

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

SDI-LAC

April

2014

Vol. 11, No. 4

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.



GSDI Definition

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.

[Message from the Editor](#)

[Input to this Issue](#)

[Global and Regional SDI, News, Presentations](#)

[IGS News, Links, Publications](#)

[National SDI, News, Links, Presentations](#)

[Articles and Publications of the Month](#)

[Geospatial Research, Applications, Software, Data](#)

[Training and Funding Opportunities, Awards](#)

[Employment Opportunities](#)

[Other](#)

[Americas: Conferences, SDI Events \(Year 2014 and 2015\)](#)



## Message from the Editor

This last Edition of SDI-LAC Newsletter (#121) highlights the following updates: The **Global and Regional SDI** section comprises notes on the Call for Pan-American Technical Cooperation Projects 2015 of PAIGH; News from the GSDI Outreach and Membership Committee; Call for the ISO/TC 211 Standards in Action Workshop; OGC ILAF Corner; Launching of Brazilian Satellite in December; Launching of Largest Satellite Fleet in History; Territorial and Urban Digital Mapping now available in IDERM, Spain; UN-SPIDER Knowledge Portal in Spanish; and relevant conferences taking place worldwide. The **IGS section** includes comments on IGS Membership Renewal. The **National SDI** segment informs on Argenmap for Official Cartography of Argentina on your Website; the Brazilian Network for High-precision Continuous Monitoring; IDESC Geographic Web Services Upgrade, and Challenges to IDECA in 2014, Colombia; IDEUCUENCA's Platform Upgrade, Ecuador; Presentation of BIG to Guatemala's Mayors; SNIEG 2013 Report on Outcomes and New Committee on Open Data, Mexico; IPDE 2013 Report, Panama; and an IDEUy Node: Geoportal of the Military Geographic Service, Uruguay. **Articles and Publications** of the month include papers on *Confronting Standards and Nomenclature in SDI: A case study of Geospatial Water Management Data in Urban Los Angeles County*, and *Formalizing Spatiotemporal Knowledge in Remote Sensing Applications to Improve Image Interpretation*; and the Atlas of El Chichon Volcano Region, Mexico. **Geospatial Research and Applications** underline the Digital Map of Mexico; The Natural Phenomena Early Warning System of Nicaragua; TERRA-i Peru Early Warning System for the Analysis of Land Use Change; The Space Application Matrix; Novel PPGIS Map Viewers; Quantartica: A free GIS Package for Antarctica; and a GPS-less UAV

Lidar Surveying and Mapping System. The **Training and Funding Opportunities** section encompasses remarks on the Specialization Course on Spatial Databases in Spain; The ESA Summer School 2014; OGC Training at MundoGEO#Connect Latin America 2014; and a Call for PhD Assistantship in Geospatial Analytics, USA. 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**, Analist (Navteq – Recife); **Antonio J. Fazan**, Analist (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 Porfírio**, Geoinformation Unit (ITEP); **Juan Carlos G. Mamani**, consultant in Geoinformation Technology; **Rodrigo Quirino** Technologist (IBGE/RJ); **Silvana Camboim** Professor (UFPR); **Silvane Paixão**, GIS Project Coordinator; **Tatiana Mendes**, Professor ICT (Unesp); Verônica Azevedo, Analist (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](mailto:cnaguirre@ipgh.org)

[\(Back to top\)](#)

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### Input to this Issue

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

Rodrigo Barriga-Vargas	Secretary General, Pan-American Institute of Geography and History, PAIGH, Mexico
Greg Brown	Professor of Environmental Planning, School of Geography Planning and Environmental Mgmt., University of Queensland, Australia
Arturo Brun-Martinez	Architect, Colombia
Joan Capdevila-Subirana	Regional Service of the National Geographic Institute in Catalunya, Spain
Roger Longhorn	Vice-Chair Communications Director, GSDI Association
Joshua Newell	Assistant Professor, School of Natural Resources and Environment (SNRE), University of Michigan, USA
Carlos Pretelt	GEOANDES Research Group, National University, Colombia
Jessica Robbins	Island Communications Manager, Global Island Partnership and PCI Media Impact, USA
Sadaf Sajjad	SUPARCO Headquarters, Karachi, Pakistan
Jordan W. Smith	Assistant Professor of Natural Resource Social Science and GIS, North Carolina State University, USA
Imma Serra	National Geographic Information Center, National Geographic Institute, Spain
Eric van Praag	Regional Coordinator, GeoSUR Program- CAF, Venezuela

[\(Back to top\)](#)

### Global and Regional SDI, News, Presentations

**Call for Pan-American Technical Cooperation Projects 2015 - PAIGH**

Source: Rodrigo Barriga-Vargas



The Pan-American Institute of Geography and History (PAIGH) informs that the call is open for applications to Pan-American Technical Cooperation Projects to be implemented in 2015, which should be directly linked to the implementation of the "Pan-American Agenda 2010-2020 ."

The PAIGH's Technical Assistance Program aims at implementing dedicated actions in the fields of Cartography, Geography, History and Geophysics to contribute to regional integration and sustainable development.

In response to priorities identified in the Agenda of PAIGH, applications will be accepted in the following four areas:

1. Projects to support PAIGH Member States in the scheduled development of their fundamental spatial data bases and their interoperability;

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

2. Geographic Analysis to stimulate interdisciplinary approaches, and regional integration in priority areas for sustainable development: Natural resources, risk and vulnerability associated with disasters, climate change, land use and socio-economic progress in border area adjacency.
3. Initiatives that promote innovative alternatives to the study of Pan-American development, and that encourage a broader view of American history as well as a plurality of approaches in areas such as environmental history, historiography, archeology, historical cartography, regional integration, climate change, cultural diversity, conservation of tangible and intangible cultural heritage and historical preservation.
4. Projects aimed at the study and monitoring of geophysical processes, including the implementation of the declarations of PAIGH on "Risk and disaster prevention to volcanic events" and "Land Management and Natural Disasters".

All processes of preparation, assessment and approval of applications are done electronically, thus projects must be submitted in sufficient time to the respective National Section.

Deadline for receipt of applications at the General Secretariat of PAIGH: Wednesday **April 30**, 2014

The complete Call may be found at: [Pan-American Technical Cooperation Projects 2015](#)

For more information please contact: [CooperacionTecnica@ipgh.org](mailto:CooperacionTecnica@ipgh.org) / [SecretariaGeneral@ipgh.org](mailto:SecretariaGeneral@ipgh.org)

### News from GSDI Outreach and Membership Committee

Source: Roger Longhorne

Work continues on developing the 5-year GSDI and International Geospatial Society (IGS) Strategic Plan via the working group led by President-elect, Dave Lovell (Eurogeographics). A first draft has been completed and circulated to the Executive Committee and selected members of the Board and external advisors. Based on the comments received, a final first draft will be circulated to the full GSDI Board for discussion at the next Board Meeting, scheduled for 31 March 2014. Vice-Chair Communications, Roger Longhorn, provided lectures on geo information legal and policy issues including licensing, on the Association member ICC (Cartographic Institute of Catalonia) course IC\_Cartotechnology in Barcelona. Chair Denise McKenzie has been very active in preparations for several OGC meetings, as had vice-Chair Europe, Joep Cromptvoets, in his other role as Secretary-General of EuroSUR. The O&M Committee manages the GSDI Group on LinkedIn, which now has 319 members, an increase of 12 from last month. If you are not already a member of this group, please join today – and tell your friends! Visit <http://www.linkedin.com> to join, then find GSDI in the 'Groups' option, to join the group or go direct to:

<http://www.linkedin.com/groups/GSDI-Association-3794985>. Note: You do NOT have to be a member of the GSDI Association or the IGS to join the LinkedIn group!

However, requests to join the group and/or to post

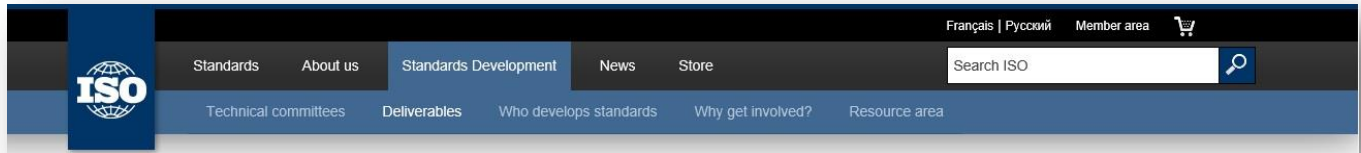
messages are moderated. Our new Facebook account created in July to help promote the GSDI Conference, has gathered a few more followers and GSDI and IGS members are encouraged to use Facebook to tell us about their activities. Visit us on Facebook at: [www.facebook.com/gsdilandigs](http://www.facebook.com/gsdilandigs). We continue to publish news on the Members' Corner of the GSDI website and via [https://twitter.com/GSDI\\_IGS](https://twitter.com/GSDI_IGS).



# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

## Call for Abstracts - ISO/TC 211 Standards in Action Workshop

Source: Roger Longhorn



The ISO/TC 211 Geographic information/Geomatics technical committee will host a Standards in Action workshop on 4 June 2014 in Berlin, Germany. This workshop provides an opportunity to present and showcase case studies, implementations and research to a wider audience. Government, industry and academia are invited to submit abstracts for this great event. The deadline for submission is **30 April** 2014. Submissions can be emailed to [victoria.rautenbach@up.ac.za](mailto:victoria.rautenbach@up.ac.za).

## OGC ILAF Corner

Source: Imma Serra and Joan Capdevila

Did you know that...

The Sensor Observations Service (SOS ) implementation standard defines an interface for requesting, filtering, and retrieving observations and sensor system information. SOS returns responses following an Observations and Measurements Coding (O & M) and information on sensors with Sensor Model Language (SensorML). The current version, SOS 2.0, Core-structure by main class includes operations such as *GetCapabilities* (information on service capabilities), *DescribeSensor* (information about available sensors and server processes), and *GetObservation* (information on observational data through spatial, temporal or particular item queries) and other operation extends through:

- Enhanced Operations Extension: Include the *GetFeatureOfInterest* and *GetObservationById* observations consulting operations.
- Transactional Extension: Allows the inclusion of observations (*InsertObservation*) , inclusion and deletion of data from sensors (*InsertSensor* and *DeleteSensor*)
- Result Handling Extension: Defines the *InsertResult*, *InsertResultTemplate*, *GetResult*, and *GetResultTemplate* operations to manage results of the observations.
- Binding Extension: Specifies the operations' support encodings.

It is also included a Profile Spatial Filtering to extend the filtering of *GetResult* and *GetObservation* operations. In the following [link](#) you may see the standard specification.

OGC News

04/ 03: [OGC Academic Summit 2014](#)

05/ 03: [Webinar on Geopackage](#)

12/ 03: [OGC announces new Discrete Global Grid Systems Standards Working Group](#)

24 /03 : [March '14 Technical and Planning Committee - Crystal City, Arlington, Virginia](#)

25/ 03: [LEAPS Summit - Crystal City, Arlington, Virginia](#)

26/ 03: [Web3D Emerging Technology Showcase Reception](#)

27/ 03: [Interoperability Showcase and OWS-10 Demonstration](#)

27 /03 [OGC 20th Anniversary Gala Dinner](#)

More on OGC at the Iberian and Latin American Forum of OGC [webpage!](#)

## Brazil to Launch Satellite in December

Source: Arturo Brun-Martínez

The Brazilian Space Agency (in Spanish AEB) confirmed that the launch of the Cbers-4 satellite is expected to take place in the first half of December, Brazilian news website G1 reported. Cbers-4 was originally scheduled to be



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

launched in 2015, but the date was brought forward following the failed launch of the Cbers-3 satellite in December, which did not reach its planned orbit after malfunction of the carrying rocket. Cbers-4 will be launched from China under a partnership agreement signed between the two countries: Under this pact, each of them finances 50 percent of the project. Cbers-4 will have the same mechanisms as Cbers-3, but with more modern cameras to observe the Earth, G1 said. The satellite will be used to capture images for the Brazilian government, to monitor the environment and to better manage agricultural resources. The space program is part of the government's efforts to reduce its dependence on U.S. and European space equipment. As part of their partnership, China and Brazil also agreed to cooperate on building Cbers-5, which is expected to be launched in 2017.

### Planet Labs Set To Launch Largest Satellite Fleet in History

Source: <http://www.spacedaily.com/>

"Getting 100 satellites on the launch manifest is a major milestone in the new space industry," said Steve Jurvetson, Managing Director at Draper Fisher Jurvetson and board member of Planet Labs and SpaceX. Planet Labs has announced that it has confirmed launches for more than 100 satellites over the next 12 months. The satellites will launch on rockets from the USA and Russia. This constitutes the largest constellation of satellites manifested in history. These new launches will build on Planet Labs first 28 satellites, Flock 1, which were launched in January. This constellation will allow Planet Labs to image the whole earth every 24 hours. "We are imaging the planet to save the planet," said Will Marshall, cofounder of Planet Labs. Imaging the Earth at this frequency will help us to measure things from deforestation, to improving agricultural yield, to detecting overfishing. Our mission is to create information people need to help life on the planet." More at: [http://www.spacedaily.com/reports/Planet\\_Labs\\_Set\\_To\\_Launch\\_Largest\\_Satellite\\_Fleet\\_In\\_History\\_999.html](http://www.spacedaily.com/reports/Planet_Labs_Set_To_Launch_Largest_Satellite_Fleet_In_History_999.html)

### Territorial and Urban Digital Mapping of La Union, Spain now Available in IDERM

Source : Arturo Brun-Martínez

The Minister of Public Works and Planning, Antonio Sevilla, delivered to the mayor of La Union, Francisco Bernabé, territorial and urban digital mapping of this municipality, which was produced by his department during the past year. The digital and urban mapping becomes a basic and fundamental tool for municipal management on land use, land registry, land planning and archeology, among others. Items delivered to the City Council include two maps, one of the

entire municipality at scale of 1:5000 and another corresponding to the urban centers of La Union, Portman, and Roche at scale of 1:1000. Sevilla said that his department's digital mapping format and structure "provides and ensures the availability and interoperability between municipal services that require using new technologies based on geo-referenced information." The information provided to the municipal Council is now available in the Spatial Data Infrastructure of Murcia (in Spanish IDERM), which depends on the Ministry and integrates data, metadata, services and geographic

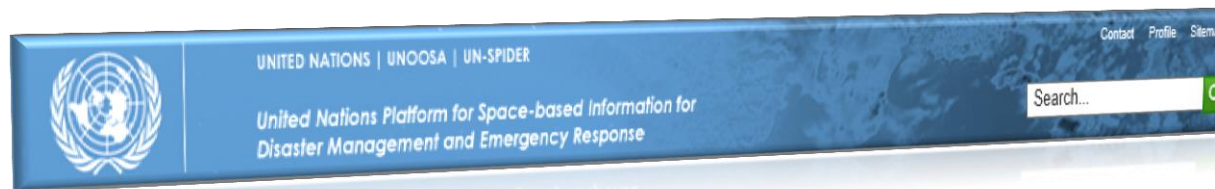


information of the Murcia region through Internet. IDERM is the region's response to requirements of the INSPIRE European Directive (Infrastructure for Spatial Information in Europe), and the guidelines set by the National Spatial Data Infrastructure of Spain (in Spanish IDEE) thereby joining other efforts for a global spatial data infrastructure. Through the IDERM portal, which may be accessed at: <http://www.iderm.es>, anyone may search, view maps, and obtain geographical information.

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

## UN-SPIDER Knowledge Portal is now Available in Spanish

Source: <http://www.un-spider.org/>

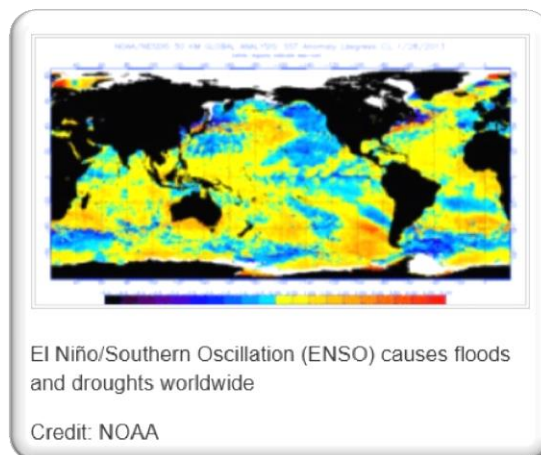


On 18 February 2014, UN-SPIDER officially launched the Spanish-language version of its Knowledge Portal: [www.un-spider.org/es](http://www.un-spider.org/es). By making available relevant content of the Portal, such as selected Regional Support Offices mission profiles and emergency mechanisms in the Spanish language, the UN-SPIDER team aims to allow more users from Latin America and the Caribbean, where UN-SPIDER has already conducted numerous activities, to benefit from the resources made available on the website. Users can easily switch between the Spanish and the English version by clicking the corresponding language buttons at the upper right corner of the page. While the Spanish-language version is continuously being further developed and improved, all comments and suggestions are appreciated. Feel free to get in touch with UN-SPIDER via the contact buttons or by email ([un-spider@unoosa.org](mailto:un-spider@unoosa.org)). In addition to Spanish, other official UN languages will be added in the future in order to make the Knowledge Portal available to as many users around the world as possible.

## United Nations/Germany Expert Meeting on Space Technologies for Flood and Drought Risk Management

Source: UN-SPIDER Team

UN-SPIDER is pleased to announce its upcoming United Nations/Germany Expert Meeting on Space Technologies for Flood and Drought Risk Management taking place on 5 and 6 June 2014 in Bonn, Germany. This year's Expert Meeting will focus on the use of space technologies to improve disaster risk reduction. Floods and droughts will serve as examples for hazard types that have recently affected countries around the globe. The main objective of the expert meeting is to promote the use of space-based applications to assess and to manage flood and drought risks. Effective disaster risk management helps preventing that natural hazards like floods and droughts turn into disasters. Space technologies, especially Earth observation and global navigation satellite systems, provide crucial information for hazard assessment, vulnerability analysis, and risk assessment. The potential contribution of space-based information to disaster risk management is not yet fully exploited – technical solutions are not tailored enough to the needs on the ground, and the information is rarely easily accessible for disaster managers. With this expert meeting, UN-SPIDER is aiming to fulfil one of its core functions: serving as a bridge between the different space and disaster risk management communities. Taking into consideration the limited financial resources available for this expert meeting, a number of qualified applicants from developing countries, who have expressed the need for financial support, will be offered financial support to attend the expert meeting. Due to this limited availability of financial resources, applicants and their nominating organizations are strongly encouraged to find additional sources of sponsorship to allow them to attend the Expert meeting. Qualified participants whose nominating agency/organization agrees to fund round-trip travel and/or living expenses will be considered on a priority basis. Kindly apply online for participation in this event until **22 April** 2014. Only complete applications, with all requested information and signatures, will be considered. Apply here: <http://www.un-spider.org/webform/registration-un-spider-bonn-expert-meeting-space-technologies-droughts-and-floods> For more information on the Expert Meeting and to apply online, please visit the Knowledge Portal: <http://www.un-spider.org/BonnExpertMeeting2014>



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### Global Oceans Action Summit

Source: Jessica Robbins

The world faces one of the biggest challenges of the 21st century: how to feed 9 billion people by 2050 in the face of climate change, economic uncertainty and the growing competition for natural resources. This global challenge requires an integrated response and an urgent transition toward a sustainable, inclusive and resource efficient world economy. Healthy oceans are essential for food security, livelihoods and economic growth around the world. Ocean health and productivity must be at the heart of global efforts to reduce poverty, strengthen food security and build resistance to climate change. Action oriented partnerships, governance arrangements and investment frameworks are necessary to turn the tide on ocean and human health. The Global Oceans Action Summit - at The World Forum Conference Center in The Hague 22-25 April, 2014 - will bring together global leaders in government, business, civil society, and science to demonstrate measurable steps toward ocean health. The Summit will highlight successful integrated approaches to public-private partnerships, catalytic financing, and secure ocean governance. Roundtable events will address the balance between growth and conservation, private sector and community benefits, and issues of regional and national jurisdiction. Information and registration available at [www.globaloceansactionsummit.com](http://www.globaloceansactionsummit.com) Follow on twitter with #oceanaction



The Government of The Netherlands, in close collaboration with the Food and Agriculture Organization of the United Nations (FAO), the World Bank and the Governments of Grenada, Indonesia, Mauritius, Norway, the United States of America, is pleased to announce that the Global Oceans Action Summit for Food Security and Blue Growth will now take place in The Hague, The Netherlands from 22 to 25 April, 2014 at the World Forum conference centre.

### [International Conference on Space \(ICS-2014\)](#)

Source: Sadaf Sajjad



Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), in collaboration with the Institute of Space Technology (IST) is organizing an International Conference on Space (ICS-2014). The Inter-Islamic Network on Space Sciences and Technology (ISNET) will co-sponsor the Conference. The International Conference on Space is a biennial event aimed at connecting researchers, scientists, administrative heads of public-sector space agencies and commercial space industries as well as academia from around the world at one forum to enable them to share latest developments in space technologies and applications, and discuss ways and means of using space-based technologies and their applications to address issues of international concern. The theme for ICS-2014 is "Space for Development". The focus shall be on how emerging space-faring nations can effectively apply space-derived techniques and solutions to solve complex issues of development including natural resources management; urban and rural planning and development; provision of health services and education to the masses; sustainable agriculture management; environmental monitoring and protection; disaster risk assessment, management and mitigation; and reliable telecommunications services. Advanced technologies and innovative approaches for addressing these development issues will be explored. The Conference will also look at existing international legal space regimes and the various domestic implementing mechanisms for countries to carry out their space-related activities. The Conference will take place on September 8-10, 2014 in Islamabad, Pakistan. Contact: Ms. Sadaf Sajjad, Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), email: [am.una@suparco.gov.pk](mailto:am.una@suparco.gov.pk)

[\(Back to top\)](#)

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### IGS News, Links, Publications



International  
Geospatial Society



#### **IGS Reminders – Membership Renewal**

Source: News from the GSDI Association and the International Geospatial Society

Please 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 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](mailto:mgallant@gsdi.org))

[\(Back to top\)](#)



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### National SDI, News, Links, Presentations

#### ARGENTINA

##### [Argenmap Allows Using a Map of Argentina on your Website](#)

Source: <http://www.ign.gob.ar/argenmap/>



Argenmap allows displaying a map of Argentina on your website with information of the National Geographic Institute of Argentina (in Spanish IGN). Official information for this map is provided by the National Geographic Institute, with the exception of the data shown on a larger scale than 1:250,000 (i.e. from zoom level 12). On large scales, Argenmap overlaps some OpenStreetMap data to provide continuity to the user experience on the digital map site. The IGN does not publish official data to be represented at scales larger than 1:250,000. Argenmap is a web service directed to programmers and web designers. Argenmap - jquery is a library of web maps designed as a [jQuery](#) plugin. In order to implement this service on your own website, you must inform the IGN for evaluation in order to provide the required quality of service. Please send your request to [argenmap@ign.gob.ar](mailto:argenmap@ign.gob.ar).

#### BRAZIL

##### 101 stations of the Brazilian Network for High-precision Continuous Monitoring

Source: <http://www.inde.gov.br/>



The Brazilian Network for Continuous Monitoring of GNSS Systems (in Portuguese RBMC) as of March 2014 includes 101 stations, after incorporation of five new stations located in Araquari and Florianópolis/SC (SCAQ and SCFL), Bacabal/MA (MABB), Sobral/CE (CESB), and Afogados de la Ingazeira/PE (PEAF). Each RBMC station is equipped with a GNSS receiver (Global Navigation Satellite Systems - Navigation Systems GPS + GLONASS), connected to an internet link, through which the data are freely available on the Brazilian Institute of Geography and Statistics (in Portuguese IBGE) website. Using the information generated by RBMC, coordinates (latitude, longitude and altitude) with accuracy of few centimeters may be obtained, which are different from those used on mobile devices in our daily life. This accuracy, however, is needed for various applications and professional activities that are conducted in different areas, for example in engineering, air and maritime navigation, rural and urban records, and precision agriculture, among others. Therefore, the Network (in operation since 1996) has been a tool of great importance for geotechnology development in Brazil. The RBMC also contributes in international projects' activities such as the Geocentric Reference System for the Americas (in Spanish SIRGAS), which conducts studies on the South American plate geodynamics through the temporal coordinate series of GNSS stations. To learn more about the RBMC please visit: <http://www.ibge.gov.br/home/geociencias/geodesia/rbmc/rbmc.shtm?c=7>.

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### COLOMBIA

#### IDESC Tools Training and Geographic Web Services Upgrade

Source: <http://www.cali.gov.co/>



During March 2014 a series of trainings were held on the topic of geospatial data and geographic services offered by the Spatial Data infrastructure of Santiago de Cali (in Spanish IDESC), given the cross-cutting nature of the IDESC and the geographic information consultation requirements submitted by offices of the Local Government. The training involved more than 70 staff and contractors in 13 Local Government Units. It aimed at harmonizing geographic information processes, access, use, and distribution while avoiding duplication of efforts and promoting geographic data exchange, planning and decision making tools based on relevant, timely and reliable geo-referenced information. On the other hand, information on the city's [Partial Plans](#) that are available in the IDESC Geoportal are being permanently updated so that the wider community, as well as interested builders, designers, consultants, planners, associations, municipal authorities, architectural and engineering faculty could view and download reliable and updated information used for project structuring, the academic interests, and knowledge production more general.

#### Challenges to IDECA in 2014

Source: <http://www.ideca.gov.co/>



The Spatial Data Infrastructure of the Capital District (in Spanish IDECA) shares with the District's community the strategic development projects to be undertaken this year in line with the Development Plan "Humane Bogota" including the following:

1. Strategy to strengthen the links supporting IDECA's institutionalization
2. knowledge Management and Disseminating Plan
3. Conceptualization of New Initiatives
4. Geospatial Platform Analysis and Design
5. Reference Map Consolidation and Upgrading
6. Phase II - Regional SDI
7. Geographic Information Policy Implementation in the District

Detailed project information is available at: <http://www.ideca.gov.co/index.php?q=es/content/retos-de-ideca-en-el-2014>

### ECUADOR

#### IDEUCUENCA Platform Upgrade

Source: <http://ide.ucuenca.edu.ec/>



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

The Spatial Data Infrastructure of the University of Cuenca (in Spanish IDEUCUENCA) Support Center has worked tirelessly for its Platform's upgrade, which was made available from January 3, 2014 ([Map Viewer](#)). The project on "New Methods and Technologies to Strengthening Citizen Participation in Early Warning Enhancing the [IDE RedCEDIA](#) (SDI for the National Research and Education Network of Ecuador)" started up in December 9, 2013. Within this project there is a task on redesigning the platform for a final update of the IDEUCUENCA platform, which currently includes four thematic portals: [Seismic Activity](#), [Indicators](#), [Tourist Sites](#), and [Natural Resources](#). More information at: <http://ide.ucuenca.edu.ec/>

### GUATEMALA

#### [SEGEPLAN Chimaltenango Presents BIG to Mayors of Zaragoza and El Tejar](#)

source: <http://www.segeplan.gob.gt/>



Under the National Planning System, the Departmental Delegate of the Secretary of Planning and Programming of the Presidency (in Spanish SEGEPLAN) in Chimaltenango presented the georeferenced Real Estate Base (in Spanish BIG) to municipalities of Zaragoza, and El Tejar mayors. BIG is a Geographic Information Systems (GIS)-based tool supporting municipalities in promoting risk management and their residents' life quality improvement. Among key features of the BIG are highlighted the information collection and storage capabilities for each property of a populated place. Pertinent information may include housing type, demographics, economic characteristics, health, education and basic services. Mayors expressed their interest in BIG considering it useful to their municipalities.

### MEXICO

#### [SNIEG 2013 Outcomes Report and New Committee on Open Data](#)

Source: <http://www.snieg.mx/>



Last March the "Report on Activities and Results 2013" was presented to the President and the Congress of the Union, pursuant to provisions on the Law for the National Statistical and Geographical Information System (in Spanish SNIEG). The report consists of three chapters: the first includes results of the implementation of the Annual Programme of Statistical and Geographical Information 2013; in the second, activities of the Committees of the National Information Subsystems are discussed; and in the third, reports on activities of the National Institute of Statistics and Geography (in Spanish INEGI) carried out during 2013 are comprised. See the [Report on Activities and Results 2013](#). On the other hand, the new Specialized Technical Committee on Open Data (in Spanish CTEDA) settled with its first meeting last February 26, 2014. The committee is part of the National Information Subsystem of Government Public Safety and Justice Administration (in Spanish SNIGSPIJ), which Chair stressed the importance of promoting the availability, distribution, use, reuse and sharing of public open data that may be obtained from the statistical and geographical information. The preliminary version of the work program of the committee which will be discussed by its members was also presented.

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### PANAMA

#### IPDE 2013 Report

Source: <http://www.ipde.gob.pa/>



The Panamanian Spatial Data Infrastructure (in Spanish IPDE) presented the Report of Activities 2013 that includes, among others, the following results:

1. Publication of Decree No. 51, which created the IPDE on February 14, 2013.
2. Production of the IPDE Operating Regulations approved by the Interagency Technical Committee to be delivered for relevant procedures and approval.
3. Implementation of the IPDE website at: [www.ipde.gob.pa](http://www.ipde.gob.pa).

4. Pilot Implementation Plan for Data Publication in GEORED at: <http://geored.maps.arcgis.com/home/>  
Please find the complete [Report here](#) in PDF format.

### URUGUAY

#### IDEUy Node: Geoportal of the Military Geographic Service

Source: <http://ide.uy/>

This Geoportal is one of the nodes of the Spatial Data Infrastructure of Uruguay (in Spanish IDEUy) where both geographic information as well as geo-services, metadata, documents, standards, product catalog and general information can be viewed and accessed. The Geoportal includes the following sections: [Map Viewer](#), [Metadata Catalog](#), [Reference Stations](#), and [Geoservices](#) (WMS and WFS). It also comprises information on procedures and standards as well as a section for software downloading. The Geoportal may be accessed here: <http://www.sgm.gub.uy/geoportal/>



[\(Back to top\)](#)

## Articles and Publications of the Month

### Confronting Standards and Nomenclature in Spatial Data Infrastructures: A case study of Geospatial Water Management Data in Urban Los Angeles County



By Miriam A Cope, Stephanie Pincetl. Article under Review for the *International Journal of Spatial Data Infrastructures Research IJSDIR*, submitted 2014-02-26.

**Abstract:** This paper examines the problem of insufficient and often inaccurate water management boundary data in California. Due to fragmented water management in California, no central government agency is responsible coordinating water data collection, authorship, and dissemination and maintenance. Despite statewide and county scale efforts of building spatial data infrastructures that include water data, the silo development of geospatial data sustains competing nomenclatures of water management features and poor boundary data in publicly available data sets. This paper examines these nomenclature and spatial inconsistencies and calls for assigning standardized

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

numeric identifiers for California's public and private water management entities. We contend that resolving the development of a universal ID system not only helps reconcile nomenclature differences propagated across data sets but also serves as a vehicle for forwarding an institutionally integrated water management spatial data infrastructure. [Full text may be found at: <http://ijsdir.jrc.ec.europa.eu/index.php/ijsdir/article/view/352/361>]

### Formalizing Spatiotemporal Knowledge in Remote Sensing Applications to Improve Image Interpretation

By Christelle Pierkot, Samuel Andrés, Jean François Faure, Frédérique Seyler. Journal of Spatial Information Science JOSIS No 7 (2013): Special feature on Semantic and Conceptual Issues in GIS (SeCoGIS).

**Abstract:** Technological tools allow the generation of large volumes of data. For example satellite images aid in the study of spatiotemporal phenomena in a range of disciplines, such as urban planning, environmental sciences, and health care. Thus, remote-sensing experts must handle various and complex image sets for their interpretations. The GIS community has undertaken significant work in describing spatiotemporal features, and standard specifications nowadays provide design foundations for GIS software and spatial databases. We argue that this spatiotemporal knowledge and expertise would provide invaluable support for the field of image interpretation. As a result, we propose a high level conceptual framework, based on existing and standardized approaches, offering enough modularity and adaptability to represent the various dimensions of spatiotemporal knowledge. [Full text may be found at: <http://www.josis.org/index.php/josis/article/view/142>]

### [Atlas of El Chichon Volcano Region, Mexico](#)

Source: <http://www.igeograf.unam.mx/>



Coordinated by Faculty members Irasema Alcantara, Ricardo Garnica, Atlantis Coll and Silvia Ramos, this work is the result of a joint research between the National Autonomous University of Mexico Institute of Geography (in Spanish IGg-UNAM) and the University of Science and Arts Chiapas Research Center for Risk Management and Climate Change (in Spanish UNICACH). Silvia Ramos of the Risk Management and Climate Change Research Center said the El Chichon volcano -or Chichonal - is considered one of the most active volcanoes in the country: "In the last two thousand years it has had eight eruptions, the most recent of which was in 1982," and noted that more than 40 persons participated in this publication including researchers and students from the UNAM and UNICACH. The Atlas is directed to people interested in Earth System Science relationships to society. This is reflected not only in the Atlas' identification of risks to which the population is subjected; but on its aim at promoting sustainable development of the El Chichon Volcano region as a fragile environmental system with great potential for "geo-tourism" activities.

[\(Back to top\)](#)

## Geospatial Research, Applications, Software, Data



### Digital Map of Mexico

Source : <http://www.inegi.org.mx/>

Digital Map of Mexico is a Geographic Information System (GIS) developed by the National Institute of Statistics and Geography (in Spanish INEGI), which integrates information from the natural and cultural elements of the country's geographical area and allows relating these to statistical information. It comes in two forms seeking to serve the needs of different users :

- [Digital Map of Mexico \(online\)](#). It facilitates browsing 168 information layers on urban maps (roads, towns and infrastructure in general), and

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

natural resources (rivers, lakes, mountains, vegetation, etc.), allowing a fast search.

- [Digital Map of Mexico \(desktop\)](#). It is a more comprehensive and developed version for installation on computers as to enable information manipulation, connection to geographic databases; and joining of data tables, geographic layers and documentation, among others .

### [Natural Phenomena Early Warning System, Nicaragua](#)

Source: <http://www.ineter.gob.ni/>



The Nicaraguan Institute of Territorial Studies (in Spanish INETER) recently presented an effective early warning system for natural phenomena detection, information processing and reporting at national and international levels, thus alerting population in opportunity and preventing possible risks. This system requires installation of technical equipment in different sites, such as the INETER's Seismic Central, in order to monitor and reduce natural disaster risks. Likewise, the system is so effective that it allows monitoring meteorological phenomena that form and travel in the Caribbean, Central America and the Gulf of Mexico.

### [MINAM and CIAT presents TERRA -i Peru Early Warning System for the Analysis of Land Use Change](#)

Source: Rodrigo Barriga-Vargas and Eric van Praag



As part of an agreement signed between the Ministry of Environment of Peru (in Spanish MINAM) and the International Centre for Tropical Agriculture in Colombia (in Spanish CIAT), a workshop was held on the Terra-i Peru Program at the Directorate General of Land Management (in Spanish DGOT). The workshop focused on applying a set of tools designed for detection and early warning of

land use changes using satellite images. For this purpose, the tool provides information about territorial changes caused mainly by various human activities, every 16 days, using MODIS and TRMM 250 meter resolution satellite images. This makes it useful for activities related to natural resources and biodiversity sustainable use and conservation, adaptation to climate change, and disaster risk management, among others. In particular, it is also useful for designing public policies to help guiding the various intervention actions under territorial land Management.

Video: TERRA -i PERU / The analysis of land use change in - Ucayali , Peru:

<http://www.youtube.com/watch?v=gKHNWfFpFvM>

More at: <http://www.minam.gob.pe/notas-de-prensa/minam-y-el-ciat-presentaron-el-sistema-de-alerta-temprana-para-el-analisis-de-cambio-de-uso-de-territorio-terra-i-peru/>

### [Space Application Matrix](#)

Source: <http://www.un-spider.org/>

The Space Application Matrix allows you to explore articles, case studies, and technical as well as scientific documents about space technologies for all phases of the disaster management cycle: mitigation, preparedness, response and recovery. With this tool you can access documents authored by experts and practitioners. They describe experiences from the application of space technology, and address benefits, lessons learned, and further potential, as the case may be. [Enter the Space Application Matrix.](#)



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### Novel PPGIS Map Viewers

Source: Greg Brown

Internet map viewers are now available that show selected spatial results for two Public Participation GIS (PPGIS) studies conducted in 2013/2014.

1. The first website shows the distribution of public land values and preferences in the state of Victoria, Australia. About 1,900 PPGIS participants mapped over 35,000 locations in Victoria. The project was sponsored by Parks Victoria to assist in the management of national parks and reserves. The map viewer overlays spatial distributions on top of Google Maps. Click here to see the website: <http://www.landscapevalues.org/pvictoria/mapviewer.php>
2. The second PPGIS study was completed as part of the public consultation process for developing a new city plan for Helsinki, Finland (Helsinki 2050). About 4,700 participants mapped 33,000 locations in the city. The PPGIS data overlays on maps provided by Mapita, a Finnish software company. The map viewer is written in Finnish (or Swedish) language so you may need to have your browser translate the web pages into English to understand what you are viewing. The map viewer is available here: <http://helsinki.asiatkartalle.fi/geofoms/2/>.

Visit the Landscape Values Institute at: [www.landscapevalues.org](http://www.landscapevalues.org)



### Victorian Public Lands Study

### Quantarctica: A free GIS Package for Antarctica

Source: <http://www.quantarctica.org/>



Quantarctica is a collection of Antarctic geographical datasets which works with the free, open-source software [Quantum GIS](#). It is free for non-commercial use, such as research, education, and operation in Antarctica. Quantarctica was originally developed for in-house use at the [Norwegian Polar Institute](#). It currently includes geography, glaciology and geophysics data, and will expand with contributions from the research community. The [Quantarctica manual](#) (PDF, 0,5 MB) is a step-by-step guide to install Quantum GIS and Quantarctica and optimize the system for your use. You need Quantum GIS (QGIS) software version 1.8, plugins and Quantarctica's project file and datasets. The Quantarctica base package, may be found on the [downloads page](#). If you're not using Windows, please download QGIS version 1.8 for your platform from [QGIS's downloads section](#). The base package is 7 GB, including base maps, mosaics of satellite images,

glaciology data, and geophysics data as well as high-resolution Landsat CIRREF images. High-resolution Landsat MOS and RADARSAT images are also available but should be downloaded separately. You may find them on the [downloads page](#).

### Geographers "Easily" Calculate River Flows from Space

Source: <http://www.terraily.com/>

The frustrated attempts of a University of California, Los Angeles (UCLA) graduate student to quantify the amount of water draining from Greenland's melting ice sheet led him to devise a new way to measure river flows from outer space, he and his professor report in a new study. The new approach relies exclusively on the measurements of a river's width over time, which can be obtained from freely available satellite imagery. Currently, hydrologists calculate a river's discharge - the volume of water running through it at any given time - by taking a series of measurements on the ground, including not just the river's width but also its depth at multiple points and the velocity of its flows. Politics, financial considerations and terrain often stand in the way of obtaining such measurements. "Our new method doesn't require access to the country or getting in the river to safely take measurements in the field," said Colin Gleason, lead author of the study and a doctoral student in geography in UCLA's College of Letters and Science. "As long as we can

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

get multiple pictures of a river and apply this method to them, we can tell you how much water was flowing in the river at the time the images were taken." The discovery is highlighted March 17 in the online edition of Proceedings of the National Academy of Sciences (PNAS). With the potential to be applied anywhere in the world, the new approach is expected to provide information that will benefit agriculture, sanitation and flood preparation, especially in countries without the resources to physically measure and monitor their rivers.

### Mapillary: Putting Crowdsourcing on the Map

Source: carib-gis-users list

Mapillary wants to create a photo representation of the world, a map with photos of every place on Earth. Following this article in MIT Technology Review (<http://www.technologyreview.com/news/525216/putting-crowdsourcing-on-the-map/>), and this discussion on Twitter (<https://twitter.com/Liberationtech/status/442436326047367168>) you might appreciate testing out Mapillary and contributing. Here are some of the areas

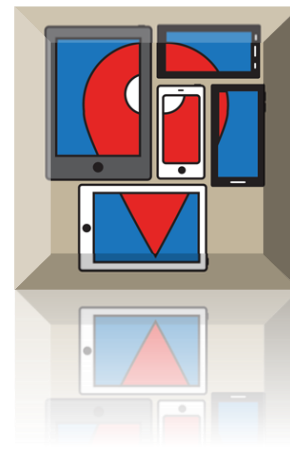
- trails, tracks, national parks, nature reserves, camping sites and other areas where cars and professional equipment is not available, not feasible or not able to get there in a timely fashion
- monitoring and assessment/follow-up of projects, construction sites and other areas over time
- mapping of areas where no other visual information is available (slums, rural areas, catastrophic sites)
- monitoring of crops, forests etc., over time

Feel free to join in, this took about 3h for two people walking with smartphones:

<http://www.mapillary.com/map/im/16/33.9834918917949/-118.46370935440063>.

Contact: peter (@peterneubauer).

Mapillary is trying to build a community-generated version of Google Street View.



### Japan Launches Next-Generation NASA Satellite to Track Rain and Snow

Source: AAG SmartBrief

NASA's newest weather satellite soared into space on February, kicking off a mission to observe rainfall and snowfall around the globe in unprecedented detail. The [Global Precipitation Measurement](#) (GPM) Core Observatory, a joint effort between NASA and the Japan Aerospace Exploration Agency (JAXA). GPM will deliver near real-time observations of precipitation every three hours all over the world, greatly improving scientists' understanding of climate change and the global water cycle, mission officials said. [[See Launch Photos for NASA's GPM Satellite Mission](#) (Gallery)]

### Debut for GPS-less UAV Lidar Surveying and Mapping System

Source: <http://www.gim-international.com/>

Lidar technology, photogrammetry and other sensors continue to revolutionise the surveying and mapping industries, and the world is now buzzing about how UAVs and unmanned vehicles may hold the future of these industries. But only within the last few years has the sensor technology been sufficiently reduced in terms of size and weight to be considered for UAV platforms. It is now possible to capture point cloud data from a Lidar-equipped UAV and produce 3D environment results, processed without the need for GPS and other sensors. Reducing cost and increasing efficiency are only the beginning of the benefits a versatile, nimble, and mobile scanning solution. Their custom-built aircraft can carry a wide array of sensors to obtain immediately useful data from nearly any location. Multispectral, infrared, and thermal sensors can easily be adapted to the platform, and within moments an aircraft can be on its way. These innovations mean data can be instantly obtained on-demand and with better results.



[\(Back to top\)](#)



## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

### Training and Funding Opportunities, Awards

#### Lincoln Institute of Land Policy - Support to Research Masters and Doctoral Theses

Source: Lincoln Institute of Land Policy



The Latin America and the Caribbean Program at the Lincoln Institute of Land Policy announced a new initiative to support masters and doctoral theses that are being developed by students from universities located in Latin America. The program will support graduate

thesis on relevant land policies in the interest areas to the Program for Latin America and the Caribbean of the Lincoln Institute. The call, guidelines, and application forms are available from the following link: [Pautas para postular, Programa de Apoyo a la Investigación de Tesis de Maestría y Doctorado, Programa para América Latina y el Caribe, 2014-2015](#). Candidates interested in applying should complete the application contained in the notice and send it to [lacbecas@lincolninst.edu](mailto:lacbecas@lincolninst.edu). The Institute sends receipt by email within 3 business days after receiving the complete application. If you do not receive an email after this time, please forward your application to make sure that it is received. The deadline for receipt of entries is until **April 27**, 2014. The selection results will be released in July 2014.

#### Specialization Course on Spatial Databases

Source: <http://blog-idee.blogspot.com.es/>

**UNIGIS Girona** [Formamos Profesionales en SIG desde 1999]



The course in Spatial Databases explains database theory, and examines relational and object-oriented database models. It will provide practical experience in database design and implementation, and performance of basic queries using PostGIS spatial functions. Deadline for online registration is **April 7**, 2014. The course will take place from April 14 to June 2, 2014. More details at: <http://www.unigis.es/Oferta-Formativa/Cursos-Especializacion/BBDD-Espaciales-ce> Contact: [info@unigis.es](mailto:info@unigis.es)

#### ESA Summer School 2014

Source: ISPRS webmaster



The European Space Agency (ESA) invites Early Career Scientists to join leading experts in Earth Observation, Modeling and Data Assimilation in ESRIN (Frascati, near Rome) for keynote lecture, hands-on computing, practical and poster sessions on the occasion of the 7th Earth Observation Summer School on "Earth System Monitoring and Modeling". More information is available at: <https://earth.esa.int/web/eo-summer-school/home>. Application Submission: <https://earth.esa.int/web/eo-summer-school/application-submission>. All enquiries should be addressed to [eotraining@esa.int](mailto:eotraining@esa.int).

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

## OGC Training at MundoGEO#Connect Latin America 2014

Source: <http://www.opengeospatial.org/>



You may register for a 1 day OGC training course to be held May 8, 2014 during the [MundoGEO#Connect Latin America 2014 conference](#) (May 7-9, 2014 in Sao Paulo, Brazil). The training will be in Portuguese and will be led by Luis Bermudez, director of the OGC Compliance Program. Attendees successfully completing the training will receive a certificate from OGC and MundoGeo and either one free membership for their employer or a discount coupon (Terms and Conditions apply).

## Latest gvSIG Webinar Recordings

Source: gvSIG News Office

The following webinar recordings were recently published: "What's new in gvSIG Desktop 2.1" in Portuguese, and "gvSIG applied to Geomarketing" in Spanish. First webinar focused on new features of gvSIG Desktop 2.1 (latest version), while the second showed some of many features available in gvSIG Desktop for the "business strategy" field. If you could not follow these live webinars, recordings are now available [on the video section](#) of the project's website.



## Dominican Republic: CONAE strengthens technical capacities of EIGEO

Source: <http://www.un-spider.org/>

UN-SPIDER's Regional Support Office, the National Commission on Space Activities (in Spanish CONAE), is providing a two-phase technical training course to the Interagency Team on Geospatial Information (in Spanish EIGEO) in the Dominican Republic in order to strengthen its members' capacities to use satellite imagery for disaster response. The first phase of the training course took place from 10 to 14 March 2014 with an introduction to optical image processing and its application in emergencies. The second phase is scheduled from 31 March to 3 April 2014 with an introductory course to radar images processing and its application in emergencies. These courses are taught remotely by Professor Mario Alberto Lanfri of CONAE from Argentina via Google Hangout. Estrella Melero, a volunteer from the Australian Volunteers for International Development (AVID) program is supporting CONAE as the on-site-trainer. The images used in this training are covering the Dominican Republic and were provided by the Geological Survey of the United States (USGS), as well as by the Centre National d'Etudes Spatiales (CNES) of France. This training course is a follow up activity to a previous course held by UN-SPIDER and its Regional Support Offices of the Water Center for the Humid Tropics of Latin America and



The Caribbean (in Spanish CATHALAC), and Geographic Institute "Agustín Codazzi" of Colombia (in Spanish IGAC) in May 2013. EIGEO is an interagency Geo-Spatial Information Team for Risk Management that incorporates nearly 15 government ministries, agencies and university centers. It is headed by a representative of the National Emergency Commission.

## PhD Assistantship in Geospatial Analytics Related to the Human Health Impacts of Climate Change

Source: Jordan W. Smith

Dr. Jordan Smith and the Department of Parks, Recreation and Tourism Management (PRTM) of the North Carolina State University (NCSU) College of Natural Resources (CNR) are seeking a qualified candidate who is committed to pursuing a Ph.D.

**NC STATE UNIVERSITY**

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

degree and engaging in high-quality research using geospatial analytics to address the human health impacts of climate change in urban areas. Specifically, the research addresses:

- The spatial variation of extreme temperatures and human health risks in urban environments,
- Landscape and urban planning approaches to reduce climate-related human health risks, and
- Adaptive human behaviors in response to extreme summertime temperatures.

Potential candidates for the assistantship must meet admission standards and be fully accepted to the PRTM doctoral program. Candidates must have positive recommendations from previous positions. Prior research experience is expected through a Master of Science degree (or equivalent). Strong organizational, project management and communication skills are preferred. Previous GIS and/or programming experience are highly desirable. The full announcement can be found [here](#). For further information, contact Dr. Jordan W. Smith ([jordan\\_smith@ncsu.edu](mailto:jordan_smith@ncsu.edu)). Review of applications will begin immediately and continue until an optimal candidate is identified.

[\(Back to top\)](#)

## Employment Opportunities

### One-year position at Middlebury

Source: Joshua Newell



The Middlebury College Geography Department, Vermont, USA, seeks to fill a 1-year term position beginning in the fall of 2014 in Human Geography at the instructor (ABD) or Assistant Professor (Ph. D) level. We seek broadly trained candidates with strong quantitative skills who complement the department's existing thematic and regional strengths. In particular, preference will be given to candidates who can offer an advanced course in statistical analysis in geography and thematic courses in human-environment relations, particularly medical geography and/or hazards. Regionally, we prefer candidates whose research and teaching is based in parts of the world that are not well represented in our department, including Africa, Asia, and Latin America. Teaching responsibilities will include one 300-level course in statistical analysis in geography and 200-level electives in the candidate's areas of expertise. The strongest candidates will be able to contribute to the department's existing ties with other departments and programs across campus (e.g. Environmental Studies, International and Global Studies, and Global Health). Review of applications will begin March 24, 2014 and continue until the position is filled. The Department will hold interviews at the AAG meeting in Tampa, Florida (April 9 – 12). Middlebury College is a top-tier liberal arts college with a demonstrated commitment to excellence in faculty teaching and research. An Equal Opportunity Employer, the College is committed to hiring a diverse faculty as we work to foster innovation in our curriculum and to provide a rich and varied educational experience to our increasingly diverse student body. Middlebury College uses Interfolio to collect all job applications electronically. Email and paper applications will not be accepted. Through Interfolio, please submit a letter of application addressed to Geography Search Committee, along with current a curriculum vita that includes all qualifications, and the names and contact information for three references whom we may contact for letters of recommendation. More information about application procedures is available at <https://apply.interfolio.com/24604>. For questions about uploading application materials, please contact Interfolio. For questions about the position, please contact Anne Kelly Knowles, Department Chair ([aknowles@middlebury.edu](mailto:aknowles@middlebury.edu)).

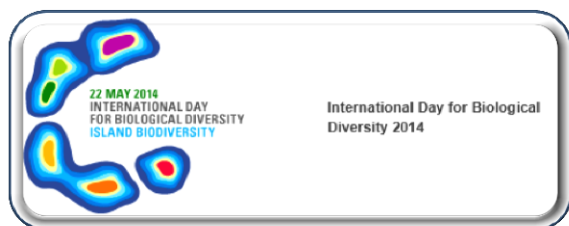
[\(Back to top\)](#)

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

## Other

### International Day for Biological Diversity 2014

Source: <http://sids-l.iisd.org/>



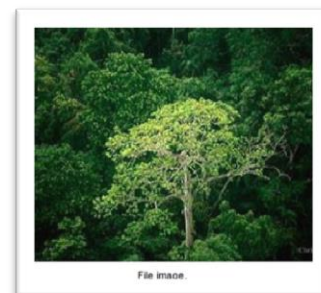
The Secretariat of the UN Convention on Biological Diversity (CBD) announced the release of the logo for the 2014 International Day for Biological Diversity (IDB), which will focus on the theme 'Island Biodiversity.' This theme was selected to coincide with the designation by the UN General Assembly (UNGA) of 2014 as the International Year of Small Island Developing States (SIDS). The theme was also chosen to reflect decision XI/15, paragraph 1 in which the Conference of the Parties (COP) to the CBD "urges Parties, and invites other Governments, financial institutions and other relevant organizations to strengthen the programme implementation of

work on island biodiversity." The Secretariat also invited parties that have already initiated plans to celebrate IDB to keep it informed of such plans, including activities organized by NGOs and other organizations for inclusion in the IDB 2014 webpage. [CBD Notification, 13 March 2014]. More information at: <http://www.cbd.int/idb/2014/>

### [Climatologists Offer Explanation for Widening of Earth's Tropical Belt](http://www.terraviva.com/)

Source: <http://www.terraviva.com/>

Recent studies have shown that the Earth's tropical belt - demarcated, roughly, by the Tropics of Cancer and Capricorn has progressively expanded since at least the late 1970s. Several explanations for this widening have been proposed, such as radiative forcing due to greenhouse gas increase and stratospheric ozone depletion. Now, a team of climatologists, led by researchers at the University of California, Riverside, posits that the recent widening of the tropical belt is primarily caused by multi-decadal sea surface temperature variability in the Pacific Ocean. This variability includes the Pacific Decadal Oscillation (PDO), a long-lived El Niño-like pattern of Pacific climate variability that works like a switch every 30 years or so between two different circulation patterns in the North Pacific Ocean. It also includes, the researchers say, anthropogenic pollutants, which act to modify the PDO. Study results appear in *Nature Geoscience*.



[\(Back to top\)](#)

## Americas: Conferences, SDI Events

### [15th Meeting of Latin American Geographers \(EGAL\)](#)

Source: Carlos Pretelt



Call for participation in the 15th Meeting of Latin American Geographers to be held from 6 to 10 April 2015 in Havana, Cuba, aimed at sharing experiences and good practices between geographic specialists

with innovative and multidisciplinary approaches, as to justify the meeting's theme "For a united and sustainable Latin America." Contact: Ms. Karen Aguilar Mugica, School of Geography, University of Havana [15egal2015@geo.uh.cu](mailto:15egal2015@geo.uh.cu). More information at: <http://www.xv-egal-cuba.com/>.

### [OGC Academic Summit 2014](#)

Source: OGC Press Release



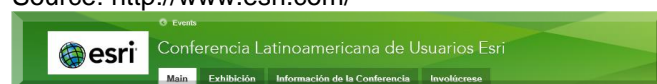
## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

The [Open Geospatial Consortium \(OGC®\) Academic Summit 2014](#) will be held 15-16 September 2014 at the [University of Calgary](#) in Alberta, Canada as part of the September OGC Technical Committee Meeting. 2014 marks the 20th anniversary of the creation of the Open Geospatial Consortium (OGC). After two decades, OGC standards have become a key enabler of geospatial interoperability, delivering significant societal, economic and scientific benefits by integrating digital location resources into commercial and institutional processes worldwide. Emerging technologies such as cloud computing, smartphones, UAVs, sensor networks and the Internet of Things offer new ways of collecting, accessing, and analyzing geospatial information, generating ever increasing interest in the diffusion, usage, and processing of georeferenced data. This rapidly expanding technology domain brings exciting new challenges and opportunities to many scientific disciplines and to the geospatial interoperability research community. We invite you to submit papers describing your cutting-edge, exciting new research to the OGC Academic Summit 2014. The ISPRS International Journal of Geo-Information (IJGI) will publish a special issue for the OGC Academic Summit 2014. Accepted papers will be

invited to incorporate reviewers' comments, extend the paper (if needed) and submit to the IJGI Open Geospatial special issue. [Click to Submit Your Paper.](#)

### [Esri Latin America User Conference \(LAUC\)](#)

Source: <http://www.esri.com/>



LAUC will take place on September 25-26, 2014 in Campinas, São Paulo, Brazil: two days of workshops, seminars, and presentations led by Esri staff and other GIS specialists. Learn how the latest technological developments in GIS announced at the 2014 Esri International User Conference are being implemented by the Latin American user community. Abstract submission deadline is May 15, 2014. All submissions must be noncommercial. This year's committee will evaluate all abstracts and make selections based on topic, content, and available time. All authors will be notified after the selection process. A detailed program of presentations and events will be provided prior to the conference. Please contact the LAUC team ([lauc@esri.com](mailto:lauc@esri.com)) with questions.

[\(Back to top\)](#)

## Year 2014

[Year 2014](#) [January](#) [February](#) [March](#) [April](#) [May](#) [June](#) [July](#) [August](#) [September](#) [October](#) [November](#) [December](#)

### APRIL 2014

1-2	Washington DC, USA	<a href="#">MAPPS Federal Programs Conference</a>
1-2	Tabasco, Mexico	<a href="#">Geo-spatial Workshop "Improving the Connectivity in the Southeast"</a>
<b>* NEW *</b>		
5-12	Medellin, Colombia	<a href="#">7<sup>th</sup> Urban World Forum (WUF)</a>
<b>* NEW *</b>		
7-11	Ciudad de Panama, Panamá	<a href="#">Introductory GIS Using Free Software</a>
<b>* NEW *</b>		
8-10	Tabasco, Mexico	<a href="#">PECOM – Petroleum Exhibition and Conference of Mexico</a>
8-12	Tampa FL, USA	<a href="#">AAG Annual Meeting 2014</a>
9-11	Temuco, Chile	<a href="#">6<sup>th</sup> Chilean Congress of Forestry</a>
10-11	Toluca, Mexico	<a href="#">First Mexican gvSIG Conference: Open Knowledge Geotechnologies</a>
10-12	Tampa FL, USA	<a href="#">Avenza MAPublisher Training</a>
<b>* NEW *</b>		
12-13	Washington DC, USA	<a href="#">State of the Map US 2014 and Open Street Map Conference</a>
14-16	Monterey CA, USA	<a href="#">20th Annual California GIS Conference</a>
14-17	Tampa FL, USA	<a href="#">GEOINT 2014</a>
14-18	La Havana, Cuba	<a href="#">13<sup>th</sup> International Congress on Information INFO 2014</a>
<b>* NEW *</b>		
22-23	Lima, Peru	<a href="#">International Congress on Geomatics GEOEXPO Lima 2014</a>
22-25	Rancho Mirage CA, USA	<a href="#">Field Service 2014</a>
23-25	Houston TX, USA	<a href="#">Esri Petroleum GIS Conference</a>
24-25	San Miguel de Tucuman, Argentina	<a href="#">5<sup>th</sup> TUCUMANSIG Working Days 2014</a>

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

April 27-May 1	Kansas City MO, USA	<a href="#">MAGIC 2014</a>
30	Michoacán, Mexico	<a href="#">Cartography and Social Uses of Water</a>

## MAY 2014

5-7	Charlotte NC, USA	<a href="#">Esri Southeast User Conference</a>
5-9	Bahia Blanca, Argentina	<a href="#">24<sup>th</sup> Argentinean Congress of Soil Science - 2<sup>nd</sup> National Meeting on Organic Matter and Humid Substances</a>
5-9 <b>*NEW*</b>	Calgary AB, Canada	<a href="#">URISA Leadership Academy</a>
6-8	Burlington VT, USA	<a href="#">Geospatial Information Systems for Transportation Symposium</a>
7-8	Valparaíso IN, USA	<a href="#">2014 Indiana GIS Conference</a>
7-9 <b>*NEW*</b>	Sao Paulo, Brazil	<a href="#">OGC Training at MundoGEO#Connect LatinAmerica 2014</a>
7-9 <b>*NEW*</b>	Sao Paulo, Brazil	<a href="#">6<sup>th</sup> Latin America and Caribbean Working Days (LAC) and IV Brazilian gvSIG Working Days, under the theme "Innovation and Collaborative Development: Overcoming Challenges"</a>
7-9	Sao Paulo, Brazil	<a href="#">MundoGEO#Connect 2014</a> Conference and Trade Show Geomatics and Geospatial Solutions
7-9	Sao Paulo, Brazil	<a href="#">The Latin American and Caribbean gvSIG Working Days Joined with MundoGEO#Connect 2014</a>
7-9	Tandil - Buenos Aires, Argentina	<a href="#">3rd National Conference on Argentinean Geography Research and Education, and 9th Conference on Geographical Research and ExtensionGeographical Research</a> - Geography: the challenge of building inclusive territories
8	Sao Paulo, Brazil	<a href="#">Location Intelligence Brazil 2014</a>
8-9	Boston MA, USA	<a href="#">2014 Conference: Disaster Mitigation, Preparedness, Response and Sustainable Reconstruction</a>
12-14	Tacoma WA, USA	<a href="#">2014 Washington GIS Conference</a>
12-15	Orlando FL, USA	<a href="#">AUVSI Unmanned Systems 2014</a>
14-17	Santa Fe, Argentina	<a href="#">4<sup>th</sup> Geography International Meeting of Southern Cone</a>
15-17	Eldorado, Misiones, Argentina	<a href="#">16<sup>th</sup> Forestry and Environmental Technical Conference</a>
19-21	Washington DC, USA	<a href="#">Location Intelligence 2014</a>
20-22	Salt Lake City UT, USA	<a href="#">2014 Cityworks User Conference</a>
27-29	Guayaquil, Ecuador	<a href="#">Fourth Disaster Risk Reduction Session of the Regional Platform for the Americas 2014</a>
28-30	Tiradentes, Minas Gerais, Brazil	<a href="#">Second Brazilian Symposium of Historical Cartography</a>

## JUNE 2014

2-5	Las Vegas NV, USA	<a href="#">HxGN LIVE 2014 - Hexagon International Conference</a>
2-6 <b>*NEW*</b>	On line	<a href="#">Interdisciplinary Congress on Water (CINA 2014)</a>
3-5	Boone NC, USA	<a href="#">71<sup>st</sup> Eastern Snow Conference</a>
9-10	Buenos Aires, Argentina	<a href="#">7<sup>th</sup> Conference on Cultural Identity and Foreign Policy in American History and Argentina</a>
9-13 <b>*NEW*</b>	San Juan, Puerto Rico	<a href="#">Intensive Fifth International Seminar "Cultural Studies and Public Policies"</a>
10-13	Vancouver BC, Canada	<a href="#">FME International User Conference 2014</a>
10-15	Memphis TN, USA	<a href="#">MapInfo User Conference</a>
16-17	Bogota, Colombia	<a href="#">Andean Geomatics 2014</a> 3 <sup>rd</sup> International Congress of Geo Information Technologies and Urban Development Management
16-18	San Diego CA, USA	<a href="#">Inspire 2014 Analytic Freedom</a>
16-18	Orlando FL, USA	<a href="#">The Institute of Navigation (ION) 2014 Joint Navigation Conference (JNC)</a>
22-28 <b>*NEW*</b>	Storrs CT, USA	<a href="#">Geography Faculty Development Alliance Workshop for Graduate Students and Early-Career Faculty</a>
25-28 <b>*NEW*</b>	Storrs CT, USA	<a href="#">2014 AAG Department Leadership Workshop: Geography, IT, Social Media and Web 2.0+</a> "Geography, IT, social media and Web 2.0+: Department strategies for innovation in teaching, research and outreach"
To be determined	São Paulo, Brazil	<a href="#">History of Cartography, Historical Cartography and Digital Cartography</a>

# Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

## JULY 2014

10-12	Lima, Peru	<a href="#">International Symposium on Sustainable Development of Peripheral Rural Regions</a>
12-15	San Diego CA, USA	<a href="#">Esri National Security Summit</a>
12-15	San Diego CA, USA	<a href="#">Esri Education GIS Conference</a>
12-15	San Diego CA, USA	<a href="#">Esri Business Summit</a>
12-15	San Diego CA, USA	<a href="#">Esri Architecture, Engineering and Construction Summit</a>
12-15	San Diego CA, USA	<a href="#">Esri 3D Mapping Forum</a>
14-18	San Diego CA, USA	<a href="#">Esri International User Conference "United We Map"</a>
15-19	San Diego CA, USA	<a href="#">International Congress on Environmental Modelling and Software (IEMSS 2014)</a>
23-26 <b>*NEW*</b>	Rosario, Argentina	<a href="#">11<sup>th</sup> CAAS - Argentinean Congress of Social Anthropology</a>
24-27	San Jose, Costa Rica	<a href="#">WCCA 2014 – World Congress on Computers in Agriculture and Natural Resources</a>
27-31	Coeur d'Alene ID, USA	<a href="#">2014 MAPPS Summer Conference</a>

## AUGUST 2014

3-7	Goiânia, Brazil	<a href="#">9<sup>th</sup> International Symposium AgroEnviron2014: "Impacts of Agro Systems on the Environment: Challenges and Opportunities"</a>
4-6 <b>*NEW*</b>	Burlingame CA, USA	<a href="#">Astronomical Society of the Pacific (ASP) 2014 Annual Meeting</a>
6-8	Bahia Blanca, Argentina	<a href="#">2<sup>nd</sup> Southern Argentina Conference on Geographic Information Technologies</a> Contact: <a href="mailto:jornadasinfogeo@gmail.com">jornadasinfogeo@gmail.com</a>
6-9	Lima, Peru	<a href="#">12<sup>th</sup> Latin American Association of Communication Researchers Congress (in Spanish ALAIC)</a>
7-9 <b>*NEW*</b>	Buenos Aires, Argentina	<a href="#">International Conference for University Students. The Age of Collaboration</a>
12-15 <b>*NEW*</b>	Lima, Peru	<a href="#">6<sup>th</sup> Latin American Population Association Congress (in Spanish ALAP) - Population dynamics and sustainable development with equity</a>
25-29 <b>*NEW*</b>	Santiago de Chile, Chile	<a href="#">25<sup>th</sup> Latin-American Congress on Hydraulics</a>
26-28	Gatineau-Ottawa, Canada	<a href="#">International Conference on Water, Informatics, Sustainability and Environment: iWISE 2014</a>

## SEPTEMBER 2014

8-10 <b>*NEW*</b>	Philadelphia PA, USA	<a href="#">2<sup>nd</sup> International Conference and Exhibition on Mechanical and Aerospace Engineering</a> "Surging into the future of Mechanical and Aerospace Engineering"
8-11 <b>*NEW*</b>	New Orleans LA, USA	<a href="#">GIS-Pro 2014: URISA's 52nd Annual Conference</a>
8-12	Cusco, Peru	<a href="#">X COLAGE - Latin American Conference on Space Geophysics</a>
8-13	Portland OR, USA	<a href="#">FOSS4G 2014</a>
14-18	Charleston SC, USA	<a href="#">NSGIC National States Geographic Information Council 2014 Annual Conference</a>
15-16 <b>*NEW*</b>	Calgary AB, Canada	<a href="#">OGC Academic Summit 2014</a>
15-24	Lima, Peru	<a href="#">The SCOSTEP/ISWI International School on Space Science</a>
22-25	Ciudad de Mexico, Mexico	<a href="#">Latin America Geospatial Forum</a>
22-26	Denver CO, USA	<a href="#">GeCo in the Rockies 2014</a>
24-26	Mendoza, Argentina	<a href="#">XII ENACOM 2014</a> "The role of communication in the process of Latin American integration"
24-27	Bogota, Colombia	<a href="#">5<sup>th</sup> Ibero-American Symposium on the History of Cartography (5siach)</a>
25-26	São Paulo, Brazil	<a href="#">Esri Latin America User Conference - LAUC</a>
25-26	Alexandria VA, USA	<a href="#">2014 Geospatial and Engineering International Conference</a>
Sep.29-Oct.3	Medellin, Colombia	<a href="#">16<sup>th</sup> International Symposium SELPER 2014: Geo-information at Service of Society.</a>

## OCTOBER 2014

13-17 <b>*NEW*</b>	Louisville KY, USA	<a href="#">URISA Leadership Academy</a>
-----------------------	--------------------	--

## Global Spatial Data Infrastructure Latin America and the Caribbean Newsletter

14-18	Quilmes, Argentina	<a href="#">7<sup>th</sup> Symposium from the Latin American and Caribbean Society of Environmental History</a>
21-23	Merida, Venezuela	<a href="#">3<sup>rd</sup> Venezuelan Congress of Geographic Information Systems GIS (COVESIG)</a>
22-24	Ft. Worth TX, USA	<a href="#">Race, Ethnicity and Place 2014 Conference</a>
27-30 <b>*NEW*</b>	Curacao, Curacao	<a href="#">The Seventh URISA 2014 Caribbean GIS Conference</a>

### NOVEMBER 2014

3-5 <b>*NEW*</b>	La Vegas NV, USA	<a href="#">Trimble Dimensions User Conference</a>
3-7	San Juan, Argentina	<a href="#">27<sup>th</sup> Scientific Meeting of Argentina Association of Geodesy and Geophysics</a>
3-7	Scottsdale AR, USA	<a href="#">21<sup>st</sup> ACM Conference on Computer and Communications Security</a>
4-7	Dallas TX, USA	<a href="#">ACM SIGSPATIAL Cup 2014</a>
5-7	Cordoba, Argentina	<a href="#">X Biennial Colloquium of Territorial Transformations</a>
5-7 <b>*NEW*</b>	Ciudad de Mexico, Mexico	<a href="#">10<sup>th</sup> Mexico Resilience Congress 2014</a>
14-15	Huntsville AL, USA	<a href="#">GEO-Energy-Cyber Huntsville Summit</a>

### DECEMBER 2014

1-12	Lima, Peru	<a href="#">Conference of the Parties COP20/2014</a>
------	------------	--

[\(Back to top\)](#)

## Year 2015

[Year 2015](#) [January](#) [February](#) [March](#) [April](#) [May](#) [June](#) [July](#) [August](#) [September](#) [October](#) [November](#) [December](#)

### JULY 2015

12-17	San Salvador, El Salvador	<a href="#">55<sup>th</sup> Americanists International Congress: Conflict, Peace and Identity Construction in the Americas</a>
-------	---------------------------	--

### AUGUST 2015

23-25	Rio de Janeiro, Brazil	<a href="#">27<sup>th</sup> International Cartographic Conference: Maps Connecting the World</a>
-------	------------------------	--

[\(Back to top\)](#)

Please mention GSDI (PAIGH) SDI-LAC Newsletter as source of information in any correspondence or publication you may have on items on this issue

To subscribe to SDI-LAC, please do so online at:  
<http://www.gsdi.org/newslst/gsdisubscribe.asp>  
 Nancy Aguirre, PAIGH, Editor [cnaguirre@ipgh.org](mailto:cnaguirre@ipgh.org)  
 Global Spatial Data Infrastructure Association,  
<http://www.gsdi.org>

**DISCLAIMER:**  
 GSDI, PAIGH and the Editor will not be held liable for any errors, mistakes, misprints or incorrect information from third parties. Copyright © 2014. All rights reserved.

[\(Back to top\)](#)