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 March issue of the newsletter for the year 2012.

If you have news or information related to SDI, GIS, RS or spatial data that you would like to share with the community (e.g. workshop announcements, publications, reports, websites of interest etc.), kindly send us the materials by the 25th of the each month for your contribution to be included in the next newsletter.

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

Contributions

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

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**GSDI News**

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

**GITA Revamps Web Presence and Membership Structure**
Following a six-month period during which all facets of its operations and activities were assessed and reviewed in detail, GITA has streamlined its website and completely restructured the association's membership categories.
Source: GITA Press Release

**International Development and Mapping**
International development requires an integrated approach to address complex challenges experienced within sectors such as agriculture, environment, health, education, economic growth, democracy and governance, and disaster response. This is where the use of GIS comes in. Using GIS allows organisations to go beyond making maps of just land cover. It enables them to combine layers of information, and study the spatial relationship between selected indicators to get a more holistic view of places or regions they are working to develop.
Source: Asia Pacific Futuregov & World Food Program

**Bangkok 3D City Model Made Available to the Public**
The Bangkok Metropolitan Administration's City Planning Department has created a 3D city planning map which is now online. The 3D city map includes traffic routes and infrastructure systems, which will be added to with help from the Geo-Informatics and Space Technology Development Agency. To date there are 990 3D structures out of a total of 1.4 million buildings, and additional infrastructure such as landmarks, public parks, high-rise buildings will be added over time. The model is particularly useful for development plans to mitigate against the damages from flooding, after last year's devastating and historic flooding. There have been long queues in the planning department for this digital elevation model data, and the online access will help to address some of the demand. The online site can be found at [http://3d-cpd.bangkok.go.th](http://3d-cpd.bangkok.go.th) Read more about the model features, and the planning and zoning issues in the city, in this feature from the Bangkok Post.
Source: SpatialSustain

**Turning government data into private sector products is complicated business**
This article provides an interesting insight into the US government data set trove Data.gov in 2009 with a clear mission: to put information the government was gathering anyway into the hands of private sector and nonprofit Web and mobile app developers. But turning government data into private sector products has
proved more complicated in practice. Some agencies, such as the Environmental Protection Agency, are posting new data sets regularly and rapidly in machine-readable form, but other agencies have shown little interest in devoting dwindling resources to making data more accessible. Agency data publication schedules also are often too slow for the go-go world of mobile apps.

Source: Nextgov

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**SDI Spotlight**

This month the Editors would like to direct readers to the latest information pertaining to social media and spatial data infrastructures a number of recent references on this emerging area of interest are outlined below.

**Citizens as sensors: The World of Volunteered Geography**
Mike Goodchild

**Ethical Issues in GIS and Crisis Mapping** – Links to blog discussions and articles on the ethical concerns, appropriate uses, codes of ethics, and data protection standards for GIS, crowd-mapping and crisis-mapping (last updated February 20, 2012).

**2012 – The Year of OpenStreetMap? Yes** - Has the geospatial world reached the tipping point? Are users, developers, and society as a whole now more accepting of open-source spatial information? Are we now confident in the crowd sourced masterpiece that is OSM?

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

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**GIS Tools, Software, Data**

**Asia Smart City Building Contains a Strong ICT Core**
There are a great many large-scale city building efforts underway in Asia that are taking the smart city approach for management of infrastructure. At the core of these developments is an investment in information and communications technology (ICT) that enables the rapid connection and monitoring of systems. Large international communications companies are behind much of this investment, with a public-private partnership approach that aims to recoup some costs by offering services to citizens and companies on top of this technology backbone.

Source: Asia Surveying and Mapping Magazine

**Release of iVAULT ArcGIS 4.4** - iVAULT version 4.4 for the ArcGIS platform.
This latest release better supports client workflows and has enhanced data access capabilities.

This new release features over 15 enhancements, including:

- Extended iVAULT Administrator is more intuitive and comprehensive with a WYSIWYG iVAULT web layout creation tool
- Social Media Integration mapping feeds from Twitter, YouTube and Flickr providing crowd-sourced spatial information to help track emergency situations and improve constituent communication
- New Events functionality to create spatial objects with attributes on-the-fly allowing users to register inspection, repair or any other type of event against any feature. For example, add or update an inspection, repair, or replacement event against traffic signs.
- Layer priority for finer control of feature selection
- Role-based layer settings to control initial display, legend inclusion and expansion, and map feature selectability – this allows our clients to author just one map and provide their specialized layer configuration and access to various user groups (e.g. staff vs public, different departments, etc.)
- Quick Map tool to store current base map and layer information for future recall
- Ability to expand or collapse individual map services in the legend by default
· Support for multiple default user logins
· Slider to enable the user to adjust number of columns in the detail report
· …and much more!

New modules available:
· Third-Party Integrations with systems such as: Laserfiche, Tempest, and WorkTech.
· eCommerce: enhanced security to facilitate many user groups accessing the system through logins administered by each user group’s administrator. The security is now linked to common payment options like Visa and paypal to facilitate system access.

**Free Webinar, March 08th**
Source: Press release – Pacific Alliance Technologies

**Australia Begins Large-scale Mapping of Debris on its Shores**
Scientists from Australia's national science agency, Commonwealth Scientific and Industrial Research Organisation (CSIRO), are setting out to survey Australia’s 35,000-kilometre coastline to measure marine debris and its impact on sea life. The work is part of the National Marine Debris project.
Source: Asian Surveying & Mapping

**Mapping Australia’s sea floor**
Covering nearly 71 per cent of the world and supporting nearly half of the world's species, the ocean is a mysterious and exciting world that's one of the remaining little-explored frontiers. Only a minute amount of the sea floor has been mapped despite the fact that it plays an integral role in many of the Earth's systems including climate and weather.
Thanks to Ross Johnson for this item

**Is GPS All in Our Heads?** by JULIA FRANKENSTEIN (NY Times)
It’s a question that probably every driver with a Garmin navigation device on her dashboard has asked herself at least once: What did we ever do before GPS? How did people find their way around, especially in places they’d never been before?
Like most questions asked in our tech-dependent era, these underestimate the power of the human mind. It is surprisingly good at developing “mental maps” of an area, a skill new research shows can grow stronger with use. The question is, with disuse — say, by relying on a GPS device — can we lose the skill, too?

**New Visual Navigation System Ditches Satellites for Cameras**
Research into making Global Positioning Systems (GPS) more reliable and accurate has turned to camera technology and mathematical algorithms that its creator says will make navigation cheaper and simpler. … The approach of visual navigation algorithms is being called SeqSLAM (Sequence Simultaneous Localisation and Mapping), and uses local best match and sequence recognition components to determine locations.
Source: Asian Surveying & Mapping

**Centre for Wind Energy to develop solar atlas for India**
Centre for Wind Energy Technology (C-WET) is creating a solar atlas for India, which will identify the solar hotspots where the sun's radiation has optimum intensity for power generation. It will enable solar power developers to accurately pinpoint locations for projects.
Source: Geospatial World and Economic Times of India

**Queensland Offers Citizens a Community Intelligence Map**
The Queensland government has recently provided a Community Intelligence Map (CIM) that provides a portal for the public to search for information when disasters happen. The map is an adjunct of the Total Operational Mapping (TOM) system that the Queensland disaster and emergency management organization uses during emergencies.
Source: Asian Surveying & Mapping

**Scientists draw ‘wall-to-wall’ map of carbon storage of forests**
A study published in Nature Climate Change claimed 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.

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forests, shrublands, and savannas in the tropics of Africa, Asia, and South America. Colours on the map represent the amount of carbon density stored in the vegetation in a continuum fashion.
Source: Geospatial World and Woods Hole Research Center (WHRC) press release

**IfSAR data detects horizontal earthquake**
Most earthquakes occur at near-vertical faults, such as the strike-slip San Andreas Fault or the thrust fault that caused the 2011 Japan earthquake. The Kohat Plateau earthquake in 1992 occurred on a horizontal fault — something that scientists have rarely, if ever, seen before, scientists at University of Colorado, Boulder, claimed.
In 1992, the city of Kohat, Pakistan, faced magnitude-6.0 earthquake, which moved a 30-square-mile (80-square-kilometer) swath of land one foot (30 centimetres) horizontally in a split second, levelling buildings and killing more than 200 people.
Source: Geospatial World and OurAmazingPlanet.com

**earthmine launches in Australia**
The Hon. Brendon Grylls MLA, Minister for Lands, will officially launch earthmine Australia Pty Ltd (eA) in Perth. The joint venture with Australian partners Geomatic Technologies, Landgate and earthmine Inc. (USA), offers a complete end-to-end solution for the collection, processing and delivery of 3D street level imagery in the Australian and New Zealand marketplace.
Source: earthmine Press Release

**Indian state launches GIS-based grievance mgmt system**
This innovative call centre, better known as the Jharkhand Grievance Management System (JGMS) is a platform for communicating citizens’ complaints against government bodies of the state. It is accessible at www.aapkacm.com.
According to the CyberSWIFT’s press statement, the JGMS is a brainchild of Arjun Munda, Chief Minister of Jharkhand. One can reach JGMS by dialling +91-651-3059999, by email to info@aapkacm.com, or lodging a complaint on the website (http://www.aapkacm.com/lodgecomplain.php). The 24X7 call centre is so prepared that it will register complaints in multiple languages like English, Hindi and other local dialects. The innovative GIS system helps identify the location of the incoming call and highlights the area where the call density is high. With the help of this system the Chief Minister can monitor the calls live and air his views as well.
Source: Geospatial World

**Make Maps People Want to Look At**
Five primary design principles for cartography.
Cartographers apply many design principles when compiling their maps and constructing page layouts. Five of the main design principles are legibility, visual contrast, figure-ground organization, hierarchical organization, and balance. Together these principles form a system for seeing and understanding the relative importance of the content in the map and on the page. Without these, map-based communication will fail.
Visual contrast and legibility provide the basis for seeing the contents on the map. Figure-ground organization, hierarchical organization, and balance lead the map reader through the contents to determine the importance of things and ultimately find patterns.
This article introduces you to these five principles and explains their importance in cartography. It's worth noting that these principles are not applied in isolation but instead are complementary. Collectively, they help cartographers create maps that successfully communicate geographic information.
[Web link](#) to full article and article in PDF format.
Thanks to Ross Johnson for this item.
News from abroad

“\textit{This section has been included to highlight some of the developments happening outside the region which demonstrate SDI in action.}”

\textbf{JPL - NASA Map Sees Earth’s Trees in a New Light}
A NASA-led science team has created an accurate, high-resolution map of the height of Earth’s forests. The map will help scientists better understand the role forests play in climate change and how their heights influence wildlife habitats within them, while also helping them quantify the carbon stored in Earth’s vegetation.

… “Knowing the height of Earth’s forests is critical to estimating their biomass, or the amount of carbon they contain,” said lead researcher Marc Simard of JPL. “Our map can be used to improve global efforts to monitor carbon. In addition, forest height is an integral characteristic of Earth’s habitats, yet is poorly measured globally, so our results will also benefit studies of the varieties of life that are found in particular parts of the forest or habitats.”

… The researchers found that, in general, forest heights decrease at higher elevations and are highest at low latitudes, decreasing in height the farther they are from the tropics. A major exception was found at around 40 degrees south latitude in southern tropical forests in Australia and New Zealand, where stands of eucalyptus, one of the world’s tallest flowering plants, tower much higher than 130 feet (40 meters).

… In general, estimates in the new map show forest heights were taller than in a previous ICESat-based map, particularly in the tropics and in boreal forests, and were shorter in mountainous regions. The accuracy of the new map varies across major ecological community types in the forests, and also depends on how much the forests have been disturbed by human activities and by variability in the forests’ natural height.

Source: \textit{NASA} and GIS User

\textbf{GPS uncovers quake risk in the US Southwest}
The US Southwest isn’t particularly known for its seismic activity, but the Rio Grande Rift, a series of faults and basins that runs from central Colorado south through New Mexico, is alive and stretching, scientists at University of Colorado at Boulder claimed. Their study published in the January issue of the journal \textit{Geology}.

Using a large network of GPS stations — nearly 300 sites — Anne Sheehan, a seismologist at the University of Colorado at Boulder and her team monitored the rift’s movement over four years. They found that the rift is in fact spreading very slowly, at a rate of about 0.1 millimetres per year.

Source: Geospatial World & \textit{Our Amazing Planet}

\textbf{Free high resolution imagery}
It does not happen very often that something of great value is made available free of charge, and in large quantities. Courtesy of US Government and GeoEye, you can now access some 180,000 scenes, one meter resolution (black and white) and four meter resolution (multi-spectral), captured by OrbView-3 satellite around the world between 2003 and 2007. The initial data format available is GeoEye’s Basic Enhanced (L1B) product.

Thanks to Ross Johnson for this item

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\textbf{Articles}

Source: Kathmandu News

\textbf{Building national capacity through spatial standards policies} by Steven Ramage
Geospatial information flows are a particularly important factor in capacity building across those domains. This article focuses on how capacity building in the geospatial sector of the ICT domain depends on National Spatial Data Infrastructure (NSDI) policies that encourage the use of open geospatial standards. \textit{OGC standards} and complementary standards from the International Organization for Standardization (ISO) Technical Committee

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211 (ISO/TC 211 Geographic information/Geomatics) have become part of SDI “best practices” around the world.  
Source: Coordinates magazine

**Traveling Through Time with GIS**

Geospatial professionals are well versed in visualization of spatial relationships and dependencies. But when looking for relationships and dependencies, examining proximity in time can be equally important. Pioneering environmental planner Ian McHarg put great emphasis on chronology, or the placing of geographic layers in chronological sequence to show relationships, dependencies, and causation through time.

... Using chronology to visualize the past is certainly an important tool to help us understand the present. But can we do even more with this geographic knowledge? Can we use it to predict the future?  
Source: ESRI Insider blog

**The role of the Ina-SDI in supporting the development of the geospatial industry in Indonesia**

**Abstract**

In the past, geospatial data and information systems were developed for a nation’s security purposes, but nowadays they are utilized to augment its prosperity. Accordingly, the development of geospatial information and communication infrastructure has become imperative to provide the ease and speed of geoinformation access, as well as to reduce redundancy. In this vein, the Indonesian government (GoI) has established the Ina-SDI (Indonesian GeoSpatial Data Infrastructure) under the Presidential Regulation Nr. 85 year 2007, following which the BAKOSURTANAL (National Coordinating Agency for Surveying and Mapping) received a mandate from the GoI to coordinate the development of Ina-SDI operational model which is to be actualized within two years under the Ina-SDI Development Project. This article embarks on an exploratory assessment of the development of Ina-SDI. The conclusion is that the success of the Ina-SDI is dependent on the completion of a nationwide standardized based map, the integration of all Ina-SDI geospatial data and information players, the support for ease and speed of data and information accessibilities through integrated ICT infrastructures, and the provision and enforcement of laws and regulation to enable the Ina-SDI to take off from a “rowing” to a “steering” role in order to lend support to the country’s geospatial commerce and industry.   
**Keywords:** geospatial data and information systems, geospatial industry, ICT infrastructures, ICT integration, ICT network, standardized based map

**Mission to Mason Neck** by SUSAN SCHULTEN  
During the early years of the American Civil War (1861-5) the city of Washington was under threat from the Southern forces. The capital’s vulnerability to the south was worsened by the scarcity of reliable maps, prompting Gen. Winfield Scott to begin a comprehensive mapping effort in the summer of 1861. The Union defeat at Bull Run derailed the effort for a time, but by the end of the year the Coast Survey and the Office of Topographical Engineers had produced an impressive map of northeastern Virginia. Issued on New Year’s Day 1862, it was the first large and detailed map of the area, drawn from existing sources as well as new surveys.  
Source: The NY Times

**How Cartographers Make Surveyors Look Good** by Jeff Thurston  
The cartographer, however, can improve the usability and understanding of high accuracy data, and what it is intended for, through applying professional cartographic experience, knowledge and education. We are all aware of ‘good maps’ - those we find attractive, interesting, useful and helpful for making real decisions. Cartographers are part of the process that makes these results appear. I think cartographers need to talk with surveyors more. They could make surveyors shine more than they do already.  
Source: Asian Surveying & Mapping
Locating dangerous zones prior to drilling the 57 km long Gotthard Tunnel in Switzerland
by Edi Meier & Ulrich Sambeth

Georadar (or Ground Penetrating Radar) was one of the tools used to locate the most critical zone

GPR is a geophysical investigation method. Its principle is similar to that of Seismics but instead of emitting elastic waves, it emits electromagnetic waves. They are much shorter, which leads to a much higher spatial resolution. GPR is sensitive to the electromagnetic properties of the material under investigation. Interfaces of rock formations, fissures and aquiferous areas are displayed.

Source: Coordinates magazine

Ten Things You Need to Know about Open Source Geospatial Software
Source: Directions magazine

Books and Journals (including Videos and Web publications)

This from Eric at Geospatial Training... Each chapter from my e-book, "The GIS Geeks Guide to Mastering the ArcGIS Server API for JavaScript" has been posted online for viewing.
The book is based on materials drawn from our Building Custom ArcGIS Server Applications with JavaScript course and covers how to use the ArcGIS Server API for JavaScript to build high performance, attractive Web mapping applications using the lightweight, browser based ArcGIS Server API for JavaScript.
Here's Chapter 1 - Chapter 1: Introduction to ArcGIS Server
The chapters are free to everyone in pdf format.
Source: GISUser

Video - Geospatial Revolution Project #4 - geospatial technology around the world
From May, 2011 episode 4 in this popular educational video series from Penn State Public Broadcasting a closer look at change and how geospatial technology can help monitor the changing Earth.
About the video - The fourth and final episode explores geospatial technology around the world: monitoring global climate change, preventing famine, tracking disease and mapping communities never before seen on a map.
See also - Episode One and Episode Two and Episode Three

The February 2012 issue of SSSI's GeoMessage is now available

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) and LiDAR News, Vol 2, No 4 (Mid-February 2012)

Think Quarterly – Google’s new on-line magazine

Coordinates monthly magazine (February 2012)

SERVIR-Africa community news

GISuser - GIS and Geospatial Technology News

National geographic website

The Atlantic Cities website

Professional Surveyor magazine

Just for Fun!

Spy vs Spy
Reading about the twists and turns of surveillance in the geospatial world reminds me of a series of cartoons ‘Spy vs Spy’ which used to appear in MAD magazine. Each spy tries to go ‘one up’ on the other with interesting results for both! Japanese power companies do not want to show power lines fearing misuse by terrorists. This is the classic approach to security and it will fail in a networked and information rich world. What will work is the approach being adopted by FBI and NGA. Trawl the network for seemingly unconnected data and discover patterns hidden in them. Even the most adept terrorist has to necessarily leave an electronic trail as he is forced to use modern technologies for communications and information. This also means that when data has to be protected it is necessary to take into account these very electronic trails to be able to secure the data. This sounds contradictory and perhaps it is. The success belongs to the side that is able to garner maximum information not to the one that is able to hide it. Thus, blocking is not a solution but finding out the illegal access and diverting the access to safer data or even diversionary data is the way to go.
Source: Geospatial World editorial (February 6)

Manchurian Trivia
Here’s a bit of insight into the mind of a budding map-head. While the author’s grade-school geography teacher attempted to stuff our heads with tables on the average rainfall in the Amazon and graphs on the relevance of the Donbas for the Soviet economy, I kept staring at the page showing East Asia, wondering: Does Russia share a border with North Korea, or does China touch the sea?
Source: Borderlines blog from the NY Times See also The First Google Maps War recounting how Google inadvertently fueled a territorial dispute between Nicaragua and Costa Rica.

Surveying & soccer remember the item from the November 2011 issue of the newsletter – The Amazing ‘Throwable Panoramic Ball Camera’
The problem is to get the ball to the exact location and height from which you want to take the picture. Thus, that is why you need to be a skilled soccer player before you can start capturing image data.
Source: GeoInformatics (Jan/Feb 2012) page 52
**Training Opportunities**

**General Bathymetric Chart of the Oceans (GEBCO)/Nippon Foundation Training Programme**

**Postgraduate Certificate in Ocean Bathymetry at the University of New Hampshire, USA (2012-2013)**

The Nippon Foundation of Japan has provided funding for GEBCO to train a new generation of scientists and hydrographers in ocean bathymetry. The 12-month course, leading to a Postgraduate Certificate in Ocean Bathymetry (PCOB), has been held at the University of New Hampshire, USA, since 2004.

Applications are now sought for entry onto the course, starting in August 2012. Students for the PCOB will be selected by a competitive application process. Minimum qualifications for acceptance are a four year undergraduate degree in a related science or engineering discipline, and proof of ability to successfully complete graduate level courses conducted in English. The selection process will aim at choosing candidates from a wide geographic distribution of coastal countries. Find out more about the course and how to apply. The closing date for applications is 31 March 2012.

**Tuition and fees will be paid directly by the Training Project.** In addition to the tuition and fees, the Training Project will also provide each selected student with:

1. An annual stipend of US$24,000. "Under review"
2. Computer hardware, software and textbooks necessary to complete the course.
3. One return airfare for the student to cover travel to UNH from the student's home base at the beginning of the program and back to the student's home base at the end of the program.
4. Return airfare and living expenses for the student for one trip to obtain work experience at another institution active in bathymetry (subject to opportunities).
5. Return airfare and living expenses for the student to participate in a data collection cruise on a research or survey ship (subject to opportunities).

All other costs must be met by the student.

**Learn to Use HTML5 with Esri ArcGIS**

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

Source: GIS User and [ESRI](http://esri.com)

**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](http://elogo.org).

**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:

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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

Funding Opportunities, Awards, Grants

2012 IEEE GRSS Data Fusion Contest

The 2012 IEEE GRSS Data Fusion Contest is up and running and something that you should think about participating in. While with ever increasing spatial and spectral resolutions in the variety of imagery and elevation data available now-a-days has reduced the need for certain data fusion products, it is also creating new opportunities to fuse the new data options. This year’s contest is based on data made available by Astrium, Digital Globe, and the USGS CLICK. The Data Fusion Contest is designed to investigate the potential of multi-modal/multi-temporal fusion of very high spatial resolution imagery. This year, participants will download three different sets of images (optical, SAR, and LIDAR) over the downtown of San Francisco and each participant will get to choose their own research topic to work with. The contest is open to everyone and the deadline for submission (of the paper) is May 1, 2012. The entry details and prize list are available on the contest website.

Challenge to spur the geospatial industry

The Singapore Land Authority has launched OneMap Challenge that seeks to promote the development of innovative map-based desktop and mobile applications by businesses and the community. The OneMap Challenge provides a platform for application developers to showcase their creativity through the apps they develop to an increasingly tech-savvy population and enterprises, including those represented by the Association of Small and Medium Enterprises (ASME) which is one of the competition promotion partners. The Challenge also aims to facilitate collaborations between potential business partners for creating location-based apps that are useful for business enterprises and the general community. With two top prizes of $20,000 cash each and other attractive prizes up for grabs, the OneMap Challenge is divided into two categories – Web Applications for applications that run on web browsers and Mobile Applications for those that run on smart phones, tablets and other portable devices. Visit http://www.sla.gov.sg/OneMapChallenge to learn more about OneMap Challenge and check out the OneMap Facebook page at www.facebook.com/OneMap.
Course Spotlight: Master of Spatial Information Science
The University of Melbourne Course Spotlight: Master of Spatial Information Science
Spatial information is an essential and indispensable part of any economy's infrastructure. It is needed in all walks of life and on many scales, with applications in land tenure systems, environmental modelling, food production, disaster management, climate change modelling, engineering, architecture and urban planning.

Current industry shortfalls in spatial information practitioners combined with a growing demand in Australia and internationally, ensure graduates a range of well-paid job opportunities. Find out more about the Master of Spatial Information Science, as well as our scholarship opportunities.

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 (www.incam-cnrs.eu) 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: mailto:laurent.drapeau@cesbio.cnes.fr
Source and further information Cesbio

Post-Doctoral Position for DataONE Provenance and Scientific Workflows Working Group
The Data Observation Network for Earth (DataONE) 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 Bertram Ludaescher and Rebecca Koskela (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: www.gisjobboard.com
New Site Provides Employers and Job Seekers Tools to Post and Search Jobs and Resumes in the GIS and Geospatial Disciplines
GIS Job Board has launched a new website specifically dedicated to GIS and other geospatial disciplines. The new site makes it simple for employers and job seekers to post and search for jobs and resumes. The site was created to serve the growing needs of the GIS community and help with recruiting and job seeking efforts. Visitors also have the option to view the site in a different language if they choose, making it easier for them to have access to the content.
Registered users can receive jobs or resumes by email. They can also flag jobs and resumes as well as save searches, setup resume alerts, and save resumes and jobs. Users have the capability of private messaging.
other users in case they ever want to communicate with someone. For more information about GIS Job Board, please visit their website at www.gisjobboard.com

**Employment opportunities for Soccer-playing Surveyors**

Remember the item from the [November 2011 issue](#) of the newsletter – *The Amazing 'Throwball Panoramic Ball Camera'*. The problem is to get the ball to the exact location and height from which you want to take the picture. Thus, that is why you need to be a skilled soccer player before you can start capturing image data.

Source: GeoInformatics (Jan/Feb 2012) page 52

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### Conference Proceedings

**Iraq Spatial Data Infrastructure workshop completed**

In mid-February 2012, over 25 persons representing 13 national and regional government organizations assembled in Erbil in the north of Iraq for an intensive three-day exchange to explore concepts and ideas towards the establishment of a National Spatial Data Infrastructure for Iraq. The workshop was conducted under the auspices of the Prime Minister Advisory Committee (PMAC), and supported by the United States Geologic Survey (USGS). Staff from the GPC Group facilitated the workshop, bringing experience and insights regarding the implementation of GIS federations and Spatial Data Infrastructure (SDI) in other countries and regions around the world.

Open Planet 5, the magazine published for the [International gvSIG Conference](#) is now available in electronic format

**National Geomatic Plan in Gabon: results of pilot projects presented**

IGN France International presented the main results of the work conducted between April and December, 2011 at the occasion of a final seminar. This seminar was held on December 6th, 2011 in Libreville and brought together around 60 representatives, most of whom were general managers and permanent secretaries from the main ministries, all in the presence of Emmanuel Issozet, Minister of the Budget and Madame Yolande Nyonda, Permanent Secretary of the Budget.

**Phase pilote du PNG Gabon: Promesses tenues**

**NGP Gabon: IGN France International presented the results of the pilot projects during a final seminar**

**2nd International Workshop on 3D Cadastres organized by FIG, EuroSDR and TU Delft**


**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 [also](#).

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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.

[Back to contents](#)
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.

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<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event</th>
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<tbody>
<tr>
<td>March 2012</td>
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<tr>
<td>6-7 March</td>
<td>Melaka, Malaysia</td>
<td><strong>Malaysia Geospatial Forum 2012</strong></td>
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</tbody>
</table>
| 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 display 22 March 2012  
Conference start 22 March 2012  
NT Spatial & Awards Dinner 22 March 2012  
Final day of conference 23 March 2012  
Contact |
| 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  
The closing date for submissions is 25th November 2011. 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 or contact members of the local organising committee via gisruk2012@lancs.ac.uk. We look forward to receiving your
## May 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event</th>
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<tbody>
<tr>
<td>23–27 April</td>
<td>Amsterdam, The Netherlands</td>
<td>Geospatial World Forum</td>
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<tr>
<td>May 2012</td>
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<td><strong>Theme:</strong> Geospatial Industry &amp; World Economy</td>
</tr>
<tr>
<td>7–9 May</td>
<td>Rio de Janeiro, BRAZIL</td>
<td>4th International Conference on GEographic Object Based Image Analysis 2012 – GEOBIA 2012</td>
</tr>
<tr>
<td>14–17 May</td>
<td>Quebec City, Canada</td>
<td>2012 Joint World Conference&lt;br&gt;GSDI 13 and Canadian Geomatics Conference (CCC)&lt;br&gt;&amp; there’s more - 14th GEOIDE Annual Scientific Conference&lt;br&gt;&amp; there’s even more - 7th 3D Geoinfo Conference&lt;br&gt;hosted by GEOIDE Network&lt;br&gt;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: (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, (2) a pre-conference published book of fully refereed articles titled &quot;Spatially Enabling Government, Industry and Citizens: Research and Development Perspectives&quot; to be distributed to all conference participants and archived on the web, and (3) a post-conference special edition of the International Journal of Spatial Data Infrastructures Research (IJSOIR) with full articles selected from the proceedings and then fully refereed and revised after the conference. <strong>In addition</strong>, two separate calls arising from the joint conference are being issued for chapter submissions to two additional books: (1) &quot;The Added Value of Scientific Networking: GEOIDE Network Experiences&quot; 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 (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>).</td>
</tr>
<tr>
<td>16–17 May</td>
<td>Quebec, CANADA</td>
<td>7th International Conference on 3D GeoInformation</td>
</tr>
<tr>
<td>21–3 May</td>
<td>Prague, Czech Republic</td>
<td>FOSS4G-CEE &amp; Geoinformatics</td>
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<td></td>
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<td>Important dates: &lt;br&gt;1.1.2012 Call for papers &amp; workshops &lt;br&gt;1.2.2012 Workshop submission deadline &lt;br&gt;1.3.2012 Papers submission deadline &lt;br&gt;15.2.2012 Confirmation of accepted workshops &lt;br&gt;15.3.2012 Confirmation of accepted papers &lt;br&gt;1.4.2012 Early bird registration deadline</td>
</tr>
<tr>
<td>23–4 May</td>
<td>Taza, Morocco</td>
<td>International conference of GIS users, Taza GIS-Days 2012*</td>
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*The Taza-GIS-Days symposium is being organized by the Laboratory Natural Ressources and Environment of the

**IMPORTANT LINKS**
- Conference Website: [http://www.gsdi.org/gsdi13](http://www.gsdi.org/gsdi13)
- Past GSDI World Conference Proceedings: [http://www.gsdi.org/gsdiConferences](http://www.gsdi.org/gsdiConferences)
- Past open access Books affiliated with the conference: [http://www.gsdi.org/openaccessbooks](http://www.gsdi.org/openaccessbooks)
- Other Important Dates: [http://www.gsdi.org/gsdiconf/gsdi13/dates.html](http://www.gsdi.org/gsdiconf/gsdi13/dates.html)
### June 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event</th>
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<tbody>
<tr>
<td>3-5 June</td>
<td>Kuala Terengganu, Malaysia</td>
<td>The International Conference on Informatics &amp; 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.</td>
</tr>
<tr>
<td>4-7 June</td>
<td>Las Vegas</td>
<td>Hexagon 2012 conference.</td>
</tr>
<tr>
<td>8-11 June</td>
<td>Shanghai, China</td>
<td>2nd International Workshop on Earth Observation and Remote Sensing Applications (EORSA 2012) Call for Papers Following the first EORSA conference in Beijing in 2008, the second workshop (EORSA2012) will be held in Shanghai, China, on June 8-11, 2012. This event is jointly organized by Tongji University, Peking University, and Nanjing University, with technical sponsorship from IEEE Geoscience and Remote Sensing Society and International Society for Photogrammetry and Remote Sensing. Timetable: Abstract submission due - March 15, 2012 Notification of acceptance - March 30, 2012 Full paper submission - May 15, 2012 Pre-conference registration due - April 15, 2012 Pre-conference workshops - June 8, 2012 Conference: June 9-11, 2012 Abstract Submission: Please submit your abstract through the following web site: <a href="https://www.easychair.org/conferences/?conf=eorsa2012">https://www.easychair.org/conferences/?conf=eorsa2012</a> An abstract should be between 400 and 600 words in English, and be saved in Microsoft Word format. Please include title, key words (up to five), full name, affiliation, and contact details (e-mail, phone, fax, and regular mailing address). Please also indicate your preference for oral or poster presentation. For more information about the workshop, visit the website.</td>
</tr>
<tr>
<td>15-17 June</td>
<td>Hong Kong</td>
<td>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,</td>
</tr>
</tbody>
</table>
Pollutions and many other natural and man-made disasters are severe threats to the mankind. Geoinformatic technologies shall play an essential role 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, http://cpgis.org/) and its Annual Conference (the Geoinformatics series), the organizing committee cordially invite geoinformatics professionals and scholars all around the world, review and celebrate our accomplishments and to develop our vision for the next 20 years.

18-20 June
“NEW”
Salvador de Bahia, Brasil
“Cities, Technologies and Planning” - CTP 12
(http://www.unibas.it/utenti/murgante/geog_an_mod_10/index.html) in conjunction with The 2012 International Conference on Computational Science and its Applications (ICCSA 2012)”

21-3 June
“NEW”
Yokohama, Japan
Geospatial Expo 2012

25-7 June
“NEW”
Taipei, Taiwan
International Conference on Earth Observations and Societal Impacts (ICEO-SI)
The ICEO-SI 2012 Meeting will advance the understanding of earth observations and societal impacts from the regional to the global levels. Through the promotion and construction of the Global Earth Observation System (GEOS), the conference will namely address the following topics:
- Ecosystems – Biodiversity
- Water – Disasters
- Energy – Health
- Weather – Climate
- Agriculture

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
Esri International User Conference
Now Accepting Presentation Submissions
Participation from the GIS community makes the Esri International User Conference (Esri UC) <http://www.esri.com/events/user-conference/index.html> 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:
- Applying ArcGIS to new problems in innovative ways
- Leveraging new capabilities of ArcGIS 10
- Extending your GIS to a broader audience through web and mobile applications
- Driving GIS advancements in your industry
- 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. 

**Abstract submission deadline:** passed.

### August 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>6 – 8 August</td>
<td>Melbourne, Australia</td>
<td><strong>GITA 2012</strong> – GITA 17th Annual Geospatial Solutions Conference “From Fundamentals to the Future – Managing Assets Spatially”</td>
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### Important dates

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Details</th>
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<tbody>
<tr>
<td>30 March 2012</td>
<td>Abstract submission closes</td>
</tr>
<tr>
<td>late April 2012</td>
<td>Authors notified of initial acceptance or otherwise; successful authors invited to submit a full paper</td>
</tr>
<tr>
<td>5 March 2012</td>
<td>Registration opens</td>
</tr>
<tr>
<td>31 May 2012</td>
<td>Deadline for authors to register for the meeting</td>
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### Contact

Email: isprs2012@icms.com.au

### September 2012

<table>
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<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>25 August – 1 September</td>
<td>Melbourne, Australia</td>
<td><strong>XXII International Society for Photogrammetry &amp; Remote Sensing Congress</strong></td>
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<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>2-5 September</td>
<td>Wellington, New Zealand</td>
<td><strong>The 4th Digital Earth Summit focusing on “Natural Disasters”</strong></td>
</tr>
<tr>
<td>6-8 September</td>
<td>Tokyo, Japan</td>
<td><strong>2012 International Conference for OpenStreetMap (OSM) State of the Map 2012 (SoTM12)</strong></td>
</tr>
<tr>
<td>9-14 September</td>
<td>Ticino, Switzerland</td>
<td><strong>11th NCCR Climate Summer School, 2012</strong></td>
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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:** closed. Successful applicants will be notified in February 2012. Detailed information and the application form are available at [http://www.nccr-climate.unibe.ch/summer_school/2012/](http://www.nccr-climate.unibe.ch/summer_school/2012/).

Contact: University of Bern, NCCR Climate Management Centre,
<table>
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<tr>
<th>Date</th>
<th>Location</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>17–9 September</td>
<td>Hanoi, Vietnam</td>
<td>11th Asia Geospatial Forum</td>
</tr>
<tr>
<td>October 2012</td>
<td>El Jadida, Morocco</td>
<td>10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE)</td>
</tr>
<tr>
<td>29 October – 2 November</td>
<td>El Jadida, Morocco</td>
<td>AARSE 2012 Conference: Call for Side-event Workshops</td>
</tr>
<tr>
<td>2014</td>
<td>Malaysia</td>
<td>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.</td>
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</table>

As you might be aware the AARSE 2012 Conference will take place from October 29 to November 2, 2012 in El Jadida, Morocco. This 9th holding of the AARSE Conference represents a major event in the long series of internationally recognized AARSE conferences. AARSE 2012 welcomes dedicated workshops - organized as pre- or post-conference events or as half-day events concurrent with the conference scientific programme (the latter in exceptional cases only). Workshops should present state-of-the-art research and cover the development, deployment and operational use of Earth observing systems both space- and airborne.

Workshop Summary Submission
Interested parties should submit a summary of the workshop they propose. The summary must include:
- Title of workshop;
- Relevant keywords;
- Full name and title, e-mail address, fax, telephone of workshop organizer(s);
- Short description of the workshop (maximum one page);
- Target audience;
- Proposed duration of workshop

The Workshop summary should reach the Chairman of the Local Organizing Committee: Prof. Kamal LABBASSI, no later than 30 June 2012. Workshop proposers will be notified of acceptance as soon as the requirements are fulfilled.

**Note:** Please be aware that the following policy of the AARSE Executive Council on workshops organized by other parties applies:
- Organizers of a pre-/concurrent-/post-conference workshop must pay a fixed amount of €3000 to cover expenses for projector, venue, writing materials and microphone. Anything extra is to be borne by the workshop organizer. However, organizers of a pre-/concurrent-/post-conference workshop who pay the conference registration fee for 8 of their participants, 2 months prior to the conference date, pay a fixed amount of €1500 to cover costs of projector, venue, writing materials and microphone.

**REMINDER:** Abstract submission deadline: 30 April 2012