

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 July 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 25th of the each month for your contribution to be included in the next newsletter.

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

Contributions

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

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GSDI News

[GSDI and IGS Global News, Issue 3 Volume 3 for 2013](#)

GSDI 14 Conference Preparations

Preparations continue for the joint [GSDI 14 World Conference and AfricaGIS 2013 Conference](#) scheduled to be held in Addis Ababa, Ethiopia, at the UNECA Conference Center, November 4-8 2013 in partnership with GSDI Association, EIS-Africa, the International Geospatial Society, EiABC - Addis Ababa University and the United Nations Economic Commission for Africa (UNECA).

AfricaGIS is the largest regularly occurring GIS conference in Africa with participants from the whole continent. The GSDI World Conference moves to sites across the globe to offer geospatial specialists from all parts of the world opportunities to better exchange ideas and learn from peers in building spatial data infrastructure. [For past conferences.](#)

The selected theme of the conference is "Spatial Enablement in Support of Economic Development and Poverty Reduction" The pressing needs of African nations, their citizens, and the needs of economically disadvantaged nations generally are a particular emphasis of the conference and include such concerns as:

- sustainable development,
- economic development,
- business intelligence and business geographics,
- disaster prevention, warning, management, response, and recovery,
- alleviation of poverty and crime,
- lessening the digital divide including access to information technologies,
- ensuring food security,
- support of transportation, health and communication systems, and
- facilitating land ownership.

Substantial reduction in registration fees will be available for local participants, members of EIS-Africa and members of the International Geospatial Society who are from low income per capita nations. Substantial reductions in Exhibit and Sponsorship fees will be available for companies and agencies that are members of the GSDI Association.

Consult the [web site](#) as the Call for Papers and details about the program, facilities and sponsorship opportunities become available.

We are now only two weeks away from the deadline for abstracts (for presentations) and full papers for peer reviewed publication – 15 May 2013!

This combined and fully integrated conference offers numerous opportunities for oral presentations and refereed and non-refereed publication outlets. We invite presentations covering the full range of practice, development and research experiences that advance the practice and theory of spatially enabling citizens, government, and industry. The conference theme is Spatial Enablement in Support of Economic Development and Poverty Reduction.

This call for papers supports two primary forms of publication:

- (1) a Conference Proceedings, with Abstracts for all accepted submissions, and refereed and non-refereed Full Papers for some of the submissions, and
- (2) a pre-conference published book containing fully refereed articles. The tentative title is "Spatial Enablement in Support of Economic Development and Poverty Reduction: Research, Development and Education Perspectives". The book will be published as an open access book in various e-reader formats.

*** IMPORTANT CONFERENCE DATES ***

Deadline for Submission of Abstracts: 15 May 2013

Deadline for Submission of Full Papers for Refereed Publications: 15 May 2013

Deadline for Submission of Full Papers for Non-refereed Publications: 1 Sept 2013

Deadline for Full Conference Registration Payment for All Presenters 15 Sept 2013

Conference Dates: 4-8 Nov 2013

*** IMPORTANT CONFERENCE LINKS ***

Joint Conference [Call for Abstracts and Papers](#), [Conference Website](#): [Other Important Dates](#).

Past GSDI World Conference [Proceedings](#). Past [open access Books](#) affiliated with the conference.

* JOIN the GSDI Association or International Geospatial Society to enjoy conference fee reductions! *

Substantial reduction in registration fees will be available for local participants, members of EIS-Africa and members of the International Geospatial Society who are from low income per capita nations. Substantial reductions in Exhibit and Sponsorship fees will be available for companies and agencies that are members of

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the GSDI Association.

Consult the [web site](#) for latest information and details about the program, facilities and Sponsorship opportunities. Come prepared to engage, learn and enjoy! More news on the conference in future issues!

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.

Outreach & Membership Committee

Committee vice-Chair, Roger Longhorn has joined the International Hydrographic Organization (IHO) Marine SDI Working Group (MSDIWG) and attended the Marine SDI Open Forum meeting in Copenhagen (remotely!) and the following two-day workshop of the MSDIWG, hosted by the Danish Hydrographic Service. The MSDIWG, which has existed since 2009, is setting its new workplan for 2013-2014 and is interested in developing a stronger relationship with non-marine SDI development initiatives at national, regional and global levels. Longhorn will explore this with the GSDI Board and Executive Committee at the next opportunity. The Outreach & Membership Committee also manages the GSDI Group on LinkedIn, which has added seven new members in the past month, for a total of 229 members today. If you are not already a member of this group, please join today – and tell your friends! Visit <http://www.linkedin.com> to join, then find GSDI in the 'Groups' option, to join the group.

Technical Committee

Technical Committee Chair, Eric van Praag, Regional Coordinator, GeoSUR Program of the Latin American Development Bank (CAF), along with USGS, has nominated the GeoSUR Topographic Processing Service (TPS), built with ESRI's AG Server 10.1, for the AAG Stanley Brunn Award for Creativity in Geography. See more news later in this issue.

The Technical Committee is also responsible for updating of the GSDI SDI Cookbook, a wiki maintained at: http://www.gsdidocs.org/GSDIWiki/index.php/Main_Page.

GSDI Member organisations, members of the GSDI Association Committees, Council and Board, and IGS members are involved in the many other regional and global initiatives on an on-going basis:

- [Digital Earth](#) (International Society for Digital Earth).
- [Eye on Earth](#).
- [Group on Earth Observations \(GEO\) / Global Earth Observation System of Systems \(GEOSS\)](#).
- [EuroGEOSS](#) – GEOSS Project funded by the European Union.
- [INSPIRE](#) – Infrastructure for Spatial Information in the European Community.
- [International Hydrographic Organisation](#) – Marine SDI Working Group.
- [UNESCO IOC](#) – Marine/Coastal Spatial Data Infrastructure development.
- [UNSD \(Statistics Division\) – UN-GGIM \(UN Global Geospatial Information Management\)](#).
- [UNGIWG](#) (UN GI Working Group).
- [UNESCO IOC](#) – Marine/Coastal Spatial Data Infrastructure development.
- [UNSDI – UN-GGIM](#) (UN Global Geospatial Information Management).
- [UNSDI – UNGIWG](#) (UN GI Working Group).

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SDI News, Links, Papers, Presentations

[Indonesia: building spatial database system on north coast of Java island](#)

The Geospatial Information Agency and the Ministry of National Development and Planning signed an agreement with the Korean International Cooperation Agency (KOICA) to build a Spatial Database System on the North Coast of Java island. Java is the most populated island of Indonesia and account for nearly 60 per cent of the total population. Its capital, Jakarta, is located on the North West coast of Java.

The project, which has a budget of US \$3.5 million, aims to establish a basic spatial infrastructure to support

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policy decision making in coastal protection and climate change. It also aims to develop policies to minimise the adverse effects of natural disasters and to also help local authorities draft effective disaster preparedness plans. Furthermore the project aims to improve Indonesia's capacity to produce topographic maps by sharing know-how, necessary technology and knowledge through the capacity building programmes which will be hosted by visiting experts from South Korea.

Once the system is in place, the government will produce a topographic map with a scale of 1:5,000 that will replace the National Base map of Java Island which was made from 1993-1994 with a scale of 1:25,000. The spatial information generated by the project will be essential for the development of the national spatial data infrastructure, which plays a critical role in national development plans and policies for road construction, land use, public housing, and flood control among others.

Source: FutureGov

[INSPIRE: Guidelines for the encoding of spatial data, Version 3.3rc3 \(Date: 2013-06-11\)](#)

This document specifies requirements and recommendations for the encoding of spatial data for the purpose of data interchange between systems in INSPIRE. The focus of data interchange is understood by this document primarily as access to data via services which includes, but is not limited to, a download of a complete spatial data set.

The requirements and recommendations specified by this document are requirements and recommendations for encoding rules as specified by ISO 19118. These encoding rules will be specified in or referenced from INSPIRE data specifications.

[India \(Jammu and Kashmir\): Workshop held on Geo-Informatics and SDI](#)

A daylong User Interactive Workshop on 'Application of Geo-informatics in Planning & Monitoring and Concept of Spatial Data Infrastructure' was organized in Srinagar on 12 June 2013 by the Directorate of Environment & Remote Sensing (DERS).

The workshop was presided over by Additional Principal Chief Conservator of Forests/Director DERS, Suresh Chugh. Chugh while speaking on the occasion emphasized for generating sharing mechanism which could optimize utility of data for planning, an official statement said. He stressed for coordination among the line departments, so that data can be generated as a central repository and shared for common use in a standard format.

The workshop was also attended by Regional Director, Department of Environment & Remote Sensing, Kashmir, Liaqat Ali Dar, Joint Director, Planning & Statistics, Tariq Ahmad Khan besides Chief Education Officers, Chief Planning Officers and officers from Wildlife Protection, Forest, Rural Development Departments, Srinagar Municipality and National Informatics and Planning Departments.

The technical sessions were conducted by Principal Investigator of the SSDI-JK Project, Humayun Rashid who gave a detailed PowerPoint presentation on Application of Geo informatics in planning and monitoring and concept of Spatial Data Infrastructure. Various speakers also deliberated on application of Geo-informatics & Spatial Data Infrastructure in Health Sector, Education Sector, Urban Development planning land use analysis and Forestry & Ecosystem Analysis.

Director, Economics & Statistics, B.R Lachotra underlined the importance of Spatial Data Infrastructure in improving planning process in the State.

[SDI Cookbook update](#)

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

If you are interested in helping update any of the chapters, please contact [Douglas Nebert](#).

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SDI Spotlight

This month's "Spotlight" feature has been held over as the contributors' submission fell short of the high standards imposed by the editors.

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

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GIS Tools, Software, Data



[Interactive Map of the Tornado Devastation in Moore, Oklahoma](#) **Contemplating the scale and capriciousness of the damage**

Last month's Moore, Oklahoma tornado caused severe damage in many portions of the city. Whole blocks were wiped out, as can be seen in this swiipeable, before-and-after map created by the geographic information services company, ESRI.

Source: The Atlantic and [ESRI](#)

[Seasonal vegetation change – satellite imagery](#)

The Earth is the "Blue Planet" because more than 70 percent of its surface is covered in water. But what does the Blue Planet look like without the blue? How would Earth appear as ... the Green Planet?

Something [like this](#), apparently. The [Suomi NPP satellite](#), NASA's Earth-observing research satellite, has been gathering data about the world's vegetation from its delightfully lofty perch. The data themselves come from Suomi NPP's [Visible-Infrared Imager/Radiometer Suite](#), or VIIRS,

instrument. VIIRS, as its name (sort of) suggests, is able to detect changes in the reflection of light -- which allows it, in turn, to capture images that measure vegetation changes over time. (In order to power photosynthesis, [vegetation absorbs visible light](#), and leaf cells strongly reflect near-infrared light -- which means that lush areas of the planet show less visible light and more near-infrared light than their relatively barren counterparts.)

Source: The Atlantic



[Philippines: geo-tagging workshop for agriculture workers](#)

The Department of Agriculture organised a two-day training workshop on geo-tagging tools for eighty Agricultural Extension Workers (AEW), in a bid to improve governance in the agriculture sector. The training introduced the participants to basic Global Position System (GPS) principles and how to maximise the potential of hand-held Garmin GPS receivers.

According to an official statement, the workshop aims to support the Department's Unified and Enterprise Geospatial Information Systems (UEGIS), which aims to enhance the decision making capability of the key local government offices in strategic agriculture and fisheries development zones. The project also aims to leverage high resolution satellite imagery in order to establish a geospatial database of agricultural and fisheries resources; improve the institutional capacity and capability of the various stakeholders; and formulate an Integrated Development Plan for the agriculture sector. Furthermore, the Department of Agriculture will also be leveraging the system to improve the effectiveness of emergency assistance to farmers and fisher folk and to provide more accurate forecasts on agriculture and fisheries production.

Source: FutureGov

See also: [Unified and Enterprise Geospatial Information System \(UEGIS\) Project](#) and [Enhancing the Planning and Implementing Capability of the Department of Agriculture in the SAFDZs](#) (Bureau of Soils & water Management)

[Lao PDR: DECIDE info project](#)

The Lao DECIDE info project strives to stimulate data and information sharing among sectors and administrative levels towards improved evidence-based socio-economic planning and decision-making in the Lao PDR. Through a set of tools and procedures, the project actively promotes the availing of spatial and statistical data - initially from the Lao national Population and Housing Census 2005 - in various formats to users with a variety of individual needs.

See also: [External Review of the Lao DECIDE info project by Thomas Hoesli](#)

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[Global Roads Open Access Data Set, Version 1](#)

CIESIN has released a digital global data set on intercity roads, the Global Roads Open Access Data Set, Version 1 (gROADSv1). Developed under the auspices of the Global Roads Data Development Task Group of the Committee on Data for Science and Technology (CODATA) of the International Council for Science, gROADSv1 combines the best available open access data on roads between human settlements into a global roads coverage consistent with the United Nations Spatial Data Infrastructure Transport (UNSDI-T) version 2 data model.

This first version of the gROADS data set is part of a continuing effort to address the need among professionals in the humanitarian response, development, transportation, biodiversity conservation, and allied fields for free and open, spatially accurate, and readily updateable data on roads in order to better understand issues such as market access, cost of transportation, and human pressures on the environment. Data on road networks connecting human settlements may be especially valuable when used in conjunction with remote sensing and other spatial data to improve decision making related to urbanization and rural development. gROADSv1 is being distributed by the NASA Socioeconomic Data and Applications Center (SEDAC) operated by CIESIN, and represents an important step towards addressing the criteria established by the CODATA Task Group.

[Historical Maps Still Matter](#)

Interview with David Rumsey, owner of one of the world's finest private map collections.
Source: The Atlantic "Cities"

[Satellite eye on Earth: May 2013 – in pictures NASA & ESA satellite images](#)

[Satellite eye on Earth: April 2013 – in pictures](#)

[Satellite eye on Earth August 2008 – March 2013](#)

Source: The Guardian

[The Devastating Impact of 30 Years of Sprawl, As Seen From Space Time lapse satellite imagery](#)

How much have cities in Texas expanded in just the past few decades? We can actually see those urban centers spread like slime mold with a series of amazing satellite-based animations. These GIFs were recorded from Google's "[Landsat Annual Time Lapse](#)" tool by Samuel Aston Williams, a young Texas architect. Williams



wanted to contribute something new to a startling series of showing three decades of [human-landscape intervention](#) recently produced by a collaboration of Google, NASA, TIME and others. Readers can also zoom in to any spot on the planet – your hometown, the Amazon, your favorite Chinese mega-city – and watch the same three-decade timelapse unroll. Good luck getting anything done for the rest of the day.
Source: The Atlantic "Cities"

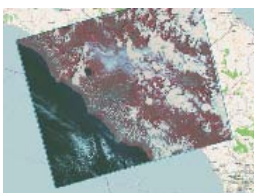
[ESA Study: The economic benefits of free satellite data](#)

A recent study commissioned by the European Space Agency (ESA) brings forward the idea that data from the upcoming Sentinel series of satellites should be regarded as Public Sector Information, increasing their value for money. The study-- "About GMES and data: Geese and golden eggs - A study on the Economic Benefits of a Free and Open Data Policy for Sentinel Satellite data" the authors outlined how reusing the data could potentially generate new businesses and jobs, and provide consumers with more choice and more value for money.

The report notes: "GMES may well be Europe's goose capable of laying golden eggs. But how can we ensure a steady sustainable business model: do we take one egg (direct returns from sales of data) or do we allow the egg to hatch, hoping more golden-egg-laying geese will follow?"

ESA points out: "The free and open data policy for Sentinel data is expected to foster such reuse. In fact, there is evidence that economic benefits are magnified when the data are made available at low or marginal cost, so that entry barriers are minimised also for small and medium enterprises. Several surveys have evidenced this effect for various non-space information sectors, but no such survey exists for Earth observation data.

Source: ESA Global Monitoring for Environment and Security (GMES) and [UN SPIDER](#)



[Image of the Week - Quicker than pizza delivery!](#)

Gone are the days when processing satellite images used to take days and weeks. Setting a record, DMC International Imaging (DMCii) and Spacemetric have delivered a satellite image to the end users in just 11 flat minutes, faster than pizza delivery. An image of Rome was acquired at 09:17 UTC on June 5 and was processed and made available by 09:28 UTC the same morning.

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Source: Geospatial World

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News from abroad

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

[Press Release: Big data from space - Imagery of Rome delivered in near real time](#)

DMCii and long-term partner Spacemetric, have successfully delivered an image from satellite to end-user in just 11 minutes, as part of a demonstration at the European Space Agency's 'Big Data from Space' conference, where industry experts discuss how to distribute large volumes of data from space to the people that need it.

An image of Rome (where the event is being held) was acquired at 09:17 UTC on Wednesday the 5th June 2013 and it was processed and made available by 09:28 UTC the same morning. Adina Gillespie, DMCii's Product Development Manager said: "Delivering images from space to users usually takes at least a day, so demonstrating that it's possible to capture Rome, download the image and process it in just 11 minutes is hugely exciting and proves that an age where civil users can tap into near real time data from space is just around the corner."

The live demonstration of rapid image access is using the latest capabilities developed within the NGI project (Near Real-Time Geo-annotated Imagery) for the European Space Agency by [Spacemetric](#). In partnership with the UK Space Agency and the other DMC member nations (Algeria, China, Nigeria, Turkey and Spain), DMCii works with the International Charter 'Space and Major Disasters' to provide free satellite imagery for humanitarian use in the event of major international disasters such as tsunamis, hurricanes, fires and flooding.

This [press release](#) is available for download.

[Satellite Makes Major Discovery: Amazon plant growth detectable at last](#)

Until recently, it was impossible to carry out large-scale measurements of photochemical activity in the tropical rainforest and therefore draw conclusions on the subject. A chance success – a measurement by a satellite over the Brazilian Amazon – represents a scientific breakthrough. The technology used shows the effects of drought, heat or cold on plants, which is very useful when analysing agricultural production or climatic conditions. University of Twente scientists in the Netherlands and NASA researchers have published an article on the research in the journal [Proceedings of the Royal Society B](#).

For many years, scientists have been using satellites in earth's orbit, but this is the first time that measurements of this particular kind have been successful. Christiaan van der Tol, a researcher at ITC (the Faculty of Geo-Information Science and Earth Observation) at the University of Twente in the Netherlands, is very excited about the discovery. "This is a fantastic stroke of luck on the part of Japan's GOSAT (Greenhouse gases Observing SATellite), which has been orbiting the earth since 2009. In fact, it is not the only satellite orbiting there: there is heavy satellite traffic around the earth, both working and non-working satellites. "GOSAT is actually designed to measure greenhouse gases in the atmosphere." But the satellite turned out to be sufficiently precise and sensitive to another very weak signal, the red-coloured light that indicates plant growth.

During photosynthesis, the process whereby a plant uses sunlight for growth, it radiates a tiny amount of red-coloured light. The satellite was able to distinguish this weak signal from the reflected sunlight. The red light, also known as fluorescence, enables plant biological activity to be observed from a great distance. The measurements showed, for example, that while the tropical rainforest remains green during dry and sunny periods it grows less fast than in wet periods.

GOSAT, which was not designed to carry out measurements of this kind, picked up the plant growth, although the technology has been known for some time now. The ESA (European Space Agency) is investigating the possibility of a dedicated satellite. Christiaan van der Tol's research is being conducted at the Department of Water Resources of the University of Twente's [Faculty of Geo-Information Science and Earth Observation](#) (ITC).

Source: U Twente News

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[Visualizing the Stunning Growth of 8 Years of OpenStreetMap](#)

The U.S. [OpenStreetMap](#) community gathered in San Francisco over the weekend for its annual conference, the [State of the Map](#). The loose citizen-cartography collective has now been incrementally mapping the world since 2004. While they were taking stock, it turns out the global open mapping effort has now mapped data on more than 78 million buildings and 21 million miles of road (if you wanted to drive all those roads at, say, 60 miles an hour, it would take you some 40 years to do it).



And more than a million people have chipped away at this in an impressively democratic manner: 83.6 percent of the changes in the whole database have been made by 99.9 percent of contributors.

These numbers come from the OpenStreetMap [2013 Data Report](#), which also contains, of course, *more maps*. The report, created by [MapBox](#), includes a beautiful worldwide visualization of all the road updates made as OpenStreetMap has grown, with some of the earliest imports of data shown in

green and blue, and more recent ones in white. You can navigate the full map [here](#) (scroll down).

Source: Atlantic "Cities"

[Happy 200th Birthday to a Mapmaker Who Changed the World](#)

In 1854, there was an outbreak of cholera in the London neighborhood of Soho, one of many mid-century epidemics to strike the English capital, then the largest city in the world.

But this episode was different. An English physician named John Snow — born two hundred years ago today — decided to plot the cases on a map of the neighborhood. In doing so, he identified a contaminated well as the source of the illness, founding the study of public health, and changing the design of cities forever.

Today, there are a host of events in Snow's honor. In York, a two-day program commemorates his contributions to epidemiology and anesthesia. (Every year, the John Snow Society honors the doctor in an annual Pumphandle Lecture, accompanied by a ceremonial [removing and replacing](#) of a pump handle.)

Source: Atlantic "Cities"

[Russia \(Belarus\): topographic maps to be updated](#)

The State Property Committee of Belarus (Goskomimushchestvo) and the Federal Service for State Registration, Cadastre, and Cartography of Russia (Rosreestr) have plans to update topographic maps of the Belarusian-Russian border regions. This issue was on the agenda of a session of Goskomimushchestvo and Rosreestr in Russia's Petrozavodsk which took place on 19-21 June.

The two agencies have prepared a joint address to the Permanent Committee of the Union State concerning financial support to update the maps of the 1:50,000 and 1:100,000 scales of the border territories between Belarus and Russia. After the status of works has been decided the issue will be introduced to a session of the Council of Ministers of the Union State.

Participants in the session shared their experience in using geo-portals that are meant to enable more efficient land management and registration of rights to own land parcels. The session also was used to provide an update on the coordination mechanisms that are used to create spatial data infrastructure for the state inventory of immovable property.

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Articles

[Embrace the chaos \(let the data describe itself\)](#)

Lack of metadata foils many spatial data infrastructure initiatives. In this June 2013 GeoConnexion article, Kris Goodfellow and Brian Goldin argue that we can learn from the web how to find and improve map data.

[Putting meaning into NETMAR - the Open Service Network for Marine Environmental Data](#) by Adam M.

Leadbetter, Roy K. Lowry, & D. Oliver Clements, International Journal of Digital Earth (not an open access journal), Accepted author version posted online: 14 Mar 2013

Abstract: The Open Service Network for Marine Environmental Data (NETMAR) project uses semantic web technologies in its pilot system which aims to allow users to search, download and integrate satellite, in-situ and model data from open ocean and coastal areas. The semantic web is an extension of the fundamental ideas of the World Wide Web, building a web of data through annotation of metadata and data with hyperlinked resources. Within the framework of the NETMAR project, an interconnected semantic web resource was

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developed to aid in data and web service discovery and to validate Open Geospatial Consortium Web Processing Service orchestration. A second semantic resource was developed to support interoperability of Coastal Web Atlases across jurisdictional boundaries. This paper outlines the approach taken to producing the resource registry used within the NETMAR project and demonstrates the use of these semantic resources to support user interactions with systems. Such interconnected semantic resources allow the increased ability to share and disseminate data through the facilitation of interoperability between data providers. The formal representation of geospatial knowledge to advance geospatial interoperability is a growing research area. Tools and methods such as those outlined in this paper have the potential to support these efforts.

Keywords: Geoinformatics, Oceanography, Geospatial data integration

[Least Squares - Best Fit](#) by Cyn Rene Whitfield

All measurements contain errors. These errors can be mitigated by applying least square adjustments which is also known as "best fit". With global positioning systems, total station instruments, laser scanners and satellite imaging systems now generating millions of points per second, adjustment for errors is crucial to accurate interpretation. Laser scanning tools bring the outside as built world into the office so now the evaluation of this data can be accomplished in a safe and comfortable environment.

Source: LiDAR News

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Books and Journals (including Videos and Web publications)

Rak, Andriy (2013). [Legal Issues and Validation of Volunteered Geographic Information](#).

M.Sc.E. thesis, Department of Geodesy and Geomatics Engineering Technical Report No. 283, University of New Brunswick, Fredericton, New Brunswick, Canada, 128 pp. (April 2013)

Abstract:

The Canadian Geospatial Data Infrastructure (CGDI) provides access to authoritative geographic datasets of Canada, which are the source of accurate and reliable data. The process of acquiring, updating and maintaining such datasets using traditional approaches, requires both time and costly resources. As a result, in many cases the datasets are out of date because of the high cost of maintenance. An alternative approach to reliably create and update authoritative datasets is linked to its integration with Volunteered Geographic Information (VGI). VGI provides a vast source of spatial information to government, industry and citizens. However, the integration of VGI with CGDI generates several questions, with VGI quality and legal issues at the forefront.

This research has investigated methods for assessing the quality of VGI, and describes the importance of a link between VGI and legal liability in the need for integration of VGI with CGDI. This research developed a prototype to validate data quality and examined legal liability issues around VGI to discover a strategy for possible integration of VGI with CGDI datasets. The research also provides four primary risk management techniques for CGDI to manage risks resulted from incorporating VGI into their datasets.

[3D Visualisation World](#) (May 2013 newsletter)



[Manuel of Photogrammetry, Sixth Edition Now Available](#)

The American Society for Photogrammetry and Remote Sensing (ASPRS) announces the Manual of Photogrammetry, Sixth Edition is now available for purchase through the ASPRS [Bookstore](#).

Under the leadership of J. Chris McGlone, PhD, CP, as Editor-in-Chief and George Y.G. Lee, Technical Editor, the Manual covers photogrammetry in depth, as well as its constituent technologies, providing the student, practitioner, or researcher with a single valuable reference resource.

The overall outline of this Sixth Edition is slightly modified from that of the Fifth Edition. The emphasis is again on digital methods and products, while material on film cameras and analog plotters has been deleted. The mathematical content has been further expanded, especially the treatment of replacement sensor models, along with discussions of digital image processing and computer vision algorithms.

[SDI Cookbook update](#)

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

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reference and citation of the document and provide a time context.

If you are interested in helping update any of the chapters, please contact [Douglas Nebert](#).

[2013 GIS in Local Government Benchmark Study - Preliminary Report](#)

The 2013 GIS in Local Government Benchmark Study: Preliminary Report is the culmination of a collaborative effort between Australia's councils, SSSI and Esri Australia. The Report, which contains the Study findings, was compiled by an independent research agency.

It provides an outline of how councils across the country are currently using GIS and also how they plan to use it in years to come.

The Report also highlights new trends and areas of growth for the sector.

Most importantly, it provides the opportunity for councils to share knowledge and insights with each other that will impact future technology strategies; and support collaboration in areas from community engagement to emergency response.

A copy of the Report has been provided exclusively to Study participants - however, you can read an overview of the findings in the articles at the link above.

[GSDI and IGS Global News, Issue 3 Volume 3 for 2013](#)

[NewGeography website](#)

[Mapping London blog](#)

[LandScan: a news update from Land Information New Zealand, Issue 64 \(March 2013\)](#)

In this issue...

- International acclaim for the LINZ Data Service
- Property rights reputation remains high
- LINZ establishes Crown Land Centre of Expertise
- Location-based information to boost Canterbury recovery
- First new nautical paper chart produced in-house
- LINZ takes learners on a geospatial adventure
- Stakeholder survey - thanks for your feedback

[Borderlines blog from the New York Times](#)

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

by Frank Jacobs

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

Blog of [Ragnvald Larsen, geographer](#)

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

Steve Goldman's [Map Fodder](#) website

[David Rumsay Map Collection](#)

[International Society for Digital Earth](#) - August, 2012 [Newsletter](#)

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

[New Zealand - SDI Cookbook Chapter 6 – Government and Industry, moving forward.](#)

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

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

[SDI Magazine](#)

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

The December 2012 issue has been published

[LiDAR News, Vol 3, No 10](#) (June 11, 2013 Newsletter)

[LiDAR News magazine](#) (May-June, Vol 3, No 3, 2013)

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

[Coordinates](#) monthly magazine - [PDF](#) (February 2013)

[SERVIR-Africa community news](#)

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

[National Geographic website](#)

[The Atlantic Cities website](#) including [Maps](#)

[Professional Surveyor](#) magazine

[The American Surveyor](#) newsletter (June 12)

[The American Surveyor Vol.10 No.6](#) (May 2013)

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

[UN-SPIDER Newsletter](#) June 2013

[UN SPIDER Updates](#) May 2013

[Thematic Mapping blog](#)

Terrain mapping with Mapnik

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Just for Fun!



Men’s Map Boardshorts [Glenn Letham’s ‘Awesome Maps’](#)

[Changing sizes of New York City’s public parks](#)

Over the last three years, the New York City Department of Parks and Recreation has been remeasuring every park in the system - from tiny South Oxford Park in Brooklyn to the behemoth Pelham Bay Park in the Bronx - using mapping software and satellite technology, rather than relying on a cartographer whose maps drew on city records dating to the 19th century. ... But along the way, there have been winners and losers. In Manhattan, Fort Washington Park is 24 acres bigger than previously believed, while East River Park shed 11 acres, and the already tiny Thomas Paine Park downtown lost 0.049 acres. In the Bronx, Soundview Park, where the Bronx River meets the East River, grew by 63 acres. But all of Soundview’s new territory is underwater (the parks department owns out to the pierhead line, a federal delineation). Over all, the department has picked up acres, on paper at least, and the new total, when completed this fall, should push park acreage over 30,000 for the first time. ...

Those old records have their appeal, but precision is not part of it. “There is a certain artistry behind the old hand-drawn maps, and now everything is done on computer,” a Park official said. “It’s a trade-off between beauty and accuracy. But numbers are important.”

Source: New York Times

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[3D scanning with the Smithsonian's laser cowboys](#) includes video link



Also impressive is the sheer diversity of the team's work -- fitting though, when you consider the breadth of the Smithsonian itself. Metallo and Rossi rattle off a number of 3D scans they've done for the museum, a list that includes orchids, gunboats, the first aircraft to ever fly and various parts of Abraham Lincoln's body. "About three years ago, we had a 3D scan of a cast of Abraham Lincoln's hand," says Rossi. "We did 3D scanning because mold making was not an option -- pouring silicone rubber on this object posed a risk to it. Without touching the object, we're able to capture it in 3D on the computer and deliver that data to a 3D printer that can bring it back into the world."

Source: Engadget

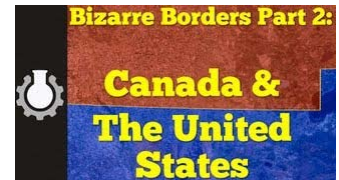
[The Geography and History of the Canada US Border explained](#) video link

Canada and the United States share the longest, straightest, possibly boringest border in the world. But, look closer, and there's plenty of bizarreness to be found.

Also see [Countries inside Countries](#)

Source: AnyGeo blog and [Canada.com](#)

More YouTube videos from the maker at [CPG Grey & CPG Grey website](#)



[MAPPING THE RISE OF CRAFT BEER](#)

As of March, the United States was home to two thousand three hundred and sixty craft breweries, the relatively small, artisanship-oriented producers best known for India pale ales, porters, and other decidedly non-Budweiser-esque beers. These beverages have become so popular that craft beer now represents thirty per cent of Costco's beer sales.

But such statistics and anecdotes fail to communicate a fascinating aspect of the craft-beer boom. The beverage is colonizing what one might call the craft-beer frontier: the parts of the country that are far from the major craft breweries of the West Coast and the Northeast.

The New Yorker's [new interactive map](#) both illustrates this phenomenon and offers a more general overview of the American craft-beer industry.

Source: The New Yorker

[Serendipity](#)

Serendipity is usually a pleasant experience, and today's Spotlight is no exception. After I wrote my Breithaupt article, I was contacted by Bill Buntrock, a Colorado surveyor. He, too, was an 82C artillery surveyor in Germany in the Army, but 20 years after me. We started sharing experiences, and I mentioned to Bill that I always regretted not being the winning bidder on a Breithaupt compass at a Skinner auction in Boston in the 90s.



Based on this, Bill sent me a link to a Breithaupt mining compass he had found on eBay. Shown at right is an example of this compass in the museum exhibit in Kassel. Mounted on gimbals and suspended from a wire, the compass is always "upright." And so, for the second time in my life, I put in a bid. I did not

win, but when the high bidder failed to pay, the owner came to the next in line, me. ... [READ MORE](#)

Source: The American Surveyor Newsletter

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Training Opportunities

[Arizona State University GIS Lab](#)

A good place to get a sense of where the geographic information system (GIS) field is headed is Lattie F. Coor Hall at Arizona State University in Tempe, Ariz. That's the home of the 30-credit-hour Masters of Advanced Study in GIS (MAS-GIS) Program within ASU's School of Geographical Sciences and Urban Planning. Here, students are exposed to not only the latest GIS concepts but also ever-evolving technologies.

Source: The American Surveyor

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[Maps and the Geospatial Revolution](#) Coursera course offered by Penn State University

Learn how advances in geospatial technology and analytical methods have changed how we do everything, and discover how to make maps and analyze geographic patterns using the latest tools.

Workload: 6-9 hours/week **Next Session:** Jul 17th 2013 (5 weeks long)

The past decade has seen an explosion of new mechanisms for understanding and using location information in widely-accessible technologies. This Geospatial Revolution has resulted in the development of consumer GPS tools, interactive web maps, and location-aware mobile devices. These radical advances are making it possible for people from all walks of life to use, collect, and understand spatial information like never before.

This course brings together core concepts in cartography, geographic information systems, and spatial thinking with real-world examples to provide the fundamentals necessary to engage with Geography beyond the surface-level. We will explore what makes spatial information special, how spatial data is created, how spatial analysis is conducted, and how to design maps so that they're effective at telling the stories we wish to share. To gain experience using this knowledge, we will work with the latest mapping and analysis software to explore geographic problems.

[Free Webinars on Solving Data Challenges](#)

Sign up for future webinars and view past recorded webinars

[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](#).

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Funding Opportunities, Awards, Grants

APPLICATIONS FOR COMMONWEALTH SCHOLARSHIPS TENABLE IN SOUTH AFRICA FOR DOCTORAL STUDIES AT THE UNIVERSITY OF PRETORIA, SOUTH AFRICA

The University of Pretoria is a research intensive university. Hence, it is seeking candidates for doctoral studies who will make significant contributions to its research endeavour. As part of South Africa's contribution to the Commonwealth Scholarship and Fellowship Plan, the University of Pretoria has made funds available for two doctoral scholarships for students coming from Commonwealth Countries (excluding South African students). This scholarship will be known as the University of Pretoria Commonwealth Doctoral Scholarship and will be awarded on a competitive basis. The University of Pretoria has established a reputation for academic excellence, particularly in relation to some of its major research activities. Information about these research activities can be obtained from the [website](#) of the University. [Download PDF](#)

- The UP Commonwealth Doctoral Scholarship will be awarded to applicants who are citizens of Commonwealth countries.
- Applicants must conduct their studies at the University of Pretoria.
- Applicants must have completed the degree that will give them admission to a doctoral programme a maximum of three years prior to their application for the University of Pretoria Commonwealth Doctoral Scholarship.
- Applicants must not be older than 35 years of age at time of application.
- Masters students currently registered at the University of Pretoria are not eligible for the Doctoral Scholarship.
- The value of this Doctoral Scholarship will be R120 000 in 2014.
- The holder of this scholarship may hold supplementary bursaries/ grants/scholarships.
- The scholarship will be for a maximum period of support of three academic years. Doctoral students who are not able to complete within the maximum three academic year period due to unforeseeable reasons must provide a written motivation supported by their supervisor as to why an extension is necessary. The extension request will be considered by the University's Institutional Selection Committee.

Closing DATE for 2014 academic year– 30 August, 2013

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[SEARCA Graduate Scholarship for Southeast Asians](#)

Deadline: July 30, 2013

The Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) invites applications for its graduate scholarship (MS and PhD) in agriculture and related fields for School Year 2014-2015.

Eligibility:

The SEARCA Graduate Scholarship is open to nationals of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam who are regular employees of academic, research or government institutions and not more than 35 years old at the time of application.

Fields of Studies:

Agriculture and related sciences (including biological sciences, fishery, environmental science, statistics, forestry and social sciences)

Study Posts:

Any of the following universities, as well as those that have institutional arrangements with SEARCA, may serve as study posts of SEARCA MS and PhD scholars:

- Institut Pertanian Bogor (IPB), Bogor, Indonesia
- Universitas Gadjah Mada (UGM), Yogyakarta, Indonesia
- Universiti Putra Malaysia (UPM), Selangor, Malaysia
- Kasetsart University (KU), Bangkok, Thailand
- University of the Philippines Los Baños (UPLB), Laguna, Philippines
- University of the Philippines Diliman (UPD), Quezon City, Philippines
- University of the Philippines Visayas (UPV), Iloilo, Philippines

Financial Support:

Covers stipend, tuition, international and domestic travel allowances, thesis/dissertation support, book allowance, and health insurance.

How to apply:

Interested parties may submit their accomplished SEARCA Scholarship Application form together with other original application requirements to the Ministries of Education/Higher Education of their respective countries. Applicants must check the deadlines set by the Ministries to receive/accept applications of SEARCA scholarship. These Ministries will then screen and endorse applications to SEARCA not later than 30 July 2013.

[Singapore Government launches app competition](#)

The Singapore Government announced the launch of [Apps4SG](#), an app development competition promoting the use of government data in developing innovative applications. **The Competition is open to all Singapore residents.**

To be eligible for the competition, a developer must create either a mobile or web-based application featuring the use of at least one government dataset.

The government is offering three attractive cash prizes to winners - the first prize is SG\$10,000, the second SG\$5000, and the third SG\$3000. In addition, all apps will be eligible for consideration to receive seed funding. The government will provide free cloud services to each participating team.

Participants are encouraged to participate in hackathons to get a headstart in conceptualizing ideas and prototypes. Apps that are developed from these hackathons can be submitted to Apps4SG.

Health Up! - May 2013

Environment Up! - April 2013

Apps4SG Hackathon - June 2013

Workshops on app development and government data will be organized for participants to attend.

Register your interest with us and be kept informed! <http://www.data.gov.sg/apps4sg/reg.aspx>

Submission deadline: October 1, 2013.

[OGC Student Spatial App Challenge sponsored by Google](#)

The Open Geospatial Consortium (OGC) is challenging students who have software development skills to create new applications that use OGC standards in innovative, interesting and fun ways. For example, the software application can do some or all of the following:

- Mash up data from a variety of existing geospatial Web services that provide location data
- Provide access to new sources of location data (including, for example, sensors, computer models, webcams, 3D urban models, mobile devices, or spatial databases) to support innovative applications.
- Provide access to original new Web services that provide processing capabilities for innovative applications

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that use new or existing location data.

The three applicants to the OGC Student Spatial App Challenge that best satisfy the competition criteria will receive an award and the opportunity to have their apps featured on the OGC website and in other media channels. In addition, the first place winner will:

- Be sponsored by OGC to receive an award in front of the OGC membership at a quarterly OGC Technical Committee meeting.
- Have a dedicated award page on the OGC website featuring the winning application.
- Be cited in an OGC press release acknowledging the award.
- Receive a Nexus Tablet donated by Google.
- Receive, for the student's academic institution, a two-year OGC membership or two-year free renewal if the institution is an existing member.

The estimated total value of the prize to be awarded is \$1,500 plus round trip travel to the winner's selected OGC TC meeting. The OGC Map App challenge is open to any university student at the undergraduate or graduate level who is enrolled part or full time as of July 15, 2013. Submissions to the challenge are by individual only. Submitters must be 18 years or older at the time of submission.

Applications must be submitted by midnight EST, July 15th, 2013.

[OGC Press Release](#)

[For registration details.](#)

[2013 IEEE Data Fusion Contest](#)

Recently, the IEEE Geoscience and Remote Sensing Society announced plans for its **2013 Data Fusion Contest**. The Contest, which helps connecting students and researchers around the world, evaluates existing methodologies at the research or operational level to solve remote sensing problems using data from various sensors. The Contest is open not only to IEEE members, but to everyone, and consists of two parallel competitions: Best Paper Award and Best Classification Award. The winning teams will receive an iPad, an IEEE Certificate of Appreciation, and a free open access publication in an IEEE GRSS Journal. Final results will be announced at the 2013 IEEE International Geoscience and Remote Sensing Symposium in Melbourne, Australia, in July 2013.

Thanks to AnyGeo blog



[Ideas Challenge](#)

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

[ESA App Challenge](#)

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

[European Space Imaging High-Res Challenge](#)

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

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[DLR Environmental Challenge](#)

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

[Best Service Challenge](#)

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

[T-Systems Cloud Computing Challenge](#)

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

[Challenge to spur the geospatial industry](#)

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

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

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

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

Source: Geospatial World and [SLA press release](#)

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Employment Opportunities

[Geographic Information System \(GIS\) Assistant \(Ref: 1321\), CIFOR, Bogor, Indonesia](#)

The application deadline is 13 July 2013.

The Center for International Forestry Research (CIFOR) is looking for a Geographic Information System (GIS) Assistant. CIFOR is a nonprofit, global facility dedicated to advancing human well-being, environmental conservation and equity by conducting research to help shape effective policy, improve the management of tropical forests and address the needs and perspectives of people who depend on forests for their livelihoods. CIFOR is a member of the CGIAR Consortium. Our headquarters are in Bogor, Indonesia, with offices in Asia, Africa and South America.

The Geographic Information System (GIS) Assistant will be responsible for providing technical assistance in GIS to CIFOR research projects, assisting CIFOR scientists in developing, implementing and maintaining a GIS infrastructure, and performing technical work related to designing, maintaining and producing GIS data.

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Duties and Responsibilities

Reporting to GIS Research Administrator of Forests and Environment Research and working closely with the GIS team in three (3) research programs, the GIS Assistant is accountable for the following:

a. GIS data captures Provide guidelines for research field work (onsite) to gather GIS and other bio-physical, social, economic, and political datasets that are relevant to CIFOR's research, when required. Provide data capture guidelines for different kinds of features or objects in different kinds of vector formats using GPS, on-screen digitizing or other means and convert it into useable spatial data with its geo-reference information.

Obtain secondary data and/or acquire satellite or other images, and process into ready-to-use data formats, complete with geo-reference information.

Assist in sourcing and acquiring spatial data and models to describe phenomena and trends in land use, ecological processes, biodiversity, and socio-economic patterns and processes, significant to CIFOR research. Provide guidelines to update, synchronize and maintain GIS primary files and geo-databases in CIFOR's GIS server and makes sure that all data has its own metadata.

b. GIS data management Provide guidelines on how to archive secondary data involved in research activities, as well as primary data produced from research activities. Provide guidelines to update, synchronize and maintain the GIS files and geo-database in CIFOR's GIS server. Provide tools for staff, to help them manage and find the dataset.

c. GIS data manipulation and spatial data analysis Perform GIS manipulation and analysis, such as overlays and conversion of coverage, data format and projection conversion, GPS data collection/post-processing/projection, data reconciliation, etc.

Perform remote-sensing manipulations, such as geo-referencing, image calibration, image processing and analysis, feature extraction, and produce land cover/land use maps.

Perform spatial data analysis and or modeling that allows data integrations in varied ways that reveal relationships, patterns and trends.

d. GIS data visualization Design, produce and print maps and other forms of graphic products for CIFOR projects and scientists.

Assist in designing, testing and implementing online mapping platforms.

Assist in the preparation of presentation materials, reports and special events with GIS components.

e. Maintenance of Spatial Data Infrastructure Maintain the GIS database.

Provide basic GIS technical support (troubleshooting, license activation, providing current software, etc.).

f. Partnerships Establish and maintain professional cooperation, linkages, and partnerships with relevant institutions whose goals and programs are related to CIFOR research.

Where necessary, develop comprehensive modular technical GIS and remote sensing training materials for staff, collaborators and/or partners that require basic GIS knowledge.

Requirements

Education, experience and technical skills

At least a Bachelor degree (S1) in a relevant discipline (GIS, Geography, Remote Sensing, Forestry) with at least three years' experience in GIS and data management.

Advanced knowledge in ArcGIS, Spatial Analysis and Image Processing software (e.g. Erdas Imagine, Envi, Definiens) as well as data management.

Fluency in English and Bahasa Indonesia.

Strong computer skills in information technology and programming will be an advantage.

Personal attributes and competencies

Good personal organizational and priority setting skills, with the ability to work effectively under time pressure and manage multiple priorities.

Capable of working independently as well as being an effective team player, with initiative and creativity.

Good interpersonal and communications skills, with the ability to effectively interact with people in a multi-disciplinary and multi-cultural environment.

Values the sharing of information and continuous improvement in a cooperative atmosphere of constructive evaluation and learning.

Excellent facilitation and teambuilding capacity.

Terms and conditions

This is a nationally recruited position.

Competitive remuneration commensurate with skills and experience.

The appointment will be for a period of one year, inclusive of six months probationary period, with a possibility of extension contingent upon performance, continued relevance of the position and available resources.

The duty station will be in Bogor, Indonesia.

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Applications process

CIFOR will acknowledge all applications received by 13 July 2013, but the organization will contact only short-listed candidates. Please send your letter of interest and CV, including contact information for three referees to: [Human Resources Department, CIFOR](#).

Please indicate the position and its reference number in the email subject line.

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

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

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

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

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

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

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Conference Proceedings

[Proceedings: GMES & Africa Water Resources Management Workshop, May 14-15, 2013, Abuja, Nigeria](#)

The "GMES and Africa" process was launched by the Maputo Declaration, signed on 15 October 2006. The initiative aims to strengthen and further develop infrastructure for a more coherent exploitation of Earth Observation data (space and in-situ), technologies and services in support of the environmental policies for sustainable development in Africa and ACP countries.

The GMES & Africa Water Resources Management Workshop (the 2nd GMES & Africa workshop) was organized through the BRAGMA FP7 project and was co-financed by the European Union in the framework of the joint Africa-EU Strategy and by the host organisation NASRDA. It was attended by over 60 participants from over 30 African countries and included representatives of the AUC, AMCOW, ECOWAS, EAC, CEMAC and NEPAD. The Workshop was furthermore attended by representatives from the EU and EU financed supporting projects in Africa and the European Space Agency. The background of the African technical representatives, as proposed by the AUC, was very broad and ranged from members of various (trans-boundary) water resources implementation organizations to members from various national universities, as well as the NASRDA, which also acted as the Workshop local organizing committee.

See: [Report on the 2nd GMES and Africa Workshop on Water Resources Management](#) (PDF)

Note: a [3rd GMES & Africa workshop focusing on Long Term Management of Natural Resources](#) will be held June 25-26, 2013, in Sharm el-Sheikh, Egypt.

[Australia: AURIN Training Update](#)

Between the 1st and 3rd of May over 35 participants representing 15 partners agencies took part in a training and information session on the [Australian Urban Research Infrastructure Network](#) (AURIN) [portal](#) and demonstrator projects conducted as part of the North West Melbourne Data Integration Project. This project has been delivered through the Centre for Spatial Data Infrastructures and Land Administration and jointly funded by the Australian National Data Service (ANDS) and AURIN.

Click [here](#) to view the latest Demonstrator video, showcasing the latest eTools and data available through the AURIN Portal.

[3D Malaysia 2013](#)

The First 3D Malaysia 2013 conference with the theme "3D Data for Sustainable Development" was jointly organized by DES Mapping and Intermap, USA. in Parkroyal Kuala Lumpur on January 22nd. Over 120 participants from relevant Government agencies, private sectors and academia attended the event.

The one-day seminar showcased innovative technology and application using NextMap Malaysia – out of the box high resolution 3D terrain data for Malaysia, in addressing the challenges of National Development such as

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Infrastructure development, Natural Resource Management and Disaster Management. The keynote addresses by JUPEM, DES and Intermap were highly informative and educational.

Modernization of land administration and management systems Uganda: 17-18 January 2013



Implementation of land information systems (LIS): sharing experiences, innovations and good practices.

Throughout the two day conference, discussions focused on technical issues related to the choice of the solutions adopted, the methodologies to be implemented and the technical equipment installed. Other topics included issues of protection against hacking, the importance of training local people, the communication targeting administrative staff and the public, and the importance of measuring concrete benefits of such projects and their returns on investment. Several presentations focused on the use of aerial photography or satellite imagery in cadaster projects. As the cost of a geographic dataset depends heavily on its accuracy, it is essential to define the data sources that will be used for the establishment of the cadastral reference from the start.

Picking up a key point of discussion on the theme of the added value of NSDI projects for developing countries at the regional conference IGN France International held in April 2012 in Ouagadougou (Burkina Faso) **the link between land projects and National Spatial Data Infrastructure (NSDI) was also addressed. Land projects are sometimes considered the cornerstone of NSDI initiatives.** However the situation varies considerably from one country to another. Clear links exist between LIS projects and NSDI initiatives; however, some countries initiated NSDI projects without systematic land initiatives, while others have taken advantage of LIS projects to develop national spatial data infrastructure.

Most agreed that the highest authorities must play a determining role in the definition of public policies legal frameworks and the way these projects move forward. Without this strategic vision, both LIS and NSDI projects encounter difficulties fail to get off the ground or are not become sustainable. **The completion of a geographic data set appears to be an essential component for both LIS or NSDI projects** and should be taken into account from the very beginning.

In her final intervention, the Minister of Lands insisted on the added value of the LI project led by IGN France International. Securing land titles will reduce poverty and enhance economic development in Uganda.

More details on the regional conference and the programmes will be available at: www.lis-uganda.go.ug and at www.ignfi.com

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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.

Date	Location	Event
July 2013		
2 – 5 July	Salzburg, Austria	<p>GI Forum 2013 – Creating the GISociety</p> <p>The international GI Forum attracts an interdisciplinary audience interested in discussing progress and new ideas in GIScience. The GI_Forum communicates innovative research and learning in Geographic Information Science with focus on hardware, software, orgware and brainware for the GISociety, and their inter-relationships. Young researchers are especially invited to contribute and discuss their research. Together with recognized scientists they</p>

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		<p>will find a vibrant community from academia, business, and education ready to embrace new ideas and explore new research directions. GI Forum runs concurrently with the highly regarded German language conference on Applied Geoinformatics – AGIT. The two symposia share some 1200 participants, the innovative AGIT EXPO exhibit and stimulating social events.</p> <p>Submission deadline February 1, 2013. Contact.</p>
8-12 July	San Diego, USA	Esri International User Conference
16 – 18 July	Gold Coast, Australia	<p>IGNSS 2013</p> <p>The International Global Navigation Satellite Systems (IGNSS) Society Inc. is pleased to announce IGNSS 2013</p> <p>Closing Date for Submission of Abstracts: Monday 4th February, 2013:</p> <p>Information regarding on line submission of abstracts and abstract templates will be updated in due course on the IGNSS Society website .</p> <p>Submission of Peer Reviewed and Non Peer Reviewed Papers: Information regarding On Line Submission of Peer Reviewed and Non Peer Reviewed Papers will be updated in due course on the IGNSS Society website (Click here).</p> <p>IGNSS Free Membership:</p> <p>There is no fee to register for Membership of the IGNSS Society. Complete the On Line Membership Form .</p> <p>Benefits of Membership include reduced Symposium Registration Fees.</p> <p>Contact : http://www.ignss.org/</p>
21 – 26 July	Melbourne, Australia	<p>IEEE International Geoscience and Remote Sensing Symposium (IGARSS)</p> <p>On behalf of the IEEE Geoscience and Remote Sensing Society and the IGARSS 2013 Local Organising Committee, we are delighted to invite you to Melbourne, Australia for IGARSS 2013. We are looking forward to welcoming leading scientists, engineers and educators from the diverse disciplines that make up the Geoscience and Remote Sensing community. We also hope to attract new delegates from the Asia-Pacific and Oceania regions. We will be offering a world class technical program encompassing traditional IGARSS topics and new topics reflecting the theme of the 2013 Conference, "Building a Sustainable Earth through Remote Sensing". This theme was selected to emphasize the issues that most affect the Earth's environment, and the human impact on the planet. We welcome both seasoned and new delegates to Melbourne in July 2013.</p>
22-24 July	Mountain View, California, USA	<p>Geo for Higher Ed Summit</p> <p>What: Geo for Higher Ed Summit</p> <p>When: July 22-24, 2013, deadline to apply has CLOSED.</p> <p>Where: Google Headquarters, Mountain View, California</p> <p>This special 3-day, hands-on technical workshop is designed for mapping and technology instructors and researchers in higher education institutions, who are actively working on projects related to mapping. To find out more and apply, visit.</p> <p>Details:</p> <p>Google will be hosting a special three-day hands-on technical workshop at the Googleplex in Mountain View. This Summit will bring together instructors and researchers in GIS and remote sensing technologies from higher education institutions. You will connect with Google instructors and engineers, and get resources for using these tools in your research and teaching.</p> <p>Cost: Attendance is free, following acceptance into the workshop</p>

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		through Google's application process. Breakfast and lunch on these 3 days will be provided free to participants.
August 2013		
26-29 August "NEW"	Arlington, VA, USA	<p><u>2nd Symposium on Advances in in Geospatial Technologies for Health</u></p> <p>This event is being organized in collaboration with the 5th International Conference on Medical Geology - MEDGEO 2013 scheduled for August 24-30, 2013 in Arlington, Virginia, USA.</p> <p>Abstract submission deadline: CLOSED June ,</p> <p>The organizing committee welcomes your attendance. There will be a number of workshops and short courses for young researchers in these fields.</p>
26-29 August	Kuching, Sarawak, Malaysia	<p><u>The 8th International Symposium on Digital Earth (ISDE8)</u> with the theme of "Transforming Knowledge into Sustainable Practice" will be held in Kuching, Sarawak, Malaysia.</p>
30 August - 1 September	Beijing, China	<p><u>International Conference 2013 on Spatial Planning and Sustainable Development</u></p> <p>Abstract deadline closed: 15 April 2013.</p>
September 2013		
2 – 4 September	Jakarta, Indonesia	<p><u>UN/Indonesia Workshop on Climate Change</u></p> <p>United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change</p> <p>Application deadline: CLOSED May 31, 2013</p> <p>The United Nations is organizing the United Nations/Indonesia International Conference on Integrated Space Technology Applications to Climate Change under the framework of the United Nations Programme on Space Applications. The Conference will be hosted by Indonesia's National Institute of Aeronautics and Space (LAPAN). This conference will bring together experts from the space and the climate change community as well as decision makers to discuss methods to use space-based applications to support the identification and implementation of adaptation measures, as well as to share experiences and lessons learned on the use of such applications in the context of mitigation.</p> <p>The objectives of the Conference are:</p> <ol style="list-style-type: none"> 1) To discuss ways in which countries affected by climate change can make better use of space applications to assess vulnerability to climate change. 2) To identify potential alternatives in the context of mitigation and adaption to climate change 3) To improve synergies among space agencies and organizations targeting efforts on climate change. 4) To strengthen international and regional cooperation in this area. 5) To raise awareness on the recent advances in space-related technologies, services and information resources which can be use to assess the impacts of climate change and the effects of measures implemented to reduce such impacts. <p>Applicants must have a well-established professional working experience in a field related to the theme of the Conference. Applicants should ideally be involved in the planning or implementation of relevant space programmes in relevant governmental organizations, international or national agencies, non-governmental organizations, research or academic institutions or industry.</p> <p>Within the limited financial resources available to the co-sponsors, a number of qualified applicants from developing countries, who</p>

		<p>have expressed the need for financial support will be offered financial support to attend the Conference. This may include the provision of a round-trip air ticket between Jakarta and the applicant's international airport of departure and daily subsistence allowances to cover board and lodging for the duration of the Conference. En-route expenses or any changes made to the air ticket must be the responsibility of the participants.</p>
7-19 September	Tehran, Iran	<p><u>ISNET/ISA Workshop on Space Applications for Disaster Risk Reduction and Management</u> Application deadline: CLOSED June 30, 2013 The objectives of the Workshop are:</p> <ol style="list-style-type: none"> 1) To provide participants with a broad overview of space-based technologies for disaster risk reduction and management 2) To provide specialized training in the processing, interpretation and applications of satellite remote sensing data for disaster risk reduction and management 3) To impart hands-on training on floods, earthquakes, landslides, cyclones, tsunamis and avalanches using space-derived optical, SAR and microwave remote sensing data 4) To impart knowledge on the use of advanced disaster risk reduction and management techniques and methodologies in handling space-derived data 5) To develop familiarization with techniques used to integrate optical and SAR data for applications in different disaster hazard areas 6) To enhance horizontal cooperation and collaboration among the participants through the development of synergy <p>Applicants must have a professional background of working in the fields of satellite image processing, interpretation and analysis, disaster management applications especially floods, earthquakes and landslides. Applicants should ideally be involved in the areas of space technology applications for disaster risk reduction and management particularly on early warning, prevention, response and mitigation in space agencies, disaster management authorities and other space-related organisations. Those with the knowledge and working experience of optical, SAR/microwave remote sensing data processing and interpretation would be given preference. Postgraduate students who are in the second phase of their studies in disaster management area or Ph.D. fellows who are in the starting phase of their studies are encouraged to apply. ISNET will offer full/partial funding to a limited number of deserving applicants from OIC member states only. This will include the provision of a round-trip air ticket between Tehran and the applicant's international airport of departure and daily/subsistence allowance to cover board and lodging for the duration of the Workshop. En-route expenses or visa fees must be the responsibility of the participants. While applying for funding, an applicant must submit a letter of recommendation from the head of organisation alongwith a duly-filled application form to ISNET. Incomplete application forms shall either be returned or not be entertained depending upon the date of receipt.</p>
12-14 September	Enschede, NL	<p><u>GISDECO: URBAN FUTURES. Multiple visions, paths and constructions</u> Deadline for abstract submission: 15 April 2013 Notification of acceptance: 15 May 2013 Deadline full paper submission: 15 August 2013 ? The upcoming GISDECO (GIS for Developing Countries)</p>

		<p>conference is being hosted by the Department of Urban and Regional Planning and Geo-Information Management (PGM) (Faculty ITC, University of Twente) and jointly organized with N-AERUS (Network-Association of European Researchers on Urbanisation in the South).?</p> <p>CALL FOR PAPERS</p> <p>Some pre-conference workshops/meetings can be arranged for a small fee can also be facilitated. Should there be a desire for these please contact the local organization committee before 31 March 2013.</p> <p>For any further information or communication regarding the conference please only use this email.</p>						
23-27 September	TSUKUBA, Japan	<p>ASPAR 2013 The 4th Asia-Pacific Conference on Synthetic Aperture Radar</p> <p>"Overcoming the Hardships: Responding to Disasters with SAR"</p>						
24-26 September	Kuala Lumpur	<p>Asia Geospatial Forum 2013</p> <p>CALL for ABSTRACTS Contact</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Abstract Submission</td> <td style="background-color: #008080; color: white;">30 May 2013</td> </tr> <tr> <td>Abstract Acceptance / Non-Acceptance</td> <td style="background-color: #008080; color: white;">15 June 2013</td> </tr> <tr> <td>Authors' Registrations</td> <td style="background-color: #008080; color: white;">30 June 2013</td> </tr> </table>	Abstract Submission	30 May 2013	Abstract Acceptance / Non-Acceptance	15 June 2013	Authors' Registrations	30 June 2013
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October 2013								
15 – 17 October	Coombe Abbey, Warwickshire, UK	<p>1st call for papers for the 9th International Workshop of the EARSeL Special Interest Group (SIG) on Forest Fires. The workshop is organised by the University of Leicester with support from the Laboratory of Forest Management and Remote Sensing, Faculty of Forestry and Natural Environment, Aristotle University of Thessaloniki. Contact</p> <p>EXTENDED deadline for abstract submission is 15 April 2013.</p>						
23-25 October "NEW"	Beijing, China	<p>United Nations International Conference on Space-based Technologies for Disaster Management - "Disaster risk identification and response".</p> <p>Please submit your application for participation online until 10 August 2013.</p> <p>In the context of the Conference the International Training Programme "Flood Risk Mapping, Modelling and Assessment using Space technology" will be organised for 25 participants of the conference.</p> <p>The organisers will be able to provide financial support to a limited number of participants. Only participants/experts representing a country and/or an organisation engaged in developing a long-term partnership with UN-SPIDER will be considered for the funding support. Those who request funding support must express their government's or organisation's intention to develop a work programme with UN-SPIDER in the coming years. The support will defray the cost of travel (round-trip ticket – most economic fare – between the airport of international departure in their country of residence and Beijing) and/or room and board expenses during the duration of the event.</p> <p>If you have further questions about the conference, contact Mr. Shirish Ravan, Telephone: (+86) (10) 6353 3527</p> <p>For specific questions related to the registration process contact Ms. Liu Jing, Telephone: (+86) (10) 6353 3527</p>						
28 - 30 October "NEW"	Tehran, Iran	<p>2nd Meeting of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP)</p>						

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		<p>Theme: NGIA's roles in successful disaster response</p> <p>The 2nd Plenary Meeting of the Regional Committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP) is being hosted by the National Cartographic Center of Iran under the theme of National Geospatial Information Authorities' (NGIAs') Roles in Successful Disaster Response.</p> <p>The theme was chosen based on a common understanding and recognition that strengthening regional capacities for disaster response is critical as Asia and the Pacific region is the most disaster-prone region in the world. The intensity and frequency of natural disasters are likely to increase due to environmental degradation, population growth, urbanization and climate change. Considering such circumstances, it is very important for us to meet and discuss disaster response and develop strategies in a coordinated manner.</p> <p>In addition, global trends in the spatial web services will be discussed under the sub theme of The Latest of Spatial Web Services Provided by NGIAs. As the number of Spatial Web Services by NGIAs is increasing in the region, the sharing of experiences and lessons learnt in this area is expected to be beneficial to all participants</p>
November 2013		
4-8 November	Addis Ababa, Ethiopia	<p><u>GSDI 14 and AfricaGIS 2013:</u></p> <p>The GSDI Association, EIS-Africa, the International Geospatial Society, and the United Nations Economic Commission for Africa (UNECA) are pleased to announce a close partnership in offering the joint GSDI 14 World Conference and AfricaGIS 2013 Conference.</p> <p>The theme of the conference is Spatially Enabling Africa in Support of Economic Development and Poverty Reduction.</p> <p>IMPORTANT DATES</p> <p>Deadline for Submission of Abstracts: 15 May 2013</p> <p>Deadline for Submission of Full Papers for Refereed Outlets: 15 May 2013</p> <p>Deadline for Submission of Full Papers for Non-refereed Outlet: 1 Sept 2013</p> <p>Deadline for Full Conference Registration Payment for All Presenters: 15 Sept 2013</p>
13-16 November	Skopje, FYRoM	<p><u>International Conference on Spatial Data Infrastructures and Spatial Information Management 2013</u></p> <p><u>e-mail</u></p>
December 2013		
16-19 December	Ahmedabad, India	<p><u>AGSE 2013 - "Geospatial Momentum for Society and Environment"</u></p> <p>Organizers: - Dr. Anjana Vyas (CEPT University, India) Dr. Josef Behr (Stuttgart University, Germany)</p> <p>Important Dates</p> <p>Last date of Abstract Submission: 20th June 2013</p> <p>Last date of Full Paper Submission: 07th September 2013</p> <p>End of Early Bird Conference Registration: 31st September 2013</p> <p><u>Contact</u></p>
2014		
	Malaysia	<p>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.</p>

May 2014		
21-23 May “NEW”	Thessaloniki, Greece	5th International Conference on Geographic Object-Based Image Analysis (GEOBIA 2014).

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[Global Spatial Data Infrastructure Association](#).

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