptance Notification          15 October 2011: Camera-Ready Papers and Authors Registration          The submitted papers should not exceed 8 pages and must follow the <a href="#"><u>ACM guidelines</u></a>. <a href="#"><u>Contact</u></a></p>
<b>6 - 9 December</b>	Singapore	<p><a href="#"><u><b>18th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-18)</b></u></a>  <a href="#"><u>PDF Brochure</u></a> <a href="#"><u>Contact APRSAF Secretariat</u></a>          APRSAF serves as an active forum to promote concrete cooperative space-related activities at the regional, Asia-Pacific level. APRSAF also aims to expand the peaceful uses of space technologies and their applications for sustainable development of countries in the region.          APRSAF-18 is being jointly organized by the Singapore Space and Technology Association (SSTA), Centre for Remote Imaging, Sensing and Processing (CRISP) of the National University of Singapore, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan and the Japan Aerospace Exploration Agency (JAXA).</p>
<b>11 – 14 December</b>	Abu Dhabi, UAE	<p><b>CALL FOR PAPERS</b>  <a href="#"><u><b>The 6th International Conference for Internet Technology and Secured Transactions (ICITST-2011)</b></u></a>          The ICITST is an international refereed conference dedicated to the advancement of the theory and practical implementation of secured Internet transactions and to fostering discussions on information technology evolution. The ICITST aims to provide a highly professional and comparative academic research forum that promotes collaborative excellence between academia and industry.  <b>Full Paper Submission Date:</b> June 30, 2011  <b>Extended Abstract (Work in Progress) Submission:</b> July 31          Early Registration Deadline (Authors only): September 30, 2011          Late Registration Deadline (Authors only): November 15, 2011  <b>Participants Registration:</b> May 01 to December 01, 2011          For more <a href="#"><u>details</u></a></p>
<b>January 2012</b>		
<b>10 – 12 January</b>	University of BC, Vancouver, Canada	<p><a href="#"><u><b>Eighth International Conference on Environmental, Cultural, Economic and Social Sustainability.</b></u></a></p>
<b>16 – 18 January</b>	UCLA, Los Angeles, USA	<p><a href="#"><u><b>EIGHTH INTERNATIONAL CONFERENCE ON TECHNOLOGY, KNOWLEDGE AND SOCIETY</b></u></a>          Presenters may choose to submit written papers for publication in the fully refereed International Journal of Technology, Knowledge</p>

		<p>and Society. If you are unable to attend the conference in person, virtual registrations are also available which allow you to submit a paper for refereeing and possible publication in this fully refereed academic Journal.</p> <p>The <b>deadline</b> for the next round in the call for papers (a title and short abstract) is 11October.</p> <p>Proposals are reviewed within two weeks of submission.</p>								
<b>February 2012</b>										
<b>7 – 9 February</b>	Gurgoan, India	<p><b><u><a href="#">India Geospatial Forum</a></u></b>  <b>Important Dates to Remember</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Abstract Submission</td> <td style="padding: 2px;">November 11, 2011</td> </tr> <tr> <td style="padding: 2px;">Abstract Acceptance</td> <td style="padding: 2px;">November 30th, 2011</td> </tr> <tr> <td style="padding: 2px;">Author Registration</td> <td style="padding: 2px;">December 9th, 2011</td> </tr> <tr> <td style="padding: 2px;">Full Paper Submission</td> <td style="padding: 2px;">December 16th, 2011</td> </tr> </table> <p><b><u><a href="#">Award to encourage young geospatial scientists</a></u></b>          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™.’ 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.</p>	Abstract Submission	November 11, 2011	Abstract Acceptance	November 30th, 2011	Author Registration	December 9th, 2011	Full Paper Submission	December 16th, 2011
Abstract Submission	November 11, 2011									
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Author Registration	December 9th, 2011									
Full Paper Submission	December 16th, 2011									
<b>March 2012</b>										
<b>8-10 March</b>  <b>“NEW”</b>	Coimbatore, India	<p><b><u><a href="#">The International Conference on Digital Information and Wireless Communications (ICDIWC2012)</a></u></b>          Hindusthan College of Arts and Science,          The conference aims to enable researchers to build connections between different digital applications.          Researchers are encouraged to submit their work electronically. All papers will be fully refereed by a minimum of two specialized referees. Before final acceptance, all referees comments must be considered.</p> <p>Important Dates          =====          Submission Date : Jan 10, 2012          Notification of acceptance: Feb. 1, 2012          Camera Ready submission : Feb. 20, 2012          Registration : Feb. 20, 2012</p>								
<b>April 2012</b>										
<b>11 - 13 April</b>	Lancaster, UK	<p><b><u><a href="#">Call for Papers, GISRUK2012, Lancaster University, 2012</a></u></b>          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:</p> <ul style="list-style-type: none"> <li>• Environmental Geoinformatics</li> <li>• Open-Source GI</li> <li>• Web2.0</li> <li>• Qualitative GIS</li> <li>• Spatial Ecology</li> <li>• Health</li> <li>• Emergency Response</li> <li>• Landscape Visualisation</li> <li>• Geospatial Semantics</li> </ul>								

		<ul style="list-style-type: none"> <li>• Location-Based Services</li> <li>• Remote Sensing and Photogrammetry</li> </ul> <p><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 <a href="http://www.lulu.com">http://www.lulu.com</a>. The conference will be preceded by a Open Source GeoSpatial software workshop and a Young Researchers Forum commencing on Tuesday 10th April 2012.</p> <p>The keynote speakers for the conference will be:</p> <ul style="list-style-type: none"> <li>- Pete Atkinson, University of Southampton, UK</li> <li>- Mei-Po Kwan, Ohio State University, USA</li> <li>- Tyler Mitchell, Executive Director, OSGeo, USA</li> </ul> <p>For more information and submission details please visit the conference website: <a href="http://www.lancs.ac.uk/gisruk2012">http://www.lancs.ac.uk/gisruk2012</a> or contact members of the local organising committee via <a href="mailto:gisruk2012@lancs.ac.uk">gisruk2012@lancs.ac.uk</a>. We look forward to receiving your submissions and welcoming you to Lancaster in 2012.</p>
<b>23 – 27 April</b>	Amsterdam, The Netherlands	 <b>Geospatial World Forum</b> <b>Theme:</b> Geospatial Industry & World Economy
<b>May 2012</b>		
<b>13-17 May</b>	Quebec City, Canada	<p><b>2012 Joint World Conference</b>  <b><a href="#">GSDI 13</a> and <a href="#">Canadian Geomatics Conference (CCC)</a></b>          hosted by <a href="#">GEOIDE</a> Network</p> <p>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:</p> <ol style="list-style-type: none"> <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> <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 (IJS DIR) with full articles selected from the proceedings and then fully refereed and revised after the conference.</li> </ol> <p><b>In addition</b>, two separate calls arising from the joint conference are being issued for chapter submissions to two additional books:</p> <ol style="list-style-type: none"> <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 <a href="http://www.3dgeoinfo2012.ulaval.ca/?page_id=48">http://www.3dgeoinfo2012.ulaval.ca/?page_id=48</a>).</li> </ol> <p><b>IMPORTANT DATES</b>          Deadline for Submission of Abstracts: 15 November 2011          Deadline for Submission of Full Papers for Refereed Outlets: 15 November 2011          Conference Dates: 14-17 May 2012</p> <p><b>IMPORTANT LINKS</b></p>

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		<p>Joint Conference Call for Abstracts and Papers:<a href="http://www.gsdi.org/gsdiconf/gsdi13/papers.html">http://www.gsdi.org/gsdiconf/gsdi13/papers.html</a>          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/gsdiConferences">http://www.gsdi.org/gsdiConferences</a>          Past open access Books affiliated with the conference:<a href="http://www.gsdi.org/openaccessbooks">http://www.gsdi.org/openaccessbooks</a>          Other Important Dates:<a href="http://www.gsdi.org/gsdiconf/gsdi13/dates.html">http://www.gsdi.org/gsdiconf/gsdi13/dates.html</a></p>
<b>16-18 May</b>  <b>“NEW”</b>	Bangkok, Thailand	<p><b><u><a href="#">The Second International Conference on Digital Information and Communication Technology and its Applications (DICTAP2012)</a></u></b></p> <p>The proposed conference on the above theme will be held at the University of the Thai Chamber of Commerce(UTCC), Bangkok, The DICTAP2012 aims to enable researchers to build connections between different digital applications. The conference welcomes papers on the following (but not limited to) research topics:</p> <ol style="list-style-type: none"> <li>1) Communication Basic and Infrastructure           <ul style="list-style-type: none"> <li>- Telecommunications</li> <li>- Communication protocols</li> <li>- Algorithms, Architecture, and Infrastructures</li> <li>- Transmission Techniques</li> <li>- Communication Systems</li> </ul> </li> <li>2) Networks Basic and Management           <ul style="list-style-type: none"> <li>- Network Systems and Devices</li> <li>- Wireless Networks, Ad-Hoc and Sensor Networks</li> <li>- Network Modeling and Simulation</li> <li>- Network Management Techniques</li> <li>- Networks Security, Encryption and Cryptography</li> </ul> </li> <li>3) Multimedia Application           <ul style="list-style-type: none"> <li>- Management and Diffusion of Multimedia Applications</li> <li>- Multimedia Data Base</li> <li>- Information Retrieval</li> <li>- Digital Rights Management</li> </ul> </li> <li>4) Image, Video, Signal and Information Processing           <ul style="list-style-type: none"> <li>- Compression and Coding</li> <li>- Analysis and Processing</li> <li>- Computer Graphics</li> <li>- Data mining</li> <li>- Soft Computing</li> <li>- Web based applications</li> </ul> </li> </ol> <p>Researchers are encouraged to submit their work electronically. All papers will be fully refereed by a minimum of two specialized referees. Before final acceptance, all referees comments must be considered.</p> <p><b>Important Dates</b></p> <p>=====</p> <p>Submission Date : Feb. 10, 2012          Notification of acceptance: March 1, 2012          Camera Ready submission : March 20, 2012          Registration : March 20, 2012          Conference dates : May 16-18, 2012</p>
<b>June 2012</b>		
25-30 June	Istanbul, Turkey	<p><b><u><a href="#">World GIS Summit</a></u></b>  <b>“The World GIS Summit” has been postponed to June 25-30, 2012.”</b></p>
<b>July 2012</b>		

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<p>23-27 July</p> <p><b>"NEW"</b></p>	<p>San Diego, USA</p>	<p><b><a href="#">Esri International User Conference</a></b>  <b>Now Accepting Presentation Submissions</b>        Participation from the GIS community makes the Esri International User Conference (Esri UC) &lt; <a href="http://www.esri.com/events/user-conference/index.html">http://www.esri.com/events/user-conference/index.html</a> &gt; much more than just another technology user conference. It's a place to collaborate with your colleagues and get inspired by their work.        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:</p> <ul style="list-style-type: none"> <li>• Applying ArcGIS to new problems in innovative ways</li> <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</li> </ul> <p>Review the <a href="#">session topics</a> to see how your contribution can fit into this year's agenda.  <b>Abstract submission deadline:</b> 4 November, 2011.  <b>Submit Your Abstract at</b> <a href="http://www.esri.com/events/user-conference/participate/presentations.html">http://www.esri.com/events/user-conference/participate/presentations.html</a> .</p>
<b>August 2012</b>		
<p><b>25 August – 1 September</b></p>	<p>Melbourne, Australia</p>	<p><b><a href="#">XXII International Society for Photogrammetry &amp; Remote Sensing Congress</a></b>        Email: <a href="mailto:jsprs2012@icms.com.au">jsprs2012@icms.com.au</a></p>
<b>September 2012</b>		
<p><b>9-14 September</b></p> <p><b>"NEW"</b></p>	<p>Ticino, Switzerland</p>	<p><b><a href="#">11th NCCR Climate Summer School, 2012</a></b>        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:</p> <ul style="list-style-type: none"> <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> <p>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)</p>

		<p>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).</p> <p><b>Deadline for applications:</b> <u>20 December 2011</u>. Successful applicants will be notified in February 2012. Detailed information and the application form are available at <a href="http://www.nccr-climate.unibe.ch/summer_school/2012/">http://www.nccr-climate.unibe.ch/summer_school/2012/</a>.</p> <p>Contact: University of Bern, NCCR Climate Management Centre, Zähringerstrasse 25, CH-3012 Bern, Switzerland, mailto: <a href="mailto:nccr-climate@oeschger.unibe.ch">nccr-climate@oeschger.unibe.ch</a></p> <p>Telephone +41 31 631 31 45, Telefax +41 31 631 43 38.</p>
<b>October 2012</b>		
	Morocco	<b>10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE)</b>
<b>2014</b>		
	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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