Spatial Data Infrastructure-Latin America and the Caribbean (SDI-LAC) is a regional, monthly, and free, electronic newsletter from the Global Spatial Data Infrastructure Association (GSDI). It focuses on aspects related with Spatial Data Infrastructure, and on GIS, remote sensing, and data management issues, related with SDI in Latin America and the Caribbean. It aims to raise awareness, provide useful information to strengthen national SDI initiatives, and support synchronization of regional efforts.

The Pan-American Institute of Geography and History (PAIGH), member organization of GSDI, and the Permanent Committee on Geospatial Data Infrastructure for the Americas (PC-IDEA now UN-GGIM-Americas), promote SDI development in the region. The newsletter is prepared by PAIGH for GSDI.

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This SDI-LAC number highlights: The Global and Regional SDI section comprises notes on Endorsement of GEO for Another 10 Years and GSDI Statement at the GEO Geneva Ministerial Summit; The GeoSUR Elevation Profile; 1st-ever SERVIR Town Hall; The URISA GIS Caribbean Workshop; OGC ILAF Corner; Hydrogography Geospatial Data Management for Malaysia; Approval for SDI Implementation in Sri Lanka; and New Global Agreement on Disaster Risk by 2015. The IGS section includes comments on IGS Membership Renewal. The National SDI segment informs on the Provincial Map Server of Santa Cruz v3.1, Argentina; Bahamas’ SDI Programme Bill advanced in Parliament; Call for Technical Assistance on NSDI Policy, Belize; Course on SDI countrywide in Bolivia; Applications of Bogota’s Geodetic Network Supported by IDECA, Colombia; House of Guyana passes Bill to Regulate Land Surveying Profession; Approval of the Statistics and Geography 2014 Annual Program, Mexico; and the Venezuelan Cartography and Cadastre (CARCAVEN) Project. Articles and Publications of the month include SDI and the need for Society’s Education to Leverage Spatial Data; Testing OGC WFC Service Performance; Publication of MundoGEO 75 Journal (Brazil), the IDERA Newsletter 12 (Argentina), Geography Notebooks Journal vol. 23 no. 1 (Colombia), and Land Lines Magazine vol 26, no 1; Draft of 3rd volume of IPCC Trilogy; and the ADRC’s Natural Disasters Data Book 2012. Geospatial Research and Applications underline Lands & Survey service in Cayman Islands; The launch of Satellite CBERS-4 as priority for Brazil; New Caribbean Protected Areas Website; Blue Planet for an Integrated Atlantic Ocean Observing System (IAOOS); Measuring Sea Surface Temperatures with Satellites; Canada’s Multi-Agency Situational Awareness System (MASAS); Online Version of Seminal U.S. Atlas; and Global map to Predict Locations of Giant Earthquakes. The Training and Funding Opportunities section encompasses remarks on GeoSUR Training opportunities; New gvSIG-Training; The ISPRS Tracking and Imaging Challenge 2014; The Erasmus Scholarships 2014-15; and the ELOGeo Repository. Finally, several Events taking place in the Americas are listed in the last section.

Translation of SDI-LAC Portuguese is possible thanks to undergrad students Esrom A. Rissate Jr. and Caroline Martins, the geographer Alexandre Scussel, editorial assistant (MundoGEO) and cartographer engineers: Alison Galdino, Analyst (Navteq – Recife); Antonio J. Fazan, Analyst (AMS Kepler Engenharia de Sistemas); Annette Pic, MSc in Remote Sensing; Camila B. Guedes, Operations Department Advisor (DECEA); Edilce F. Burity, Technologist (IBGE/PE); Edmilson M. Volpi, Natural Resources Secretary in SP; Eduardo Freitas, editor (MundoGEO portal and magazine); Flávio Portifiori, Geoinformation Unit (ITEP); Juan Carlos G. Maman, consultant in Geoinformation Technology; Rodrigo Quirino Technologist (IBGE/RJ); Silvana Cambboi, Professor (UFPR); Silvane Paixão, GIS Project Coordinator; Tatiana Mendes, Professor ICT (Unesp); Verônica Azevedo, Analyst (Navteq Recife); Vivan Fernandes, Professor (UFBA). Under the coordination of Silvane Paixão and review of Eduardo Freitas.

Back issues of the newsletter are at the GSDI website: http://www.gsdi.org/newsletters.asp
Editor, Nancy Aguirre, Pan-American Institute of Geography and History (PAIGH), http://www.ipgh.org, cnaguirre@ipgh.org

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Thanks for their contributions to this SDI-LAC Newsletter issue to:

Carolann Albury  
Director of the Bahamas National GIS Centre, Bahamas

Frank Angulo  
Chairman of COVESIG 2012, Venezuela

Miguel-Angel Bernabé  
Technical University of Madrid, Spain

Santiago Borrero  
Secretary General, Pan-American Institute of Geography and History, PAIGH, Mexico

Arturo Brun-Martínez  
Architect, Colombia

Joan Capdevila-Subirana  
Regional Service of the National Geographic Institute in Catalunya, Spain

Maureen Clarke  
PUBLICATIONS Lincoln Institute of Land Policy, USA

Margherita Di Leo  
Scientific / technical project officer, European Commission - DG JRC, Institute for Environment and Sustainability (IES), Ispra, Italy

Dieter Fritsch  
Institute of Photogrammetry, University of Stuttgart, Germany

Lloyd Gardner  
Director, Ecotech Inc Limited, Jamaica

Kate Lance  
GSDI listserv moderator, USA

Roger Longhorn  
Communications Director, GSDI Association

John Williams Montoya  
Associate Professor, Coordinator of Graduate Studies in Geography, Editor of Geography Notebooks Journal, Department of Geography, National University, Colombia

Erin Roberts  
Marketing Coordinator, CARIS, USA

Luz Angela Rocha  
Professor, District University, Colombia

Imma Serra  
National Geographic Information Center, National Geographic Institute, Spain

Magdalena Stec  
22nd Cartographic School 2014, Poland

Claudia Stormoen  
FIG Office and Event Coordinator, Denmark

Neil Thompson  
Chairman, Geospatial Advancement, Canada

Eric van Praag  
Regional Coordinator, GeoSUR Program- CAF, Venezuela

Stephan Winter  
Professor, Discipline Leader, Geomatics, Department of Infrastructure Engineering, Melbourne School of Engineering, The University of Melbourne, Australia

GEO to Keep Unleashing the Power of Open Data Mandate Unanimously Endorsed for another 10 Years
Source: GEO Secretariat by way of Santiago Borrero
In Geneva on January 17, the Group on Earth Observations (GEO) received unanimous endorsement to unleash the power of open data for a second decade. There was agreement to continue building on the organization’s first 10 years of pioneering environmental advances, which are designed to improve the quality of life of people everywhere. Fueled by open data, GEO’s efforts are now evident in most regions of the world. GEO is comprised of 90 member nations, the European Commission and 77 Participating Organizations. “GEO is successfully meeting its mandate, which is to make data and other information open, accessible and easy to discover for decision makers around the world,” said Mr. Janez Potočnik, European Commissioner for the Environment. “GEO’s vision is now operational, a proven force for putting sound science to work across nine essential areas: agriculture, biodiversity, climate, disasters, ecosystems, energy, health, water and weather.” GEO’s mandate is to drive the interoperability of the many thousands of space-based, airborne and in situ Earth observations around the globe. Without concerted efforts to coordinate across diverse observations, these separate systems often yield just snapshot assessments, leading to gaps in scientific understanding and hampering data fusion in support of better decision making for society. GEO aims to fill such gaps by providing a comprehensive, more integrated picture of our changing Earth. GEO is accomplishing this by establishing a Global Earth Observation System of Systems, known as GEOSS, and a Portal through which data and
other information can be easily accessed at little or no cost. GEO-X Plenary and the Geneva Ministerial were held from 12 to 17 January 2014 in Geneva, Switzerland. More [here](#).

**GSDI Statement at the GEO Geneva Ministerial Summit**

Source: GSDI News

The GSDI Association is an organization with members from national governments, the private sector, non-governmental organizations, and academia that are developing Spatial Data Infrastructures (SDIs) around the globe. These infrastructures provide access to geospatial data, information, applications and technologies - for a variety of needs in the global community. The global geospatial community is comprised of over 2 million experts - which collect, process, and/or disseminate geospatial data, products, and services.

As a Participating Organization, GSDI would like to congratulate GEO on its 10th event and much advancement of its global initiatives and current work plan, which will help us to sustain our planet through integrated observations.

Since its conception GEO has demonstrated remarkable progress - as showcased by the events this week - especially through the many Side Events and the Exhibition, which illustrate concrete implementations supporting the societal benefit areas.

GSDI would like to highlight and commend the work of the GEO Data Sharing Working Group to support the ongoing implementation of the Data Sharing Principles. Real change will only come if these commitments are translated into national laws and in the business models of data providers. As many of the GSDI members are engaged in this activity, the GSDI Association supports the need for open access to geospatial data for economic growth driven by governments and the private sector resulting in improved transparency, more extensive citizen engagement, and better, more efficient science. For example, in the United States and Europe, the sharing of geospatial data is facilitated by a strong policy framework with their Open Data Policies, the COPERNICUS data policy, the INSPIRE directive, as well as the Public Sector Information directive and the Horizon 2020 program, that promote research and innovation.

As a Participating Organization, the GSDI Association wishes to update the GEO community worldwide on its specific actions and contributions in relation to the GEO goals and objectives. These include efforts to advance standards and policy frameworks in order to promote geospatial interoperability and innovative applications. GSDI has an active program to provide capacity building and resources to the GEO community including:

- The Geographic Information Knowledge Network ([www.giknet.org](http://www.giknet.org))

- Regional monthly SDI newsletters ([www.gsdi.org/newsletters](http://www.gsdi.org/newsletters)) that are disseminated electronically at no cost

- Regional SDI workshops and events including:
  - The “Global Geospatial Conference” ([www.gsdi.org/gsdi14](http://www.gsdi.org/gsdi14)) organized by the EIS-Africa and the GSDI Association in Addis Ababa, Ethiopia in November 2013 assembled over 500 participants from the African region, the global community and included the launch of AfriGEOSS.
  - The recent international workshop on “Geoinformation Networks for Societal and Commercial Acceptance of COPERNICUS” organized by GSDI member, European Umbrella Organization for Geographic Information (EUROGI), in Budapest, Hungary and hosted by Hungarian Association for Geoinformation (HUNAGI). The workshop resolution noted the need for involvement of the GI networks in Earth Observation programs and engagement in joint user events; and participants endorsed a COPERNICUS data policy providing free of charge and open access to Sentinel and other data including outputs from core services.
The “International NASA World Wind Europa Challenge” supported by the United Nations, NASA, European Commission Joint Research Centre (JRC), and others mobilized small and medium sized enterprises and universities to bring innovative solutions in earth observation. (http://eurochallenge.como.polimi.it/node/11)


• The GSDI Small Grants Program (www.gsdi.org/sic1) which has provided 104 grants in developing nations with financial resources and/or professional services from the GIS Corps of URISA.

• The annual capacity building program for three (3) professionals from developing nations by the International Center for Land Policy Studies and Training (ICLPST) through a two-week training seminar on ‘Geographical Information Systems and Land Management’.

During the past several years, GSDI members have provided their expertise and resources to support the development of GEOSS to advance our mutual interests. Additionally, the International Geospatial Society (IGS) (www.igeoss.org) was established in order to enhance communications globally among individuals that are actively involved in promoting, developing, and advancing SDI and related concepts.

GSDI looks forward to participating in additional GEO and GEOSS developments through strategic alliance to promote key cross-cutting solutions in data management, data quality, interoperability, standards, and capacity building. These opportunities will serve to provide integrated Earth Observations data and information to users and decision-makers in order to sustain our future.

The GSDI Association acknowledges the Geneva Declaration and its reaffirmations and commitments that believes are essential in fulfilling the purpose of GEOSS and Spatial Data Infrastructures.

**GeoSUR Elevation Profile**
Source: Eric van Praag

The model to generate elevation profiles, part of the GeoSUR Topographic Processing Service (TPS), is back on-line. This module was out of operation for a few months due to problems faced when migrating the GeoSUR Regional Map Service, where the TPS seats, to a new version of ArcGIS Server. You can view the model at http://www.geosur.info/map-viewer, option TOPOGRAPHIC MODELS in top menu. More information on the TPS at http://www.geosur.info/geosur/index.php/en/topographic-service. You can check videos explaining how it works in great detail at: http://www.geosur.info/geosur/index.php/en/geosurslibrary. The TPS also offers many more models that are fully open to the public: data extraction, aspect, shaded relief, color shaded relief, slope, slope classification, raindrop trace, watershed delineation, and viewed analysis. The TPS uses several DEMs for its analysis, including the SRTM 30-meter resolution DEM. All data and results of the analysis can be downloaded for free, including 30-meter resolution derivative datasets. Any comments you might have on this innovative tool are welcome.
SERVIR team members host first-ever SERVIR Town Hall
Source: https://www.servirglobal.net/

SERVIR Coordination Office and NASA Applied Sciences Program personnel as well as SERVIR Applied Sciences Team (AST) members converged in San Francisco for the Annual Fall Meeting of the American Geophysical Union (AGU) 9-13 December 2013. They hosted the first-ever AGU SERVIR Town Hall on the 11th, introducing SERVIR to a broader audience, sharing the Regional Visualization and Monitoring System’s (SERVIR) successes, and garnering feedback from the AGU community on tools, models, and applications that are important to them. “AGU was the perfect venue for our first town hall,” says SERVIR Project Director Dan Irwin. "It provided an opportunity to introduce SERVIR to a broader audience. We look forward to the opportunity to do this again.” The SERVIR Applied Sciences Team Annual Meeting took place on December 8. At this event, the entire AST shared their project progress and results and discussed potential collaborations with their projects in the SERVIR-Africa and SERVIR-Himalaya hub regions. More here.

URISA GIS Caribbean Regional Workshop in St Maarten
Source: URISA Caribbean Chapter

Countdown to St Maarten: http://countingdownto.com/countdown/447781#!
Official Workshop Site: http://www.urisa.org/chapters/caribbean-chapter/
If you want to learn more about modern cartography, the art of transforming your GIS implementation dollars into awesome returns or discuss and address key issues affecting GIS development in the region then you cannot afford to miss this workshop.
Why you should attend:
• Explore and Learn about the latest in Open Source/Web Mapping technologies and projects from the International Cartographic Association (ICA).
• With the advent of the latest trends and developments in web mapping, GIS users look toward leveraging free and open source technology (FOSS) as GIS budgets continues to shrink within organizations.
• Learn how to determine the Return on Investment (ROI) for your GIS project/program. This can assist in securing support and funding for your project/program.
• Collaborating on Open Source/ Web Mapping Ideas- provide feedback and take an active part in the development process.
• Participate in discussions on advancing GIS in the region as well as explore how to fully leverage GIS to meet your current and potential needs, from industry best practices to available regional support. Get the details as well as the bigger picture!

For more information regarding the workshop please contact URISA Caribbean at the following:
http://www.urisa.org/chapters/caribbean-chapter/ Contact: Valrie Grant: urisacaribbean@gmail.com
Find On: www.facebook.com/URISACaribbeanChapter
Go To: http://www.linkedin.com/groups/URISA-Caribbean-Chapter-5164777/about
Follow on: first go to: http://twitter.com/UrisaCaribbean / Connect using: @UrisaCaribbean
http://www.urisa.org/clientup

OGC ILAF Corner
Source: Imma Serra and Joan Capdevila
Did you know that ...

The Sensor Planning Service (SPS) Implementation Standard defines an interface to allocate and configure tasks to sensors in an interoperable way. Using SPS, you may reschedule or calibrate the sensors, initiate or change the duties of sensory systems. It also allows you to run and control simulation models, in addition to verify the feasibility of a tasking request. Information and functional operations are defined in the current version, SPS 2.0. Information operations include GetCapabilities, DescribeTasking, DescribeResultAccess, getTask, and GetStatus. Functional operations to manage sensory systems include GetFeasibility, Reserve, Confirm, Submit, Update and Cancel. With these operations, the standard defines five interfaces: BasicSensorPlanner, SensorProvider, ReservationManager, FeasibilityController, TaskUpdater, and Task Canceller that may be requested by the client and implemented by an SPS server. It also includes two interfaces, SWE Service Model Implementation Standard SensorProvider and SensorDescriptionManager. These interfaces include DescribeSensor and UpdateSensorDescription. From this version, OGC has developed a specific extension for programming Earth Observation sensor systems: SPS 2.0 Earth Observation Satellite Tasking Extension. For more information see the description of the specification http://www.opengeospatial.org/standards/sps.

OGC News
20 /01 Conference and Exhibition: Defence Geospatial Intelligence
More on OGC at the OGC Iberian and Latin American Forum webpage!

Hydrography Geospatial Data Management and Production System for Malaysia
Source: Erin Roberts
As the national hydrographic and charting authority in Malaysia, the Hydrographic Directorate of the Royal Malaysian Navy (HDMRN) has a mandate to collect measurements using modern techniques, and provide adequate and timely hydrographic information to support safety of navigation, national development, defense and security, and numerous other activities related to the use of Malaysia's marine environment. In order to achieve these goals in the most efficient manner, CARIS and local Alliance Partner OKENOS Sdn. Bhd. were selected to implement a Hydrographic Geospatial Data Management and Production System (HGDMPs) at the National Hydrographic Centre (NHC). The enterprise GIS, comprised of Bathy DataBASE and HPD, will allow NHC to increase organizational capability for the management of elevation datasets, production of multiple paper and electronic chart types from a single database source, and improve the sharing of spatial information through a Marine Spatial Data Infrastructure (MSDI). CARIS and OKENOS are very pleased to announce that NHC has taken final acceptance of the new system. For more information contact: Erin Roberts (erin.roberts@caris.com)
**Sri Lanka: Approval for Spatial Data Infrastructure Implementation**
Source: http://www.un-spider.org/
Recognizing geospatial information as an essential resource that supports the economic, social and environmental interests, the Survey Department of Sri Lanka has recently received a Cabinet approval to build the National Spatial Data Infrastructure (NSDI). The goal is to provide and integrate geographically-referenced data and make it easily accessible in a user-friendly online portal. An initial step is first to draft the policies, procedures and data standards necessary to foster the efficient use, management and production of geospatial information. “Once the policies are in place, we are looking at launching a geoportal so that citizens can easily access authoritative, consistent and updated maps online”, told P.M.P Udayakantha, Senior Assistant Secretary and Senior Deputy Surveyor General. “Furthermore, we are inspired by the journey undertaken by countries like Singapore, Malaysia and others. Everyone has the same challenges, so by learning from their experience we are able make our lives easier.” Read more at: FutureGov

**New Global Agreement on Disaster Risk Expected in 2015**
Source: http://www.un-spider.org/

The General Assembly confirmed that the 3rd World Conference on Disaster Risk Reduction will take place in Sendai City, Japan from **14 to 18 March** 2015. The main topic on the Conference will be the renewal and further development of the Hyogo Framework for Action which was adopted in 2005 in the aftermath of the Indian Ocean Tsunami disaster. UNISDR Chief Margareta Wahlström said “The 3rd World Conference provides us with a rare opportunity to forge universal agreement on how to build disaster resilience across all sectors of society.” The organizers expect more than 8,000 people to attend the Conference including government, private sector, science and NGO’s representatives. Read more: UNISDR

**Call for Papers: Geospatial Semantic Array Programming**
Source: Margherita Di Leo
“Earthzine”, an IEEE-sponsored online scientific journal, is soliciting articles of 800-3,000 words for its second quarter theme of 2014 on Geospatial Semantic Array Programming (GeoSemAP). Contributions are sought from all regions of the globe, addressing environmental transdisciplinary research in which a concise integration of array-based semantics and array programming, geospatial tools and a modular composition of data-transformation models are exploited for geospatial problems within the paradigm of Semantic Array Programming. This theme specifically focuses on wide-scale transdisciplinary modelling for environment (WSTMe) as a scientific challenge with an increasingly important role in allowing strategic policy-making to be effectively discussed and programmed with the support of robust science. See the call for paper at [http://www.earthzine.org/2013/12/18/call-for-papers-geospatial-semantic-array-programming/](http://www.earthzine.org/2013/12/18/call-for-papers-geospatial-semantic-array-programming/) and download it in PDF.
FIG Congress 2014 - Early Bird Registration has Opened
Source: Claudia Stormoen

Registration for the XXV International FIG Congress 2014 now has opened. For all details and a link to register, please visit: www.fig.net/fig2014/registration.htm. The Congress will take place on June 16-21 in Kuala Lumpur, Malaysia. The silver jubilee Congress will be a grand celebration. The FIG XXV Congress will be a culmination of the four-year FIG Work Plan as well as the start of a new 4-year term with a new FIG President who will be elected at the 2014 General Assembly. The celebration will be a mix of interesting plenary and technical sessions and workshops; a trade exhibition and a variety of side events and social functions, giving you a unique opportunity to discuss best practices within the surveying profession with fellow peers. The Kuala Lumpur 2014 FIG Congress should be of interest to participants from all over the world and will be a memorable experience. Read more at: www.fig.net/fig2014.

22nd Cartographic School
Source: Magdalena Stec
The organizing committee of the 22nd Cartographic School 2014 on “Geoinformatics and Atmospheric Science” invites you to attend this conference that will be held from May 6-9, 2014 in Walbrzych-Ksiaz, Poland. 22nd Cartographic School 2014 will bring together new ideas and leading experts in the fields of geoinformatics and broadly understood atmospheric science. The conference language is English. You will find all necessary information on website: http://www.cartoschool.uni.wroc.pl Contact: Dr. Malgorzata Wieczorek at kartografia@uni.wroc.pl.

IGS Reminders – Membership Renewal
Source: News from the GSDI Association and the International Geospatial Society

It is time to renew your membership in the International Geospatial Society (IGS). As a member you played a vital role in making the past year a great success.

Activities and Benefits

The International Geospatial Society (IGS) is the global society for geospatial specialists who want to affiliate with, help support, learn from and communicate with peer professionals across the world. Without the base financial support and volunteered personal time and effort of members the numerous activities in which IGS engages would not be possible. See a description of member benefits and the range of activities in which members have been engaged at http://www.igeoss.org/BenefitsOfJoining.
In terms of new initiatives, the organization was able to implement a program to allow geospatial specialists in developing nations to provide services in lieu of dues. Those services consist of providing or updating each year a personal professional profile in the geographic knowledge network. This effort has provided a much broader geographic distribution of representation in the organization. See the full list of members at http://www.igeoss.org/members.

We also expanded publication of GSDI and IGS Global News so it comes to you through email on a regular basis. The organization continues to advocate open access to geospatial conference proceedings, books, learning materials, newsletters and standards across global geospatial organizations to ensure that all are able to benefit from the resources being developed.

*Submitting your Dues or Maintaining Free Membership*

In order to renew your membership, please go to http://www.igeoss.org/join. In the event that you are a citizen of and live within a qualifying economically disadvantaged nation, the online membership application at http://www.igeoss.org/join will provide you with the option of applying for free membership in IGS. The primary obligation is to provide the URL link to your professional profile in the GIKNetwork.

*Information provided by Marilyn Gallant, GSDI Business Manager (mgallant@gsdi.org).*

ARGENTINA

**Provincial Map Server of Santa Cruz**

Source: http://spm.sitsantacruz.gob.ar/

The Provincial Map Server (SPMv3.1) is a web tool developed and managed by the Territorial Information System of the Province of Santa Cruz (SIT SantaCruz). The project is under the Ministry General Secretariat of the Government of Santa Cruz, through Undersecretary of Planning. It is based on free Geographic Information Systems (GIS) and designed to provide official geographic information of interest to support decision-making processes in the territory of the province of Santa Cruz (Patagonia, Argentina), and for public distribution. SPMv3.1 has been developed in cooperation between SIT Santa Cruz and the company ZonaGeo with funding from the Federal Investment Council (CFI, 2012-2014), through the Ministry of Production (in Spanish MINPRO) in the Province of Santa Cruz.
BAHAMAS

SDI Programme Bill in Bahamas
Source: Carolann Albury by way of Kate Lance

On 8th January 2014, Minister of the Environment and Housing, Hon. Kenred Dorsett, moved the Bahamas Spatial Data Infrastructure Programme (BSDI) Bill in the House of Assembly. Minister Dorsett said in his presentation that “the Bahamas Spatial Data Infrastructure Programme Bill provides policy statements and identifies initial core databases for the use of the BDSI System. The government of The Bahamas recognizes that direction must be given to providing an environment which fosters activities for using, managing and producing geographic data and applying standards, procedures and protocols in a coordinated manner.” More information: http://myplp.org/2014/01/08/dorsett-moves-bsdi-bill/ The Bahamas National GIS Centre, Nassau, Bahamas Website URL - http://www.bahamas.gov.bs/bngisc : Contact: carolannaalbury@bahamas.gov.bs

BELIZE

Consultancy - Technical Assistance for the National Spatial Data Infrastructure (NSDI) Policy
Source: http://jobs.aag.org/
The Government of Belize (GOB) has received financing from the International Bank for Reconstruction and Development (IBRD) toward the cost of a Project Preparation Facility of a Climate Resilient Infrastructure Project (CRIP) and intends to apply part of the proceeds of this financing towards consultant services for Technical Assistance for the National Spatial Data Infrastructure (NSDI) Policy. See more at: http://jobs.aag.org/jobseeker/job/16057326/#sthash.OVS3drah.dpuf. The terms of reference for the assignments can be viewed on-line at GOB’s official website http://www.belize.gov.bz; and at BSIF’s website http://www.sifbelize.org.

BOLIVIA

Course on SDI in La Paz, and the Departments of Beni, Chuquisaca, and Potosi
Source: http://geo.gob.bo/
GeoBolivia developed the presence stage of the course "Introduction to Spatial Data Infrastructures" on January 14 in La Paz, Bolivia. This course is being developed in the various departments of the national territory and includes four modules that make up the course based on the GeoBolivia virtual training platform. Participants next attended a face stage. Now GeoBolivia will give the online course to those interested in the Departments of Beni, Chuquisaca, and Potosi starting on February 3 for the three departments, and will finish this with an actual class in each capital city of the three Departments.
COLOMBIA

Applications of Bogotá’s Geodetic Network - Special Administrative District Unit for Cadaster
Source: http://www.ideal.gov.co/

Since 2011, the Special Land Registry Administrative Unit of Bogota District and the Colombian Geological Survey have advanced technical works in order to increase density of the Geodetic Network of Bogotá. Based on support provided from the Spatial Data Infrastructure of Bogota (in English IDECA) and the Operations Deputy, a constant materialization of new points has been achieved, for a total of forty (40) points to date being part of this important network in Bogotá. A pilot test currently began based on this information in order to establish a methodology that combines data from GEORED with policies on Geographic Information Production under the Bogota SDI and thus to contribute to quality improvement of the district mapping. Cartography of the District’s Cadaster is being used for implementation of the pilot test particularly over research areas previously defined by the Cadastral Information Management and IDECA Management offices, who based on technical conditions defined two research areas distributed in the Engativá and Horizontes Norte neighborhoods. Landmarks were built on these areas of interest - baseline data - as to irradiate coordinates obtained from GEORED and to calculate true cartographic positions by means of topographic processes.

GUYANA

House of Guyana passes Bill to Regulate Land Surveying Profession
Source: Kate Lance

Minister of Natural Resources and the Environment Mr. Robert Persaud has said that, given the growth in all sectors of the economy and competition for land (housing expansion, development of natural resources, etc.), the important role of land surveyors and land surveying cannot be understated. The minister made this point in the National Assembly during the debate on the Land Surveyors (Profession) Bill on January 16th, 2014. The Bill, which is a product of extensive consultations with relevant stakeholders including practitioners and the private sector, was passed with the unanimous support of the House. [...] The Bill seeks to establish a board of land surveyors that will be tasked with managing the profession. This Board will also be responsible for putting the necessary arrangements in place so as to ensure that land surveyors are properly trained and certified. Minister Persaud pointed out that there are lots of loopholes and often many individuals in this profession “get away with murder”. He said the ministry is looking to put an end to this, and will be putting in place a code of conduct, as well as associated penalties for practitioners who are found to be in breach of same.

MEXICO

Governing Board Approved Statistics and Geography 2014 Annual Program
Source: http://www.snieg.mx/

On December 10, 2013, the Board of Governors of the National Institute of Statistics and Geography (in Spanish INEGI) approved the Annual Program of Statistics and Geography (in Spanish PAEG) 2014, thus meeting the provisions of Articles 9 and 12 of Law of the National System of Statistical and Geographical Information. The PAEG 2014 consists of 188 specific activities and 275 deliverables, with 86% of these assigned to the National Information Subsystems and 14% to the INEGI as the Central Unit System Coordinator. In PAEG’s integration participated 27 State Units connected to 31 Specialized Technical Committees linked to the four National Information Subsystems of SNIEG. The Annual Program of Statistics and Geography 2014, can be accessed in the section: SNIEG Programs. See the Annual Program of Statistics and Geography (PAEG) 2014.
VENEZUELA

Project Support Venezuelan Cartography and Cadastre (Carcaven)
Source: http://www.igvsb.gob.ve/

In 2009, the Bolivarian Republic of Venezuela and the European Union signed a financing agreement (Carcaven DCI-ALA/2007/018-628), in order to provide the Geographic Institute of Venezuela “Simón Bolívar” (in Spanish IGVSB) with state of the art technological equipment and to equipping four (4) of its Regional Offices located in Lara, Guarico, Anzoategui and Barinas. The specific objective of the project was that the Carcaven IGVSB could advance in the country’s 153 municipalities: A Municipal Precise Geodetic Network, an Urban Mapping at 1:1000 scale in 142 population centers, 40,000 Cadastral surveys in 40 municipalities, and the strengthening of Institutional Building at the Central and Regional levels. To achieve these objectives professionals of the Geography, Cartography, and Cadastre Managements Offices, as well as the Office of Technology and Systems and other support offices participated.

Articles and Publications of the Month

Spatial Data Infrastructures, Spatially Enabled Society and the need for Society's Education to Leverage Spatial Data

By Sabine Hennig, Inga Gryl, Robert Vogler. Article under review for the International Journal of Spatial Data Infrastructure Research (IJSDIR)

Abstract: During the last years, SDI concepts have developed towards user-centric SDI initiatives, whose creation is strongly driven by user requirements. Closely related to (user-centric) SDIs is the vision of spatially enabled societies describing societies where access to and use of spatial data is regarded as relevant support for everyone to organize his activities. Both, user-centric SDI models and the concept of spatially enabled societies, focus on large and diverse user communities encompassing, besides public and private sector organizations, the general public as well. Although benefits of spatial data use for professional reasons are widely recognized, awareness on advantages for private life such as activities related to citizenship (civic duties and rights) has been raised only recently. Nevertheless, most citizens, as being non-professionals regarding spatial data use, face difficulties carrying out tasks related to the use of resources provided by a SDI. While capacity building is a long-established feature to ensure effective use for professionals, the need for citizens’ spatial education just recently became obvious. This asks, on the one hand, for the specification of skills and competencies required on the part of citizens to open up opportunities to benefit SDIs. On the other hand, suitable education initiatives addressing the general public are needed. Therefore, the spatial education approach “Spatial Citizenship” seems to be appropriate to train the general public. Relevant target groups are pupils/ students and adults (non-GI professionals), who demand for different education initiatives adjusted to their particular situation. According topics are discussed in this paper [The complete article may be found at: http://ijsdir.jrc.ec.europa.eu/index.php/ijsdir/article/view/336].
Testing OGC Web Feature and Coverage Service Performance: Towards Efficient Delivery of Geospatial Data


Abstract: OGC Web Feature Service (WFS) and Web Coverage Service (WCS) specifications allow interoperable access to distributed geospatial data made available through spatial data infrastructures (SDIs). To ensure that a service is sufficiently responsive to fulfill users’ expectations and requirements, performance of services must be measured and monitored to track latencies, bottlenecks, and errors that may negatively influence its overall quality. Despite the importance of data retrieval and access, little research has been published on this topic and mostly concentrates on the usability of services when integrating distributed data sources. Considering these issues, this paper extends and validates the FOSS4G approach to measure the server-side performance of different WFS and WCS services provided by various software implementations; and provides guidance to data providers looking to improve the quality of their services. Our results show that performance of tested implementations is generally satisfactory and memory tuning/data and storage optimization are essential to handle increased efficiency and reliability of services [The complete article may be found at: http://www.josis.org/index.php/josis].

MundoGEO 75
Fuente: http://mundogeo.com/
MundoGEO Magazine issue 75 includes an interesting article on the trends in geotechnology for this year, and expectations for growth and integration of the Latin American market.

Now Available IDERA Newsletter 12: December Special
Source: IDERA Broadcasting and Corporate Communications Working Group
IDERA Bulletin No. 12 for the month of December 2013 is now available. The IDERA Bulletin is a communication asset for the dissemination of news and content of interest to SDI community in Argentina. It informs on topics related to GIS, SDI, remote sensing and geospatial data management at global, regional, national and local levels. In issue 12 (December 2013), a message from Julio Benedetti stands out. You will also find news about provincial and local SDI initiatives. Among other novelties, downloadable resources and a calendar up to April 2014 are included. You may download the newsletter from the official IDERA website.

Geography Notebooks Journal
Source: John Williams G. Montoya
Is now available the Geography Notebooks Journal Volume 23 No. 1 (in Spanish Cuadernos de Geografía) for the first half of 2014. As usual, the Journal is first published in digital format and later in print. Digital version is available since January 2014 at: http://www.revistas.unal.edu.co/index.php/rcg/index

Land Lines
Source: Maureen Clarke
The January 2014 issue of the Land Lines quarterly magazine (vol. 26, no 1) is now posted here, which includes: Residential Wealth Distribution in Rio de Janeiro by David M. Vetter, Kaizô I. Beltrão, and Rosa M. R. Massena. In Brazil, residential structures represent about one-third of total net fixed capital, so their value is important for economic and social policy. This report asks, what generates residential wealth in Rio de Janeiro? How much residential wealth is there? Who holds it? Where is it located?

Other New Lincoln Institute Publications:
-Inking Made for Walking
-Arrested Developments: Combating Zombie Subdivisions and Other Excess Entitlements
-Implementing Value Capture in Latin America
**Next 15 Years Vital for Taming Warming**  
Source: http://www.brecorder.com/  
The next 15 years will be vital in determining whether global warming can be limited to $2^\circ$C ($3.6^\circ$F) by 2100, with energy and transport presenting the heftiest challenges, according to a draft UN report. "Delaying mitigation through 2030 will increase the challenges and reduce the options," warns a summary of the report. The draft is the third volume in a long-awaited trilogy by the Intergovernmental Panel on Climate Change (IPCC), a Nobel-winning group of scientists. Major efforts are needed to control the growth in carbon emissions for a good chance to limit warming to 2 degrees Celsius (3.6 degrees Fahrenheit) by 2100, says the summary. "It would entail global consumption losses of one to four percent in 2030, two to six percent in 2050 and two to 12 percent in 2100," the 29-page summary says. These costs do not factor in benefits, such as growth in new areas of the economy, or savings from avoiding some of the worst impacts of climate change. The estimates are based on the assumption that "all countries of the world" begin curbing carbon emissions immediately and that there are "well-functioning markets" to establish a single global price for carbon. The final version of the document is due to be thrashed out at a meeting in Berlin in April. The trilogy is the IPCC's long-awaited Fifth Assessment Report, the first great overview of the causes and effects of global warming, and options for dealing with it, since 2007. The draft document notes that global emissions of greenhouse gases surged by an average 2.2 percent per year between 2000 and 2010, compared to 1.3 percent per year over the entire 30-year period between 1970 and 2000.

**Asian Disaster Reduction Center publishes Natural Disasters Data Book 2012**  
Source: http://www.unspider.org/  
The Asian Disaster Reduction Center (ADRC), one of UN-SPIDER's Regional Support Offices, has published the Natural Disasters Data Book 2012. The document provides the statistical perspectives in figures and tables for 2012 as well as for the period 1983-2012. The main findings presented in the document include that 328 natural disasters occurred in 2012 worldwide, killing 10,783 people and affecting over 104 million people. The estimated amount of economic damage came close to US$142 billion. The Data Book 2012 also contains tables of the 25 worst disasters by number of people killed and total affected people, economic damage, and their respective ratios to population and gross domestic product. It also includes tables of 2012 disasters in ADRC member and other Asian countries sorted by country and disaster type. The data book is freely available online.

**Cayman Islands: Technology Enhances Lands & Survey Service**  
Source: Kate Lance  
Officials at the Lands and Survey Department said that it will be offering a faster, enhanced service as a result of a new web map application. Although the department has used geographical information systems to produce detailed maps, geographic data and web based interactive mapping services for some time, Caymap displays a vast array of information, and allows user searches that can produce broad, global views, or be refined to specific districts, neighborhoods and building lots. The end result is a more reliable, fast system, with advanced functionality which customers can also use on their mobile devices, officials said. Lands and Survey maps were also updated this year, with the acquisition of new aerial images that show detailed information of the islands. "Using base maps, the new application provides a seamless transition between historic aerials - images are available going as far back as 1999, and will go back to 1971 once the full system is available," officials said in a release about the new services. The Planning Department also has newly fine-tuned its applications for online services. IT recently launched an Online Planning System (OPS) – an inspection portal which shares data and links all users in real-time. It links common users like contractors, utility service...
providers and agencies such as the Fire Service, National Roads Authority, Department of the Environment and the Water Authority. With the click of a button on his/her tablet computer, a planning inspector in the field can now update information simultaneously while visiting a building site. Owners should also see cost savings from the government initiatives. With OPS now the hub for permits and inspections, there have already been marked improvements in inspector time gains, and up to 76% reduction in time for the contractor, reports Project Manager Charles Brown. More information at: www.caymanlandinfo.ky for more information on the Planning Department services, visit: www.Planning.gov.ky

The Launch of Satellite CBERS-4 will be a Priority for Brazil
Source: Arturo Brun-Martinez
The China-Brazil Earth Resources Satellite (CBERS-4), which had its launch scheduled for 2015, is one of the priorities of the Ministry of Science, Technology and Innovation (in Portuguese MCTI) of Brazil. “We are accelerating the schedule to compensate the fault occurred with CBERS-3,” said Minister Marco Antonio Raupp. In December 2013, the latest equipment developed by Brazil and China could not went into orbit due to rocket problems. According to Raupp, the continuity of Brazil’s Space Program is a crucial issue for the scientific world.

New Caribbean Protected Areas Website Launched
Source: Lloyd Gardner by way of Carib-coral-reefs list
The launch of ParksCaribbean (http://parkscaribbean.net), a new website dedicated to providing information on protected areas programming in the Caribbean. The website will function as a key information resource, providing general information for a wide audience, as well information and publications that can be utilized by decision makers and protected areas professionals for policy formulation and programme development. Contact: Lloyd Gardner info@parkscaribbean.net

Blue Planet Works Toward an Integrated Atlantic Ocean Observing System (IAOOS)
Source: http://www.sensorsandsystems.com/
"Oceans and Society: Blue Planet," a Group on Earth Observations (GEO) task, was featured at a GEO-X session to highlight work toward an Integrated Atlantic Ocean Observing System (IAOOS). The IAOOS is a recently launched initiative supported by GEO’s Blue Planet task. The project was presented at the 10th Plenary Session of the Group on Earth Observations (GEO-X) in a special side event. GEO-X was held on January 15-16 in Geneva, Switzerland. Read More - See more at: http://www.sensorsandsystems.com/news/headlines/32731-blue-planet-works-toward-an-integrated-atlantic-ocean-observing-system-iaaos.html#sthash.KsNnFQth.dpuf

Measuring Sea Surface Temperatures with Satellites
Source: http://www.un-spider.org/
With data from sensors such as the Thermal Infrared Sensor (TIRS) on NASA’s Landsat 8 satellite, experts can calculate sea surface temperatures without having to measure water temperatures on site. NASA’s Landsat team has produced this image of the surface temperatures in the Gulf Stream based on data input by the infrared bands of TIRS. “Infrared bands measure how much energy is emitted by the surface of the Earth at particular wavelengths,” said Matthew Montanaro, a researcher on NASA’s Landsat team. “We can calculate the surface temperature from these measurements through math and some modeling. Essentially, the higher the infrared signal measured, the higher temperature on the surface.” “For several locations around the world, however, there are floating buoys that can directly measure the sea temperature,” he added. “We can compare these buoy measurements with the TIRS image-derived temperatures and adjust our calibration to provide a more accurate temperature calculation for TIRS and other satellites.” Read more: NASA
Canada’s Multi-Agency Situational Awareness System
Source: http://ggim.un.org/
MASAS is a system-of-systems that facilitates the sharing of authoritative location-based situational awareness information, in near real-time, within Canada’s emergency management community. The system was built to overcome such challenges as limited capabilities to share information, (i.e. warning/alert information feeds) and promote a common understanding of disasters and emergencies amongst first responder (municipal, provincial, territorial and federal) emergency managers, and infrastructure operators that need to coordinate their response. MASAS is a system designed to act as a central hub for critical information, amalgamating data from a variety of sources and providing access to this data via integrated tools or data connections; MASAS can be accessed from desktop or mobile applications, thus improving communication and information flow; MASAS provides value through its ability to efficiently and effectively convey and portray real-time and near real-time information. More at: http://ggim.un.org/docs/Canada%20user%20case%20studies_Dec%202012.pdf

University Creates Online Version of U.S. atlas
Source: AAG SmartBrief January 2014
The Digital Scholarship Lab at the University of Richmond has created an enhanced version of the Atlas of the Historical Geography of the United States, which was published in 1932. The atlas, which took dozens of researchers to assemble, used maps to illustrate a variety of political, demographic and economic concepts. The atlas “covered so many topics that there’s really something for everyone,” said Robert Nelson, the Digital Scholarship Lab’s director. Paulin’s atlas online version has just been released by the University of Richmond’s Digital Scholarship Lab, bringing what some historians still consider a work of unsurpassed scope into the age of the iPad. Detailed information at: The New York Times (tiered subscription model)

Global Map Predicts Locations for Giant Earthquakes
Source: http://www.lagf.org/
A team of international researchers, led by Monash University’s Associate Professor Wouter Schellart, have developed a new global map of subduction zones, illustrating which ones are predicted to be capable of generating giant earthquakes and which ones are not. Doctor Schellart, of the School of Geosciences, and Professor Nick Rawlinson from the University of Aberdeen in Scotland used earthquake data going back to 1900 and data from subduction zones to map the main characteristics of all active subduction zones on Earth. They investigated if those subduction segments that have experienced a giant earthquake share commonalities in their physical, geometrical and geological properties. “For the Australian region subduction zones of particular significance are the Sunda subduction zone, running from the Andaman Islands along Sumatra and Java to Sumba, and the Hikurangi subduction segment offshore the east coast of the North Island of New Zealand. Our research predicts that these zones are capable of producing giant earthquakes,” said Doctor Schellart.
MINAM and MINAGRI Officials are Trained in Japan on the use of Remote Sensing Satellite Images
Source: Santiago Borrero

A group of officials from the ministries of Environment (in Spanish MINAM) and Agriculture (in Spanish MINAGRI) are in Japan to receive training on the latest technology applications and handling of satellite imagery and remote sensing tools, as part of technical assistance-not refundable donation that the Japanese government gave to Peru through the Forest Conservation Program. These important activities are intended to share the latest developments and applications in Japan regarding GIS, Remote Sensing and Satellite Imagery management. Officials will also visit key institutions such as the National Forestry Agency of Japan, the General Center for International Forestry Research and the Center for Geospatial Data in the island of Okinawa, which develop advanced methods for processing and analyzing large amounts of satellite imagery applied to environmental management. They will also visit the headquarters of Kokusai Kogyo Co. Ltd. main Japanese company dedicated to the application of geospatial information technologies where they will also receive training. The Peruvian delegation was received by Toru Nakatani, President of the Japan International Cooperation System (JICS), an organization that has been coordinating with MINAM and MINAGRI the donation process consisting also of satellite high-resolution imagery for the entire country, state of the art data servers and workstations for satellite data and map processing, GIS and remote sensing software, and satellite positioning equipment (GPS & GLONASS) among others, besides basic and specialized training for decision-makers. More information here.

GeoSUR Training Opportunities
Source: Eric van Praag
The GeoSUR Program offers the possibility to specialists from Latin America and the Caribbean to take advantage of training courses offered by ESRI on its Virtual Campus. Nominees should submit an email with the following information:
- Name of course
- Cost
- Name and coordinates of nominee
- Institution
- Justification (how the person plans to use the skills acquired)
Nominations should be sent to: Eric van Praag, Coordinator, GeoSUR Program evanpraag@caf.com. More information about the Virtual Campus on: http://training.esri.com/gateway/index.cfm. GeoSUR will cover the cost of any selected courses, once approval is provided. Petitions will be attended in the order in which they arrive to CAF.

New Call for gvSIG-raining Courses in Spanish and Portuguese
Source: gvSIG News Office
The Distance Training Platform gvSIG -Training announces the start of the registration process of the court of First Spanish and Portuguese Courses in 2014, as part of the gvSIG Association Certification Program offer. Restricted Registration (with Limited Quotas). By participating in any of these courses you may get gvSIG Certification Program credit that allows you to qualify for “gvSIG User” and “gvSIG Expert User” certification http://www.gvsig.com/servicios/certificacion/certificacion Contact: contacto@gvsig-training.com. For more information visit gvSIG Platform http://www.gvsig-training.com or write to: inscripciones@gvsig-training.com or info@gvsig-training.com.
The ISPRS Tracking and Imaging Challenge 2014: Call for Participation
Source: Stephan Winter

The ISPRS Tracking and Imaging Challenge 2014 (TIC’14), is aiming at stimulating research and creativity between communities such as image processing, spatial computing, and GIScience. TIC’14 is requiring that two types of data are linked in innovative ways, namely trajectory data as it is captured for example from mobile positioning sensors, smart cards, or e-tags, and image data as it is captured for example from tourist photos on Flickr, smartphones, CCTV, or car mounted cameras. You may even think of wearable computing. TIC’14 is on purpose broad and open to allow for unorthodox and novel applications and methods. For all the details please visit the TIC’14 website at [http://www2.isprs.org/commissions/comm2/wg8/tic.html](http://www2.isprs.org/commissions/comm2/wg8/tic.html). Submission deadline: **27 July 2014**. For any queries, please contact Stephan Winter, The University of Melbourne, Australia, winter@unimelb.edu.au; Monika Sester, Leibniz Universität Hannover, Germany, monika.sester@ikg.uni-hannover.de; and Alper Yilmaz, The Ohio State University, USA, yilmaz.15@osu.edu.

**Erasmus Course Scholarships 2014-2015**
Source: Arturo Brun-Martinez
The Call for available Erasmus scholarships for the academic year 2014-2015 is found here. Application deadline: **February 10, 2014**. You may also find additional international mobility programs including:
- Latin America, Caribbean and Europe (Smile-Magalhaes Program):
  Deadline: 14:00 h. **February 24**.
- Asia (Chinese-Hispanic Program):
  Deadline: 14:00 h. **February 25**.
- Developing Countries (PFC and Development Degree Program):
  Deadlines: **28 February 2014** and from **September 1 to 30, 2014**.

**The ELOGeo Repository**
Source: [http://elogeo.nottingham.ac.uk/](http://elogeo.nottingham.ac.uk/)

The digital repository of the ELOGeo Project is a digital service that collects, preserves, and distributes digital material about open geospatial data, software and standards, in order to facilitate the digital preservation and scholarly communication in the open geospatial community. More information are also available on the project website [http://elogeo.nottingham.ac.uk/](http://elogeo.nottingham.ac.uk/). Using the repository is free and doesn't need registration. We welcome your contributions to make this repository as rich as possible. To be able to contribute, you will need to register to the system. Once you have done so, you will be able to upload your materials to the repository. For more information, please read the **Learning Material Preparation Guidelines**. Categories in ELOGeo Repository include: Conference Series, Educational Series, Learning Materials, OSGeo Projects, Software Repository, and Use Cases.
Public University Professors  
Source: Miguel-Angel Bernabé  
The University of the Armed Forces of Ecuador invites competition for full time Associate Professors (40h/week) among which there are 5 seats for the Department of Earth Science and Construction. The requirements include:  
a. PhD degree  
b. Indexed articles or works of relevance  
c. Documentation supporting the claimed requirements and merits  
Monthly Payment: USD: 3496.25 - Complete information and application to the call at: [http://phd.espe.edu.ec](http://phd.espe.edu.ec)

Principal Investigator in the Centre for Geosciences, UNAM  
Source: Santiago Borrero  
The Centre for Geosciences (in Spanish CGEO) of the National Autonomous University of Mexico (in Spanish UNAM), located on the Juriquilla campus in Queretaro, Mexico, offers an appointment as Researcher "A" on "Natural Hazards Analysis and Assessment." Further information and submission of digital documents at: [sec_academica@geociencias.unam.mx](mailto:sec_academica@geociencias.unam.mx). Application Deadline: **March 15, 2014**.

European Marie Curie Initial Training Network  
Source: Dieter Fritsch by way of Santiago Borrero  
Six (6) positions are offered for Early Stage Researchers in the framework of the European Marie Curie Initial Training Network “FP7-PEOPLE ITN2013 ITN-DCH: Digital Cultural Heritage”. Eligible candidates (m/f) interested in the area of the e-documentation and e-preservation in Cultural Heritage (CH) are encouraged to apply. The Marie Curie ITN-DCH consists of 23 academic, research, industrial and CH stakeholders/partners from 11 EU countries. The project aims to analyze, design, research, develop and validate an innovative multi-disciplinary and inter-sectorial research training framework that covers the whole lifecycle of digital CH research for a cost–effective preservation, documentation, protection and presentation. Currently, this is the largest Marie Curie Project funded by the European Union. All posts are found at: [http://www.ifp.uni-stuttgart.de/news/jobs/index.en.html](http://www.ifp.uni-stuttgart.de/news/jobs/index.en.html)

- **Full Time Marie Curie Early Stage Researcher Position in the fields of 3D/4D data scalable for digital Cultural Heritage Description**, Institute for Photogrammetry, University of Stuttgart, Germany (Deadline: **1-Mar-2014**)
- **Full Time Marie Curie Early Stage Researcher Positions in the fields of large scale spatiotemporal reconstruction and Environmental factors for digital Cultural Heritage**, Faculty of Civil and Geodetic Engineering of University of Ljubljana (UL FGG), Slovenia (Deadline: **30-Mar-2014**)
- **Full Time Marie Curie Early Stage Researcher Position in the field of 2D/3D Data Acquisition for Cultural Heritage**, Laboratory of Photogrammetry, School of Rural & Surveying Engineering, National Technical University of Athens (NTUA), Greece (Deadline: **1-Mar-2014**)
- **Full Time Marie Curie Early Stage Researcher Position in the fields of 3D Laser scanning and structured lighting methods in cultural heritage digitization for high resolution 3D surveys**, ArcTron 3D Ltd - Engineering Services for 3D Documentation & Software Development, Altenthann (near Regensburg), Bavaria, Germany (Deadline: **30-Apr-2014**)
- **Full Time Marie Curie Early Stage Researcher Position in the fields of Digital Cultural Heritage Documentation and Protection**, School of Chemical Engineering Section III of Materials Science and Engineering Laboratory of Materials Science and Engineering, National Technical University of Athens (NTUA), Greece (Deadline: **31-Mar-2014**)
- **Full Time Marie Curie Early Stage Actions Researcher Position in the fields of real-time Computer Graphics, Computer Vision and HCI for Cultural Heritage**, Institute of Computer Science at the Foundation for Research and Technology Hellas (FORTH), Heraklion, Greece (Deadline: **TBD**)

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Researchers say Magnetic Fields in Oceans can Help Detect Tsunamis
Source: http://www.terradaily.com/
Japanese researchers said they found a new way to define tsunamis: Observe magnetic fields generated by tsunami-induced movements of seawater. The researchers said such observations make it easier to determine the direction, size and arrival time of a tsunami. The team said it successfully detected magnetic fields generated as tsunami spread after a massive earthquake off Chile in February 2010. Using underwater, high-precision electro magnetometers, the team said it detected magnetic fields near Tahiti, nearly 4,350 miles away. The findings were published in the British journal Scientific Reports.

New Patent Mapping System Helps Find Innovation Pathways
Source: http://www.space-travel.com/
What's likely to be the "next big thing?" What might be the most fertile areas for innovation? Where should countries and companies invest their limited research funds? What technology areas are a company's competitors pursuing? To help answer those questions, researchers, policy-makers and Research and Development directors study patent maps, which provide a visual representation of where universities, companies and other organizations are protecting intellectual property produced by their research. But finding real trends in these maps can be difficult because categories with large numbers of patents - pharmaceuticals, for instance - are usually treated the same as areas with few patents. Now, a new patent mapping system that considers how patents cite one another may help researchers better understand the relationships between technologies - and how they may come together to spur disruptive new areas of innovation. The system, which also categorizes patents in a new way, was produced by a team of researchers from three universities and an Atlanta-based producer of data-mining software. The full patent map shows 466 technology categories and 35 technological areas. Each node color represents a technological area; lines represent relationships between technology categories. Labels for technological areas are placed close to the categories with largest number of patent applications in each area. Innovation often occurs at the intersection of major technology sectors, noted Jan Youtie, director of policy research services in Georgia Tech's Enterprise Innovation Institute. Studying the relationships between different areas can help suggest where the innovation is occurring and what technologies are fueling it. Patent maps can also show how certain disciplines evolve. The patent mapping research, which was supported by the US National Science Foundation, will be described in a paper to be published in an upcoming issue of the Journal of the American Society for Information Science and Technology (JASIST). In addition to Youtie and Porter, the research was conducted by former Georgia Tech graduate student Luciano Kay, now a postdoctoral scholar at the Center for Nanotechnology in Society at the University of California Santa Barbara. Maps produced by the system provide visual information relating the distances between technologies. The maps can also highlight the density of patenting activity, showing where investments are being made. And they can show gaps where future R and D investments may be needed to provide connections between related technologies.

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The upcoming Geospatial Advancement Canada conference taking place on March 3-5 in Ottawa, Canada, announces that Major General Christian Rousseau CD, Commander of the Canadian Forces Intelligence Command and Chief of Defence Intelligence and General (Retired) Walter J. Natynczyk CMM, MSC, CD, President of the Canadian Space Agency have joined the speaker line up. This is especially exciting as it ensures that the meeting has the involvement of the most crucial stakeholders within the Canadian geo field. Major General Rousseau (Day 1: 08:30, Monday, 3 March) and General Natynczyk (Day 2: 08:30, Tuesday, 4 March) will each be giving an overview of their respective agencies and future priorities. There is a new updated agenda. The gathering is now few weeks away. You can get in contact via either of these methods:
1 – Call +1 646 200 7530
2 – Email geospatialcanada@wbresearch.com
3 – Visit www.geospatialcanada.com

1st Mexican gvSIG Conference: "Opened-to-knowledge Geotechnologies"
Source: gvSIG News Office
1st Mexican gvSIG Conference [http://www.gvsig.org/web/community/events/jornadas-mexico/2014] will be held on April 10-11, 2014 at the Autonomous University of the State of Mexico Faculty of Geography, under the slogan "Opened-to-knowledge Geotechnology". The Conference is organized by the Autonomous University of the State of Mexico, through the School of Geography and the National Institute of Ecology and Climate Change (in Spanish INECC), with collaboration of gvSIG Association. The period for submission of proposals to the conference is now opened. Deadline for abstract submission is February 14. Proposals may be sent to jornadas.mexico@gvsig.org, and will be evaluated by a scientific committee for inclusion in the conference program. All information on submissions rules may be found in the ‘Communications’ section at: http://www.gvsig.org/web/community/events/jornadas-mexico/2014/Comunicaciones.

WCCA 2014 – World Congress on Computers in Agriculture and Natural Resources
Source: http://aims.fao.org/
WCCA 2014 will take place on July 27-30th, 2014 in San José, Costa Rica (http://wcca2014.ucr.ac.cr/). Abstract submission deadline is February 15th, 2014. This is the 12 World Congress of Computers in Agriculture and Natural Resources. It is a collaborative effort among agricultural information technology associations worldwide. This congress provides a forum for agriculture related professionals to exchange information on applications and developments in the use of Information Technologies. It covers a wide array of topics. These include new applications of well-established and understood technologies to innovative and entrepreneurial applications of emerging technologies, in addition to issues related to policy and knowledge dissemination. Contributions from various countries will allow a broadened perspective for all attending. This congress is sponsored by the International Network for Information Technology in Agriculture and the University of Costa Rica (in Spanish UCR).

5th Ibero-American Symposium on the History of Cartography
Source: http://www.ign.gob.ar/
The 5th Ibero-American Symposium on the History of Cartography (5siahc) will take place on September 24-27, 2014 in Bogotá, Colombia, and is organized by the University of “los Andes” and “Razón Cartográfica”. Following the tradition of previous Symposia, registration for the event will be free for all speakers and attendees. Contact: 5siahc@uniandes.edu.co.
16th SELPER International Symposium 2014
"Geoinformation at the Service of Society"
Source: Luz Angela Rocha

The Latin American Society for Remote Sensing and Spatial Information Systems (In Spanish SELPER) - Chapter Colombia 30 years– will hold the 16th SELPER International Symposium “Geoinformation at the Service of Society” from September 29 to October 3, 2014 in the city of Medellin, Colombia. The main objective of this Symposium is to highlight the importance of spatial information to the world today. For more information please visit the website at: www.selper.org.co.

3rd Venezuelan Congress on Geographic Information Systems (COVESIG)
Source: Frank Angulo

The 3rd Venezuelan Congress on Geographic Information Systems (COVESIG http://covesig.blogspot.com/) will take place on October 21-23, 2014 in the University Los Andes-Merida, Faculty of Forestry and Environmental Sciences, Venezuela. This event will involve students, professionals and individuals from different Faculties, Institutes of Higher Education, and other national and international organizations. The main objective of this Congress is to promote and develop knowledge that stimulate sharing GIS applications between all interested persons within academic, technical and social realms. As part of this event discussions will take place on topics such as GIS and the environment, Geoinformatics, Natural Hazards, Remote Sensing, Spatial Planning, GIS in municipalities, GIS population and quality of life, GIS and telecommunications, Management and administration in GIS Projection, Infrastructure in GIS, Cadastral GIS, and Free Geoinformatics. Contacts: aseciam@ula.ve / covesig@gmail.com

Year 2014

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**FEBRUARY 2014**

- **9-13** La Jolla CA., USA  MAPPS Winter Conference
- **10-12** Washington DC, USA  Esri Federal GIS Conference 2014
- **12** Washington DC, USA  Esri Developer Summit
- **17-19** Denver CO, USA  International LIDAR Mapping Forum [ILMF] Conference
- **23-26** Washington, DC, USA  Cloud Computing for DoD & Government
- **24-27** Annapolis MD; USA  NSGIC National States Geographic Information Council 2014 Midyear Meeting
- **24-27** Jacksonville FL, USA  18th Annual GIS/CAMA Technologies Conference

**MARCH 2014**

- **3-5** Ottawa, Canada  Geospatial Advancement Canada 2014
- **4-6** Loveland CO, USA  Link 2014 - Schneider Electric GIS Annual Conference
- **8-11** Palm Springs CA, USA  Esri Partner Conference
- **10-13** Palm Springs CA, USA  Esri International Developer Summit
- **10-14** The Woodlands TX, USA  24th Annual South Central Arc User Group Conference

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</tr>
</thead>
<tbody>
<tr>
<td>12-15</td>
<td>Rio Gallegos, Santa Cruz, Argentina</td>
<td>9th Patagonian working days on Geography 2014</td>
</tr>
<tr>
<td>20-21</td>
<td>Cartagena de Indias, Colombia</td>
<td>First International Conference on Biofuels, and VI International Congress on science and technology of Biofuels (CIBSCOL)</td>
</tr>
<tr>
<td>23-27</td>
<td>Louisville KY, USA</td>
<td>ASPRS 2014 Annual Conference- Geospatial Power in Our Pockets</td>
</tr>
<tr>
<td>26-28</td>
<td>Vancouver, Canada</td>
<td>Globe 2014</td>
</tr>
<tr>
<td>27-29</td>
<td>Malargue – Mendoza, Argentina</td>
<td>10th Physical Geography National Working days</td>
</tr>
<tr>
<td>Mar. 30 – Apr. 2</td>
<td>San Diego CA, USA</td>
<td>17th Annual AAAE GIS Conference and Exhibition</td>
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**APRIL 2014**

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<th>Date</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Washington DC, USA</td>
<td>MAPPS Federal Programs Conference</td>
</tr>
<tr>
<td>8-10</td>
<td>Tabasco, México</td>
<td>PECOM – Petroleum Exhibition &amp; Conference of Mexico</td>
</tr>
<tr>
<td>8-12</td>
<td>Tampa FL, USA</td>
<td>AAG Annual Meeting 2014</td>
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<tr>
<td>9-11</td>
<td>Cúcuta, Colombia</td>
<td>6th Colombian Congress of Forestry</td>
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<tr>
<td>10-11</td>
<td>Toluca, México</td>
<td>First Mexican gvSIG Conference: Open Knowledge Geotechnologies</td>
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<tr>
<td>14-17</td>
<td>Tampa FL, USA</td>
<td>GEOINT 2014</td>
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<tr>
<td>22-25</td>
<td>Rancho Mirage CA, USA</td>
<td>Field Service 2014</td>
</tr>
<tr>
<td>23-25</td>
<td>Houston TX, USA</td>
<td>Esri Petroleum GIS Conference</td>
</tr>
<tr>
<td>24-25</td>
<td>San Miguel de Tucumán, Argentina</td>
<td>3rd TUCUMASIG Working days 2014</td>
</tr>
<tr>
<td>Apr. 27-May 1</td>
<td>Kansas City MO, USA</td>
<td>MAGIC 2014</td>
</tr>
<tr>
<td>30</td>
<td>Michoacán, México</td>
<td>Cartography and Social Uses of Water</td>
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**MAY 2014**

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<thead>
<tr>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>5-7</td>
<td>Charlotte NC, USA</td>
<td>Esri Southeast User Conference</td>
</tr>
<tr>
<td>6-8</td>
<td>Burlington VT, USA</td>
<td>Geospatial Information Systems for Transportation Symposium</td>
</tr>
<tr>
<td>7-8</td>
<td>Valparaiso IN, USA</td>
<td>2014 Indiana GIS Conference</td>
</tr>
<tr>
<td>8</td>
<td>Sao Paulo, Brazil</td>
<td>Location Intelligence Brazil 2014</td>
</tr>
<tr>
<td>7-9</td>
<td>Sao Paulo, Brazil</td>
<td>MundoGEO#Connect 2014</td>
</tr>
<tr>
<td>7-9</td>
<td>Sao Paulo, Brazil</td>
<td>The Latin American and Caribbean gvSIG working days joined with MundoGEO#Connect 2014</td>
</tr>
<tr>
<td>7-9</td>
<td>Tandil - Buenos Aires, Argentina</td>
<td>Third National Working days on Argentina Research and Teaching in Geography and Ninth Working days on Research and Extension Center Geographical Research - Geography: the challenge of building inclusive territories</td>
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<tr>
<td>12-14</td>
<td>Tacoma WA, USA</td>
<td>2014 Washington GIS Conference</td>
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<tr>
<td>13-15</td>
<td>Orlando FL, USA</td>
<td>AUVSI Unmanned Systems 2014</td>
</tr>
<tr>
<td>14-17</td>
<td>Santa Fe, Argentina</td>
<td>4th Geography International Meeting of Southern Cone</td>
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<tr>
<td>15-17</td>
<td>Eldorado, Misiones, Argentina</td>
<td>16th Forestry and Environmental Technical Conference</td>
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<tr>
<td>20-22</td>
<td>Salt Lake City, Utah</td>
<td>2014 Cityworks User Conference</td>
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<tr>
<td>27-29</td>
<td>Guayaquil, Ecuador</td>
<td>Fourth Disaster Risk Reduction Session of the Regional Platform for the Americas 2014</td>
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**JUNE 2014**

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<tr>
<td>2-5</td>
<td>Las Vegas NV, USA</td>
<td>HxGN LIVE 2014 - Hexagon International Conference</td>
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<tr>
<td>3-5</td>
<td>Boone NC, USA</td>
<td>71st Eastern Snow Conference</td>
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<tr>
<td>10-13</td>
<td>Vancouver BC, Canada</td>
<td>FME International User Conference 2014</td>
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<tr>
<td>16-18</td>
<td>Orlando FL, USA</td>
<td>The Institute of Navigation (ION) 2014 Joint Navigation Conference (JNC)</td>
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<tr>
<td>To be determined</td>
<td>São Paulo, Brazil</td>
<td>History of Cartography, Historical Cartography and Digital Cartography</td>
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<td>Date</td>
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<td>Event</td>
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<td>JULY 2014</td>
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<tr>
<td>12-15</td>
<td>San Diego CA, USA</td>
<td>Esri National Security Summit</td>
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<td>Esri Education GIS Conference</td>
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<td>12-15</td>
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<td>Esri Business Summit</td>
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<td>Esri Architecture, Engineering and Construction Summit</td>
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<td>12-15</td>
<td>San Diego CA, USA</td>
<td>Esri 3D Mapping Forum</td>
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<td>14-18</td>
<td>San Diego CA, USA</td>
<td>Esri International User Conference &quot;United We Map&quot;</td>
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<td>15-19</td>
<td>San Diego CA, USA</td>
<td>International Congress on Environmental Modelling &amp; Software (iEMSs 2014)</td>
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<td>24-27</td>
<td>San José, Costa Rica</td>
<td>WCCA 2014 – World Congress on Computers in Agriculture and Natural Resources</td>
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<tr>
<td>27-31</td>
<td>Coeur d'Alene ID, USA</td>
<td>2014 MAPPS Summer Conference</td>
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<td>AUGUST 2014</td>
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<tr>
<td>6-8</td>
<td>Bahía Blanca, Argentina</td>
<td>2nd Southern Argentina Conference on Geographic Information Technologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contact: <a href="mailto:jornadasinfgeo@gmail.com">jornadasinfgeo@gmail.com</a></td>
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<tr>
<td>26-28</td>
<td>Gatineau-Ottawa, Canada</td>
<td>International Conference on Water, Informatics, Sustainability and Environment: iWISE 2014</td>
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<td>SEPTEMBER 2014</td>
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<td>8-13</td>
<td>Portland OR, USA</td>
<td>FOSS4G 2014</td>
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<td>14-18</td>
<td>Charleston SC, USA</td>
<td>NSGIC National States Geographic Information Council 2014 Annual Conference</td>
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<td>22-25</td>
<td>Ciudad de México, México</td>
<td>Latin America Geospatial Forum</td>
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<td>24-27</td>
<td>Bogotá, Colombia</td>
<td>5th Ibero-American Symposium on the History of Cartography (5siach)</td>
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<td>25-26</td>
<td>Alexandria VA, USA</td>
<td>2014 Geospatial &amp; Engineering International Conference</td>
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<td>25-26</td>
<td>São Paulo, Brazil</td>
<td>Esri Latin America User Conference - LAUC</td>
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<tr>
<td>Sep. 29-Oct. 3</td>
<td>Medellín, Colombia</td>
<td>16th International Symposium SELPER 2014: Geo-information at service of society</td>
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<td>OCTOBER 2014</td>
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<td>14-18</td>
<td>Quilmes, Argentina</td>
<td>7th Symposium from the Latin American and Caribbean Society of Environmental History</td>
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<td>21-23</td>
<td>Mérida, Venezuela</td>
<td>3rd Venezuelan Congress of Geographic Information Systems GIS (COVESIG)</td>
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<td>22-24</td>
<td>Ft. Worth TX, USA</td>
<td>Race, Ethnicity and Place 2014 Conference</td>
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<td>NOVEMBER 2014</td>
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<td>3-7</td>
<td>San Juan, Argentina</td>
<td>27th Scientific Meeting of Argentina Association of Geodesy and Geophysics</td>
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<td>5-7</td>
<td>Córdoba, Argentina</td>
<td>X Biennial Colloquium of Territorial Transformations</td>
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<td>DECEMBER 2014</td>
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<tr>
<td>1-12</td>
<td>Lima, Peru</td>
<td>Peru will host the COP20 2014</td>
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Global Spatial Data Infrastructure
Latin America and the Caribbean Newsletter

Year 2015

Year 2015 January February March April May June July August September October November December

JULY 2015

12-17 San Salvador, El Salvador 55th Americanists International Congress: Conflict, peace and identity construction in the Americas

AUGUST 2015

23-25 Rio de Janeiro, Brazil 27th International Cartographic Conference: Maps Connecting the World

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Nancy Aguirre, PAIGH, Editor cnaguirre@ipgh.org
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