

SDI-AP September 2011 Vol. 8, No. 9

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.





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Message from the editors

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



GSDI News

Call for proposals: GSDI Small Grants Program 2011-2012

The Global Spatial Data Infrastructure (GSDI) Association, the FGDC, and GISCorps have announced the Small Grants Program for the year 2011-12.

Application deadline: 31 October 2011. See under "Funding Opportunities, Awards, Grants"

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SDI News, Links, Papers, Presentations

UN sets up committee on global geospatial information

The United Nations Economic and Social Council (ECOSOC) voted on July 27 to establish a committee of experts on global geospatial information management to coordinate international dialogue on spatial data infrastructures and enhance cooperation in that field. According to the latest report of the Secretary-General on global geospatial information management, geospatial information has application in many fields including humanitarian, peace and security, environmental and development challenges facing the world, such as climate change, natural disasters, pandemics, famines, population displacement and food and economic crises. Building the infrastructure for the gathering, validation, compilation and dissemination of geospatial information is therefore as important for countries as the building of roads and telecommunications networks. However, there is currently no global multilateral or intergovernmental mechanism that can play the important leadership role of setting the agenda for the development of global geospatial information and promote its use to address key global challenges. The Secretary-General proposed that the UN take the lead role and serve as the coordinating entity of the global geospatial information community, hence the decision to create the committee. The committee is mandated, among other tasks, with providing a platform for the development of effective strategies on how to build and strengthen national capacity on geospatial information, especially in developing countries. It will also compile and disseminate best practices and experiences of national, regional and international bodies on geospatial information related to legal instruments, management models and technical standards, thus contributing to the establishment of spatial data infrastructures. The committee will comprise experts from all Member States, as well as from international organizations. Source: UN

Indonesia: Bakosurtanal and UGM establish Research Centre for SDI

Bakosurtanal and University Gadjah Mada (UGM) has established a new Research Centre for Spatial Data Infrastructures Development (RC-SDI-D). The MOU was signed on 29 July 2011. The RC-SDI-D centre will be housed at the Department of Geodetic Engineering, Faculty of Engineering, UGM. Before RC-SDI-D was formally established, researchers at the department have been actively involved in the SDI development in the country.

The OGC and OpenMI Association to advance computer modelling standards

August 25, 2011 - The Open Geospatial Consortium (OGC®) and the OpenMI Association announced that they recently signed a memorandum of understanding (MOU) to cooperate in standards development and promotion of open standards related to computer modelling. A first priority will be the facilitation of OpenMI 2.0 as an open international consensus standard under the OGC process framework.

The objectives of the OpenMI Association are to promote the development, use, management and maintenance of the Open Modelling Interface (the OpenMI), a standard for the exchange of data between computer software in environmental management applications. Learn more about the OpenMI Association at http://www.openmi.org.

Roger Moore, chairman of the OpenMI Association, said, "The OpenMI Association sees huge opportunities ahead if the linking of models of different processes as they run can be made simple and reliable. Our immediate goal is to facilitate the integrated modelling needed to understand Earth system processes and hence help scientists, policy makers and managers find sustainable solutions to environmental challenges. Our long term aim is to unlock the innovation that will create a new global wealth generating industry." Source: OGC



Australia and New Zealand Team to Develop a Spatial Marketplace

Tens of thousands of spatial data sets exist in the public sector, yet few of them are readily available. Australia and New Zealand have decided to set up a spatial marketplace to facilitate discovery and access to these public sector spatial datasets to encourage the development and use of value-added applications and services. To make this data transparent and accessible, there are a number of licensing and interoperability issues to resolve, along with identifying platform requirements. Australia's Cooperative Research Centre for Spatial Information (CRCSI) is aiding in the research for this marketplace by conducting an alignment study to understand what data products have been built and how they relate between the two countries. CRSCI marketplace by conducting an alignment study to understand what data products have been built and how they relate between the two countries. CRSCI has estimated that the spatial information industry contributes about \$10 billion to Australia's GDP and at least \$1 billion to New Zealand's. They expect that the systematic development of the marketplace will add several billion dollars more to this figure. The alignment of Spatial Data Infrastructure (SDI) initiatives between the two countries will also save money and resources. A demonstration portal will be developed in the next few months to catalogue up to 500 datasets from linked sites and allow access to services and web-based Apps. This one-stop-shop will be similar to the award-winning Shared Land Information Platform (SLIP) that was developed in Western Australia.

Source: Asia Surveying and Mapping Magazine

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SDI Spotlight

This month's "Spotlight" feature is from Heri Sutanta who has a Bachelor degree in Geodesy from the Department of Geodesy and Geomatics Engineering, Gadjah Mada University, Indonesia. He did his final project on GPS satellite positioning. Heri is currently a PhD candidate at CSDILA, the University of Melbournr



Projecting Future Growth and Progression of Natural Hazards for Disaster Risk Reduction

Statistics from several sources, such as UNDP (2004) and the EM-DAT database, show that there was significant increase in the disaster casualties and economic loses. The EM-DAT database shows that the number of people killed due to natural disasters were several thousands to hundreds of thousand every year. Between 1975 and 2010, the annual economic loss was increase from less than US\$ 5 billion to more than US\$ 120 billion. The increasing casualties and economic loss due to natural disasters trigger a question of what make this situation occur. Is it related merely to the increasing events of natural hazards or a combination of them with the increase exposure of people and infrastructures?

Climate change is one of the factor in increasing frequencies and magnitude of hydrological and meteorological disaster (Resurreccion, et al., 2008), and sea level rise (Titus, 1996; IPCC, 2009). Another factor is the increasing exposure of people and infrastructures to natural hazards due to rapid urbanization, physical infrastructure development, un-controlled land use and land use change, and also limited available space which is disaster-free (see for example Sanderson, 2000; UNDP, 2004). Urbanization leads to the need of more space to live in already limited space which makes less affluent people forced to live in disaster-prone areas. Coastal cities attracted large portion of the urbanization, as 14 out 25 of the world's biggest cities located in the coastal zones. With increasing threat from natural disaster to coastal cities, effort to reduce their risk should be started immediately.

Disaster risk reduction (DRR) requires consideration on the types and characteristics of each hazards as well as the coping capacity of the elements at risk. Elements at risk consist of people, physical infrastructures, environment, social and economic activities. Each of these elements at risk has different coping capacity level if confronted to similar or different hazards. As natural disaster impacted a particular land parcel or zones, land management practices have significant influences on the exposure of elements at risk to the natural hazards. Lessening exposure can have significant impact on reducing their vulnerability. The coping capacity and vulnerability of each will determine the risk acceptability level of each land use designation to a particular hazard that may strikes. The acceptable risk is defined as "the level of potential losses that a society or community considers acceptable given existing social, economic, political, cultural, technical and environmental conditions" (UN/ISDR, 2009). The key components in here are the potential losses and acceptance from the potentially affected parties. Potential losses concern the safety of people and economic loss.

Spatial planning has a central role in managing interaction between land use and natural hazards. It requires that the current and future of elements at risk (reflected as land use designation) as well as hazards progression be modeled and evaluated. Projection of the future growth is conducted based on the capacity of the suitable

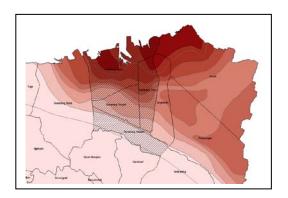


land and the assumption of the economic state. On the physical infrastructures aspect, the projection aims to find out where and when a particular building will be developed.

The progression of future disasters needs to be predicted to know their spatial footprint and magnitude. The currently less threatening disaster may progress into catastrophic event, especially when its extent reach highly developed and populated areas. The prediction of the future disaster is particularly relevant for the continuous disaster such as relative sea level rise where the risk in increasing through time. Unlike sporadic disaster e.g. volcanic eruption and earthquake, the potential impact of continuous disaster is ever-progressing. In the sporadic disaster, there will be a period when people can come back to normality.

The projection of future growth and progression of disaster along with the acceptability level of each zones were used to assess the future suitability of land use designation. The results will form the basis to determine the appropriateness of the initial land use. In the coastal lowland threatened by relative sea level rise, increase of frequency, duration and depth of inundation are the main concerns. Capacity to cope with these water related disaster impacts is essential in evaluating the risk acceptability level of different land use. Residential use, due to their financial capacity, has low coping capacity but high vulnerability. Therefore, it cannot accept high risk of inundation. Industrial use, on the other hand, has better financial resources to modify ground elevation or building protection structures. With similar magnitude of hazards, industrial use can accept higher level of risk compare to the residential use. In the long term, the calculation of risk level can be conducted with the help of

Economic Cost Benefit Analysis (CBA).





Two scenarios were developed and tested: the business-as-usual and the disaster incorporation. In the business-as-usual scenario, all potential impacts of the relative sea level rise were ignored. In the disaster incorporation scenario, if the initial land use designations were not complying with the acceptable risk level, they were changed. Calculation on the construction cost of building at risk from inundation was done on the two scenarios. It was found that modification of initial land use designations will result in less risk to people and residential building, but slightly higher for industrial sector. Several zones were changed from residential use to industrial, because industrial use has better coping capacity in response to land subsidence than residential use. The initial development costs will increase, as earth material need to be added to compensate the rate of subsidence.

Using this case study, the findings show that in the long run, the disaster incorporation scenario will result in less risk to people and infrastructure. Initial cost will be higher but will be offset by long term benefit. Several challenges in land use modification have been identified: (1) the limitation of available land, (2) jurisdiction barrier which impede cross boundary planning, (3) limited possibility for land use modification due to size, shape, location and association of the parcel, (4) data availability. With regard to the fact that there are several highly developing coastal cities but threaten by relative sea level rise, careful planning has to be developed in advance and should incorporate prediction on the progression of natural hazards. Method developed in this research is applicable to many coastal cities with similar settings.

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



GIS Tools, Software, Data

Chinese researchers uncovers new facts about Brahmaputra and Indus rivers

Researchers from the Chinese Academy of Sciences (CAS) completed a first of its kind study to pinpoint the sources of the Brahmaputra and Indus rivers using satellite images. They found that the length and drainage areas of both rivers exceeded earlier estimates. The CAS study mapped the river's length at 3,848 km, while earlier studies had estimated its length at 2,900-3,350 km. It also measured its drainage area at 712,035 sq km, with earlier estimates ranging from 520,000 sq km to 1.73 million sq km.

Source: Geospatial World

South Korea Funds Uzbek GIS

A South Korean Economic Cooperation Development Fund loan of \$15 million will be used to set up a GIS in Uzbekistan. It's part of \$155 million package of development loans.

Source: Directions Magazine and Central Asia Newswire

India, Bangladesh settle border dispute

Bangladesh and India settled the 4,156 km-long border-related discord. Bangladesh High Commissioner in New Delhi Tariq Ahmad Karim and Indian High Commissioner here Rajeet Mitter signed some of the 1,149 maps for five sectors of the 4,156-km border.

Source: Geospatial World

Global Statistics / Population Statistics

The <u>GeoHive</u> website provides a variety of interesting statistics and demographic information on various themes and topics that cover different places around the world. As the site points out, the Indian population will surpass China in the not too distant future. Also interesting is the fact that African countries will be quickly rising in terms of population.

Source: GeoHive

Chinese Advanced Deep-sea submersible

Nestled on the deck of its mother ship, China's most advanced deep-sea submersible is on its way to the depths of the central Pacific Ocean in a program that is being closely watched in Asia and the West for its mining and military potential as well as its scientific research.

The Jiaolong, named after a mythical dragon, will attempt to plunge 5,000 meters below the surface of the Pacific, exceeding its 3,759-meter dive in the South China Sea last year.

The submersible has a special titanium hull to withstand the crushing pressures of the deep ocean. If the current expedition is successful, the craft is expected to try operating close to its maximum depth of about 7,000 meters in 2012, making it capable of reaching the bottom of almost all the world's sea areas.

This would elevate China to the top of an exclusive club of deep-sea submersible operators, putting it ahead of Japan, Russia, France and the United States.

Source: Japan Times

Taipei Police gets geospatial power

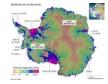
The New Taipei Police Department in Taiwan set up a cutting-edge Intelligence Integrated Center (IIC). The centre integrates information provided by the GPS, GIS and 110 hotline telephone reporting system, enabling the precise location of an incident to be pinpointed and the police officers closest to the scene to be quickly dispatched. According to New Taipei Deputy Mayor Hou Yu-ih, total cost of the centre is USD 68.94 million. Source: Geospatial World

Map tracks Antarctica on the move

Scientists have produced what they say is the first complete map of how the ice moves across Antarctica.

Built from images acquired by radar satellites, the visualisation details all the great glaciers and the smaller ice streams that feed them. The map has been published online by Science magazine.

Source: BBC News





Existing Coastal Radar Detected Japan Tsunami

To date, tsunami detection and warning systems have been based on deep-water, pressure-sensor observations that determine changes in sea surface elevation and fluctuation on the coast, which are point measurements. Researchers observed after-the-fact that existing coastal current monitoring radar remote sensing systems were able to detect the tsunami signal and velocity as it approached both the coast of Japan and the Pacific Coast of the United States.

The primary purpose of HG radar observations are to tell real-time offshore ocean circulation, but after looking closely at records from a few of the 80 HF radars that operate along the US Pacific coast and along the coast of Japan, researchers were able to see tsunami-induced wave velocities.

Radars in Hokkaido in Japan show tsunami measurements in their records. In California, the Coastal Ocean Currents Monitoring Program, a network of coastal radar devices, were able to detect the March 11 tsunami. The radar could offer hours of advance warning in Japan, but less than a half-hour warning in California due to the steeper sea floor bathymetry. This was the first time that a tsunami has been tracked by radar, and could prove to be a useful means of detection for future incidents.

The radar detection results are outlined in this paper published in the journal Remote Sensing.

Source: Asian Surveying & Mapping and GeoSpatial World

Australia's National Positioning Infrastructure Effort Promises Economic Gain

Australia is working to establish a National Positioning Infrastructure (NPI) that will deliver 2-cm accurate positioning anywhere outdoors in real-time. This accuracy can only be accomplished by taking advantage of the existing GPS system and the new and emerging systems of Galileo (EU), GLONASS (Russia), Compass (China), QZSS (Japan) and IRNSS (India), along with permanent satellite navigation tracking stations. The system will underpin innovation in such sectors as agriculture, mining, construction and climate change, as well as providing the basis for logistics, navigation, transport, emergency management and security. An economic analysis of the plan suggests an addition of at least \$32 billion to the Australian economy over the next 20 years with such a system in place.

You can read the National Positioning Infrastructure (NPI) Policy document via ANZLIC, the Spatial Information

Council, <u>here</u> [PDF].

Source: Asian Surveying & Mapping

Pakistan to expand satellite network

Pakistan plans to work with China, Japan and Europe to expand its network of remote sensing (RS) satellites for use in environment monitoring and natural resource surveys.

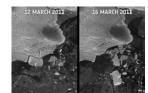
The Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) announced this month (16 August) that the plan involves the launch of six homemade, high-resolution RS satellites by 2014.

Source: SciDev.net and Asian Surveying & Mapping

Japanese tsunami caused icebergs to break off in Antarctica

The effects of the March 2011 earthquake and subsequent tsunami that devastated areas of Japan can be seen as far away as Antarctica. Satellite images show new icebergs were created after the tsunami hit the Sulzberger Ice Shelf.

Source: ESA and GeoSpatial World



Scaling Location Data in Australia and New Zealand

Interview with Peter Woodgate, CEO, Cooperative Research Center for Spatial Information

Source: LBx Journal

Panel to demarcate mining lease boundaries

To bring transparency in mining operations, the Orissa State Government in India constituted two committees, state level committee (SLC) and district level committee (DLC). Their tasks include survey and demarcation of the lease boundaries, digitisation of lease maps, superimposition of the satellite imagery on differential GPS (DGPS) survey map and georeferencing of mining maps. In addition, the committees will compare these maps with approved mining lease map.

Source: GeoSpatial World

3D Cadastre in Victoria Australia - Converting Building Plans of Subdivision

Three-dimensional (3D) land development is common, especially in urban areas. Management of 3D land rights, restrictions and responsibilities (3D RRRs) is one of the most important challenges in current land-administration systems, most of which are equipped with cadastres able only to maintain information in a 2D spatial information environment.

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Source: GIM International

Spatial Genie Launches to Promote GIS Education in Australian Schools

The Education Services Australia (ESA) has launched Spatial Genie, an education system to promote GIS in Australian schools. This capability marks the first time the education system in Australia has invested in the development and promotion of GIS in schools.

Source: Asian Surveying & Mapping

Scorpio tanker completes Northern Sea Route voyage

A tanker managed by Scorpio Ship Management s.a.m. recently completed a voyage from Vitino, Russia to Map Ta Phut, Thailand, via the Northern Sea Route (NSR) -- with the assistance of nuclear powered icebreakers. This is the first such voyage for a vessel managed by SSM.



The NSR, which connects the Atlantic to the Pacific Ocean via the Russian arctic

coast, is only open occasionally for international commercial shipping and is navigable with the assistance of icebreakers from mid-summer to mid-autumn. In addition to gaining considerable savings in distance and fuel, by using the NSRP ships avoid both Suez Canal tolls and the risks of piracy in the Gulf of Aden and Indian Ocean region.

Source: MarineLog.com & Asian Surveying & Mapping

Indonesian law mandates single reference for official maps

Despite funding shortages, a new law obliges government institutions to use a single source for geographical mapping as its policy reference.

National Coordinating Agency for Land Survey and Mapping (Bakosurtanal) head Asep Karsidi said the 2011 Geo-spatial Information Law stipulated that government institutions should refer to Bakosurtanal for official geographical information.

Source: Jakarta Post and 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.

- 1. Useful Hurricane Irene Data and Storm Related Maps, Data and WMS Resources, and
- 2. Esri Hurricane / Storm Reports Social News Map

Source: GIS User

Atmospheric condition improves satellite measurements

Students from Howard University and Georgia Institute of Technology, US, claimed that local atmospheric conditions can improve the accuracy of satellite surface imagery. They published their findings in the online edition of the journal *Remote Sensing Letters*.

Source: Geospatial World

GIS provides insight into coral disease spread

In the last 30 years, more than 90 percent of the reef-building coral responsible for maintaining major marine habitats and providing a natural barrier against hurricanes in the Caribbean has disappeared because of a disease of unknown origin. Now a University of Florida geographer and his colleagues applied GIS to examine human illness to show where clusters of diseased coral exist.

Source: Geospatial World and University of Florida News

Researchers map stress on world's coral reefs

Researchers at the Wildlife Conservation Society created a map of the world's coral reefs charting climate stress impacts. The map identifies world reef systems at risk from high seawater temperatures, ultra-violet radiation, weather systems and sedimentation.

Source: Geospatial World





Augmented reality: Bringing futuristic fantasy to life

When the 'Back to the Future' films first hit our screens in the late 1980s, the futuristic predictions of hover cars and virtual trips seemed like they were light years away. But now, thanks to GIS, it seems like a slice of futuristic fantasy is just around the corner. Source: GeoSpatial World

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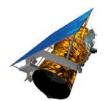
Articles

Ice Flow of the Antarctic Ice Sheet by E. Rignot, J. Mouginot, & B. Scheuchl1

ABSTRACT

We present a reference, comprehensive, high-resolution, digital mosaic of ice motion in Antarctica assembled from multiple satellite interferometric synthetic-aperture radar data acquired during the International Polar Year 2007-2009. The data reveal widespread, patterned, enhanced flow with tributary glaciers reaching hundreds to thousands of kilometers inland, over the entire continent. This view of ice-sheet motion emphasizes the importance of basal-slip-dominated tributary flow over deformation-dominated ice-sheet flow, redefines our understanding of ice-sheet dynamics, and has far-reaching implications for the reconstruction and prediction of ice-sheet evolution.

Source: Science magazine



Understanding Airborne vs. Satellite Imagery by Jeff Thurston

A common question that many readers of Asian Surveying and Mapping often ask us is, "what is the difference between airborne camera systems as compared to satellite imagery - what do I need to know?" Invariably, there is a short answer, or a long answer. The first really does not provide much of value, while the second can take hours or days to explain. This brief article is intended to help.

Source: Asian Surveying & Mapping

<u>Japan Tsunami Current Flows Observed by HF Radars on Two Continents</u> by Belinda Lipa, Donald Barrick, Sei-Ichi Saitoh, Yoichi Ishikawa, Toshiyuki Awaji, John Largier, and Newell Garfield

Abstract: Quantitative real-time observations of a tsunami have been limited to deep-water, pressure-sensor observations of changes in the sea surface elevation and observations of sea level fluctuations at the coast, which are essentially point measurements. Constrained by these data, models have been used for predictions and warning of the arrival of a tsunami, but to date no detailed verification of flow patterns nor area measurements have been possible. Here we present unique HF-radar area observations of the tsunami signal seen in current velocities as the wave



train approaches the coast. Networks of coastal HF-radars are now routinely observing surface currents in many countries and we report clear results from five HF radar sites spanning a distance of 8,200 km on two continents following the magnitude 9.0 earthquake off Sendai, Japan, on 11 March 2011. We confirm the tsunami signal with three different methodologies and compare the currents observed with coastal sea level fluctuations at tide gauges. The distance offshore at which the tsunami can be detected, and hence the warning time provided, depends on the bathymetry: the wider the shallow continental shelf, the greater this time. Data from these and other radars around the Pacific rim can be used to further develop radar as an important tool to aid in tsunami observation and warning as well as post-processing comparisons between observation and model predictions.

Keywords: radar oceanography; remote sensing; current velocity measurement

Source: Remote Sens. 2011, 3(8), 1663-1679

Infrastructure Development Starts with a Survey and a Map by Matt Ball

The level of development that is needed in Asia and Africa provides great opportunities for surveying and mapping firms. Mapping and surveying are often step one in the design and planning for such projects as power and telecommunication line expansion, pipelines, road design, dam site selection, railway development, mineral exploration, mine management, environmental planning and rehabilitation, and agricultural planning. With greater development taking place, mapping and surveying is a very important element to local empowerment.



Source: Asian Surveying & Mapping

Cadastre: Evolution or Revolution? by Kees de Zeeuw & Martin Salzmann

We come from a situation where the societal relevance of a cadastre was limited to the core statutory tasks of registration and maintenance of cadastral maps and providing information on land parcels and their ownership and use-rights (van der Molen, 2009). Nowadays, modern land registry organisations do not only face many new challenges, also the pace of demand for new products and services increases every year. This paper aims to analyse the developments in society that influence the functioning of a cadastral organisation and to show how the Dutch Kadaster handles these developments. The driving forces behind development are categorised and the impact on our business processes is explained. Secondly we like to show how Kadaster reacts on these developments by introducing new solutions and innovations constantly, and by adapting our organisation and company strategy accordingly. Finally, we summarize the consequences of these developments for the Dutch Kadaster and how our experiences can be of value to other registering organisations, questioning ourselves: are we in the middle of evolution or revolution, should we act or should we react?

Source: Co-ordinates

Subterranean Intelligence by Christine L. Grahl

A GNSS-based utility mapping technology permits rapid and accurate 3D mapping of underground utilities with a high level of confidence.

The dynamic, bustling city of Fukuoka, Japan, relies on a complex network of pipes, ducts and cables to carry its power, water, communications and gas--the city's lifeblood. Increasingly, many of these utilities are buried underground.

Source: Point of Beginning

Track me if you can! by Fan-Ren Chang, Huei Wang, Pei-Hung Jau & Zuo-Min Tsai

This paper is going to provide a concept of a new system for positioning the target bees. The biologists eagerly wish to collect the bodies of the bees in order to find the causes of the colony collapse disorder (CCD) of bees. As we know it, there are several ways used to find out and trace animals. For example, the scientists set up the transponders or the GPS trackers on the top of shells of thalassians or on the feet of migrant birds by ringing. These methods make great contributions for tracking and studying in the field of the biological research. However, how to track or position small insects, like cicadas, butterflies, or bees, is still a problem needed to be solved. The obvious crux of the problem is the size and the weight of the devices which are not suitable for fitting on such a small insects.

Source: Co-ordinates

The Evolution of the Geo-Data Manager by Bryn Fosburgh

From restoring the boundaries between fields in the Nile River valley during the time of the Pharaohs to supporting the work of the Roman engineers that built the Appian Way, surveyors were a fundamental part of early cultures. They fulfilled needs to demarcate property boundaries, conduct reconnaissance and make maps for planning. They planned, monitored and archived the details of construction projects, and provided a host of other services and products that involved measuring and depicting the earth's surface with the natural, built and planned environments.

Source: Point of Beginning



3D Imagery from Space

The last decade has shown a series of developments triggering intensification of the use of satellite imagery for a multitude of applications. These developments include, among many: reduction in cost of launching satellites into orbit, improvement in revisit time for capturing a scene and boosting ground sample distance to up to 50cm; a spatial resolution that challenges aerial photogrammetry. Among the greatly in demand products derived from

satellite data are Digital Elevation Models (DEM). In tandem with the new product survey on Very High Resolution Satellite Imagery (see our website), the author here discusses the possibilities of very high-resolution optical and radar imagery for creating DEMs. Features of the RapidEye constellation launched in August 2008 are also discussed.

Source: GIM International

The Unforgiving Boundary by Michael J. Pallamary PLS

A surveyor reflects on his experiences over nearly 30 years of surveying along the U.S.-Mexico border.



Source: Point of Beginning

<u>Modelling Glacier Melt and Runoff in Greenland and in the Nepal Himalaya</u> by Alison Banwell, and <u>Impact Everyday</u> by Adam Carver

Two in a series of articles from the winners of the 2011 Dow Sustainability Innovation Student Challenge Awards.

Source: EnvironmentalLeader.com

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Books and Journals (including Videos and Web publications)

Thoughts on the Geospatial industry, Open Standards and Open Source Cameron Shorter's blog

SDI Magazine

Mother Pelican: A Journal of Sustainable Human Development

The August 2011 issue has been posted:

LiDAR News, Vol 1, No 9

Think Quarterly - Google's new on-line magazine

Coordinates monthly magazine

SERVIR-Africa community news

The American Surveyor newsletter (20 July)

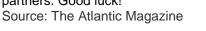
GISuser - GIS and Geospatial Technology News

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Just for Fun!

Where in the World? A Google Earth Puzzle

Looking at the world through via Google Earth offers striking images of the diversity of our planet and the impact that humans have had on it. Today's entry is a puzzle. We're challenging you to figure out where in the world each of the images below is taken. (You'll find answers and links at the bottom of the entry.) North is not always up in these pictures, and, apart from a bit of contrast, they are unaltered images provided by Google and its mapping partners. Good luck!





How to measure [a] traffic jam? by Martin Grzebellus

As traffic jam is getting a bad reality in our times, realistic information on the traffic situation together with optimized routing to reduce overall waiting time on the trip become more and more valuable all over the world. But how to validate, if the information provided is reliable and trustworthy? On the first look, this sounds easy, but as truth is in the details, a lot of hurdles have to be passed for a successful finish. Source: Co-ordinates

Fun and Games: August 22

Each week, <u>Point of Beginning</u> presents a surveying problem for you to solve from the third edition of "Surveying Solved Problems for the FS and PS Exams" by Jan Van Sickle, PLS (formerly "1001 Solved")



Surveying Fundamentals Problems"), some jokes, trivia or other amusing items and a cool link to brighten your day. If you have a joke or link you would like to share, please submit it to <u>fujiwaras@bnpmedia.com</u>.

Joke of the Week

These two green beans were crossing the highway when one of them was hit by a large truck. His buddy scrapes him up and rushes him to the hospital. After hours of surgery the doctor comes in and says "I have good news and bad news."

The green bean starts to rejoice and the doctor says, "The good news is that he's going to live."

"The bad news is he'll be a vegetable for the rest of his life."

Source: www.justcleanjokes.com

Problem of the Week

Which of the following terms may be correctly applied to the Lambert map projection that is used as the foundation for state plane coordinates in the U.S.?

- (A) conformal and conic
- (B) azimuthal and equal-area
- (C) cylindrical and conformal
- (D) conic and sinusoidal

This is problem 28 (9-4) from the NEW third edition of "Surveying Solved Problems for the FS and PS Exams" by Jan Van Sickle, PLS (formerly "1001 Solved Surveying Fundamentals Problems"). Reprinted with permission from "Surveying Solved Problems for the FS and PS Exams" by Jan Van Sickle, PLS (2008 Professional Publications Inc.).

For answers www.pobonline.com/Articles/Fun_Games_Answers

Source: Point of Beginning

Doctors protest rural classification in Australia

Classification of some rural areas is exacerbating difficulties of attracting doctors to country towns in South Australia. Hence, the Rural Doctors Association of Australia launched Stop the Rot! roadshow nationwide to highlight problems with the new Australian Standard Geographical Classification - Remoteness Areas system. The new classification determined the extent of relocation and retention incentives that doctors receive, based on their location. But it places many smaller rural towns in the same category as larger regional centres. This substantially reduced the incentive for doctors to move to or stay in smaller towns.

Source: GeoSpatial World

GNSS-powered devices cause most road accidents

GPS systems have led to a surge in road accidents, posing the same danger to drivers as mobile phones, a police study has found.

Instead of concentrating on driving, motorists are getting distracted and disoriented by tracking streets on their Global Positioning System devices, NSW Police traffic boss John Hartley said.

Source: The Daily Telegraph and GeoSpatial World

Surveyors on a Busman's Holiday

This 2,000 feet "offset" of the northern border of Georgia is on the north slope of North Georgia's Hightower Bald, some 4,000 feet in elevation. Its tale is a continuation of the story of the Camak Stone, described by Bart Crattie in the Nov/Dec 2009 Georgia Land Surveyor. In 1818, mathematician James Camak, surveyor Hugh Montgomery, and others headed east from the incorrectly positioned Camak Stone. Though intending to follow the 35th parallel to the corner of Tennessee on the northern boundary of Georgia, their entire line is south of that parallel. They also continued well past the Georgia/Tennessee boundary to set a mark that became known as "Montgomery's Corner". In 1819, Camak and a different group headed west from Ellicott's Rock, which had been accurately set in 1811 at the NE corner of Georgia. They veered south of the 35th parallel but still found themselves nearly a half mile north of Montgomery's Corner. Rather than correct the error, they merely marked a north/ south line connecting the new "30 Mile Post" and the previous year's Montgomery's Corner. This caused the entire northern boundary of Georgia to be south of where it was intended.

Source: The American Surveyor



Training Opportunities

Surveying and Spatial Sciences Institute (SSSI) NSW - Metadata & Spatial Data Infrastructure Workshop Friday, 23 September 2011 - LPI, Queens Square, Sydney CBD

Large-Scale 3D Laser Scanning: The Complete Process

Don't worry if you missed the live webinar, "Large-Scale 3D Laser Scanning: The Complete Process". It's now available online for you to watch any time!

REGISTRATION FOR COURSES IN THE ACADEMIC YEAR 2012-2013 NOW OPEN:

University of Twente - ITC Faculty of Geo-Information and Earth Observation

You can now apply online for courses starting in the academic year 2012-2013. Browse by programme (degree, diploma, and certificate), course domain (disaster management, earth sciences, geoinformatics, governance, land administration, natural resources, urban planning, water resources) or location in the course finder at www.itc.nl/CourseFinder. If you prefer a printed copy of the study brochure 2012-2013, let ITC know by sending us an email: .

Short Course: Remote Sensing and GIS for Geological and Mineral Exploration, 2 weeks (Dar es Salaam, Tanzania)

The two-week course Remote Sensing and GIS for Geological and Mineral Exploration provides an introduction into the application of GIS, remote sensing and airborne geophysics to geologic mapping and mineral resources exploration. The course will start on 7 November 2011 at the SEAMIC premises in Dar es Salaam, Tanzania. Registration deadline: 1 November 2011. The following will be covered: 1) The analysis and interpretation of geological data sets, such as ASTER satellite imagery, aeromagnetics and gamma-ray spectrometry and geochemistry, 2) the integration of different data sets to enhance geologic interpretations, and 3) mineral prospectivity modelling with GIS to generate exploration targets. Concepts and theories are explained in interactive lectures and their application will be practiced in hand-on exercises of East-African and other case studies.

Target group: Geologists who are working in the field of geological mapping and/or mineral resources exploration who want to deepen their knowledge of the use of digital data sets in a GIS environment to increase the efficiency of geologic mapping and exploration campaigns.

For more information and registration: www.itc.nl/Pub/study/Courses/C11-ESA-TM-05.html.

e-Learning for the Open Geospatial Community

We are pleased to inform that the course repository for the ELOGeo (An e-Learning Framework for Using Geospatial Open Data, Open Source and Open Standards) project is ready.

ELOGeo is a JISC-funded project based at the Centre for Geospatial Science, the University of Nottingham in partnership with the Mimas Centre of Excellence at the University of Manchester. ELOGeo main collaborators are Open Source Geospatial Foundation, Open Geospatial Consortium (OGC), Ordnance Survey, Open Nottingham, International Cartographic Association (ICA) and gvSIG Association.

More details of ELOGeo.

gvSIG Training platform opens with a first course for gvSIG users

The gvSIG Association tries to increase its learning offer through online courses, publishing a new learning platform: gvSIG Training. In parallel, the gvSIG Association launches its official certification program. It's a step forward in the training processes in free geomatic, creating an online training centre, that contributes to the spreading as well as to the sustainability of the gvSIG project. Training without geographic barriers, and with the best professionals.

In this platform, you will find courses in several languages to learn to use the different applications of the gvSIG project, in a user level as well as in a developer one. The courses list will be extended gradually with different gvSIG and free geomatic specialization courses (databases, map servers...), with the objective of covering the different needs of the Community.

The courses offered by gvSIG Training are part of the training routes that are required to obtain the gvSIG official certification.

For further information:

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



GIS Courses by Distance Education NSW Riverina Tafe

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

Certificate III in Spatial Information Services (GIS)

Certificate IV in Spatial Information Services (GIS)

Diploma of Spatial Information Services (GIS)

Source: NSW River

Participatory Spatial Information Management and Communication Training Kit now available on-line

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

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

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

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

Source: The Centre for Agricultural and Rural Cooperation

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Funding Opportunities, Awards, Grants

Europe's earth monitoring competition

The Global Monitoring for Environment and Security (GMES) has opened this year's competition for the best new ideas and services for the best use of Earth observation data from Europe's Global Monitoring for Environment and Security program. Initiated by the European Space Agency (ESA), the Bavarian Ministry of Economy, the German Aerospace Center (DLR) and T-Systems, the competition is open to students, researchers, entrepreneurs, start-up companies and small and medium enterprises to develop new applications for data from the GMES initiative. Proposals can be submitted by September 15, 2011 in five categories: Best Service, Ideas, ESA App, DLR Environmental, and T-Systems Cloud Computing. Prizes are awarded for the winners of each category. And, an overall winner will be awarded the GMES Master which comes with an additional cash prize of 20,000 Euros.

Source: GMES Masters and Thanks to Wonkug Baek for this item

Call for proposals: GSDI Small Grants Program 2011-2012

The Global Spatial Data Infrastructure (GSDI) Association, the FGDC, and GISCorps have announced the Small Grants Program for the year 2011-12.

The Small Grants Program provides awards of \$2500 US in cash and/or contributed volunteer professional services for a technical or institutional projects. A list of typical projects follows - but this list is not exhaustive: Convening of national or sub-national seminars or workshops related to SDI

Producing SDI- and EOS-related training manuals and modules (these materials must not duplicate existing materials)

Establishing metadata and clearinghouse nodes (catalog services)

Establishing standards-based web mapping and data access services

Accomplishing geospatial data and/or SDI surveys or inventories

Producing and disseminating newsletters and awareness-raising materials about SDI

Drafting policy and legislation related to SDI

Priority will be given to projects in developing nations and countries with economies in transition. Grants can be awarded to SDI coordinating bodies (councils, committees) and GIS user groups, but the GSDI Association



asks that one institution take responsibility for receiving/depositing the funds. Grants cannot be used to cover organization overhead expenses.

Application deadline: 31 October 2011

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Employment Opportunities

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Conference Proceedings

Webcast presentations of Open Source GIS Conference 2011

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

INSPIRE 2011 Conference Report

27 June – 2 July, Edinburgh, UK



2011 Esri Asia Pacific User Conference Proceedings

ISDE Working Group Meeting on Digital Earth Vision to 2020

In March 2011, the International Society for Digital Earth held a working group meeting in Beijing on a Digital Earth Vision to 2020. The meeting brought together a diverse group of experts in an attempt to imagine how Digital Earth might evolve over the next decade. The Vision to 2020 is an updated reevaluation of the Digital Earth concept presented by Al Gore in 1998. This new vision takes into account the advances in technology made so far in the 21st century, considers changes in society and the ways people interact with technology, and anticipates the drivers that will affect future development.

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Conferences, Events

For upcoming events of global or major international interest, please visit the <u>upcoming conference list</u> on the GSDI website – as this conference list will be reserved for conferences within or with specific interest to the Asia Pacific Region.

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

Call for Expression of Interest to host AARSE 2014 and future Conferences

Call for Expression of Interest to host the 10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE) in October 2014 and future Conferences. The 9th conference will be held in Morocco in October 2012.

Date	Location	Event
September 2011		
9 – 11	Denver, Colorado	State of the Map (SotM)
September		
12 – 16	Denver, Colorado	FOSS4G 2011
September		
15-16	Paris,FRANCE	3rd Symposium on Earth Observation Business
September		



18 – 22 September	Amman, Jordan	ISNET / RJGC Workshop on Applications of Satellite Technology in Water Resources Management The workshop would comprise presentations by participants, topic-specific lectures by experts and hands-on training which will focus on building capabilities in use of SRS techniques for water exploration. The main focus of the workshop is sharing of knowledge, experiences and update relevant OIC researchers on water resources exploration. Important dates Last date for abstract submission & applications US July Intimation of selection US August Last date for sending full papers & presentations US August 18 August
19-22 September	Tossa de Mar, SPAIN	11th International Scientific & Technical Conference From imagery to map: digital photogrammetric technologies. E-mail: conference@racurs.ru
28 – 30	The Delft,	<u>UDMS 2011</u>
September	Netherlands	
October 2011		
3-7 October	Taipei, TAIWAN	32nd Asian Conference on Remote Sens Bransing for Green Asia" (ACRS 2011)
5-7 October	Zanzibar Beach	6th ESRI Eastern Africa User Conference
	Resort, Tanzania	Call for Presentations ESRI Eastern Africa invites you to share and discuss your GIS experiences by submitting a paper abstract for the upcoming conference in any of the following tracks: * Conference Track Sub-themes * Mapping & Charting and Public Safety Defence & Intelligence, Disaster Management, Law Enforcement, National Mapping & Charting * Government Demographics, Economic Development, Election Services, Land Records, Public Works, Urban Planning * Natural Resources Agriculture, Biodiversity Conservation, Environmental Management, Water Resources * Health Services and Education Higher Education, Public Health, Research * Utilities Electric Generation, Transmission & Distribution, Telecommunications, Water & Sewerage * Transportation & Business Aviation, Highways & Roads, Logistics, Maritime Transportation, Railways, Real Estate Abstract Submission The deadline for abstract submission is 30 July 2011. Papers brochure for the guidelines of abstract submission and submit your abstract at http://www.esriea.co.ke/index.php/6th-esri-ea-user-conference or contact events@esriea.co.ke/ index plays in the Map Gallery ESRI Eastern Africa invites you to submit posters/banners of your GIS work done with ArcGIS software for display in the Map Gallery during the conference and for inclusion in the keynote presentations. All poster presenters will receive a 30% discount on conference registration. All poster presenters will receive a 30% discount on conference registration deadline is 12 August 2011. ESRI Eastern Africa recommends that you register today and take advantage of the Early Bird Registration. Visit http://www.esriea.co.ke/index.php/6th-esri-ea-user-conference or contact http://www.esriea.co.ke/index.php/6th-esri-ea-user-conference or



		information and registration.
5 – 7 October	Melbourne, Australia	Celebrating ten years of research and achievement Celebrating 10 Years (2001-2011) Established in 2001, the CSDILA has been contributing to national and international knowledge and practise in the domain of Land Administration, SDI and spatial enablement for ten years. To celebrate ten years of research the CSDILA is proud to host a two day event titled "Beyond Spatial Enablement" to be held in Melbourne, October 2011 to discuss the future directions of spatial enablement.
17 – 19 October	Jakarta, Indonesia	Map Asia is now rebranded as Asia Geospatial Forum. Contact Important Dates Author registration 9th September 2011 Full paper submission 15th September 2011 For information on paper submission
20 - 21 October	Guilin, China	ISPRS Workshop on Geospatial Data Infrastructure: From data acquisition and updating to smarter devices 2011 Contact Deadline for abstracts: CLOSED The objective of the workshop is to provide a platform for scholars and professionals in relevant areas to exchange research ideas and interests, to present the newest research results, to discuss the cutting-edge technology, and to promote the development and application of SDI and the international collaboration.
24-26 October "NEW"	Seoul, Korea	High level forum on Global Geospatial Information Management This High level forum on Global Geospatial Information Management is being co-organized by the Korean National Geographic Information Institute (NGII Korea) and the UN Department of Economic and Social Affairs (UN-DESA), and supported by the Permanent Committee on GIS Infrastructure for Asia and the Pacific (PCGIAP), the Permanent Committee for Geospatial Data Infrastructure of the Americas (PC-IDEA) and the Committee on Development Information, Science and Technology (CODIST) for Africa. Draft programme
24 - 27 October 25 – 28 October	Seoul, Korea Paris, France	United Nations Forum on Global Geospatial Information Management (GGIM) FIG Commission 3 Workshop - The Empowerment of Local Authorities: Spatial Information and Spatial Planning Tools
November 2011		Website
7 – 11 November	Abuja, Nigeria	AfricaGIS 2011: A Geospatial Technology Revolution in Africa Sub-themes: Spatially-enabled Governance; Enterprise GIS and Land Administration: the building blocks of sustainable development; New Trends: crowd-sourcing, volunteered geographic information (VGI), and web services in the cloud; Business Geographic's: the geospatial advantage Please submit your abstracts to secretariat@eis-africa.org immediately.
14 – 16	Kuala Lumpur,	The International Conference on Informatics Engineering &



November	Malaysia	Information Science (ICIEIS2011) University Technology Malaysia, Malaysia
		Nov. 14-16, 2011 All the papers will be reviewed and the accepted papers in the conference will be published in the <i>Communications in Computer and Information Science</i> (CCIS) of Springer Lecture Notes Series (www.springer.com/series/7899), and will be indexed in many global databases including ISI Proceedings and Scopus. In addition, selected papers after complete modification and revision will be published in the special issues journals. Researchers are encouraged to submit their work electronically. Submitted paper should not exceed 15 pages, including illustrations. Papers should be submitted electronically. All papers will be fully refereed by a minimum of two specialized referees. Before final acceptance, all referees comments must be considered. Important Dates
		Submission Date : Aug. 1, 2011 Notification of acceptance: Aug. 20, 2011 Camera Ready submission : Aug. 30, 2011 Registration : Aug. 30, 2011 Conference dates : Nov. 14-16, 2011
14 – 16 November	Madrid, Spain	ICERI2011, the International Conference of Education, Research and Innovation Abstract submission: 14th July 2011 Acceptance notification: 1st September 2011 Final Paper submission: 29th September 2011
14 – 18 November "NEW"	Pretoria, South Africa	ISO/TC 211 Plenary 33rd ISO/TC 211 Plenary and associated meetings ISO/TC 211 Geographic information/Geomatics is responsible for the ISO geographic information series of standards. These standards may specify, for geographic information, methods, tools and services for data management (including definition and description), acquiring, processing, analyzing, accessing, presenting and transferring such data in digital/electronic form between different users, systems and locations.
14 – 18 November	Santiago, Chile	UGI 2001 International Geographic Union "Regional Geographic Conference" Brochure & Call for Papers
15 – 16 November	Seoul, Korea	Esri Korea, Inc. is proud to host the 7th Esri Asia Pacific User Conference
15 – 17 November	Canberra, Australia	Spatial@Gov2011
21 – 24 November "NEW"	Jakarta, Indonesia	World Delta World Summit
21 – 25 November	Wellington, New Zealand	Surveying & Spatial Sciences Conference 2011
22 – 25 November "NEW"	Beijing	United Nations International Conference on Space-based Technologies for Disaster Risk Management [UN SPIDER] - Applications from interested professionals, experts and decision-makers are now being accepted. Please visit the Conference webpage and register for this event. The deadline for receiving applications: 30 September 2011.
		Please note that incomplete applications as well as applications received after the deadline will not be considered so you are



		requested to take the time to complete all the necessary steps and complete all the required information, particularly if you need funding support . The event expects 200 disaster risk management and space-technology experts to participate in Beijing. For specific contributions to the proposed themes/sessions, for proposing a topic for technical presentation and for proposing to provide sponsorship to the event, please contact Mr. Shirish Ravan and/or Ms. Li Suju. For further information, contact: David Stevens, Programme Coordinator, [UN-SPIDER] United Nations Office for Outer Space Affairs.
29 November – 2 December	University of Melbourne, AUSTRALIA	The State of Australian Cities Key Dates Final papers due 31 OCT 2011
29 November – 2 December "NEW"	Suva, Fiji	Pacific GIS&RS Conference 2011 Since the first Pacific GIS&RS Conference in 1999, this annual event has attracted a lot of participants from as far as the Americas to the sunny islands most of us call home. Each year the range of GIS&RS technologies presented cover an array of applications including the management of resources of the small island Pacific nations. Shallow water bathymetry derived from satellite imagery, forest function maps to identify areas for to be protected, areas identified for developments in flood zones are some of the applications where the development of GIS&RS in the region have been applied in various sectors. As with previous conferences, there are no fees levied for those wishing to attend. Donations however are graciously accepted. This year's theme is Data Sharing, Better Mapping! Send presentation title by 15 September 2011. Abstracts due by 2 November 2011.
December 2011		
5 - 7 December	Hue City, Vietnam	The 9th International Conference on Advances in Mobile Computing and Multimedia (MoMM2011) 15 July 2011: Full Papers (8 pages), Short papers, Demos and work in progress (5 pages) 15 September 2011: Acceptance Notification 15 October 2011: Camera-Ready Papers and Authors Registration The submitted papers should not exceed 8 pages and must follow the ACM guidelines. Contact
6 - 9 December "NEW"	Singapore	18th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-18) PDF Brochure APRSAF serves as an active forum to promote concrete cooperative space-related activities at the regional, Asia-Pacific level. APRSAF also aims to expand the peaceful uses of space technologies and their applications for sustainable development of countries in the region. APRSAF-18 is being jointly organized by the Singapore Space and Technology Association (SSTA), Centre for Remote Imaging, Sensing and Processing (CRISP) of the National University of Singapore, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan and the Japan Aerospace Exploration Agency (JAXA).
11 – 14	Abu Dhabi, UAE	CALL FOR PAPERS



January 2012		Secured Transactions (ICITST-2011) The ICITST is an international refereed conference dedicated to the advancement of the theory and practical implementation of secured Internet transactions and to fostering discussions on information technology evolution. The ICITST aims to provide a highly professional and comparative academic research forum that promotes collaborative excellence between academia and industry. Full Paper Submission Date: June 30, 2011 Extended Abstract (Work in Progress) Submission: July 31 Early Registration Deadline (Authors only): September 30, 2011 Late Registration Deadline (Authors only): November 15, 2011 Participants Registration: May 01 to December 01, 2011 For more details
10 – 12 January	University of BC, Vancouver, Canada	Eighth International Conference on Environmental, Cultural, Economic and Social Sustainability.
16 – 18 January	UCLA, Los Angeles, USA	EIGHTH INTERNATIONAL CONFERENCE ON TECHNOLOGY, KNOWLEDGE AND SOCIETY Presenters may choose to submit written papers for publication in the fully refereed International Journal of Technology, Knowledge and Society. If you are unable to attend the conference in person, virtual registrations are also available which allow you to submit a paper for refereeing and possible publication in this fully refereed academic Journal. The deadline for the next round in the call for papers (a title and short abstract) is 14 June 2011.
April 2012		
11 - 13 April	Lancaster, UK	Call for Papers, GISRUK2012, Lancaster University, 2012 We are pleased to invite you to submit short (~1500 word) papers for the 20th annual GIS Research UK conference (GISRUK). We welcome papers covering all aspects of theoretical and applied GIS research, particularly those within the following themes: • Environmental Geoinformatics • Open-Source GI • Web2.0 • Qualitative GIS • Spatial Ecology • Health • Emergency Response • Landscape Visualisation • Geospatial Semantics • Location-Based Services • Remote Sensing and Photogrammetry The closing date for submissions is 25th November 2011. All papers will be subject to peer review with accepted papers allocated to oral and poster sessions accordingly. Conference proceedings including all papers accepted for oral and poster presentation will be made available as a free e-book (with ISBN) and as hardcopy for purchase via http://www.lulu.com . The conference will be proceeded by a Open Source GeoSpatial software workshop and a Young Researchers Forum commencing on Tuesday 10th April 2012. The keynote speakers for the conference will be: - Pete Atkinson, University of Southampton, UK - Mei-Po Kwan, Ohio State University, USA - Tyler Mitchell, Executive Director, OSGeo, USA



May 2012		For more information and submission details please visit the conference website: http://www.lancs.ac.uk/gisruk2012 or contact members of the local organising committee via gisruk2012@lancs.ac.uk . We look forward to receiving your submissions and welcoming you to Lancaster in 2012.
May 2012	0 1 2 0'1	2040 Jaint World Conference
13-17 May	Quebec City, Canada	2012 Joint World Conference GSDI 13 and Canadian Geomatics Conference (CCC) hosted by GEOIDE Network GSDI 13 invites presentations/papers covering the full range of practice, development and research experiences that advance the practice and theory of spatial data infrastructure development and spatial enablement of society. GSDI 13 will support three primary forms of publication: (1) a normal conference proceedings with abstracts and full articles (non-refereed and refereed), published on a CD, (2) a pre-conference published book of fully refereed articles, and (3) a post-conference special edition of the International Journal of Spatial Data Infrastructures Research (IJSDIR) with full articles selected from the proceedings and then fully refereed and revised after the conference.
August 2012		
25 August – 1 September	Melbourne, Australia	XXII International Society for Photogrammetry & Remote Sensing Congress Email: isprs2012@icms.com.au
October 2012		
	Morocco	10th biennial International Conference of the African Association of Remote Sensing of the Environment (AARSE)
2014		
	Malaysia	Malaysia will be hosting the (International Federation of Surveyors) FIG Congress in 2014. The decision was taken at the recently concluded FIG Congress 2010 in Sydney, Australia.

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

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

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