



"GeoSUR develops geographic services on a free-access web platform"

The Editor's Note

Participants to the 1st Workshop of the project "Integrated North Andean Map" (in Spanish MIAN) that complements a previous initiative, the "Integrated Map of Mesoamerica" (in Spanish MIMA), discuss their contributions and the envisioned MIAN's applications in the first section of this issue. Efforts by the GeoSUR Program to put spatial data in The Cloud in eight countries in the region, with the implementation of a training program that has benefited professionals and institutions in over 14 countries, is detailed inside the section "What is said from the Coordination of GeoSUR?". The General Secretariat of PAIGH highlights the Honorable Mention granted to INERE

under the GeoSUR 2014 Award, the development of MIAN project, and the 3rd Joint Technical Meeting of the Commissions of PAIGH to be held in Mexico City in June.

GeoSUR newsletter seeks to disseminate GeoSUR Program's achievements and characteristics as well as events, projects and best practices for the application of GI into sustainable development and decision making in the region, as part of the Geospatial Data Infrastructure of the Americas. The Portuguese translation is performed by **Eduardo Freitas**, Manager of the GEOeduc Institute of Brazil. Please send your contributions and suggestions to: **Nancy Aguirre**, Editor of GeoSUR Newsletter, at cnaguirre@ipgh.org.

Inside this Issue:

- The interview of this month is with leaders and technical assistants to the first workshop of the MIAN project.
- Santiago Borrero, from the coordination of GeoSUR Program, comments on spatial databases in The Cloud and the GeoSUR Program.
- The General Secretariat of PAIGH grants a GeoSUR Award 2014-Honorable Mention to INERE, and announces the Third Joint Technical Meeting of the Commissions of the Institute.



Group of participants to the 1st MIAN Workshop, February 2015, in the IGAC (Bogota, Colombia)



Technical and financial support of the MIAN project at the 1st Workshop classroom-practice. From left to right: Antonio Rodriguez and Luis Miguel Blanco (CNIG, Spain), with Jean Parcher (DOI, USA)

Bilateral initiatives will be supported by the Integrated Northern Andean Map (MIAN), said Directors of Geographical Institutes

The first of three participatory workshops of the project Integrated Northern Andean countries Map (in Spanish MIAN) was held from 9 to 13 February 2015 at the Geographic Institute "Agustin Codazzi" (IGAC) in Bogotá, Colombia. A second workshop in Ecuador in July and a third workshop in Panama in November have been planned. The project is funded by CAF-PAIGH under the GeoSUR Program, and the US Department of the Interior (DOI), in addition to the support and technical assistance from the National Center for Geographic Information (CNIG) of Spain. The following questions were addressed to some of the leaders and participants to this event:

What is the contribution of your organization to MIAN and what will be the applications of this map?

Antonio Rodriguez, Deputy Assistant Director of the IGN National Center for Geographic Information (CNIG) of Spain, said: "The First MIAN's Workshop was held with participation of directors and

specialists of the Geographical Institutes of Colombia, Ecuador, Peru and Panama, the technical support and assistance from the DOI and CNIG, and assistance from CAF representative, Santiago Borrero, the President and the Secretary General of PAIGH, Rigoberto Magaña and Rodrigo Barriga respectively.

The Integrated Northern Andean Map (MIAN) project complements another initiative also led by PAIGH and CAF under the GeoSUR Program, the Integrated Map of Mesoamerica (MIMA), and aims to produce a digital geographic data base at 1: 250,000 scale in the region that covers basic and fundamental topographic themes: Administrative Boundaries, Hydrography, Villages, Roads, Morphology and others (Points of Interest) using official geographic information of each country.

The workshop was a complete success, as it was agreed a first draft catalog of geographic objects (features) and attributes, much of the geometric and

Bilateral initiatives will be supported, continues...



Antonio Rodriguez, Deputy Assistant Director of CNIG - IGN, Spain



Rigoberto Magaña, President of PAIGH and Director General of the Geographic and National Cadastre Institute of El Salvador



Israel Sanchez, Director General of the National Geographic Institute "Tommy Guardia" of Panama

"Those who participated in the MIMA are bringing their expertise and best practices to share with the group in charge of the new MIAN project."

semantic matches were solved, and a methodology to furthering remotely-work was designed.

Unfortunately, the IGM of Bolivia could not attend the workshop due to imponderables, but mechanisms for their incorporation into these works have already been established. It is expected to have a WMS service publishing the resulting integrated map on the GeoSUR website by first quarter of 2016.

As a similar project in many ways, the experience of CNIG (IGN) of Spain in the pan-European map, the EuroRegionalMap of EuroGeographics, which integrates data from 33 countries at a scale of 1:250,000, has been very positive. It is a reference database for trans boundary and multinational GIS projects that has been used in a number of European projects, and has meant a significant improvement for CNIG's reputation, a gradual increase in sales and opportunities and, ultimately, for moving from a data producer nationally to a data producer internationally.

Similarly, we believe that the MIAN project will be a breakthrough of the geographic information sector in the region. It will provide a supranational resource -at a very interesting medium scale-, basic and fundamental to project planning, environmental protection, statistical graphical analysis, climate change studies, natural disaster prevention..."

Meanwhile, Rigoberto Magaña, President of PAIGH and Director General of the Geographic and National Cadastre Institute of El Salvador (IGCN) emphasized the good practices previously learned with the Integrated Map of Mesoamerica (MIMA), saying that "Monitoring of climate change on a global scale

requires cooperation among nations as well as sharing and making compatible their environmental, geographic, and demographic data, without compromising their national security.

In 2009 Jean Parcher, Geographer of the DOI, prepared the first request to PAIGH for starting these participatory workshops in Central America. Due to the large number of natural disasters affecting the region it was essential to have geographic information for various uses. It is also important to note that having different data types with different levels of detail implied we had to rely on cartographic aspects that were common to all participating countries. In the MIMA, as is now in the MIAN, a key aspect was the application of participatory mapping methods for harmonizing and integrating digital data, in addition to the high capacity, commitment and dedication of the technicians who carried out the project throughout four workshops held from 2011 to 2014. Those who participated in the MIMA are bringing their expertise and best practices to share with the group in charge of the new MIAN project."

Likewise, Israel Sanchez, Director General of the "Tommy Guardia" National Geographic Institute of Panama stated that, "The IGNTG has participated collaboratively in the Integrated Map of Mesoamerica project, by providing fundamental data at a scale of 1 : 250 000 to ensure the smooth connection of these data with the countries of Central America and Mexico. In this new initiative of the Integrated Northern Andean Map, the IGNTG hopes to provide its experience and qualified personnel, so that in the future, both projects become online resources allowing spatial analyses needed in the region on issues of natural disaster prevention and mitigation, and other decision-making."

Bilateral initiatives will be supported, continues...



William C. Aragón, Director General of the Military Geographic Institute of Ecuador



Juan A. Nieto, Director General of the Geographic Institute "Agustin Codazzi" of Colombia

"This mapping initiative, coupled with other national and regional efforts to consolidating their respective spatial data infrastructures, will grant us a greater common understanding on environmental and social issues, and to build cooperation-bridges on economic, social and environmental matters for the common benefit of our countries."

William Aragón, Director General of the Military Geographic Institute of Ecuador noted that "The Government of Ecuador is committed to work on binational and regional integration. This is why the Military Geographic Institute of Ecuador (IGM) is strongly involved in the MIAN project. We have progressed on cartographic integration activities with Peru and Colombia in advance and will bring these experiences to share them in this workshop. We have also offered our facilities to developing the second workshop of the MIAN, considering we have all the technical and logistical facilities necessary for achieving the objectives for next event. Given the regional nature of the MIAN, we consider the map will have broad applications in the topics of binational natural disasters."

In turn, Juan A. Nieto, Director General of the Geographic Institute "Agustin Codazzi" (IGAC) of Colombia told us that "This mapping initiative, coupled with other national and regional efforts to consolidating their respective spatial data infrastructures, will grant us a greater common understanding on environmental and social issues, and to build cooperation-bridges on economic, social and environmental matters for the common benefit of our countries. The MIAN will certainly be an asset for managing transnational issues of crucial importance such as: Climate change, global natural resources, security needs, international cooperation, and business opportunities, among others, and will also allow the strengthening of relationships among our governments, businesses, the academia and research centers. I'm sure that the enthusiastic involvement of all participants in the scheduled activities, will allow us to build the integrated map we need and to strengthen our fraternal bonds."

Finally, the members of the delegation of Peru led by Marco Antonio Merino, Director General of the National Geographic Institute (IGN), stressed that "In our country the national cartography is produced at a scale of 1:100,000, but we have different coverages both at more general and more detailed scales, particularly in the scale of 1: 250,000. There are also significant advances on cartographic integration with Colombia, Ecuador and Bolivia. For the MIAN project we are able to provide fundamental cartographic data, and we also have the National Land Information System. Regarding the latter, we think that the MIAN will support important applications on regional territorial aspects."

At the closing of the 1st MIAN workshop, country representatives presented their achievements and commitments for the project's maintenance. Both the daily records, results and commitments of the workshop were drafted.

It was agreed that the Second MIAN Workshop would take place between July 13 and 17, 2015 in Ecuador, while the Third MIAN Workshop would be held in Panama, on November 16-20, 2015.

Main results of the 1st MIAN Workshop were highlighted:

A concerted draft Plan to evolve the project; the conformation of a group of specialists who will develop the project for four countries; the pertinent commitment of Directors of geographical institutes who participated in the workshop; the first version of the MIAN including its metadata and specifications; and consensus on having the MIAN on GeoSUR's Cloud in a WMS by first quarter of 2016.

What is said from the Coordination of GeoSUR?

By Santiago Borrero

Since the founding of GeoSUR Eric van Praag conducted every detail to bring the program to the point where it is today, with his departure the initial transition phase will be at my charge.

Spatial databases in The Cloud and GeoSUR

GeoSUR operates since 2007 and its contribution has been important for technological innovation in the region. The Regional Geoportal, the decentralized map service network, and the Topographic Processing Service (TPS), are examples.

An effort to place spatial databases in The Cloud is now added.

In 2013, with financial support from the Environment Agency of Abu Dhabi -in the framework of the Eye on Earth initiative-, under an agreement signed with the PAIGH, it was implemented a training program to the Ministries of Environment in the region on issues related to the uploading of geospatial data in The Cloud.

The training was undertaken by the National Center for Geographic Information (CNIG-IGN) of Spain.

With the joint effort of PAIGH, UNEP, CAF and CNIG of Spain more than 12 institutions in the region have benefitted of capacity building.

In addition of 67 trained professionals from 14 countries, the geospatial data from six countries were uploaded.

The Institute of Geography and Cadastre of El Salvador launched its first free access map-service in the Amazon Cloud in early 2013 using ESRI software, and was first in Latin America and the Caribbean.

This was followed by the National Geographic Institute of Honduras, using GeoServer.

In 2014, the Geographic Institute of Guatemala launched its first map service in The Cloud.

In Uruguay we supported the Uruguayan National Directorate of Environment (DINAMA) to implementing its mapping service in The Cloud.

In Cordoba, Argentina it was the Department of Statistics and Census.

In Peru, the Directorate of Territorial Ordering of the Ministry of the Environment; in Haiti the National Center for Geospatial Information (CNIGS); and in Chile, we are currently working with the National Territorial Information System (SNIT).

For specialized organizations, The Cloud provides an innovative scheme that allows placing geospatial data, which is available to users at lower costs compared to traditional server-based local options.



Santiago Borrero, interim GeoSUR Program Coordinator

"...in the framework of the Eye on Earth initiative-, under an agreement signed with the PAIGH, it was implemented a training program... on issues related to the uploading of geospatial data in The Cloud In addition of 67 trained professionals from 14 countries, the geospatial data from six countries were uploaded"

"For specialized organizations, The Cloud provides an innovative scheme that allows placing geospatial data, which is available to users with lower costs compared to traditional server-based local options."

From PAIGH's Secretary General

By Rodrigo Barriga

As part of the 2014 edition of GeoSUR Award it was conferred an Honorable Mention to the National Renewable Energy Inventory (INERE), an initiative by the Department of Energy (SENER) of Mexico; the Secretary General of the PAIGH did the service at SENER's facilities on February 19 this year. [More information / INERE tool](#)

Likewise, under the [GeoSUR](#) program, the first workshop of the Integrated Northern Andean Map (MIAN) was held on February 9-13, at the [IGAC](#), Colombia.

This project aims to integrate digital cartography of Bolivia, Colombia, Ecuador, Panama and Peru at a scale of 1: 250,000, with funding from the CAF-Development Bank of Latin America, the cooperation of the National Center for Geographic Information - National Geographic Institute ([CNIG-IGN](#)) of Spain and the US Department of the Interior ([US DOI](#)).

Next workshops will take place in Ecuador (July 2015) and Panama (November 2015).

As a testimony of gratitude from the Pan American community it was organized a posthumous tribute to Dr. Silvio Zavala Vallado (1909-2014) a distinguished Mexican historian, founding editor of the Journal of American History (1938-1965) and President of the Commission of History (1946-1963).

Rodrigo Barriga, Secretary General of the PAIGH, and Patricia Galeana, President of the History Commission,

handed over a remembrance plaque to Maria Eugenia Zavala and Castelo, the historian's daughter. [Full story](#)

The "Camino del Inca" project seeks to highlight World Heritage conservation by protecting communities' sustainability using geo-referenced information. Countries involved include: Argentina, Bolivia, Chile, Colombia, Ecuador and Peru. The idea is to develop the project proposal as to obtain respective funding.

On the other hand, the Third Joint Technical Meeting of the Commissions of the PAIGH: Geography, Cartography, History and Geodesy, will be held on June 15-19, 2015, at premises of the National Autonomous University of Mexico (UNAM) in Mexico City.

This meeting aims at evaluating progresses on the respective Commission's projects, as well as presenting relevant Commission Reports, and stimulating technical and academic presentations by qualified specialists.

In this particular occasion, the development of multidisciplinary activities along with the innovation and relevance of the projects supported each year by the Commissions will be encouraged.

The meeting is coordinated by the Commission on History of PAIGH. For more information please contact: 3rtcc@ipgh.org



Efrain Villanueva Arcos, CEO of Clean Energy [SENER](#); Rodolfo Lacy Tamayo, Secretary of [SEMARNAT](#) Planning and Environmental Policy; Rodrigo Barriga Vargas, Secretary General of the PAIGH; Leonardo Beltran Rodriguez, Assistant Secretary for [Planning and Energy Transition](#); and Gustavo Arvizu Lara, Manager of [CFE](#) Civil Engineering Studies



Directors of the Geographic Institutes of Ecuador, Panama, and Peru; the GeoSUR Coordinator; the President of PAIGH and Director of the IGN of El Salvador; and the Secretary General of PAIGH while greeting the Director General of IGAC



Dr. Maria Eugenia Zavala and Castelo, daughter of Dr. Silvio Zavala receives from the Secretary General, Rodrigo Barriga and the Chair of the History Commission, Patricia Galeana, a remembrance plaque; in the background the representative of OAS Office in Mexico, Anibal Quiñonez

GeoSUR Portal's Novelties

January and February are marking the GeoSUR Program's-portal dynamics this year.

On one hand, with support of the USGS the urban sprawl map that is available in the regional viewer was updated, including besides Mexico City, the correspondent for Guatemala City, Buenos Aires, Santiago de Chile, and Sao Paulo.

The Flood Map of Latin America in 2014, produced by the University of Colorado for GeoSUR for download from the portal was also added. Flood layers for 2013, 2012 and 2011 are still also available in the WMS services.

Likewise, the latest version of the Gran Chaco Guyra geodatabase containing the updated Guyra Project data until November 2014 was incorporated.

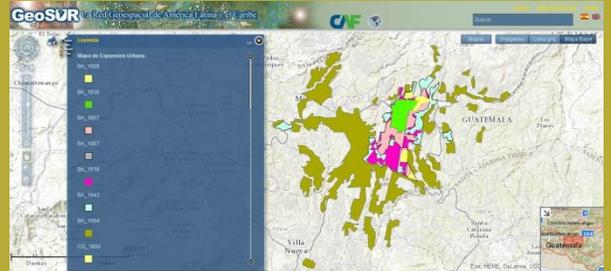
On the other hand, the novel georeferencing of projects being conducted by the CAF will soon be available. In 2011, CAF produced a document entitled "IDeAL: Infrastructure for the Integral Development of Latin America", which contains a strategic assessment of the infrastructure in the region based on an analysis aimed at developing a strategic development agenda. This document has been effective; indeed three editions have been released since its publication.

Given the above, from the GeoSUR Program it has been considered appropriate to conduct an exercise leading to the georeferencing of CAF infrastructure projects, with reference to the period between 2010 and 2013. The database comprises approximately 180 projects which have a multisectoral scope including the areas of Infrastructure, energy and social development of the bank, so covering the following sectors: transport, electricity, gas transport, telecommunications, and water management.

With this tool the user, through the [GeoSUR Regional Map Viewer](#), can spatially locate each of the projects including the project name, country, sector and subsector corresponding to each project and the amount of investment, as well as reference to additional information and other associated projects.

In the near future, these data will be available to the general public for download through the [GeoSUR Portal](#).

As a final point, is now available in the "[GeoSUR Library](#)" section the archive of *GeoSUR Newsletter*, which is published in Spanish, English and Portuguese.



Map of Guatemala City Urban Expansion now available for public access in the [GeoSUR Portal](#)



Flood Map 2014 now available on the [GeoSUR map viewer](#)

GeoSUR Program: Basic Figures

Years in Operation	8
Participating Institutions	110
Beneficiary Countries	26
GeoSUR Network Specialists	550
Officials Trained (6 Regional Workshops)	314
CAF Officials Trained	130
Virtual Workshops Offered	41
Available Digital Maps	20,000
Available Metadata	14,000
Map Services (WMS)	310
WFS Services	25

Webpage: <http://www.geosur.info>

Other events in the region

INVITATION TO "GEO FOR ALL" REGION WISE AND THEMATIC GROUPS

"Geo for All" <http://www.geoforall.org>, is pleased to inform that Region wise and Subject wise thematic groups are now established and is calling to join them.

All who are interested in different regions are welcome to join the specific mail list to build local collaborations and directly contact the regional chairs for new applications for establishing ICA-OSGeo-ISPRS Research labs in universities worldwide to build Open Principles in Geo Education. The mail list will be the first point of contact for new members.

The criteria for membership for ICA-OSGeo-ISPRS Labs are found at: http://wiki.osgeo.org/wiki/Geoforall_criteria

Presidents of the South American Region: Sergio Acosta y Lara (Uruguay) and Silvana Camboim (Brazil) / Subscribe to the mailing list: <http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-southamerica> / Web Site: http://wiki.osgeo.org/wiki/GeoForAll_South_America / Email: sergio.acostaylara@mtop.gub.uy; silvanacamboim@gmail.com

[Source: Sergio Acosta y Lara, MTOP, Uruguay]

"All who are interested in different regions are welcome to join the specific mail list to build local collaborations and directly contact the regional chairs for new applications for establishing ICA-OSGeo-ISPRS Research labs..."



Criteria for membership for ICA-OSGeo-ISPRS Labs

BRAZIL: TRANSITION PERIOD ENDING FOR SIRGAS 2000

Since February 25, 2015, all users in Brazil should take only the new Geodetic Reference System SIRGAS2000 in geospatial information production activities or manipulation in accordance with Resolution No. 1/2015 issued by the President of the Brazilian Institute of Geography and Statistics (IBGE), after a transition period of ten years. The procedures for migrating geodetic coordinates and map products of different reference systems are described in the Technical Note "End of the transition period for adoption in Brazil of the Geocentric Reference System for the Americas (SIRGAS)"

[Source: IBGE, [MundoGEO Portal](#) by way of Santiago Borrero]

LAUNCH OF ENVIRONMENTAL DEMOCRACY INDEX (EDI)

The World Resources Institute (WRI) and the Access Initiative will launch the Environmental Democracy Index (EDI) with 99 indicators and an interactive web platform on May 20 in Washington DC. The inaugural EDI will feature results from 70 countries, including 23 from Latin America and the Caribbean. The EDI 2014 is limited to binding national and sectoral laws on air and water quality, extractive industry, forests and terrestrial biodiversity. The website will allow comparisons between the laws and practices of these countries. Data will be free to download and each country will have its own analysis and data sources. The EDI will be updated every two years. Read more [here](#).

[Source: Jesse Worker, Access Initiative (WRI) by way of Santiago Borrero]

"The inaugural EDI will feature results from 70 countries, including 23 from Latin America and the Caribbean"



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Other events, continues...

SHOULD BE REGULATED THE INTERNET IN THE LAC REGION?

"Countries in the region face different challenges when creating regulatory frameworks that promote the use of the Internet to reduce the social divide". In a short [video](#) key issues that also affect the use and access of spatial data are presented: the importance of a regulatory framework to obtain fair prices for internet access services and contents; the challenges faced in establishing regulatory frameworks in a region characterized by large differences in infrastructure; broadband services as catalysts for social inclusion; the need for "will" on telecommunications' state (long-term) policies that impact all sectors and are affecting the region.

[Source: [CAF](#)]

TALKING WITH CAF: A DIALOGUE ON THE PRESENT AND THE FUTURE OF LATIN AMERICA

CAF announces the release of "[Talking with CAF](#)," a space for dialogue between influential figures in Latin America. "Development is a complex process that requires versatility," said Enrique García, CAF President. "It requires combining ideas from multiple actors with different thoughts and ideologies." Also accessible on [YouTube](#).

"Countries in the region face different challenges when creating regulatory frameworks that promote the use of the Internet to reduce the social divide". In a short video key issues that also affect the use and access of spatial data are presented..."

LAUNCH OF THE MESOAMERICAN INFORMATION HIGHWAY (AMI)

The official launch of the project Mesoamerican Information Highway (AMI) with 1,800 km along the entire region, took place on January 29 under the 23rd Meeting of the Mesoamerican Forum of Senior Telecommunications Authorities (FMAT). For this event the Ministry of Foreign Affairs and the National Bureau for the Mesoamerica Project of El Salvador produced a [video](#). AMI was installed based on the power line for power exchange between countries of Mesoamerica, with a number of optical fibers that enable communication and the interchange of data and information so that it fosters the use of Information and Communication Technologies (ICT) as well as e-government among member countries. Undoubtedly, the AMI will enhance spatial data use and application including products such as the Integrated Map of Mesoamerica (MIMA) and the Integrated Northern Andean Map (MIAN). Indeed, given the importance of this highway, it has also been specifically proposed to AMI from the academia and science arenas, the assignment of a few strands of optical fiber to the National Research and Education Networks of the region (NRENs gathered by [RedCLARA](#)) to its full utilization without any cost.

[Source: Newsletter of the Mesoamerica Project No. 05-2015 / <http://blogs.laprensagrafica.com/litoibarra/?p=3293>]



Electrical Interconnection System for the Mesoamerican Countries (SIEPAC) (Source: Mesoamerica Project)