



Spatial Data Infrastructure - Asia and the Pacific Newsletter



SDI-Asia/Pacific Newsletter

March 2007

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Spatial Data Infrastructure – Asia and the Pacific (SDI-AP) is a free electronic newsletter for people interested in GIS, remote sensing, and data management issues in Asia and the Pacific. It aims to raise awareness and provide useful information to strengthen national SDI initiatives and support synchronization of regional activities. The Permanent Committee on Geographic Information for Asia and the Pacific ([PCGIAP](#)) is a regional forum that is promoting SDI development. The newsletter is sponsored and prepared by the Global Spatial Data Infrastructure Association ([GSDI](#)) with input from PCGIAP.

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

If you have news or information related to GIS, remote sensing, and spatial data infrastructure that you would like to highlight (e.g., workshop announcements, publications, reports, websites of interest, etc.), kindly send us the materials by the 25th of the each month to chan@usgs.gov, sdi-ap@gsdi.org, so that we can include the items in the next newsletter.

PLEASE share this newsletter with colleagues and encourage them to subscribe themselves.

Back issues of the newsletter are at the GSDI website: <http://www.gsdi.org/newsletters.asp>
Best regards, Changsup Han, Editor, chan@usgs.gov.



Input to this Issue

Thank you to Kate Lance, ITC (USA/the Netherlands), Markku Villikka (FIG Director), and Dong-Kyu Kim (Korea National Geographic Information Institute) for their contributions to the issues of this Newsletter.

Have you signed up for the [GSDI News List](#)? It only takes a minute, and then GSDI can alert you of special news and announcements, and you will be notified when a new issue of the SDI-AP newsletter is available. The GSDI Association also hosts an [SDI-AP Discussion List](#) with intermittent announcements.

SDI News, Links, Papers, Presentations

[5 year plan for precise level of the geoid development plan of Korea](#)

[Korean National Geographic Information Institute](#) (NGII) announced the 5 years plan for precise (cm) level Geoid Development on 1 February 2007. In order to provide consumers with more precise geoid data the Institute have established physical yearly plan as below to build it through 2007 to 2011.

- FY 2007 Land gravity survey (1200 points on Bench Mark : Lacoste & Romberg and Scintrex relative gravimeter)
- FY 2008 Absolute gravimeter(FG5, A10) introduction and set up 20 absolute gravity points nationwide, Land gravity survey (1200 points on Bench Mark : relative gravimeter)
- FY 2009 Aerial gravity survey with US NRL. (\$1 million), Land gravity survey (1367 points on Bench Mark), GPS leveling on BM (570 points, 1st order nat'l BM : 4hour gps observation)
- FY2010 GPS leveling on BM (570 points, 1st order nat'l BM : 4hour gps observation)
- FY2011 Final Geoid model production research project (\$ 300,000), Method : Hybrid Geoid model (Land gravity + Air gravity survey + GPS leveling(1,140points) +Grace gravity)

For more information contact Dong-Kyu Kim (International Program Officer, NGII), kbruce74@mocet.go.kr

[Metadata Project of the Coordinating Committee for Geoscience Programmes in East and Southeast Asia \(CCOP\)](#)

The CCOP Metadata Clearinghouse is now up on the web. At a workshop held 5-7 September 2006 in Guangzhou, China, the CCOP Metadata Working Group discussed on the updates and progress of the CCOP Metadata Project. The metadata on geological maps is near to its completion. More data from China,



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Japan, Korea, Thailand and Vietnam are available at the [clearinghouse](#). As of the workshop date, the total number of metadata records available at the clearinghouse was 4,115. The [metadata workshop](#) was combined with a CCOP-CGS-GSJ/AIST Seminar on Geoinformation Technology. Twenty-three participants from the CCOP Member Countries joined the activity. The CCOP Metadata Project is a joint cooperative project on the development of the CCOP Metadata System of the Member Countries. In close cooperation between the Member Countries, Cooperating Countries and Organizations the project addresses the following:

- ✓ To seek the location database of the information in each country for the advanced utilization of geological publications.
- ✓ CCOP countries jointly own and mutually exchange some of these information under XML standardization of metadata through the internet
- ✓ To introduce the distributed system of the metadata clearinghouse for the information's whereabouts
- ✓ To promote and to collect literature and map index database in CCOP countries
- ✓ To collect and report the map names with the location of organizations at countries, to convert the source index metadata to XML format for the interoperable data exchange and to introduce the compatible and distributed clearinghouse system in each country
- ✓ To develop the system of accessible scanned map images in the internet
- ✓ To develop seamless geological maps from the scale, resolution and geometric projection to get standardization of boundaries, symbols, colors, legend, and categories to be identical in a map system.

UNDPs Project to Promote Policies for Open Computing Standards in Asia-Pacific Countries

Dr. Emmanuel C. Lallana, former Commissioner of the Philippines Commission on Information and Communications Technology joined UNDP Asia-Pacific Development Information Program (UNDP-APDIP) as Project Adviser of the Government Interoperability Frameworks (GIFs) Project. The GIFs Project is a joint initiative of UNDP-APDIP, IBM, Oracle and the International Open Source Network. It aims to help Asia-Pacific countries share and create strategies, blueprints and policies for adopting the right blend of open standards and technology services. The goal will be for more countries to develop universally compatible applications and networks to make internal and external government services and transactions more automatic, affordable, efficient and service-oriented. According to Dr. Lallana; "The GIF Project meets a growing global interest in interoperability using open standards, recently demonstrated by the submission by 20 government's National Bodies to the International Organization for Standardization (ISO) expressing concerns on a standard." As Project Adviser, Dr. Lallana, in coordination with UNDP-APDIPs Program Coordinator, will manage the overall research work and ensure the timely implementation of the project's activities. Specifically, he will be responsible for leading the review of existing GIFs, the convening of a study group on GIFs, and the writing and publication of a step-by-step guide on GIF formulation and policy recommendations for countries interested in developing their own GIFs. For more information on the GIFs Project, please visit <http://www.apdip.net/projects/gif>

Comprehensive data infrastructure for National Capital Territory (NCT) Delhi, India

The Department of Science & Technology, Survey of India (SOI) and the Ministry of Urban Development (MOUD), have come together to make the data based on 3D city model available to the city of Delhi. They decided to put their combined efforts to see that data starts flowing after nine months and for the NCT Delhi, it is completed within three years. A research project was commissioned by Department of Science & Technology (DST) for creating a 3D city model of Chandni Chowk area of Delhi for various purposes including detection of illegal constructions. The project was carried out jointly by DST and the Russian Academy of Sciences. This database will be a major resource in disaster management, utilities management and even enhanced property tax collection besides security management. The data created was completed unclassified as it has been collected by non-metric cameras and freely available satellite imagery from the Quick bird. The project is estimated to cost over Rs. 100 crores, which would soon be recovered by way of enhanced revenue collection.

Indian Arrangements to Change the Mapping policy

In a keynote presentation to the Map World Forum in Hyderabad, India's minister of science, Kapil Sibal, outlined the importance for the industry of new government initiatives. They are likely to have ramifications far beyond the borders of India. Among the most momentous is a scaling back of military control of the map making process. New regulations posted in 2005 divided Indian's maps into military and civilian series, with



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different rules of access for each. Now, in a major departure, the government says it will allow private survey firms access to Indian skies. Private companies from India and other countries will now be able to undertake aerial survey work. New Zealand Aerial Mapping announced a joint venture with Genesys Pvt of Hyderabad, to undertake such mapping work. It is believed this is the first project under the new rules. A team from the Australian-based AAMHatch was present Map World, as were teams from European and North American service providers. The minister said that the changes were necessary because of its ambitious development plans. At the moment, he said, the demands of mapping the country to the level required are beyond the resources of government. Private/public partnerships would be a major part of the future industrial landscape in the country, he added. One consequence of all this is that the demand for local geographic data will explode. India may well change from being a net exporter of GIS skills to being an importer. With much work to be done, and so few skilled people, this seems inevitable.

[Europe and China collaborate on methods of monitoring the Earth's vegetation](#)

Links between European and Chinese scientists were further strengthened when they met Florence, Italy recently to discuss issues relating to monitoring the Earth's vegetation by means of multi-angular hyperspectral remote sensing, in combination with measurements of emission of radiation by soil and vegetation. Monitoring the Earth's vegetation from space is very important in terms of learning more about the state of the planet, the carbon cycle and the impact that a changing climate may be having. The proposed technique of monitoring vegetation by way of multi-angular hyperspectral remote sensing makes use of solar-reflected sunlight, its spectral change due to various constituents present in plants in combination with its directional dependence on canopy structure. The spectrometer's multiangular view, which records the reflected sunlight in many narrow bands covering the visible and near-infrared spectral range, would also contain information about the structure of the vegetation canopy – an important variable for describing processes within the vegetation and its interaction with the atmosphere. Future possible cooperation and collaboration was discussed at length at the workshop and pilot projects identified – the next phase of the DRAGON Programme would provide the ideal framework for this. The Dragon Programme is an initiative jointly undertaken by ESA, China's Ministry of Science and Technology (MOST) and the National Remote Sensing Centre of China (NRSCC) to encourage increased exploitation of ESA Earth Observation satellite data within China as well as stimulate increased scientific co-operation in the field of Earth Observation science and technology between China and Europe. There are currently 16 Dragon projects including agricultural and forest monitoring, water resource assessment, atmospheric chemistry, terrain measurement, the ocean environment and climate change, among others.

[Malaysia's trying to develop a flood hazard mapping system](#)

Malaysia will seek help from Japanese experts to develop a flood hazard mapping system which will enable the country to forecast the effects of global warming. Natural Resource and Environment Deputy Minister Datuk S. Sothinathan said the system will enable the government to predict the worst case scenario of flood disasters in 50 to 100 years due to climate change that had already taken its toll globally. "This will be a guide for future action on how to organise action during flood, the location of the relief centres and the best route to reach the disaster area" since floods have been one of the most devastating natural disasters in East and Southeast Asia. "It can also be a guide for land development. If the areas are likely to be flooded, we can advice the state governments not to develop the area. In case they want to develop the area, then they must have a contingency plan in case there is flood," he told reporters after launching the "East and Southeast Asia Regional Seminar On Flood Hazard Mapping" here. The three day seminar was organised by the International Centre for Water Hazard and Risk Management of the Japan's Public Works Research Institute and was attended by more than 50 participants from eight countries.

[Satellite images show river pollution threatening Great Barrier Reef](#), Australia

The remotely sensed images, taken from February 9 to 13 this year, challenge conventional thought that sediment traveling from our river systems into the GBR is captured by the long shore current and travels no more than 10 to 15km offshore, affecting only the inner Great Barrier Reef Lagoon and the inner reef corals. Images captured by CSIRO show large plumes of terrestrial material following unconventional patterns and traveling quite fast as far as 65 to 130km, to the outer reef and, in some instances, traveling along the outer reef and re-entering the reef. The plumes are the result of heavy rainfalls in northern QLD around late January to early February 2007, with the resulting flood waters carrying a larger sediment load than during regular rainfall and river flow. As such floods have not occurred for a while the accumulated material in the creeks and rivers coupled with increased sediment runoff from the land is causing a significant transport of terrestrial material to all areas of the affected reefs and reef waters. Managers of the GBR have long been



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examining the effects of run-off of sediments, including pesticides, herbicides and fertilizers, on the reef corals. The images challenge the traditional school of hydrological modeling, which says sediment plume movement in the mid to northern GBR usually, goes north and never directly flow to the outer reef is spared the direct effects of such river floods.

[China to launch "Haiyang-1B" \(Ocean 1B\) in April](#)

China will launch the country's second-generation oceanic survey satellite, "Haiyang-1B" (Ocean 1B), this April. The country's second oceanic satellite "C "Haiyang-1B" (Ocean 1B) - is the successor of "Haiyang-1A" (Ocean 1A), which was launched in 2002. The surveying ability of "Haiyang-1B" has been improved greatly from the first-generation model, and its data collection capacity has doubled, said Jiang Xingwei, director of the National Satellite Ocean Application Service. He also noted that both the satellites and the earth system were designed domestically. To improve satellites' capacity to survey the ocean environment and ocean resources, the earth system is being expanded. China's State Council has endorsed plans to launch "Haiyang-2" (Ocean 2), which shows that ocean survey satellites are now considered important civil satellites. The "Haiyang-2" (Ocean 2) series of satellites would be used to collect data on offshore wind fields, ocean circulation, tides, and sea surface temperatures.

[ICIMOD inaugurated its country office in Afghanistan](#)

At the request of the Government of Afghanistan, ICIMOD inaugurated its country office in Afghanistan, located at the Ministry of Agriculture and Irrigation, Department of Forest, Kabul, on 11 February 2007. In his inaugural speech, the Honourable Minister of Agriculture and Irrigation, Obaidullah Ramin, described the establishment of an ICIMOD country office as "an important and valuable step for Afghanistan at this critical stage in its history." The Minister stressed the importance of food security and addressing sustainable livelihood issues, and welcomed ICIMOD's cooperation along these areas. He emphasized the importance of mobilizing the support of ICIMOD and other international agencies in implementing Afghanistan's Agricultural Master Plan. The Minister identified water and soil conservation, desertification, and deforestation, as the other critical areas for potential collaboration. The Minister expressed a desire for his country to learn from ICIMOD's over two decades of experience in forestry and forest protection. The Honourable Minister also noted with appreciation that H. E. Ghulam Mostafa Jawad, Deputy Minister, Ministry of Agriculture and Irrigation, is Afghanistan's representative to the ICIMOD Board of Governors and its current Chair for 2007.

GIS Tools, Software, Data

[Asian Multilingual Thesaurus of Geosciences \(AMTG\)](#)

With financial support from the French Ministry of Foreign Affairs and UNESCO, the Coordinating Committee for Geoscience Programmes in East and Southeast Asia (CCOP) has produced an Asian Multilingual Thesaurus of Geosciences (AMTG). The AMTG was conceptualized during the bibliographic phase of the South-East Asian Network for a Geological Information System (SANGIS) to facilitate information exchanges in different languages in the CCOP region. This printed AMTG is based on the 5,867 geoscientific terms in English and French in the Multilingual Thesaurus of Geoscience of the International Union of Geological Sciences/Commission on the Management and Application of Geoscience Information (IUGS/COGEOINFO) and the International Council for Scientific and Technical Information (ICSTI) translated to the Khmer, Chinese, Indonesian, Japanese, Korean, Lao, Malaysian, Thai and Vietnamese languages. This will be a very valuable international reference in geoscience that can promote greater use of geoscience knowledge by the community as well as facilitating sharing, exchange and enhancing geoscience knowledge and cooperation.

[OGC® Seeks Comment on Observations & Measurements Specification](#)

The members of the Open Geospatial Consortium, Inc. (OGC) have approved the candidate OpenGIS® Observations & Measurements (O&M) Specification for release for a thirty day public comment period. The document can be downloaded from <http://www.opengeospatial.org/standards/requests/37>. The O&M candidate specification describes a framework and encoding for measurements and observations. This framework is required specifically for use by other OGC standards known as the OGC Sensor Web Enablement (SWE) capability as well as for general support for OGC compliant systems dealing in technical measurements in science and engineering. The aim is to define a number of terms used for measurements, and the relationships between them. This document discusses observation, measurement, result, procedure, feature of interest, observed property, phenomenon, coverage and related terms, presented using UML class diagrams and in equivalent OGC Geography Markup Language (GML) conformant XML serializations. The



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scope of the specification covers observations and measurements whose results may be quantities, categories, temporal and geometry values, coverages, and composites and arrays of any of these.

[NGA releases new document: "Geospatial Intelligence Standards: Enabling a Common Vision"](#)

The National Geospatial-Intelligence Agency (NGA), USA has issued a new document that provides guidance and direction to develop an overall baseline for common geospatial standards used to share, manipulate, and exploit digital geospatial data. The document, "[Geospatial Intelligence Standards: Enabling a Common Vision](#)" outlines the standards that will be used in the National System for Geospatial-Intelligence (NSG). The NSG is the combination of technology, policies, capabilities, doctrine, activities, people, data and communities necessary to produce geospatial intelligence (GEOINT) in an integrated multi-intelligence, multi-domain environment. NGA's position on standards for the GEOINT community parallels a growing policy direction developing across the defense and intelligence community as well as across many other communities of interest around the world. The movement is towards a greater mandate for open, standards-based interoperable technology solutions.

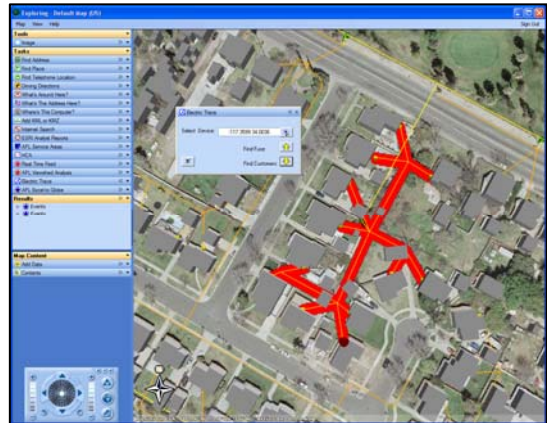
[MapWindow GIS I - Shapefile Viewing](#), Free Tool

It one of the best open source shapefile viewers and editors out there, and has many other useful functions. In addition, GIS novices might find this series useful as a general introduction to GIS programs, since it covers some of the basic operations applicable to other GIS programs as well. The first screencasts will cover basic shapefile viewing operations in MapWindow, including:

- ✓ Opening a shapefile
- ✓ Moving layers in the display stack
- ✓ Zooming and panning
- ✓ Changing generic shapefile display parameters
- ✓ Changing display parameters for a shapefile based on attribute data
- ✓ Setting dynamic extents for shapefile data

[First Service-Oriented Architecture GIS for Developers](#)

[ArcGIS 9.2](#) software recently released by ESRI is a powerful [developer](#) technology designed to support [service-oriented architecture \(SOA\)](#) systems. SOA focuses on an approach that supports heterogeneous, loosely coupled services. ArcGIS supports this environment by providing a complete set of spatial tools for the [desktop](#), [server](#), [mobile devices](#), and Web that is combined with robust Application Development Frameworks (ADF) for .NET and Java. Many organizations face the challenge of reacting to frequently changing [business](#) requirements while trying to increase productivity and reduce costs. GIS provides the visualization and analysis that help illustrate relationships, connections, and patterns that are not necessarily obvious in any one dataset, enabling organizations to make better decisions based on all relevant factors. ArcGIS 9.2 meets those needs with enhanced functionality, fine-grained objects, and extensive documentation, allowing quicker, easier, and cost-efficient development of mapping and sophisticated [geographic information system \(GIS\)](#) analysis applications.



[Availability of digital maps for Saudi Arabia and Egypt](#)

The availability of digital maps for Saudi Arabia and Egypt, bringing the number of countries that Tele Atlas maps cover to 64 across six continents released by Tele Atlas (FSE: TA6, EUNV: TA), a global provider of digital maps and dynamic content for navigation and location. The total amount of road coverage in the company's database now stands at 21.3 million kilometers or 13.2 million miles, the same number of miles as 528 trips around the earth's circumference at the equator. Tele Atlas digital maps feature detailed street-level and complete interconnecting road networks to allow application developers and device manufacturers in the personal navigation, automotive, Internet and wireless markets to guide users seamlessly across country borders. The announcement follows Tele Atlas' recent move to deliver digital maps covering Central and Eastern Europe and South Africa, and is in response to increased demand from global customers for highly detailed and accurate maps of all major countries around the world.



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[Next Generation Geospatial Technology - GDSK Geoplatform: Enterprise GIS Online Demo](#)

The online demo of the GIS platform GDSK GEOPLATFORM is available at <http://www.gdsk.biz/index.htm?go=demo>. Detailed technical information is accessible at GDSK Knowledge Base <http://www.gdsk.biz/index.htm?go=kbase>. The following components are available at the demo:

- ✓ GDSK GISPORTAL: Web portal for accessing heterogeneous GIS services.
- ✓ GDSK MAPVIEWER: Interactive viewer for vector maps with layer control, locator, filter, navigation, etc.
- ✓ GDSK GEOPLATFORM EDITOR: Vector geometry edition in the web browser.
- ✓ GDSK GEOPRINT SERVER: Printing services for GDSK MAPVIEWER.
- ✓ GDSK GEONET: Access to OGC WMS servers.

Introduction to GDSK GEOPLATFORM

- ✓ GDSK GEOPLATFORM is a platform designed for establishing enterprise GIS communities at the web. It includes portal services. Catalog, vector geometry edition, OGC/ISO support, shared information and multimedia objects. GDSK GEOPLATFORM contributes substantially to the success in GIS projects at institutions and corporations, simplifies the access to GIS technologies and offers the lowest [TCO](#) in the market for this type of infrastructure.

GDSK GEOPLATFORM allows:

- ✓ Distributed and federated GIS infrastructures. Includes load balancing, replication mechanisms, and permits advanced topologies of Web servers, RDBMS and storing devices ([SAN](#)).
- ✓ Simplification of the installation, management and maintenance of a GIS. For instance, the server installation is executed in 15 minutes, geometry is imported from GML or SHP files, and object catalog is administrated at the web. There is no need of installing the products at client machines.
- ✓ Integration with ERP or CRM. The SQL spatial views permit distributed queries between systems to link easily geometry at GDSK SPATIAL with attribute tables at SAP or other ERPs. These mechanisms do not modify business' tables and improves the performance and organization of backups.
- ✓ Shared massive storage in [relational database](#). The capacities of RDBMS' referring to data's integrity, speed of process and/or access, native indexes and others, as physic partition of files, are seized to the maximum.

GDSK GEOPLATFORM supports the following standards/recommendations:

- ✓ Internet: HTTP/S, HTML, XML, XSLT
- ✓ Service-Oriented Architecture
- ✓ GIS: GML, WMS, recommendations and reference models from Open Geospatial Consortium
- ✓ ISO: SQL/MM
- ✓ Topological analysis based in DE-9IM

[CGIAR-CSI GeoNetwork Beta Version now ONLINE](#)

The CGIAR-CSI GeoNetwork Project is intended to facilitate a friendly and free geospatial data-sharing platform for the CGIAR system and members for the [CGIAR-CSI Consortium](#). GeoNetwork allows scientists and researchers to easily disseminate geospatial data that has been created and developed by at the various CGIAR Centers, and affiliated organizations. GeoNetwork is a standardized and decentralized spatial information management environment, designed to enable access to geo-referenced databases, cartographic products and related metadata from a variety of sources, enhancing the spatial information exchange and sharing between organizations and their audience, using the capacities of the internet. This approach of geographic information management aims at facilitating a wide community of spatial information users to have easy and timely access to available spatial data and to existing thematic maps that might support informed decision making.

Geospatial Research, Applications, Reference Material

[Developments in remote sensing, GIS, GPS exploited to safeguard of the Indian borders](#)

The Border Security Force (BSF) would soon be making use of remote sensing and digital technologies to improve intelligence curb infiltration and protect sensitive installations. "Remote sensing and satellite technologies have become an essential part of security world wide, particularly in the field of defense," BSF director general A K Mitra said. Mitra said this while inaugurating a two-day training program on 'Remote sensing and geographic information systems (GIS) technology' for BSF officers organized by the Centre for



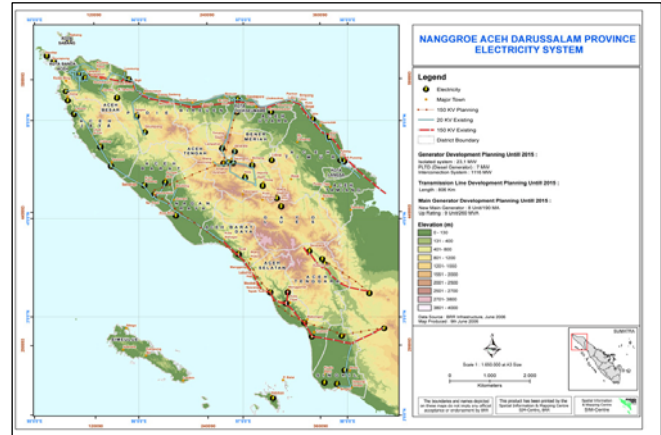
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Disaster Management studies under the aegis of Guru Gobind Singh Indraprastha University. The BSF chief said India is a huge country sharing more than 14,000 km of border with six neighboring nations.

[GIS Assists Recovery Efforts in Post-Tsunami Indonesia](#)

The Spatial Information and Mapping Centre (SIM-Centre) of [Badan Rehabilitasi dan Rekonstruksi \(BRR\)](#) NAD-Nias in Aceh Province, Sumatra, Indonesia, is using ESRI [geographic information system \(GIS\)](#) software to support the activities of [humanitarian](#) agencies rebuilding after the 2004 Indian Ocean tsunami. SIM-Centre is actively building sustainable GIS capacity in the [government](#) through the creation of an online [data](#) catalog, [training](#) local personnel in GIS technology, and creating a [spatial data infrastructure \(SDI\)](#). SIM-Centre has standardized with ESRI [ArcGIS](#), an integrated collection of software products for building a complete GIS. ArcGIS enables users to deploy [mapping](#) and spatial analysis wherever it is needed on [desktops](#), on [servers](#), in custom applications, over the Internet, and in the field. SIM-Centre has created and supports a GIS user group and GIS consortium to advance the use of GIS in the area. Currently, the GIS consortium is creating a customized training manual for ArcGIS written in Bahasa Indonesian and based on Aceh Province datasets.



[Location, Jan-Feb 07](#)

The magazine, Location Jan-Feb 07, has published. The main contents are:

- ✓ [TechWatch](#)
- ✓ [GPS Augmentation Systems](#)
- ✓ [US National Space-Based Positioning, Navigation And Timing Policy](#)
- ✓ [The European EGNOS Project: Mission, Program and System Description](#)
- ✓ [Quasi-Zenith Satellite System: Status and Design](#)
- ✓ [Modeling of Indian Ionosphere for GNSS Augmentation Systems](#)
- ✓ [Monitoring the Position Integrity in Road Transport: Using SBAS/EGNOS and Communication Issues](#)
- ✓ [SBAS With Ground-Based Atomic Reference Station](#)



[Mumbai Police Implement Incident Command and Control System](#)

Mumbai Police, responsible for policing the vast metropolitan area of Mumbai, one of the largest metropolitan areas in the world and home to over 16 million people, has implemented the Intergraph Corporation's Incident Command and Control System. The implementation of the Intergraph system was announced by the Honorable Deputy Chief Minister R. R. Patil along with the Commissioner of Police A. N. Roy, at the modernized Police Main Control Room in Mumbai. The Command and Control System serves as the foundational technology for the security systems of high-value assets and critical infrastructure in the public safety, government and transportation industries. As the core technology for these security systems, Intergraph's software captures, analyzes, organizes, and shares intelligent information to provide a common operational picture to the intelligence and first-responder communities to more effectively prevent and respond to critical incidents. The Command and Control System, as implemented by Intergraph's Indian distributor, Rolta India Limited, provides Mumbai Police force with the ability to quickly identify the location of a fixed line to Dial 100 emergency call, on a map of Mumbai city. The system also provides detailed information of any emergency event. While the emergency call details are being registered, operators can also quickly locate the nearest police patrol vehicle to the reported incident site with help of this location-aware technology. The solution helps Police Control Room officials to immediately alert the closest patrol teams in the field to improve reaction time to any emergency incident and further better its services to the public. Mumbai Police under the leadership of their present commissioner, Mr. A. N. Roy, are continuously upgrading themselves with the latest in the technology, to provide quality service the citizens.

Training Opportunities



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[Geoinformatics Center \(GIC\) of Asian Institute of Technology \(AIT\)'s Training Courses](#), Klong Luang, Thailand

[Geoinformatics Center](#) has undertaken a number of natural resources and environment related projects in Bangladesh, Cambodia, Indonesia, Lao PDR, Nepal, Phillipines, Sri Lanka, Thailand and Vietnam. It has carried out many training programs, workshops and conferences drawing participants from more than 25 countries within the Asia-Pacific Region.

- ✓ [Basic Course in Remote Sensing and GIS](#) (2weeks): 17 Apr – 28 Apr
- ✓ [Remote Sensing and GIS for Disaster Risk Assessment](#) (2weeks): 15 May – 26 May
- ✓ [Remote Sensing and GIS for Watershed Management](#) (2weeks): 05 Jun – 16 Jun
- ✓ [Remote Sensing and GIS for Land Resources Management](#) (2weeks): 17 Jul – 28 Jul
- ✓ [Poverty Mapping \(with applications of GIS\)](#) (2weeks): To be announced
- ✓ [Applications of GPS for Positioning and Navigation](#) (2weeks): Course available on demand

[GeoDATA 2007: FREE Educational Seminars Lighting the Way to GI](#)

Training 4 GIS - the training and consultancy division of The Geoinformation Group - announced that it is offering its fifth national GeoDATA seminar series showcasing geographic data and the benefits they bring to those within both the public and private sectors. Due to the popularity of this educational seminar series, GeoDATA has become an annual fixture encouraging anyone interested in learning more about the availability, management and application of geographic data and related technologies. The 1-day seminars are accredited by The Association of Geographic Information and are worth four CPD points towards the Chartered Geographer (GIS) status. The series will commence in Birmingham on 15 May followed by Edinburgh on 17 May, London on 22 May and Leeds on 24 May 2007. The seminar content will include a mix of presentations and tutorials focusing on working practices and the latest technologies, and applications for service delivery. Topics will include: Intelligent Mapping, The Digital National Framework, Mapping and GIS Software, Applications of Geoscience Data, Chartered Geographer GIS, Integrating CAD and GIS for cartography and 3D modeling, living in a 3D World, Strong and prosperous communities. Further event details can be found at: www.training4gis.com

[12th Post-graduate Course in Remote Sensing and GIS](#), October 1, 2007 to June 30, 2008 (9 months), Dehradun, India

The course, offered by the Centre for Space Science and Technology Education in Asia and the Pacific, is directed towards university educators and researchers and to natural resources and environmental management professionals and specialists. Nominations are invited from candidates in countries of Asia and the Pacific Region. For the current course, Government of India (GOI) has offered to bear the course fee of US \$6000 per participant of the Asia-Pacific region selected by the Centre. GOI has offered a limited number of Fellowships consisting of living expenses in India, book allowance, and local tour expenses. The Centre is trying to obtain financial assistance for international travel for a limited number of participants of the Asia-Pacific region Deadline: [15 May 2007](#).

[Indian Institute of Remote Sensing Training Course Calendar 2007](#), Dehradun, India

- ✓ Certificate Course(4 months): Basic Photogrammetry & Remote Sensing, GIS in Geosciences, Land Information System, GIS in Soils & Landuse Planning, GIS in Water Resources Management, GIS in Coastal Zone Management, etc.
- ✓ Diploma Course(10 months): Geosciences, Digital Photogrammetry, Post Graduate Diploma in Geoinformatics, PG Diploma in "Geo-Hazards" 3 Optional streams : Hydrometeorological/ Geological/ Environmental, etc.
- ✓ M.Tech.: M.Tech. in RS & GIS in all the disciplines of the above Post Graduate Diploma Courses except D-DP
- ✓ M.Sc.; M. Sc. in Geoinformatics , M. Sc. in Geo-Hazards
- ✓ Orientation Course: Orientation Course in any area of Natural Resource Management, Environmental Assessment and Disaster Management
- ✓ Awareness Course: Awareness course on "Geo-Hazards", Overview for decision makers
- ✓ NNRMS - ISRO Sponsored courses : for University Faculty only
- ✓ International Programs: [Short Course on Remote Sensing with special emphasis on Digital Image Processing](#), [Short Course on Geoinformatics](#)

[Intergraph Mapping and Geospatial 2007 Training Schedule in Australia](#)



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Intergraph Mapping and Geospatial 2007 Training in Australia will be available at 3 cities, Melbourne, Brisbane, and Perth throughout 2007. Contact: Gordon Sumerling, anztraining@intergraph.com.

Flemish Interuniversity Council (VLIR) Short Training Initiative program, the Katholieke Universiteit Leuven in Belgium

With support of the Flemish Interuniversity Council (VLIR) through its Short Training Initiative program, the Spatial Applications Division of the Katholieke Universiteit Leuven in Belgium (SADL/K.U.Leuven) offers a two-week English spoken training on Land evaluation with Open Source Geomatics tools with emphasis on the GRASS for Windows software. The training will take place from 27 August to 7 September 2007 in Leuven, Belgium. Training program:

- 1 week program: 27 August 2007 – 2 September 2007, Concepts, functionalities and land evaluation applications of GIS. Illustrations and hands-on exercises using GRASS for Windows
- 2 weeks program: 3 September 2007 – 7 September 2007, Concepts, functionalities and applications of earth remote sensing and image processing in the context of land evaluation with GIS. Illustrations and hands-on exercises using GRASS for Windows

Application deadline: 30th March 2007, Contact: Stefaan Vande Walle, stefaan.vandewalle@sadl.kuleuven.be

Sweden National Land Survey's International Training Program

Lantmäteriet, the National Land Survey in cooperation with Swedesurvey, announce a new International Training Program in "Urban Land Administration". The Program targets middle management professionals working with Land, Housing and Settlement (National, Regional or Local bodies), Urban Development and Planning (City Councils), Survey and Mapping, Informal Settlements (NGOs) and similar organizations. The main aim of the program is to initiate change processes via projects which will develop methods and tools for management of real property rights, information on land, land use and urban and rural planning to the benefit of the society as a whole but especially to dis-advantaged groups and women within this group. The whole program consists of two phases (which cannot be attended separately) and an intermediate interactive period. The Swedish International Development Cooperation Agency will cover all training cost (lectures, documentation, study tours, accommodation, board and lodging). Phase 1: Gavle, Sweden, 3-28 September 2007, Phase 2: Ulaanbaatar, Mongolia, 19-29 May 2008. Application deadline: 2 May 2007. Contact: gerd.lindroos@swedesurvey.se

MENRIS Training Courses

MENRIS(Mountain Environment natural Resources' Information Systems) organizes and conducts regional and national level training courses on applications of geo-informatics on various issues related to mountain development for scientists, professionals, managers, and many others from partner institutions. The theme of the trainings are related to natural resources management, environmental management, agricultural land use planning, disaster management, water resources and urban planning. A variety of training programs are periodically conducted to achieve our objective of promoting spatial tools and techniques within the Hindu Kush Himalayan Region (HKH). The mode of the training courses is through a combination of lectures, workshops, extensive practical exercises, and a field trip. Courses are designed to:

- ✓ Increase the knowledge of GIS and remote sensing concepts.
- ✓ Develop practical skills in geographical data capture, storage, management, analysis, manipulation and output.
- ✓ Apply the concepts and knowledge to various applications in the respective fields related to mountain development issues.
- ✓ Train university teachers and educators who could produce the multiplier effect of their training in their institutions.
- ✓ Assist collaborating partner institutions over the long-term to establish centers for Geo-Informatics that are specifically designed to address the research, training and environmental education as per their needs.

After identifying the problems and the need of partner institutions, MENRIS organizes following three types of training courses: Regional Level Training Courses, National Level Training Courses, Tailor-made Training Courses

Funding Opportunities, Awards, Support

URISA's Exemplary Systems in Government (ESIG) Award



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The Exemplary Systems In Government Awards, inaugurated in 1980 by the Urban and Regional Information Systems Association, recognize extraordinary achievement by government agencies in the use of automated information systems. This achievement is defined as the effective application of computer technology that can be measured in terms of improved government services and increased benefits to citizens. The award competition is open to all public agencies at the federal, state/provincial, regional and local levels. ESIG Award winners are recognized in two separate categories:

- **Single Process Systems:** Systems in this category are outstanding and working examples of applying information system technology to automate a specific SINGLE process or operation involving one department or sub-unit of an agency. The system application results in extended and/or improved government services that are more efficient and/or save money.
- **Enterprise Systems:** Systems in this category are outstanding and working examples of using information systems technology in a multi-department environment as part of an integrated process. These systems exemplify effective use of technology yielding widespread improvements in the process (is) and/or service(s) involved and/or cost savings to the organization.

The deadline for submissions: April 2, 2007, Contact sgrams@urisa.org

[United Nations University \(UNU\) Internship Program](#)

The Purpose of the United Nations University (UNU) Internship Program is set forth as follows:

- ✓ To promote interaction and dialogue between young scholars and UNU.
- ✓ To provide support to activities within the UNU Centre.
- ✓ To familiarize interns with the research work and related activities of the UNU.

Applicants who are interested in doing an internship at the UNU in Tokyo should submit a duly completed [application form](#) accompanied by brief curriculum vitae and covering letter to the Chair of the Internship Committee of the UNU (Contact: mbox@hq.unu.edu). Applications are considered four times a year, at the end of January, April, July and October.

[Asian Scholarship Foundation \(ASF\)](#)

The Asian Scholarship Foundation (ASF) is funded by a grant from the Ford Foundation. Its office in Bangkok administers the ASIA Fellows Awards in the region with assistance from partner offices in Beijing, New Delhi, Manila, Hanoi, and Jakarta. The principal goal of the ASIA Fellows Awards is to increase the overall awareness of intellectual resources in the countries of Northeast, South and Southeast Asia and to contribute to the growth of long-range capabilities for cross-regional knowledge sharing. The ASIA Fellows Awards seek to develop regional expertise, establish a multilateral network of Asian specialists from many disciplines, professional fields and countries, stimulate interdisciplinary research and inter-societal comparison, and contribute to new developments within existing area studies communities. The awards offer opportunities for outstanding young and mid-career Asian scholars, and professionals to gain knowledge of the countries in the region and an understanding of the contexts that shape global and regional issues through research. They enable the awardees to conduct research in a participating Asian country for six to nine months. The proposed grant period must be between 6-9 months. Once awarded, a fellow is required to conduct research at the proposed host country throughout the grant period. Splitting of the grant period or conducting research in the applicant's own country during the proposed grant period is not allowed under any circumstances. While an applicant from South or Southeast Asia may propose a research project in a country within his/her own region, preference is given to applicants who propose to conduct research in a region of Asia other than their own (e.g., an award to an Indian scholar or professional for research in China). Applicants are required to start the award by the end of December 2007.

[Human Development Academic Fellowships 2007 for Asia Pacific](#)

The fellowships support Ph.D. students conducting research related to human development and gender. The research must focus on a well-defined aspect of human development under the theme selected for the year and can be theoretical, applied, policy-oriented, or a combination. It must amount to substantive contribution to human development thinking relevant to the region. A student selected for the UNDP Human Development Academic Fellowship for Asia-Pacific will be provided financial support of US \$ 10,000, which will be released two installments. Application deadline: March 15, 2007. Contact: Mr. Omar Siddique, omar.siddique@undp.org

[Applications for the UNU-IAS fellowship programs are now open](#)

UNU-IAS offers [PhD](#) and [Postdoctoral](#) fellowships beginning in October of each year, as well as the [JSPS-UNU Postdoctoral Fellowships](#), beginning in November. Applications for the UNU-IAS fellowship programs



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are now open. The closing date for the submission of applications is 25 April 2007. Fellowships are intended to complement and contribute to the Institute's research programs, and are aimed at providing young scientists, policy-makers, and developing country scholars with the opportunity to expand their intellectual vision beyond a single scientific field. Completed applications for ALL fellowships must reach UNU-IAS on or before the application deadline. Applications will only be considered if fully completed and all the required documentation has been received. Click [here](#) for more details about the application procedures. Contact: fellowships@ias.unu.edu

Employment Opportunities

[Assistant Professor in Geo-Information Technology](#), Hong Kong Polytechnic University, China

The appointee will be required to: (a) teach at both undergraduate and postgraduate levels; (b) supervise student projects and theses; (c) initiate, lead and participate in research activities; and (d) undertake relevant academic administrative duties. Applicants should: (a) have a doctoral degree in Geomatics, Computing or other related disciplines; (b) have several years of relevant teaching/research/practical and/or industrial experience; (c) have good record of research and scholarships; and (d) be able to demonstrate evidence of effective classroom teaching skills. Closing date: 30 April 2007, Contact: hrstaff@polyu.edu.hk

[GNSS Reference Station Support Engineer](#), Heerbrugg, Switzerland

Leica Geosystems' Networked Reference Station (NRS) solutions lead the market in the industry. To provide world wide information and support for our growing applications and projects concerning these products we are looking for a GNSS Reference Station Support Engineer. Duties & Responsibilities:

- ✓ Maintain a high level of application and technical expertise in current and prospective technologies used within the NRS Portfolio
- ✓ Provide technical second level support and expertise to specialists, sales representatives and customers
- ✓ Design and create training materials and support training courses
- ✓ Create user documentations, guides and manuals
- ✓ Provide input for product improvements and development
- ✓ Support with competitor analyses and in competitive benchmarks
- ✓ Maintain support information within a CRM system
- ✓ Networking with Leica NRS and GPS Specialists, Product and Project managers, Regional Sales Managers and Key Customers

Contact: jobs_se_engineering@leica-geosystems.com Closing date: Closing date: not indicated.

[Technical Writer](#), Sharjah, United Arab Emirates

ESRI Global Inc. is seeking for a Technical Writer who can coordinate with application development and project management teams to develop requirements, installation, design, and other project documentation, create and edit online help systems, user guides, and training materials for clients, assist project managers with estimating documentation hours for proposals, and guide and mentor junior technical writer and who as a B.A./B.S. degree in technical writing, English, journalism, computer science, GIS, or related field. Closing date: 15 April 2007, Contact: uaecareers@esri.com

[Remote Sensing Analyst](#), Visakhapatnam, India

Annova Technologies Pvt. Ltd. is seeking for a Remote Sensing Analyst who can work in parts of Georectification, Image Processing, Classification of Satellite images with Landuse Land Cover criteria. Job required knowledge/exposure to ERDAS, ESRI ArcGIS, ArcView, good knowledge on handling Satellite Images and a person who should have worked for at least 6 months in RS/Image Processing Projects. Closing date: 3 March 2007, Contact: resources@annova-tech.com

[GIS System Analyst and Developer](#), Riyadh, Saudi Arabia

SIR Technology is seeking for a GIS System Analyst and Developer who will be responsible for GIS Database editing, Digitization, Land base mapping, Geo-codingm Topology creation, etc. Remote Sensing Analysts will be responsible for image analyses, Geo-Rectification, Ortho-Rectification, Feature extraction, Feature Classification, etc. Applicant must have executed at least 4 large GIS projects, as Sr. Project Manager-GIS, at Metro level, State level and above Involving Digitisation, GIS Application Development, Land based records, Network Utilities, Satellite Imagery of Sub Meter Accuracy, Aerial



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Photography, DGPS, Asset Management, Digital Terrain Model, Disaster Management Applications, etc.
Closing date: 2 April 2007, Contact: info@sirsaudi.com

GIS Programmer and GIS Technician, Madinah, Saudi Arabia

SIR Technology is seeking for two GIS Programmer and one GIS Technician for Madinah Municipality GIS Project who has experience about GIS needed. Closing date: 2 April 2007, Contact: info@sirsaudi.com

Team Leaders - forest mapping, Hyderabad, India

GIPL in India is seeking for a Team Leader Post graduates / Graduates having experience of minimum 3 years in the field of forest mapping & DGPS survey. Closing date: 25 March 2007, Contact: Kumar, ysk_geo@yahoo.com

Post Doctoral Fellows, Indian Himalayan Region

Highly motivated, experienced ecologists/biologists are sought with a strong background in plant ecology/systematic/wildlife biology/remote sensing/GIS to work for duration of 12-18 months in the Indian Himalayan Region. A Doctoral degree in any field of environment with a minimum of 2-3 years experience will be preferred. Familiarity with mountain ecosystems and motivation to participate in varied projects and habitats is important. Candidates with proven track record of writing reports/research papers will have a strong chance. Responsibilities will include: organizing, collecting, and analyzing information/data (primary & secondary), carrying out different facets of fieldwork (assessments, surveys, monitoring, etc.), report writing, presenting findings at different academic and statutory forums. Excellent communication and writing skills are preferred. Applicants should send a cover letter, resume, and three references to: uspmkp@nus.edu.sg or abhaskar@cismhe.du.ac.in or by mail to : Professor M.K.Pandit, Director, CISMHE, University of Delhi, Academic Research Centre Building, Patel Marg, DELHI -110007. India. Deadline: 10 March 2007. [Source: Society for Conservation Biology]

Director General, IWMI, Colombo, Sri Lanka

The International Water Management Institute (IWMI) Board of Governors seeks a visionary leader for the position of Director General to guide IWMI in its mission to overcome key challenges relating to land, water, food, livelihoods, health and the environment faced by poor rural communities. Headquartered in Colombo, Sri Lanka, IWMI is a non-profit scientific organization engaged in collaborative research with partners in the North and South to develop tools and practices to help developing countries eradicate poverty and better manage their land and water resources. Candidates must have: PhD or experience equivalent, plus an established professional reputation in the natural or social sciences related to land and water resources; broad understanding of sustainable cross-sectoral land and water resources and the global issues affecting them; senior management experience in a research and training institution; preferably in a developing country other than the country of birth; Strong communication skills; demonstrated capacity to work collaboratively within a multidisciplinary, multicultural setting; extensive fundraising experience and familiarity with the relevant donor community; fluency in written and spoken English, with a knowledge of French desirable. Deadline: March 15, 2007.

Research Analyst, Washington, DC, USA (with travel to other countries)

[Locally recruited - no relocation expenses will be paid, but the position is open in terms of nationality; the position would have G4 visa status for foreign nationals] [International Food Policy Research Institute](#) (IFPRI)'s new strategic research theme on Global Change, hosted by the Environment and Production Technology Division (EPTD), seeks a skilled, conscientious and innovative GIS professional to support strategic, policy-focused research across a range of geographic scales from sub-national through to global. Current regional foci are Sub-Saharan Africa and South Asia, but the underlying perspectives on challenges and opportunities for poverty and hunger alleviation in developing countries are global. The successful candidate will perform the following duties:

- ✓ Document, catalogue, and manage a very large and growing collection of national, regional and global spatial data sets.
- ✓ Take the lead in articulating and implementing the spatial (primarily raster-based) analysis tasks required to generate the GIS-related technical outputs required to support the team's research.
- ✓ Develop tools within the ArcGIS environment to systematize routine GIS procedures required by the team including standardized query and retrieval options to generate datasets for biophysical and economic models. This will likely require a capacity to write database, object-oriented or procedural language code to manipulate large datasets for such specialized analytical functions.
- ✓ Prepare maps for research articles and reports



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- ✓ Together with IT (including WWW) specialists in IFPRI and the CGIAR contribute to the design and implementation of a capacity to share spatial data, analytical tools and analytical results through both the intranet and the internet.

Candidates should have a Master's level degree in a relevant discipline (e.g., geography, agricultural or environmental science, engineering or economics); have majored in the study and application of GIS (preferably including remote sensing), spatial analysis methods, and have considerable, proven expertise in the management and use of geographic information systems (GIS) using raster data, and in the quantitative/statistical analysis of large spatial datasets, preferably in the context of agricultural or environmental science; proficient and experienced in the use of an appropriate database, object-oriented, or procedural programming language supporting both the manipulation of large data bases (usually raster GIS files), and the utilization of spatial analytical programming tools such as GIS macro languages, MapObjects or ArcObjects. Deadline: March 12, 2007 or until filled.

[Vacancies at International Institute for Geo-Information Science and Earth Observation \(ITC\)](#)

The International Institute for Geo-Information Science and Earth Observation (ITC) develops and transfers knowledge on Geo-Information Management for Sustainable Development. ITC undertakes education, research and advisory services in earth observation and spatial information collection, analysis and management. ITC provide tools and methods for the exploitation and conservation of natural resources, particularly in developing countries. ITC has six scientific and several support departments. Current vacancies:

- ✓ [Technician](#) - Dept. of Water Resources (closing date: 15 March 2007)
- ✓ [Assistant Professor](#), Climate Models linkage to ecosystem, carbon, and land use modeling - Dept. of Natural Resources (closing date: 15 March 2007)
- ✓ [Assistant Professor](#), Strategic environmental assessment (SEA) and environmental impact assessment (EIA) - Dept. of Natural Resources (closing date: 15 March 2007)
- ✓ [Lecturer](#) - Dept. of Natural Resources (closing date: 15 March 2007)

Other

[ADB and Germany Launch Initiative to Address Asia's Urban Challenges](#)

ADB and the German Government launched a joint initiative that will help improve the lives of up to 200 million people in Asia's growing cities. The new Cities Development Initiative for Asia (CDIA), announced at the end of a conference on [Investing in Asia's Urban Future](#), will support local governments in implementing their urban development efforts. Partnering ADB in holding the meeting was the German Federal Ministry for Economic Cooperation and Development (BMZ). At the conference, more than 100 representatives of municipal, local, provincial and national agencies dealing with cities joined donors in finding new ways to improve the living conditions of the 1.6 billion people in Asia's cities. Among the clear messages to donors was the need for more flexibility in their approach to assisting city development and tailoring their investments to the needs of local communities. "Our goal is to bring about lasting improvements in the living conditions of the urban poor, to limit negative environmental consequences of urban growth, and to make use of cities' potential for national development," Karin Kortmann, Parliamentary State Secretary at the German Federal Ministry for Economic Cooperation and Development and ADB Governor for Germany, told the conference. Hailing the move as an important step forward, ADB Vice-President Ursula Schaefer-Preuss said CDIA would prove an innovative way to build new investments of up to \$10 billion in Asia's cities in sanitation, urban transport, waste management and other urban infrastructure.

Conferences, Events

Items newly added to this listing of events since the last SDI-AP issue are marked ***NEW***

Date	Location	Event
March 2007		
4-7 March	Las Vegas, US	11th Annual Integrating GIS & CAMA Conference Organized by URISA (Urban and Regional Information Systems Association)
4-8 March *NEW*	Sydney, Australia	AWA Ozwater 2007 Convention & Exhibition , Contact: quitz@bigpond.net.au
5-6 March	Gold Coast, Australia	SEQ Regional Plan Conference



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5-9 March	Kuala Lumpur, Malaysia	11th Annual CARIS User Group Conference and Educational Sessions Contact: caris2007@caris.com .
8-9 March	Melbourne, Victoria, Australia	Housing Congress 2007 , Contact: registration@informa.com.au
11-15 March	Sharjah, UAE	1st Pan-Arab Conference on Environmental Science & Technology , Contact: m.alomar@astf.net .
12-14 March	Dhaka, Bangladesh	International Conference on Water and Flood Management (ICWFM) Abstract deadline: <u>15 September 2006</u> .
13-16 March	Moscow, Russia	GEOFORM+ 2007
14 March * NEW *	New York, U.S.A	Geospatial Information Systems
14-15 March	Washington, DC, USA	4th International Bird Flu Summit
17 March * NEW *	Houston, U.S.A	Advances in Planetary Mapping 2007
19-20 March * NEW *	Baltimore, U.S.A	12th Annual Geographic Information Sciences Conference , Contact: jmorgan@towson.edu
21 March * NEW *	Brisbane, Australia	Digital Lodgement of Cadastral Survey Data
21-22 March	Sydney, Australia	CRCSI Workshop: Geophysical Image Processing Enquiries: training@crcsi.com.au
21-23 March	Singapore	3rd Asian Space conference Paper deadline: 6 November 2006.
27-30 March	Phuket, Thailand	Asia Modeling Symposium (ASM 2007) Deadline for papers/posters: November 17, 2006.
28-30 March	Victoria, Australia	Intergraph Australia User Conference 2007 - Security, Government & Infrastructure
28-31 March	Athens, Greece	FIG Commission 3 Annual Meeting and Workshop on Spatial Information Management towards Legalizing Informal Urban Development Contact: chryssyp@survey.ntua.gr .
April 2007		
1 April	Sydney, Australia	Mapping & 3D Information Extraction from High Resolution Sat. Imagery , Contact: training@crcsi.com.au
2-3 April	Sydney, Australia	Australian Water Summit Sydney 2007 , Contact: Shahida Sweeney, shahida@acevents.com.au
2-5 April	Amman, Jordan	6th International Symposium on Eastern Mediterranean Geology and 9th International Geological Conference of the Jordanian Geologists Association
4-6 April	Hong Kong, China	Location Asia 2007 , Contact: Email
9-11 April	Dubai, UAE	Map Middle East , Contact: info@mapmiddleeast.org
14 April * NEW *	Bangalore, India	The 14th Session of the Asia-Pacific Regional Space Agency Forum (APRSF-14)
16-18 April	Christchurch, New Zealand	23rd Population Census Conference 2007 , The conference will bring together the heads of the national statistical agencies in the Asia-Pacific region.
16-19 April	Ottawa, Canada	April 2007 OGC Technical Committee Meeting
17-20 April	Graz, Austria	Ingenieurvermessung 2007 - 15th International Course on Engineering Surveying
18-19 April	Moscow, Russia	Aerial and Satellite Methods and GIS in Silviculture and Forestry - 4th Russian Nation-Wide Conference , (with international inputs), Contact: nlm@smtp.ru .



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22-27 April * NEW *	Abu Dhabi, UAE	Mecom2007, The Middle East Communications Exhibition & Conference , Telecommunications & ICT Summit 2007
23-25 April	Al-Khobar, Saudi Arabia	2nd National GIS Symposium in Saudi Arabia Abstract deadline: <u>December 2, 2006</u> . Contact: info@saudigis.org .
23-27 April	Montreux, Switzerland	Envisat Symposium
25-27 April	Novosibirsk, Russia	GEO-SIBERIA 2007 The Third International Exhibition and Scientific Congress , E-mail: nenash@sibfair.ru and geo-sib@ssga.ru
May 2007		
2-6 May	Noumea, New Caledonia	GeoHab 2007 - Marine Benthic Habitats of the Pacific and Other Oceans: Status, Use, and Management , Contact: Yves LaFoy, yves.lafoy@gouv.nc , or Mary Power, mary@sopac.org . Abstract deadline: <u>31 January 2007</u> . Registration deadline: <u>28 February 2007</u> .
5-6 May	Tainan, Taiwan	4th International Conference on Planning and Design (ICPD) Abstract deadline: <u>1 November 2006</u>
5-9 May	Hanoi, Vietnam	5th International Conference on Research, Innovation & Vision for the Future (RIVF'07) Information & Communication Technologies
8-11 May	Aalborg, Denmark	10th AGILE International Conference on Geographic Information Science Deadline of full papers: <u>November 15, 2006</u> .
13-17 May	Hong Kong China	FIG Working Week 2007 Deadline for abstracts: <u>30 November 2006</u> . Deadline for full papers is <u>15 February 2007</u> .
14-18 May	Hobart, Tasmania, Australia	Spatial Sciences Institute Biennial International Conference Abstract deadline: <u>1 September 2006</u> .
15-18 May	Taipei, Taiwan	5th Taipei International Digital Earth Symposium - TIDES 2007 , Abstract deadline: <u>December 31, 2006</u> , Contact: derc@mail.pccu.edu.tw .
16-18 May	Istanbul, Turkey	ISPRS Commission VII WG2 & WG7 , Conference on Information Extraction from SAR and Optical Data, with Emphasis on Developing Countries, Contact: Conference Secretariat, isprs2007ist@itu.edu.tr
20-23 May	New Orleans, US	1st Annual URISA GIS in Public Health Conference , Organized by URISA (Urban and Regional Information Systems Association). Call for presentations will be published soon.
21-24 May	Nashville, TN, USA	Intergraph 2007
23-25 May	Toronto, Canada	3rd International Symposium on Geoinformation for Disaster Management (Gi4DM2007) Abstract deadline: <u>December 1, 2006</u> . Contact: Dr. Jonathan Li, junli@ryerson.ca . (Call for proposals)
27-29 May	St.Petersburg, Russia	International Workshop on Information Fusion and Geographical Information Systems (IF&GIS07) Organized by The research group of object-oriented geoinformation systems.
27 May- 9 June	Jerusalem, Israel	e-Gov International Practice Seminar
28-30 May	Saint Petersburg, Russia	14th Saint Petersburg International Conference on Integrated Navigation System Contact: elprib-onti@telros.net
28-31 May	Padova, Italy	5th International Symposium on Mobile Mapping Technology Organized by FIG Commission 5, IAG and ISPRS. Mobile Mapping Summer School 28 May 2007 and the 5 th MMT Symposium 29-31 May 2007. Contact: naser@geomatics.ucalgary.ca .



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June 2007		
2-9 June	Seoul, Korea	International Association for Impact Assessment Conference 2007 (IAIA07) , Abstract deadline: <u>January 31, 2007</u> .
3-6 June	St. Petersburg, Russia	International Conference on Globalisation of Landscape Architecture: issues for education and practice Contact: imelnichuk@peterlink.ru or ignatiem@lincoln.ac.nz . Abstract deadline: <u>November 1, 2006</u> .
6-8 June	Kuching, Sarawak, Malaysia	Rivers 2007: 2nd International Conference on Managing Rivers in the 21st Century Solutions Towards Sustainable River Basins Deadline for papers submission: <u>January 31, 2007</u> . Contact: rivers2007@gmail.com .
7-9 June * NEW *	Prague, Czech Republic	FIG Commission 2 Workshop – Scientia Est Potentia – Knowledge is Power
12-13 June * NEW *	Bangalore, India	Location India 2007, 3rd International Conference and Exhibition on Vehicle Tracking, Location Intelligence and Surveying
12-15 June	Seoul, Korea	13th PCGIAP Annual Meeting Contact: PCGIAP Secretariat: sec@pcgiap.org
12-18 June	Okinawa, Japan	21st Pacific Science Congress , Theme: Diversity and Change: Challenges and Opportunities for Managing Natural and Social Systems in Asia-Pacific. Abstract deadline: <u>January 15, 2007</u> . Contact: PSC Secretariat, pssc21@to.jim.u-ryukyu.ac.jp .
13-15 June	Enschede, Netherlands	WG II/7 Workshop 5th International Symposium on Spatial Data Quality Submission of abstract: <u>15 November 2006</u> , Early registration deadline: <u>15 March 2007</u> .
14-16 June	Istanbul, Turkey	RAST 2007 3rd International Conference on Recent Advances in Space Technologies , E-mail: yucel@nik.com.tr
16-19 June	San Diego, California	7th Annual ESRI Education User Conference
16-19 June	San Diego, California	5th Annual Survey and GIS Summit
18-21 June	San Diego, California	27th Annual ESRI International User Conference
20-27 June	Pacifico Yokohama, Japan	Geoinformation Forum Japan 2007 Contact: geoforum@jsurvey.jp .
27-28 June	Ulaanbaatar, Mongolia	Good Land Administration – Its Role in the Economic Development, Abstracts deadline: <u>February 28, 2007</u>
July 2007		
2-13 July	Perugia, Italy	IAG/IUGG Conference. IUGG XXIV General Assembly
4-6 July	Auckland, New Zealand	Pacific Asia Conference on Information Systems (PACIS) , Submission deadline: <u>March 3, 2007</u> .
5-7 July	Yokohama, Japan	Geoinformation Forum Japan 2007 , Contact: geoforum@jsurvey.jp
10-12 July	Kuching, Malaysia	5th International Conference on IT in Asia (CITA '07) , Theme: Social computing: engaging communities. Abstract deadline: extended to <u>December 31, 2006</u> .
10-13 July	Hong Kong	4th International Conference on Population Geographies Abstract deadline: <u>20 December 2006</u> .
15-20 July	Cambridge, England	Cambridge Conference for national mapping organisations
25 July	Christchurch, New Zealand	Transport 2007



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30 July – 4 August	Bangkok, Thailand	Asia Oceania Geosciences Society, 4th Annual Meeting , Abstract deadline: <u>15 February 2007</u> , Contact: info@asiaoceania.org
August 2007		
1-3 August	Beijing, China	7th International Workshop of Geographical Information System , Contact: iwgis@lreis.ac.cn
4-10 August	Moscow, Russia	XXIII ICA International Cartographic Conference Contact: info@icc2007.com . Abstract deadline: <u>December 15, 2006</u> .
12-14 August	Khanty-Mansiysk, Russia	INTERCARTO-INTERGIS 13 Sustainable Development of Territories: GIS Theory and Practice , Contact: syv@npc-monitoring.ru
15-21 August	Honiara, Solomon Islands	PacINET 2007 Deadline for registrations of interest: <u>April 30, 2007</u> . Contact: rajnesh.singh@gmail.com
18-24 August	Chun-cheon, Republic of Korea	9th Asian Urbanization Conference , Abstract deadline: <u>March 31, 2007</u> .
28-29 August	Urumchi, Xinjiang, China	ISPRS Workshop on Updating Geo-spatial Databases with Imagery & 5th ISPRS Workshop on DMGIS (1st call) Deadline for abstracts: <u>1 February 2007</u> . Deadline for extended abstracts: <u>February 1, 2007</u> . Contact: Dr. Jie JIANG, jjie@nsdi.gov.cn , jiangjie_263@263.net .
29 August - 1 September	Bakosurtanal; Jakarta	2nd Indonesian Geospatial Technology Exhibition
August	Beijing, China	7th International Workshop of Geographical Information Systems (IWGIS'07) , Deadline for papers: <u>January 1, 2007</u> .
September 2007		
3-6 September	Brisbane, Australia	10th International River Symposium and Environmental Flows Conference Abstract deadline: <u>31 January 2007</u> .
5-6 September * NEW *	Shangri-la, Hongkong	Location Asia 2007 , Contact: info@location.net.in
6-8 September * NEW *	Helsinki, Finland	Seminar on Compulsory Purchase and Compensation , Organised by FIG Commission 9.
8-11 September	Lijiang, China	1st International Symposium on Geospatial Health , Theme: Geospatial Health and Control of Fish-borne Parasites in Asia
10-13 September	Chengdu, China	The Fourth International Conference on Debris-Flow Hazards Mitigation Organized by ICIMOD. Call for papers (Submittal of manuscripts for peer review): <u>August 15, 2006</u> .
12-14 September	Warsaw, Poland	21st ENVIROINFO 2007 Environmental Informatics Meets Systems Research
17-18 September	Beijing, China	5th International Conference on Current and Future Trends in Bridge Design, Construction and Maintenance
17-23 September	Guangzhou and Three Gorges, China	2nd International Conference of GIS/RS in Hydrology, Water Resources and Environment (ICGRHWE'07) & 2nd International Symposium on Flood Forecasting and Management with GIS and Remote Sensing (FM2S'07) Abstract deadline: <u>March 31, 2007</u> . Contact: hydrolab@zsu.edu.cn .
19-21 September	Munich, Germany	Photogrammetric Image Analysis (PIA) 2007
19-23 September	Melbourne, Australia	2007 Conference on Spatial Information Theory (COSIT) Contact: Stephan Winter, winter@unimelb.edu.au .
21-24 September	Nanjing, China	APAC 2007: The Fourth International Conference on Asian and Pacific Coasts Abstract deadline: <u>December, 15, 2006</u> . Contact: jfge@nhri.cn .
24-27 September * NEW *	Victoria, Canada	2007 Free Open Source Software For Geospatial (FOSS4G) Conference



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25-27 September	Chengdu, China	WG VII/6+7 Joint Conference on Techniques & Applications of Optical & SAR Imagery Fusion 'Mapping without the Sun' Contact: Jixian Zhang, zhangjx@casm.ac.cn .
October 2007		
2-5 October	Quebec City, Canada	GeoCongress Quebec 2007 Histoire de voir le monde and General Assembly of the Federation des Geometres Francophones
7-12 October	Christchurch, New Zealand	NZIS/South East Asian Survey Conference (SEASC) / CASLE Conference Contact: email: nzis@surveyors.org.nz
16-19 October	Dongying City, China	3rd International Yellow River Forum (IYRF) Sustainable Water Resources Management and Delta Ecosystem Maintenance, Abstract deadline: <u>October 31, 2006</u> . Contact: iyrf@yellowriver.gov.cn .
22-24 October	Beijing, China	4th International Conference on Agriculture Statistics (ICAS-4) World Bank Fund Application for this Conference , Contact: icas4@stats.gov.cn .
28 October – 1 November	Perth, Western Australia	2nd IWA – ASPIRE , Contact: aspire@awa.asn.au
28 October – 2 November	Jaipur, Rajasthan, India	12th World Lakes Conference Contact: dalwani@taal2007.org , info@taal2007.org
28 October - 2 November	Christchurch, New Zealand	9th South-East Asian Survey Congress
November 2007		
6-8 November	Kuala Lumpur, Malaysia	International Symposium & Exhibition on Geoinformation/Global Navigation Satellite System (ISG/GNSS 2007) Contact: Dr. Md. Nor Kamaruddin, md.nor@fksq.utm.my
12-15 November * NEW *	San Jose, Costa Rica	6th FIG Regional Conference
12-16 November	Kuala Lumpur, Malaysia	28th Asian Conference on Remote Sensing (ACRS 2007) , Abstract deadline: <u>July 16, 2007</u> . Contact: acrs2007@macres.gov.my .
13-16 November	Kuala Lumpur, Malaysia	WG I/6 Workshop on Earth Observation Small Satellites for Remote Sensing Applications Contact: Mazlan Hashim, mazlan@fksq.utm.my
15-17 November	Riaydh, Saudi Arabia	WG VII/7 Workshop , Contact: Sultan Al Sultan, rsensing_2004@yahoo.com
24-26 November * NEW *	Kuwait	3rd Annual GIS Conference and Exhibition , Postponed from February to November.
27-29 November	Taipei, Taiwan	2007 Conference on Urban Disaster Reduction Abstract deadline: <u>31 March 2007</u>
December 2007		
4-6 December	Moscow, Russia	3rd International conference "Earth from space - The Most Effective Solutions" Contact: conference@scanex.ru . Abstract deadline: <u>September 20, 2007</u> .
January 2008		
January	Jinju, Korea	6th International Symposium on City Planning and Urban Management in Asian Countries
February 2008		
5-8 February	Sydney, Australia	Global Workshop on High Resolution Digital Soil Sensing & Mapping , Contact: viscarra-rossel@usyd.edu.au .
March 2008		
10-14 March	Perth, Australia	WALIS International Forum 2008 - Management of Geographic Information , Contact: David Lee Steere, davidls@walis.wa.gov.au .
June 2008		



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14-19 June	Stockholm, Sweden	<u>FIG XXXI General Assembly and Working Week</u> Contact: FIG Office, fig@fig.net .
July 2008		
1-5 July	Beijing, China	<u>Spatial Accuracy 2008</u> Contact: accuracy2008@spatial-accuracy.org .
3-11 July	Beijing, China	<u>XXI ISPRS Congress</u> Contact: Chen Jun, congressdirector@isprs2008-beijing.org .
3-11 July	Beijing, China	4th International Symposium on Geospatial Information for Disaster Management (Gi4DM 2008) , Contact: Sisi Zlatanova, s.zlatanova@otb.tudelft.nl .
September 2008		
29 September–3 October	Darwin, Australia	14th Australasian Remote Sensing & Photogrammetry Conference (ARSPC)
September (tbc)	Nanjing, China	4th World Urban Forum , Organized by UN-Habitat.
2010		
	Sydney, Australia	<u>International Federation of Surveyors (FIG) 2010</u> , Contact: info@isaust.org.au

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