

SDI-AP April 2010 Vol. 7, No. 4

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 the 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 editor

Welcome to the April edition of the newsletter. We note that this is the second month where the "Spotlight" feature has been provided by a member of the University of Melbourne's CSDILA research group. We are in receipt of a reader's communication referring to the preponderance of contributions from the CSDILA group and beseech our subscribers to redress the balance by contributing to the newsletter.

Please note that the GSDI organisation is currently planning for the GSDI conference and calling for Workshop and Tutorials — further information is available from the GSDI website and the Conference, Events section of the Contents of this 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 (<u>Editors</u>), at the <u>Centre for Spatial Data Infrastructures and Land Administration</u>, The University of Melbourne.



Contributions

Thank you to the following people and organisations for their contributions to this issue: Paul Box, Kate Lance, and Baek Wonkug for news feeds, Jeremy Shen and Jeremy Huang for the Chinese translation as well as Shivani Lal, *GIS Development, Asia Surveying Mapping Magazine* for directly contributing to the newsletter.

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SDI News, Links, Papers, Presentations

GIS and SDI Project Development

infoDev and the World Bank's Finance, Economic and Urban Development (FEU) department are working together to advance the information and communication technology for the development (ICT4D) agenda in the area of GIS technology and Spatial data infrastructure (SDI). The project, Spatial Data Infrastructure for Millennium Development Goals (SDI4MDGs), will provide technical assistance to Jordan and Uganda on how they can use GIS/SDI for monitoring development outcomes.



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The project combines three main elements: Learning from good practice,

Learning by doing and Synthesis and diffusion of knowledge. The project will utilise the lessons from good practice emerging from the cases of Brazil and Korea and will be undertaken in close collaboration and consultation with country stakeholders. The principal source of funds for the project is the Korean Trust Fund (KTF) on ICT4D, which was established in 2008 and awards grants to World Bank projects and activities submitted along cross-cutting strategic themes.

Source: Education and GIS and infoDEv

Guidance Material on How to Support Spatial Data Infrastructure for New Zealand

As part of the New Zealand Geospatial Office's work to facilitate the development of spatial data infrastructure we have drafted guidelines to help people think about how to publish and share data they hold. We hope people will use these guidelines. The guidelines are a first draft and are intended to inform and be informed by the various intiativies throughout New Zealand to develop spatial data infrastructure. The guidelines are now online and comments are being sought.

Please click here to view and download the guidelines

Source: New Zealand Geospatial Strategy

Spatial Data Infrastructure for Malaysia Land Administration

Authors: Abd Halim Hamzah, Abdul Rashid Mohamed Shariff, Ahmad Rodzi Mahmud,

Nik Mohd Zain Nik Yusof and Hishamuddin Mohd Ali

The objective of this paper to identify the key issues related on the implementation of Spatial Data Infrastructure for Malaysia Land Administration especially in non-technical integration for land information delivery services.

Please note: This article under Review for the International Journal of Spatial Data Infrastructures Research submitted 23-02-2010

Source: International Journal of Spatial Data Infrastructures Research

NIMLI (National Infrastructure for Managing Land Information) launched

NIMLI is an ARC Linkage Project funded by the Australian Research Council (ARC) in collaboration with The University of Melbourne, Land Victoria (VIC), Landgate (WA), the Land and Property Authority (NSW) and PSMA Australia.

The project aims to design, build and manage a new infrastructure to integrate disparate state based land information and administration processes to meet national needs.

Source: Rohan Bennett CSDILA



SDIs and Regional Competitiveness

Article by Steven Ramage

SDIs are being developed to help address environmental concerns, disaster preparedness and emergency responsiveness. There is other possible areas which would for benefit from SDIs, namely regional competitiveness. This could mean public sector organisations that are currently experiencing budget cuts across the board and could use activities relating to geospatial data to minimise budget cuts or maintain existing budget levels. This is because their activities provide a positive contribution to the regional economy, especially where the overriding objective is to build a knowledge economy.

Source: Vector 1 Media

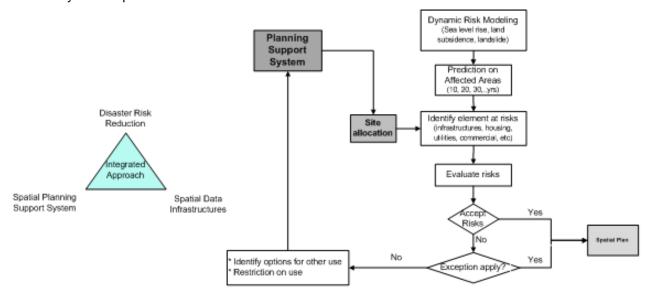
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SDI Spotlight

This month's Spotlight feature is by Heri Sutanta, a PhD candidate in the University of Melbourne's CSDILA.

A Spatial Planning Support System and SDI Platform for an Integrated Approach to Disaster Risk Reduction

Many coastal urban cities around the world are experiencing problems associated with urbanisation, particularly the limited available space for development, and the increasing number of natural disasters. Global climate change will greatly exacerbate the vulnerability of coastal urban environment. In addition, the limited space available will continue to force less fortunate people to occupy marginal land which is usually located in disaster-prone areas. Disaster risk reduction is a very important element to protecting the safety of livelihoods and infrastructure as well as minimising the subsequent economic loss. It is a complex effort, involving a multi disciplinary approach, the participation of many stakeholders and requires the access and sharing of many types of spatial and non-spatial data. Long term effort in disaster risk reduction needs to be implemented by reducing exposure of elements at risk of natural disaster through spatial planning, which is not sufficiently addressed by current practice.



This research project aimed at designing and developing spatial planning support systems (SPSS) for an integrated approach to reducing disaster risk. Spatial planning support systems will be the main deliverable. Integrated approaches to disaster risk reduction is the application subject of this research. The coastal urban city, facing threats from climate change and locally-driven disaster, will be the case study area. Semarang city of Indonesia has been chosen as a case study area. The city is suffering from the increase, in terms of both the magnitude and extent, of sea water inundation due to the degree of land subsidence and sea level rise. A



prototype of spatial planning support systems and a Spatial Data Infrastructures (SDI) platform will be tested with a real world case, involving participants from local and central government agencies, community and interest groups.

A questionnaire was distributed to Local Planning Agencies (LPAs) and responses were received from across the region. The aim was to understand the current use of geo-information technology in spatial planning, the incorporation of disaster risk information and also SDIs. The results of the questionnaire showed that geo-information technology has been used widely in spatial planning, although at varying degrees among the LPAs. Disaster risk reduction has been incorporated, with a lesser degree, after the new laws on Spatial Planning and Disaster Risk Reduction were enacted. SDI platforms have not been developed and therefore spatial data sharing and exchange was based on gentlemen's agreement. These findings were considered in the design of the SPSS.

Contributions to this research are the incorporation of time-dependent multi hazards information in spatial planning and the development of online public participation mechanisms in spatial planning. Some hazards are time-dependent, which means that their magnitude and extend might increase through time. Areas inundated by sea level rises 10 years from now will be very different from those over the next 30 years. These conditions will have significant implications when assigning appropriate land use. For example, a particular land use for a certain area might be suitable for the next 15 years, but will not be suitable after 25 years. Currently, operational SPSS has limited functionalities for online public participation. In this research, an online participation method will be developed using open standard system. Spatial plan mapping will be published online to enable the general public to see, gain understanding and provide comment and criticize it. They will also able to provide input, which will be fed into the system to be simulated. A comparison of different scenarios will be presented to provide opportunities for planners and stakeholders to discuss the best option. It is expected that this research will be completed by the close of 2011.

The editors are actively soliciting contributions to the monthly "SDI Spotlight" feature for the March and subsequent issues.

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GIS Tools, Software, Data

Algorithm to develop boreal forest biomass maps (France)

Having a large-scale boreal forest biomass inventory would allow scientists to understand better the carbon cycle and to predict more accurately Earth's future climate. However, obtaining these maps has been wrought with difficulty – until now. A new processing algorithm has been developed using stacks of images from the Advanced Synthetic Aperture Radar (ASAR) on European Space Agency's (ESA) Envisat satellite that allows for the retrieval of boreal forest biomass well beyond the levels that have been previously reported. Source: GIS News & European Space Agency news

OGC Seeks Comments on SWE Common Data Model

The Open Geospatial Consortium, Inc. (OGC®) seeks public comment on the draft OGC Sensor Web Enablement (SWE) Common Encoding Standard Version 2.0. The SWE Common standard provides a common data encoding that is used throughout the OGC Sensor Web Enablement (SWE) standards suite. More precisely, the SWE Common model is used to define the representation, nature, structure and encoding of sensor related data. The proposed OGC SWE Common 2.0 standard and information on submitting comments on this document are available at http://www.opengeospatial.org/standards/requests/63>. The public comment period closes on 14 April 2010.

Source: http://www.opengeospatial.org

OGC Calls for Comment on Table Joining Service Standard

The Open Geospatial Consortium, Inc. (OGC®) seeks public comment on the draft OGC Table Joining Service (TJS) Interface Standard. This standard defines an interface for services that provide the ability to join attribute data stored in one database on a network with the corresponding geometry (points, lines, or polygons) stored in another network accessible database. The proposed OGC TJS 1.0 standard and information on submitting



comments on this document are available at < http://www.opengeospatial.org/standards/requests/62>. The public comment period closes on 14 April, 2010.

Source: http://www.opengeospatial.org

OGC announces Earth Observation Profile for Web-based Catalogue Services

The Open Geospatial Consortium, Inc.(OGC®) announces adoption and availability of the OGC Catalogue Services Standard Extension Package for ebRIM Application Profile: Earth Observation Products, and also the related Geography Markup Language (GML) Application Schema for EO Products. Together, these standards, when implemented, will enable more efficient data publishing and discovery for a wide range of stakeholders who provide and use data generated by satellite-borne and aerial radar, optical and atmospheric sensors. The OASIS standard ebRIM (Electronic business Registry Information Model) is the preferred cataloguing metamodel foundation for application profiles of the OpenGIS Catalogue Service Web (CS-W) Standard. For more information, please read the official news release.

Source: http://www.opengeospatial.org

Forest land allotment goes hi-tech (India)

Gujarat State Tribal Development Department has used 3-D satellite imagery from ISRO's Bhuvan programme to allot land titles in Vijaynagar and Khedbrahma in Sabarkantha district and Sagbara and Dediapada in Narmada district under the Forest Rights Act (FRA) of 2006. T L Patel, Joint Director, Tribal Development Department, said, "With satellite imagery, there would not be any doubt about the land settlements in these forest areas. We have the village-level maps to determine those who were cultivating the lands in these areas for the last 40 years."

Source: GIS News & the Indian Express

MapInfo and Discover GIS Mapping Software now available in the Philippines

Makati, Philippines -- Imaginet, the Philippines premier provider of IT Solutions and Managed Services, was appointed by Pitney Bowes Business Insight (PBBI), a global provider of data quality and location intelligence solutions, as the Authorized Reseller for their MapInfo Professional, Discover, Discover 3D and Discover Mobile product lines in the Philippines.

Source: <u>Directions Magazine</u>

LINZ Develops Real-Time Position Data

LINZ is currently developing real-time provision of position data from a number of its <u>PositioNZ</u> stations. PositioNZ is a country-wide network of 33 continuously operating global navigation satellite system (GNSS) stations.

The new real-time service, <u>PositioNZ-RT</u>, streams data every second. This contrasts with the current system that provides position data recorded every 30 seconds in hourly and daily files. The new service means you can undertake surveys (and connect to the datum) in real-time using data from the PositioNZ network. You don't have to wait and post-process your data as you have in the past.

Source: New Zealand Geospatial Strategy

Thematic maps are no longer static

From now on, thematic maps will be more dynamic than static, according to James Masso, head of the Unit of Territorial Delimitation and Great Works, Cartographic Institute of Catalonia (ICC) at the conference, *The Geo-information of the Future*, held in Barcelona (Spain), within the series visions of science.

See also The new cartography

Source: GIS Development & GlobalTalent News

India's first nano-satellite ready now

IIT-Kanpur students, working under Dr NS Vyas have successfully made *Jugnu*, India's first nano-satellite for the first time by any educational institute. Weighing less than three kilos and with most functionalities of a normal satellite on a small platform, the payload of the satellite will include an indigenously designed camera for near remote sensing and a GPS receiver. *Jugnu* will transmit a blinking signal at all times, across the Earth. It will revolve around the Earth 15 times a day in polar orbit and will be visible over Kanpur three to four times a day for a total of 20 minutes.

Source: GIS News & Times of India



Indonesia maps forests with satellite images

Indonesia is intensifying efforts to map forest areas nationwide using remote-sensing satellite technology, to maximise their role in absorbing greenhouse gas emissions, a seminar has heard.

The announcement was made at the start of the three-day symposium of the 4th Asia-Pacific Global on Earth Observation System in Bali.

Source: Jakarta Post & Asian Surveying & Mapping

Sri Lanka Geomatic Faculty students face hardship

Students belonging to the Geomatic Faculty of the Sabaragamuwa University vowed to fight for their rights if the shortcomings in the Geomatic Faculty remained unanswered. Sabaragamuwa University Students Union President, Dhanushka Ruwan Dissanayake said that for the past four years the students belonging to the Geomatic Faculty had been continuing their studies under minimal facilities.

Source: Sri Lanka Daily Mirror & Asian Surveying & Mapping

Chandrayaan -1 images reveal ice on moon

India's Chandrayaan-1 has discovered ice in the Moon's craters -- a finding that indicates the presence of as much as 600 million metric tonnes of water ice on the Moon's North Pole. The announcement on the breakthrough, with far-reaching consequences for space travel, was made at the 41st Lunar and Planetary Science Congress organised by the Houston-based Lunar and Planetary Institute.

Source: GIS News & The Times of India

Accuracy Analyst 2.0 to be demonstrated

Spatial Information Solutions (SIS) will demonstrate Version 2.0 of Accuracy Analyst at the Joint Agency Commercial Imagery Evaluation (JACIE) conference on 16th March 2010, in Fair Oaks, Virginia (US). Accuracy Analyst is a software solution to determine location accuracy of the image data used to produce maps. The company claims that this software saves over 90% of the time needed for traditional accuracy assessment. Version 2.0 adds three major enhancements: Survey Location Planner, PhotoBook and ReViewer. In addition, more report customisation is available. A new 23-page User Guide updated for version 2.0 is available.

Survey Location Planner enables users to load existing image data, select desired survey (control or check) points for field work planning and output a set of points-of-interest (POIs or waypoints) that may be added to vehicle navigation systems so teams can easily navigate to the collection sites.

Source: GIS News & Spatial Information Solutions (SIS)

Malaysia Forestry Dept to Carry Out Land Survey

THE Selangor Forestry Department will conduct a land survey at the Kota Damansara Community Forest in Petaling Jaya. Selangor Forestry Department senior assistant director Wan Abdul Hamid Shukri Wan Abdul Rahman said the forest area that had been gazetted was based on previous records and a proper land survey would be done in the near future.

Source: Asian Surveying & Mapping and The Star online (Malaysia)

Australia Begins New Climate Change Satellite Program

Curtin University of Technology is heading up a new \$8 million space technology partnership that will address the issue of climate change with the use of its Global Navigation Satellite System Research Laboratory. Source: Asian Surveying & Mapping and www.itwire.com

Remote Sensing explores mineral potential in India

Geological Survey of India (GSI) has been conducting remote sensing surveys to examine mineral potential of the country including backward and rural areas. B.K. Handique, Minister of Mines and Minister of Development of North Eastern Region in India, has said that Satellite imagery and aerial photography are components of remote sensing (RS) surveys and have been/are being used for identifying suitable structures favourable for mineral deposits. Recently GSI is undertaking hyperspectral mapping using satellite and aerial platforms as a modern tool to strengthen the search of minerals in the country.

Source: http://pib.nic.in/ (Thanks to Wonkug Baek)

Satellite imagery aids judiciary

The Gujarat High Court (in India) ordered a stay on all construction activities at the Nirma Ltd's upcoming cement plant in Mahuva taluka of Bhavnagar district (in Gujarat, India) while hearing a petition by farmers



opposing it. During the hearing of the case, farmers' lawyer Anand Yagnik submitted satellite imageries, obtained from National Remote Sensing Centre (NRSC), Hyderabad showing the water bodies near Samadhiyada village where Nirma Ltd's cement plant is coming up.

Source: GIS News & The Hindu

JaLTER ecological observation data catalog/search service

The Japan Long-Term Ecological Research Network (JaLTER) ecological observation data catalog/search service was developed to facilitate long-term ecological research. All data on this server is "public". You may search and access the data catalog without being logged-in. Enter a search phrase (e.g. biodiversity) to search for data sets in the data catalog, or simply browse by category using the links provided.

The vision of the JaLTER is to provide scientific knowledge which contributes to conservation, advancement and sustainability of environment, ecosystem services, productivity and biodiversity for a society by conducting long-term and interdisciplinary research in ecological science including human dimensions. The JaLTER is closely linked with the International Long-Term Ecological Research Network (ILTER Network). Thanks to Kate Lance for providing this item

India initiates hazard mapping of coastline

India announced that it would initiate hazard mapping across its 7,500 km long coastline to study the impact of global warming and assist in protecting coastal communities and infrastructure. The study will be done in a span of two years using an aerial mapping system by the Survey of India through a World Bank-funded project Integrated Coastal Zone Management (ICZM).

Source: GIS Development & the Economic Times of India

UNOSAT maps Uganda disaster

UNOSAT rapid mapping was activated this March over Uganda in the aftermath of deadly landslides provoked by severe flooding in the region of Bududa, Uganda. UNOSAT is the UN Institute for Training and Research (UNITAR) Operational Satellite Applications Programme, implemented in co-operation with the European Organisation for Nuclear Research (CERN).

Source: GIS Development & UNITAR

Georgia Tech to develop new radar (USA)

NASA has awarded USD 2.4 million to Georgia Institute of Technology (GIT) in Atlanta to develop a new type of radar system that will be used to study the Earth's ice and snow formations from the air. The system could provide new information about the effects of global climate change. The research aims to create a small, lightweight, low-cost phased-array radar that uses silicon-germanium (SiGe) chips in tandem with radio-frequency micro-electromechanical systems (RF MEMS). The system being developed could be mounted on aircraft or satellites to enable high-quality mapping of ice and snow formations.

Source: GIS News & www.semiconductor-today.com news

Simpson Desert's ancient rivers mapped

Australian scientists have charted some of the world's oldest rivers and streams that flowed through the Simpson Desert 50 million years ago. Using a digital software, experts from Canberra's Australian National University have mapped the underlying landscape for the first time. They have uncovered a network of long-buried rivers and streams in the heart of the country - estimated to be among the world's oldest. Source: GIS News & the Sydney Morning Herald

GIS atlas for all Indian districts

A GIS-based atlas depicting the environmental status of each district of the Indian state will be accessible online in 2011. The Environment Directorate will now send the proposal to the Ministry of Environment and Forest for allocation of funds. "The atlas will be a public document and will be accessible to them. It will also be beneficial for the policy makers in the state as they can refer to the data online as well," said Yashpal Singh, Director of Environment Directorate. The atlas will be a thematic map and based on different parameters which will include details like administrative boundaries, environmental sensitive areas, land use, river and water quality, biodiversity hotspots and critical stretches of rivers and polluted areas.

Source: < http://www.indianexpress.com/> [thanks to Wonkug Baek for this item]



AUSGeoid09 improving access to Australia's vertical datum

Australian Surveying and Land Information Group (AUSLIG) (now Geoscience Australia) introduced new version of gravimetric geoid model, AUSGeoid09. AUSGeoid09 is still undergoing final testing before its release in mid-2010. It allows Global Positioning System (GPS) users to convert between GPS heights and Australian Height Datum (AHD) heights. In Australia, heights above mean sea level (MSL) are referenced to the Australian Height Datum (AHD). It was established by setting the mean value observed at 32 tide gauges around Australia between 1966 and 1968 to a height of 0.000 metres. GPS receivers use a different

reference surface known as the ellipsoid. It is a simplified approximation of the Earth that looks like a basketball which has been slightly squashed at the top and bottom. Unfortunately, ellipsoid is not directly compatible with the AHD. Consequently, there has been an increasing demand for a method of combining the speed of GPS data acquisition and the practicality of the AHD. So, AUSGeoid09 is the solution.

Source: http://www.ga.gov.au/>

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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.

Croatia launches first Spatial Data Infrastructure in Southeast Europe

The Republic of Croatia has simplified access to countrywide geographic data through an online geoportal, a type of website that makes it easier for citizens, government and private-sector users to find and access vast quantities of geographic information and related services. The geoportal has already proven its value as an essential component of the country's Organized Land Project, which streamlines and regulates the real property registration of land in the republic. By making data more accessible, the average time for processing changes to land titles has dropped from a 400-day average to 37 days.

Source: Geospatial Today

ScanEX receives images of Moscow settlement

The ScanEx Centre has received highly-detailed colour images of the settlement of Rechnik (in Moscow), which became a subject of public scrutiny due to the land title disputes. The settlement was imaged on 16 February 2010 using the hardware onboard the WorldView-2 satellite with spatial resolution of 0.5 m upon the request of ScanEx RDC. ScanEx Research and Development Centre is an official distributor of WorldView-2 data in Russia and CIS countries. The situation with the settlement of Rechnik stirred the public mind in January 2010 when demolition of the houses started upon the order of the Kuntsevsky Court of Moscow. The satellite imagery provides an impartial outlook on the current situation. The series of multi temporal images acquired over 50 years show dynamics of development and demolition. The recently declassified images of Moscow, acquired by the American spy satellites in 60s – 70s of the last century, have become available for the public.

Source: GIS News & ScanEx

Satellite monitoring of seasonal floods

ScanEx is conducting space imaging of the spring season floods on the largest Russian rivers on behalf of the Emercom of Russia during March-May 2010. Satellite data will be submitted to the National Centre for Crisis Management of the Emercom of Russia. It aims to provide operational data in support of the Emercom response actions. The practical experience of the 2009 seasonal floods showed that the satellite imagery data enable both to assess and take the situation under control and to make timely administrative decisions. Source: GIS News & ScanEx

NASS info about agricultural land

The US Department of Agriculture's National Agricultural Statistics Service (NASS) has released new satellite images depicting agricultural land cover across most of the nation for the 2009 crop year. The images, referred to as cropland data layers (CDL), are a useful tool for monitoring crop rotation patterns, land use changes, water resources and carbon emissions.

Source: GIS News & Lewisburg Herald (Kansas)



Surface completes thematic mapping of southern Brazil

Surface Real World Models has completed the thematic mapping and digital surface models (DSM) for the entire southern region of Brazil.

Source: GIS News

Learning Through Tragedy

Once again, we have been delivered a stunning lesson in earth science. A tremendous earthquake (magnitude 8.5 or so) rocked Chile this weekend, spurring tsunami warnings across the Pacific. The questions I, as a geography teacher, would have asked my students are my standard three: "What's where? Why is it there? So what?" I wondered especially about this quake versus the one which caused such suffering in Haiti a month ago. To look at these, I decided to make some simple but powerful maps in ArcView. It turned into a nice example of how "GIS is a power tool for STEM" (Science, Technology, Engineering, Mathematics).

Source: ESRI GIS Community blog

Remote-sensing to study human evolution

A new report by *National Research Council* has recommended four new research initiatives over the next 10 to 20 years. One of them is to launch a major effort to locate new fossil sites using remote-sensing tools and traditional ground methods to survey new terrain. The point is to fill key gaps in the fossil record, such as when new species first appear and disappear, to see if there are links between these major events in human evolution and changes in the climate.

The researchers also called for a comprehensive program to drill ancient lakebeds and lakes on land, as well as in ocean basins, for example in the regions where humans evolved in the Rift Valley of Ethiopia and Kenya. This would help provide a record of climate changes in the local areas where human ancestors actually lived, given that the climate can vary dramatically in different parts of Africa. It would be part of a larger effort to reconstruct past environments in local habitats where fossils have been found.

Source: GIS News & AAAS ScienceNews

Satellite imagery aids sales of solar devices - North America

Sungevity is the first solar company to shift the bulk of the sales experience online. The Web-based process, which provides aerial photographs of your house outfitted with solar panels and a firm price quote within 24 hours, is designed to make going solar fast and easy, as well as more affordable.

Sungevity's employees custom design solar systems using satellite imagery and mapping software instead of more costly home visits. Once a customer purchases the system, Sungevity contracts with local installers to put the panels on the roof.

. . .

Using image feeds from Microsoft Virtual Earth and Bing Maps, employees create three-dimensional satellite photographs of houses that allow them to measure the length, width, pitch (slope) and azimuth (directional orientation) of a roof. Most solar companies send crews out to rooftops to take those measurements but Sungevity does it remotely in about 20 minutes.

Source: GIS News & the San Jose Mercury News

Kosmosnimki.Ru introduces hybrid view option

The geo-portal, Kosmosnimki.Ru introduced the hybrid view option – map layers over satellite-based image. With this advancement, Kosmosnimki.ru can handle three view modes map, images and hybrid. The map overlay is based on the world map and the map of Russia data. An open tool Mapnik was used for rendering (drawing in form of raster images).

Source: GIS Development & www.ScanEx.ru

Aviation industry gears ups for EGNOS launch

The aviation industry is preparing to use European Geostationary Navigation Overlay Service (EGNOS) once it is certified for the sector later this year, according to speakers at Galileo Application Days in Brussels, Belgium.

. . .

Studies have shown that the full adoption of EGNOS-enabled flight procedures, such as localised performance with vertical guidance (LPV), could produce savings of up to EUR 4 billion in Europe.

Source: GIS Development & www.egnos-portal.eu



Map-based info about southern US forest

A new online system that maps a rich trove of environmental data of the southern US forests onto satellite images from the past 35 years has been launched by the World Resources Institute (WRI). The system, located at SeeSouthernForests.org, highlights risks to these forests such as pest and pathogen outbreaks, active wildfires, potential climate change impacts and forest conversion to suburban development - the leading cause of southern U.S. forest loss in recent decades. The system also maps other features such as the region's protected areas and forest ownership.

Source: GIS News & World Resources Inst News Release

Quality of climate data improving in Africa

According to a report by the International Research Institute for Climate and Society on *Climate Risk Management in Africa*, advances in climate science are improving the availability and quality of climate data through data rescue techniques, satellite remote sensing and climate modelling through the development of new technologies.

Source: GIS News & The Daily Monitor (Uganda)

Penn State Public Broadcasting's Geospatial Revolution Project

The U.S. Penn State Public Broadcasting (PSPB) is developing the Geospatial Revolution Project, an integrated media and outreach program to help educate the public about the world of digital mapping and how it is changing the way we think, behave and interact. The Project consists of a series of web-based videos, each of which tells an intriguing geospatial story. Viewers will meet 'virtually,' inventive people who are using satellite, surveillance and location-based technologies to address some of the world's most difficult problems. The series will discuss the benefits of this proliferating technology, as well as concerns related to security and privacy. Release of the first episode is planned for mid-September 2010. The project also will include an outreach initiative in collaboration with educational partners, a chaptered program DVD and downloadable outreach materials. A preview video and more information about the project are available at the link above. Source: Wonkug Baek

More "Augmented Reality"

Following the item in last month's newsletter, GIS Development (22 March) has this item:

American car maker General Motors (GM) has introduced a new augmented reality display windshield called "enhanced vision system." This augmented reality system detects the driver's position and perspective and displays important objects such as road signs and buildings to which he or she is aiming to go. It is still at the prototype level. However, you can have a car navigation system that is displayed on your car windshield. This kind of augmented reality display system provides a safer driving environment because the driver can pay attention to the road ahead while driving instead of looking at a navigation device on-screen. [Editors' note: The term "augmented reality" may require more precise definition in the future because of a danger that it may mean different things to different people.]

Health - GIS addresses stroke care

new report on stroke care highlights the systematic changes that were required to achieve a remarkable reduction of 25% in stroke, heart disease and cardiovascular risk since the American Heart Association/American Stroke Association (AHA/ASA) committed to this goal a decade ago. One of the developments has been the use of GIS to understand how to address the quality of stroke care.

"GIS mapping — geospatial information mapping — has turned out to be a very powerful tool to identify disparities in care, based on geographic factors or patient characteristics, such as race/ethnicity, age, or socioeconomic means. Now, because we can overlay this information onto maps of the US, along with regional death rates and the location of stroke centers, we can identify regions of the country that need special attention and resources."

Source: GIS News & MedScape Today (free subscription required)

Gigantic crater in Congo discovered

With the help of satellite imagery, an Italian scientist team announced the discovery of Wembo-Nyama crater, a gigantic impact crater, in Democratic Republic (DR) of Congo. Source: GIS News & www.softpedia.com news & BBC





"Take 10 Map" Showing 2010 U.S. Census Participation Rates

The U.S. Census Bureau rolls out new interactive Google Maps showing 2010 Census participation rates. The collaborative partnership with Google allows communities the ability to track how their area is responding to the once-a-decade count. The Census Bureau provides daily updates of the percentage of returned census forms using Google Maps and Google Earth. The Census Bureau encourages everyone to "Take 10" — that is to take 10 minutes to answer the 10 questions on the census form. The mail participation rate for the nation in 2000 was 72 percent. For every 1 percent increase in the national participation rate by mail, the Census Bureau can save taxpayers \$85 million by not having to send census takers door to door to households that failed to return the census form. If every household mailed back its 2010 Census form, the cost of taking the census would be reduced by \$1.5 billion. The "Take 10 Map" will feature an easy-to-embed local rate tracker (widget) that local community officials, businesses and media can add to their Web sites to encourage residents to participate in the census.

Source: http://2010.census.gov [thanks to Wonkug Baek for this item]

The UN, JRC and the World Bank issue a comprehensive building damage atlas for Haiti

A comprehensive atlas of all damage caused in Haiti by the magnitude 7.0 earthquake on 12 January 2010 is now available to help planning recovery and reconstruction measures. The atlas, based on the comparison between pre-disaster satellite imagery and post-disaster aerial photos, provides an overview of building damage in the main affected cities in Haiti showing that almost 60,000 buildings, ten times more than initially estimated, were either destroyed or very heavily damaged. The Haiti building damage atlas was produced by the United Nations' Institute for Training and Research (UNITAR)/Operational <u>Satellite Applications Programme</u> (UNOSAT), the European Commission's <u>Joint Research Centre (JRC)</u>, and the World Bank in support to the Post Disaster Needs Assessment (PDNA) process led by the Government of Haiti. The PDNA Atlas series is available for download at: http://www.unosat.org/asp/prod_free.asp?id=52. For more information <u>click here</u>. Source: UNITAR [thanks to Wonkug Baek for this item]

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Articles

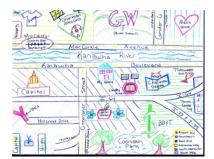
FIG article of the month - March 2010

"Rapid Urbanization and Mega Cities: The Need for Spatial Information Management" by Chryssy POTSIOU, Greece (edit.), Yerach DOYTSHER, Israel, Paul KELLY, Australia, Rafic KHOURI, France, Robin McLAREN, United Kingdom and Hartmut MUELLER, Germany

This paper briefly presents the resolutions of a research made within FIG Commission 3 on the topic. The extended research study is published in FIG publication 48. The goal of this research is to investigate the emerging needs, the current trends and the extent of using SDIs in selected megacities, but also to identify the emerging possibilities for using new technical tools for the governance of sustainable large urban areas applied by the surveying- mapping- data processing community. The methodology followed included experience gained through the general current FIG Com 3 activity to improve management of expanding urban areas, review of existing publications and other sources, Internet research on specific problems of megacities and on existing SDIs, on site visits to a selected number of megacities and interviews with individual decision makers in city administrations, and review and assessment of data received from questionnaires.

<u>Children's places, spaces and PGIS</u> by **Michael K. McCall,** ITC, University of Twente, Enschede, the Netherlands and CIGA, UNAM Morelia, Mexico **Abstract**

Mapping children's views of place and their concepts of space, and interpreting their mental maps have been addressed for a variety of purposes and from a variety of standpoints, from child psychology, pedagogy, environmental geography, health and safety management, and urban planning. This is a short overview of many of these investigations. Source: GIS Development





In GIS as in economics, a little knowledge is a dangerous thing (Zimbabwe edition)

This blog discusses the conclusions incorrectly drawn from a comparison of Google Earth images when the different images were in fact the same. There is no suggestion that the researcher set out to deceive, rather it is suggested that the researcher may have deceived himself. A salutary lesson for us all. Source: GIS Development (March 22)

<u>Public participatory GIS: A new kind of GIS Application?</u> by <u>Peter A. Kwaku Kyem</u>, PhD, GISP, Professor of Geography, Central Connecticut State University, Connecticut, USA.

The recent upsurge in the implementation of GIS projects in local and indigenous communities around the world provides clues to how the forces of technological change, advocacy, and public expectation have reshaped the course of GIS development and the power relations that define its research and applications. As GIS has continued to play an expanded role in the way we analyse spatial data, manage our resources, view, and understand spatial phenomena, the empowerment of underprivileged groups has emerged as a popular field of GIS research and applications. The practice is the result of a spontaneous merger of participatory learning and action methods with geographic information technologies (Rimbaldi e.t. al, 2005). The new initiative in GIS applications has come to be known as participatory GIS (PGIS). Additional terms that have been used to describe the community-based GIS Applications include public participation GIS (PPGIS) which was first used at the National Center for Geographic Information and Analysis (NCGIA) workshop at Orono in Maine, community integrated GIS (CIGIS) and recently, participatory 3-dimensional modelling (P3DM). To advocates and GIS experts who are engaged in PGIS applications, the technology provides a critical complement to grassroots efforts that are undertaken to empower communities and underrepresented members of society. Source: GIS Development

Mapping the Lie of the Land by David Mole and Adam Thomas

Satellite derived ground and structure stability information is increasingly being used by developers and engineers who require a detailed understanding of ground stability issues across the UK. David Mole and Adam Thomas explain how a new satellite technology will offer valuable insight into Britain's changing landscape at a time when the impact of climate change is making technology more important than ever.

Source: V1 Media

How can maps provide motivation? by Matt Ball

With the 2010 U.S. Census underway, one of the more interesting items in the marketing and awareness campaign was released this week. Through a partnership with Google, the U.S. Census Bureau is publicizing participation rates through their <u>Take 10 Map</u> that give varying levels of views down to the local neighborhood level. Besides being a fascinating map to navigate and consider how demographic and neighborhood makeup affect response rates, the map itself is a clever means to provide an incentive to trade on local pride and increase participation rates.

Source: V1 Media

SDIs and Regional Competitiveness by Steven Ramage

SDIs are being developed to help address environmental concerns, disaster preparedness and emergency responsiveness there are other possibilities for benefiting from SDIs, namely regional competitiveness. This could mean public sector organisations who are currently experiencing budget cuts across the board could use activities relating to geospatial data to minimise budget cuts or maintain existing budget levels. This is because their activities provide a positive contribution to the regional economy, especially where the overriding objective is to build a knowledge economy.

Source: V1 Media

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Books and Journals

<u>Archaeology and Landscape in the Mongolian Altai: An Atlas</u> by Esther Jacobson-Tepfer James E. Meacham Photography by Gary Tepfer, ESRI Press, 225 pages ISBN: 9781589482326 2009

Reviewed by Jeff Thurston in Asian Surveying & Mapping





The Science of Storytelling Across an Archipelago

Even though Indonesia is an archipelago made up of more than 17,000 islands, it seems that maritime related issues are not popularly discussed. This is what motivated Balinese author, Andi Arsana to dedicate most of his writings to the topic, the author revealed during an interview in Wollongong, Australia, where he is currently based.

Andi is a doctoral candidate majoring in ocean affairs and the law of the sea at the University of Wollongong. He is also a lecturer at the Gadjah Mada University in Yogjakarta.

Cincin Merah di Barat Sonne by Andi Arsana, Indonesian language, 272 pages, Rp 44,000 (\$5), Published by Lingkar Pena.

[see also Asian Surveying & Mapping]



Sensors Anywhere

The Open Geospatial Consortium, Inc. (OGC)® announces the availability of a new book "SANY - an open service architecture for sensor networks," available free at http://sany-ip.eu/publications/3317. The book provides an excellent introduction to OGC's Sensor Web Enablement (SWE) standards, which enable developers to make all types of sensors, transducers and sensor data repositories discoverable, accessible and useable via the Web. The acronym SANY stands for "Sensors Anywhere." As a major Integrated Project in the Sixth Framework Programme of the European Commission, SANY extends the interoperability advances of an earlier European project, ORCHESTRA, into the domain of environmental sensor networks and standards-based sensor web enablement to support decision-making. OGC SWE standards were applied in SANY to three innovative risk management applications involving air pollution, marine risks and geohazards. These efforts yielded valuable reference implementations of sensor web Web services and geospatial processing Web services for decision support and data fusion. SANY is the work of the SANY consortium, a group composed of 16 partners from seven EU member states (Austria, Belgium, Germany, Spain, France, Poland, United Kingdom) and one associated state (Switzerland).

Source: http://www.opengeospatial.org [thanks to Wonkug Baek for this item]

Women & Geosciences News, N°1 (December 2009) published by the African Association of Women in Geosciences.

Philippine Cartography republished

Vibal Foundation is republishing the work of national artist for historical literature Carlos Quirino, called *Philippine Cartography* to spark interest in maps among a generation whose concept of cartography is limited to Google Maps.

Source: GIS News & Manila Bulletin Publishing news

The Spatial Turn - Inter-disciplinary Perspectives

The Spatial Turn is a collection of writings by 13 scholars about geography and space. The term Spatial Turn findsit's origin in the turning of geographical pursuit toward social and historical narratives. It emanates from the social sciences that reconsider space in the context of new dimensions in human geography. Reviewed by Jeff Thurston in V1 Magazine

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Just for Fun!



GIS News "Image of the Week" (March 15)

This sharply geometric pattern was noticed by me when searching for Area 51 in Google Earth. It is nowhere close to Area 51. It is strange that not a single placemark has been placed explaining this feature.

Source: GIS News



Machine pieces together the ripped secrets of the East German state

Bertram Nickolay does not like doing jigsaws. This is strange, because for the past 15 years the German computer engineer has sweated over the most fiendish jigsaw puzzle imaginable, made up of 600 million scraps of paper.

Now he has solved it, thanks to a technological breakthrough that will enable Germany to reconstruct one of the most painful chapters of its history.

As the East German state crumbled in 1989, Erich Mielke, the chief of the secret police, better known as the Stasi, ordered his minions to destroy the most incriminating files, the hard evidence of a state founded on fear, spying, blackmail and betrayal.

. . .

The Stasi's flimsy electric shredders (Reisswolfs: literally rip-wolves) collapsed under the strain, so the secret police continued the job by hand, working around the clock for three months. An astonishing 45 million documents were ripped up, and stuffed into rubbish bags.

. . .

In 1996 Dr Nickolay, an expert in image processing at the Fraunhofer Institute for Production Facilities and Construction Technology in Berlin, saw a television programme about the destroyed files and set about building a prototype machine that could do the job automatically. The result is the E-puzzler, **the most sophisticated digital pattern-recognition system in the world**.

In the Fraunhofer office in Berlin, Dr Nickolay displays a demonstration model of the invention which, he says, should complete the task of reconstructing all the ripped files in a matter of years. The German Government gave the go-ahead, and funding, for the first 400 bags to be reconstructed. In some ways the E-puzzler works like a human doing a jigsaw, only much faster and without the benefit of a box-lid to show what the puzzle should look like.

Source: The London Times

Emotional Cartography

Source: GIS News blogs

Chile city moves 10 feet by quake

The massive magnitude 8.8 earthquake that struck off the coast of Chile last month moved the entire city of Concepción, the closest urban area to the quake's epicentre, at least 10 feet west. The results were obtained from precise global positioning satellite (GPS) measurements taken before and after the quake, which occurred off the Maule coast of Chile, according to scientist Mike Bevis of Ohio State University

Source: GIS News & The Seattle Times

GPS hampers tourism in Geraldine, New Zealand

Overseas tourists in New Zealand, hiring vehicles increasingly expect to find a satellite navigation system, not a map, in the vehicle. And that's not good news for the Geraldine community which has found itself the victim of the new technology with many tourists opting to take the shortest route supplied by their GPS system, bypassing Geraldine.

Timaru man Grant Dempsey is suggesting there could be another option to spending \$15,000 on new signs [to encourage tourists to call into Geraldine].

Back in 2008, while on an extended family holiday touring South East Queensland, Mr Dempsey found their satellite navigation system was very eager to take them off the "beaten track".

He described that as a scary prospect in a tropical state where distances were huge and mistakes costly in terms of time and fuel.

"It was also apparent that some locals were fed up with wayward tourists and developed a simple solution – large hand-painted signs stating `YOUR SAT NAV IS WRONG – GO BACK!'."

Source: GIS Development & the Timaru Herald (NZ)

LAND USE POETICS

OPEN EVENT: Sunday 28 March 2010 from 11am

at Crate Studio & Project Space Margate

Land Use Poetics is an international workshop and an exhibition about spatial practices, technologies and imaginaries. During an intense four day workshop ten artists and researchers from around Europe will gather in Thanet for an improvised field study of its everyday environs. Through walks, observations, interviews, or other more or less artistically influenced methods – the group will attempt to explore, understand, map out and



scrutinize the area and its different forms of land uses, the tentative result of which will be made public at an open event at Crate Space in Margate, Sunday the 28th of March, from 11am.

Source: GIS News (March 29) & Thanet press release

Climate change eats up India-Bangladesh island dispute

Once a flashpoint in India-Bangladesh ties, the New Moore Island or Purbasha in the Bay of Bengal, which Dhaka called the South Talpatti, has ceased to exist, consumed by the rising sea.

Source: GIS News & Merco Press

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Training Opportunities

United Nations University and ESRI to Collaborate on GIS Research and Training

ESRI and United Nations University (UNU) recently approved a memorandum of understanding (MOU) at the university's headquarters in Tokyo, Japan. They will collaborate on research, create Centres of Excellence, promote the exchange of graduate students and provide GIS training opportunities within and by UNU. Source: GISLounge

Demographic and Health Surveys (DHS) course in Kenya

University of Nairobi Enterprises and Services Ltd are offering a professional short course on Demographic and Health Surveys (DHS) for Health from June 21-25, 2010 in Nairobi, Kenya. The course provides an overview of DHS surveys and how to use DHS data to improve health programs.

DHS are nationally-representative household surveys that provide data for a wide range of monitoring and impact evaluation indicators in the areas of population, health and nutrition. Demographic and Health Surveys provide countries with a standardised tool to obtain indicators for the effective monitoring of national programs such as those on HIV/AIDS, health and family planning services available in a country. Contact: Prof. Mwanthi Source: Kate Lance

The New Professional Spatial Information Programs at the University of Melbourne

Master of Engineering (Geomatics)

Master of Spatial Information Science

This item was extensively covered in <u>Volume 7</u>, issue 3 (<u>March 2010</u>) of the SDI-AP newsletter and is here reprinted in abbreviated form.

Forestry GIS User Group Opens for Membership

ESRI has launched a new user group specifically for its forestry and timberland management customers. The newly formed ESRI Forestry Group (EFG) will build opportunities for foresters to learn about business solutions, network with like-minded professionals and develop professional growth.

Source: Vector1Media

UNIGIS MSc now in Australia

The international UNIGIS MSc postgraduate degree is now offered in Australia through the UNIGIS study centre at the University of Canberra, ACT. Students are invited to enrol in a joint program combining the capacities from the University of Canberra and University of Salzburg, Austria.

This new UNIGIS study centre is led by Prof. George Cho at the Institute of Applied Ecology, University of Canberra. The program offers in-service distance education for professionals interested in GIS and Geo-informatics. Courses towards the MSc were launched with an on-site workshop in 2009 and lead students to obtain recognised international academic degrees.

Source: http://www.unigis.net

Trimble Seminars

Trimble will launch a new series of web seminars for people with an interest in GPS and GIS. They will be offered every 4-6 weeks. The schedule for upcoming 'webinars' includes: an introduction to the new Yuma rugged tablet computer and VRS. Visit the <u>Trimble website</u> for more information.

Source: Asian Surveying & Mapping



Web Map Gallery

Web Map Gallery | Contribute Web Map

Web Map Gallery is a resource for readers to see what others geospatial professionals have created. We encourage you to contribute to the gallery so that all may benefit from the breadth of geospatial applications now being used in many industries. Please feel free to use the link "Contribute Web Map" above to add your own Internet-based mapping application with as much information as necessary to explain your contribution. Source: Directions Magazine

GIS software training by ESRI

ESRI now offers access to more than 40 beginning, intermediate and advanced instructor-led GIS courses through a variety of training alternatives and venues including

- Video teleconferencing training at the ESRI learning centers
- Virtual Classroom online training delivered to students' own workplaces or home computers Source: GIS News

ESRI Training Program

ESRI in Singapore has released its training schedule for the first part of 2010, up to next February. Seats are reserved on a first come, first served basis, upon registration. Training prerequisites will be as indicated in the course notes. For course outlines, contact ESRI direct.

Geospatial technology update seminars scheduled for SE Asia

ESRI and GIS Development will present free seminars to mapping agencies in Southeast Asia. The Geospatial Technology Update seminars will take place in Jakarta, Indonesia; Bangkok, Thailand; Hanoi, Vietnam; Kuala Lumpur, Malaysia; and Manila, Philippines. The seminars commenced January 2010. The seminars will outline technology trends in the geospatial community including how to take advantage of the Web 2.0 environment, the integration of topographic and remotely sensed data and how to best offer published data via cloud computing.

Mapping organisation staff members and managers and their affiliates, including national hydrographic and aeronautical agencies, are invited to attend the free, daylong program in their respective cities. For more information and to register, visit http://www.GISdevelopment.net/GTUS. For more information on how mapping agencies use GIS software, visit www.esri.com/maps

FOSS 4G 2010 Workshops - Barcelona, Spain.

This item was extensively covered in <u>Volume 7</u>, issue 3 (<u>March 2010</u>) of the SDI-AP newsletter and is here reprinted in abbreviated form.

September 6 Workshops (Monday afternoon, 15-18h)

W-01: Web mapping with GeoServer

W-02: qvSIG 1.9 user workshop

W-03: Setting up an OpenStreetMap rendering toolchain

W-04: Introduction to PostGIS

W-05: Introduction to the Mapbender geoportal framwework

W-06: Solid web mapping with Python

W-07: Practical introduction to ZOO, the powerful WPS platform

September 7 Workshops (Tuesday morning, 9-12h)

W-08: Getting started with MapServer

W-09: Quantum GIS and PostGIS: Solving spatial problems and creating web-based analysis tools

W-10: FOSS4G routing with PgRouting tools, OpenStreetMap road data and GeoEXT

W-11: Working with OpenLayers

W-12: GeoNetwork for dummies, or how to setup an SDI in 3 hours

W-13: Geospatial for java

W-14: Practical introduction to GRASS Source: FOSS4G 2010 press release 5



Funding Opportunities, Awards, Grants

ESRI's Mashup Challenge Winners Announced

Links to the winning mashups and related videos can be found at http://www.esri.com/apimashup.

Source: Directions Magazine

Asia - RS and GIS Scholarships

Remote Sensing and GIS field of study at Asian Institute of Technology (Thailand) has recently announced scholarships for this coming August 2010 semester. These scholarships will be granted to students who have excellent study records. Please take your chance to apply for this scholarship.

MapGuide Project Sponsorship Program

The MapGuide Project Steering Committee is pleased to announce the MapGuide Open Source Project Sponsorship and Donation program. This program provides a source of funding to help ensure the continued success of MapGuide Open Source. The full details of the program are available at the URL link above. Source: OSGeo

NAVTEQ Global LBS Challenge

The NAVTEQ Global LBS Challenge is focused on driving the development and visibility of innovative location-based solutions (LBS) for wireless devices. The Global LBS Challenge has become the premier event in the wireless industry and a global symbol of LBS innovation and opportunity. From business applications to sports, travel and security, integrating the accuracy and richness of NAVTEQ digital map data facilitates the discovery of the next wave of LBS using dynamic positioning technology.

Winners are chosen by a panel of distinguished judges in each of five regions. Since the launch of the NAVTEQ Global LBS Challenge, over 32 per cent of the finalist companies have gone on to receive venture capital funding or launched commercially-distributed applications, many on major wireless carriers.

Further information on the registration process is available from here

Thanks to Kate Lance & Wonkug Baek for this update on the Challenge:

UPDATE: Eight new sponsors for NAVTEQ LBS Challenge Microsoft, Intel, Digital Globe, Alcatel-Lucent, Atlas CT, Imagination Technologies and Mobile Distillery are the new added sponsors to the list. Previously announced sponsors were HTC, Blackberry, deCarta, DeviceAnywhere and Tanla. These sponsors are contributing to a prize pool valued at over \$10 million, mostly made of professional licenses (maps, geospatial platforms, software testing tools, etc).

Source: NAVTEQ

Earn a PhD in Fuxin

Professor Xu Aigong is seeking PhD students to study under him at Liaoning Technical University in Fuxin, China. His subjects of interest include geodesy and geomatics, GNSS, GIS and intelligent transportation systems. Students may be eligible for support under the 2010 Liaoning Provincial Government Scholarship Program. Email Prof. Xu for details

ICIMOD Photo Contest on Mountain Biodiversity

ICIMOD is organising a Photo Contest on 'Mountain Biodiversity' to mark the International Year of Biodiversity 2010 and raise awareness of the vital role that mountain biodiversity plays in sustaining life in the Hindu Kush Himalayan region and beyond. The themes of the competition reflect the theme of the International Year of Biodiversity 'Biodiversity is life. Biodiversity is our life', and the theme for the International Day for Biological Diversity 22 May 2010 'Biodiversity, Development and Poverty Alleviation'.

Regional Scope

To qualify for the competition, images must be taken within the Hindu-Kush Himalayan portion of ICIMOD's regional member countries - Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan - as shown in the ICIMOD regional map.



Employment Opportunities

Spatial Jobs Online (Australia) Because of tight application closing dates the editors provide these websites for employment seekers to access directly: < http://www.spatialjobs.com.au/ > and < http://www.GISjobs.com.au/ >

Looking for a GIS - Geomatics Job in Canada?

Here are some links: 1) Geomatics Canada Job Site; 2) GeographyJobs.ca; 3) GoGeomatics Canada; 4)

Geomatics Employment Center

Source: V1 Magazine

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Conference Proceedings

2010 ESRI Developer Summit

22-25 March

View the <u>plenary demos</u> and <u>tech session videos</u>. More technical information is going to be posted so check back for this additional information.

Source: **ESRI**

5th gvSIG Conference Proceedings available

The videos of the report sessions and workshops at the 5th gvSIG Conference, held the first week of December 2009, are now available.

All the videos are available with English and Spanish audio. They are available to be downloaded directly as well as online.

With this publishing, we pretend to bring the Conference closer to the interested people that could not attend the event, having the possibility to access to the recording of the different sessions.

2010 NSGIC Midvear Conference Archive Published

The National States Geographic Information Council (NSGIC) hosted the 2010 NSGIC Midyear Conference on March 7-10, 2010 in Annapolis, Maryland, USA. The NSGIC is an organization committed to efficient and effective government through the prudent adoption of geospatial information technologies (GIT). The archive of PowerPoint presentations and other materials from the 2010 NSGIC Midyear Conference, is now available. The archive includes the final on-site agenda (PDF) as well as the final attendance roster (PDF) from the conference. NSGIC's on-line conference archives include materials from the 1999 Midyear conference to the present. Source: http://news.nsgic.org/ & Wonkug Baek

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Conferences, Events

For upcoming events of global or major international interest, please visit the <u>upcoming conference list</u> on the GSDI website.

FIG 2010 Pre-Congress Program

Online registration is now open for the FIG surveying congress to be held in Sydney, 11-16 April 2010. A local surveyor, John Brock, has arranged a history seminar on the two days leading up to the congress (9-10 April). Technical tours have also been organised, including a boat trip to historic Fort Denison.

Source: Asia Surveying and Mapping Magazine

The editors welcome news of conferences & events from the newsletter subscribers



Date	Location	Event
April 2010		
11 – 14 APRIL	Manama,	Geospatial Intelligence Middle East 2010
	Bahrain	Email
11-16 April	Sydney, Australia	International Federation of Surveyors (FIG) Congress 2010 Contact The deadline for submission of abstracts is 22 September 2009. Alternative URL: FIG 2010 Pre-Congress Program Online registration is now open for the FIG surveying congress to be held in Sydney, 11-16 April 2010. A local surveyor, John Brock, has arranged a history seminar on the two days leading up to the congress (9-10 April). Technical tours have also been organised, including a boat trip to historic Fort Denison.
12-13 April	Melbourne, Australia	The International Symposium on Coastal Zones and Climate Change (ISCZ) will be held 12-13 April, 2010 at Monash University in Australia. The coastal zone will house 75 per cent of the world population by 2025. However, coastal zones face severe socioeconomic and environmental problems, of which rising sea level is just one problem. The symposium is sponsored by the Asia Pacific Network for Global Change Research. Contact - Registration queries Email: Irene.Thavarajah@adm.monash.edu.au Contact - Further Queries Email: Charlotte.Fisher@sci.monash.edu.au
13-14 April	Trieste, Italy	The 3rd gvSIG Users Meeting This conference is jointly organised by the "Ispettorato Ripartimentale Foreste di Trieste and Gorizia," the "Dipartimento di Scienze della Vita dell'Universit degli Studi di Trieste", the "Comune di San Dorligo della Valle - Dolina Obina" and "Zavod za gozdov Slovenije, OE Seana. Those present at the event will know both the innovations in the latest versions of Desktop gvSIG and Mobile gvSIG, with the participation of the gvSIG Association and different success stories submitted by users of the gvSIG Community of the above- mentioned countries. You can submit your abstracts now because the period for receipt of abstracts is now open. Likewise, registration is now open for the Conference. The conference is free to attend.
April 13-15, 2010	Toronto, Ontario	GeoTec 2010 - Increasing Productivty, Potential and Profits
		Call for Presentations – 2010 GeoTec Event DEADLINE EXTENDED! - Submissions due December 7, 2009 Contact Kathleen Hastings.
14-16 April	Zahedan, Iran	4th International Congress of the Islamic World Geographers (ICIWG2010) Abstract deadline has passed. This congress is a chance for scholars across Iran and the world to exchange ideas and offer solutions to address obstacles facing the Islamic world and furthermore, to achieve sustainable development. Information Technology advances, especially in Information Management as well as new technologies in Geographic Sciences such as Geographic Information System (GIS) and Remote Sensing (RS) are very important to the geography community. Contact.
25-29 April	Phoenix, Arizona	2010 GITA Email



April 26-28	Al-Khobar City, Saudi Arabia	The Fifth National GIS Symposium and Exhibition. Featuring a state-of-the-art exhibit, plenary, keynote and technical sessions, the symposium will bring all stakeholders in the geospatial domain – academia, researchers, students and the industry – onto one platform for interaction, sharing and discussion on various topics such as collaboration on spatial technology and experiences gained. For further details, check the website. Contact
26-28 April	Singapore	Spatially Enabled Government Asia – Singapore – 2010 Spatially Enabled Government Asia will focus on the strategies for data management and data sharing. Email
26-29 April	Sendai, Japan	PICES Symposium, an international symposium on Climate Change Effects on Fish and Fisheries: Forecasting Impacts, Assessing Ecosystem Responses and Evaluating Management Strategies. Abstract submission deadline: November 30, 2009 Financial support application deadline: January 15, 2010
26 - 30 April	San Diego , California , United States	ASPRS 2010 Annual Conference Organiser: American Society for Photogrammetry & Remote Sensing Contact: 5410 Grosvenor Lane Suite 210 Bethesda, MD 20814 Phone: 301 493 0290 x106 Fax: 301 493 0208 Email
28-29 April	Kuala Lumpur, Malaysia	The 6th International Remote Sensing and GIS Conference and Exhibition (MRSS 2010) is being organised by the Malaysian Remote Sensing Society (MRSS) and Universiti Putra Malaysia. It is scheduled for 28-29 April, 2010 at PWTC in Kuala Lumpur. MRSS has issued a call for papers for the conference. Contact E-mail (Attn: Ms Nuraini Bt Abdul Thalib)
May 2010		
17-21 May 2010	Chicago, USA	The 2010 International Symposium on Collaborative Technologies and Systems (CTS 2010) Contact contact one of the Symposium's Co-Chairs: Bill McQuay or Waleed W. Smari. Workshop on Sensor Web Enablement 2010 (SWE2010) As part of The 2010 International Symposium on Collaborative Technologies and Systems (CTS 2010) Abstract Submission Deadline: December 18, 2009 Paper Submission Deadline: January 8, 2010 Notification of Acceptance: February 7, 2010 Registration & Camera-Ready Paper Due: March 1, 2010 Note that the workshop paper submission deadline is different from that of the CTS 2010 main conference.
19-21 May UPDATED	Istanbul, TURKEY	INTERGEO East 2010 The conference theme is Recent Problems in Geodesy and Related Fields with International Importance. Project developments in Turkey, Southeastern Europe and the Middle-East also will be emphasised. Subject areas include: - Land Management and Cadastre, - GIS Technologies, - Photogrametry and Cartography, - Modern Technologies in Geodesy, Satellite Technologies, - Education, - Case Studies, - Eastern European Collaboration.



		The conference is co-organised by ISPRS (International Society for Photogrammetry and Remote Sensing) and Istanbul Technical University Faculty of Civil Engineering. The conference will be held in English. Address questions to project manager Daniel Katzer .
19-21 May	Beijing	The first China Satellite Navigation Conference (CSNC) http://www.beidou.org/ > Contact
20-21 May 2010	Taipei, Taiwan	7th Taipei International Digital Earth Symposium (TIDES 2010) Abstract deadline: December 31, 2009. This year's theme is "Digital Earth for the New Generation Towards a Green Earth", and topics are related to the fields of Earth Observation and Technology, Social Science and Education, and Environmental Change and Strategy. The focus through these discussions is to upgrade Digital Earth education for the young generation and attract more young people to become involved in Digital Earth study, to help restore the balance now missing in our relationship with the Earth. Contact
26-28 May	Hong Kong Bishkek,	The 14th International Symposium on Spatial Data Handling Organisers are inviting abstracts related to the theme Theory, Modelling and Concepts in Geospatial Information Science. The event will explore topics such as digital cartography, data modelling for social science and interoperability. The deadline for abstracts is 31 August. A pdf flyer is available at International Symposium Announcement Fourth Control Asia CIS Conference (CISCA 2010)
27 – 28 May	Kyrgyz Republic	Fourth Central Asia GIS Conference (GISCA 2010) Water: Life, Risk, Energy and Landuse Contact: Dr. Akylbek Chymyrov Tel: +996 (312) 545-602
June 2010		
2 – 3 June	New Delhi, India	GeoIntelligence Asia
UPDATED	New Bellii, Ilidia	Conference and Exhibition on Geospatial Technologies for Defence and Security General Information - Annu Negi Exhibition - Kushagra Agarwal Registration - Amit Roshan
7-11 June "NEW"	Bangkok, Thailand	Data Democracy Workshop for Asia Theme: Climate Change and relevant free- software/data/applications for SE Asia 2010 GISTDA, Objective: To transfer technologies about application of EO information for climate change to user community in working level in South East ASIA Contact: Ms. Taksaporn Sungsiri, GISTDA/Thailand
9-11 June	Washington, DC USA	The First International Conference on Computing for Geospatial (Com.GEO 2010) Important Submission Deadlines Full and Short Papers 19, February 2010, Courses Proposal 19 February 2010 Tech Talks Abstract 22 March 2010, Invited Sessions Proposal 25 January 2009 Workshops Proposal 25 January 2009
9-11 June	Nottingham, United Kingdom	The British Cartographic Society Annual Symposium 2010 'Talking With Maps' The closing date for submissions is Friday, 8 January 2010. Successful submissions will be notified by no later than Friday, 22 January. Proposed titles and abstracts of no more than 300 words should be submitted to:



		Mr P Jones, Chair of Programme Committee, Defence Geographic
18-20 June 2010	Beijing, China	Centre, Hotine 141, Elmwood Avenue, Feltham, Middx, TW13 7AH. 18th International Conference on Geoinformatics
10-20 Julie 2010	beijing, China	(Geoinformatics 2010)
		The conference theme is "GIScience in Change".
		CALL for Papers: Abstract deadline: January 30, 2010.
		CPGIS will organize student paper competition. The top quality
		papers will be selected as CPGIS GeoInformatics' 2010 Best
		Student Paper to receive plaque and cash award and will be invited
		to submit a revised version to a special journal issue.
		Pre-conference workshop: Topological analysis of urban street
		networks for better understanding of human mobility patterns
21-22 June	Nottingham, UK	The OSGIS Conference (Open Source GIS UK Conference)
		As a highlighted event, the first gvSIG Day will be held at the
		Conference. The main activity of this day will be a wide workshop
		during eight hours the 21st June, where gvSIG Desktop and gvSIG
		Mobile will be shown in-depth.
		The entities that wish to contact with the gvSIG Association
		previously can do it from the form of the website [4], with the
		objective of planning meetings for the gvSIG Day.
21-24 June	Yogyakarta,	9th GISDECO Conference
	Indonesia	Theme: Applying Remote Sensing and GIS in Disaster
		Management
		Abstract deadline: 15 January 2010.
		The conference aims to encourage the use of geospatial
		information in disaster and risk management as well as a basis
		for spatial planning and regional development. Contact: Dr. Richard Sliuzas, ITC
		For practical matters: <u>Dr. Projo Danoedoro</u> , PUSPICS Faculty of
		Geography, Gadjah Mada University,
28-30 June	London	International Conference on Information Society (i-Society
20 00 00110	London	2010)
		Technically Co-Sponsored by IEEE UK/RI Computer Chapter
July 2010		
5 – 7 July	Vienna	100 Years ISPRS: Call for Papers
•		Organisers of the ISPRS Commission VII Symposium (5-7 July
		2010, Vienna) are inviting papers relating to the theme, 100 Years
		ISPRS – Advancing Remote Sensing Science. They are particularly
		seeking contributions that critically review major research areas in
		remote sensing. The deadline for full-paper review is 28 November
		2009. The deadline for abstract-only review is 28 February 2010.
5 – 7 July	Barcelona,	EDULEARN10, the International Conference on Education and
	SPAIN	New Learning Technologies
		Abstract submission: 1st April 2010
		Acceptance notification: 22nd April 2010
		Final Paper submission: 20th May 2010
		For more information CONTACT
		NOTE - You can present your projects in two modalities:
		In person: oral and poster presentations. With the line of the standing person.
e o luba	Colabora Arratal	Virtually: if you can not attend in person
6-9 July	Salzburg, Austria	GI Forum 2010 The organizate of the CI Forum 2010 in Austria have issued a call
		The organisers of the GI Forum 2010 in Austria have issued a call
		for papers for the conference, which will be held 6-9 July. The
		conference theme is spatial assessment and analysis of
		vulnerability. Workshops will be held prior to the conference on 6
		July. email IMPORTANT DATES
	1	I IIII VILLAITI DATEO



12 – 16 July	San Diego	Full papers for publication in the conference proceedings and oral presentation February 1, 2010 Extended abstracts for discussion session February 1 Extended abstract for poster presentation June 7 Workshop presentation February 19 Registration deadlines Early registration – until May 28, 2010 Online registration – until June 25 On-the-spot registration commences July 6 The GI Forum pass also provides access to the AGIT Symposium and AGIT Expo. 30th Annual ESRI User Conference Call for papers & presentations – Abstract deadline closed 6 November
26 29 hily	Kuolo Lumpur	ESRI invites users to tell their GIS story by sharing their experiences with GIS and presenting during a moderated session at the 2010 ESRI International User Conference (ESRI UC).
26 – 28 July "UPDATED"	Kuala Lumpur, Malaysia	Map Asia 2010 & ISG 2010EmailImportant Dates to RememberCall for PapersAbstract SubmissionMay 24, 2010Abstract Acceptance IntimationJune 04, 2010Submission of Full PapersJune 30, 2010Author RegistrationJune 22, 2010For any queries related to papers, contact Simmi Sinha
26 – 30 July	Vancouver, BC Canada	GeoWeb 2010 Conference Update
28 – 30 July	Baltimore, MA USA	Intelligent Spatial Decision Analysis (ISDA '10) & International Symposium on Intelligent Decision Technologies (IDT'10) Important dates 22 March 2010: *Notification of acceptance 19 April 2010: *Deadline for Camera Ready Papers For further information or questions, please send an e-mail to: Beniamino Murgante (University of Basilicata, Italy) or idt-10@kesinternational.org
August 2010		
9 – 12 August	Kyoto, Japan	ISPRS Commission VIII symposium International Society for Photogrammetry and Remote Sensing Contact: (Ms. Kumiko Sekiguchi, Ms. Juri Hikiba)
23 August – 1 September	Bangkok, Thailand	Call for Applications: Workshop on Asian Coastal Cities The Southeast Asia START Regional Center and the East-West Center has issued a Call for Applications for an upcoming International Workshop to address the risks of flooding in Asian Megacties. With support from the Asia-Pacific Network for Global Change Research (APN) the Workshop on Climate Change Vulnerability Assessment and Urban Development Planning for Asian Coastal Cities will be held on August 23 to September 1. The Workshop objectives include: 1) The development of capacity on the part of urban planners, managers, and researchers in climate change risk and vulnerability assessment and its application to urban development planning and governance. 2) The promotion of locally led risk and vulnerability research in Asian coastal cities that is linked to user needs. 3) The development of partnerships between researchers, planners and policy makers that encourage communities of knowledge for



		vulnerability assessment in each participating city. The Workshop invites researchers, urban planners and managers, practitioners, professionals and policymakers interested in and working on topics related to the workshop topics to submit an Application to the Southeast Asia Regional Center by 1 March 2010. The application must include: A curriculum vitae for each applicant A written letter of interest describing the relevance of the workshop to the applicant/team's academic or professional work and expected benefits of participation All materials should be submitted in English For more information, review the Call for Applications or contact
September 2010		
1-3 September	Paris	PCV2010 PCV 2010 will be held in next year. It is an ISPRS selective conference covering all the aspects of computer vision and image analysis dealing with geographic data. PCV focuses on the processing of images and 3D point clouds, acquired from satellites, aircraft or from street level acquisition systems. Important dates: 1 March, 2010: for peer reviewed papers; 1 April: abstracts of non peer-reviewed papers. 31 August is tutorial day. Conference dates are 1-3 September, 2010. Visit the Website for further details.
6-9 September	Barcelona, Spain	FOSS4G 2010
"UPDATED"		1 May 2010, Abstract submission deadline The latest Press Release (#6, March, 2010) states that the Submission Deadline has been postponed until April 15th, 2010, with full papers due by July 15. 1 Jun 2010, Presenters notified of acceptance for talks 15 Jun 2010, Author/Early registration deadline Aug 2010, Completed program available 6-7 Sep 2010, FOSS4G Workshops 7-9 Sep 2010, FOSS4G Presentations and Tutorials 10 Sep 2010, FOSS4G Code Sprint Contact Conference Chair for further details (Lorenzo Becchi)
20-3 September	Gaeta, Italy	The 10th Anniversary International Scientific and Technical Conference "From imagery to map: digital photogrammetric
NEW		technologies". More information about the conference will be available soon on the official site of the Conference.
22-6 September	Toyama, Japan	Asia-Pacific Radio Science Conference 2010 (AP-RASC10) Contact
October 2010		
18 – 22 October "AMENDED"	<u>Singapore</u>	GSDI 12 World Conference – Realising Spatially Enabled Societies In conjunction with the 16th PCGIAP Annual Meeting. Call for Papers EXTENDED SUBMISSION DEADLINES: Abstract Deadline for All Submissions: 1 April 2010 Full Paper Deadline (if author wants submission considered for a refereed chapter in the Conference Book or refereed paper in the Proceedings): 1 April 2010 Full Paper Deadline (if author wants submission considered for
		inclusion in the Refereed IJSDIR Special Issue or in the non- refereed portion of the proceedings): 1 July 2010



25-29 October	Addis Ababa, Ethiopia	ALSO: there will be a full day pre-conference workshop for PhD students pursuing research on SDI related topics which will be similar to the highly successful workshop held in conjunction with GSDI 11. 8th International Conference of the African Association of Remote Sensing of the Environment (AARSE)-2010 Theme: Earth Observation for Africa's Development Agenda 2010 Abstract deadline: 30 April 2010. Send to Final paper submission: 1 September 2010. The four major scientific sub-themes of the conference are: Food and Water Security Energy Resources Disaster Risk Reduction Marine and Coastal Management Conference sub-themes of a more operational nature are: Capacity-building: achievement and challenges Spatial Data Infrastructure, SDI Space Policy in Africa National and regional programs and projects Products
November 2010		
31 October - 3 November	Denver, Colorado	US - GSA Annual Meeting
5 – 6 November	Kaohsiung, Taipei	ASIA GIS 2010 The theme for this conference is GIS and Cloud Computing. Cloud computing is a hot topic in 2010 and GIS is moving to the cloud computing paradigm. Invited keynote speakers will present the future trend of cloud computing and its application in GIS. Key Dates: Deadline for Paper Abstracts Acceptance of Paper Abstracts Deadline for Early Bird Registration 31 August Paper Submission 33 August
8 – 11 November	London	The 5th International Conference for Internet Technology and Secured Transactions (ICITST-2010) Technical Co-Sponsored by IEEE UK/RI Communications Chapter, Contact IMPORTANT DATES Full Paper Submission: May 31, 2010 Extended Abstract (Work in Progress) Submission: April 01, 2010 Proposal for Workshops and Tutorials: April 30, 2010 Notification of Workshop and Tutorial Acceptance: March 15, 2010 Proposal for Industrial Presentation: April 30, 2010 Early Registration Deadline: January 01 to July 31, 2010 Late Registration Deadline: July 31 to November 08, 2010
9 – 11 November "NEW"	Taipei, Taiwan	2010 The 7th International Symposium on Cadastral Survey. Main Topic: The Development of Cadastral Survey in New Generation. Contacts: Geographic Information Systems Research Center of Feng Chia University. Email: joy@gis.tw
December 2010		
22 December	Kyoto, Japan	Japan - Topic Maps Japan 2010 Topic Maps enthusiasts in Japan will gather together for this symposium. They will present the latest case studies, research, etc.



		They will discuss about identification of Subject/Knowledge/Information, classification, systematisation, the exchange/share of them and improving their findability with the audience. They will also discuss its effective utilisation and a new way of use. They will also aim at the spread, development and promotion of Topic Maps in Japan
January2011		
18-21 January	Hyderbad, India	MapWorld Forum 2011 Contact
"NEW"		

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